SUPPLEMENTAL DATA SUMMARY REPORT

COLEMAN OIL 3 EAST CHEHALIS STREET WENATCHEE, WASHINGTON

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1.0 INTRODUCTION

Farallon Consulting, L.L.C. (Farallon) has prepared this Supplemental Data Summary Report (SDS Report) on behalf of Coleman Oil Company (Coleman Oil) to summarize the ongoing and completed environmental investigation activities that have been conducted in 2017 in response to a release of renewable diesel fuel from leaking underground piping at the Coleman Oil fuel storage facility at 3 Chehalis Street in Wenatchee, Washington (herein referred to as the Coleman Oil Property). The SDS Report has been prepared to meet the requirements of Exhibit B – Scope of Work and Schedule of Agreed Order No. DE 15389 entered into by Coleman Oil Company, LLC; Coleman, Services IV, LLC; and the Washington State Department of Ecology (Ecology) with an effective date of September 18, 2017 (Agreed Order). The Agreed Order is a continuation of previous and ongoing significant oil spill response activities and removal actions conducted under the Administrative Order on Consent for Removal Activities issued by the U. S. Environmental Protection Agency (EPA) on May 5, 2017 (EPA Docket No. CWA-10-2017-0114).

The site, as defined under the Washington State Model Toxics Control Act Cleanup Regulation (MTCA), Chapter 173-340 of the Washington Administrative Code (WAC 173-340), comprises the portion of the Coleman Oil Property and adjacent properties where hazardous substances have come to be located in soil, groundwater, and surface water at concentrations exceeding applicable cleanup levels (herein referred to as the Site) as a result of releases at the Coleman Oil Property.

The SDS Report is organized as follows:

- Section 2, Site Description and Ownership History, provides a description of the Site and adjacent properties, and Coleman Oil Property ownership and improvements.
- Section 3, Summary of Environmental Investigations, describes the environmental investigations that have been completed at the Site.
- Section 4, Geology and Hydrogeology, summarizes the geologic and hydrogeologic conditions documented in the Site characterization activities completed to date.
- Section 5, Soil and Groundwater Results, summarizes the soil and groundwater sampling results from the investigation and monitoring activities conducted in 2017.

- Section 6, Light Nonaqueous-Phase Liquid Recovery, summarizes the light nonaqueous-phase liquid (LNAPL) recovery operations conducted to date at the Site.
- Section 7, Preliminary Conceptual Site Model, presents a preliminary conceptual model for the Site.
- Section 8, References, lists the references cited in the SDS Report.

2.0 SITE DESCRIPTION AND OWNERSHIP HISTORY

This section includes an overview description of the Site and adjacent properties, and the Coleman Oil Property ownership history and property improvements.

2.1 SITE AND ADJACENT PROPERTIES DESCRIPTION

The Coleman Oil Property is located at 3 East Chehalis Street in Wenatchee, Washington (Figure 1). The Chelan County Assessor (2017) online records listed the street address as 600 South Worthen Street with a legal description of Manufacturers Amended Block 4 Lots 1-9, 1.27 acres. The Coleman Oil Property was listed in the Chelan County Assessor (2017) online records as County Assessor Property Identification No. 10398, Treasurer Map Property Identification No. (Property ID) 55798, and Chelan County Assessor Parcel No. 222011693005 with a listed owner of Coleman Services V LLC.

The Site comprises the following four parcels:

- Chelan County Parcel No. 222011693005 with a listed owner of Coleman Services V LLC;
- Chelan County Parcel No. 222010693001 with a listed owner of Chelan County Public Utilities Department (PUD);
- Chelan County Parcel No. 222011693105 with a listed owner of Chelan County PUD; and
- Chelan County Parcel No. 222011693100 with a listed owner of Chelan County PUD.

Directly adjacent to the Coleman Oil Property are Chehalis Street to the north, South Worthen Street and the Columbia River to the east, and BNSF Railway Company railroad tracks to the west. Adjacent parcels and property owners include:

- Chelan County Parcel No. 222010693001 (Property ID 54389) at 500 South Worthen Street, north of the Coleman Oil Property, with a listed owner of Chelan County PUD;
- Chelan County Parcel No. 222011693105 (Property ID 55806) with no assigned street address, east of South Worthen Street and northeast of the Coleman Oil Property, with a listed owner of Chelan County PUD;

- Chelan County Parcel No. 222011693100 (Property ID 55805) with no assigned street address, east of South Worthen Street and the Coleman Oil Property, with a listed owner of Chelan County PUD;
- Chelan County Parcel Nos. 222011693015, 22011693020, and 222011693030 (Property ID 55799, 55800, and 55801, respectively) at 700 South Worthen Street, south of the Coleman Oil Property, with a listed owner of Albert G. Junior and Joanne Dalinkus; and
- Chelan County Parcel No. 222010815425 (Property ID 55079) at South Columbia Street, west of the Coleman Oil Property, with a listed owner of Piepel Premium Fruit Storage, LLC.

2.2 OWNERSHIP HISTORY AND PROPERTY IMPROVEMENTS

The historical information provided herein regarding the Coleman Oil Property was acquired from the *Environmental Site Assessment/ASTM E1527-05 at Coleman Oil Company Wenatchee Cardlock/Bulk Facility, 3 Chehalis St./600 Worthen St., Wenatchee, Washington 98801* dated February 28, 2007, prepared for Bank of Whitman by Blue Mountain Environmental Consulting, Inc. (2007); and the Chelan County Assessor and Treasurer website (Chelan County Assessor 2017).

The Coleman Oil Property was first owned and occupied by Standard Oil Company and has been a bulk fuel facility since 1921. Based on information obtained from Sanborn maps, two vertical gasoline aboveground storage tanks (ASTs), four oil ASTs, one kerosene AST, and four structures were present on the Coleman Oil Property in the 1920s. The number and configurations of ASTs have changed over time. A 4,000-square-foot, wood-framed building used for offices and warehouse storage was constructed on the northwestern corner of the Coleman Oil Property in 1935. By the 1950s, a tank farm was present on the south-central portion of the Coleman Oil Property and included 10 approximately 20,000-gallon vertical ASTs.

The Chelan County Assessor (2017) online records indicated that North Central Petroleum, Inc. purchased the Coleman Oil Property in 1980. In the early 1990s, a tank farm was present south of the warehouse and office building and contained eleven 19,000-gallon horizontal ASTs and one 1,000-gallon horizontal waste oil AST. An underground storage tank (UST) and cardlock system

were installed in 1997, which included inventory control and tank monitoring features and two pump islands (Blue Mountain Environmental Consulting, Inc. 2007).

Coleman Services IV, LLC purchased the Coleman Oil Property in January 2007 from North Central Petroleum, Inc (Chelan County Assessor 2017). Some features of the Coleman Oil Property were modified over the next 10 years. The eleven 19,000-gallon ASTs were replaced by eight 2,100-gallon ASTs (Tank Farm B) (Figure 1), and one of the two pump islands was dismantled. From 2010 to 2017, the Coleman Oil Property included a 4,000-square-foot, woodframed building used for offices and warehouse storage; a 1,591-square-foot, wood-framed storage building on the northeastern corner of the Coleman Oil Property; a truck fuel-loading rack east of the warehouse and office building; a four-compartment UST and associated card lock pump island on the eastern and south-central portions of the Coleman Oil Property; and two tank farms (Figure 1). Tank Farm B, south of the warehouse and office building, included eight 2,100-gallon petroleum ASTs and associated pumps (Figure 1). The tank farm on the south-central portion of the Coleman Oil Property included two 25,000-gallon ASTs, two 20,000-gallon ASTs, one 19,500gallon AST, five 19,400-gallon ASTs, and associated pumps and piping (Tank Farm A) (Figure 1). The northern portion of the Coleman Oil Property was fenced, including the buildings, bulk fuel tank farms, and truck fuel-loading rack. The card lock pump island was present south of and outside of the fence (Blue Mountain Environmental Consulting, Inc. 2007).

In March and April 2017, the truck fuel-loading rack, associated piping, and the eight 2,100-gallon ASTs in Tank Farm B were dismantled and removed from the Coleman Oil Property. In June and July 2017, the 4,000-square-foot, wood-framed warehouse and office building and the 1,591-square-foot storage building were demolished and removed, and the remaining ASTs were emptied of petroleum and cleaned. Currently, only the UST and card lock pump island are used in operations conducted at the Coleman Oil Property.

3.0 SUMMARY OF ENVIRONMENTAL INVESTIGATIONS

The following sections describe the environmental investigations that have been completed at the Site.

3.1 2010 TO 2013 ENVIRONMENTAL INVESTIGATIONS

On June 2, 2010, a review of daily inventory records for AST 15A by Coleman Oil personnel revealed a discrepancy of approximately 180 gallons of unleaded gasoline (Farallon 2014). Subsequent inspection of AST 15A and associated piping revealed gasoline leaking from a fill valve and flowing onto the concrete ground surface in the AST 15A valve control box on the southern portion of Tank Farm A. In addition, gasoline was observed on the ground surface east of the AST 15A valve control box in an unpaved area between the Tank Farm A containment area and the south-adjacent former fuel dispenser island. Coleman Oil personnel immediately stopped the flow of gasoline from the AST to the leaking fill valve; contacted emergency spill response contractor NRC Environmental Services, Inc. of Spokane, Washington (NRCES) to address the spill; and reported the spill to the appropriate regulatory agencies.

The gasoline release appeared to be limited to a narrow unpaved area between the Tank Farm A containment area and the south-adjacent former fuel dispenser island (Figure 1). NRCES excavated soil containing gasoline from this area to a depth of approximately 2 feet below ground surface (bgs) using hand tools. Feasible alternatives for excavation of additional material between the Tank Farm A containment area and the south-adjacent former fuel dispenser island were limited due to concerns regarding the structural integrity of the Tank Farm A containment area and the presence of large boulders in the excavation area.

Initial follow-up characterization activities conducted by Environmental Compliance Associates, LLC of Kennewick, Washington included completion of shallow borings using a push-probe drilling rig and completion of a deeper boring using an air rotary drilling rig. Results of the follow-up characterization indicated that concentrations of total petroleum hydrocarbons as gasoline-range organics (GRO) and benzene, toluene, ethylbenzene, and xylenes (BTEX) in soil decreased significantly with distance both laterally and vertically from the spill area.

Farallon (2014) conducted a subsurface investigation at the Site in July and September 2010 to evaluate whether the surface spill of gasoline had migrated beneath the Site to a deeper groundwater-bearing zone that may be in hydraulic communication with surface water in the adjacent Columbia River. Monitoring wells MW-1 through MW-4 were installed on the Coleman Oil Property, and monitoring well MW-5 was installed east of South Worthen Street (Figure 1).

Groundwater samples were collected from the monitoring wells on an approximately quarterly basis from soon after installation in July and September 2010 until 2013 depending on the well locations (Farallon 2014). GRO was detected at a concentration exceeding the MTCA Method A cleanup level on one occasion in a groundwater sample collected from monitoring well MW-1. Benzene was detected at concentrations exceeding the MTCA Method A cleanup level on five occasions in 2010 and 2011 in groundwater samples collected from monitoring wells MW-1 and MW-2. With the exception of a single detection of benzene at a concentration less than the MTCA Method A cleanup level in the groundwater sample collected from monitoring well MW-4 in October 2010, GRO and BTEX were not detected at concentrations exceeding laboratory reporting limits in groundwater samples collected from monitoring wells MW-5.

On May 30, 2013, a gasoline spill occurred at the Site while the UST on the eastern portion of the Site that supplied fuel to the retail sales card lock fuel island was being filled. The spill was reported to the National Response Center and issued Case No. 1048904. Based on the letter report regarding Report for a Gasoline Spill for Coleman Oil, Located at the Coleman Oil Bulk Plant, 3 Chehalis Street, Wenatchee, Washington dated July 1, 2013, from Mr. Kipp Silver of Able Clean-up Technologies, Inc. (Able) to Mr. Mark Sater of Coleman Oil (Able 2013), approximately 200 gallons of gasoline overtopped the UST fill port and spilled onto the soil surrounding the UST. Able responded to the incident on May 31, 2013 and began excavation of the impacted soil. A total of 90.08 tons of petroleum-impacted soil was removed from around the UST. The final excavation exposed the UST and was 21 feet long by 18 feet wide, and extended to a depth of 12 feet bgs. Confirmation soil samples collected from the final limits of the excavation confirmed removal of petroleum-impacted soil to less than MTCA Method A cleanup levels. No groundwater was encountered during excavation.

Ecology (2015) issued a No Further Action determination for the Coleman Oil Property in a letter dated March 13, 2015. The No Further Action determination was contingent on compliance with the Environmental Covenant recorded on October 6, 2014 with Chelan County that specified restrictions and requirements related to residual concentrations of petroleum hydrocarbons at concentrations exceeding MTCA cleanup levels in soil in the area of Tank Farm A.

3.2 2017 ENVIRONMENTAL INVESTIGATION

On March 17, 2017, the Wenatchee Fire Department reported the presence of a sheen and petroleum odor on the Columbia River between Thurston and Chehalis Streets in Wenatchee, Washington. On March 18, 2017, the U.S. Environmental Protection Agency (EPA), Ecology, and Chelan County Emergency Management formed a Unified Command to respond to the occurrence of the sheen. The initial spill response activities included deployment of booms and sorbent pads in the area of the observed sheen on the Columbia River.

On behalf of Coleman Oil, a subcontractor conducted a line tightness test on March 24, 2017 on underground fuel lines associated with ASTs at Tank Farm A on the Coleman Oil Property. Two of the fuel lines would not hold pressure: the R99 renewable diesel fuel line and the B75 biodiesel fuel line. Coleman Oil closed and locked the B75 biodiesel fuel AST, and closed and locked the isolation valves from the pumps to each of the fuel lines. Review of Coleman Oil inventory records indicated that the release was most likely from the R99 renewable diesel fuel line.

Able, on Coleman Oil's behalf, assumed management of the booms and curtains placed to contain the sheen on the Columbia River on March 26, 2017. Able conducted hourly inspections of the sorbent pads, curtains, and booms placed where a sheen is observed on the Columbia River until the week of June 6, 2017, at which point Anchor QEA of Wenatchee, Washington took over the boom and curtain management on Coleman Oil's behalf. Additional details on the timeline and spill response actions are provided in *Emergency Spill Response Plan, Coleman Oil Wentachee* [sic] Facility, 3 East Chehalis Street, Wenatchee, Washington dated April 1, 2017, prepared by Farallon (2017) (ESRP). The scope of work presented in the ESRP was initiated immediately following approval from Ecology and EPA. The scope of work for the ESRP was expanded by Coleman Oil during implementation to expedite the Site characterization process and cleanup. Farallon collected groundwater samples from monitoring wells MW-1, MW-2, MW-4, and MW-5 on March 23, 2017 to assess whether the release of renewable diesel had impacted groundwater in the existing Site monitoring wells.

Monitoring wells BH-1 through BH-3 were installed by Ecology consultant Environmental Partners, Inc. of Issaquah, Washington on March 25 and 26, 2017 along South Worthen Street adjacent to the area where the sheen discharge was observed on the Columbia River. On March 26, 2017, Coleman Oil decommissioned the fuel lines that would not hold pressure. All fuel associated with the ASTs in Tank Farm A was subsequently removed from the Coleman Oil Property and transported to other Coleman Oil facilities.

Following approval of the ESRP, Coleman Oil initiated additional investigative work at the Site. On April 4 and 5, 2017, trenching was conducted to assess subsurface conditions north and east of the truck fuel-loading rack area, including the location of a former drywell on the east-central portion of the Coleman Oil Property (Figure 1). On April 6 and 7, 2017, direct-push borings FB-3 through FB-10 were advanced along South Worthen Street, Chehalis Street, and the northern portion of the Coleman Oil Property. Between April 10 and 14, 2017, monitoring wells MW-6 through MW-11, potential LNAPL recovery well RW-1, and boring FB-11 were installed at various locations across the Site. The monitoring wells were constructed using either 3- or 4-inchdiameter well materials so that the wells could be used for LNAPL recovery, if necessary. Conditions encountered in the borings are discussed in Section 4, Geology and Hydrogeology. Soil and groundwater analytical results are summarized in Section 5, Soil and Groundwater Results. Concurrent with the monitoring well installation activities, the truck fuel-loading rack and subsurface piping leading to the rack were removed. Following the discovery of red-colored LNAPL on perched groundwater in the area of the truck fuel-loading rack, a groundwater recovery sump was fabricated and installed in the excavation at this location. The R99 renewable diesel is a red-dyed product very similar in color to traditional diesel fuels dyed for identification for offroad use.

Site-wide groundwater monitoring and sampling of new and existing monitoring wells was conducted on April 20 and 21, 2017.

Test pits were installed on the southern, eastern, and northern sides of the warehouse and office building at the Coleman Oil Property to help delineate the extent of LNAPL observed in the truck fuel-loading rack area excavation. Recovery sumps 1 through 3 were installed at three locations along the eastern side of the warehouse and office building, recovery sump 4 was installed in the excavation south of the warehouse and office building, and recovery sump 6 was installed north of the warehouse and office building. Recovery sump 5 was installed in the northeastern corner of the Coleman Oil Property, where the former storage building was located (Figure 1). During the test pit excavations, a substance that appeared to be red LNAPL was observed to flow into the excavations from beneath the warehouse and office building. For several days, water and LNAPL were pumped from the recovery sumps into a 10,000-gallon baffle tank with an oil-water separator. The pumps were turned off on April 26, 2017 to facilitate an assessment of the rate of LNAPL recovery into the sumps. Following the assessment, the depth to groundwater began to drop in elevation to below some of the recovery sumps, and recovery of LNAPL diminished. Periodic pumping of groundwater from the recovery sumps continued in an attempt to draw LNAPL to the sumps, but LNAPL recovery continued to diminish and LNAPL currently is recovered using sorbent pads placed in the recovery sumps and periodic pumping. As of September 28, 2017, groundwater was only present in recovery sumps 2, 5, and 6. LNAPL continues to be recovered from the recovery sumps and monitoring wells. Section 6, Light Nonaqueous-Phase Liquid Recovery, provides information on the volume of LNAPL recovered from structures at the Site.

LNAPL bail-down tests were performed on monitoring wells MW-8, MW-9, and BH-2 on May 1, 2017 to estimate the formation transmissivity for evaluation of the feasibility of hydraulic recovery of LNAPL. The bail-down tests were performed by evacuating LNAPL from the monitoring wells using a peristaltic pump, and monitoring the depth to LNAPL and depth to groundwater during recovery after the pumping was terminated. The LNAPL bail-down testing results indicated that the estimated transmissivity values exceed the generally accepted lower limit for practicable hydraulic recovery by a factor of greater than 2; therefore, LNAPL recovery via pumping wells can be considered as a viable cleanup alternative.

Site-wide groundwater monitoring and sampling of new and existing monitoring wells was conducted on September 28 and 29, 2017.

4.0 GEOLOGY AND HYDROGEOLOGY

4.1 SOIL CONDITIONS

The soil conditions encountered in the boring and in borings for monitoring wells are described below by geographic areas of the Site. Boring logs are provided in Appendix A. Geologic crosssections of the Site are provided on Figure 2.

4.1.1 Coleman Oil Property and Chehalis Street

Soil encountered in the test pits and excavations on the Coleman Oil Property consist of a heterogenous mixture of sand, gravel, and silt. Boulders in excess of 4 feet in diameter were encountered in this area, which suggests that the material is native rather than fill.

Push-probe boring FB-3 was installed north of Chehalis Street and the Coleman Oil Property on April 6, 2017 (Figure 1). Push-probe borings FB-4 and FB10 were installed on the Coleman Oil Property on April 6 and 7, 2017 (Figure 1). Boring FB-11 was installed north of the warehouse and office building using an air rotary drill rig on April 13, 2017 (Figure 1). Boring logs pertaining to the subsurface investigation activities at the Site are provided in Appendix B.

Monitoring wells MW-6 through MW-9 were installed on April 11 and 12, 2017 on and northadjacent to the Coleman Oil Property using air rotary drilling methods. Monitoring well MW-10 was installed on April 14, 2017 east of South Worth Street and north of monitoring well BH-3. Soil conditions encountered in the borings for the monitoring wells are described below by well, and boring logs are provided in Appendix B. The cross-sections for select boring and monitoring wells are provided on Figure 2. The borings for the monitoring wells installed on the Coleman Oil Property in 2017 were cleared with an air knife and vacuum truck to 5 feet bgs; therefore, the upper 5 feet of soil in the borings was not observed.

Push-Probe Boring FB-3

Push-probe boring FB-3 was installed north of Chehalis Street and the Coleman Oil Property (Figure 1). Push-probe boring FB-3 encountered primarily silty sand and sand with silt to a depth of 9.7 feet bgs, underlain by gravel from 9.7 to 12.7 feet bgs, and sand with silt and silty sand from 12.7 feet bgs to the total depth of the boring at 15.5 feet bgs. Evidence of petroleum hydrocarbon

impacts included photoionization detector (PID) readings ranging from 149 to 522 parts per million (ppm)¹, and hydrocarbon odors in soil samples collected between depths of approximately 12.5 and 15.0 feet bgs. The measured depth to groundwater in the boring was 13.0 feet bgs at the time of drilling.

Push-Probe Boring FB-4

Push-probe boring FB-4 was installed west of the former storage building on the Coleman Oil Property (Figure 1). The boring encountered refusal at a depth of 3.0 feet bgs.

Push-Probe Boring FB-10

Push-probe boring FB-10 was installed west of boring FB-4 (Figure 1). The boring encountered interbedded gravel, silt, and sand to a depth of 5.8 feet bgs. There was no soil recovery from the boring from 5.8 to 12.0 feet bgs. Interbedded gravel, silt, and sand were encountered from 12.0 to 17.3 feet bgs, with no recovery from 17.3 feet bgs to the total depth of the boring at 20.0 feet bgs. Evidence of petroleum hydrocarbons impacts included PID readings ranging from 267 to 1,486 ppm and hydrocarbon odors in soil samples collected between depths of approximately 12.0 and 17.3 feet bgs. The highest PID reading was from silty sand collected at a depth of 17.1 feet bgs. The measured depth to water in the boring was 13.5 feet bgs at the time of drilling.

Boring FB-11

Boring FB-11 was installed north of the warehouse and office building (Figure 1). No soil was recovered in the upper 10 feet of the boring. Interbedded cobbles and silt were encountered between 10.0 and 12.8 feet bgs. Silt was encountered from 15.0 feet bgs to the total depth of the boring at 25.2 feet bgs. A solvent-like odor and PID readings of 1,297 and 1,942 ppm were noted for silty soil from approximately 15.0 to 16.5 feet bgs. PID readings were less than 1.0 ppm in soil samples collected above and below this interval. Saturated conditions were not observed in the boring.

¹ Parts per million total organic vapors as calibrated to 100 parts per million isobutylene span gas and ambient air zero gas.

Monitoring Well MW-6

Monitoring well MW-6 was installed north of the truck fuel-loading rack approximately 20 feet north of the area of the renewable diesel piping leak (Figure 1). The boring encountered gravel at 5 feet bgs underlain by gravelly silt to 10.8 feet bgs. Elevated PID readings ranging from 106 to 302 ppm were observed in gravelly silt, well-graded sand, and silty gravel between 10.0 and 15.6 feet bgs. Saturated conditions were observed at a depth of approximately 10 feet bgs at the time of drilling. Depths to water measured in the monitoring well ranged from 9.40 to 11.51 feet below the top of the well casing during the period between April 17 and September 28, 2017 (Table 1). No LNAPL has been detected in monitoring well MW-6.

Monitoring Well MW-7

Monitoring well MW-7 was installed east of monitoring well MW-6 (Figure 1) in the likely downgradient direction of groundwater flow based on the data obtained from previous monitoring of groundwater monitoring wells MW-1 through MW-5 in 2010 through 2013. Suspected boulders and cobbles were encountered in the upper soil, with no sample recovery above 12.7 feet bgs. Evidence of potential petroleum hydrocarbon impacts in the boring included a petroleum-like odor noted in drill cuttings at a depth of 9 feet bgs, a PID reading of 38.8 in a soil sample of silt at a depth of 13.0 feet bgs, and a light sheen in silt collected over the interval from 17.0 to 17.5 feet bgs. The measured depth to water in the boring was 12.95 feet bgs at the time of drilling. Depths to water measured in the well have ranged from 9.64 to 12.46 feet below the top of the well casing during the period between April 17 and September 28, 2017 (Table 1). No LNAPL has been detected in monitoring well MW-7.

Monitoring Well MW-8

Monitoring well MW-8 was installed north of the former storage building, south of Chehalis Street (Figure 1). Sandy silt and silt were encountered between 5.5 and 11.0 feet bgs in the boring for monitoring well MW-8. Soil sample recovery was generally poor below 11.0 feet bgs in the boring. Cobbles and silt were encountered between 12.5 and 13.0 feet bgs, sand at 15.0 to 15.4 feet bgs, and silt at 17.5 to 17.6 and 20.0 to 20.2 feet bgs, with no recovery in the intervening sampling intervals. The highest PID reading of 75.0 ppm and a petroleum-like odor were observed

in a silt sample collected at a depth between 12.6 to 12.8 feet bgs. The measured depth to water in the boring was 16.5 feet bgs at the time of drilling. Depths to water measured in the monitoring well have ranged from 13.47 to 18.10 feet below the top of the well casing during the period between April 17 and September 28, 2017 (Table 1).

An LNAPL thickness of 2.21 feet was measured in monitoring well MW-8 on April 13, 2017, 2 days after installation of the monitoring well. The LNAPL and groundwater in the monitoring well were evacuated using a vacuum truck on April 13, 2017. The LNAPL thickness measured in the monitoring well was only 0.01 foot on April 20, 2017. The LNAPL accumulated subsequent to the vacuum truck removal in the monitoring well and the maximum thickness measured to date was 2.53 feet on May 1, 2017. Ongoing passive and active LNAPL recovery has been conducted in monitoring well MW-8 since April 2017; therefore, the rate of LNAPL thickness recovery in the well currently is unknown. The monitoring wells were last gauged on September 28, 2017, and sorbent socks were removed from the wells 2 days prior. No LNAPL was detected during the September 28, 2017 water-level gauging event.

Monitoring Well MW-9

Monitoring Well MW-9 was installed north of monitoring well MW-8 on the northern side of Chehalis Street (Figure 1). Soil sample recovery was generally poor in the boring for the monitoring well. Gravel, silty sand with gravel, and silt were encountered between 5.0 and 12.6 feet bgs. Silt was encountered between 12.6 and 15.2 feet bgs, underlain by cobbles, gravel, and gravelly silt to 18.5 feet bgs. Silt was encountered in soil samples collected between 18.5 feet bgs and the total depth of the boring at 24.5 feet bgs. Evidence of petroleum hydrocarbon impacts in the boring included PID readings of 172 and 224 ppm in soil samples collected at depths of 15.6 and 18.7 feet bgs, and petroleum-like odors and sheens in soil samples collected at depths between 15.2 and 21.8 feet bgs. The measured depth to water in the boring was 16.9 feet bgs at the time of drilling. Depths to water measured in the monitoring well have ranged from 13.56 to 22.69 feet below the top of the well casing during the period between April 17 and September 28, 2017 (Table 1).

LNAPL was first detected in monitoring well MW-9 on April 27, 2017 at a thickness of 0.70 foot 15 days after installation. An LNAPL thickness of 1.27 feet was measured in monitoring well MW-9 on May 1, 2017. The LNAPL was subsequently periodically pumped from the monitoring well between May 2 and 19, 2017, and sorbent socks have been placed in the well since May 20, 2017. No LNAPL was detected during the September 28, 2017 water-level gauging event, 2 days after removal of the sorbent sock for the September 2017 monitoring event.

Monitoring Well MW-11

Monitoring Well MW-11 was installed west of the former storage building between the area of the renewable diesel piping leak and monitoring wells MW-8 and MW-9 (Figure 1). Soil sample recovery was generally poor in the boring for the monitoring well. Boulders with cobbles were encountered from 5.0 to 17.7 feet bgs, with silt interbeds at 5.3 to 6.0 and 13.1 to 13.5 feet bgs. Silt was encountered below 17.7 feet bgs to the total depth of the boring at 22.3 feet bgs. Evidence of petroleum hydrocarbon impacts in the boring included a PID reading of 75.9 ppm in silty soil samples collected at a depth of 13.2 feet bgs. The measured depth to water in the boring was 13.83 feet bgs at the time of drilling. Depths to water measured in the well have ranged from 13.45 to 14.65 feet below the top of the well casing during the period between April 17 and September 28, 2017 (Table 1).

An LNAPL thickness of 0.27 foot was measured in monitoring well MW-11 on June 8, 2017. Sorbent socks were placed in the monitoring well from June 8 to August 8, 2017.

4.1.2 South Worthen Street

Push-probe borings FB-5 through FB-9 installed in South Worthen Street generally encountered silty sand to depths ranging from 10 to 15 feet bgs (Figure 1). The borings were cleared with an air knife to 5 feet bgs; therefore, the upper 5 feet of soil was not observed. Interbedded silt and gravel were encountered at depths below 8.3 feet and 10.2 feet bgs, respectively, in borings FB-8 and FB-9. Of the push-probe borings installed in South Worthen Street, only the northern-most boring, FB-9, encountered saturated conditions, which were observed in silty gravel at a depth of approximately 10 to 14 feet bgs. A PID reading of 534 ppm was measured in a soil sample of silty

gravel collected from boring FB-9 at a depth of 14.0 feet bgs. A PID reading of 21.6 ppm was measured in a soil sample of silty sand collected from boring FB-8 at a depth of 14.0 feet bgs. No field evidence of petroleum hydrocarbons impacts was observed in the other push-probe borings installed in South Worthen Street or in the soil in borings FB-8 and FB-9 at depths above 13 feet bgs.

4.1.3 East of South Worthen Street

Monitoring wells BH-1 through BH-3 were installed on March 25 and 26, 2017 by Environmental Partners, Inc. for Ecology along the eastern shoulder of South Worthen Street, adjacent to the general area of the sheen observed on the Columbia River (Figure 1). Recovery well RW-1 was installed by Farallon on April 10, 2017 between monitoring wells BH-1 and BH-3 for potential use as an LNAPL recovery well. Monitoring Well MW-10 was installed north of monitoring well BH-3 to aid in delineating the extent of groundwater impacts and evaluate potential up-gradient sources. Soil conditions encountered in the borings for the monitoring wells are described below by well.

Monitoring Well BH-1

Monitoring well BH-1 was installed east of South Worthen Street, adjacent to the general area of the sheen discharge to the Columbia River (Figure 1). Very little sample recovery was noted from the surface to a depth of 15 feet bgs, with crushed rock fragments observed in the sampler. Sandy silt was encountered from 15 to 20 feet bgs, underlain by sand at approximately 20 to 21 feet bgs and silt from 21 feet bgs to the total depth of the boring at 30 feet bgs. The only evidence of petroleum hydrocarbon impacts in the boring were a PID reading of 20 ppm, an odor, and a faint sheen in soil at a depth of approximately 29 feet bgs, with the water level in the boring equilibrating at a depth of 20.55 feet bgs. Depths to water measured in the monitoring well have ranged from 19.71 to 28.73 feet below the top of the well casing during the period between April 17 and September 28, 2017 (Table 1).

An LNAPL thickness of 0.55 foot was measured in monitoring well BH-1 on July 3, 2017. Sorbent socks were placed in the monitoring well from May 20 to July 23, 2017.

Monitoring Well BH-2

Monitoring well BH-2 was installed east of South Worthen Street between the general area of the sheen discharge to the Columbia River and the Coleman Oil Property (Figure 1). Soil was not sampled or described in the upper 15 feet of the boring for the monitoring well. Sandy silt was encountered from 15 feet bgs to the total depth of the boring at 35 feet bgs. No evidence of petroleum hydrocarbon impacts was noted on the boring log for the monitoring well. Saturated conditions were not observed during drilling, with the water level in the boring equilibrating at a depth of approximately 29 feet bgs. Depths to water measured in the well have ranged from 26.16 to 31.25 feet below the top of the well casing during the period between April 17 and September 28, 2017 (Table 1).

LNAPL thicknesses of 0.08 and 0.10 foot were measured in monitoring well BH-1 on April 27 and May 1, 2017, respectively. Sorbent socks were placed in the monitoring well from May 20 to July 23, 2017.

Monitoring Well BH-3

Monitoring well BH-3 was installed east of South Worthen Street, adjacent to the general area of the sheen discharge to the Columbia River (Figure 1). Soil was not sampled or described in the upper 15 feet of the boring for the monitoring well. Silt was encountered from 15 feet bgs to the total depth of the boring at 30 feet bgs. The only evidence of petroleum hydrocarbon impacts in the boring were a PID reading of 67 ppm, an odor, and a faint sheen in soil at a depth of approximately 20 feet bgs. Saturated conditions were noted as first encountered at a depth of approximately 20 feet bgs, with the water level in the boring equilibrating at a depth of 17.26 feet bgs. Depths to water measured in the well have ranged from 17.47 to 23.04 feet below the top of the well casing during the period between April 17 and September 28, 2017 (Table 1). No LNAPL has been detected in monitoring well BH-3.

Recovery Well RW-1

Recovery well RW-1 was installed as a potential groundwater recovery well (Figure 1). The recovery well was constructed of 3-inch-diameter well casing and screen in contrast to the 2-inch-diameter BH-series wells to allow flexibility in pump selection, if needed. Silt was encountered

from the first-recovered soil sample at a depth of 5 to 18 feet bgs. There was no sample recovery from 18 feet bgs to the total depth of the boring at 30 feet bgs. No evidence of petroleum hydrocarbon impacts was observed in the soil samples collected during the installation of recovery well RW-1. The measured depth to water in the boring was 17.0 feet bgs at the time of drilling. Depths to water measured in the well have ranged from 16.15 to 26.74 feet below the top of the well casing during the period between April 17 and September 28, 2017 (Table 1). No LNAPL has been detected in recovery well RW-1.

Monitoring Well MW-10

Monitoring well MW-10 was installed north of BH-3 to help delineate the extent of groundwater impacts and evaluate potential up-gradient sources (Figure 1). Gravel and sand were encountered from 5.0 to 6.0 feet bgs, underlain by gravelly silt and silt with gravel from 10.0 to 12.7 feet bgs and silt and silt with sand from 15.0 feet bgs to the total depth of the boring at 30.2 feet bgs. Evidence of potential petroleum hydrocarbons impacts in the boring included a PID reading of 409 ppm, a petroleum-like odor, and a sheen in the silt soil sample collected at a depth of 25.1 feet bgs, and a sheen was present but no odor. The measured depth to water in the boring was 17.3 feet bgs at the time of drilling. Depths to water measured in the monitoring well have ranged from 16.72 to 25.70 feet below the top of the well casing during the period between April 17 and September 28, 2017 (Table 1).

An LNAPL thickness of 1.44 feet was measured in monitoring well MW-10 on July 3, 2017. Sorbent socks and pumping have been used to remove LNAPL from monitoring well MW-10 since July 4, 2017.

4.2 HYDRGEOLOGY

The hydraulic gradient at the Site is variable and steepens to the east with proximity to the Columbia River. Groundwater elevation contour maps for April 20 and September 28, 2017 are provided on Figures 3 and 4. On April 20, 2017, a northeasterly direction of groundwater flow was indicated by the groundwater elevation data, with a hydraulic gradient of 0.06 foot per foot across the Coleman Oil Property and an easterly direction of groundwater flow, and a much steeper

hydraulic gradient of 0.25 foot per foot to the east in the area of South Worthen Street. The hydraulic gradient was steeper at 0.47 foot per foot on April 20, 2017, east of the southern portion of the Coleman Oil Property as measured between monitoring wells MW-2 and MW-5.

The groundwater levels in monitoring wells on the Coleman Oil Property have dropped by approximately 3 feet between mid-April and late September 2017. Monitoring wells installed east of South Worthen Street have shown a greater decrease in water-level elevation, but the magnitude of the decrease is more variable than for the monitoring wells on the Coleman Oil Property. The groundwater levels in monitoring well MW-5, east of the southern portion of the Coleman Oil Property, declined by 4.69 feet between April 17 and September 28, 2017. The groundwater levels in monitoring wells BH-2 and BH-3 declined by 5.08 and 5.57 feet, respectively, over the same time period. The groundwater levels in monitoring wells BH-1 and MW-10 and in recovery well RW-1 showed larger decreases in elevation, ranging from 8.98 to 10.54 feet between April 17 and September 28, 2017.

The occurrence of LNAPL in monitoring well MW-10, which was first detected in July 2017, indicates that the LNAPL migration pathway is cross-gradient to the groundwater flow directions indicated by the groundwater elevation contours constructed using groundwater levels measured in Site monitoring wells. The presence of LNAPL in monitoring well MW-10 suggests that a more northerly component of flow exists than would be suggested by the groundwater contours. The exact mechanism for the apparent preferential northerly component of LNAPL migration is not clear.

An initial assessment of the sanitary sewer or other subsurface utilities in South Worthen Street indicated that groundwater levels are likely well below the utilities. As a result, the utility lines cannot be acting as preferential migration pathways. Potential preferential migration pathways will be further assessed as part of the pending remedial investigation for the Site.

The somewhat anomalous direction of LNAPL migration may be a result of lithologic variations within the upper saturated zone. The borings for the monitoring wells east of South Worthen Street encountered more fine-grained soil than borings installed on the Coleman Oil Property or within South Worthen Street. It is possible that the northeasterly direction of groundwater flow suggested

by the groundwater contours for monitoring wells on the Coleman Oil Property is deflected as a result of the higher silt content and likely lower permeability of soil east of South Worthen Street. Aquifer testing will be conducted as part of the remedial investigation field activities to estimate the hydraulic conductivity of selected wells spatially distributed across the Site.

4.3 **RIVER LEVELS**

River levels have fallen since the LNAPL recovery operations were initiated in March 2017. The average daily tailwater elevation of the Columbia River at the Rocky Reach Dam, upstream of the Site, was 615.08 feet on September 28, 2017 (U.S. Army Corps of Engineers 2017a). The average daily forebay elevation of the Columbia River at the Rock Island Dam, downstream of the Site, was 612.85 feet on September 28, 2017 (U.S. Army Corps of Engineers 2017b).

Farallon received hourly average water-level data for the period of April 1 to October 1, 2017 from the Chelan County PUD for the boat launch at the base of Orondo Avenue in Wenatchee, approximately 0.6 mile north of the Site. Water levels in the Columbia River at the boat launch ranged from approximately 618 to 621 feet above mean sea level in early April 2017, and dropped to approximately 613 to 615 feet above mean sea level in late September 2017. Water levels in the Columbia River at this location are dam-controlled and fluctuate by up to several feet per day. Additional assessment of the river elevation and fluctuations relative to groundwater levels and hydraulic gradient will be conducted as part of the remedial investigation for the Site.

5.0 SOIL AND GROUNDWATER RESULTS

Laboratory analytical results for soil samples collected from the trenching excavations and borings completed in April 2017 indicate that total petroleum hydrocarbons as diesel-range organics (DRO) are present at concentrations exceeding MTCA Method A cleanup levels in shallow soil in the area of the truck fuel-loading rack and drywell. North of the truck fuel-loading rack and drywell, petroleum hydrocarbons at concentrations exceeding MTCA Method A cleanup levels in soil appear to be limited to soil 10 to 15 feet bgs, likely as a result of migration associated with shallow perched groundwater. GRO and total petroleum hydrocarbons as oil-range organics (ORO) also were detected in soil samples collected at the Site, but were generally noted on the laboratory reports to be the result of overlap from the DRO results. The laboratory analytical results for total petroleum hydrocarbons and BTEX in soil samples are provided in Table 2. The laboratory analytical reports are provided in Appendix B.

Farallon conducted Site-wide groundwater monitoring and sampling events on April 20 and 21 and September 28 and 29, 2017. Monitoring wells MW-1, MW-2, MW-4, and MW-5 also were sampled on March 23, 2017 prior to the installation of new monitoring wells at the Site in April 2017. Reconnaissance groundwater samples were collected from push-probe borings FB-9 and FB-10 on April 7, 2017. The groundwater analytical results for the April 20 and 21 and September 28 and 29, 2017 groundwater monitoring and sampling events are presented on Figure 5. The 2017 groundwater and reconnaissance groundwater sample results are presented in Table 3. The laboratory analytical reports are provided in Appendix B.

DRO, ORO, GRO, and/or benzene were detected at concentrations exceeding the MTCA Method A cleanup levels in monitoring wells BH-1 through BH-3, MW-1, and MW-6 through MW-11 and in recovery well RW-1 during the April and/or September groundwater sampling events. The laboratory analytical reports noted that the ORO and GRO results were impacted by the heavier fuels and/or DRO present in the groundwater samples. During the April 2017 groundwater monitoring and sampling event, groundwater samples were not collected for laboratory analyses from monitoring wells MW-8 and MW-9 due to the presence of LNAPL at these locations. Groundwater samples were not collected from monitoring wells BH-1 and BH-2 during the September groundwater monitoring and sampling event in the sampling event due to insufficient groundwater in the

monitoring wells at these locations. Based on historical groundwater analytical data not exceeding the laboratory practical quantitation limit for DRO, ORO, GRO, and BTEX at monitoring well MW-2, a groundwater sample was not collected at this location during the September 2017 groundwater monitoring and sampling event.

6.0 LIGHT NONAQUEOUS-PHASE LIQUID RECOVERY

In response to the March 17, 2017 spill of renewable diesel fuel, Coleman Oil has documented the amount of LNAPL recovered from the Columbia River and groundwater at the Site. The quantity of LNAPL recovered from the Columbia River, from each sump structure and monitoring well on the Coleman Oil Property, and from the oil-water separator associated with the temporary groundwater treatment system installed to treat groundwater pumped from the sump structures has been tracked. Table 4 presents the quantities of LNAPL recovered from pads and booms off the Columbia River; from pads, booms, and pumps placed in sumps and monitoring wells on and near the Coleman Oil Property; and from the oil-water separator associated with the temporary groundwater treatment system. A total of 300.53 gallons of LNAPL was recovered from these locations between March 27 and September 6, 2017 as described below:

- A total of 158.01 gallons of LNAPL was recovered in pads and booms from the Columbia River;
- A total of 67.48 gallons of LNAPL was recovered from sumps on the Coleman Oil Property: Sump 1 produced 11.99 gallons; Sump 2 produced 12.62 gallons; Sump 3 produced 3.28 gallons; Sump 4 produced 0.13 gallons; Sump 5 produced 29.33 gallons; and Sump 6 produced 10.13 gallons;
- A total of 67.86 gallons of LNAPL was recovered from monitoring wells: MW-6 produced 0.03 gallons; MW-8 produced 13.51 gallons; MW-9 produced 33.76 gallons; MW-10 produced 19.28 gallons; MW-11 produced 0.62 gallons; BH-1 produced 0.19 gallons; and BH-2 produced 0.47 gallons; and
- A total of 7.18 gallons of LNAPL was recovered from the oil-water separator prior to the storage tank and groundwater treatment system.

Monitoring and recovery of LNAPL from the Columbia River, sump structures, and monitoring wells continues.

7.0 PRELIMINARY CONCEPTUAL SITE MODEL

The following sections present the preliminary conceptual site model that has been developed for the Site. The conceptual site model will be further developed and refined as more information and data become available as part of the remedial investigation for the Site.

7.1 KNOWN OR SUSPECTED SOURCES OF CONTAMINANTS

The primary known source of release(s) is leakage from buried piping near the truck fuel-loading rack. A release of unleaded gasoline was documented from a fill valve outside Tank Farm A on the south-central portion of the Site in 2010. Other potential primary sources or releases include historical truck or tank overfills, spills, or leaking ASTs or USTs either on the Coleman Oil Property or on nearby properties.

Secondary sources of contaminants include LNAPL in soil pores in the vadose zone or in saturated soil that could serve as an ongoing source for dissolution to groundwater.

7.2 TYPES AND CONCENTRATIONS OF CONTAMINANTS

The primary known release at the Site is of R99 renewable diesel. Red-colored LNAPL is present on groundwater at the Site as a result of the renewable diesel release. Other petroleum products also could potentially have been released from historical spills or leaks at or in the vicinity of the Site.

The primary contaminant detected in the 2017 spill response investigations was DRO, which was detected at concentrations exceeding MTCA Method A cleanup levels in soil and groundwater samples. GRO and ORO were also detected at concentrations exceeding MTCA Method A cleanup levels in soil and groundwater samples, but the data were generally flagged in the laboratory reports as having been affected by the DRO results.

DRO has been detected at concentrations of up to 69,000 milligrams per kilogram in soil samples, with the highest concentrations detected in soil samples collected from the area of the former truck fuel-loading rack and leaking renewable diesel piping.

7.3 POTENTIALLY CONTAMINATED MEDIA

The potentially impacted media include surface (less than 15 feet bgs) and subsurface (greater than 15 feet bgs) soil, groundwater, surface water, and sediment.

7.4 KNOWN AND POTENTIAL EXPOSURE PATHWAYS AND RECEPTORS

Potential exposure pathways for soil include:

- Direct contact by construction workers;
- Leaching to groundwater or surface water; and
- Direct contact by plants or burrowing animals.

The primary potential exposure pathway for groundwater is discharge to surface water or sediment. The primary potential exposure pathway for surface water and sediment is contact by construction workers, recreational users, wildlife, and aquatic organisms.

8.0 REFERENCES

- Able Clean-Up Technologies, Inc. (Able). 2013. Letter Regarding Report for a Gasoline Spill for Coleman Oil, Located at the Coleman Oil Bulk Plant, 3 Chehalis Street, Wenatchee, Washington. From Kipp Silver. To Mark Sater, Coleman Oil. July 1.
- Blue Mountain Environmental Consulting, Inc. 2007. Environmental Site Assessment/ASTM E1527-05 at Coleman Oil Company Wenatchee Cardlock/Bulk Facility, 3 Chehalis St./600 Worthen St., Wenatchee, Washington 98801. Prepared for Bank of Whitman. February 28.
- Chelan County Assessor. 2017. Property Search Results. <<u>http://pacs.co.chelan.wa.us/PropertyAccess/Property.aspx?cid=91&prop_id=10398&ye</u> <u>ar=2017</u>>. (October 15, 2017).
- Farallon Consulting, L.L.C. (Farallon). 2014. Final Groundwater Monitoring Report and Request for No Further Action Determination. Prepared for Coleman Oil Company. January.

———. 2017. Emergency Spill Response Plan, Coleman Oil Wentachee [sic] Facility, 3 East Chehalis Street, Wenatchee, Washington. Prepared for Coleman Oil Company. April 1.

- Washington State Department of Ecology (Ecology). 2015. Letter Regarding No Further Action at the Following Site: Coleman Oil company 1, 3 East Chehalis Street, Wenatchee. From Jennifer Lind. To Jim Cach, Coleman Oil Company. March 13.
- U.S. Army Corps of Engineers. 2017a. "Rocky Reach Dam & Lake." <<u>http://www.nwd-</u> wc.usace.army.mil/dd/nwdp/project_daily/webexec/rep?r=rrh&ago=1>. (October 15, 2017.)

—. 2017b. "Rock Island Dam & Reservoir." <<u>http://www.nwd-wc.usace.army.mil/dd/nwdp/project_daily/webexec/rep?r=ris&ago=1</u>>. (October 15, 2017.)

9.0 LIMITATIONS

9.1 GENERAL 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 limitations:

- 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.
- **Reconnaissance and/or Characterization**. Farallon performed a reconnaissance and/or characterization of the Site that is the subject of this report/assessment to document current conditions. Farallon focused on areas deemed more likely to exhibit hazardous materials conditions. Contamination may exist in other areas of the Site that were not investigated or were inaccessible. Site activities beyond Farallon's control could change at any time after the completion of this report/assessment.

For the foregoing reasons, Farallon cannot and does not warrant or guarantee that the Site 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.

This report/assessment has been prepared in accordance with the contract for services between Farallon and Coleman Oil Company, and currently accepted industry standards. No other warranties, representations, or certifications are made.

9.2 LIMITATION ON RELIANCE BY THIRD PARTIES

Reliance by third parties is prohibited. This report/assessment has been prepared for the exclusive use of Coleman Oil Company to address the unique needs of Coleman Oil Company at the Site at a specific point in time.

This is not a general grant of reliance. No one other than Coleman Oil Company may rely on this report unless Farallon agrees in advance to such reliance in writing. Any unauthorized use, interpretation, or reliance on this report/assessment is at the sole risk of that party and Farallon will have no liability for such unauthorized use, interpretation, or reliance.

FIGURES

SUPPLEMENTAL DATA SUMMARY REPORT Coleman Oil 3 Chehalis Street Wenatchee, Washington

Farallon PN: 1001-002



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TABLES

SUPPLEMENTAL DATA SUMMARY REPORT Coleman Oil 3 Chehalis Street Wenatchee, Washington

Farallon PN: 1001-002

Table 1 Groundwater and LNAPL Elevation Data Coleman Oil Wenatchee, Washington Farallon PN: 1001-002

Well Identification	Monitoring Date	Monitoring Well Screened Interval (feet bgs)	Elevation Top of Casing ¹ (feet)	Depth to Water (feet below top of casing)	Depth to NAPL (feet below top of casing)	LNAPL Thickness (feet)	Groundwater Elevation ¹ (feet)
	4/17/2017			9.47			648.54
	4/20/2017	-		9.63			648.38
	4/27/2017	-		10.14			647.87
MW-1	5/1/2017	20-35	658.01	10.31			647.70
	6/8/2017			11.20			646.81
	7/3/2017			NM			
	9/28/2017	-		12.36			645.65
	4/17/2017			9.58			648.18
	4/20/2017	_		9.61			648.15
	4/27/2017			10.19			647.57
MW-2	5/1/2017	25-40	657.76	10.36			647.40
	6/8/2017			11.33			646.43
	7/3/2017			11.96			645.80
	9/28/2017			12.65			645.11
	4/17/2017			7.12			651.14
	4/20/2017	-		7.15			651.11
	4/27/2017	-		11.44			646.82
MW-3	5/1/2017	25-35	658.26	7.90			650.36
	6/8/2017			7.33			650.93
	7/3/2017			7.46			650.80
	9/28/2017			7.74			650.52
	4/17/2017	_		15.29			642.19
	4/20/2017	_		15.40			642.08
	4/27/2017	_		15.74			641.74
MW-4	5/1/2017	27-37	657.48	15.71			641.77
	6/8/2017	_		16.23			641.25
	7/3/2017	_		16.93			640.55
	9/28/2017			18.18			639.30
	4/17/2017			33.98			622.02
	4/20/2017	-		35.67			620.33
	4/27/2017	4		34.98			621.02
MW-5	5/1/2017	30-45	656	35.92			620.08
	6/8/2017	4		32.06			623.94
	7/3/2017	-		36.75			619.25
	9/28/2017			38.67			617.33
	4/17/2017	4		9.57			648.13
	4/20/2017	-		9.40			648.3
	4/27/2017	1		9.89			647.81
MW-6	5/1/2017	8-18	657.7	9.95			647.75
	6/8/2017	4		10.60	10.55	0.05	647.14
	7/3/2017	4		11.10			646.60
	9/28/2017			11.51			646.19

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Table 1 Groundwater and LNAPL Elevation Data Coleman Oil Wenatchee, Washington Farallon PN: 1001-002

Well Identification	Monitoring Date	Monitoring Well Screened Interval (feet bgs)	Elevation Top of Casing ¹ (feet)	Depth to Water (feet below top of casing)	Depth to NAPL (feet below top of casing)	LNAPL Thickness (feet)	Groundwater Elevation ¹ (feet)
	4/17/2017			9.64			647.88
	4/20/2017			9.71			647.81
	4/27/2017			10.26			647.26
MW-7	5/1/2017	10-20	657.52	10.35			647.17
	6/8/2017			11.44			646.08
	7/3/2017			11.91			645.61
	9/28/2017			12.46			645.06
	4/13/2017			16.71	14.50	2.21	641.21
	4/17/2017			13.47			642.73
	4/20/2017			13.96	13.95	0.01	642.25
MW-8	4/27/2017	15.25	656 20	17.25	14.91	2.34	640.78
IVI VV - ð	5/1/2017	15-25	656.20	17.47	14.94	2.53	640.70
	6/8/2017	-		18.02			638.18
	7/3/2017			17.97	17.91	0.07	638.28
	9/28/2017			18.1			638.10
	4/17/2017			13.56			641.73
	4/20/2017	-		14.31			640.98
	4/27/2017	-		17.45	16.75	0.7	638.39
MW-9	5/1/2017	14-24	655.29	18.60	17.33	1.27	637.68
	6/8/2017	-		22.14			633.15
	7/3/2017			22.16			633.13
	9/28/2017	-		22.69			632.6
	4/17/2017			16.72			629.08
	4/20/2017			17.31			628.49
	4/27/2017			18.11			627.69
MW-10	5/1/2017	14-30	645.80	18.99			626.81
	6/8/2017			19.88			625.92
	7/3/2017			25.06	23.62	1.44	621.86
	9/28/2017			25.7			620.10
	4/17/2017	_		13.45			644.55
	4/20/2017			13.45			644.55
	4/27/2017	1		13.76			644.24
MW-11	5/1/2017	12-22	658.00	13.77			644.23
	6/8/2017	1		14.32	14.05	0.27	643.89
	7/3/2017	1		14.30			643.70
	9/28/2017	1		14.65			643.35
	4/17/2017			19.71			632.46
	4/20/2017	1		20.13			632.037
	4/27/2017	-		22.88			629.29
BH-1	5/1/2017	20-30	652.17	23.16			629.01
	6/8/2017	1		25.64			626.53
	7/3/2017	-		28.46	27.91	0.55	624.14
	9/28/2017	1		28.73			623.44

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Table 1 Groundwater and LNAPL Elevation Data Coleman Oil Wenatchee, Washington Farallon PN: 1001-002

Well Identification	Monitoring Date	Monitoring Well Screened Interval (feet bgs)	Elevation Top of Casing ¹ (feet)	Depth to Water (feet below top of casing)	Depth to NAPL (feet below top of casing)	LNAPL Thickness (feet)	Groundwater Elevation ¹ (feet)
	4/17/2017			26.16			627.61
	4/20/2017			26.30			627.47
	4/27/2017			26.56	26.48	0.08	627.27
BH-2	5/1/2017	20-35	653.77	26.68	26.58	0.1	627.17
	6/8/2017			26.73			627.04
	7/3/2017			28.86			624.91
	9/28/2017			31.25			622.52
	4/17/2017			17.47			631.29
	4/20/2017			17.88			630.876
	4/27/2017			18.70			630.06
BH-3	5/1/2017	15-30	648.76	19.06			629.70
	6/8/2017			21.19			627.57
	7/3/2017			21.70			627.06
	9/28/2017			23.04			625.72
	4/17/2017			16.15			634.27
	4/20/2017			16.34			634.079
	4/27/2017			17.35			633.07
RW-1	5/1/2017	15-30	650.42	18.55			631.87
	6/8/2017			22.67			627.75
	7/3/2017			24.19			626.23
	9/28/2017			26.74			623.68

NOTES:

- - - denotes no LNAPL present

¹Elevation in feet above mean sea level. Elevations based on NAVD88 vertical datum. Well survey conducted by Munson Engineers, Inc. of Wenatchee, Washington in July 2010 and April 2017. Groundwater elevations in wells with LNAPL corrected for waterlevel elevation using typical specific gravity of R99 LNAPL of 0.78. bgs = below ground surface LNAPL = light nonaqueous-phase liquid NAPL = nonaqueous-phase liquid

Table 2Soil Analytical Results for TPH and BTEXColeman OilWenatchee, WashingtonFarallon PN: 1001-002

						Analytical	Results (milligrams p	er kilogram)		
Sample Location	Sample Identification	Sample Depth (feet) ¹	Sample Date	DRO ²	ORO ²	GRO ³	Benzene ⁴	Toluene ⁴	Ethylbenzene ⁴	Xylenes ⁴
	1	Π	D	ry Well and Concrete	Box Excavation		1	1	-	
Concrete Box	CMTB-3.0	3.0	4/3/2017	370	150	< 7.5	< 0.020	< 0.075	< 0.075	< 0.150
Dry Well Bottom	DRY WELL-B-5.0	5.0	4/3/2017	2,400	2,000					
Dry Well East Sidewall	DRY WELL-E-4.0	4.0	4/3/2017	2,000	540					
Dry Well North Sidewall	DRY WELL-N-4.0	4.0	4/3/2017	4,400	1,800					
Dry Well South Sidewall	DRY WELL-S-4.0	4.0	4/3/2017	580	< 55					
Dry Well West Sidewall	DRY WELL-W-4.0	4.0	4/3/2017	1,800	300					
				Fuel Line Exc	avation		•			
Fuel Line Excavation Bottom	FUEL LINE-EX-B-6.0	6.0	4/3/2017	14,000	< 3,300					
Fuel Line Excavation East Sidewall	FUEL LINE-EX-E-2.0	2.0	4/3/2017	58,000	< 6,000					
	FUEL LINE-EX-E-3.0	3.0	4/3/2017	3,400	< 230					
Fuel Line Excavation North Sidewall	FUEL LINE-EX-N-3.0	3.0	4/3/2017	3,400	< 280					
				North-South Trenc	h Excavation		•			
North-South Trench 1	NS-TRENCH-1-5.0	5.0	4/4/2017	< 28	< 56					
North-South Trench 2	NS-TRENCH-2-10.0	10.0	4/4/2017	49	< 55					
North-South Trench 3	NS-TRENCH-3-10.0	10.0	4/4/2017	< 28	< 55					
North-South Trench 4	NS-TRENCH-4-5.0	5.0	4/4/2017	< 28	61					
North-South Trench 5	NS-TRENCH-5-10.0	10.0	4/4/2017	< 28	< 56					
North-South Trench 6	NS-TRENCH-6-10.0	10.0	4/4/2017	< 28	< 55					
North-South Trench 7	NS-TRENCH-7-10.0	10.0	4/4/2017	6,400	< 550					
North-South Trench 8	NS-TRENCH-8-5.0	5.0	4/4/2017	94 N	600					
North-South Trench 9	NS-TRENCH-9-10.0	10.0	4/4/2017	5,600	< 600					
	NS-TRENCH-9-10.0-1	10.0	4/4/2017	6,400	< 570					
MTCA Method A Cleanup Levels for So	il ⁵			2,000	2,000	30/100 ⁶	0.03	7	6	9

Table 2Soil Analytical Results for TPH and BTEXColeman OilWenatchee, WashingtonFarallon PN: 1001-002

						Analytical]	Results (milligrams pe	er kilogram)		
		Sample Depth								
Sample Location	Sample Identification	(feet) ¹	Sample Date	DRO ²	ORO ²	GRO ³	Benzene ⁴	Toluene ⁴	Ethylbenzene ⁴	Xylenes ⁴
	I	ſ	ſ	East-West Trench	Excavation		[]		1	
East-West Trench 1	EW-TRENCH-1-5.0	5.0	4/4/2017	< 27	< 54					
East-West Trench 2	EW-TRENCH-10.0	10.0	4/4/2017	< 28	< 56					
East-West Trench 3	EW-TRENCH-3-5.0	5.0	4/5/2017	< 28	< 57					
East-West Trench 4	EW-TRENCH-4-10.0	10.0	4/5/2017	7,700	< 550					
East-West Trench 2-5	EW-TRENCH2-5-5.0	5.0	4/5/2017	< 28	< 55					
East-West Trench 2-6	EW-TRENCH2-6-9.0	9.0	4/5/2017	< 28	< 55					
East-West Trench 2-7	EW-TRENCH2-7-5.0	5.0	4/5/2017	< 27	< 54					
East-West Trench 2-8	EW-TRENCH2-8-6.0	6.0	4/5/2017	< 27	< 55					
				Filling Station E	xcavation					
Filling Station Ex 1	FS-EX-1-6.0	6.0	4/6/2017	8,700	< 550	540 F	0.089	0.74	2.4	7.1
Filling Station Ex 2	FS-EX-2-4.0	4.0	4/6/2017	42,000	2,200 N1					
Filling Station Ex 2	FS-EX-2-4.0-1	4.0	4/6/2017	45,000	2,500 N1					
Filling Station Ex 3	FS-EX-3-2.0	2.0	4/6/2017	69,000	5,600 N1					
Filling Station Ex 4	FS-EX-4-8.0	8.0	4/6/2017	12,000	< 660	1,300 F	0.050	0.071	3.9	12.7
Filling Station Ex 5	FS-EX-5-11.0	11.0	4/6/2017	24,000	< 730					
				Reconnaissance	e Borings					
	FB-3-9.0-040617	9.0	4/6/2017	< 27	< 55	< 5.4	< 0.020	< 0.054	< 0.054	< 0.108
FB-03	FB-3-12.5-040617	12.5	4/6/2017	4,000	< 110	420 F	< 0.020	< 0.049	0.68	0.59
FB-03	FB-3-13.5-040617	13.5	4/6/2017	14,000	< 610	940 F	0.046	< 0.042	2.5	4.03
	FB-3-15.0-040617	15.0	4/6/2017	2,300	150 N1	380 F	0.028	< 0.044	1.2	0.98
	FB-5-13.5-040617	13.5	4/6/2017	< 26	< 51	< 4.2	< 0.020	< 0.042	< 0.042	< 0.084
FB-05	FB-5-15.0-040617	15.0	4/6/2017	< 26	< 52	< 4.4	< 0.020	< 0.044	< 0.044	< 0.088
	FB-5-17.0-040617	17.0	4/6/2017	< 27	< 53	< 4.8	< 0.020	< 0.048	< 0.048	< 0.096
FB-06	FB-6-12.0-040617	12.0	4/6/2017	< 120	1,100	< 4.7	< 0.020	< 0.047	< 0.047	< 0.094
MTCA Method A Cleanup Levels for So	bil ⁵	· · · · ·	······	2,000	2,000	30/100 ⁶	0.03	7	6	9

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Table 2Soil Analytical Results for TPH and BTEXColeman OilWenatchee, WashingtonFarallon PN: 1001-002

					-	Analytical	Results (milligrams pe	r kilogram)		
		Sample Depth								
Sample Location	Sample Identification	(feet) ¹	Sample Date	DRO ²	ORO ²	GRO ³	Benzene ⁴	Toluene ⁴	Ethylbenzene ⁴	Xylenes ⁴
			I	Reconnaissance Borin	ngs (Continued)					
FB-07	FB-7-13.0-040617	13.0	4/6/2017	< 27	< 53	< 4.9	< 0.020	< 0.049	< 0.049	< 0.098
	FB-7-23.0-040617	23.0	4/6/2017	40 N	440	< 4.7	< 0.020	< 0.047	< 0.047	< 0.094
FB-08	FB-8-14.0-040717	14.0	4/7/2017	< 27	< 55	< 5.0	< 0.020	< 0.050	< 0.050	< 0.100
	FB-9-6.9-040717	6.9	4/7/2017	1,100	350	< 4.7	< 0.020	< 0.047	< 0.047	< 0.094
FB-09	FB-9-10.0-040717	10.0	4/7/2017	60	< 53	< 5.0	< 0.020	< 0.050	< 0.050	< 0.100
	FB-9-14.0-040717	14.0	4/7/2017	440	180	330 F	< 0.020	< 0.050	0.63	0.48
	FB-10-12.8-040717	12.8	4/7/2017	4,300	< 610	880 F	< 0.020	< 0.044	0.59	0.99
FB-10	FB-10-14.0-040717	14.0	4/7/2017	5,900	1,800 N1	860 F	0.080	< 0.055	0.52	2.1
10-10	FB-10-17.1-040717	17.1	4/7/2017	1,300	270	910 F	0.086	< 0.25	0.58	3.0
	FB-10-17.3-040717	17.3	4/7/2017	8,200	< 580	530 F	0.13	< 0.27	1.3	2.2
FB-11	FB-11-12.6	12.6	4/13/2017	< 27	< 54	< 5.5	0.020	< 0.055	< 0.055	< 0.110
10-11	FB-11-23.4	23.4	4/13/2017	140	390	< 5.9	< 0.020	< 0.059	< 0.059	< 0.118
				Well Installa	ations					
MW-6	MW-6-10.3	10.3	4/12/2017	10,000	< 570	280 F	0.068	< 0.065	2.2	0.96
111 11 -0	MW-6-12.8	12.8	4/12/2017	3,900	< 310	1,400 F	0.066	< 0.29	0.34	0.76
MW-7	MW-7-13.0	13.0	4/11/2017	160	< 56	< 5.8	< 0.020	< 0.058	< 0.058	< 0.116
1v1 vv - /	MW-7-17.3	17.3	4/11/2017	< 29	< 58	< 6.1	< 0.020	< 0.061	< 0.061	< 0.122
	MW-8-12.8	12.8	4/11/2017	1,400	< 55	< 6.0	< 0.020	< 0.060	< 0.060	< 0.120
MW-8	MW-8-15.0	15.0	4/11/2017	100	< 51	< 4.3	< 0.020	< 0.043	< 0.043	< 0.086
	MW-8-17.5	17.5	4/11/2017	230	< 56	< 5.5	< 0.020	< 0.055	< 0.055	< 0.110
MTCA Method A Cleanup Levels for S	Soil ⁵			2,000	2,000	30/100⁶	0.03	7	6	9

Table 2Soil Analytical Results for TPH and BTEX
Coleman Oil
Wenatchee, Washington
Farallon PN: 1001-002

						Analytical	Results (milligrams po	er kilogram)		
Sample Location	Sample Identification	Sample Depth (feet) ¹	Sample Date	DRO ²	ORO ²	GRO ³	Benzene ⁴	Toluene ⁴	Ethylbenzene ⁴	Xylenes ⁴
				Well Installations	(continued)					
	MW-9-12.8	12.8	4/12/2017	< 28	< 55	< 6.2	< 0.020	< 0.062	< 0.062	< 0.124
MW-9	MW-9-15.6	15.6	4/12/2017	15,000	< 580	1,800 F	< 0.062	< 0.31	0.64	2.7
	MW-9-24.5	24.5	4/13/2017	280	330	31 F	< 0.020	< 0.076	< 0.076	0.094
MW-10	MW-10-15.7	15.7	4/14/2017	< 30	< 59	< 6.1	< 0.020	< 0.061	< 0.061	< 0.122
WIW-10	MW-10-25.1	25.1	4/14/2017	1,300	< 55	1,300 F	0.13	< 0.46	4.5	5.14
	MW-11-5.8	5.8	4/14/2017	< 28	< 55	< 5.0	< 0.020	< 0.050	< 0.050	< 0.100
MW-11	MW11-13.2	13.2	4/14/2017	600	< 59	570 F	< 0.024	< 0.12	1.0	0.97
	MW11-17.8	17.8	4/14/2017	58	< 56	12	< 0.020	< 0.060	< 0.060	< 0.120
RW-1	RW-1-17.5	17.5	4/10/2017	< 32	< 63	< 6.9	< 0.020	< 0.069	< 0.069	< 0.138
MTCA Method A Cleanup Levels for S	oil ⁵			2,000	2,000	30/100⁶	0.03	7	6	9

NOTES:

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

< denotes analyte not detected at or exceeding the laboratory practical quantitation limit listed.

- denotes sample not analyzed.

¹Depth in feet below ground surface.

²Analyzed by Northwest Method NWTPH-Dx.

³Analyzed by Northwest Method NWTPH-Gx.

⁴Analyzed by U.S. Environmental Protection Agency Method 8021B.

⁵Washington State Model Toxics Control Act Cleanup Regulation 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 2013.

⁶Cleanup level is 30 milligrams per kilogram if benzene is detected and 100 milligrams per kilogram if benzene is not detected.

BTEX = benzene, toluene, ethylbenzene, and xylenes
DRO = total petroleum hydrocarbons (TPH) as diesel-range organics
F = hydrocarbons indicative of heavier fuels are present in sample and impacting the gasoline result
GRO = TPH as gasoline-range organics
N = hydrocarbons in the oil-range are impacting the diesel result
N1 = hydrocarbons in the diesel-range are impacting the oil result

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ORO = TPH as oil-range organics

Table 3 **Groundwater Analytical Results for TPH and BTEX Coleman Oil** Wenatchee, Washington **Farallon PN: 1001-002**

					Analytical F	Results (microgra	ms per liter)	· · · · ·	
Sample Location	Sample Date	Sample Identification	DRO ¹	ORO ¹	GRO ²	Benzene ³	Toluene ³	Ethylbenzene ³	Xylenes ³
•			Reconnaissan	ce Boring Ground	lwater Samples				
FB-09	4/7/2017	FB-9-RECON-040717	2,900	1,200	1,200 F	2.4	< 1.0	3.7	1.7
FB-10	4/7/2017	FB-10-RECON-040717	57,000	< 4,100	2,000 F	71	13	7.1	64
			Monitoring	g Well Groundwa	ter Samples				
BH-1	4/21/2017	BH-1-042117	1,900	970 N1	820 F	15	2.8	8.3	18.5
BH-2	4/10/2017	BH-2-041117	100,000	10,000	1,900 F	< 4.0	< 4.0	13	39
B11-2	4/21/2017	BH-2-042117	2,600	630 N1	1,500 F	4.2	3.3	12	39
BH-3	4/21/2017	BH-3-042117	2,400	660	1,800 F	1.8	< 1.0	5.4	8.2
BII-5	9/29/2017	BH-3-092917	1,200	550 N1	150 O	<1.0	<1.0	<1.0	<2.0
	3/23/2017	MW-1-032317	520	480					
MW-1	4/21/2017	MW-1-042117	730	510	210 F	< 1.0	< 1.0	< 1.0	< 2.0
	9/29/2017	MW-1-092917	410	<410	200	<1.0	<1.0	<1.0	<2.0
MW-2	3/23/2017	MW-2-032317	< 260	< 410					
IVI VV -2	4/20/2017	MW-2-042017	< 260	< 410	< 100	< 1.0	< 1.0	< 1.0	< 2.0
MW-3	4/20/2017	MW-3-042017	< 260	< 410	< 100	< 1.0	< 1.0	< 1.0	< 2.0
WIW-5	9/28/2017	MW-3-092817	<260	<410	< 100	< 1.0	< 1.0	< 1.0	< 2.0
	3/23/2017	MW-4-032317	< 260	< 410					
MW-4	4/20/2017	MW-4-042017	< 260	< 410	< 100	< 1.0	< 1.0	< 1.0	< 2.0
	9/28/2017	MW-4-092817	<260	<410	< 100	< 1.0	< 1.0	< 1.0	< 2.0
	3/23/2017	MW-5-032317	< 260	< 410					
MW-5	4/20/2017	MW-5-042017	< 260	< 410	< 100	< 1.0	< 1.0	< 1.0	< 2.0
	9/28/2017	MW-5-092817	<260	<410	<100	< 1.0	< 1.0	< 1.0	< 2.0
MW-6	4/20/2017	MW-6-042017	1,800	480 N1	880 F	5.0	< 4.0	6.2	37
IVI W-0	9/28/2017	MW-6-092817	760	430 N1	530 O	<1.0	<1.0	<1.0	4.3
MW-7	4/20/2017	MW-7-042017	1,300	420 N1	1,100 F	3.2	< 1.0	15	11.4
101 00 - 7	9/28/2017	MW-7-092817	520	<470 U1	<100	<1.0	<1.0	<1.0	<2.0
MW-8	9/29/2017	MW-8-092917	2,100	690 N1	1,300 O	<1.0	<1.0	4.1	27.2
MW-9	9/29/2017	MW-9-092917	1,200	670 N1	500 O	<1.0	<1.0	<1.0	1.5
MW-10	4/21/2017	MW-10-042117	3,800	730	1,900 F	3.4	< 1.0	11	12.5
14144-10	9/29/2017	MW-10-092917	16,000	1,300 N1	1,900 O	<1.0	<1.0	13	26.7
MW-11	4/21/2017	MW-11-042117	1,700	1,000 N1	1,400 F	28	4.1	8.2	26.1
141 44 - 1 1	9/29/2017	MW-11-092917	3,100	720 N1	1,000 O	<1.0	<1.0	1.9	12.5
RW-1	4/21/2017	RW-1-042117	840	540 N1	< 100	< 1.0	< 1.0	< 1.0	< 2.0
IX VV - 1	9/29/2017	RW-1-092917	360	440	<100	< 1.0	< 1.0	< 1.0	< 2.0
TCA Method A C	leanup Level for (Groundwater ⁴	500	500	800/1,000 ⁵	5	1,000	700	1,000

NOTES:

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

< denotes analyte not detected at or exceeding the laboratory practical quantitation limit listed.

- denotes sample not analyzed.

¹Analyzed by Northwest Method NWTPH-Dx. ²Analyzed by Northwest Method NWTPH-Gx.

³Analyzed by U.S. Environmental Protection Agency Method 8021B.

⁴Washington State Model Toxics Control Act Cleanup Regulation Method A Cleanup Levels for Groundwater, Table 720-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as revised 2013.

⁵Cleanup level is 800 micrograms per liter if benzene is detected and 1,000 micrograms per liter if benzene is not detected.

BTEX = benzene, toluene, ethylbenzene, and xylenes

DRO = total petroleum hydrocarbons (TPH) as diesel-range organics

F and O = hydrocarbons indicative of heavier fuels are present in sample and impacting the gasoline result

GRO = TPH as gasoline-range organics

N1 = hydrocarbons in the diesel-range are impacting the oil result ORO = TPH as oil-range organics

U1 = the practical quantitation limit is elevated due to interferences present in the sample

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				LNAPL Recovered with
				Pads, Booms, Socks, or
Recovery Location(s)	Time R	ecovered	Volume (gallons)	Pumps ¹
	From:	To:		
	Columbia	River		•
Columbia River	3/27/2017	3/27/2017	30.00	pads
Columbia River	3/27/2017	4/2/2017	22.75	booms, pads
Columbia River	4/4/2017	4/4/2017	0.62	pads
Columbia River	4/5/2017	4/5/2017	2.89	booms, pads
Columbia River	4/6/2017	4/6/2017	2.02	booms, pads
Columbia River	4/7/2017	4/7/2017	3.77	booms, pads
Columbia River	4/8/2017	4/8/2017	2.59	pads
Columbia River	4/9/2017	4/9/2017	1.28	pads
Columbia River	4/10/2017	4/10/2017	1.77	pads
Columbia River	4/11/2017	4/11/2017	2.49	pads
Columbia River	4/12/2017	4/12/2017	2.69	pads
Columbia River	4/13/2017	4/13/2017	1.94	pads
Columbia River	4/14/2017	4/14/2017	1.65	pads
Columbia River	4/15/2017	4/15/2017	3.52	pads
Columbia River	4/16/2017	4/16/2017	1.21	pads
Columbia River	4/17/2017	4/17/2017	3.62	pads
Columbia River	4/18/2017	4/18/2017	1.13	pads
Columbia River	4/19/2017	4/19/2017	0.91	pads
Columbia River	4/20/2017	4/20/2017	0.76	pads
Columbia River	4/21/2017	4/21/2017	0.79	pads
Columbia River	4/22/2017	4/22/2017	1.08	pads
Columbia River	4/23/2017	4/23/2017	0.77	pads
Columbia River	4/25/2017	4/25/2017	0.44	pads
Columbia River	4/27/2017	4/27/2017	1.05	pads
Columbia River	4/28/2017	4/28/2017	0.95	pads
Columbia River	4/29/2017	4/29/2017	0.54	pads
Columbia River	4/30/2017	4/30/2017	1.09	pads
Columbia River	5/1/2017	5/1/2017	0.30	pads
Columbia River	5/3/2017	5/3/2017	2.00	pads
Columbia River	5/5/2017	5/5/2017	1.74	pads
Columbia River	5/6/2017	5/6/2017	0.95	pads
Columbia River	5/7/2017	5/7/2017	0.94	pads
Columbia River	5/9/2017	5/9/2017	1.85	pads
Columbia River	5/10/2017	5/10/2017	1.85	pads
Columbia River	5/11/2017	5/11/2017	2.96	pads
Columbia River	5/12/2017	5/12/2017	1.46	pads
Columbia River	5/13/2017	5/13/2017	0.60	pads
Columbia River	5/14/2017	5/14/2017	0.53	pads
Columbia River	5/15/2017	5/15/2017	0.83	pads
Columbia River	5/16/2017	5/16/2017	0.48	pads

				LNAPL Recovered with
				Pads, Booms, Socks, or
Recovery Location(s)	Time R	ecovered	Volume (gallons)	Pumps ¹
	From:	To:		
	Columbia Rive	r (continued)		
Columbia River	5/17/2017	5/17/2017	1.19	pads
Columbia River	5/18/2017	5/18/2017	1.99	pads
Columbia River	5/19/2017	5/19/2017	0.24	pads
Columbia River	5/20/2017	5/20/2017	1.33	pads
Columbia River	5/21/2017	5/21/2017	0.79	pads
Columbia River	5/22/2017	5/22/2017	0.34	pads
Columbia River	5/31/2017	6/4/2017	0.41	pads
Columbia River	6/5/2017	6/5/2017	0.79	pads
Columbia River	5/25/2017	6/5/2017	1.24	boom(s)
Columbia River	6/5/2017	6/6/2017	1.25	pads
Columbia River	6/6/2017	6/7/2017	0.10	pads
Columbia River	6/7/2017	6/8/2017	0.26	pads
Columbia River	6/8/2017	6/9/2017	0.40	pads
Columbia River	6/9/2017	6/10/2017	0.66	pads
Columbia River	6/10/2017	6/11/2017	0.30	pads
Columbia River	6/10/2017	6/11/2017	0.48	boom(s)
Columbia River	6/11/2017	6/12/2017	1.70	pads
Columbia River	6/12/2017	6/13/2017	0.49	pads
Columbia River	6/18/2017	6/19/2017	0.82	pads
Columbia River	6/19/2017	6/20/2017	2.63	boom(s)
Columbia River	6/19/2017	6/20/2017	0.94	pads
Columbia River	6/20/2017	6/21/2017	0.24	pads
Columbia River	6/20/2017	6/21/2017	0.30	boom(s)
Columbia River	6/21/2017	6/22/2017	0.20	boom(s)
Columbia River	6/21/2017	6/22/2017	0.46	pads
Columbia River	6/22/2017	6/23/2017	0.72	pads
Columbia River	6/23/2017	6/24/2017	0.06	pads
Columbia River	6/24/2017	6/25/2017	0.21	pads
Columbia River	6/25/2017	6/26/2017	0.53	pads
Columbia River	6/22/2017	6/26/2017	0.14	boom(s)
Columbia River	6/26/2017	6/27/2017	0.08	pads
Columbia River	6/27/2017	6/28/2017	0.45	pads
Columbia River	6/26/2017	6/28/2017	0.72	boom(s)
Columbia River	6/28/2017	6/29/2017	0.32	pads
Columbia River	6/29/2017	6/30/2017	1.47	boom(s)
Columbia River	6/29/2017	6/30/2017	0.56	pads
Columbia River	6/30/2017	7/1/2017	0.30	pads
Columbia River	7/1/2017	7/2/2017	0.53	pads
Columbia River	7/1/2017	7/2/2017	0.68	boom(s)
Columbia River	7/2/2017	7/3/2017	0.25	pads

				LNAPL Recovered with
				Pads, Booms, Socks, or
Recovery Location(s)	Time R	ecovered	Volume (gallons)	Pumps ¹
	From:	To:		
	Columbia Rive	r (continued)		
Columbia River	7/3/2017	7/4/2017	0.14	pads
Columbia River	7/4/2017	7/5/2017	1.73	pads
Columbia River	7/4/2017	7/5/2017	0.81	boom(s)
Columbia River	7/5/2017	7/6/2017	0.08	pads
Columbia River	7/6/2017	7/7/2017	0.31	pads
Columbia River	7/7/2017	7/8/2017	0.31	pads
Columbia River	7/8/2017	7/9/2017	0.41	pads
Columbia River	7/9/2017	7/10/2017	0.16	pads
Columbia River	7/10/2017	7/11/2017	0.22	pads
Columbia River	7/11/2017	7/13/2017	0.53	pads
Columbia River	7/13/2017	7/14/2017	0.11	pads
Columbia River	7/14/2017	7/15/2017	0.46	pads
Columbia River	7/15/2017	7/16/2017	0.29	pads
Columbia River	7/16/2017	7/17/2017	0.11	pads
Columbia River	7/18/2017	7/19/2017	0.06	pads
Columbia River	7/5/2017	7/19/2017	0.11	boom(s)
Columbia River	7/19/2017	7/20/2017	0.13	pads
Columbia River	7/20/2017	7/21/2017	0.15	pads
Columbia River	7/21/2017	7/22/2017	0.18	pads
Columbia River	7/21/2017	7/23/2017	0.06	pads
Columbia River	7/19/2017	7/24/2017	0.35	boom(s)
Columbia River	7/23/2017	7/24/2017	0.01	pads
Columbia River	7/24/2017	7/25/2017	0.06	pads
Columbia River	7/25/2017	7/26/2017	0.09	pads
Columbia River	7/26/2017	7/27/2017	0.15	pads
Columbia River	7/27/2017	7/28/2017	0.01	pads
Columbia River	7/24/2017	7/30/2017	0.00	boom(s)
Columbia River	7/28/2017	7/30/2017	0.22	pads
Columbia River	7/30/2017	7/31/2017	0.12	pads
Columbia River	7/30/2017	8/1/2017	0.93	boom(s)
Columbia River	7/30/2017	8/1/2017	0.17	pads
Columbia River	8/1/2017	8/2/2017	0.09	pads
Columbia River	8/1/2017	8/3/2017	0.24	boom(s)
Columbia River	8/2/2017	8/3/2017	0.33	pads
Columbia River	8/3/2017	8/4/2017	0.14	pads
Columbia River	8/4/2017	8/5/2017	0.18	pads
Columbia River	8/3/2017	8/5/2017	0.30	boom(s)
Columbia River	8/5/2017	8/6/2017	1.38	pads
Columbia River	8/6/2017	8/7/2017	0.19	pads

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				LNAPL Recovered with
				Pads, Booms, Socks, or
Recovery Location(s)		ecovered	Volume (gallons)	Pumps ¹
	From:	To:		
	Columbia Rive	· · · · · ·	T	1
Columbia River	8/7/2017	8/8/2017	0.18	pads
Columbia River	8/5/2017	8/8/2017	0.85	boom(s)
Columbia River	8/8/2017	8/9/2017	0.06	pads
Columbia River	8/8/2017	8/10/2017	0.05	boom(s)
Columbia River	8/9/2017	8/10/2017	0.15	pads
Columbia River	8/10/2017	8/11/2017	0.18	pads
Columbia River	8/11/2017	8/12/2017	0.15	pads
Columbia River	8/12/2017	8/13/2017	0.24	pads
Columbia River	8/13/2017	8/14/2017	0.26	pads
Columbia River	8/10/2017	8/14/2017	0.05	boom(s)
Columbia River	8/14/2017	8/15/2017	0.06	pads
Columbia River	8/15/2017	8/16/2017	0.30	pads
Columbia River	8/16/2017	8/17/2017	0.39	pads
Columbia River	8/17/2017	8/18/2017	0.13	pads
Columbia River	8/18/2017	8/19/2017	0.06	pads
Columbia River	8/19/2017	8/20/2017	0.20	pads
Columbia River	8/8/2017	8/20/2017	0.07	boom(s)
Columbia River	8/20/2017	8/21/2017	0.17	pads
Columbia River	8/21/2017	8/22/2017	0.05	pads
Columbia River	8/23/2017	8/23/2017	0.05	pads
Columbia River	8/24/2017	8/24/2017	0.03	pads
Columbia River	8/25/2017	8/25/2017	0.30	pads
Columbia River	8/26/2017	8/26/2017	0.07	pads
Columbia River	8/28/2017	8/28/2017	0.34	pads
Columbia River	8/29/2017	8/29/2017	0.18	pads
Columbia River	8/30/2017	8/30/2017	0.04	pads
Columbia River	8/20/2017	8/30/2017	0.46	boom(s)
Columbia River	8/20/2017	8/31/2017	0.98	boom(s)
Columbia River	9/1/2017	9/1/2017	0.22	pads
Columbia River	8/20/2017	9/1/2017	0.55	boom(s)
Columbia River	9/2/2017	9/2/2017	0.13	pads
Columbia River	9/3/2017	9/3/2017	0.22	pads
Columbia River	8/30/2017	9/4/2017	1.30	boom(s)
Columbia River	9/4/2017	9/4/2017	0.14	pads
Columbia River	9/5/2017	9/5/2017	0.37	pads
Columbia River	9/12/2017	9/12/2017	0.08	pads
Columbia River	8/20/2017	9/14/2017	0.24	boom
Columbia River	9/14/2017	9/14/2017	0.01	pads
Total Recovered from Columbia River	3/27/2017	9/5/2017	158.01	pads & booms

				LNAPL Recovered with Pads, Booms, Socks, or
Recovery Location(s)	Time P	ecovered	Volume (gallons)	Pumps ¹
Ketovery Location(s)	From:	To:	volume (ganons)	T umps
	Sump #1 Near			
Sump #1	4/11/2017	4/11/2017	2.85	pads, booms
Sump #1	4/12/2017	4/12/2017	2.85	pads
Sump #1	4/13/2017	4/13/2017	1.21	pads
Sump #1	4/13/2017	4/14/2017	0.63	pads
Sump #1	4/15/2017	4/15/2017	0.73	boom
Sump #1	4/16/2017	4/16/2017	0.42	boom
Sump #1	4/18/2017	4/18/2017	0.42	pads
Sump #1	4/19/2017	4/19/2017	0.42	pads
Sump #1	4/20/2017	4/20/2017	0.05	pads
Sump #1	4/21/2017	4/21/2017	0.31	pads
Sump #1	4/23/2017	4/23/2017	0.05	pads
Sump #1	4/25/2017	4/25/2017	0.26	pads
Sump #1	4/26/2017	4/26/2017	0.50	pads
Sump #1	5/5/2017	5/5/2017	0.18	pads
Sump #1	5/6/2017	5/6/2017	0.16	pads
Sump #1	5/12/2017	5/12/2017	0.26	pads
Sump #1	5/14/2017	5/14/2017	0.16	pads
Sump #1	5/23/2017	6/2/2017	0.07	pads
Sump #1	6/2/2017	6/8/2017	0.19	pads
Sump #1	6/8/2017	6/12/2017	0.18	pads
Sump #1	8/9/2017	8/12/2017	0.02	pads
Sump #1	8/12/2017	8/16/2017	0.07	pads
Total Recovered from Sump #1	4/11/2017	8/16/2017	11.99	pads

				LNAPL Recovered with Pads, Booms, Socks, or
Recovery Location (s)	Time R	ecovered	Volume (gallons)	Pumps ¹
	From:	To:	(guilous)	- unpo
	Sump #2 Near Wareh	ouse Loading Doc	k	•
Sump #2	4/19/2017	4/19/2017	0.48	pads
Sump #2	4/20/2017	4/20/2017	0.05	pads
Sump #2	4/21/2017	4/21/2017	0.31	pads
Sump #2	4/22/2017	4/22/2017	0.05	pads
Sump #2	4/23/2017	4/23/2017	0.15	pads
Sump #2	4/24/2017	4/24/2017	0.58	pads
Sump #2	4/26/2017	4/26/2017	0.63	pads
Sump #2	5/2/2017	5/2/2017	0.36	pads
Sump #2	5/3/2017	5/3/2017	2.17	pads
Sump #2	5/5/2017	5/5/2017	0.18	pads
Sump #2	5/23/2017	6/22/2017	0.01	pads
Sump #2	6/22/2017	6/28/2017	0.16	pads
Sump #2	6/28/2017	7/5/2017	0.24	pads
Sump #2	7/5/2017	7/11/2017	0.33	pads
Sump #2	7/11/2017	7/15/2017	0.31	pads
Sump #2	7/15/2017	7/16/2017	0.14	pads
Sump #2	7/16/2017	7/18/2017	0.24	pads
Sump #2	7/18/2017	7/19/2017	0.26	pads
Sump #2	7/19/2017	7/20/2017	0.21	pads
Sump #2	7/20/2017	7/21/2017	0.20	pads
Sump #2	7/21/2017	7/22/2017	0.10	pads
Sump #2	7/22/2017	7/24/2017	0.20	pads
Sump #2	7/24/2017	7/25/2017	0.08	pads
Sump #2	7/25/2017	7/26/2017	0.11	pads
Sump #2	7/26/2017	7/28/2017	0.15	pads
Sump #2	7/28/2017	7/30/2017	0.03	pads
Sump #2	7/30/2017	8/1/2017	0.07	pads
Sump #2	8/1/2017	8/3/2017	0.20	pads
Sump #2	8/3/2017	8/4/2017	0.09	pads
Sump #2	8/4/2017	8/6/2017	0.09	pads
Sump #2	8/6/2017	8/7/2017	0.08	pads

				LNAPL Recovered with
				Pads, Booms, Socks, or
Recovery Location(s)	Time Re	Time Recovered		Pumps ¹
	From:	To:		
	np #2 Near Warehouse Lo			-
Sump #2	8/7/2017	8/8/2017	0.09	pads
Sump #2	8/8/2017	8/9/2017	0.19	pads
Sump #2	8/9/2017	8/10/2017	0.15	pads
Sump #2	8/10/2017	8/11/2017	0.27	pads
Sump #2	8/11/2017	8/12/2017	0.04	pads
Sump #2	8/12/2017	8/13/2017	0.22	pads
Sump #2	8/13/2017	8/15/2017	0.46	pads
Sump #2	8/15/2017	8/16/2017	0.03	pads
Sump #2	8/16/2017	8/17/2017	0.05	pads
Sump #2	8/18/2017	8/19/2017	0.06	pads
Sump #2	8/19/2017	8/21/2017	0.04	pads
Sump #2	8/21/2017	8/22/2017	0.04	pads
Sump #2	8/22/2017	8/23/2017	0.04	pads
Sump #2	8/23/2017	8/24/2017	0.07	pads
Sump #2	8/25/2017	8/26/2017	0.12	pads
Sump #2	8/26/2017	8/27/2017	0.07	pads
Sump #2	8/27/2017	8/28/2017	0.14	pads
Sump #2	8/28/2017	8/29/2017	0.07	pads
Sump #2	8/29/2017	8/29/2017	0.15	pads
Sump #2	8/29/2017	8/30/2017	0.14	pads
Sump #2	8/30/2017	8/31/2017	0.22	pads
Sump #2	8/31/2017	9/1/2017	0.23	pads
Sump #2	9/1/2017	9/2/2017	0.31	pads
Sump #2	9/2/2017	9/4/2017	0.18	pads
Sump #2	9/4/2017	9/5/2017	0.13	pads
Sump #2	9/5/2017	9/6/2017	0.13	pads
Sump #2	9/6/2017	9/6/2017	0.16	pads
Sump #2	9/11/2017	9/12/2017	0.13	pads
Sump #2	9/12/2017	9/13/2017	0.19	pads
Sump #2	9/13/2017	9/14/2017	0.24	pads
Total Recovered from Sump #2	4/19/2017	9/14/2017	12.62	pads
	Sump #3 Nea	r Office		
Sump #3	4/22/2017	4/22/2017	0.31	pads
Sump #3	4/23/2017	4/23/2017	0.36	pads
Sump #3	4/24/2017	4/24/2017	0.98	pads
Sump #3	4/26/2017	4/26/2017	0.05	pads
Sump #3	5/2/2017	5/2/2017	0.36	pads
Sump #3	5/3/2017	5/3/2017	1.22	pads
Total Recovered from Sump #3	4/22/2017	5/3/2017	3.28	pads

				LNAPL Recovered with Pads, Booms, Socks, or
Recovery Location(s)	Timo P	ecovered	Volume (gallons)	Pumps ¹
Ketovery Location(s)	From:	To:	volume (ganons)	1 umps
	Sump #4 South En	- * *		
Sump #4	4/25/2017	4/25/2017	0.05	pads
Sump #4	4/26/2017	4/26/2017	0.05	pads
Sump #4	5/23/2017	6/21/2017	0.03	pads
Total Recovered from Sump #4	4/25/2017	6/21/2017	0.13	pads
	Sump #5 Near St	orage Building		1
Sump #5	5/27/2017	6/2/2017	0.07	pads
Sump #5	6/2/2017	6/3/2017	0.63	pads
Sump #5	6/3/2017	6/5/2017	0.24	pads
Sump #5	6/5/2017	6/6/2017	0.42	pads
Sump #5	6/6/2017	6/7/2017	0.53	pads
Sump #5	6/7/2017	6/8/2017	0.74	pads
Sump #5	6/8/2017	6/9/2017	0.57	pads
Sump #5	6/9/2017	6/10/2017	0.39	pads
Sump #5	6/10/2017	6/11/2017	0.34	pads
Sump #5	6/11/2017	6/12/2017	0.34	pads
Sump #5	6/12/2017	6/13/2017	0.48	pads
Sump #5	6/19/2017	6/20/2017	0.73	pads
Sump #5	6/20/2017	6/21/2017	0.19	pads
Sump #5	6/21/2017	6/22/2017	0.29	pads
Sump #5	6/22/2017	6/23/2017	0.55	pads
Sump #5	6/23/2017	6/24/2017	0.40	pads
Sump #5	6/24/2017	6/28/2017	0.36	pads

Sump #5 6/ Sump #5 6/ Sump #5 6/ Sump #5 6/ Sump #5 7/	Time Re rom: ar Storage I 28/2017 29/2017 30/2017 2/2017 12/2017 12/2017 13/2017 14/2017 15/2017 16/2017 17/2017	covered To: Building (continue 6/29/2017 6/30/2017 7/2/2017 7/5/2017 7/12/2017 7/13/2017 7/14/2017 7/16/2017 7/16/2017 7/17/2017 7/18/2017	$\begin{array}{c} 0.68 \\ \hline 1.36 \\ \hline 0.65 \\ \hline 0.38 \\ \hline 0.68 \\ \hline 0.69 \\ \hline 0.66 \\ \hline 1.11 \\ \hline 0.40 \\ \hline 0.66 \\ \end{array}$	Pads, Booms, Socks, or Pumps ¹ pads pads pads pads pads pads pads pads
Sump #5 6/ Sump #5 6/ Sump #5 6/ Sump #5 6/ Sump #5 7/	Prom: ar Storage I 28/2017 29/2017 30/2017 2/2017 12/2017 12/2017 13/2017 15/2017 15/2017 16/2017 17/2017	To: Building (continue 6/29/2017 6/30/2017 7/2/2017 7/5/2017 7/12/2017 7/13/2017 7/14/2017 7/16/2017 7/16/2017 7/17/2017	0.68 1.36 0.65 0.38 0.68 0.69 0.66 1.11 0.40 0.66	pads pads pads pads pads pads pads pads
Sump #5 6/ Sump #5 6/ Sump #5 6/ Sump #5 6/ Sump #5 7/	ar Storage I 28/2017 29/2017 30/2017 2/2017 5/2017 12/2017 13/2017 15/2017 16/2017 17/2017	Building (continue 6/29/2017 6/30/2017 7/2/2017 7/5/2017 7/12/2017 7/13/2017 7/14/2017 7/15/2017 7/16/2017 7/16/2017 7/17/2017	$\begin{array}{c} 0.68 \\ \hline 1.36 \\ \hline 0.65 \\ \hline 0.38 \\ \hline 0.68 \\ \hline 0.69 \\ \hline 0.66 \\ \hline 1.11 \\ \hline 0.40 \\ \hline 0.66 \\ \end{array}$	pads pads pads pads pads pads pads pads
Sump #5 6/ Sump #5 6/ Sump #5 6/ Sump #5 7/	28/2017 29/2017 30/2017 2/2017 5/2017 12/2017 13/2017 15/2017 15/2017 16/2017	6/29/2017 6/30/2017 7/2/2017 7/5/2017 7/12/2017 7/13/2017 7/14/2017 7/15/2017 7/16/2017 7/17/2017	$\begin{array}{c} 0.68 \\ \hline 1.36 \\ \hline 0.65 \\ \hline 0.38 \\ \hline 0.68 \\ \hline 0.69 \\ \hline 0.66 \\ \hline 1.11 \\ \hline 0.40 \\ \hline 0.66 \\ \end{array}$	pads pads pads pads pads pads pads pads
Sump #5 6/ Sump #5 6/ Sump #5 7/ Sump #5 7/ Sump #5 7/ <	29/2017 30/2017 2/2017 5/2017 12/2017 13/2017 13/2017 15/2017 16/2017 17/2017	6/30/2017 7/2/2017 7/5/2017 7/12/2017 7/13/2017 7/14/2017 7/15/2017 7/16/2017 7/17/2017	1.36 0.65 0.38 0.68 0.69 0.66 1.11 0.40 0.66	pads pads pads pads pads pads pads pads
Sump #5 6/ Sump #5 7/	30/2017 2/2017 5/2017 12/2017 13/2017 13/2017 15/2017 15/2017 16/2017 17/2017	7/2/2017 7/5/2017 7/12/2017 7/13/2017 7/14/2017 7/15/2017 7/16/2017 7/17/2017	0.65 0.38 0.68 0.69 0.66 1.11 0.40 0.66	pads pads pads pads pads pads pads pads
Sump #5 7,	2/2017 5/2017 12/2017 13/2017 14/2017 15/2017 16/2017 17/2017	7/5/2017 7/12/2017 7/13/2017 7/14/2017 7/15/2017 7/16/2017 7/17/2017	0.38 0.68 0.69 0.66 1.11 0.40 0.66	pads pads pads pads pads pads pads
Sump #5 7/	5/2017 12/2017 13/2017 14/2017 15/2017 16/2017 17/2017	7/12/2017 7/13/2017 7/14/2017 7/15/2017 7/16/2017 7/17/2017	0.68 0.69 0.66 1.11 0.40 0.66	pads pads pads pads pads pads
Sump #5 7/	12/2017 13/2017 14/2017 15/2017 16/2017 17/2017	7/13/2017 7/14/2017 7/15/2017 7/16/2017 7/17/2017	0.69 0.66 1.11 0.40 0.66	pads pads pads pads pads
Sump #5 7/	13/2017 14/2017 15/2017 16/2017 17/2017	7/14/2017 7/15/2017 7/16/2017 7/17/2017	0.66 1.11 0.40 0.66	pads pads pads
Sump #5 7/	14/2017 15/2017 16/2017 17/2017	7/15/2017 7/16/2017 7/17/2017	1.11 0.40 0.66	pads pads
Sump #5 7/	15/2017 16/2017 17/2017	7/16/2017 7/17/2017	0.40 0.66	pads
Sump #5 7/	16/2017 17/2017	7/17/2017	0.66	A
Sump #5 7/	17/2017			nada
Sump #5 7/		7/18/2017	107	pads
Sump #5 7/	18/2017		1.05	pads
Sump #5 7/		7/19/2017	0.42	pads
Sump #5 7/	19/2017	7/20/2017	0.61	pads
Sump #5 7/	20/2017	7/21/2017	0.46	pads
Sump #5 7/	21/2017	7/22/2017	0.38	pads
Sump #5 7/ Sump #5 7/	22/2017	7/23/2017	0.11	pads
Sump #5 7/2	23/2017	7/24/2017	0.28	pads
Sump #5 7/2	24/2017	7/25/2017	0.57	pads
1	25/2017	7/26/2017	0.55	pads
Sump #5 7/2	26/2017	7/27/2017	0.53	pads
Sump #5 7/	27/2017	7/28/2017	0.66	pads
Sump #5 7/	28/2017	7/29/2017	0.46	pads
	29/2017	7/30/2017	0.38	pads
	30/2017	7/31/2017	0.32	pads
1	31/2017	8/1/2017	0.30	pads
	1/2017	8/2/2017	0.63	pads
	2/2017	8/3/2017	0.50	pads
1	3/2017	8/4/2017	0.34	pads
*	4/2017	8/6/2017	0.32	pads
Sump #5 8		8/7/2017	0.14	pads

				LNAPL Recovered with
				Pads, Booms, Socks, or
Recovery Location(s)	Time Recovered		Volume (gallons)	Pumps ¹
	From:	To:		
	p #5 Near Storage	0 \		1
Sump #5	8/7/2017	8/9/2017	0.51	pads
Sump #5	8/9/2017	8/11/2017	0.35	pads
Sump #5	8/11/2017	8/14/2017	0.26	pads
Sump #5	8/14/2017	8/15/2017	0.27	pads
Sump #5	8/15/2017	8/15/2017	0.15	pads
Sump #5	8/15/2017	8/16/2017	0.06	pads
Sump #5	8/16/2017	8/16/2017	0.26	pads
Sump #5	8/16/2017	8/17/2017	0.30	pads
Sump #5	8/17/2017	8/18/2017	0.21	pads
Sump #5	8/18/2017	8/19/2017	0.07	pads
Sump #5	8/19/2017	8/20/2017	0.26	pads
Sump #5	8/20/2017	8/21/2017	0.39	pads
Sump #5	8/21/2017	8/22/2017	0.40	pads
Sump #5	8/22/2017	8/23/2017	0.39	pads
Sump #5	8/23/2017	8/24/2017	0.28	pads
Sump #5	8/24/2017	8/25/2017	0.08	pads
Sump #5	8/25/2017	8/26/2017	0.05	pads
Sump #5	8/26/2017	8/27/2017	0.06	pads
Sump #5	8/27/2017	8/28/2017	0.08	pads
Sump #5	8/28/2017	8/30/2017	0.11	pads
Sump #5	8/30/2017	8/30/2017	0.20	pads
Sump #5	8/30/2017	8/31/2017	0.11	pads
Sump #5	8/31/2017	9/1/2017	0.21	pads
Sump #5	9/1/2017	9/2/2017	0.13	pads
Sump #5	9/2/2017	9/3/2017	0.14	pads
Sump #5	9/3/2017	9/6/2017	0.25	pads
Sump #5	9/11/2017	9/13/2017	0.20	pads
Total Recovered from Sump #5	5/27/2017	9/13/2017	29.33	pads

				LNAPL Recovered with Pads, Booms, Socks, or
Recovery Location (s)	Time D	Time Recovered		Pumps ¹
Recovery Location(s)	From:			Fumps
	Sump #6 on Northern		e e	
Sump #6	7/18/2017	7/18/2017	0.99	pads
Sump #6	7/18/2017	7/18/2017	5.55	pump
Sump #6	7/18/2017	7/19/2017	0.78	pads
Sump #6	7/19/2017	7/20/2017	0.24	pads
Sump #6	7/20/2017	7/24/2017	0.01	pads
Sump #6	7/24/2017	7/30/2017	0.07	pads
Sump #6	7/30/2017	8/1/2017	0.05	pads
Sump #6	8/1/2017	8/9/2017	0.20	pads
Sump #6	8/9/2017	8/11/2017	0.09	pads
Sump #6	8/11/2017	8/12/2017	0.05	pads
Sump #6	8/12/2017	8/13/2017	0.07	pads
Sump #6	8/13/2017	8/14/2017	0.07	pads
Sump #6	8/14/2017	8/15/2017	0.21	pads
Sump #6	8/15/2017	8/16/2017	0.11	pads
Sump #6	8/16/2017	8/17/2017	0.11	pads
Sump #6	8/16/2017	8/17/2017	0.04	pads
Sump #6	8/17/2017	8/18/2017	0.05	pads
Sump #6	8/18/2017	8/19/2017	0.10	pads
Sump #6	8/19/2017	8/20/2017	0.15	pads
Sump #6	8/20/2017	8/23/2017	0.11	pads
Sump #6	8/23/2017	8/24/2017	0.06	pads
Sump #6	8/24/2017	8/24/2017	0.07	pads
Sump #6	8/24/2017	8/25/2017	0.07	pads
Sump #6	8/25/2017	8/26/2017	0.10	pads
Sump #6	8/26/2017	8/27/2017	0.08	pads
Sump #6	8/27/2017	8/28/2017	0.12	pads
Sump #6	8/28/2017	8/29/2017	0.02	pads
Sump #6	8/30/2017	8/31/2017	0.06	pads
Sump #6	8/31/2017	9/1/2017	0.10	pads
Sump #6	9/1/2017	9/3/2017	0.17	pads
Sump #6	9/3/2017	9/6/2017	0.16	pads
Sump #6	9/11/2017	9/13/2017	0.07	pads
Total Recovered from Sump #6	7/18/2017	9/13/2017	10.13	pads & pump

				LNAPL Recovered with Pads, Booms, Socks, or
Recovery Location(s)	Time Re	ecovered	Volume (gallons)	Pumps ¹
	From:	To:		
	Monitoring V	Vell MW-6		
Total Recovered from MW-6	6/16/2017	7/23/2017	0.03	sock
	Monitoring V	Vell MW-8		
MW-8	4/13/2017	4/13/2017	1.855	pump
MW-8	5/4/2017	5/4/2017	1.620	pump
MW-8	5/5/2017	5/5/2017	0.680	pump
MW-8	5/6/2017	5/6/2017	0.570	pump
MW-8	5/7/2017	5/7/2017	0.510	pump
MW-8	5/8/2017	5/8/2017	0.670	pump
MW-8	5/10/2017	5/10/2017	1.120	pump
MW-8	5/11/2017	5/11/2017	0.790	pump
MW-8	5/12/2017	5/12/2017	0.560	pump
MW-8	5/13/2017	5/13/2017	0.790	pump
MW-8	5/14/2017	5/14/2017	0.340	pump
MW-8	5/15/2017	5/15/2017	0.340	pump
MW-8	5/16/2017	5/16/2017	0.34	pump
MW-8	5/17/2017	5/17/2017	0.11	pump
MW-8	5/18/2017	5/18/2017	0.11	pump
MW-8	5/20/2017	5/20/2017	0.07	socks
MW-8	5/21/2017	5/21/2017	0.08	socks
MW-8	5/22/2017	5/22/2017	0.03	socks
MW-8	5/29/2017	6/2/2017	0.10	socks
MW-8	6/2/2017	6/5/2017	0.06	sock
MW-8	6/2/2017	6/8/2017	0.05	sock

				LNAPL Recovered with Pads, Booms, Socks, or
	T ' D.		V (, , ,
Recovery Location(s)	Time Re		Volume (gallons)	Pumps ¹
	From:	To:		
MW-8	Monitoring Well M		0.12	
	6/18/2017	6/19/2017	0.12	sock
MW-8	6/19/2017	6/20/2017	0.11	sock
MW-8	6/20/2017	6/21/2017	0.21	sock
MW-8	6/21/2017	6/22/2017	0.15	sock
MW-8	6/22/2017	6/23/2017	0.13	sock
MW-8	6/23/2017	6/24/2017	0.09	sock
MW-8	6/24/2017	6/25/2017	0.10	sock
MW-8	6/25/2017	6/26/2017	0.08	sock
MW-8	6/26/2017	6/30/2017	0.08	sock
MW-8	6/30/2017	7/2/2017	0.09	sock
MW-8	7/2/2017	7/3/2017	0.11	sock
MW-8	7/4/2017	7/5/2017	0.11	sock
MW-8	7/5/2017	7/6/2017	0.07	sock
MW-8	7/6/2017	7/10/2017	0.05	sock
MW-8	7/10/2017	7/14/2017	0.07	sock
MW-8	7/14/2017	7/15/2017	0.10	sock
MW-8	7/15/2017	7/16/2017	0.11	sock
MW-8	7/16/2017	7/17/2017	0.11	sock
MW-8	7/17/2017	7/17/2017	0.62	pump
MW-8	7/17/2017	7/18/2017	0.08	sock
MW-8	7/18/2017	7/21/2017	0.07	sock
MW-8	7/21/2017	7/27/2017	0.02	sock
MW-8	7/27/2017	8/11/2017	0.03	sock
Total Recovered from MW-8	4/13/2017	8/11/2017	13.51	pump & socks

				LNAPL Recovered with Pads, Booms, Socks, or
Recovery Location(s)	Time D	o o o v o v o v o v o v o	Volume (gallons)	Pumps ¹
Recovery Location(s)	From:	Time Recovered From: To:		Fumps
	Monitoring V			
MW-9	5/2/2017	5/2/2017	3	pump
MW-9	5/4/2017	5/4/2017	3.58	pump
MW-9	5/5/2017	5/5/2017	1.8	pump
MW-9	5/6/2017	5/6/2017	0.56	pump
MW-9	5/7/2017	5/7/2017	0.28	pump
MW-9	5/8/2017	5/8/2017	2.7	pump
MW-9	5/9/2017	5/9/2017	4.14	pump
MW-9	5/10/2017	5/10/2017	3.82	pump
MW-9	5/11/2017	5/11/2017	1.46	pump
MW-9	5/12/2017	5/12/2017	1.8	pump
MW-9	5/13/2017	5/13/2017	1.57	pump
MW-9	5/14/2017	5/14/2017	1.12	pump
MW-9	5/15/2017	5/15/2017	0.45	pump
MW-9	5/16/2017	5/16/2017	0.67	pump
MW-9	5/17/2017	5/17/2017	0.67	pump
MW-9	5/18/2017	5/18/2017	0.45	pump
MW-9	5/19/2017	5/19/2017	0.45	pump
MW-9	5/20/2017	5/20/2017	0.35	socks
MW-9	5/21/2017	5/21/2017	0.21	socks
MW-9	5/22/2017	5/22/2017	0.26	socks
MW-9	6/2/2017	6/2/2017	0.32	socks
MW-9	6/3/2017	6/3/2017	0.16	sock
MW-9	6/4/2017	6/4/2017	0.21	sock
MW-9	6/5/2017	6/5/2017	0.24	sock
MW-9	6/5/2017	6/5/2017	0.11	sock
MW-9	6/5/2017	6/6/2017	0.34	pump
MW-9	6/7/2017	6/7/2017	0.25	socks

				LNAPL Recovered with Pads, Booms, Socks, or
Recovery Location(s)	Time Recovere		Volume (gallons)	Pumps ¹
	From:	To:		
	Monitoring Well M	W-9 (continued)		
MW-9	6/8/2017	6/8/2017	0.36	socks
MW-9	6/8/2017	6/9/2017	0.09	sock
MW-9	6/9/2017	6/10/2017	0.10	sock
MW-9	6/10/2017	6/11/2017	0.11	sock
MW-9	6/11/2017	6/12/2017	0.10	sock
MW-9	6/12/2017	6/13/2017	0.11	sock
MW-9	6/13/2017	6/14/2017	0.12	sock
MW-9	6/19/2017	6/20/2017	0.11	sock
MW-9	6/20/2017	6/21/2017	0.21	sock
MW-9	6/21/2017	6/22/2017	0.19	sock
MW-9	6/22/2017	6/23/2017	0.15	sock
MW-9	6/23/2017	6/24/2017	0.08	sock
MW-9	6/24/2017	6/25/2017	0.08	sock
MW-9	6/25/2017	6/26/2017	0.18	sock
MW-9	6/26/2017	6/27/2017	0.18	sock
MW-9	6/27/2017	6/28/2017	0.16	sock
MW-9	6/29/2017	6/30/2017	0.10	sock
MW-9	6/30/2017	7/3/2017	0.07	sock
MW-9	7/3/2017	7/7/2017	0.08	sock
MW-9	7/7/2017	7/17/2017	0.08	sock
MW-9	7/17/2017	7/23/2017	0.05	sock
MW-9	7/23/2017	7/27/2017	0.02	sock
MW-9	7/27/2017	8/11/2017	0.03	sock
MW-9	8/11/2017	8/23/2017	0.03	sock
Total Recovered from MW-9	5/16/2017	8/23/2017	33.76	pump & socks

				LNAPL Recovered with
				Pads, Booms, Socks, or
Recovery Location(s)		ecovered	Volume (gallons)	Pumps ¹
	From:	To:		
	Monitoring W		1	
MW-10	7/4/2017	7/5/2017	0.15	sock
MW-10	7/5/2017	7/6/2017	0.29	sock
MW-10	7/6/2017	7/7/2017	0.24	sock
MW-10	7/7/2017	7/10/2017	0.17	sock
MW-10	7/10/2017	7/11/2017	0.19	sock
MW-10	7/11/2017	7/12/2017	0.16	sock
MW-10	7/12/2017	7/13/2017	0.14	sock
MW-10	7/13/2017	7/14/2017	0.13	sock
MW-10	7/14/2017	7/15/2017	0.07	sock
MW-10	7/15/2017	7/16/2017	0.08	sock
MW-10	7/16/2017	7/17/2017	0.09	sock
MW-10	7/17/2017	7/17/2017	0.41	pump
MW-10	7/17/2017	7/18/2017	0.07	sock
MW-10	7/18/2017	7/18/2017	0.20	pump
MW-10	7/18/2017	7/19/2017	0.05	sock
MW-10	7/19/2017	7/19/2017	0.11	pump
MW-10	7/19/2017	7/20/2017	0.09	sock
MW-10	7/20/2017	7/20/2017	1.13	pump
MW-10	7/20/2017	7/21/2017	0.09	sock
MW-10	7/21/2017	7/21/2017	1.03	pump
MW-10	7/21/2017	7/22/2017	0.03	sock
MW-10	7/22/2017	7/23/2017	0.03	sock
MW-10	7/23/2017	7/24/2017	0.07	sock
MW-10	7/24/2017	7/24/2017	0.62	pump
MW-10	7/24/2017	7/25/2017	0.07	sock
MW-10	7/25/2017	7/25/2017	0.05	sock
MW-10	7/25/2017	7/26/2017	0.07	sock
MW-10	7/26/2017	7/26/2017	1.23	pump
MW-10	7/26/2017	7/27/2017	0.07	sock
MW-10	7/27/2017	7/27/2017	0.82	pump
MW-10	7/27/2017	7/27/2017	0.66	pump
MW-10	7/27/2017	7/27/2017	0.04	sock
MW-10	7/27/2017	7/28/2017	0.08	sock
MW-10	7/28/2017	7/29/2017	0.09	sock
MW-10	7/29/2017	7/30/2017	0.09	sock
MW-10	7/30/2017	7/31/2017	0.10	sock
MW-10	7/31/2017	8/1/2017	0.09	sock
MW-10	8/1/2017	8/2/2017	0.11	sock
MW-10	8/2/2017	8/3/2017	0.10	sock
MW-10	8/3/2017	8/3/2017	0.08	sock

				LNAPL Recovered with
				Pads, Booms, Socks, or
Recovery Location(s)		ecovered	Volume (gallons)	Pumps ¹
	From:	To:		
	Monitoring Well M		1	
MW-10	8/3/2017	8/4/2017	0.09	sock
MW-10	8/4/2017	8/5/2017	0.09	sock
MW-10	8/5/2017	8/6/2017	0.09	sock
MW-10	8/6/2017	8/7/2017	0.11	sock
MW-10	8/7/2017	8/8/2017	0.10	sock
MW-10	8/8/2017	8/9/2017	0.10	sock
MW-10	8/9/2017	8/11/2017	0.11	sock
MW-10	8/11/2017	8/11/2017	0.06	sock
MW-10	8/11/2017	8/13/2017	0.09	sock
MW-10	8/13/2017	8/14/2017	0.09	sock
MW-10	8/14/2017	8/14/2017	0.09	sock
MW-10	8/14/2017	8/14/2017	1.00	pump
MW-10	8/14/2017	8/15/2017	0.05	sock
MW-10	8/15/2017	8/15/2017	1.60	pump
MW-10	8/15/2017	8/15/2017	0.07	sock
MW-10	8/15/2017	8/16/2017	0.09	sock
MW-10	8/16/2017	8/16/2017	0.09	sock
MW-10	8/16/2017	8/17/2017	0.09	sock
MW-10	8/17/2017	8/17/2017	1.44	pump
MW-10	8/17/2017	8/17/2017	0.07	sock
MW-10	8/17/2017	8/18/2017	0.11	sock
MW-10	8/18/2017	8/18/2017	0.07	pump
MW-10	8/18/2017	8/18/2017	0.09	sock
MW-10	8/18/2017	8/19/2017	0.10	sock
MW-10	8/19/2017	8/20/2017	0.11	sock
MW-10	8/20/2017	8/21/2017	0.09	sock
MW-10	8/21/2017	8/21/2017	0.09	sock
MW-10	8/21/2017	8/21/2017	0.01	pump
MW-10	8/21/2017	8/22/2017	0.09	sock
MW-10	8/22/2017	8/22/2017	0.10	pump
MW-10	8/22/2017	8/22/2017	0.09	sock
MW-10	8/22/2017	8/23/2017	0.10	sock
MW-10	8/23/2017	8/23/2017	0.15	pump
MW-10	8/23/2017	8/23/2017	0.09	sock
MW-10	8/23/2017	8/24/2017	0.09	sock
MW-10	8/24/2017	8/24/2017	0.05	pump
MW-10	8/24/2017	8/24/2017	0.07	pads
MW-10	8/24/2017	8/25/2017	0.09	sock
MW-10	8/25/2017	8/25/2017	0.05	pump
MW-10	8/25/2017	8/25/2017	0.08	sock

				LNAPL Recovered with
				Pads, Booms, Socks, or
Recovery Location(s)	Time R	ecovered	Volume (gallons)	Pumps ¹
	From:	To:		
	Monitoring Well M	W-10 (continued)		
MW-10	8/25/2017	8/26/2017	0.11	sock
MW-10	8/26/2017	8/27/2017	0.09	sock
MW-10	8/27/2017	8/28/2017	0.09	sock
MW-10	8/28/2017	8/28/2017	0.05	pump
MW-10	8/28/2017	8/28/2017	0.09	sock
MW-10	8/28/2017	8/29/2017	0.11	sock
MW-10	8/29/2017	8/29/2017	0.07	sock
MW-10	8/29/2017	8/30/2017	0.11	sock
MW-10	8/30/2017	8/30/2017	0.04	pump
MW-10	8/30/2017	8/31/2017	0.11	sock
MW-10	8/31/2017	9/1/2017	0.11	sock
MW-10	9/1/2017	9/1/2017	0.09	pump
MW-10	9/1/2017	9/1/2017	0.09	sock
MW-10	9/1/2017	9/2/2017	0.11	sock
MW-10	9/2/2017	9/3/2017	0.09	sock
MW-10	9/3/2017	9/4/2017	0.11	sock
MW-10	9/4/2017	9/5/2017	0.10	sock
MW-10	9/5/2017	9/5/2017	0.07	pump
MW-10	9/5/2017	9/5/2017	0.09	sock
MW-10	9/5/2017	9/6/2017	0.11	sock
MW-10	9/6/2017	9/6/2017	0.09	sock
MW-10	9/11/2017	9/12/2017	0.09	sock
MW-10	9/12/2017	9/12/2017	0.05	pump
MW-10	9/12/2017	9/12/2017	0.10	sock
MW-10	9/12/2017	9/13/2017	0.10	sock
MW-10	9/13/2017	9/13/2017	0.05	pump
MW-10	9/13/2017	9/13/2017	0.09	sock
MW-10	9/13/2017	9/14/2017	0.09	sock
MW-10	9/14/2017	9/14/2017	0.06	pump
MW-10	9/14/2017	9/14/2017	0.09	sock
Total Recovered from MW-10	7/4/2017	9/14/2017	19.28	pump, pads, & socks
	Monitoring W	ell MW-11		
MW-11	6/8/2017	6/9/2017	0.28	socks
MW-11	6/9/2017	6/10/2017	0.10	sock
MW-11	6/10/2017	6/11/2017	0.08	sock
MW-11	6/11/2017	6/13/2017	0.07	sock
MW-11	7/18/2017	7/19/2017	0.08	sock
MW-11	7/19/2017	8/4/2017	0.01	sock
Total Recovered from MW-11	6/8/2017	8/4/2017	0.62	sock

				LNAPL Recovered with Pads, Booms, Socks, or
Recovery Location (s)	Time R	ecovered	Volume (gallons)	Pumps ¹
	From:	To:		
	Monitoring	Well BH-1		
BH-1	7/4/2017	7/7/2017	0.03	sock
BH-1	7/7/2017	7/10/2017	0.04	sock
BH-1	7/10/2017	7/12/2017	0.04	sock
BH-1	7/12/2017	7/20/2017	0.07	sock
BH-1	7/20/2017	7/23/2017	0.01	sock
Total Recovered from BH-1	7/4/2017	7/23/2017	0.19	sock
	Monitoring V	Well BH-2		
BH-2	5/20/2017	5/20/2017	0.18	socks
BH-2	5/21/2017	5/21/2017	0.08	socks
BH-2	5/22/2017	5/22/2017	0.03	socks
BH-2	5/23/2017	6/2/2017	0.03	sock
BH-2	6/2/2017	6/5/2017	0.02	sock
BH-2	6/5/2017	6/12/2017	0.08	sock
BH-2	6/18/2017	6/22/2017	0.03	sock
BH-2	6/22/2017	7/23/2017	0.02	sock
Total Recovered from BH-2	6/18/2017	7/23/2017	0.47	sock
	Oil-Water S	eparator		•
Oil-water separator	4/24/2017	4/24/2017	4.114	pump
Oil-water separator	7/23/2017	7/24/2017	0.82	pump
Oil-water separator	7/24/2017	7/24/2017	0.62	pump
Oil-water separator	7/25/2017	7/25/2017	1.18	pump
Oil-water separator	7/24/2017	8/14/2017	0.02	sock
Oil-water separator	8/23/2017	8/23/2017	0.05	pump
Oil-water separator	8/25/2017	8/25/2017	0.12	pump
Oil-water separator	8/25/2017	8/25/2017	0.05	pads
Oil-water separator	8/28/2017	8/28/2017	0.07	pump
Oil-water separator	8/29/2017	8/29/2017	0.02	pump
Oil-water separator	8/29/2017	8/29/2017	0.05	pads
Oil-water separator	8/30/2017	8/30/2017	0.02	pump
Oil-water separator	9/5/2017	9/5/2017	0.05	pump
Total Recovered from Oil-Water Separator	4/24/2017	9/5/2017	7.18	pump, socks, & pad
Total Recovered LNAPL	3/27/2017	9/14/2017	300.53	

NOTES:

¹The quantity of LNAPL recovered by sorbent material in gallons was determined by subtracting the total weight of oiled sorbent material from the total weight of pre-oiled sorbent material, assuming 25% percent as water content. This process complies with requirements of Washington Administrative Code 173-183-870.

APPENDIX A BORING LOGS

SUPPLEMENTAL DATA SUMMARY REPORT Coleman Oil 3 Chehalis Street Wenatchee, Washington

Farallon PN: 1001-002



USCS Classification and Graphic Legend

Coarse-	GRAVEL	CLEAN GRAVEL (Little		GW	Well graded GRAVEL, well graded GRAVEL with sand
Grained Soil (More than 50%	AND GRAVELLY SOIL (More	or no fines)		GP	Poorly graded GRAVEL, GRAVEL with sand
of material is larger	than 50% of coarse	GRAVEL WITH FINES (Appreciable amount of		GP-GM	Poorly graded GRAVEL - GRAVEL with sand and silt
than No. 200 sieve	fraction retained on	fines)		GM	Silty GRAVEL
size)	No. 4 sieve)			GC	Clayey GRAVEL
	SAND AND SANDY	CLEAN SAND (Little or no fines)		SW	Well graded SAND
	SOIL (More than 50% of	no incoy		SP	Poorly graded SAND
	coarse fraction	SAND WITH FINES (Appreciable amount of	.	SP-SM	Poorly graded SAND - silty SAND
	passed through No.	fines)		SM	Silty SAND
	4 sieve)			SC	Clayey SAND
				SM-ML	SILT - Silty SAND
Fine- Grained	SILT AND CLAY (Liquid			ML	SILT
Soil (More than 50%	limit less than 50)		1777 ALL	CL	CLAY
of material				OL	Organic SILT
than No. 200 sieve	SILT AND CLAY (Liquid			MH	Inorganic SILT
size)	limit greater than 50)			СН	Inorganic CLAY
			\sim	ОН	Organic CLAY
		Highly Organic Soil	<u> </u>	PT	Peat
OTHER MATERIALS	PAVEMENT			AC	Asphalt concrete
				СО	Concrete
	OTHER			RK	Bedrock
				WD	Wood Debris
			<u> </u>	DB	Debris (Miscellaneous)
				PC	Portland cement



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		FARALLON CONSULTING		Lo	g o	of E	Bori	ng	j: FB-3		Page 1 of 2
Pro Lo Fa	Client: Coleman Oil Project: Coleman Oil Location: Wenatchee, WA Farallon PN: 1001-002 Logged By: Daniel Aguilar		Date/Time Completed: Equipment: Drilling Company: Drilling Foreman:		4/6/2017 1100Sampler Type: 4' Macrocore4/6/2017 1300Drive Hammer (lbs.):Geoprobe 5400Depth of Water ATD (ft bgs):Environmental WestTotal Boring Depth (ft bgs):Greg WaltsonTotal Well Depth (ft bgs):Direct push						Auto ogs): 13.0 gs): 15.5
Depth (feet bgs.)	Sample Interval	Lithologic Descripti	ion	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0_	-	0.0-1.0' Silty SAND with gravel (50% sand, 30% silt to coarse sand and gravel, dark brown, moist, no oc 1.0-1.6' Well-graded SAND with gravel (50% sand, silt), fine to coarse sand and gravel, brown, moist, n 1.6-1.8' Silty SAND (60% sand, 35% silt, 5% gravel sand, tan, moist, no odor. 1.8-4.0' No recovery.	45% gravel, 5% to odor.	SM SW		45		0.5	Soil screen @ 1.5'		Asphalt
5-	-	4.0-6.5' Silty SAND (50% sand, 40% silt, 10% grave coarse gravel, tan to orange, moist, no odor. 6.5-8.0' No recovery.	el), fine sand,	SM		63	(0.8	FB-3-6.0-040617		Bentonite
		8.0-8.8' Silty SAND (50% sand, 40% silt, 10% grave coarse gravel, tan to orange, moist, no odor. 8.8-9.7' Poorly graded SAND with silt (85% sand, 1 fine to medium sand, brown to tan, moist, no odor.		SM SP-SN		63		0.9	FB-3-9.0-040617	x	

		Well Construct	tion Information	Ground Surface Eleva	tion (ft)	NA
Monument Type: NA		Filter Pack:	NA		()	
Casing Diameter (inches):	NA	Surface Seal:	Asphalt	Top of Casing Elevati	on (ft):	NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location:	X: 1771728.04	4
Screened Interval (ft bgs):	NA	Boring Abandonment:	Bentonite		Y: 15299.14	

		FARALLON CONSULTING		Lo	g o	of E	Bori	ing	j: FB-3		Page 2 of 2
Lo Fa	oje cat rall	:: Coleman Oil ct: Coleman Oil ion: Wenatchee, WA on PN: 1001-002 ed By: Daniel Aguilar	Date/Time Started Date/Time Comple Equipment: Drilling Company Drilling Foreman: Drilling Method:	ompleted:4/6/2017 1300Drive Hammer (lbs.):AutoGeoprobe 5400Depth of Water ATD (ft bgs):13.0pany:Environmental WestTotal Boring Depth (ft bgs):15.5man:Greg WaltsonTotal Well Depth (ft bgs):NA			Auto gs): 13.0 s): 15.5				
Depth (feet bgs.)	Sample Interval	Lithologic Descripti	on	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
10 -		9.7-10.5' Poorly graded GRAVEL with sand (80% gr coarse gravel, dry, no odor. Cobble in shoe. 10.5-12.0' No recovery.	avel, 20% sand),	GP							
		12.0-12.7' Poorly graded GRAVEL with sand (80% g coarse gravel, dry, no odor. 12.7-13.0' Poorly graded SAND with silt (85% sand, gravel), fine to medium sand, brown to tan, moist, hy 13.0-13.6' Silty SAND with gravel (60% sand, 25% g fine to coarse sand and gravel, gray, wet, strong hy 13.6-15.0' No recovery.	10% silt, 5% /drocarbon odor/ gravel, 15% silt)	GP SP-SM		40			FB-3-12.5-040617 FB-3-13.5-040617	x	≭ Water level
15 -		15.0-15.5' Silty SAND with gravel (60% sand, 25% g fine to coarse sand and gravel, gray, wet, strong hyd Sheen on water in sampler. Dark colored sludge floa sampler. Refusal at 15.5'.	frocarbon odor.	SM		100		468	FB-3-15.0-040617	x	

Monument Type: NA Casing Diameter (inches): NA Screen Slot Size (inches): NA Screened Interval (ft bgs): NA	Well Construc Filter Pack: Surface Seal: Annular Seal: Boring Abandonment:	tion Information NA Asphalt NA Bentonite	Ground Surface Eleva Top of Casing Elevati Surveyed Location:	ion (ft):	NA NA 4	
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	FARALLON	Lo	g c	of I	Bor	inę	g: FB-4		Page 1 of 1
-	t: Coleman Oil ect: Coleman Oil tion: Wenatchee, WA	Date/Time Completed: Equipment:		017 probe	1345 1438 e 5400 ental W	/lacrocor : (ft bgs) (ft bgs):	Auto : NA		
	lon PN: 1001-002	Drilling Foreman: Drilling Method:	Greg Direc				Total Well Depth (ft	bgs):	NA
Depth (feet bgs.) Sample Interval	Jed By: Daniel Aguilar Lithologic Descript		USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	oring/Well onstruction Details
	0.0-1.8' Well-graded SAND with silt and gravel (609 gravel, 10% silt), fine to coarse sand and gravel, broodor. 1.8-3.0' No recovery. 1.8-3.0' No recovery. Refusal at 3.0'.	% sand, 30% own, moist, no							Asphalt Bentonite

		Well Construc	tion Information	Ground Surface Eleva	NA	
Monument Type: NA		Filter Pack:	NA		()	
Casing Diameter (inches):	NA	Surface Seal:	Asphalt	Top of Casing Elevati		NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location:	X: 1771767.0	1
Screened Interval (ft bgs):	NA	Boring Abandonment:	Bentonite		Y: 152933.76	

		FARALLON CONSULTING		Lo	g c	of E	Bori	ng	j: FB-5		Ра	ge 1 of 1
Lo	ojec cati	: Coleman Oil ct: Coleman Oil ion: Wenatchee, WA on PN: 1001-002	Date/Time Started: Date/Time Completed: Equipment: Drilling Company: Drilling Foreman:			017 017 probe ronm Wal	: (ft k	bgs): I gs): ´	Auto NE 17.5 NA			
Lo	gge	ed By: Daniel Aguilar	Drilling Method:		Direc	t pus	sh					
Depth (feet bgs.)	Sample Interval	Lithologic Descripti	on	nscs	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Cons	ing/Well struction etails
0_ - -		0.0-5.0' Airknife to 5.0' to clear for utilities. Large gra boulders fill.	nite and schist									Asphalt
- 5- - -		5.0-6.7' Silty SAND with gravel (60% sand, 25% gra to coarse sand and gravel, brown, dry, no odor. 6.7-8.0' No recovery. 8.0-9.8' Silty SAND with gravel (60% sand, 25% gra to coarse sand and gravel, brown, dry, no odor.		SM SM		57		0.3	FB-5-6.0-040617			Bentonite
- 10 –		9.8-12.0' No recovery. Rock in shoe.						0.3	Soil screen @ 9.0'			
-		12.0-15.0' Silty SAND with gravel (60% sand, 25% g fine to coarse sand and gravel, brown, dry, no odor.		SM		75		0.9	FB-5-13.5-040617	x		
15 -		15.0-16.0' No recovery. Rock in shoe.						1.4	FB-5-15.0-040617	x		
-	\square	16.0-17.0' Silty SAND (60% sand, 35% silt, 5% grav brown, dry, no odor. 17.0-17.5' No recovery.		SM		67		1.3	FB-5-17.0-040617	x		
-	-	Refusal at 17.5'.	/									
20												

Well Construction Information Ground Surface Elevation (ft): NA Monument Type: NA Filter Pack: NA Top of Casing Elevation (ft): Casing Diameter (inches): NA NA Surface Seal: Asphalt Surveyed Location: Screen Slot Size (inches): NA Annular Seal: NA X:1771868.71 Screened Interval (ft bgs): NA Boring Abandonment: Bentonite Y: 152918.92

Client: Coleman Oil Project: Date/Time Started: 46/2017 15/0 Sampler Type: 4'Macroore Drot Hammer (Ba.): Auto Drot Marce Attr (Hogorito Field) Faralton PN: 1001-002 Date/Time Complete: 4/6/2017 15/0 Sampler Type: 4'Macroore Drot Marce Attr (Hogorito Field) Auto Logged By: Daniel Aguillar Date/Time Started: 4/6/2017 15/0 Sampler Type: 4'Macroore Drot Marce Attr (Hogorito Field) Auto Iggin age Lithologic Description g	FARALLON CONSULTING	,	Lo	g o	of E	Bori	ing	j: FB-6		Pa	ge 1 of 1
Logged By: Daniel Aguilar Lithologic Description g <t< td=""><td>Project: Coleman Oil Location: Wenatchee, WA Farallon PN: 1001-002</td><td colspan="2">Date/Time Completed: Equipment: Drilling Company: Drilling Foreman:</td><td colspan="5">4/6/20171653Drive Hammer (lbs.):Geoprobe5400Depth of Water ATD (ft bgs):Environmental WestTotal Boring Depth (ft bgs):Greg WaltsonTotal Well Depth (ft bgs):</td><td>4 bgs): ۱ ogs): 1</td><td>NE 15.0</td></t<>	Project: Coleman Oil Location: Wenatchee, WA Farallon PN: 1001-002	Date/Time Completed: Equipment: Drilling Company: Drilling Foreman:		4/6/20171653Drive Hammer (lbs.):Geoprobe5400Depth of Water ATD (ft bgs):Environmental WestTotal Boring Depth (ft bgs):Greg WaltsonTotal Well Depth (ft bgs):					4 bgs): ۱ ogs): 1	NE 15.0	
0 0	Logged By: Daniel Aguilar			1				Ī			
0.0-5.0' Airknife to 5.0' to clear for utilities. Asphalt 5 5.0-6.9' Silty SAND with gravel (60% sand, 25% gravel, 15% silt), fine to coarse sand and gravel, brown, dry, no odor. SM III FB-6-6.5-040617 Bentonit 60 1.1 FB-6-6.5-040617 SM III FB-6-6.5-040617 Bentonit 10 -	Depth (feet bgs.) Sample Interval Tithologic Descript	tion	nscs	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Cons	struction
5 5.0-6.9' Silty SAND with gravel (60% sand, 25% gravel, 15% silt), fine to coarse sand and gravel, brown, dry, no odor. 63 10 1.1 FB-6-6.5-040617 10 8.0-10.1' Silty SAND with gravel (60% sand, 25% gravel, 15% silt), fine to coarse sand and gravel, brown, dry, no odor. Glass debris at 10.0'. 60 10 10.1-10.4' Silty SAND with gravel (60% sand, 25% gravel, 15% silt), fine to coarse sand and gravel, dark brown, moist, no odor. SM 60 10 10.1-10.4' Silty SAND with gravel (60% sand, 25% gravel, 15% silt), fine to coarse sand and gravel, dark brown, moist, no odor. SM 60 10 10.1-10.4' Silty SAND with gravel (60% sand, 25% gravel, 15% silt), fine to coarse sand and gravel, dark brown, moist, no odor. SM 10 10.1-12.0' No recovery. 12.0-12.5' Silty SAND with gravel (60% sand, 25% gravel, 15% silt), fine to coarse sand and gravel, dark brown, moist, no odor. 53 1.0 12.5-13.6' Crushed rock fragments, dry, no odor. RK 53 1.0 15 15 1.0 FB-6-12.0-040617 X	0										
to coarse sand and gravel, brown, dry, no odor. 6.9-8.0' No recovery. 8.0-10.1' Sitty SAND with gravel (60% sand, 25% gravel, 15% sitt), fine to coarse sand and gravel, brown, dry, no odor. Glass debris at 10.1-10.4' Sitty SAND with gravel (60% sand, 25% gravel, 15% sitt), fine to coarse sand and gravel, dark brown, moist, no odor. 10.4-12.0' No recovery. 12.5-13.6' Crushed rock fragments, dry, no odor. 13.6-15.0' No recovery. 15			SM		63						
10 8.0-10.1' Silty SAND with gravel (60% sand, 25% gravel, 15% silt), fine to coarse sand and gravel, brown, dry, no odor. Glass debris at 10.0'. 60 2.2 FB-6-9.0-040617 10 10.1-10.4' Silty SAND with gravel (60% sand, 25% gravel, 15% silt), fine to coarse sand and gravel, dark brown, moist, no odor. 53 1.0 FB-6-10.3-040617 10.4-12.0' No recovery. 12.0-12.5' Silty SAND with gravel (60% sand, 25% gravel, 15% silt), fine to coarse sand and gravel, dark brown, moist, no odor. 53 1.0 FB-6-12.0-040617 13.6-15.0' No recovery. 15 10 FB-6-12.0-040617 X	to coarse sand and gravel, brown, dry, no odor.						1.1	FB-6-6.5-040617			Bentonite
10 8.0-10.1' Silty SAND with gravel (60% sand, 25% gravel, 15% silt), fine to coarse sand and gravel, brown, dry, no odor. Glass debris at 10.0'. SM 60 10 10.1-10.4' Silty SAND with gravel (60% sand, 25% gravel, 15% silt), fine to coarse sand and gravel, dark brown, moist, no odor. SM 2.2 FB-6-9.0-040617 10.1-10.4' Silty SAND with gravel (60% sand, 25% gravel, 15% silt), fine to coarse sand and gravel, dark brown, moist, no odor. 7 7 8 10.4-12.0' No recovery. 12.0-12.5' Silty SAND with gravel (60% sand, 25% gravel, 15% silt), fine to coarse sand and gravel, dark brown, moist, no odor. 53 1.0 FB-6-12.0-040617 12.5-13.6' Crushed rock fragments, dry, no odor. RK 7 1 1 15 15 10 FB-6-12.0-040617 1	6.9-8.0' No recovery.										
10.1-10.4' Silty SAND with gravel (60% sand, 25% gravel, 15% silt), 10.4-12.0' No recovery. 12.0-12.5' Silty SAND with gravel (60% sand, 25% gravel, 15% silt), fine to coarse sand and gravel, dark brown, moist, no odor. 12.0-12.5' Silty SAND with gravel (60% sand, 25% gravel, 15% silt), fine to coarse sand and gravel, dark brown, moist, no odor. 12.5-13.6' Crushed rock fragments, dry, no odor. 13.6-15.0' No recovery.	8.0-10.1' Silty SAND with gravel (60% sand, 25% g fine to coarse sand and gravel, brown, dry, no odo 10.0'.	gravel, 15% silt),	SM		60		2.2	FB-6-9.0-040617			
12.0-12.5' Silty SAND with gravel (60% sand, 25% gravel, 15% silt), fine to coarse sand and gravel, dark brown, moist, no odor. 12.5-13.6' Crushed rock fragments, dry, no odor. 13.6-15.0' No recovery.	10.1-10.4' Silty SAND with gravel (60% sand, 25%), fine to coarse sand and gravel, dark brown, moist,			. i li li i			2.8	FB-6-10.3-040617			
12.5-13.6' Crushed rock fragments, dry, no odor. 13.6-15.0' No recovery.	12.0-12.5' Silty SAND with gravel (60% sand, 25% fine to coarse sand and gravel, dark brown, moist,	gravel, 15% silt), no odor.	<u> </u>		53		1.0	FB-6-12.0-040617	x		

Monument Type: NA Well Cons Casing Diameter (inches): NA Surface Seal: Screen Slot Size (inches): NA Annular Seal: Screened Interval (ft bgs): NA Boring Abandonm	NA Asphalt NA NA NA NA	Ground Surface Eleva Top of Casing Elevati Surveyed Location:	. ,									
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		FARALLON		Lo	go	of E	Bori	inę	j: FB-7		F	Page 1 of 1
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Pro	cati	: Coleman Oil ct: Coleman Oil ion: Wenatchee, WA on PN: 1001-002	Date/Time Started Date/Time Comple Equipment: Drilling Company:	eted:	4/6/2 Geop Envir	017 probe ronme	5400 ental W	ן נ /est ל	Sampler Type: 4' I Drive Hammer (Ibs. Depth of Water ATE Fotal Boring Depth):) (ft (ft b	bgs):)gs):	Auto NE 23.0
		ed By: Daniel Aguilar	Drilling Foreman: Drilling Method:		Greg Direc			ļ	Гotal Well Depth (ft	bys).	NA
Depth (feet bgs.)	Sample Interval	Lithologic Description	on	nscs	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Coi	oring/Well nstruction Details
0_		0.0-5.0' Airknife to 5.0' to clear for utilities.										Asphalt
5-		5.0-5.9' Silty SAND with gravel (60% sand, 25% grav to coarse sand and gravel, brown, dry, no odor. 6.9-8.0' No recovery.	/	SM		30						Bentonite
10 -		8.0-8.9' Silty SAND with gravel (60% sand, 25% gravel) to coarse sand and gravel, brown, dry, no odor.	/el, 15% silt), fine	SM		23		0.4	FB-7-8.5-040617			
- 15		12.0-13.7' Silty SAND with gravel (60% sand, 25% g fine to coarse sand and gravel, brown, dry, no odor. 13.7-16.0' No recovery.		SM		43		0.0	FB-7-13.0-040617	x		
		16.0-19.0' Silty SAND (60% sand, 40% silt), fine to n brown, moist, no odor. Very dense native silty sands		SM		100		0.0	FB-7-17.0-040617			
20 -		19.0-20.0' Silty SAND with gravel (60% sand, 25% g fine to coarse sand and gravel, brown, dry, no odor. lithology.	ravel, 15% silt), Very dense native			100		0.0	FB-7-20.0-040617			
-		20.0-23.0' Silty SAND with gravel (60% sand, 25% g fine to coarse sand and gravel, brown, dry, no odor.	ravel, 15% silt),									
.		Refusal @ 23.0' due to very dense native lithology.						0.4	FB-7-23.0-040617	Х		

		Well Construct	tion Information	Ground Surface Eleva	tion (ft):	NA
Monument Type: NA		Filter Pack:	NA		()	
Casing Diameter (inches):	NA	Surface Seal:	Asphalt	Top of Casing Elevati	on (ft):	NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location:	X: 1771827.13	3
Screened Interval (ft bgs):	NA	Boring Abandonment:	Bentonite		Y: 153007.60	

		FARALLON		Lo	g o	of E	Bori	ing	j: FB-8		Page 1 of 1
Lo Fai	ojec cati rallo	: Coleman Oil ct: Coleman Oil ion: Wenatchee, WA on PN: 1001-002 ed By: Daniel Aguilar	Date/Time Started Date/Time Comple Equipment: Drilling Company: Drilling Foreman: Drilling Method:	eted:	4/7/2 Geop	017 probe onme Sink	5400 ental W	ם נ _{'est} ז	Sampler Type: 4' N Drive Hammer (Ibs.) Depth of Water ATD Total Boring Depth Total Well Depth (ft):) (ft (ft b	Auto bgs): NE pgs): 15.5
Depth (feet bgs.)	Sample Interval	Lithologic Description	on	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0_ - - - 5-		0.0-5.0' Airknife to 5.0' to clear for utilities. Large gra boulders fill. 5.0-5.7' Silty SAND with gravel (50% sand, 40% gra to coarse sand and gravel, dark brown, moist, no od 5.7-8.0' No recovery.	vel, 10% silt), fine	SM		23					Bentonite
		 8.0-8.3' Silty SAND with gravel (50% sand, 40% gravel to coarse sand and gravel, dark brown, moist, no od 8.3-8.7' Fractured rock fragments. 8.7-9.1' Sandy SILT (50% silt 40% sand, 10% gravel sand, dark brown, moist, no odor. 9.1-12.0' No recovery. 12.0-13.6' Silty SAND with gravel (60% sand, 25% gravel to coarse sand and gravel, brown, moist, no odor. 13.6-14.0' Sandy SILT with gravel (50% silt, 30% sand) 	or.	SM RK ML SM		28		-	FB-8-9.0-040717 FB-8-13.0-040717		
15 -		fine sand, brown to tan, moist, no odor. 14.0-14.3' Silty SAND (70% sand, 30% silt), fine to r brown to tan, moist, no odor. 14.3-15.5' No recovery. Refusal @ 15.5'.	nedium sand,	SM ,				21.6	FB-8-14.0-040717	x	

Well Construction Information Ground Surface Elevation (ft): NA Monument Type: NA Filter Pack: NA Casing Diameter (inches): NA Top of Casing Elevation (ft): NA Surface Seal: Asphalt Surveyed Location: Screen Slot Size (inches): NA Annular Seal: NA X:1771806.36 Screened Interval (ft bgs): NA Bentonite Y: 153045.37 Boring Abandonment:



		0.0-5.0' Airknife to 5.0' to clear for utilities. Large granite and schist boulders fill.							
5-		5.0-6.4' Well-graded SAND with silt and gravel (60% sand, 30% gravel, 10% silt), fine to coarse sand and gravel, dry, no odor.	SM		67				Bentonite
_	Å	6.4-7.0' Silty SAND (70% sand, 30% silt), fine to medium sand, brown, moist, no odor.	 			0.0	FB-9-6.9-040717	x	
	$ \rangle$	7.0-8.0' No recovery.							
-		8.0-8.8' Silty SAND (70% sand, 30% silt), fine to medium sand, brown, moist, no odor.	SM		60				
_	V	8.8-9.8' Silty SAND with gravel (50% sand, 35% gravel, 15% silt), fine to coarse sand and gravel, moist, no odor.							
10 -	Å	9.8-10.2' Silty SAND (70% sand, 30% silt), fine to medium sand, brown, moist, no odor.	GM		+				
-	$\left \right $	10.2-10.4' Silty GRAVEL with sand (50% gravel, 35% sand, 15% silt), i fine to medium sand, fine to coarse gravel, brown, wet, no odor. Two inch cobbles in sampler.							
-		10.4-12.0' No recovery.	<u></u>		70				T
_		12.0-13.2' Silty GRAVEL with sand (50% gravel, 35% sand, 15% silt), fine to medium sand, fine to coarse gravel, gray, wet, no odor.	GM	⊠ . .⊠ . .⊠					Water level
	V	13.2-13.6' Sandy SILT (60% silt, 35% sand, 5% gravel), fine sand, gray, wet, hydrocarbon odor.	ML GM						
15 –	$\left \right $	13.6-14.2' Silty GRAVEL with sand (50% gravel, 35% sand, 15% silt), fine to medium sand, fine to coarse gravel, gray, wet, hydrocarbon odor.	ML			534	FB-9-14.0-040717	X	
10 -	$ \rangle$	14.2-14.8' Sandy SILT (65% silt, 35% sand), fine sand, brown, dry,					FB-9-recon-040717	X	
-		14.8-16.0' No rcovery.	<u> </u>		1				

Well Construction Information NA Ground Surface Elevation (ft): Monument Type: NA Filter Pack: NA Top of Casing Elevation (ft): NA Casing Diameter (inches): NA Surface Seal: Asphalt Surveyed Location: Screen Slot Size (inches): NA Annular Seal: NA X: 1771738.32 Screened Interval (ft bgs): 12.5-16.0 (Temp) **Boring Abandonment:** Bentonite Y: 153141.69

		FARALLON CONSULTING	Lo	og c	of I	Bori	ing	j: FB-10		Page 1 of 2
Lo Fa	oje cat rall	: Coleman Oil ct: Coleman Oil ion: Wenatchee, WA on PN: 1001-002 ed By: Daniel Aguilar	Date/Time Started: Date/Time Completed: Equipment: Drilling Company: Drilling Foreman: Drilling Method:	4/7/20171320Sampler Type:4' Macro4/7/20171545Drive Hammer (Ibs.):Geoprobe5400Depth of Water ATD (ft the Total Boring Depth (ft bes)Ron SinkTotal Well Depth (ft bes)Direct push						Auto gs): 13.5 s): 20.0
Depth (feet bgs.)	Sample Interval	Lithologic Descripti	on sss	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0_		 0.0-0.3' Asphalt. 0.3-0.9' Silty GRAVEL with sand (50% gravel, 35% fine to coarse sand and gravel, brown, moist, no odd 0.9-1.3' Silty SAND with gravel (60% sand, 20% silt, to medium sand, brown, moist, no odor. 1.3-1.9' Sandy SILT (70% silt, 30% sand), fine to me brown, moist, no odor. 1.9-2.6' Fractured rock fragments. 2.6-4.0' No recovery 	or. , 20% gravel), fine ML		72		0.8	Soil screen at 1.5'		Asphalt
5-		4.0-4.2' Sandy SILT (70% silt, 30% sand), fine to me brown, moist, no odor. 4.2-5.8' Well-graded GRAVEL with silt and sand (50 sand, 10% silt), brown, moist, no odor. Crushed roc 5.8-8.0' No recovery. 8.0-12.0' No recovery. Rock in shoe	GW-C 9% gravel, 40% k fragments		0		0.0	FB-10-5.7-040717		Bentonite
10 -		8.0-12.0' No recovery. Rock in shoe			-					

		Well Construc	tion Information	Ground Surface Eleva	tion (ft)	NA
Monument Type: NA		Filter Pack:	NA		()	
Casing Diameter (inches):	NA	Surface Seal:	Asphalt	Top of Casing Elevati	on (ft):	NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location:	X: 1771758.6	4
Screened Interval (ft bgs):	16.5-20.0	Boring Abandonment:	Bentonite		Y: 152921.34	

		FARALLON CONSULTING		Lo	g c	of I	Bor	ing	g: FB-10		Page 2 of 2
Loo Far	ojeo cat ^r allo	: Coleman Oil ct: Coleman Oil ion: Wenatchee, WA on PN: 1001-002 ed By: Daniel Aguilar	Date/Time Started: Date/Time Comple Equipment: Drilling Company: Drilling Foreman: Drilling Method:	pleted: 4/7/20 Geopro ny: Enviror n: Ron Si			4/7/20171320Sampler Type:44/7/20171545Drive Hammer (IbsGeoprobe5400Depth of Water ATEnvironmental WestTotal Boring DepthRon SinkTotal Well Depth (red)Direct pushFor a state of the state): D (ft bgs): (ft bgs):	Auto
Depth (feet bgs.)	Sample Interval	Lithologic Descripti	on	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID		oring/Well onstruction Details
- - 15		12.0-13.0' Silty SAND (80% sand, 20% silt), fine to o brown to green, moist to dry, hydrocarbon odor. 13.0-13.5' SILT with sand (85% silt, 15% sand), fine brown, dry, hydrocarbon odor. 13.5-15.1' Silty GRAVEL with sand (50% gravel, 30° fine to coarse sand and gravel, gray, wet, hydrocarb 15.1-16.0' No recovery.	sand, dry, light % sand, 20% silt),	SM ML GM		78			FB-10-12.8-040717 FB-10-14.0-040717		Bentonite
-		16.0-16.6' Silty GRAVEL with sand (50% gravel, 30 ^o fine to coarse sand and gravel, gray, wet, hydrocarb present. 16.6-17.1' Silty SAND (80% sand, 20% silt), fine to dwet, hydrocarbon odor, sheen present. 17.1-17.3' SILT with sand (80% silt, 20% sand)fine silt hydrocarbon odor. Smearing from gray TPH impacted for sample. 17.3-20.0' No recovery.	coarse sand, gray, sand, tan, dry, ed soil from above	GM SM ML		33		284	FB-10-17.1-040717 FB-10-17.3-040717 FB-10-recon-040711	x	

Well Construction Information Ground Surface Elevation (ft): NA Monument Type: NA Filter Pack: NA Casing Diameter (inches): NA Top of Casing Elevation (ft): NA Surface Seal: Asphalt Surveyed Location: Screen Slot Size (inches): NA Annular Seal: NA X:1771758.64 Screened Interval (ft bgs): 16.5-20.0 Boring Abandonment: Bentonite Y: 152921.34

		FARALLON CONSULTING		Lo	g o	of E	Bor	ing	: FB-11		Page 1 of 2
Pro _00 Far	cati rallo	: Coleman Oil ct: Coleman Oil ion: Wenatchee, WA on PN: 1001-002 ed By: J. Kerr	Date/Time Completed: C Equipment: S Drilling Company: Drilling Foreman:			04/13/17 @ 1339Sampler Type:D04/13/17 @ 1615Drive Hammer (IbSchramm T300Depth of Water ATEnvironmental WestTotal Boring DepthRon SinkTotal Well Depth (Ib)Air rotary					140): NE
Depth (feet bgs.)	Sample Interval	Lithologic Descripti	on	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well onstruction Details
0_ 5 		5.0-6.5' No recovery.				0	16/32/ 27				Bentonite
- - 10 -		10.0-10.3' Cobbles. 10.3-10.8' SILT (95% silt, 5% sand), fine sand, gray odor. 12.0-12.3' Cobbles. 12.3-12.8' SILT (95% silt, 5% sand), fine sand, brow odor.		RK ML RK ML		100	27/ 50 for 4" 12/ 50 for	0.2	FB-11-10.5 FB-11-12.6		

		Well Construct	tion information	Ground Surface Eleva	tion (ft)	NA
Monument Type: NA		Filter Pack:	NA	Ground Surface Eleva	ation (it).	IN/A
Casing Diameter (inches):	NA	Surface Seal:	Soil	Top of Casing Elevati	on (ft):	NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location:	X: 1771707.8	4
Screened Interval (ft bgs):	NA	Boring Abandonment:	Bentonite		Y: 152934.70	

		FARALLON CONSULTING		Lo	g o	of I	Bor	ing	I: FB-11		Page 2 of 2			
Lo	ojec cati	c t: Coleman Oil i on: Wenatchee, WA	Date/Time Completed: Equipment:			04/13/17 @ 1339 Sampler Type: D&M SS 18"x2" d: 04/13/17 @ 1615 Drive Hammer (lbs.): 140 Schramm T300 Depth of Water ATD (ft bgs): NE Environmental West Total Boring Depth (ft bgs): 25.2								
		on PN: 1001-002 ed By: J. Kerr	Drilling Foreman: Drilling Method:		Ron Sink Total Well Depth (ft bgs): NA Air rotary									
Depth (feet bgs.)	Sample Interval	Lithologic Descripti	on	nscs	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID		oring/Well Instruction Details			
15 -		15.0-16.5' SILT (100% silt), brown to black at 15.4', sweet, solvent-like odor, sheen present. Cobbles pr interval. Object resembling anthracite coal observed 16.5'.	esent at top of	ML		100	15/23/ 29	1942 1297	FB-11-15.8 FB-11-16.4					
-		17.5-18.2' SILT (100% silt), gray, hard, dry, no odor 18.2-18.7' No recovery.		ML		58	17/30/ 50 for 2"	0.3	FB-11-18.0		Bentonite			
20		20.0-20.6' SILT (95% silt, 5% sand), fine sand, gray odor, no sheen. 20.6-20.9' SILT (100% silt), dark gray, hard, dry, no	/	ML ML		100	35/ 50 for 5"	0.1 0.2	Soil Screen @ 20.3 FB-11-20.8					
-		23.0-23.4' SILT (100% silt), dark brown,hardf, moist	· · · /1	 ML		100	50 for 5"	0.3	FB-11-23.4					
25 -	×	25.0-25.2' SILT (95% silt, 5% sand), fine sand, gray odor, no sheen.				100	50 for 2"	0.2	FB-11-25.0					
-														

Well Construction Information Ground Surface Elevation (ft): NA Monument Type: NA Filter Pack: NA Casing Diameter (inches): NA Top of Casing Elevation (ft): NA Surface Seal: Soil Surveyed Location: Screen Slot Size (inches): NA Annular Seal: NA X:1771707.84 Screened Interval (ft bgs): NA Boring Abandonment: Bentonite Y: 152934.70

		FARALLON CONSULTING		Lo	g o	of I	Bor	ing	j: MW-6		Pa	ge 1 of 1	
Lo	oje cat	ct: Coleman Oil tion: Wenatchee, WA	Date/Time Completed: Equipment: Drilling Company:			4/12/2017 @ 0937 Sampler Type: D&M SS 18"x2" : 4/12/2017 @ 1120 Drive Hammer (Ibs.): 140 Schramm T300 Depth of Water ATD (ft bgs): 11.0 Environmental West Total Boring Depth (ft bgs): 18.4 Ron Sink Total Well Depth (ft bgs): 18.0							
		on PN: 1001-002 ed By: J. Kerr				Air rotary							
Depth (feet bgs.)	Sample Interval	Lithologic Descript	ion	nscs	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Cons	ing/Well struction etails	
0_	1												
	-											Well Cap Concrete	
	-											Bentonite	
5-		5.0-5.3' Cobbles. 5.3-6.1' Gravelly SILT (60% silt, 35% gravel, 5% sa coarse gravel, fine to medium sand, brown, hard, m cobbles present.	ioist, no odor,	 / /		73	22/35/ 45	1.3	Soil Screen @ 6.0			Sand Pack	
- 10 -		10.0-10.8' Gravelly SILT (50% silt, 40% gravel, 10% coarse gravel and sand, gray, stiff, wet, petroleum-l present, cobbles from 10.0-10.2' and 10.5-10.8'.	6 sand), fine and ike odor, sheen	ML		53	11/15/ 18	106	MW-6-10.3	x		¥ Water level	
-		10.8-11.5' No recovery. 12.5-13.1' Well-graded SAND with silt and gravel (5 gravel, 10% silt), fine to coarse sand, fine and coars very dense, wet, petroleum-like odor, sheen, cobble	se gravel, gray,	SW-SN		66	11/7/ 50 for 5"	289	MW-6-12.8	x			
15 -		13.1-13.4' No recovery. 15.0-15.6' Silty GRAVEL (70% gravel, 25% silt, 5% coarse gravel, fine sand, gray, medium dense, wet, petroleum-like odor.		GM		40	26/18/ 28	302	MW-6-15.5			Screen	
-		15.6-16.5' No recovery. 	en, no odor.	ML		100	50 for	18.0	MW-6-18.2				

		Well Construc	tion Information	Ground Surface Eleva	ation (ft)	NA
Monument Type: Flush		Filter Pack:	10/20 Sand		()	
Casing Diameter (inches):	4	Surface Seal:	Concrete	Top of Casing Elevati	• •	NA
Screen Slot Size (inches):	0.020	Annular Seal:	Bentonite	Surveyed Location:	X: 1771804.47	1
Screened Interval (ft bgs):	8.0-18.0	Boring Abandonment:	NA		Y: 152837.75	

		FARALLON	L	-0	g o	of E	Bor	ing	: MW-7		P	age 1 of 1
	ojec	: Coleman Oil ct: Coleman Oil ion: Wenatchee, WA	Date/Time Started: Date/Time Complete Equipment: Drilling Company:	d:	4/11/ Schra	2017 amm	' @ 15 ' @ 17 T300 ental V	50 D D	ampler Type: D rive Hammer (Ibs epth of Water AT otal Boring Depth	s.): D (ft	bgs):	2" 140 12.95 20.1
		on PN: 1001-002	Drilling Foreman: Drilling Method:		Ron S	Sink			otal Well Depth (f			20.0
Lo	gge	ed By: J. Kerr										
Depth (feet bgs.)	Sample Interval	Lithologic Descript		NSCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Cor	ring/Well struction Details
0_	ז ר											1
-												Well Cap Concrete
-	-											Bentonite
- 5- -	-						50 for 0"					
- 10 -		Per drill foreman, boulder encountered from 4.0-9.0 odor present at 9' bgs, per drill foreman.	·//	 		0	15/ 50 for 6"					Sand Pack
-		12.5-12.7' Cobbles. 12.7-13.2' SILT (95% silt, 5% sand), fine sand, brow \ odor, no sheen.		 ИL ,		100	41/ 50 for	38.8	MW-7-13.0	x		Water level
15 – -		15.0-15.1' Well-graded GRAVEL (100% gravel), fin gravel, very dense, wet, no odor, angular gravel.	e and coarse	SW/	== =	10	2" 50 for 4"					
-		15.1-15.3' No recovery. 17.0-17.5' SILT (100% silt), brown, hard, wet,, no o		 ИL		100	50 for 5"	0.9	MW-7-17.3	x		Screen
20 –		20.0-20.1' No recovery.		/	<u> </u>	0	50 for					

Well Construction Information Ground Surface Elevation (ft): NA Monument Type: Flush Filter Pack: 10/20 Sand Top of Casing Elevation (ft): Casing Diameter (inches): NA 4 Surface Seal: Concrete Surveyed Location: Screen Slot Size (inches): 0.020 Annular Seal: Bentonite X:1771844.03 Screened Interval (ft bgs): 10.0-20.0 Boring Abandonment: NA Y: 152853.45

		FARALLON CONSULTING		Lo	g o	of I	Bor	ing	1: MW-8		Pag	ge 1 of 2
Lo Fai	ojec cati rallo	: Coleman Oil ct: Coleman Oil ion: Wenatchee, WA on PN: 1001-002 ed By: J. Ruark	Date/Time Started Date/Time Comple Equipment: Drilling Company: Drilling Foreman: Drilling Method:	eted:	4/11/ Schra	2017 amm onm Sink		D0 C C Vest T	Campler Type: Da Drive Hammer (Ibs Depth of Water ATI Total Boring Depth Total Well Depth (fi	.): D (ft (ft b	bgs): 1 ogs): 2	40 6.5 5.2 5.0
Depth (feet bgs.)	Sample Interval	Lithologic Descripti	on	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Cons	ng/Well struction etails
		0.0-5.0' Soil cuttings were not observed. 5.0-5.5' No recovery. 5.5-10.0' Soil cuttings observed. Sandy SILT with gr. 15% sand, 15% gravel), medium to coarse sand, find dark brown, hard, moist, no odor. Fractured rock observed. 10.0-11.0' SILT (90% silt, 10% sand), fine sand, brown no odor. Fractured rock present.	e gravel, brown to served.	 ML ML		67	50 for 5.5" 35/44/	0.5	MW-8-10.5			Well Cap Concrete Bentonite
-		11.0-11.5' No recovery. 12.5-12.6' Cobble. 12.6-12.8' SILT (100% silt), brown, hard, moist, petro 12.8-13.0' Cobble.		RK ML RK		33	35 12/31/ 39	75.0	MW-8-12.8	x		Sand Pack

Monument Type: Flush Ground Surface Elevation (ft): NA Filter Pack: 10/20 Sand Casing Diameter (inches): 4 Top of Casing Elevation (ft): NA Surface Seal: Concrete Surveyed Location: Screen Slot Size (inches): 0.020 Annular Seal: Bentonite X:1771788.28 Screened Interval (ft bgs): 15.0-25.0 NA Y: 152964.67 Boring Abandonment:

		FARALLON CONSULTING		Lo	g o	of E	Bor	ing	: MW-8		Pa	age 2 of 2
Pro Lo	cat	: Coleman Oil ct: Coleman Oil ion: Wenatchee, WA on PN: 1001-002	Date/Time Started Date/Time Comple Equipment: Drilling Company: Drilling Foreman:	eted:	4/11/ Schra Envir Ron	2017 amm ronme Sink	⁷ @ 08 7 @ 14 T300 ental V	00 D D Vest T	ampler Type: D rive Hammer (Ibs lepth of Water AT otal Boring Depth otal Well Depth (f	s.): D (ft n (ft b	bgs): ogs):	." 140 16.5 25.2 25.0
Lo	gg	ed By: J. Ruark	Drilling Method:		Air rc	otary						
Depth (feet bgs.)	Sample Interval	Lithologic Descripti	on	NSCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Con	ring/Well struction Details
15 -		15.0-15.4' Poorly graded SAND with silt (90% sand, medium sand, brown, very dense, moist, slight petro		SP-SM	1	100	50 for 5"	13.8	MW-8-15.0	x		Water level
	-	17.5-17.6' SILT (100% silt), brown,hard, wet, no odd 1 17.6-17.8' No recovery.	JI 1	 \/ \/)= /	33	50 for 3"	13.7	MW-8-17.5	x		
20 -	-	20.0-20.2' SILT with gravel (85% silt, 15% gravel), c hared, wet, slight petroleum-like odor.	oarse gravel, gray, /	,	ובו	100	50 for 2"	10.5	MW-8-20.0			Screen
25 -		25.0-25.2 No recovery.	/			0	50 for 2"	3.5	Soil Screen @ 25.0			

		Well Construc	tion Information	One of Ourface Floor	- 4 ¹ (5 4) -	NIA
Monument Type: Flush		Filter Pack:	10/20 Sand	Ground Surface Eleva	()	NA
Casing Diameter (inches):	4	Surface Seal:	Concrete	Top of Casing Elevati	ion (ft):	NA
Screen Slot Size (inches):	0.020	Annular Seal:	Bentonite	Surveyed Location:	X: 1771788.2	8
Screened Interval (ft bgs):	15.0-25.0	Boring Abandonment:	NA		Y: 152964.67	,

		FARALLON CONSULTING		Lo	g c	of I	Bor	inç	g: MW-9		Page	e 1 of 2
Lo Fai	ojec cati rallo	: Coleman Oil ct: Coleman Oil ion: Wenatchee, WA on PN: 1001-002 ed By: J. Kerr	Date/Time Started Date/Time Comple Equipment: Drilling Company Drilling Foreman: Drilling Method:	eted: :	4/12/ Schra	′2017 amm ronm Sink		50 [/est []]	Sampler Type: D& Drive Hammer (Ibs. Depth of Water ATI Fotal Boring Depth Fotal Well Depth (fl): D (ft (ft b	gs): 24	.9 .5
Depth (feet bgs.)	Sample Interval	Lithologic Descript	ion	nscs	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Const	g/Well ruction tails
0_		 5.0-5.4' Well-graded GRAVEL with silt (90% gravel to coarse gravel, gray, medium dense, moist, no od 5.4-5.8' Silty SAND with gravel (70% sand, 15% gravel to medium sand, fine and coarse gravel, brown, me no odor, no sheen. 5.8-6.2' SILT (95% silt and 5% sand), fine sand, brownist, no odor, no sheen. Slight petroleum-like odo bottom of the interval. 6.2-6.5' No recovery. 10.0-10.5' Well-graded GRAVEL with silt (80% gravel), fine and coarse gravel, fine to coarse sand, brownist, no odor, light sheen present. 10.5-10.8' No recovery. 12.5-12.6' Poorly graded GRAVEL (100% gravel), coarse gravel, no odor, no staining. 12.6-13.0' SILT (90% silt and 10% gravel), coarse gravel, no odor, light sheen present. 	Ior, no sheen. avel, 15% silt), fine edium dense, moist, pwn, very stiff, r encountered at			63	25/29/ 30 17/ 50 for 4" 50 for 5.5"	0.6 0.5 17.4 2.4	Soil Screen @ 5.6 MW-9-6.0 MW-9-6.2 Soil Screen @ 10.3	x	c	Vell Cap concrete
		Wol	II Construction I	nforn	natio	n						

		Well Construct	tion Information	Ground Surface Eleva	tion (ft)	NA
Monument Type: Flush		Filter Pack:	10/20 Sand		()	
Casing Diameter (inches):	4	Surface Seal:	Concrete	Top of Casing Elevati	. ,	NA
Screen Slot Size (inches):	0.020	Annular Seal:	Bentonite	Surveyed Location:	X: 1771766.2	1
Screened Interval (ft bgs):	14.0-24.0	Boring Abandonment:	NA		Y: 153008.50	

		FARALLON		Lo	g o	of E	Зor	ing	j: MW-9		Pa	age 2 of 2
Pre	-	: Coleman Oil ct: Coleman Oil ion: Wenatchee, WA	Date/Time Started Date/Time Comple Equipment: Drilling Company	eted:	4/12/ Schra	2017 amm	' @ 14 ' @ 16 T300 ental V	50 C	Campler Type: Da Drive Hammer (Ibs Depth of Water AT Total Boring Depth	.): D (ft	bgs):	2" 140 16.9 24.5
Fa	ralle	on PN: 1001-002	Drilling Foreman:		Ron	Sink			otal Well Depth (f			24.0
Lo	gg	ed By: J. Kerr	Drilling Method:	1	Air ro	otary			1			
Depth (feet bgs.)	Sample Interval	Lithologic Descripti	on	nscs	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Con	ring/Well struction Details
15 -		15.0-15.2 SILT (100% silt), brown, very stiff, moist, 15.2-15.8' Gravelly SILT with sand (65% silt, 20% g fine and coarse gravel, fine to coarse sand, brown, petroleum-like odor, sheen present. 15.8-16.0' Cobble.	ravel, 15% sand),	ML RK		67	16/24/ 16	172	MW-9-15.6	x		Sand Pack
20 -		16.0-16.5' No recovery. 17.5-18.3' Poorly graded GRAVEL (100% gravel), c medium dene, wet, slight petroleum-like odor, sheer 18.3-18.5' Gravelly SILT (60% silt, 30% gravel, 10% coarse gravel, fine to medium sand, gray, hard, wet odor, sheen present. 18.5-19.0' SILT (95% silt, 5% sand), fine sand, brow	oarse gravel, n present, . o sand), fine and , petroleum-like	GP ML	- ⊠ ∷⊠ ⊠	100	16/25/ 42	224	MW-9-18.7			Screen
	-	21.5-21.8' SILT (100% silt), brown, hard, wet, faint podor, sheen present,.				100	50 for 3"	37.7	MW-9-21.5			
25 -		24.0-24.5' SILT (100% silt), dark brown, hard, dry, n	o odor, no sheen.	ML		100	50 for 4"	4.5	MW-9-24.5	x		

		Well Construc	tion Information			
Monument Type: Flush		Filter Pack:	10/20 Sand	Ground Surface Eleva	ation (ft):	NA
Casing Diameter (inches):	4	Surface Seal:	Concrete	Top of Casing Elevati	on (ft):	NA
Screen Slot Size (inches):	0.020	Annular Seal:	Bentonite	Surveyed Location:	X:1771766.2	21
Screened Interval (ft bgs):	14.0-24.0	Boring Abandonment:	NA		Y: 153008.50)

Pro Loc Fai	cati rallo	E Coleman Oil C Coleman Oil ct: Coleman Oil ion: Wenatchee, WA on PN: 1001-002 ed By: J. Kerr	Date/Time Started: Date/Time Completed: Equipment: Drilling Company: Drilling Foreman: Drilling Method:	4/ 4/ Li E R	/14/2 /14/2 il Bru	2017 2017 itus onme Sink	@ 082 @ 123	20 S 60 C Vest T	J: MW-10 Sampler Type: D& Drive Hammer (Ibs.) Depth of Water ATD Total Boring Depth Total Well Depth (ft	: (ft bg ft bgs	140 gs): 17.3 s): 30.2	
Depth (feet bgs.)	Sample Interval	Lithologic Description	on SS S		USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring Constru Deta	iction
- - 5- - -		5.0-5.3' Well-graded GRAVEL (90% gravel, 10% sar coarse gravel, coarse sand, brown, medium dense, sheen. 5.3-5.5' Cobble. 5.5-6.0' Poorly graded SAND (90% sand, 10% grave coarse gravel, light brown, medium dense, moist, no 6.0-6.5' No recovery.	moist, no odor, no المرابع المرابع el), coarse sand, المرابع			67	28/40/ 16	2.2	MW-10-5.8			ncrete
- 10 - -		10.0-10.7' Gravelly SILT (60% silt, 35% gravel, 5% s gravel, medium to coarse sand, brown, very stiff, mo sheen, angular gravel,. 10.7-11.5' No recovery. 12.5-12.7' SILT with gravel (80% silt, 20% gravel), co stiff, moist, no odor, no sheen,round gravel.	ist, no odor, no	<mark>- </mark> - <mark> -</mark> - /	·		24/22/ 18 12/12/ 32		MW-10-10.5 Field Screen @ 12.6			
- 15 — -		12.7-14.0' No recovery. 15.0-15.8' SILT (100% silt), brown, hard, moist, no o			·	100	20/ 50 for	0.8	MW-10-15.7	x	Sar	nd Pac

Monument Type: Flush Ground Surface Elevation (ft): NA Filter Pack: 10/20 Sand Casing Diameter (inches): 2 Top of Casing Elevation (ft): NA Surface Seal: Concrete Surveyed Location: Screen Slot Size (inches): 0.020 Annular Seal: Bentonite **X:** 1771729.19 Screened Interval (ft bgs): 14.0-30.0 NA Y: 153240.03 Boring Abandonment:

		FARALLON	L	-0(g o	f E	Bor	ing	j: MW-10		Page 2	of 2
Pro	-	:: Coleman Oil ct: Coleman Oil ion: Wenatchee, WA	Date/Time Started: Date/Time Complete Equipment: Drilling Company:	d: '	4/14/: Lil Br	2017 utus	@ 082 @ 123	30 C	Sampler Type: D& Drive Hammer (Ibs.) Depth of Water ATD Total Boring Depth):) (ft k	140 ogs): 17.3	
		on PN: 1001-002	Drilling Foreman: Drilling Method:	ļ	Ron S Air ro	Sink			otal Well Depth (ft			
Depth (feet bgs.)	Sample Interval	ed By: J. Kerr Lithologic Descript		nscs	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring Constru Deta	iction
20 -		18.0-18.1' SILT (95% silt, 5% sand), fine sand, brow , odor, no sheen. 18.1-18.3' No recovery. 20.0-20.3' No recovery.	///// ////////////////////////////////	; ML // ;		33	50 for 4" 50 for 3"	0.7	Field Screen @ 18.3			ter level
25 -	-	, 25.0-25.2' SILT (100% silt), brown, hard, moist, pet sheen present.	//-	, M∟ /		100	50 for 2"	409.0	MW-10-25.1	×	Scr	een
30 -		30.0-30.2' SILT with sand (85% silt and 15% sand), sand, brown silt, gray sand, wet, no odor, sheen pre		/		100	50 for 2"	42.6	MW-10-30.1			

Monument Type: Flush			tion Information	Ground Surface Eleva	ation (ft)	NA
Casing Diameter (inches):	2	Filter Pack: Surface Seal:	10/20 Sand Concrete	Top of Casing Elevati	()	NA
Screen Slot Size (inches):	0.020	Annular Seal:	Bentonite	Surveyed Location:	X: 1771729.1	9
Screened Interval (ft bgs):	14.0-30.0	Boring Abandonment:	NA		Y: 153240.03	\$

		FARALLON CONSULTING		Lo	g c	of E	Bor	ing	: MW-11		Pa	ge 1 of 2
Loo Far	ojec cati rallo	: Coleman Oil ct: Coleman Oil ion: Wenatchee, WA on PN: 1001-002 ed By: J. Kerr	Date/Time Started: Date/Time Complet Equipment: Drilling Company: Drilling Foreman: Drilling Method:		4/14/ Schra	/2017 amm ronme Sink	⁷ @ 14 ⁴ 7 @ 17; T300 ental W	3 D D /est T	ampler Type: D rive Hammer (Ibs lepth of Water AT otal Boring Depth otal Well Depth (f	.): D (ft n (ft b	bgs): bgs): 2	140 13.83 22.3 22.0
Depth (feet bgs.)	Sample Interval	Lithologic Descripti	on	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Cons	ing/Well struction etails
0 - - 5- - - - - - - - - - - - - - - -		5.0-5.3' Cobbles. 5.3-6.0' SILT with sand (80% silt, 20% sand), fine to brown, hard, moist, no odor. Boulders encountered at 7.0' preventing sample col Boulders encountered at 10.0' preventing sample col	ection.	RK ML RK		100	11/ 50 for 5"	1.1	MW-11-5.8	x		Well Cap Concrete Bentonite
Casi Scre	ng D en S	nt Type: Flush Filter Pac Diameter (inches): 4 Surface S Slot Size (inches): 0.020 Annular S	eal: Concr	Sand ete		on	Тор с	of Cas	rface Elevation (f ing Elevation (ft): Location: X: 17 X: 15	71777		

12.0-22.0

Screened Interval (ft bgs):

Boring Abandonment:

NA

Y: 152916.78

		FARALLON CONSULTING		Lo	g c	of E	Bor	ing	: MW-11		Pa	ige 2 of 2
Pro	-	: Coleman Oil ct: Coleman Oil ion: Wenatchee, WA	Date/Time Started Date/Time Comple Equipment: Drilling Company:	eted:	4/14/ Schr	'2017 amm	' @ 14 [.] ' @ 17: T300 ental W	3 D D	ampler Type: D rive Hammer (Ibs epth of Water AT otal Boring Depth	.): D (ft	bgs):	" 140 13.83 22.3
		on PN: 1001-002 ed By: J. Kerr	Drilling Foreman: Drilling Method:					t bgs	5):	22.0		
Depth (feet bgs.)	Sample Interval	Lithologic Descripti	on	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Con	ing/Well struction)etails
		12.9-13.1' Poorly graded SAND (90% sand, 10% gr coarse sand, fine and coarse gravel, gray, medium petroleum-like odor, sheen present.	dense, moist,	SP ML	/ 	66	14/25/ 34	75.9	MW-11-13.2	x		▼ Water level
15 -		1 13.1-13.5' SILT (90% silt, 10% sand), coarse sand, petroleum-like odor, sheen present. 1.13.5-14.0' No recovery. 1.15.0-15.1' Cobbles, wet, sheen present on split sport 1.15.1-16.5' No recovery.	on sampler.	`' ∖'		7						
		17.5-17.7' Cobbles. 17.7-17.9' SILT (100% silt), brown, hard, moist, no o	dor, no sheen.	\/ \/		100	50 for 5"	3.8	MW-11-17.8	x		Screen
20 -		22.0-22.3' SILT (100% silt), brown, hard, moist, no o	odor, no sheen.	ML		100	50 for 4"	3.0	MW-11-22.2			
25 -												

Well Construction Information Ground Surface Elevation (ft): NA Monument Type: Flush Filter Pack: 10/20 Sand Top of Casing Elevation (ft): Casing Diameter (inches): NA 4 Surface Seal: Concrete Surveyed Location: Screen Slot Size (inches): 0.020 Annular Seal: Bentonite X:1771777.29 Screened Interval (ft bgs): 12.0-22.0 Boring Abandonment: NA Y: 152916.78

		FARALLON		Lo	g o	of I	Bori	'nç	g: RW-1	I	Page 1 of 2		
Lo	ojeo cat	:: Coleman Oil ct: Coleman Oil ion: Wenatchee, WA on PN: 1001-002	Date/Time Started Date/Time Comple Equipment: Drilling Company: Drilling Foreman:	eted:	4/10/ LBI	2017 onm	' @ 131 ' @ 183 ental W	i0 [[est]	Sampler Type: D&M Drive Hammer (Ibs.): Depth of Water ATD (Total Boring Depth (ff Total Well Depth (ff be): 140 (ft bgs): 17.0 (ft bgs): 30.0			
Lo	gg	ed By: J. Ruark	Drilling Method:	Drilling Method: A				•		_			
Depth (feet bgs.)	Sample Interval	Lithologic Descript	on	nscs	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Bo	oring/Well nstruction Details		
0_	-	0.0-5.0' Unable to observe soil cuttings. Soil cutting through a hose into a drum.	s were blown								Well Cap Concrete		
- 5- -		5.0-6.5': No recovery. Slough observed. SILT with s sand), fine sand, brown, moist, no odor.	and (85% silt, 15%	ML		0	15/20 /8				Bentonite		
- - 10 -	-	10.0-10.1' No recovery.	.1			0	50 for 1"						
-		12.5-12.9' No recovery. Slough observed. SILT (10 brown, moist, no odor.	· · · ·	 /		0	50 for 5"						
15 -	×	15.0-15.2' No recovery. Slough observed. SILT with brown, moist, no odor.		 \	-] I (0	50 for 2"				Sand Pack		
	I	1				1			I	109-109			

Marken and The Flore		Well Construc	tion Information	Ground Surface Eleva	ation (ft):	NA
Monument Type: Flush		Filter Pack:	10/20 Sand		()	
Casing Diameter (inches):	3	Surface Seal:	Concrete	Top of Casing Elevati	on (ft):	NA
Screen Slot Size (inches):	0.020	Annular Seal:	Bentonite	Surveyed Location:	X: 1771768.7	5
Screened Interval (ft bgs):	15.0-30.0	Boring Abandonment:	NA		Y: 153148.41	

		FARALLON CONSULTING		Lo	g c	of E	Bor	ing	j: RW-1		Page 2 of 2
Lo Fa	oje cat rall	:: Coleman Oil ct: Coleman Oil ion: Wenatchee, WA on PN: 1001-002 ed By: J. Ruark	Date/Time Started Date/Time Comple Equipment: Drilling Company: Drilling Foreman: Drilling Method:	eted: :	4/10/2017 @ 1315 Sampler Type: D&M SS 4/10/2017 @ 1830 Drive Hammer (Ibs.): LBI Depth of Water ATD (ft bg Environmental West Total Boring Depth (ft bgs): Air rotary Air rotary					140 bgs): 17.0 bgs): 30.0	
Depth (feet bgs.)	Sample Interval	Lithologic Descripti	on	nscs	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
20 -		17.5-18.0' SILT (100% silt), brown, hard, wet, no od present. 18.0-18.2' No recovery. 25.0-25.1' No recovery.	1	ML		83	50 for 3" 50 for 1"	1.0	RW-1-17.5 @1518	x	Image: state of the state
30 -		30.0-30.1' No recovery.	/		- <u></u>	0	50 for 1"				

Well Construction Information Ground Surface Elevation (ft): NA Monument Type: Flush Filter Pack: 10/20 Sand Top of Casing Elevation (ft): Casing Diameter (inches): 3 NA Surface Seal: Concrete Surveyed Location: Screen Slot Size (inches): 0.020 Annular Seal: Bentonite X:1771768.75 Screened Interval (ft bgs): 15.0-30.0 Boring Abandonment: NA Y: 153148.41

_OC Fara	jec ati allo	<i>Issaquah, Washington 98027</i> Coleman Oil t: Coleman Oil on: Wenatchee, WA on PN: 1001-001 ed By: K. Scott	Date/Time Started Date/Time Comple Equipment: Drilling Company: Drilling Foreman: Drilling Method:	eted: :		010 amm o. W Smith	1235 T-300 '. Expl., I	Dri ⁻ Dej Inc.Tot	npler Type: S ve Hammer (Ibs oth of Water AT al Boring Depth al Well Depth (f	.): D (ft bg (ft bg	oon 18 gs): s):	age 1 of 2 -inch 140 24.0 35.5 35.0
Depth (feet bgs.)	Sample Interval	Lithologic Descripti	on	nscs	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Con	ing/Well struction Details
		 0.0-0.4' Asphalt, black, dry, odor, sheen. Hand dig to for utilities (refusal due to 6 X10" boulder). 0.4-1.2' Poorly graded SAND with gravel (75% sand, silt), fine to medium sand, fine to coarse gravel, brow hoen. 1.2-2.5' Well graded SAND with gravel (75% sand, silt), fine to coarse sand, fine to coarse gravel, brow sheen. 2.5-3.3' SILT (95% silt, 5% sand), fine sand, brown, odor, no sheen. 5.0-5.5' Poorly graded SAND (95% sand, 5% silt), fi sand, tan, dense, moist, no odor, no sheen. Observation of the sand, tan, dense, moist, no odor, no sheen. 5.5-6.5' SILT with sand (75% silt, 25% sand), fine to tan, hard, moist, no odor, no sheen. 10.0-10.8' Poorly graded SAND with gravel (75% sand, 5% silt), fine to medium sand, fine to coarse gravel, no odor, no sheen. 	I, 20% gravel, 5% wn, dry, no odor, 20% gravel, 5% n, dry, no odor, no hard, moist, no hard, moist, no ne to medium red golden-yellow medium sand,	AC SP SW ML SP ML			N/A 38/41/39 16/33/32		FB-1-5.0			Monument 2" PVC Casing Bentonite Seal Water leve measured on 7/15/2010
- 15 - - - -		15.0-15.5' SILT (95% silt, 5% sand), fine to medium wet, odor, sheen. 15.5-15.8' Poorly graded SAND (95% sand, 5% silt) sand, grey, very dense, moist, odor, slight sheen. C 3" cobble in shoe.	, fine to medium	ML		50	26/35/31	16.1	FB-1-16.0	X		×

FARALLON Consulting 975 5th Avenue Northwest Issaquah, Washington 98027 Page 2											age 2 of 2
Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Con	Well struction letails
20 -		20.0-20.5' SILT with sand (75% silt, 25% sand), fine sand, brown, hard, moist, no odor, no sheen. 20.5-21.4' SILT (95% silt, 5% sand), fine sand, tan, hard, moist, no odor, no sheen. Observed golden-yellow flakes if mica.	ML		90	19/18/50 for 3"	0.3				2/12 Sand Pack
25 -		25.0-25.8' SILT (95% silt, 5% sand), fine sand, tan, hard, moist, no odor, no sheen. Silt is friable, semi-consolidated.	ML		50	50 for 2"	0.0				0.01 Slot PVC Well Screen
30 -	-	30.0-30.1' COBBLES (100%), grey, wet, no odor, no sheen (No Recovery).	ØBBL	S	0	50 for 1"	0.0				¥
35 -		35.0-35.1' COBBLES (100%), grey, wet, no odor, no sheen (No Recovery).	Øввг	S	0	50 for 1"	0.0				End cap

		Well Co	onstruction Informa	ation Ground S.	unfere Flavetian (ft)	658.46
Monument Type: Flush Mou	nt	Filter Pack:	2/12 Sand	Ground St	urface Elevation (ft):	030.40
Casing Diameter (inches):	2.0	Filler Fack:		Top of Cas	sing Elevation (ft):	658.01
Screen Slot Size (inches):	0.01	Surface Seal:	Grout	Boring Ab	andonment:	NA
Screened Interval (ft bgs):	15-30'	Annular Seal:	Bentonite	Surveyed Location: >	K: 9807.04 Y: 7	10355.76

		975 5th Avenue Northwest Issaquah, Washington 98027		0			ng:			F	Page 1 of 2
_OC Fara	ect: atior allon	Coleman Oil Coleman Oil n: Wenatchee, WA PN: 1001-001 By: K. Scott	Date/Time Started: Date/Time Completed: Equipment: Drilling Company: Drilling Foreman: Drilling Method:	7/8/ Sch Env Tim	7/7/2010 1530 7/8/2010 0920 Schramm T-300 Enviro. W. Expl., Ir Tim Smith Air-Rotary			npler Type: S ve Hammer (Ibs oth of Water AT al Boring Deptl al Well Depth (f	bgs): ogs):	3-inch 140 11.47' 2nd c 40.0 40.0	
eet bgs.)	Sample Interval	Lithologic Descript	ion sg	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Con	ring/Well Istruction Details
0	to H	0-0.6' Well graded GRAVEL with sand (65% grav o coarse gravel, fine to medium sand, brown, dry, and dig to 3.5' bgs to clear for utilities (refusal due oulder).	no odor, no sheen. e to 16 X18" COBB							505 505	Monument
-	i¦16	.6-1.5' BOULDER (100%), grey, dry, no odor, no s 6 X18" subrounded boulder. .5-2.5' Well graded SAND with gravel (75% sand,	! SN		100	N/A	0.0				
5	i si sh 2.	(15) Series (15	vn, dry, no odor, no	-	LI 5	50 for 4"	0.0				2" PVC Casing
	5.	5-4.2' BOULDER (100%), grey, dry, no odor, no s ubrounded boulder. .0-5.3' Silty SAND (75% sand, 25% silt), fine to me ery-dense, dry, no odor, no sheen. Observed 5 to obbles in sampler.	edium sand, brown,		0	50 for	N/A				Bentonite Seal
-	10 st	0.0-10.3' COBBLES (100%), grey, dry, no odor, n ated drilling through cobbles (No recovery).	o sheen. Driller			3"					Water leve measured on 7/15/2010
5-	\ m	5.0-15.4' Poorly graded SAND (90% sand, 5% silt redium sand, fine gravel, tan, very-dense, moist, r bserved gold mica flakes.			10	50 for 4"	0.0	FB-2-15.0	x		
- 20 - - -	\ go	0.0-20.3' COBBLES (100%), grey, dry, no odor, n olden-yellow mica flakes in 2' diameter cobble frag ecovery).		-#S	2	50 for 3"	0.0				

Screened Interval (ft bgs):

25-40

Annular Seal: Bentonite

Y: 10332.32

Surveyed Location: X: 9869.01

		FARALLON <i>consulting</i> 975 5th Avenue Northwest Issaguah, Washington 98027	Lo	g	of	Bor	ing	:MW-2		Page 2 of 2
Depth (feet bgs.)	Sample Interval	Lithologic Description	nscs	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Well Construction Details
25 -		25.0-25.2' COBBLES (100%), grey, moist, no odor, no sheen. Observed golden-yellow mica flakes in 2" diameter cobble fragments. (No recovery).	ODBBL#	S	2	50 for 2"	0.0			2/12 Sand Pack
30 -		30.0-30.2' COBBLES (100%), grey, wet, no odor, no sheen. Observed golden-yellow mica flakes in 2" diameter cobble fragments. (No recovery).	OBBL₽	S	0	50 for 2"	N/A			2/12 Sand Pack 0.01 Slot PVC Well Screen ▼
35 -		35.0-35.2' COBBLES (100%), grey, wet, no odor, no sheen. (No recovery).	рвві	S	0	50 for 2"	0.0			
40 -		40.0-40.1' COBBLES (90% rock, 5% silt, 5% sand), fine sand, dark- grey, wet, no odor, no sheen. Observed golden-yellow mica flakes in 2" diameter cobble fragments. (No Recovery). Note: Observed no measurable water on 1st day drilling (The driller used Air-Rotary compressor to blow water from casing when auger stuck). Let well MW-2 recharge overnight and monitored water at 11.47' bgs using water level indicator on 2nd day.	COBBL	S	2	50 for 1"	0.2			End cap

		Well C	onstruction Inform	ation	round Surface Elevatio	- ///
Monument Type: Flush Mou	nt	Filter Pack:	2/12 Sand	G	n (ft): 658.06	
Casing Diameter (inches):	2.0	Filler Fack:		То	op of Casing Elevation ((ft): 657.76
Screen Slot Size (inches):	0.01	Surface Seal:	Grout	В	oring Abandonment:	NA
Screened Interval (ft bgs):	25-40	Annular Seal:	Bentonite	Surveyed Loca	ation: X: 9869.01	Y: 10332.32

		FARALLON consulting 975 5th Avenue Northwest Issaquah, Washington 98027		Lo	g c	of I	Bori	ng:	MW-3		F	Page 1 of 1
Loc Far	jec ati allo		Date/Time Starter Date/Time Comp Equipment: Drilling Company Drilling Foreman Drilling Method:	leted: /:	Schramm T-300 Enviro. W. Expl., Ir Tim Smith Air Rotary				mpler Type: Sp ve Hammer (Ibs pth of Water AT tal Boring Depth tal Well Depth (f	bgs): ogs):	3-inch 140 16.5 35.3 35.0	
Depth (feet bgs.)	Sample Interval	Lithologic Description	on	nscs	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Con	ring/Well estruction Details
0		0.0-2.0' Silty SAND with gravel (60% sand, 15% silt, sand, coarse gravel, grey, moist, no odor. Hand dig clear for utilities.	15% gravel), fine to 2.0' bgs to	SM								Monument
5	\times	5.0-6.0' Poorly graded SAND with gravel (75% sand silty), medium to coarse sand, coarse gravel, brown,		SP		50	9/21/20	0.9	MW3-5.0 @ 1205			2" PVC Casing
- 10	\times	10.0-10.2' SILT (95% silt, 5% sand), fine sand, brow 10.2-10.7' SILT (95% silt, 5% sand), fine sand, grey, petroleum-like odor.	/	ML		100	32/50 for 4"	4992	MW3-10.5 @1223	x		Water level measured on 9/8/2010
- 15 - -		15.0-15.3' Poorly graded SAND with silt (90% sand, medium sand, light brown, moist, no odor.	10% silt), fine to	SP-SM	<u>z</u>	100	50 for 3"	2.0	MW3-15.0 @ 1230			Bentonite Seal
- 20		20.0' No recovery.	,	7			50 for 2"					×
25 -		23.0' SILT (95% silt, 5% sand), fine sand, grey, wet, 25.0-25.5' SILT, (95% silt, 5% sand), fine sand, grey no odor. Silt is friable, semi-consolidated.		ML		100	32/50 for 3"	2.2	MW3-25.0 @ 1258	x		0.01 Slot
30 -	~	30.0-30.3' SILT, (95% silt, 5% sand), fine sand, grey no odor. Silt is friable, semi-consolidated.	ish black, moist,	_		100	50 for 3"	2.1	MW3-30.0 @ 1310	x		PVC Well Screen 2/12 Sand Pack
35 -		35.0-35.3' SILT (100% silt), grey, moist, no odor.			<u>-17 T</u>	100	100 for 4"	2.4	MW-3-35.0 @ 1353			End cap

Manuar Trans. Eluck Mar	-1	Well C	onstruction Information	ation	Ground	Surface Elevation	(#+).	658.60
Monument Type: Flush Mou	nt	Filter Pack:	2/12 Sand		Ground	Surface Elevation	(11).	030.00
Casing Diameter (inches):	2.0				Top of C	asing Elevation (f	it):	658.26
Screen Slot Size (inches):	0.01	Surface Seal:	Grout	1	Boring A	bandonment:		NA
Screened Interval (ft bgs):	25-35	Annular Seal:	Bentonite	Surveyed Lo	cation:	X: 9764.97	Y: 10	262.14

		FARALLON consulting 975 5th Avenue Northwest Issaquah, Washington 98027		Lo	g o	of I	Bori	ng:	MW-4		I	Page 1 of 1
Loo Far	ojec cati allo	: Coleman Oil D ct: Coleman Oil Facility D ion: Wenatchee, WA D on PN: 1001-001 D	ate/Time Started: ate/Time Comple quipment: rilling Company: rilling Foreman: rilling Method:	eted: 9/8/10 1215 Schramm T-300			15 T-300 '. Expl., I	Dri ^v Dep Inc.Tot	npler Type: Sp ve Hammer (Ibs oth of Water AT al Boring Depth al Well Depth (f	bgs): gs):	140	
Depth (feet bgs.)	Sample Interval	Lithologic Descriptior	١	USCS	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Cor	ring/Well Istruction Details
0_		0.0-0.3' Asphalt. Hand dig to 3.0' bgs to clear for utilitie	2S.	AC								Monument
5		5.0-5.2' Poorly graded GRAVEL (100% gravel), coarse moist, no odor. 5.2-5.6' Well graded SAND with gravel (80% sand, 15% silt), fine to coarse sand, fine gravel, brown, moist, no o	6 gravel, 5%	GP SW		75	33/50 for 4"	6.7	MW4-5.0 @ 0747			2" PVC Casing
-		10.0-11.2' Poorly graded SAND with gravel (75% sand, 5% silt), medium to coarse sand, coarse gravel, brown,	20% gravel, moist, no odor.	SP ML		80	18/23/28	15.7	MW4-10.0 @ 0756			Bentonite Seal
15 — - -		11.2-11.3' SILT (100% silt), grey, moist, no odor.		ML		50	50 for 3"	44.3	MW4-15.0 @ 0806	x		▼ Water level
- 20 — - -		20.0-20.1' Poorly graded SAND (95% sand, 5% silt), fin moist, no odor.	ne sand, grey,	SP		50	50 for 3"	16.7	MW4-20.0 @ 0819	x		measured on 9/29/2010
25 — - -		25.0-25.1' SILT (95% silt, 5% sand), fine sand, grey, m	oist, no odor.	/		<5	50 for 1"	7.6	MW4-25.0 @ 0832			
- 30 — -		30.0' No recovery.	/				50 for 1"					0.01 Slot PVC Well Screen
- 35 — - -		35.0-35.4' SILT (100% silt), grey, moist, no odor.	/	ML /	יידרי	100	50 for 5"	17.2	MW4-35.0 @ 0905	x	2	2/12 Sand Pack End cap
- 40 — -		40.0-40.1' Silty SAND (70% sand, 30% silt), fine sand, y	grey, moist, no	SM		50	50 for 3"	7.9	MW4-40.0 @ 1112			

Manual Trans. Elizab Mari	-1	Well Co	onstruction Informa	ation Ground	Ground Surface Elevation (ft):			
Monument Type: Flush Mou	nu	Filter Pack:	2/12 Sand	Ground		(ft): 657.87		
Casing Diameter (inches):	2	i ntor i dona		Top of C	asing Elevation (ft): 657.48		
Screen Slot Size (inches):	0.01	Surface Seal:	Grout	Boring A	bandonment:	NA		
Screened Interval (ft bgs):	27-37	Annular Seal:	Bentonite	Surveyed Location:	X: 9896.58	Y: 10329.52		

		975 5th Avenue Northwest Issaquah, Washington 98027									Pa	age 1 of 2
Pro _00 Far	cati rallo	ct: Coleman Oil Facility ion:Wenatchee, WA on PN: 1001-001	Equipment: Strata S-5 Depth of Water ATD (ft bgs): 43 Drilling Company: Enviro. W. Expl., Inc Total Boring Depth (ft bgs): 45							inch 40 13.0 15.4 15.0		
				T			/8			ъ		
Depth (feet bgs.)	Sample Interval	Lithologic Descriptio	n		USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID		Cons	ng/Well struction etails
0_		0.0-2.0' Poorly graded SAND with gravel (80% sand,	15% gravel, 5% SI									
-	-	silt, <5% cobbles), fine sand, fine to coarse gravel, bro odor. Hand dig to 2.0' bgs to clear for utilities.										Monumen
- 5 -		5.0-5.2' Poorly graded GRAVEL (90% gravel, 10% sa gravel, fine sand, brown, moist, no odor. 5.2-5.7' Silty SAND (80% sand, 15% silt, 5% gravel), f gravel, brown, moist, no odor.	'/\` sr		ĒŪĖ	50	8/9/7	3.9	MW-5.0 @ 1407			2" PVC Casing
- 0 -		10.0-10.1' Poorly graded GRAVEL (95% gravel, 5% s coarse gravel, grey, moist, no odor. 10.1-10.5' Silty SAND (85% sand, 15% silt), fine sand no odor. Driller indicates wet at 12.9' bgs.			ĒĒ	10	5/7/8	6.6	MW5-10.0 @ 1415			
- - 5 -		15.0-15.2' COBBLES (100%), schist, black, moist, no	odor, mica Of OBE	 3∟∉\$		20	11/24/42	6.0	MW5-15.0 @			Bentonite
-	-	present. 15.2-15.7' Silty SAND (60% sand, 40% silt), fine to me brown, moist, no odor.	si	-1					1430			Seal
- - 0 -		20.0-20.2' COBBLES (100%), schist, black, moist, no present.	odor, mica OOBE	-//		20	28/10/11	1.6	MW5-20.0 @ 1442			
-		20.2-20.6' Silty SAND (75% sand, 25% silt), fine sand odor, appears to be broken fragments of rock.										

alio Ground Surface Elevation (ft): 656.35 Monument Type: Flush Mount Filter Pack: 2/12 Sand Top of Casing Elevation (ft): 656.00 Casing Diameter (inches): 2 Surface Seal: Grout NA Screen Slot Size (inches): 0.01 Boring Abandonment: Surveyed Location: X: 9899.55 Screened Interval (ft bgs): 30-45 Annular Seal: Bentonite Y: 10391.34

		FARALLON <i>consulting</i> 975 5th Avenue Northwest Issaguah, Washington 98027	Lc)g	of	Bor	ing	:MW-5		P	age 2 of 2
Depth (feet bgs.)	Sample Interval	Lithologic Description	nscs	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed		Well struction Details
25 -		25.0-25.1' Poorly graded SAND (95% sand, 5% silt), fine sand, grey to light grey, moist, no odor.	SP		<5	50 for 5"	2.1	MW5-25.0 @ 1455	x		
30 -	-	30.0-30.1' SILT (100% silt) brown, moist, no odor, schist rock in sampler. Not enough sample to fill sample containers.	ML		⁺ <5	50 for 4"					0.01 Slot PVC Well Screen
35 -	-	35.0-35.1' SILT (95% silt, 5% sand), fine sand, brown, moist, no odor. Not enough sample to fill sample containers.	ML /		່ <5	50 for 4"					2/12 Sand Pack
40 -	-	40.0-40.1' SILT (100% silt), grey, moist, no odor. Not enough sample to fill sample containers.			⁴ <5	50 for 3"					Water level measured on 9/29/2010
45 -		45.0-45.2' SILT (100% silt) grey, wet, no odor.			¹ 50	50 for 4"	1.9	MW5-45.0 @ 0748			End cap

	Well Construction Information											
Monument Type: Flush Mou	nt	Filter Pack:	2/12 Sand	Ground Surface Elevation (ft):	656.35							
Casing Diameter (inches):	2	Filter Pack:		Top of Casing Elevation (ft):	656.00							
Screen Slot Size (inches):	0.01	Surface Seal:	Grout	Boring Abandonment:	NA							
Screened Interval (ft bgs):	30-45	Annular Seal:	Bentonite	Surveyed Location: X: 9899.55 Y: 10	391.34							

APPENDIX B LABORATORY ANALYTICAL REPORTS

SUPPLEMENTAL DATA SUMMARY REPORT Coleman Oil 3 Chehalis Street Wenatchee, Washington

Farallon PN: 1001-002



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

April 6, 2017

Paul Grabau Farallon Consulting, LLC 1201 Cornwall Avenue, Suite 105 Bellingham, WA 98225

Re: Analytical Data for Project 1001-002 Laboratory Reference No. 1704-037

Dear Paul:

Enclosed are the analytical results and associated quality control data for samples submitted on April 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



Date of Report: April 6, 2017 Samples Submitted: April 5, 2017 Laboratory Reference: 1704-037 Project: 1001-002

Case Narrative

Samples were collected on April 3, 2017 and received by the laboratory on April 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.

NWTPH Gx/BTEX 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.



NWTPH-Gx/BTEX

Matrix: Soil Units: mg/kg (ppm)

0 0 (11)				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	CMTB-3.0					
Laboratory ID:	04-037-01					
Benzene	ND	0.020	EPA 8021B	4-5-17	4-6-17	
Toluene	ND	0.075	EPA 8021B	4-5-17	4-6-17	
Ethyl Benzene	ND	0.075	EPA 8021B	4-5-17	4-6-17	
m,p-Xylene	ND	0.075	EPA 8021B	4-5-17	4-6-17	
o-Xylene	ND	0.075	EPA 8021B	4-5-17	4-6-17	
Gasoline	ND	7.5	NWTPH-Gx	4-5-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	79	63-124				



3

NWTPH-Gx/BTEX QUALITY CONTROL

Matrix: Soil Units: mg/kg (ppm)

5 5 (i 1 /				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0405S1					
Benzene	ND	0.020	EPA 8021B	4-5-17	4-5-17	
Toluene	ND	0.050	EPA 8021B	4-5-17	4-5-17	
Ethyl Benzene	ND	0.050	EPA 8021B	4-5-17	4-5-17	
m,p-Xylene	ND	0.050	EPA 8021B	4-5-17	4-5-17	
o-Xylene	ND	0.050	EPA 8021B	4-5-17	4-5-17	
Gasoline	ND	5.0	NWTPH-Gx	4-5-17	4-5-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	84	63-124				

					Source	Pe	rcent	Recovery		RPD	
Analyte	Result		Spike	Level	Result	Rec	covery	Limits	RPD	Limit	Flags
DUPLICATE											
Laboratory ID:	03-30	08-01									
	ORIG	DUP									
Benzene	ND	ND	NA	NA			NA	NA	NA	30	
Toluene	ND	ND	NA	NA			NA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA			NA	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA			NA	NA	NA	30	
o-Xylene	ND	ND	NA	NA			NA	NA	NA	30	
Gasoline	ND	ND	NA	NA			NA	NA	NA	30	
Surrogate:											
Fluorobenzene						84	84	63-124			
SPIKE BLANKS											
Laboratory ID:	SB04	05S1									
	SB	SBD	SB	SBD		SB	SBD				
Benzene	0.857	0.876	1.00	1.00		86	88	70-124	2	12	
Toluene	0.882	0.898	1.00	1.00		88	90	73-119	2	12	
Ethyl Benzene	0.900	0.915	1.00	1.00		90	92	74-117	2	12	
m,p-Xylene	0.897	0.914	1.00	1.00		90	91	75-117	2	13	
o-Xylene	0.899	0.915	1.00	1.00		90	92	75-116	2	12	
Surrogate:											
Fluorobenzene						83	87	63-124			



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NWTPH-Dx

Matrix: Soil Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	CMTB-3.0				-	
Laboratory ID:	04-037-01					
Diesel Range Organics	370	31	NWTPH-Dx	4-5-17	4-5-17	
_ube Oil	150	63	NWTPH-Dx	4-5-17	4-5-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	127	50-150				
Client ID:	Dry Well-S-4.0					
_aboratory ID:	04-037-02					
Diesel Range Organics	580	28	NWTPH-Dx	4-5-17	4-5-17	
ube Oil Range Organics	ND	55	NWTPH-Dx	4-5-17	4-5-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	99	50-150				
Client ID:	Dry Well-E-4.0					
Laboratory ID:	04-037-03					
Diesel Range Organics	2000	30	NWTPH-Dx	4-5-17	4-5-17	
Lube Oil	540	60	NWTPH-Dx	4-5-17	4-5-17	
Surrogate:	Percent Recovery	Control Limits		+- J -17	+ -0-17	
o-Terphenyl	100	50-150				
o-reipnenyi	100	50-750				
Client ID:	Dry Well-W-4.0					
_aboratory ID:	04-037-04					
Diesel Range Organics	1800	32	NWTPH-Dx	4-5-17	4-5-17	
_ube Oil	300	64	NWTPH-Dx	4-5-17	4-5-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	97	50-150				
Client ID:	Dry Well-N-4.0					
aboratory ID:	04-037-05					
Diesel Range Organics	4400	280	NWTPH-Dx	4-5-17	4-6-17	
₋ube Oil	1800	560	NWTPH-Dx	4-5-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl		50-150				S
Client ID:	Dry Well-B-5.0					
_aboratory ID:	04-037-06					
		260	NWTPH-Dx	4-5-17	4-6-17	
Diesel Range Organics	2400 2000	260 510				
_ube Oil		510	NWTPH-Dx	4-5-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits				~
o-Terphenyl		50-150				S



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NWTPH-Dx

Matrix: Soil Units: mg/Kg (ppm)

Units: mg/kg (ppm)				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	Fuel Line-Ex-E-2.0					
Laboratory ID:	04-037-07					
Diesel Range Organics	58000	3000	NWTPH-Dx	4-5-17	4-6-17	
Lube Oil Range Organics	ND	6000	NWTPH-Dx	4-5-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl		50-150				S
Client ID:	Fuel Line-Ex-E-3.0					
Laboratory ID:	04-037-08					
Diesel Range Organics	3400	32	NWTPH-Dx	4-5-17	4-5-17	
Lube Oil Range Organics	ND	230	NWTPH-Dx	4-5-17	4-5-17	U1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	126	50-150				
Client ID:	Fuel Line-Ex-N-3.0					
Laboratory ID:	04-037-09					
Diesel Range Organics	3400	28	NWTPH-Dx	4-5-17	4-5-17	
Lube Oil Range Organics	ND	280	NWTPH-Dx	4-5-17	4-5-17	U1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	119	50-150				
Client ID:	Fuel Line-Ex-B-6.0					
Laboratory ID:	04-037-10	000		4 5 4 7	4.0.47	
Diesel Range Organics	14000 ND	300	NWTPH-Dx	4-5-17	4-6-17	1.14
Lube Oil Range Organics		3300 Control Limits	NWTPH-Dx	4-5-17	4-6-17	U1
Surrogate:	Percent Recovery					S
o-Terphenyl		50-150				5
Client ID:	Vac Truck					
Laboratory ID:	04-037-11					
Diesel Range Organics	5300	1500	NWTPH-Dx	4-5-17	4-6-17	
Lube Oil	11000	3000	NWTPH-Dx	4-5-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits		+ -J-17	+ -0-17	
o-Terphenyl		50-150				S
о-тегриенуі		00-700				3



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NWTPH-Dx QUALITY CONTROL

Matrix: Soil Units: mg/Kg (ppm)

Result	PQL	Method	Date Prepared	Date Analyzed	Flags
			•		
MB0405S3					
ND	25	NWTPH-Dx	4-5-17	4-5-17	
ND	50	NWTPH-Dx	4-5-17	4-5-17	
Percent Recovery	Control Limits				
122	50-150				
	MB0405S3 ND ND Percent Recovery	MB0405S3 ND 25 ND 50 Percent Recovery Control Limits	MB0405S3ND25ND50NWTPH-DxPercent RecoveryControl Limits	Result PQL Method Prepared MB0405S3 -<	Result PQL Method Prepared Analyzed MB0405S3 -

					Source	Percent	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Result	Recovery	Limits	RPD	Limit	Flags
DUPLICATE										
Laboratory ID:	04-03	37-01								
	ORIG	DUP								
Diesel Range Organics	295	275	NA	NA		NA	NA	7	NA	
Lube Oil	119	130	NA	NA		NA	NA	9	NA	
Surrogate:										
o-Terphenyl						127 104	50-150			
Laboratory ID:	04-03	37-07								
	ORIG	DUP								
Diesel Range Organics	49000	46200	NA	NA		NA	NA	6	NA	
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	NA	
Surrogate:										
o-Terphenyl							50-150			S,S



Date of Report: April 6, 2017 Samples Submitted: April 5, 2017 Laboratory Reference: 1704-037 Project: 1001-002

% MOISTURE

Date Analyzed: 4-5-17

Client ID	Lab ID	% Moisture
CMTB-3.0	04-037-01	20
Dry Well-S-4.0	04-037-02	9
Dry Well-E-4.0	04-037-03	17
Dry Well-W-4.0	04-037-04	21
Dry Well-N-4.0	04-037-05	11
Dry Well-B-4.0	04-037-06	2
Fuel Line-Ex-E-2.0	04-037-07	16
Fuel Line-Ex-E-3.0	04-037-08	21
Fuel Line-Ex-N-3.0	04-037-09	11
Fuel Line-Ex-B-6.0	04-037-10	18
Vac Truck	04-037-11	16



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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.

Ζ-

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



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OnSite Environmental Inc.		Cha	nin o	of (Cu	st	00	ły											Pa	age _	(of	R	_	
Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052	Turr (in	naround Requ i working day	uest rs)		La	abo	rato	ory	Nur	nbe	er:	0	4	-0	3	7									
Phone: (425) 883-3881 • www.onsite-env.com	-	(Check One)														5								Τ	
Project Number:	_ 🗌 Same	Day Day	🕻 1 Day					(0								0D/SII	_								
1001-002	2 Day	rs [] 3 Days					ean-ug							381B	ss 827	8151A								
Project Name: Cole man Oil		lard (7 Days)		0				SG CI		3260C	Only)	N	level)		des 8	sticide	cides				664A				
	_ (IPH:	analysis 5 Da	ys)	ainer		×		Acid /		atiles a	Naters	70D/S	1 (low-		Destici	us Pe	Herbi	ls	als		grease) 1664A				
Sampled by: TO		(othor)		f Cont	CID	x/BTE	×	×(□ /	260C	loV be	3011 (V	les 82 evel P,	NIS/DI	5A	orine F	loudso	d Acid	A Meta	A Meta	als	nd gre				
Sampled by: Ji Ruank		(other)		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	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and				% Moisture
Lab ID Sample Identification	Date Sampled	Time Sampled	Matrix	Num	LWN	LMN	LMN	LMN	Volat	Halo	EDB	Sem (with	PAH	PCB	Orga	Orga	Chlo	Total	Total	TCL	HEM				% M
1 CMTB-3.0	4/3/17	1405	5	4		Х		X																	0
2 Dry Well-S-40		1540	S	1				X																	
3 Dry Well-E-40		1542	S	1				X																	
4 Dry Well - W-40		1545	S	1				X																	
5 Dry Well-N-40		1551	S	1				X																	Π
6 Dr. Well-B-5.0		1600	5	1				X																	
7 Fuel Line-EX-E-20		1620	5	1				X																	1
8 Fuel Line EX-E-3.0		1621	S	l				X																	T
9 Fuel Line - EX-N-3.0		1622	S	l				X																	
10 Fuel Line -EX-B-6.0		1632	S	1			-	Х																	2
Signature		mpany				Date	-	/	Time			Com	ment	s/Spe	cial I	nstru	ction	IS	72						
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Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052 Phone: (425) 883-3881 • www.onsite-env.com		naround Req 1 working da			La	abo	rato	ory	Nun	nbe	r:	0.	1	0	37	,		_					
Project Name: Project Name: 1001-002 Project Name: Project Manager: Paul Grabau Sampled by: T. Ruank	Same		X 1 Day 3 Days	Number of Containers		BTEX			Volatiles 8260C Halorenated Volatiles 82600		(with low-level PAHs)		ne Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	1	Total RCRA Metals/ MTCA Metals (circle one)	etals	l and grease) 1664A					ture
Lab ID Sample Identification	Date Sampled	Time Sampled	Matrix	Numbe	NWTPH-HCID	NWTPH	NWTPH-GX	NWTPH-Dx	Volatiles	Camivol	(with lov	PCBs 8082A	Organoc	Organop	Chlorina	Total RC	TCLP Metals	HEM (oil and					% Moisture
11 Vac Truck	4/3/17	1645	5	1				X			_												0
		5	R																				
Signature	Co	mpany				Date	A 12/2	100	Time			Comm	ents/S	pecial	Instr	Iction	IS			Chert			
Relinquished Addition Received Addition Received Addition Relinquished Addition Received Addition Received Addition		Farq	llon NE			4	14/	19	67	20		-	Wi	10	all	0	2~	e	the Th	11 -4	13	En	
Reviewed/Date		Reviewed/Da	te								C	hroma	togram	s with	final re	eport]	×						 _

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



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

April 11, 2017

Paul Grabau Farallon Consulting, LLC 1201 Cornwall Avenue, Suite 105 Bellingham, WA 98225

Re: Analytical Data for Project 1001-002 Laboratory Reference No. 1704-056

Dear Paul:

Enclosed are the analytical results and associated quality control data for samples submitted on April 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



Case Narrative

Samples were collected on April 4, 2017 and received by the laboratory on April 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.



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

Matrix: Soil Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	NS-Trench-1-5.0			-	-	
Laboratory ID:	04-056-01					
Diesel Range Organics	ND	28	NWTPH-Dx	4-6-17	4-6-17	
Lube Oil Range Organics	ND	56	NWTPH-Dx	4-6-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	81	50-150				
Client ID:	NS-Trench-2-10.0					
Laboratory ID:	04-056-02					
Diesel Range Organics	49	27	NWTPH-Dx	4-6-17	4-6-17	
Lube Oil Range Organics	ND	55	NWTPH-Dx	4-6-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	76	50-150				
Client ID:	NS-Trench-3-10.0					
Laboratory ID:	04-056-03					
Diesel Range Organics	ND	28	NWTPH-Dx	4-6-17	4-10-17	
Lube Oil Range Organics	ND	55	NWTPH-Dx	4-6-17	4-10-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	90	50-150				
Client ID:	NS-Trench-4-5.0					
Laboratory ID:	04-056-04					
Diesel Range Organics	ND	28	NWTPH-Dx	4-6-17	4-7-17	
Lube Oil	61	56	NWTPH-Dx	4-6-17	4-7-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	98	50-150				
Client ID:	NS-Trench-5-10.0 04-056-05					
_aboratory ID: Diesel Range Organics	04-056-05 ND	28	NWTPH-Dx	4-6-17	4-6-17	
Lube Oil Range Organics	ND	28 56	NWTPH-Dx NWTPH-Dx	4-6-17 4-6-17	4-6-17 4-6-17	
Surrogate:	Percent Recovery	Control Limits		4-0-17	4-0-17	
- · · · · · · · · · · · · · · · · · · ·		CONTOF LITTING				
n-Tarnhanul	•	50-150				
o-Terphenyl	113	50-150				
	•	50-150				
Client ID:	113	50-150				
Client ID: Laboratory ID:	113 NS-Trench-6-10.0	28	NWTPH-Dx	4-6-17	4-6-17	
Client ID: Laboratory ID: Diesel Range Organics	113 NS-Trench-6-10.0 04-056-06		NWTPH-Dx NWTPH-Dx	4-6-17 4-6-17	4-6-17 4-6-17	
o-Terphenyl Client ID: Laboratory ID: Diesel Range Organics Lube Oil Range Organics Surrogate:	113 NS-Trench-6-10.0 04-056-06 ND	28				



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Matrix: Soil Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	NS-Trench-7-10.0			•		
Laboratory ID:	04-056-07					
Diesel Range Organics	6400	270	NWTPH-Dx	4-6-17	4-7-17	
Lube Oil Range Organics	ND	550	NWTPH-Dx	4-6-17	4-7-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl		50-150				S
Client ID:	NS-Trench-8-5.0					
Laboratory ID:	04-056-08					
	<u>94</u>	20	NWTPH-Dx	4-6-17	4-6-17	NI
Diesel Range Organics		28		-	-	Ν
Lube Oil	600	56 Control Limito	NWTPH-Dx	4-6-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	91	50-150				
Client ID:	NS-Trench-9-10.0					
Laboratory ID:	04-056-09					
Diesel Range Organics	5600	300	NWTPH-Dx	4-6-17	4-10-17	
Lube Oil Range Organics	ND	600	NWTPH-Dx	4-6-17	4-10-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl		50-150				S
Client ID:	EW-Trench-1-5.0					
Laboratory ID:	04-056-10					
Diesel Range Organics	ND	27	NWTPH-Dx	4-6-17	4-10-17	
Lube Oil Range Organics	ND	54	NWTPH-Dx	4-6-17	4-10-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	106	50-150				
Client ID:	EW-Trench-10.0					
Laboratory ID:	04-056-11					
Diesel Range Organics	ND	28	NWTPH-Dx	4-6-17	4-7-17	
Lube Oil Range Organics	ND	56	NWTPH-Dx	4-6-17	4-7-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	105	50-150				
Client ID:	STP-1-1					
Laboratory ID:	04-056-12					
Diesel Range Organics	9500	300	NWTPH-Dx	4-6-17	4-7-17	
Lube Oil Range Organics	9500 ND	590	NWTPH-DX NWTPH-Dx	4-6-17 4-6-17	4-7-17 4-7-17	
Surrogate:				4-0-17	4-1-11	
	Percent Recovery	Control Limits				c
o-Terphenyl		50-150				S



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Matrix: Soil Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	STP-1-2					
Laboratory ID:	04-056-13					
Diesel Range Organics	32000	280	NWTPH-Dx	4-6-17	4-7-17	
Lube Oil Range Organics	ND	1100	NWTPH-Dx	4-6-17	4-7-17	U1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl		50-150				S
Client ID:	STP-1-3					
Laboratory ID:	04-056-14					
Diesel Range Organics	19000	270	NWTPH-Dx	4-6-17	4-7-17	
Lube Oil Range Organics	ND	760	NWTPH-Dx	4-6-17	4-7-17	U1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl		50-150				S
e reipiienji						Ū
Client ID:	STP-2-1					
Laboratory ID:	04-056-15					
Diesel Range Organics	9600	690	NWTPH-Dx	4-6-17	4-10-17	
Lube Oil	14000	1400	NWTPH-Dx	4-6-17	4-10-17	
Surrogate:	Percent Recovery	Control Limits				-
o-Terphenyl		50-150				S
Client ID:	STP-2-2					
Laboratory ID:	04-056-16					
Diesel Range Organics	3400	350	NWTPH-Dx	4-6-17	4-7-17	
Lube Oil	2600	690	NWTPH-Dx	4-6-17	4-7-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl		50-150				S
e reipiiengi						U
Client ID:	STP-2-3					
Laboratory ID:	04-056-17					
Diesel Range Organics	2400	28	NWTPH-Dx	4-6-17	4-7-17	
Lube Oil	840	57	NWTPH-Dx	4-6-17	4-7-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	107	50-150				
Client ID:	STP-2-4					
Laboratory ID:	04-056-18					
Diesel Range Organics	770	28	NWTPH-Dx	4-6-17	4-6-17	
Lube Oil	460	20 56	NWTPH-Dx NWTPH-Dx	4-6-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits		4-0-17	4 -0 - 17	
	-					
o-Terphenyl	100	50-150				



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Matrix: Soil Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	STP-3-1					
Laboratory ID:	04-056-20					
Diesel Range Organics	57	28	NWTPH-Dx	4-6-17	4-6-17	
Lube Oil	320	57	NWTPH-Dx	4-6-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	101	50-150				
Client ID:	STP-3-2					
Laboratory ID:	04-056-21					
Diesel Range Organics	ND	28	NWTPH-Dx	4-6-17	4-7-17	
Lube Oil	63	55	NWTPH-Dx	4-6-17	4-7-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	97	50-150				
Client ID:	STP-3-3					
Laboratory ID:	04-056-22					
Diesel Range Organics	ND	29	NWTPH-Dx	4-6-17	4-6-17	
Lube Oil	65	58	NWTPH-Dx	4-6-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	89	50-150				
Client ID:	STP-4-1					
Laboratory ID:	04-056-25					
Diesel Range Organics	<u> </u>	27	NWTPH-Dx	4-6-17	4-6-17	
Lube Oil	93	55	NWTPH-Dx	4-6-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits		4-0-17	4-0-17	
o-Terphenyl	99	50-150				
o-reiphenyi	33	50-150				
Client ID:	STP-4-2					
_aboratory ID:	04-056-26	• -				
Diesel Range Organics	ND	30	NWTPH-Dx	4-6-17	4-6-17	
Lube Oil	130	59	NWTPH-Dx	4-6-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	101	50-150				
Client ID:	STP-4-3					
Laboratory ID:	04-056-27					
Diesel Range Organics	57	28	NWTPH-Dx	4-6-17	4-6-17	
Lube Oil	340	55	NWTPH-Dx	4-6-17	4-6-17	
Surrogate: o-Terphenyl	Percent Recovery 89	Control Limits 50-150				



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Matrix: Soil Units: mg/Kg (ppm)

onits. http://tg.(ppin)				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	STP-5-1					
Laboratory ID:	04-056-28					
Diesel Range Organics	ND	29	NWTPH-Dx	4-6-17	4-7-17	
Lube Oil Range Organics	ND	57	NWTPH-Dx	4-6-17	4-7-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	99	50-150				
Client ID:	STP-5-4					
Laboratory ID:	04-056-31					
Diesel Range Organics	34	27	NWTPH-Dx	4-6-17	4-6-17	
Lube Oil	170	55	NWTPH-Dx	4-6-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	96	50-150				
Client ID:	STP-5-5					
Laboratory ID:	04-056-32					
Diesel Range Organics	48	28	NWTPH-Dx	4-6-17	4-6-17	
Lube Oil	230	55	NWTPH-Dx	4-6-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	85	50-150				
Client ID:	NS-Trench-9-10.0-1					
Laboratory ID:	04-056-33					
Diesel Range Organics	6400	290	NWTPH-Dx	4-6-17	4-7-17	
Lube Oil Range Organics	ND	570	NWTPH-Dx	4-6-17	4-7-17	
Surrogate:	Percent Recovery	Control Limits				



NWTPH-Dx QUALITY CONTROL

Matrix: Soil Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	l Fla	ags
METHOD BLANK				•			_
Laboratory ID:	MB0406S2						
Diesel Range Organics	ND	25	NWTPH-Dx	4-6-17	4-6-17		
Lube Oil Range Organics	ND	50	NWTPH-Dx	4-6-17	4-6-17		
Surrogate:	Percent Recovery	Control Limits					
o-Terphenyl	97	50-150					
Laboratory ID:	MB0406S3						
Diesel Range Organics	ND	25	NWTPH-Dx	4-6-17	4-6-17		
Lube Oil Range Organics	ND	50	NWTPH-Dx	4-6-17	4-6-17		
Surrogate:	Percent Recovery	Control Limits					
o-Terphenyl	95	50-150					
			Source Percen	t Recovery	,	RPD	
Analyta	Pocult	Spike Lovel	Posult Posovo	rv Limite	חסס	Limit	Flag

					000100						
Analyte	Res	sult	Spike	Level	Result	Reco	overy	Limits	RPD	Limit	Flags
DUPLICATE											
Laboratory ID:	04-0	56-01									
	ORIG	DUP									
Diesel Range	ND	ND	NA	NA		N	IA	NA	NA	NA	
Lube Oil Range	ND	ND	NA	NA		Ν	IA	NA	NA	NA	
Surrogate:											
o-Terphenyl						81	89	50-150			
Laboratory ID:	04-0	56-02									
	ORIG	DUP									
Diesel Range Organics	45.1	40.5	NA	NA		N	IA	NA	11	NA	
Lube Oil Range	ND	ND	NA	NA		N	IA	NA	NA	NA	
Surrogate:											
o-Terphenyl						76	82	50-150			
Laboratory ID:	04-0	56-33									
	ORIG	DUP									
Diesel Range Organics	5600	4740	NA	NA		N	IA	NA	17	NA	
Lube Oil Range	ND	ND	NA	NA		N	IA	NA	NA	NA	
Surrogate:											
o-Terphenyl								50-150			S,S
-											



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TOTAL METALS EPA 6010C/7471B

Matrix:	Soil
Units:	mg/kg (ppm)

				Date	Date	
Analyte	Result	PQL	EPA Method	Prepared	Analyzed	Flags
Lab ID: Client ID:	04-056-15 STP-2-1					
Arsenic	ND	14	6010C	4-10-17	4-10-17	
Barium	240	3.5	6010C	4-10-17	4-10-17	
Cadmium	3.2	0.69	6010C	4-10-17	4-10-17	
Chromium	44	0.69	6010C	4-10-17	4-10-17	
Lead	120	6.9	6010C	4-10-17	4-10-17	
Mercury	ND	0.35	7471B	4-10-17	4-10-17	
Selenium	ND	14	6010C	4-10-17	4-10-17	
Silver	ND	1.4	6010C	4-10-17	4-10-17	

Lab ID: Client ID:	04-056-16 STP-2-2				
Arsenic	ND	11	6010C	4-10-17	4-10-17
Barium	140	2.8	6010C	4-10-17	4-10-17
Cadmium	1.7	0.55	6010C	4-10-17	4-10-17
Chromium	32	0.55	6010C	4-10-17	4-10-17
Lead	130	5.5	6010C	4-10-17	4-10-17
Mercury	ND	0.28	7471B	4-10-17	4-10-17
Selenium	ND	11	6010C	4-10-17	4-10-17
Silver	ND	1.1	6010C	4-10-17	4-10-17



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TOTAL METALS EPA 6010C/7471B METHOD BLANK QUALITY CONTROL

Date Extracted:	4-10-17
Date Analyzed:	4-10-17
Matrix:	Soil
Units:	mg/kg (ppm)

Lab ID: MB0410SM1&MB0410S2

Analyte	Method	Result	PQL
Arsenic	6010C	ND	10
Barium	6010C	ND	2.5
Cadmium	6010C	ND	0.50
Chromium	6010C	ND	0.50
Lead	6010C	ND	5.0
Mercury	7471B	ND	0.25
Selenium	6010C	ND	10
Silver	6010C	ND	1.0



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TOTAL METALS EPA 6010C/7471B DUPLICATE QUALITY CONTROL

Date Extracted:	4-10-17
Date Analyzed:	4-10-17

Matrix:	Soil
Units:	mg/kg (ppm)

Lab ID: 04-093-01

	Sample	Duplicate			
Analyte	Result	Result	RPD	PQL	Flags
Arsenic	10.2	10.3	1	10	
			_		
Barium	56.8	55.7	2	2.5	
Codmium		ND	NIA	0.50	
Cadmium	ND	ND	NA	0.50	
Chromium	24.3	26.2	8	0.50	
Chroman	24.0	20.2	0	0.00	
Lead	29.7	27.8	7	5.0	
Mercury	ND	ND	NA	0.25	
Selenium	ND	ND	NA	10	
Silver	ND	ND	NA	1.0	



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TOTAL METALS EPA 6010C/7471B MS/MSD QUALITY CONTROL

Date Extracted:	4-10-17
Date Analyzed:	4-10-17

Matrix:	Soil
Units:	mg/kg (ppm)

Lab ID: 04-093-01

	Spike		Percent		Percent		
Analyte	Level	MS	Recovery	MSD	Recovery	RPD	Flags
Arsenic	100	96.9	87	96.1	86	1	
Barium	100	154	97	133	76	15	
Cadmium	50.0	46.0	92	45.0	90	2	
Chromium	100	112	87	108	84	3	
Lead	250	251	89	242	85	4	
Mercury	0.500	0.557	111	0.521	104	7	
Selenium	100	88.1	88	88.5	88	0	
Silver	25.0	20.1	80	19.9	80	1	



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TCLP LEAD EPA 1311/6010C

Matrix: Units:	TCLP Extract mg/L (ppm)			Date	Date	
				Date	Date	
Analyte	Result	PQL	EPA Method	Prepared	Analyzed	Flags
Lab ID:	04-056-15					
Client ID:	STP-2-1					
Lead	ND	0.20	6010C	4-11-17	4-11-17	



TCLP LEAD EPA 1311/6010C METHOD BLANK QUALITY CONTROL

4-10-17
4-11-17
4-11-17

Matrix:	TCLP Extract
Units:	mg/L (ppm)

Lab ID: MB0411TM1

Analyte	Method	Result	PQL
Lead	6010C	ND	0.20



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TCLP LEAD EPA 1311/6010C DUPLICATE QUALITY CONTROL

Date Prepared:	4-10-17
Date Extracted:	4-11-17
Date Analyzed:	4-11-17

Matrix:	TCLP Extract
Units:	mg/L (ppm)

Lab ID: 04-089-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Lead	ND	ND	NA	0.20	



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TCLP LEAD EPA 1311/6010C MS/MSD QUALITY CONTROL

Date Prepared:	4-10-17
Date Extracted:	4-11-17
Date Analyzed:	4-11-17

Matrix:	TCLP Extract
Units:	mg/L (ppm)

Lab ID: 04-089-01

	Spike		Percent		Percent		
Analyte	Level	MS	Recovery	MSD	Recovery	RPD	Flags
Lead	10.0	9.35	94	9.32	93	0	



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% MOISTURE

Date Analyzed: 4-6&7-17

Client ID	Lab ID	% Moisture
NS-Trench-1-5.0	04-056-01	10
NS-Trench-2-10.0	04-056-02	8
NS-Trench-3-10.0	04-056-03	9
NS-Trench-4-5.0	04-056-04	11
NS-Trench-5-10.0	04-056-05	10
NS-Trench-6-10.0	04-056-06	10
NS-Trench-7-10.0	04-056-07	8
NS-Trench-8-5.0	04-056-08	10
NS-Trench-9-10.0	04-056-09	17
EW-Trench-1-5.0	04-056-10	7
EW-Trench-10.0	04-056-11	11
STP-1-1	04-056-12	16
STP-1-2	04-056-13	11
STP-1-3	04-056-14	6
STP-2-1	04-056-15	28
STP-2-2	04-056-16	10
STP-2-3	04-056-17	12
STP-2-4	04-056-18	11
STP-3-1	04-056-20	12
STP-3-2	04-056-21	9
STP-3-3	04-056-22	13
STP-4-1	04-056-25	9
STP-4-2	04-056-26	16
STP-4-3	04-056-27	10
STP-5-1	04-056-28	12
STP-5-4	04-056-31	8
STP-5-5	04-056-32	10
NS-Trench-9-10.0-1	04-056-33	13



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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.

Ζ-

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



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OnSite Environmental Inc.

Chain of Custody

Page _____ of _____

Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052		naround Req n working day			La	abo	rato	ory	Nur	mbo	er:	0	4	-0) 5	6									
Phone: (425) 883-3881 • www.onsite-env.com Company: Farally Project Number: 1001-002 Project Name: Coleway 0:1 Project Manager: Paul Gradiau Sampled by: 5. Ruark ab ID Sample Identification	_ Same	-	1 Day 3 Days ys)	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
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4 NS-Track-4-5.0		1127						X																	
5 NS-TSendy -5-10.0		1136					Ň	X																	
6 NS-Trench- 6-10,0		1213						X	_	les	>														J
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8 NS-Trend-8-5.0		1422						X																	$\overline{\mathbb{C}}$
7 US-Traid-9-10,0		1439						X																	Ĩ
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OnSite Environmental Inc.	Chai	n of (Cu	sto	ody										Pa	.ge	2	of	1_	
Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052	Turnaround Reques (in working days)	t	La	bora	atory	Nu	mbe	er:	04	- 1	05	6								
Phone: (425) 883-3881 • www.onsite-env.com Company:	(Check One)		F	T							1						T	TT	<u> </u>	T
Project Number:	Same Day	1 Day										D/SIM				N	0			
1001-002	2 Days	3 Days			Clean-up))81B	s 8270	8151A			SULY				
Project Name: Colongon Oil	Standard (7 Days) (TPH analysis 5 Days)	2			SG		8260C	s Only)	M		ides 80	sticide	icides a				664A			
Project Manager: Paul Grahau	(TEN analysis 5 Days)	Itainer		X	Acid /		latiles	(Water:	PAHs)		Pestic	orus Pe	d Herb	tals	tals	LE	grease) 1664A			
Sampled by: J. Ruark	(other)	of Cor	HCID	Gx/BT		8260C	ated Vo	A 8011	-level	10000	hlorine	hospho	ted Aci	RA Me	CA Me	etals				elle
Lab ID Sample Identification	Date Time Sampled Sampled I	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Dx (Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and			% Moistu
11 EW-Treach-100		S I		2 2	X		-									-			-	V
17. 5-P-1-1	164	1 1			Ń					+							-			1
13 STA-1-2	1642			+	X					+	-									\square
14 STP-1-3	1643				Ń					-										+
15 STP-2-1	1644			-	Q									8)	1	X)				+
16 STP-2-2	1645				Ý.									Ì		B		Jed		+
19 STP-Z-3	1646			-	V					-				0			-0.00			\square
18 STA-2-4	1647		\vdash	+	5		_	\neg								-	+	++	+-	+
10 31 A 2 1	1648				Q	->	7	\neg	_					_	_		+			-
10 STAZI	- 1649 -			-	5					-							+	+		b
Signature	Company			ate	12	Time			Comm	ents/S	pecial	Instru	uction	s		-				P
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Received									Data P	ackage	e: Sta	Indar	d 🗌	Lev	el III	🗆 Le	evel IV	' 🗆		

Reviewed/Date	Reviewed/Date
rievieweu/Date	neviewed/bate

Chromatograms with final report
Electronic Data Deliverables (EDDs)

OnSite	
Environmental	inc.

Chain of Custody

OnSite Environmental Inc.	Chain o)f (Cu	sto	dy	1								Pa	age _	3		7		
Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052	Turnaround Request (in working days)		La	bora	tory	Num	ber	: 0	4 -	05	56									
Phone: (425) 883-3881 • www.onsite-env.com Company: //	(Check One)										1									
Project Number:	Same Day 📈 1 Day				(VIS/DO									
1007-002	2 Days 3 Days				an-up					81B	s 8270	8151A								
Project Name: Coleman Oil	Standard (7 Days)				SG Cle		s260C	W	level)	des 80	sticide	cides 8				1664A				
Project Manager:	(TPH analysis 5 Days)	ainer		×	Acid / S		atiles a	8270D/SIM	1 (low-	estici	us Pe	Herbi	sli	s I I I		grease) 1(
Sampled by: TD /	(other)	f Cont	CID	×/BTE	× (□ /	260C	ad Volt	les 82 evel P/	NIS/D	2A orine F	sphor	d Acid	A Meta	A Meta	als	nd gre				
J. Ruark		Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Dx (🗌 Acid / SG Clean-up)	Volatiles 8260C	FDB FDA 8011 Maters 02600	Semivolatiles 82 (with low-level F	PAHs 8270D/SIM (low-level)	PCBs 8082A Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides	Total RCRA Metals	Total MTCA Metals	TCLP Metals	l (oil and			% Moisture	
Lab ID Sample Identification	Date Time Sampled Sampled Matrix	Nun	MN	MN	MN	Vola	Haio	Sem (with	PAH	PCE	Orge	Chlo	Tota	Tota	TCL	HEM			× ×	~
21 STA3-2	4/4/17 1650 S	1			X		-												X	2
22 STP-3-3	1 1651 Y	1			X														K)
23 547-3-4	1852-	#		-	X	- 34													(-
24 577=3-5	1653	Ħ			Ý	-)7.	,													-
	1655	Ħ			X								3						X	5
25 5TP-4-1 26 STP-4-2	1656	T			X														Ī	
27 STP-4-3	1657	T			X															
28 STP-5-1	1720	Π			X														V	
29 GTP-S-2	1725	Ŧ			X	-2 %	7													1
30 570-5-3	- 1727	1			1/		NZ.												-	
Signature	Company	<i>E</i> 1	1	Date	X	Time		Con	nments,	/Specia	l Instr	uctior	15							
Relinquished	Farallon			4/1	1/17	190	00													
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Relinquished							~													
Received								Data	Packa	ige: St	andar	d 🗌	Lev	el III		Level I	V 🗆			
Reviewed/Date	Reviewed/Date							Chro	matog	rams w	ith fina	al rep	ort 🗌	Elec	ctronic	o Data (Deliverabl	ies (EDľ	Ds) 🗌	

OnSite **Environmental Inc**

Chain of Custody

1	NIA. OnSite Environmental Inc.		Cha	ain o	f (Cu	IS	100	ly											Pa	age _	4	of	1	_	
	Analytical Laboratory Testing Services 14648 NE 95th Street : Redmond, WA 98052 Phone: (425) 883=3881 • www.onsite-env.com	Tur (ii	Turnaround Request (in working days)			La	Laboratory Number: 04-056																			
Company: Fog/lon Project Number: 1001-000 Project Name: Colomon 0:1 Project Manager: Paul Grabau		(Check One) Same Day 1 Day 2 Days 3 Days Standard (7 Days) (TPH analysis 5 Days)			Number of Containers		X		Acid / SG Clean-up)		Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with Iow-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	als	TCLP Metals	grease) 1664A				
Sampled by: J, Ru cp/k		(other)				NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (Acid /	Volatiles 8260C		EPA 8011 (olatiles 82 ow-level F	8270D/SII						Total MTCA Metals		(oil and gre				Moisture
Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Numt	NWTF	NWTF	NWTF	NWTF	Volatil	Halog	EDB E	Semiv (with I	PAHs	PCBs	Organ	Organ	Chlori	Total F	Total N	TCLP	HEM (% Moi
31	STA-S-4 STA-S-S NS-Trench-9-10.0-1	4/4/12	1729	5	1				X																	N
32	STP-5-5	4/4/17	1730	5	ĺ				X																	8
33	NS-Trench-9-10.0-1	4/4	1439	5	1				X																(×
					-			7																		
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							/									_	_									
Relinquished Signature			Company				Date Time						Con	nment	s/Spe	cial I	Instru	ction	S							
Received A P			Facillon				4/5/1 1200																			
Relinquished A. Reso			Farallon Farallon				4-5-12 18:00																			
Received			CAL			l	4/5/17 180																			
Relinquished			ser l				4-	-11		4																
Received										Data Package: Standard Level III Level IV																
Reviewed/Date			Reviewed/Date										Chromatograms with final report Electronic Data Deliverables (EDDs)													

File :X:\DIESELS\TERI\DATA\T170406.SEC\0406-T82.D
Operator : ZT
Acquired : 07 Apr 2017 7:25 using AcqMethod T161216F.M
Instrument : Teri
Sample Name: 04-056-02
Misc Info :
Vial Number: 82



File :X:\DIESELS\TERI\DATA\T170407.SEC\0407-T59.D Operator : ZT Acquired : 07 Apr 2017 17:32 using AcqMethod T161216F.M Instrument : Teri Sample Name: 04-056-04 Misc Info : Vial Number: 59



File :X:\DIESELS\VIGO\DATA\V170407.SEC\0407-V62.D
Operator :
Acquired : 7 Apr 2017 19:15 using AcqMethod V170313F.M
Instrument : Vigo
Sample Name: 04-056-07 10X
Misc Info :
Vial Number: 62



File :X:\DIESELS\TERI\DATA\T170406\0406-T34.D Operator : ZT Acquired : 07 Apr 2017 8:50 using AcqMethod T161216F.M Instrument : Teri Sample Name: 04-056-08 Misc Info : Vial Number: 34



```
File :X:\DIESELS\TERI\DATA\T170410.SEC\0410-T57.D
Operator : ZT
Acquired : 10 Apr 2017 14:00 using AcqMethod T161216F.M
Instrument : Teri
Sample Name: 04-056-09 10X RR
Misc Info :
Vial Number: 57
```



File :X:\DIESELS\VIGO\DATA\V170407.SEC\0407-V72.D Operator : Acquired : 8 Apr 2017 1:53 using AcqMethod V170313F.M Instrument : Vigo Sample Name: 04-056-12 10X Misc Info : Vial Number: 72



File :X:\DIESELS\VIGO\DATA\V170407\0407-V11.D
Operator :
Acquired : 7 Apr 2017 18:35 using AcqMethod V170313F.M
Instrument : Vigo
Sample Name: 04-056-13 10X
Misc Info :
Vial Number: 11



File :X:\DIESELS\VIGO\DATA\V170407\0407-V22.D
Operator :
Acquired : 8 Apr 2017 1:53 using AcqMethod V170313F.M
Instrument : Vigo
Sample Name: 04-056-14 10X
Misc Info :
Vial Number: 22



File :X:\DIESELS\TERI\DATA\T170410\0410-T06.D
Operator : ZT
Acquired : 10 Apr 2017 13:18 using AcqMethod T161216F.M
Instrument : Teri
Sample Name: 04-056-15 20X
Misc Info :
Vial Number: 6



```
File :X:\DIESELS\TERI\DATA\T170407.SEC\0407-T57.D
Operator : ZT
Acquired : 07 Apr 2017 16:06 using AcqMethod T161216F.M
Instrument : Teri
Sample Name: 04-056-16 10X
Misc Info :
Vial Number: 57
```



```
File :X:\DIESELS\VIGO\DATA\V170407.SEC\0407-V56.D
Operator :
Acquired : 7 Apr 2017 15:16 using AcqMethod V170313F.M
Instrument : Vigo
Sample Name: 04-056-17
Misc Info :
Vial Number: 56
```


```
File :X:\DIESELS\TERI\DATA\T170406\0406-T32.D
Operator : ZT
Acquired : 07 Apr 2017 7:25 using AcqMethod T161216F.M
Instrument : Teri
Sample Name: 04-056-18
Misc Info :
Vial Number: 32
```



File :X:\DIESELS\TERI\DATA\T170406\0406-T28.D
Operator : ZT
Acquired : 07 Apr 2017 4:35 using AcqMethod T161216F.M
Instrument : Teri
Sample Name: 04-056-20
Misc Info :
Vial Number: 28



File :X:\DIESELS\VIGO\DATA\V170407\0407-V06.D
Operator :
Acquired : 7 Apr 2017 15:16 using AcqMethod V170313F.M
Instrument : Vigo
Sample Name: 04-056-21
Misc Info :
Vial Number: 6



```
File :X:\DIESELS\TERI\DATA\T170406.SEC\0406-T71.D
Operator : ZT
Acquired : 06 Apr 2017 23:39 using AcqMethod T161216F.M
Instrument : Teri
Sample Name: 04-056-22
Misc Info :
Vial Number: 71
```



File :X:\DIESELS\VIGO\DATA\V170406.SEC\0406-V70.D Operator : Acquired : 6 Apr 2017 22:38 using AcqMethod V170313F.M Instrument : Vigo Sample Name: 04-056-25 Misc Info : Vial Number: 70



File :X:\DIESELS\VIGO\DATA\V170406.SEC\0406-V71.D Operator : Acquired : 6 Apr 2017 23:18 using AcqMethod V170313F.M Instrument : Vigo Sample Name: 04-056-26 Misc Info : Vial Number: 71



File :X:\DIESELS\VIGO\DATA\V170406\0406-V21.D Operator : Acquired : 6 Apr 2017 23:18 using AcqMethod V170313F.M Instrument : Vigo Sample Name: 04-056-27 Misc Info : Vial Number: 21



File :X:\DIESELS\TERI\DATA\T170406.SEC\0406-T72.D Operator : ZT Acquired : 07 Apr 2017 0:21 using AcqMethod T161216F.M Instrument : Teri Sample Name: 04-056-31 Misc Info : Vial Number: 72



File :X:\DIESELS\TERI\DATA\T170406\0406-T22.D Operator : ZT Acquired : 07 Apr 2017 0:21 using AcqMethod T161216F.M Instrument : Teri Sample Name: 04-056-32 Misc Info : Vial Number: 22



File :X:\DIESELS\TERI\DATA\T170407\0407-T13.D Operator : ZT Acquired : 07 Apr 2017 20:22 using AcqMethod T161216F.M Instrument : Teri Sample Name: 04-056-33 10X Misc Info : Vial Number: 13





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

April 11, 2017

Paul Grabau Farallon Consulting, LLC 1201 Cornwall Avenue, Suite 105 Bellingham, WA 98225

Re: Analytical Data for Project 1001-002 Laboratory Reference No. 1704-057

Dear Paul:

Enclosed are the analytical results and associated quality control data for samples submitted on April 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



Date of Report: April 11, 2017 Samples Submitted: April 5, 2017 Laboratory Reference: 1704-057 Project: 1001-002

Case Narrative

Samples were collected on April 5, 2017 and received by the laboratory on April 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.



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

NWTPH-Dx

Matrix: Soil Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	EW-Trench-3-5.0			-	-	
Laboratory ID:	04-057-01					
Diesel Range Organics	ND	28	NWTPH-Dx	4-6-17	4-10-17	
Lube Oil Range Organics	ND	57	NWTPH-Dx	4-6-17	4-10-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	84	50-150				
Client ID:	EW-Trench-4-10.0					
Laboratory ID:	04-057-02					
Diesel Range Organics	7700	280	NWTPH-Dx	4-6-17	4-7-17	
Lube Oil Range Organics	ND	550	NWTPH-Dx	4-6-17	4-7-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl		50-150				S
						-
Client ID:	EW-Trench2-5-5.0					
Laboratory ID:	04-057-03					
Diesel Range Organics	ND	28	NWTPH-Dx	4-6-17	4-6-17	
Lube Oil Range Organics	ND	55	NWTPH-Dx	4-6-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	71	50-150				
Client ID:	STP-2-5					
Laboratory ID:	04-057-04					
Diesel Range Organics	3200	290	NWTPH-Dx	4-6-17	4-6-17	
Lube Oil	2000	580	NWTPH-Dx	4-6-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl		50-150				S
						Ũ
Client ID:	STP-3-4					
Laboratory ID:	04-057-05					
Diesel Range Organics	ND	27	NWTPH-Dx	4-6-17	4-6-17	
_ube Oil	78	54	NWTPH-Dx	4-6-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	102	50-150				
	102					
Client ID:	STP-3-5					
Laboratory ID:	04-057-06					
Diesel Range Organics	84	27	NWTPH-Dx	4-6-17	4-6-17	
Lube Oil	200	55	NWTPH-Dx	4-6-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits		- U II	T U 17	
o-Terphenyl	84	50-150				
	04	50-750				



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

NWTPH-Dx

Matrix: Soil Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	STP-5-2					
Laboratory ID:	04-057-07					
Diesel Range Organics	130	27	NWTPH-Dx	4-6-17	4-6-17	
Lube Oil	560	54	NWTPH-Dx	4-6-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	104	50-150				
Client ID:	STP-5-3					
Laboratory ID:	04-057-08					
Diesel Range Organics	ND	29	NWTPH-Dx	4-6-17	4-6-17	
Lube Oil Range Organics	ND	58	NWTPH-Dx	4-6-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits		-		
o-Terphenyl	81	50-150				
Client ID:	STP-5-3-1					
Laboratory ID:	04-057-09					
			NWTPH-Dx	4 0 47	4 0 47	
Diesel Range Organics	ND ND	28 56	NWTPH-Dx NWTPH-Dx	4-6-17 4-6-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits	NVVIPH-DX	4-0-17	4-6-17	
o-Terphenyl	88	50-150				
o-reiphenyi	00	50-150				
Client ID:	EW-Trench2-6-9.0					
Laboratory ID:	04-057-10					
Diesel Range Organics	ND	28	NWTPH-Dx	4-6-17	4-6-17	
Lube Oil Range Organics	ND	55	NWTPH-Dx	4-6-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	79	50-150				
Client ID:	EW-Trench2-7-5.0					
Laboratory ID:	04-057-11					
Diesel Range Organics	ND	27	NWTPH-Dx	4-6-17	4-6-17	
_ube Oil Range Organics	ND	54	NWTPH-Dx	4-6-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	82	50-150				
Client ID:	EW-Trench2-8-6.0					
Laboratory ID:	04-057-12					
Diesel Range Organics	ND	27	NWTPH-Dx	4-6-17	4-6-17	
Lube Oil Range Organics	ND	55	NWTPH-Dx	4-6-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits		, 17-0-17	, 10 ⁻ 17	
o-Terphenyl	101	50-150				
	101	50-750				



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

NWTPH-Dx

Matrix: Soil Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	STP-6-1					
Laboratory ID:	04-057-13					
Diesel Range Organics	ND	27	NWTPH-Dx	4-6-17	4-6-17	
Lube Oil Range Organics	ND	54	NWTPH-Dx	4-6-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	86	50-150				
Client ID:	STP-6-2					
Laboratory ID:	04-057-14					
Diesel Range Organics	76	27	NWTPH-Dx	4-6-17	4-6-17	
Lube Oil	180	54	NWTPH-Dx	4-6-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	94	50-150				
Client ID:	STP-6-3					
Laboratory ID:	04-057-15					
Diesel Range Organics	42	28	NWTPH-Dx	4-6-17	4-6-17	
Lube Oil	56	55	NWTPH-Dx	4-6-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	83	50-150				
Client ID:	STP-7-1					
Laboratory ID:	04-057-16	07		4 0 47	4.0.47	
Diesel Range Organics	130	27	NWTPH-Dx	4-6-17	4-6-17	
Lube Oil Range Organics	ND	54	NWTPH-Dx	4-6-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	94	50-150				
Client ID:	STP-7-2					
Laboratory ID:	04-057-17					
Diesel Range Organics	110	26	NWTPH-Dx	4-6-17	4-6-17	
Lube Oil Range Organics	ND	53	NWTPH-Dx	4-6-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits			-	
o-Terphenyl	90	50-150				
Client ID:	STP-7-3					
Laboratory ID:	04-057-18					
Diesel Range Organics	ND	27	NWTPH-Dx	4-6-17	4-6-17	
Lube Oil Range Organics	ND	55	NWTPH-Dx	4-6-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits 50-150				
o-Terphenyl	72	50-150				



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

NWTPH-Dx QUALITY CONTROL

Matrix: Soil Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0406S1					
Diesel Range Organics	ND	25	NWTPH-Dx	4-6-17	4-6-17	
Lube Oil Range Organics	ND	50	NWTPH-Dx	4-6-17	4-6-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	91	50-150				

					Source	Percent	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Result	Recovery	Limits	RPD	Limit	Flags
DUPLICATE										
Laboratory ID:	04-05	57-01								
	ORIG	DUP								
Diesel Range	ND	ND	NA	NA		NA	NA	NA	NA	
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	NA	
Surrogate:										
o-Terphenyl						84 80	50-150			
Laboratory ID:	04-05	57-02								
	ORIG	DUP								
Diesel Range Organics	6990	4910	NA	NA		NA	NA	35	NA	
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	NA	
Surrogate:										
o-Terphenyl							50-150			S,S



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

6

Date of Report: April 11, 2017 Samples Submitted: April 5, 2017 Laboratory Reference: 1704-057 Project: 1001-002

% MOISTURE

Date Analyzed: 4-6-17

Client ID	Lab ID	% Moisture
EW-Trench-3-5.0	04-057-01	12
EW-Trench-4-10.0	04-057-02	10
EW-Trench-5-5.0	04-057-03	10
STP-2-5	04-057-04	14
STP-3-4	04-057-05	7
STP-3-5	04-057-06	8
STP-5-2	04-057-07	7
STP-5-3	04-057-08	13
STP-5-3-1	04-057-09	10
EW-Trench-2-6-9.0	04-057-10	10
EW-Trench-2-7-5.0	04-057-11	7
EW-Trench-2-8-6.0	04-057-12	9
STP-6-1	04-057-13	7
STP-6-2	04-057-14	8
STP-6-3	04-057-15	10
STP-7-1	04-057-16	7
STP-7-2	04-057-17	5
STP-7-3	04-057-18	9



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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.

Ζ-

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



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OnSite Environmental Inc.	Chain c)f	Cu	ıst	00	ly										Pa	age _	1	of	1	2	
Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052	Turnaround Request (in working days)		L	abo	rato	ory	Num	be	r:	04	-1	O F	57	Re-								
Phone: (425) 883-3881 • www.onsite-env.com Company: For allow Project Number:	(Check One)																					
Project Name: <i>Coleman</i> Otl Project Manager: Project Manager: Paul Grahay Sampled by: + D	2 Days 3 Days Standard (7 Days) (TPH analysis 5 Days) (other)	Number of Containers	tciD	àx/BTEX	х¢	NWTPH-Dx (Acid / SG Clean-up)	260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only) Semivolatiles 8270D/SIM	(with low-level PAHs) PAHs 8270D/SIM (low-level)	2A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	als	HEM (oil and grease) 1664A				ø
Lab ID Sample Identification	Date Time Sampled Sampled Matrix	Number (NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-D	Volatiles 8260C	Taiogenat	EDB EPA Semivolat	With low- AHs 827	PCBs 8082A	Organoch	Organoph	Chlorinate	Total RCR	Fotal MTC	TCLP Metals	HEM (oil a				% Moisture
1 FIN-Treach-3-50	4/5/17 0834 5	1		2	2	X		-										-				Ň
2 EW - Trench -4-10.0	0854	1				Y																1
3 Eup-Trench 2-5-5.0	0720		-			Y				_											_	+
4 STP-2-5 5 STP-3-4	/033					X,	_		_	-	-										_	+
6 STP-3-5	1035	$\left \right $				У V				0	-											$\left \right $
7 STP-5-2	1042	17				X																\square
t 57A-5-3 9 STP-5-3-1 10 Zw-Trench2-6-90	1644					X																
9 STP-5-3-1 10 EUN-Tronch2-6-90	1049					X	_	_	_	_												
10 200-7100 Ch2-6-9.0 Signature	0948 1 Company	-		Date	•	X	Time		(Comme	nts/Sp	ecial	Instr	uctio	ns							M
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Reviewed/Date	Reviewed/Date								С	hromat	ograr	ns wi	th fin	al rep	ort 🗌	Ele	ctroni	ic Dat	a Deliv	/erable	s (EDDs)	

OnSite Environmental Inc.		Cha	ain o	f (Cu	Ist	00	dy											Pa	age _	2	of_	2		
Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052	Tur (ii	naround Req n working da	uest ys)		La	abo	rate	ory	Nu	mb	er:	0	4 •	-0	5	7									
Phone: (425) 883-3881 • www.onsite-env.com Company: Farallon Project Number: Project Name: Colom & Oil Project Manager: Dail Grabog Sampled by:			1 Day 3 Days	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				isture
Lab ID Sample Identification	Date Sampled	Time Sampled	Matrix	Numt	NWTF	NWTF	NWTF	NWTF	Volati	Halog	EDB E	Semiv (with I	PAHs	PCBs	Orgar	Organ	Chlori	Total I	Total I	TCLP	HEM				% Moisture
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13 STA-6-1		1306		Π				X																	
13 STP-6-1 14 STP-6-2 15 STP-6-3 16 STP-7-1		1300		Π				X																	T
15 STP-6-3		1308		Π				X																	T
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12 SYA-7-2		1348						X																	
18 STA-7-3	5	1349	2	7				X																	K
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Signature	Co	ompany				Date			Time			Com	ment	s/Spe	cial	Instru	ictior	15							
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File :X:\DIESELS\VIGO\DATA\V170407\0407-V10.D Operator : Acquired : 7 Apr 2017 17:55 using AcqMethod V170313F.M Instrument : Vigo Sample Name: 04-057-02 10X Misc Info : Vial Number: 10



File :X:\DIESELS\VIGO\DATA\V170406\0406-V15.D
Operator :
Acquired : 6 Apr 2017 19:16 using AcqMethod V170313F.M
Instrument : Vigo
Sample Name: 04-057-04 10X
Misc Info :
Vial Number: 15



File :X:\DIESELS\VIGO\DATA\V170406.SEC\0406-V61.D
Operator :
Acquired : 6 Apr 2017 16:36 using AcqMethod V170313F.M
Instrument : Vigo
Sample Name: 04-057-05
Misc Info :
Vial Number: 61



File :X:\DIESELS\VIGO\DATA\V170406\0406-V13.D Operator : Acquired : 6 Apr 2017 17:56 using AcqMethod V170313F.M Instrument : Vigo Sample Name: 04-057-06 Misc Info : Vial Number: 13



File :X:\DIESELS\TERI\DATA\T170406.SEC\0406-T66.D
Operator : ZT
Acquired : 06 Apr 2017 20:04 using AcqMethod T161216F.M
Instrument : Teri
Sample Name: 04-057-07
Misc Info :
Vial Number: 66



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File :X:\DIESELS\TERI\DATA\T170406.SEC\0406-T64.D
Operator : ZT
Acquired : 06 Apr 2017 18:39 using AcqMethod T161216F.M
Instrument : Teri
Sample Name: 04-057-14
Misc Info :
Vial Number: 64
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File :X:\DIESELS\TERI\DATA\T170406\0406-T14.D
Operator : ZT
Acquired : 06 Apr 2017 18:39 using AcqMethod T161216F.M
Instrument : Teri
Sample Name: 014-057-15
Misc Info :
Vial Number: 14



File :X:\DIESELS\VIGO\DATA\V170406.SEC\0406-V63.D Operator : Acquired : 6 Apr 2017 17:56 using AcqMethod V170313F.M Instrument : Vigo Sample Name: 04-057-16 Misc Info : Vial Number: 63



File :X:\DIESELS\VIGO\DATA\V170406\0406-V11.D
Operator :
Acquired : 6 Apr 2017 16:36 using AcqMethod V170313F.M
Instrument : Vigo
Sample Name: 04-057-17
Misc Info :
Vial Number: 11





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

April 14, 2017

Paul Grabau Farallon Consulting, LLC 1201 Cornwall Avenue, Suite 105 Bellingham, WA 98225

Re: Analytical Data for Project 1001-002 Laboratory Reference No. 1704-097

Dear Paul:

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



Date of Report: April 14, 2017 Samples Submitted: April 8, 2017 Laboratory Reference: 1704-097 Project: 1001-002

Case Narrative

Samples were collected on April 6 and 7, 2017 and received by the laboratory on April 8, 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.

NWTPH Gx/BTEX 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.

Method 5035A VOA vials were not provided for sample STP-10-4. The sample was therefore extracted from a 4ounce jar for analysis. Some loss of volatiles may have occurred.

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.



Matrix: Soil Units: mg/kg (ppm)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FS-EX-1-6.0					
Laboratory ID:	04-097-01					
Benzene	0.089	0.021	EPA 8021B	4-10-17	4-12-17	
Toluene	0.74	0.10	EPA 8021B	4-10-17	4-12-17	
Ethyl Benzene	2.4	0.10	EPA 8021B	4-10-17	4-12-17	
m,p-Xylene	4.9	0.10	EPA 8021B	4-10-17	4-12-17	
o-Xylene	2.2	0.10	EPA 8021B	4-10-17	4-12-17	
Gasoline	540	10	NWTPH-Gx	4-10-17	4-12-17	0
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	74	63-124				
Client ID:	FS-EX-4-8.0					
Laboratory ID:	04-097-05					
Benzene	0.050	0.020	EPA 8021B	4-10-17	4-12-17	
Toluene	0.071	0.049	EPA 8021B	4-10-17	4-12-17	
Ethyl Benzene	3.9	0.049	EPA 8021B	4-10-17	4-12-17	
m,p-Xylene	8.5	0.49	EPA 8021B	4-10-17	4-13-17	
o-Xylene	4.2	0.49	EPA 8021B	4-10-17	4-13-17	
Gasoline	1300	49	NWTPH-Gx	4-10-17	4-13-17	0
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	78	63-124				
Client ID:	STP-8-1					
Laboratory ID:	04-097-07					
Benzene	ND	0.020	EPA 8021B	4-10-17	4-10-17	
Toluene	ND	0.054	EPA 8021B	4-10-17	4-10-17	
Ethyl Benzene	ND	0.054	EPA 8021B	4-10-17	4-10-17	
m,p-Xylene	ND	0.054	EPA 8021B	4-10-17	4-10-17	
o-Xylene	ND	0.054	EPA 8021B	4-10-17	4-10-17	
Gasoline	ND	5.4	NWTPH-Gx	4-10-17	4-10-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	100	63-124				



Matrix: Soil Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	STP-9-3		moniou	Topulou	, indiy200	1 1490
Laboratory ID:	04-097-12					
Benzene	ND	0.020	EPA 8021B	4-10-17	4-10-17	
Toluene	ND	0.052	EPA 8021B	4-10-17	4-10-17	
Ethyl Benzene	ND	0.052	EPA 8021B	4-10-17	4-10-17	
m,p-Xylene	ND	0.052	EPA 8021B	4-10-17	4-10-17	
o-Xylene	ND	0.052	EPA 8021B	4-10-17	4-10-17	
Gasoline	ND	5.2	NWTPH-Gx	4-10-17	4-10-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	100	63-124				
Client ID:	STP-9-3-1					
Laboratory ID:	04-097-13					
Benzene	ND	0.020	EPA 8021B	4-10-17	4-10-17	
Toluene	ND	0.051	EPA 8021B	4-10-17	4-10-17	
Ethyl Benzene	ND	0.051	EPA 8021B	4-10-17	4-10-17	
m,p-Xylene	ND	0.051	EPA 8021B	4-10-17	4-10-17	
o-Xylene	ND	0.051	EPA 8021B	4-10-17	4-10-17	
Gasoline	ND	5.1	NWTPH-Gx	4-10-17	4-10-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	98	63-124				
Client ID:	FB-3-9.0-040617					
Laboratory ID:	04-097-15					
Benzene	ND	0.020	EPA 8021B	4-10-17	4-10-17	
Toluene	ND	0.054	EPA 8021B	4-10-17	4-10-17	
Ethyl Benzene	ND	0.054	EPA 8021B	4-10-17	4-10-17	
m,p-Xylene	ND	0.054	EPA 8021B	4-10-17	4-10-17	
o-Xylene	ND	0.054	EPA 8021B	4-10-17	4-10-17	
Gasoline	ND	5.4	NWTPH-Gx	4-10-17	4-10-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	86	63-124				



Matrix: Soil Units: mg/kg (ppm)

Client ID: FB-3-12.5-040617 Laboratory ID: 04-097-16 Benzene ND 0.020 EPA 8021B 4-10-17 4-12-17 Toluene ND 0.049 EPA 8021B 4-10-17 4-12-17 Ethyl Benzene 0.68 0.049 EPA 8021B 4-10-17 4-12-17 o-Xylene 0.59 0.049 EPA 8021B 4-10-17 4-12-17 o-Xylene ND 0.49 EPA 8021B 4-10-17 4-12-17 Gasoline 420 4.9 NWTPH-Gx 4-10-17 4-12-17 O Surrogate: Percent Recovery Control Limits Fluorobenzene 75 63-124 Client ID: FB-3-13.5-040617 Eaboratory ID: 04-097-17 Benzene 0.042 EPA 8021B 4-10-17 4-12-17 Toluene ND 0.042 EPA 8021B 4-10-17 4-12-17 E1/2 Client ID: FB-3-15.0-040617 Eaboratory ID: 0.042 EPA 8021B 4-10-17 4-12-17 <td< th=""><th>Analyta</th><th>Deput</th><th>DOL</th><th>Mothed</th><th>Date</th><th>Date</th><th>Flore</th></td<>	Analyta	Deput	DOL	Mothed	Date	Date	Flore
Laboratory ID: 04-097-16 Benzene ND 0.020 EPA 8021B 4-10-17 4-12-17 Toluene ND 0.049 EPA 8021B 4-10-17 4-12-17 Ethyl Benzene 0.68 0.049 EPA 8021B 4-10-17 4-12-17 m,-Xylene 0.59 0.049 EPA 8021B 4-10-17 4-12-17 o-Xylene ND 0.49 EPA 8021B 4-10-17 4-12-17 U1 Gasoline 420 4.9 NWTPH-Gx 4-10-17 4-12-17 U1 Gasoline 420 4.9 NWTPH-Gx 4-10-17 4-12-17 U1 Benzene 75 63-124 -	Analyte		PQL	Method	Prepared	Analyzed	Flags
Benzene ND 0.020 EPA 8021B 4-10-17 4-12-17 Toluene ND 0.049 EPA 8021B 4-10-17 4-12-17 Ethyl Benzene 0.68 0.049 EPA 8021B 4-10-17 4-12-17 m.p.Xylene 0.59 0.049 EPA 8021B 4-10-17 4-12-17 o-Xylene ND 0.49 EPA 8021B 4-10-17 4-12-17 U1 Gasoline 420 4.9 NWTPH-Gx 4-10-17 4-12-17 U1 Gasoline 420 4.9 NWTPH-Gx 4-10-17 4-12-17 U1 Gasoline 420 4.9 NWTPH-Gx 4-10-17 4-12-17 U1 Basoline 90 0.49 EPA 8021B 4-10-17 4-12-17 EN Benzene 0.046 0.020 EPA 8021B 4-10-17 4-12-17 Toluene ND 0.042 EPA 8021B 4-10-17 4-12-17 Gasoline 940 42 NWTPH-Gx 4-10-17	• •						
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Ethyl Benzene 0.68 0.049 EPA 8021B 4-10-17 4-12-17 m,p-Xylene 0.59 0.049 EPA 8021B 4-10-17 4-12-17 o-Xylene ND 0.49 EPA 8021B 4-10-17 4-12-17 U1 Gasoline 420 4.9 NWTPH-Gx 4-10-17 4-12-17 O Surrogate: Percent Recovery Control Limits 4-10-17 4-12-17 O Surrogate: Percent Recovery Control Limits 4-10-17 4-12-17 O Surrogate: Percent Recovery Control Limits 4-10-17 4-12-17 O Benzene 0.046 0.020 EPA 8021B 4-10-17 4-12-17 Toluene ND 0.042 EPA 8021B 4-10-17 4-12-17 Ethyl Benzene 2.5 0.042 EPA 8021B 4-10-17 4-12-17 O-Xylene 0.93 0.042 EPA 8021B 4-10-17 4-12-17 Surrogate: Percent Recovery Control Limits F							
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ND 0.49 EPA 8021B 4-10-17 4-12-17 U1 Gasoline 420 4.9 NWTPH-Gx 4-10-17 4-12-17 O Surrogate: Percent Recovery Control Limits 63-124	•						
Gasoline 420 4.9 NWTPH-Gx 4-10-17 4-12-17 O Surrogate: Percent Recovery Fluorobenzene Control Limits 63-124 Control Limits 63-124 Client ID: FB-3-13.5-040617 FB-3-13.5-040617 Control Limits 63-124 Client ID: FB-3-13.5-040617 4-10-17 4-12-17 Client ID: FB-3-13.5-040617 Control Limits 4-10-17 4-12-17 Client ID: FB-3-13.5-040617 4-10-17 4-12-17 Client ID: FB-3-13.5-040617 EPA 8021B 4-10-17 4-12-17 Client ID: FB-30-13 0.042 EPA 8021B 4-10-17 4-12-17 Client ID: FB-30-13 0.042 EPA 8021B 4-10-17 4-12-17 Client ID: FB-315.0-040617 Control Limits Fluorobenzene 71 63-124 Client ID: FB-3-15.0-040617 4-10-17 4-12-17 O Surrogate: Percent Recovery Control Limits Fluorobenzene 71 63-124 Client ID: FB-3-15.0-040617 4-10-17 4-12-17 O Benzene 0.028 0.020	m,p-Xylene				-	4-12-17	
Surrogate: Percent Recovery Control Limits Fluorobenzene 75 63-124 Client ID: FB-3-13.5-040617 Laboratory ID: 04-097-17 Benzene 0.046 0.020 EPA 8021B 4-10-17 4-12-17 Toluene ND 0.042 EPA 8021B 4-10-17 4-12-17 Ethyl Benzene 2.5 0.042 EPA 8021B 4-10-17 4-12-17 o-Xylene 3.1 0.042 EPA 8021B 4-10-17 4-12-17 o-Xylene 0.93 0.042 EPA 8021B 4-10-17 4-12-17 Gasoline 940 42 NWTPH-Gx 4-10-17 4-12-17 Gurogate: Percent Recovery Control Limits Fluorobenzene 71 63-124 Client ID: FB-3-15.0-040617 Enderstring 4-10-17 4-12-17 O Surrogate: Percent Recovery Control Limits 4-10-17 4-12-17 Toluene Benzene 0.028 0.020 EPA 8021B 4-10-17<	o-Xylene						
Fluorobenzene 75 63-124 Client ID: FB-3-13.5-040617 Laboratory ID: 04-097-17 Benzene 0.046 0.020 EPA 8021B 4-10-17 4-12-17 Toluene ND 0.042 EPA 8021B 4-10-17 4-12-17 Ethyl Benzene 2.5 0.042 EPA 8021B 4-10-17 4-12-17 m,p-Xylene 3.1 0.042 EPA 8021B 4-10-17 4-12-17 Gasoline 940 42 NWTPH-GX 4-10-17 4-12-17 Gasoline 940 42 NWTPH-GX 4-10-17 4-12-17 Surrogate: Percent Recovery Control Limits Fluorobenzene 71 63-124 Client ID: FB-3-15.0-040617 4-10-17 4-12-17 O Surrogate: Percent Recovery Control Limits Fluorobenzene 71 63-124 Client ID: FB-3-15.0-040617 Laboratory ID: 04-097-18 4-10-17 4-12-17 Benzene 0.028 0.020 EPA 8021B <t< td=""><td>Gasoline</td><td></td><td></td><td>NWTPH-Gx</td><td>4-10-17</td><td>4-12-17</td><td>0</td></t<>	Gasoline			NWTPH-Gx	4-10-17	4-12-17	0
Client ID: FB-3-13.5-040617 Laboratory ID: 04-097-17 Benzene 0.046 0.020 EPA 8021B 4-10-17 4-12-17 Toluene ND 0.042 EPA 8021B 4-10-17 4-12-17 Ethyl Benzene 2.5 0.042 EPA 8021B 4-10-17 4-12-17 Ethyl Benzene 3.1 0.042 EPA 8021B 4-10-17 4-12-17 o-Xylene 0.93 0.042 EPA 8021B 4-10-17 4-12-17 Gasoline 940 42 NWTPH-Gx 4-10-17 4-12-17 Gasoline 940 42 NWTPH-Gx 4-10-17 4-13-17 O Surrogate: Percent Recovery Control Limits Fluorobenzene 71 63-124 5-124<	Surrogate:	Percent Recovery					
Laboratory ID: 04-097-17 Benzene 0.046 0.020 EPA 8021B 4-10-17 4-12-17 Toluene ND 0.042 EPA 8021B 4-10-17 4-12-17 Ethyl Benzene 2.5 0.042 EPA 8021B 4-10-17 4-12-17 m,p-Xylene 3.1 0.042 EPA 8021B 4-10-17 4-12-17 o-Xylene 0.93 0.042 EPA 8021B 4-10-17 4-12-17 Gasoline 940 42 NWTPH-Gx 4-10-17 4-12-17 Gasoline 940 42 NWTPH-Gx 4-10-17 4-13-17 O Surrogate: Percent Recovery Control Limits Fluorobenzene 71 63-124 Client ID: FB-3-15.0-040617 Enzene 0.028 0.020 EPA 8021B 4-10-17 4-12-17 Toluene ND 0.044 EPA 8021B 4-10-17 4-12-17 Toluene ND 0.044 EPA 8021B 4-10-17 4-12-17 m,p-Xylene	Fluorobenzene	75	63-124				
Benzene 0.046 0.020 EPA 8021B 4-10-17 4-12-17 Toluene ND 0.042 EPA 8021B 4-10-17 4-12-17 Ethyl Benzene 2.5 0.042 EPA 8021B 4-10-17 4-12-17 m,p-Xylene 3.1 0.042 EPA 8021B 4-10-17 4-12-17 o-Xylene 0.93 0.042 EPA 8021B 4-10-17 4-12-17 Gasoline 940 42 NWTPH-Gx 4-10-17 4-12-17 Gasoline 940 42 NWTPH-Gx 4-10-17 4-13-17 O Surrogate: Percent Recovery Control Limits Fluorobenzene 71 63-124 63-124 Client ID: FB-3-15.0-040617 Ethyl Benzene 0.020 EPA 8021B 4-10-17 4-12-17 Toluene ND 0.044 EPA 8021B 4-10-17 4-12-17 Toluene ND 0.044 EPA 8021B 4-10-17 4-12-17 Ethyl Benzene 1.2 0.044 EPA 8021B	Client ID:	FB-3-13.5-040617					
ND 0.042 EPA 8021B 4-10-17 4-12-17 Ethyl Benzene 2.5 0.042 EPA 8021B 4-10-17 4-12-17 m,p-Xylene 3.1 0.042 EPA 8021B 4-10-17 4-12-17 o-Xylene 0.93 0.042 EPA 8021B 4-10-17 4-12-17 Gasoline 940 42 NWTPH-Gx 4-10-17 4-13-17 O Surrogate: Percent Recovery Control Limits Fluorobenzene 71 63-124	Laboratory ID:	04-097-17					
Ethyl Benzene 2.5 0.042 EPA 8021B 4-10-17 4-12-17 m,p-Xylene 3.1 0.042 EPA 8021B 4-10-17 4-12-17 o-Xylene 0.93 0.042 EPA 8021B 4-10-17 4-12-17 Gasoline 940 42 NWTPH-Gx 4-10-17 4-13-17 O Surrogate: Percent Recovery Control Limits Fluorobenzene 71 63-124 Client ID: FB-3-15.0-040617 E Fluorobenzene 4-10-17 4-12-17 Benzene 0.028 0.020 EPA 8021B 4-10-17 4-12-17 Toluene ND 0.044 EPA 8021B 4-10-17 4-12-17 Ethyl Benzene 1.2 0.044 EPA 8021B 4-10-17 4-12-17 m,p-Xylene 0.98 0.044 EPA 8021B 4-10-17 4-12-17 o-Xylene ND 2.2 EPA 8021B 4-10-17 4-12-17 o-Xylene ND 2.2 EPA 8021B 4-10-17 4-12-17	Benzene	0.046	0.020	EPA 8021B	4-10-17	4-12-17	
m.p-Xylene 3.1 0.042 EPA 8021B 4-10-17 4-12-17 o-Xylene 0.93 0.042 EPA 8021B 4-10-17 4-12-17 Gasoline 940 42 NWTPH-Gx 4-10-17 4-12-17 Gasoline 940 42 NWTPH-Gx 4-10-17 4-13-17 O Surrogate: Percent Recovery Control Limits Fluorobenzene 71 63-124 Fluorobenzene Client ID: FB-3-15.0-040617 FB-3-15.0-040617	Toluene	ND	0.042	EPA 8021B	4-10-17	4-12-17	
O-Xylene 0.93 0.042 EPA 8021B 4-10-17 4-12-17 Gasoline 940 42 NWTPH-Gx 4-10-17 4-13-17 O Surrogate: Percent Recovery Control Limits Fluorobenzene 71 63-124 Client ID: FB-3-15.0-040617	Ethyl Benzene	2.5	0.042	EPA 8021B	4-10-17	4-12-17	
Gasoline 940 42 NWTPH-Gx 4-10-17 4-13-17 O Surrogate: Percent Recovery Control Limits Fluorobenzene 71 63-124 FB-3-15.0-040617 4-10-17 4-12-17 Client ID: FB-3-15.0-040617 Laboratory ID: 04-097-18 0 63-000 EPA 8021B 4-10-17 4-12-17 FI Toluene ND 0.044 EPA 8021B 4-10-17 4-12-17 F Ethyl Benzene 1.2 0.044 EPA 8021B 4-10-17 4-12-17 F o-Xylene 0.98 0.044 EPA 8021B 4-10-17 4-12-17 U1 Gasoline 380 4.4 NWTPH-Gx 4-10-17 4-12-17 O Surrogate: Percent Recovery Control Limits 6-10-17 4-12-17 O	m,p-Xylene	3.1	0.042	EPA 8021B	4-10-17	4-12-17	
Surrogate: Percent Recovery Control Limits Fluorobenzene 71 63-124 Client ID: FB-3-15.0-040617 Laboratory ID: 04-097-18 Benzene 0.028 0.020 EPA 8021B 4-10-17 4-12-17 Toluene ND 0.044 EPA 8021B 4-10-17 4-12-17 Ethyl Benzene 1.2 0.044 EPA 8021B 4-10-17 4-12-17 o-Xylene 0.98 0.044 EPA 8021B 4-10-17 4-12-17 Gasoline 380 4.4 NWTPH-Gx 4-10-17 4-12-17 U1 Gasoline 980 0.044 EPA 8021B 4-10-17 4-12-17 U1	o-Xylene	0.93	0.042	EPA 8021B	4-10-17	4-12-17	
Fluorobenzene 71 63-124 Client ID: FB-3-15.0-040617 Laboratory ID: 04-097-18 Benzene 0.028 0.020 EPA 8021B 4-10-17 4-12-17 Toluene ND 0.044 EPA 8021B 4-10-17 4-12-17 Ethyl Benzene 1.2 0.044 EPA 8021B 4-10-17 4-12-17 orxylene 0.98 0.044 EPA 8021B 4-10-17 4-12-17 Gasoline ND 2.2 EPA 8021B 4-10-17 4-12-17 U1 Gasoline 380 4.4 NWTPH-Gx 4-10-17 4-12-17 O Surrogate: Percent Recovery Control Limits Control Limits Control Limits	Gasoline	940	42	NWTPH-Gx	4-10-17	4-13-17	0
Client ID: FB-3-15.0-040617 Laboratory ID: 04-097-18 Benzene 0.028 0.020 EPA 8021B 4-10-17 4-12-17 Toluene ND 0.044 EPA 8021B 4-10-17 4-12-17 Ethyl Benzene 1.2 0.044 EPA 8021B 4-10-17 4-12-17 o-Xylene 0.98 0.044 EPA 8021B 4-10-17 4-12-17 o-Xylene ND 2.2 EPA 8021B 4-10-17 4-12-17 U1 Gasoline 380 4.4 NWTPH-Gx 4-10-17 4-12-17 O Surrogate: Percent Recovery Control Limits 4-10-17 4-12-17 O	Surrogate:	Percent Recovery	Control Limits				
Laboratory ID: 04-097-18 Benzene 0.028 0.020 EPA 8021B 4-10-17 4-12-17 Toluene ND 0.044 EPA 8021B 4-10-17 4-12-17 Ethyl Benzene 1.2 0.044 EPA 8021B 4-10-17 4-12-17 m,p-Xylene 0.98 0.044 EPA 8021B 4-10-17 4-12-17 o-Xylene ND 2.2 EPA 8021B 4-10-17 4-12-17 U1 Gasoline 380 4.4 NWTPH-Gx 4-10-17 4-12-17 O Surrogate: Percent Recovery Control Limits 5 5 5	Fluorobenzene	71	63-124				
Benzene 0.028 0.020 EPA 8021B 4-10-17 4-12-17 Toluene ND 0.044 EPA 8021B 4-10-17 4-12-17 Ethyl Benzene 1.2 0.044 EPA 8021B 4-10-17 4-12-17 m,p-Xylene 0.98 0.044 EPA 8021B 4-10-17 4-12-17 o-Xylene ND 2.2 EPA 8021B 4-10-17 4-12-17 Gasoline 380 4.4 NWTPH-Gx 4-10-17 4-12-17 O Surrogate: Percent Recovery Control Limits Control Limits Control Limits Control Limits	Client ID:	FB-3-15.0-040617					
ND 0.044 EPA 8021B 4-10-17 4-12-17 Ethyl Benzene 1.2 0.044 EPA 8021B 4-10-17 4-12-17 m,p-Xylene 0.98 0.044 EPA 8021B 4-10-17 4-12-17 o-Xylene ND 2.2 EPA 8021B 4-10-17 4-12-17 Gasoline 380 4.4 NWTPH-Gx 4-10-17 4-12-17 0 Surrogate: Percent Recovery Control Limits EVEN EVEN EVEN EVEN	Laboratory ID:	04-097-18					
Ethyl Benzene 1.2 0.044 EPA 8021B 4-10-17 4-12-17 m,p-Xylene 0.98 0.044 EPA 8021B 4-10-17 4-12-17 o-Xylene ND 2.2 EPA 8021B 4-10-17 4-12-17 U1 Gasoline 380 4.4 NWTPH-Gx 4-10-17 4-12-17 O Surrogate: Percent Recovery Control Limits Control Limits Control Limits	Benzene	0.028	0.020	EPA 8021B	4-10-17	4-12-17	
m,p-Xylene 0.98 0.044 EPA 8021B 4-10-17 4-12-17 o-Xylene ND 2.2 EPA 8021B 4-10-17 4-12-17 U1 Gasoline 380 4.4 NWTPH-Gx 4-10-17 4-12-17 O Surrogate: Percent Recovery Control Limits Control Limits Control Limits Control Limits	Toluene	ND	0.044	EPA 8021B	4-10-17	4-12-17	
ND 2.2 EPA 8021B 4-10-17 4-12-17 U1 Gasoline 380 4.4 NWTPH-Gx 4-10-17 4-12-17 O Surrogate: Percent Recovery Control Limits Control Limits Control Limits Control Limits	Ethyl Benzene	1.2	0.044	EPA 8021B	4-10-17	4-12-17	
ND 2.2 EPA 8021B 4-10-17 4-12-17 U1 Gasoline 380 4.4 NWTPH-Gx 4-10-17 4-12-17 O Surrogate: Percent Recovery Control Limits Control Limits Control Limits Control Limits	m,p-Xylene	0.98	0.044	EPA 8021B	4-10-17	4-12-17	
Gasoline3804.4NWTPH-Gx4-10-174-12-17OSurrogate:Percent RecoveryControl Limits		ND	2.2	EPA 8021B	4-10-17	4-12-17	U1
Surrogate: Percent Recovery Control Limits	Gasoline	380	4.4	NWTPH-Gx	4-10-17	4-12-17	0
	Surrogate:	Percent Recovery	Control Limits				
	Fluorobenzene	•	63-124				



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

Matrix: Soil Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-5-13.5-040617		Method	Fiepaleu	Analyzeu	i lago
Laboratory ID:	04-097-20					
Benzene	ND	0.020	EPA 8021B	4-10-17	4-12-17	
Toluene	ND	0.042	EPA 8021B	4-10-17	4-12-17	
Ethyl Benzene	ND	0.042	EPA 8021B	4-10-17	4-12-17	
m,p-Xylene	ND	0.042	EPA 8021B	4-10-17	4-12-17	
o-Xylene	ND	0.042	EPA 8021B	4-10-17	4-12-17	
Gasoline	ND	4.2	NWTPH-Gx	4-10-17	4-12-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	77	63-124				
Client ID:	FB-5-15.0-040617					
Laboratory ID:	04-097-21					
Benzene	ND	0.020	EPA 8021B	4-10-17	4-12-17	
Toluene	ND	0.044	EPA 8021B	4-10-17	4-12-17	
Ethyl Benzene	ND	0.044	EPA 8021B	4-10-17	4-12-17	
m,p-Xylene	ND	0.044	EPA 8021B	4-10-17	4-12-17	
o-Xylene	ND	0.044	EPA 8021B	4-10-17	4-12-17	
Gasoline	ND	4.4	NWTPH-Gx	4-10-17	4-12-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	77	63-124				
Client ID:	FB-5-17.0-040617					
Laboratory ID:	04-097-22					
Benzene	ND	0.020	EPA 8021B	4-10-17	4-12-17	
Toluene	ND	0.048	EPA 8021B	4-10-17	4-12-17	
Ethyl Benzene	ND	0.048	EPA 8021B	4-10-17	4-12-17	
m,p-Xylene	ND	0.048	EPA 8021B	4-10-17	4-12-17	
o-Xylene	ND	0.048	EPA 8021B	4-10-17	4-12-17	
Gasoline	ND	4.8	NWTPH-Gx	4-10-17	4-12-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	77	63-124				



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

Matrix: Soil Units: mg/kg (ppm)

onits. ing/kg (ppin)	_ .			Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-6-12.0-040617					
Laboratory ID:	04-097-26					
Benzene	ND	0.020	EPA 8021B	4-10-17	4-12-17	
Toluene	ND	0.047	EPA 8021B	4-10-17	4-12-17	
Ethyl Benzene	ND	0.047	EPA 8021B	4-10-17	4-12-17	
m,p-Xylene	ND	0.047	EPA 8021B	4-10-17	4-12-17	
o-Xylene	ND	0.047	EPA 8021B	4-10-17	4-12-17	
Gasoline	ND	4.7	NWTPH-Gx	4-10-17	4-12-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	75	63-124				
Client ID:	FB-7-13.0-040617					
Laboratory ID:	04-097-28					
Benzene	ND	0.020	EPA 8021B	4-10-17	4-10-17	
Toluene	ND	0.049	EPA 8021B	4-10-17	4-10-17	
Ethyl Benzene	ND	0.049	EPA 8021B	4-10-17	4-10-17	
m,p-Xylene	ND	0.049	EPA 8021B	4-10-17	4-10-17	
o-Xylene	ND	0.049	EPA 8021B	4-10-17	4-10-17	
Gasoline	ND	4.9	NWTPH-Gx	4-10-17	4-10-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	82	63-124				
Client ID:	FB-7-23.0-040617					
Laboratory ID:	04-097-31					
Benzene	ND	0.020	EPA 8021B	4-10-17	4-12-17	
Toluene	ND	0.047	EPA 8021B	4-10-17	4-12-17	
Ethyl Benzene	ND	0.047	EPA 8021B	4-10-17	4-12-17	
m,p-Xylene	ND	0.047	EPA 8021B	4-10-17	4-12-17	
o-Xylene	ND	0.047	EPA 8021B	4-10-17	4-12-17	
Gasoline	ND	4.7	NWTPH-Gx	4-10-17	4-12-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	80	63-124				



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881
Matrix: Soil Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-8-14.0-040717	FQL	Method	Flepaleu	Analyzeu	T lags
Laboratory ID:	04-097-34					
Benzene	<u>ND</u>	0.020	EPA 8021B	4-10-17	4-13-17	
Toluene	ND	0.020	EPA 8021B	4-10-17	4-13-17	
Ethyl Benzene	ND	0.050	EPA 8021B	4-10-17	4-13-17	
m,p-Xylene	ND	0.050	EPA 8021B	4-10-17	4-13-17	
o-Xylene	ND	0.050	EPA 8021B	4-10-17	4-13-17	
Gasoline	ND	5.0	NWTPH-Gx	4-10-17	4-13-17	
Surrogate:	Percent Recovery	Control Limits	NWTTTI-GA	4-10-17	4-13-17	
Fluorobenzene	71	63-124				
r idoroberizerie	71	05-124				
Client ID:	FB-9-6.9-040717					
Laboratory ID:	04-097-35					
Benzene	ND	0.020	EPA 8021B	4-10-17	4-12-17	
Toluene	ND	0.047	EPA 8021B	4-10-17	4-12-17	
Ethyl Benzene	ND	0.047	EPA 8021B	4-10-17	4-12-17	
m,p-Xylene	ND	0.047	EPA 8021B	4-10-17	4-12-17	
o-Xylene	ND	0.047	EPA 8021B	4-10-17	4-12-17	
Gasoline	ND	4.7	NWTPH-Gx	4-10-17	4-12-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	83	63-124				
Client ID:	FB-9-14.0-040717					
Laboratory ID:	04-097-36					
Benzene	04-097-30 ND	0.020	EPA 8021B	4-10-17	4-12-17	
Toluene	ND	0.020	EPA 8021B EPA 8021B	4-10-17 4-10-17	4-12-17 4-12-17	
Ethyl Benzene	0.63	0.050	EPA 8021B EPA 8021B	4-10-17 4-10-17	4-12-17 4-12-17	
•	0.63					
m,p-Xylene	0.48 ND	0.050 0.50	EPA 8021B EPA 8021B	4-10-17 4-10-17	4-12-17	U1
o-Xylene					4-12-17	
Gasoline	330	5.0	NWTPH-Gx	4-10-17	4-12-17	0
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	77	63-124				



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

Matrix: Soil Units: mg/kg (ppm)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-10-12.8-040717					
Laboratory ID:	04-097-39					
Benzene	ND	0.020	EPA 8021B	4-10-17	4-12-17	
Toluene	ND	0.044	EPA 8021B	4-10-17	4-12-17	
Ethyl Benzene	0.59	0.044	EPA 8021B	4-10-17	4-12-17	
m,p-Xylene	0.99	0.044	EPA 8021B	4-10-17	4-12-17	
o-Xylene	ND	0.44	EPA 8021B	4-10-17	4-12-17	U1
Gasoline	880	22	NWTPH-Gx	4-10-17	4-11-17	0
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	80	63-124				
Client ID:	FB-10-14.0-040717					
Laboratory ID:	04-097-40					
Benzene	0.080	0.020	EPA 8021B	4-10-17	4-12-17	
Toluene	ND	0.055	EPA 8021B	4-10-17	4-12-17	
Ethyl Benzene	0.52	0.055	EPA 8021B	4-10-17	4-12-17	
m,p-Xylene	2.1	0.055	EPA 8021B	4-10-17	4-12-17	
o-Xylene	ND	11	EPA 8021B	4-10-17	4-12-17	U1
Gasoline	860	28	NWTPH-Gx	4-10-17	4-11-17	0
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	84	63-124				



Matrix: Soil Units: mg/kg (ppm)

Method EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B	Prepared 4-10-17 4-10-17 4-10-17 4-10-17	Analyzed 4-10-17 4-10-17 4-10-17 4-10-17 4-10-17	Flags
EPA 8021B EPA 8021B EPA 8021B	4-10-17 4-10-17 4-10-17	4-10-17 4-10-17	
EPA 8021B EPA 8021B EPA 8021B	4-10-17 4-10-17 4-10-17	4-10-17 4-10-17	
EPA 8021B EPA 8021B EPA 8021B	4-10-17 4-10-17 4-10-17	4-10-17 4-10-17	
EPA 8021B EPA 8021B	4-10-17 4-10-17	4-10-17	
EPA 8021B	4-10-17	-	
		4-10-17	
EPA 8021B			
	4-10-17	4-10-17	
NWTPH-Gx	4-10-17	4-11-17	0
EPA 8021B	4-10-17	4-10-17	
EPA 8021B	4-10-17	4-10-17	
EPA 8021B	4-10-17	4-10-17	
EPA 8021B	4-10-17	4-10-17	
EPA 8021B	4-10-17	4-10-17	
NWTPH-Gx	4-10-17	4-11-17	0
EPA 8021B	4-10-17	4-10-17	
EPA 8021B	4-10-17	4-10-17	
EPA 8021B	4-10-17	4-10-17	
EPA 8021B	4-10-17	4-10-17	
EPA 8021B	4-10-17	4-10-17	
NWTPH-Gx	4-10-17	4-11-17	0
	NWTPH-Gx EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B NWTPH-Gx EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B	NWTPH-Gx 4-10-17 EPA 8021B 4-10-17	NWTPH-Gx 4-10-17 4-11-17 EPA 8021B 4-10-17 4-10-17 NWTPH-Gx 4-10-17 4-11-17 EPA 8021B 4-10-17 4-10-17 EPA 8021B



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Matrix: Soil Units: mg/kg (ppm)

Analysia	Decult	DOI	Mathad	Date	Date	F lar:
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	STP-10-4					
Laboratory ID:	04-097-45					
Benzene	0.046	0.020	EPA 8021B	4-10-17	4-10-17	
Toluene	0.17	0.062	EPA 8021B	4-10-17	4-10-17	
Ethyl Benzene	0.29	0.062	EPA 8021B	4-10-17	4-10-17	
m,p-Xylene	1.9	0.062	EPA 8021B	4-10-17	4-10-17	
o-Xylene	2.5	0.062	EPA 8021B	4-10-17	4-10-17	
Gasoline	950	62	NWTPH-Gx	4-10-17	4-11-17	0
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	104	63-124				
Client ID:	FB-9-10.0-040717					
Laboratory ID:	04-097-47					
Benzene	ND	0.020	EPA 8021B	4-10-17	4-12-17	
Toluene	ND	0.050	EPA 8021B	4-10-17	4-12-17	
Ethyl Benzene	ND	0.050	EPA 8021B	4-10-17	4-12-17	
m,p-Xylene	ND	0.050	EPA 8021B	4-10-17	4-12-17	
o-Xylene	ND	0.050	EPA 8021B	4-10-17	4-12-17	
Gasoline	ND	5.0	NWTPH-Gx	4-10-17	4-12-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	81	63-124				
Client ID:	FB-10-17.1-040717					
Laboratory ID:	04-097-48					
Benzene	0.086	0.020	EPA 8021B	4-10-17	4-12-17	
Toluene	ND	0.25	EPA 8021B	4-10-17	4-12-17	U1
Ethyl Benzene	0.58	0.049	EPA 8021B	4-10-17	4-12-17	
m,p-Xylene	3.0	0.049	EPA 8021B	4-10-17	4-12-17	
o-Xylene	ND	4.9	EPA 8021B	4-10-17	4-12-17	U1
Gasoline	910	49	NWTPH-Gx	4-10-17	4-13-17	0
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	79	63-124				



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Matrix: Soil Units: mg/kg (ppm)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-10-17.3-040717					
Laboratory ID:	04-097-49					
Benzene	0.13	0.020	EPA 8021B	4-10-17	4-12-17	
Toluene	ND	0.27	EPA 8021B	4-10-17	4-12-17	U1
Ethyl Benzene	1.3	0.054	EPA 8021B	4-10-17	4-12-17	
m,p-Xylene	2.2	0.054	EPA 8021B	4-10-17	4-12-17	
o-Xylene	ND	2.7	EPA 8021B	4-10-17	4-12-17	U1
Gasoline	530	5.4	NWTPH-Gx	4-10-17	4-12-17	0
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	83	63-124				



NWTPH-Gx/BTEX METHOD BLANK QUALITY CONTROL

Matrix: Soil Units: mg/kg (ppm)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Laboratory ID:	MD044000					
Laboratory ID:	MB0410S2	0.000		4 40 47	4 40 47	
Benzene	ND	0.020	EPA 8021B	4-10-17	4-10-17	
Toluene	ND	0.050	EPA 8021B	4-10-17	4-10-17	
Ethyl Benzene	ND	0.050	EPA 8021B	4-10-17	4-10-17	
m,p-Xylene	ND	0.050	EPA 8021B	4-10-17	4-10-17	
o-Xylene	ND	0.050	EPA 8021B	4-10-17	4-10-17	
Gasoline	ND	5.0	NWTPH-Gx	4-10-17	4-10-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	85	63-124				
Laboratory ID:	MB0410S3					
Benzene	ND	0.020	EPA 8021B	4-10-17	4-10-17	
Toluene	ND	0.050	EPA 8021B	4-10-17	4-10-17	
Ethyl Benzene	ND	0.050	EPA 8021B	4-10-17	4-10-17	
m,p-Xylene	ND	0.050	EPA 8021B	4-10-17	4-10-17	
o-Xylene	ND	0.050	EPA 8021B	4-10-17	4-10-17	
Gasoline	ND	5.0	NWTPH-Gx	4-10-17	4-10-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	88	63-124				
Laboratory ID:	MB0410S4					
Benzene	ND	0.020	EPA 8021B	4-10-17	4-10-17	
Toluene	ND	0.050	EPA 8021B	4-10-17	4-10-17	
Ethyl Benzene	ND	0.050	EPA 8021B	4-10-17	4-10-17	
m,p-Xylene	ND	0.050	EPA 8021B	4-10-17	4-10-17	
o-Xylene	ND	0.050	EPA 8021B	4-10-17	4-10-17	
Gasoline	ND	5.0	NWTPH-Gx	4-10-17	4-10-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	87	63-124				



NWTPH-Gx/BTEX DUPLICATE QUALITY CONTROL

Matrix: Soil Units: mg/kg (ppm)

0 0 1 1	,				Source	Perc	cent	Recovery		RPD	
Analyte	Re	sult	Spike	Level	Result	Reco	overy	Limits	RPD	Limit	Flags
Laboratory ID:	04.01	25-28									
	ORIG	DUP									
Benzene	ND	ND	NA	NA		N	٨	NA	11	30	
Toluene	ND	ND	NA	NA		N		NA	NA	30	
Ethyl Benzene	0.0451	0.0499	NA	NA		N		NA	10	30	
m,p-Xylene	0.0451 ND	0.0393	NA	NA		N		NA	NA	30	
o-Xylene	ND	0.0393 ND	NA	NA		N		NA	NA	30	
Gasoline	11.0	12.1	NA	NA		N		NA	10	30	
Surrogate:	11.0	12.1	INA	INA		IN	A	NA	10	30	
Fluorobenzene						85	86	63-124			
Laboratory ID:	04-09	97-28									
	ORIG	DUP									
Benzene	ND	ND	NA	NA		N	A	NA	NA	30	
Toluene	ND	ND	NA	NA		N	A	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA		N	A	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA		N	A	NA	NA	30	
o-Xylene	ND	ND	NA	NA		N	A	NA	NA	30	
Gasoline	ND	ND	NA	NA		Ν	A	NA	NA	30	
Surrogate:											
Fluorobenzene						82	79	63-124			
Laboratory ID:	04-09	97-15									
	ORIG	DUP									
Benzene	ND	ND	NA	NA		N	A	NA	NA	30	
Toluene	ND	ND	NA	NA		N		NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA		N		NA	NA	30	
m,p-Xylene	ND	ND	NA	NA		N		NA	NA	30	
o-Xylene	ND	ND	NA	NA		N		NA	NA	30	
Gasoline	ND	ND	NA	NA		N		NA	NA	30	
Surrogate:										-	
Fluorobenzene						86	80	63-124			



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NWTPH-Gx/BTEX SPIKE BLANKS QUALITY CONTROL

Matrix: Soil Units: mg/kg (ppm)

					Source	Per	cent	Recovery		RPD	
Analyte	Re	sult	Spike	Level	Result	Rec	overy	Limits	RPD	Limit	Flags
Lakanatan ID	000	4004									
Laboratory ID:		10S1									
	SB	SBD	SB	SBD		SB	SBD				
Benzene	0.888	0.900	1.00	1.00		89	90	70-124	1	12	
Toluene	0.908	0.922	1.00	1.00		91	92	73-119	2	12	
Ethyl Benzene	0.928	0.941	1.00	1.00		93	94	74-117	1	12	
m,p-Xylene	0.917	0.933	1.00	1.00		92	93	75-117	2	13	
o-Xylene	0.918	0.938	1.00	1.00		92	94	75-116	2	12	
Surrogate:											
Fluorobenzene						87	86	63-124			
Laboratory ID:	SB04	10S2									
	SB	SBD	SB	SBD		SB	SBD				
Benzene	0.888	0.891	1.00	1.00		89	89	70-124	0	12	
Toluene	0.929	0.935	1.00	1.00		93	94	73-119	1	12	
Ethyl Benzene	0.935	0.934	1.00	1.00		94	93	74-117	0	12	
m,p-Xylene	0.956	0.943	1.00	1.00		96	94	75-117	1	13	
o-Xylene	0.946	0.937	1.00	1.00		95	94	75-116	1	12	
Surrogate:											
Fluorobenzene						87	85	63-124			



Matrix: Water Units: ug/L (ppb)

orino: dg/2 (ppo)				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-9-Recon-040717					
Laboratory ID:	04-097-37					
Benzene	2.4	1.0	EPA 8021B	4-10-17	4-10-17	
Toluene	ND	1.0	EPA 8021B	4-10-17	4-10-17	
Ethyl Benzene	3.7	1.0	EPA 8021B	4-10-17	4-10-17	
m,p-Xylene	ND	1.0	EPA 8021B	4-10-17	4-10-17	
o-Xylene	1.7	1.0	EPA 8021B	4-10-17	4-10-17	
Gasoline	1200	100	NWTPH-Gx	4-10-17	4-10-17	0
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	101	61-118				
Client ID:	FB-10-Recon-040717					
Laboratory ID:	04-097-41					
Benzene	71	4.0	EPA 8021B	4-10-17	4-10-17	
Toluene	13	4.0	EPA 8021B	4-10-17	4-10-17	
Ethyl Benzene	7.1	4.0	EPA 8021B	4-10-17	4-10-17	
m,p-Xylene	53	4.0	EPA 8021B	4-10-17	4-10-17	
o-Xylene	11	4.0	EPA 8021B	4-10-17	4-10-17	
Gasoline	2000	400	NWTPH-Gx	4-10-17	4-10-17	0
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	103	61-118				



NWTPH-Gx/BTEX QUALITY CONTROL

Matrix: Water Units: ug/L (ppb)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0410W1					
Benzene	ND	1.0	EPA 8021B	4-10-17	4-10-17	
Toluene	ND	1.0	EPA 8021B	4-10-17	4-10-17	
Ethyl Benzene	ND	1.0	EPA 8021B	4-10-17	4-10-17	
m,p-Xylene	ND	1.0	EPA 8021B	4-10-17	4-10-17	
o-Xylene	ND	1.0	EPA 8021B	4-10-17	4-10-17	
Gasoline	ND	100	NWTPH-Gx	4-10-17	4-10-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	104	61-118				

					Source	Per	cent	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Result	Rec	overy	Limits	RPD	Limit	Flags
DUPLICATE											
Laboratory ID:	04-04	45-01									
	ORIG	DUP									
Benzene	ND	ND	NA	NA		Ν	IA	NA	NA	30	
Toluene	ND	ND	NA	NA		Ν	JA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA		Ν	JA	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA		Ν	JA	NA	NA	30	
o-Xylene	ND	ND	NA	NA		Ν	JA	NA	NA	30	
Gasoline	ND	ND	NA	NA		Ν	IA	NA	NA	30	
Surrogate:											
Fluorobenzene						104	105	61-118			
SPIKE BLANKS											
Laboratory ID:	SB04	10W1									
	SB	SBD	SB	SBD		SB	SBD				
Benzene	54.0	53.2	50.0	50.0		108	106	79-120	1	11	
Toluene	55.4	53.6	50.0	50.0		111	107	79-118	3	12	
Ethyl Benzene	54.2	53.1	50.0	50.0		108	106	80-117	2	12	
m,p-Xylene	54.5	53.3	50.0	50.0		109	107	80-117	2	12	
o-Xylene	54.5	53.3	50.0	50.0		109	107	80-116	2	11	
Surrogate:											
Fluorobenzene						106	102	61-118			



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Matrix: Soil Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FS-EX-1-6.0			•		-
_aboratory ID:	04-097-01					
Diesel Range Organics	8700	270	NWTPH-Dx	4-10-17	4-12-17	
ube Oil Range Organics	ND	550	NWTPH-Dx	4-10-17	4-12-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl		50-150				S
Client ID:	FS-EX-2-4.0					
_aboratory ID:	04-097-02					
Diesel Range Organics	42000	290	NWTPH-Dx	4-10-17	4-12-17	
ube Oil Range Organics	2200	580	NWTPH-Dx	4-10-17	4-12-17	N1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl		50-150				S
Client ID:	FS-EX-2-4.0-1					
_aboratory ID:	04-097-03					
Diesel Range Organics	45000	290	NWTPH-Dx	4-10-17	4-12-17	
ube Oil Range Organics	2500	580	NWTPH-Dx	4-10-17	4-12-17	N1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl		50-150				S
Client ID:	FS-EX-3-2.0					
_aboratory ID:	04-097-04					
Diesel Range Organics	69000	1400	NWTPH-Dx	4-10-17	4-12-17	
ube Oil Range Organics	5600	2900	NWTPH-Dx	4-10-17	4-12-17	N1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl		50-150				S
Client ID:	FS-EX-4-8.0					
aboratory ID:	04-097-05					
Diesel Range Organics	12000	270	NWTPH-Dx	4-10-17	4-12-17	
ube Oil Range Organics	ND	660	NWTPH-Dx	4-10-17	4-12-17	U1
Surrogate:	Percent Recovery	Control Limits		-		-
p-Terphenyl		50-150				S
, ,						_
Client ID:	FS-EX-5-11.0					
_aboratory ID:	04-097-06					
Diesel Range Organics	24000	280	NWTPH-Dx	4-10-17	4-12-17	
ube Oil Range Organics	ND	730	NWTPH-Dx	4-10-17	4-12-17	U1
Surrogate:	Percent Recovery	Control Limits				0.
o-Terphenyl		50-150				S
e i cipiloliyi		00 100				0



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to the samples analyzed in accordance with the chain of custody

Matrix: Soil Units: mg/Kg (ppm)

Units: mg/Kg (ppm) Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	STP-8-1			•	*	<u>×</u>
Laboratory ID:	04-097-07					
Diesel Range Organics	110	27	NWTPH-Dx	4-10-17	4-11-17	Ν
Lube Oil Range Organics	300	55	NWTPH-Dx	4-10-17	4-11-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	131	50-150				
Client ID:	STP-8-2					
Laboratory ID:	04-097-08					
Diesel Range Organics	ND	28	NWTPH-Dx	4-10-17	4-11-17	
Lube Oil Range Organics	ND	55	NWTPH-Dx	4-10-17	4-11-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	118	50-150				
Client ID:	STP-8-3					
Laboratory ID:	04-097-09					
Diesel Range Organics	59	28	NWTPH-Dx	4-10-17	4-11-17	
Lube Oil	170	56	NWTPH-Dx	4-10-17	4-11-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	99	50-150				
Client ID:	STP-9-1 04-097-10					
Laboratory ID:		20		4 40 47	4 4 4 4 7	
Diesel Range Organics Lube Oil Range Organics	ND ND	26 53	NWTPH-Dx NWTPH-Dx	4-10-17 4-10-17	4-11-17 4-11-17	
	Percent Recovery	Control Limits	INVVIPH-DX	4-10-17	4-11-17	
Surrogate: o-Terphenyl	109	50-150				
0-Terprienyi	109	50-750				
Client ID:	STP-9-2					
Laboratory ID:	04-097-11					
Diesel Range Organics	ND	27	NWTPH-Dx	4-10-17	4-11-17	
Lube Oil Range Organics	ND	53	NWTPH-Dx	4-10-17	4-11-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	101	50-150				
-						
Client ID:	STP-9-3					
Laboratory ID:	04-097-12					
Diesel Range Organics	ND	27	NWTPH-Dx	4-10-17	4-11-17	
Lube Oil Range Organics	ND	54	NWTPH-Dx	4-10-17	4-11-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	92	50-150				



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and is intended only for the use of the individual or company to whom it is addressed.

This report pertains to the samples analyzed in accordance with the chain of custody,

Matrix: Soil Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	STP-9-3-1	-		-1		
Laboratory ID:	04-097-13					
Diesel Range Organics	ND	27	NWTPH-Dx	4-10-17	4-11-17	
Lube Oil Range Organics	ND	53	NWTPH-Dx	4-10-17	4-11-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	109	50-150				
Client ID:	FB-3-9.0-040617					
_aboratory ID:	04-097-15					
Diesel Range Organics	ND	27	NWTPH-Dx	4-10-17	4-11-17	
ube Oil Range Organics	ND	55	NWTPH-Dx	4-10-17	4-11-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	89	50-150				
Client ID:	FB-3-12.5-040617					
Laboratory ID:	04-097-16					
Diesel Range Organics	4000	27	NWTPH-Dx	4-10-17	4-11-17	
_ube Oil Range Organics	ND	110	NWTPH-Dx	4-10-17	4-11-17	U1
Surrogate:	Percent Recovery	Control Limits				•
o-Terphenyl	143	50-150				
Client ID:	FB-3-13.5-040617					
Laboratory ID:	04-097-17	070		4 4 9 4 7	4 40 47	
Diesel Range Organics	14000	270	NWTPH-Dx	4-10-17	4-12-17	
ube Oil Range Organics	ND	610	NWTPH-Dx	4-10-17	4-12-17	U1
Surrogate:	Percent Recovery	Control Limits				0
o-Terphenyl		50-150				S
Client ID:	FB-3-15.0-040617					
aboratory ID:	04-097-18					
Diesel Range Organics	2300	29	NWTPH-Dx	4-10-17	4-11-17	
ube Oil Range Organics	150	58	NWTPH-Dx	4-10-17	4-11-17	N1
Surrogate:	Percent Recovery	Control Limits		-		
p-Terphenyl	75	50-150				
Client ID:	FB-5-13.5-040617					
Laboratory ID:	04-097-20					
Diesel Range Organics	ND	26	NWTPH-Dx	4-10-17	4-11-17	
Lube Oil Range Organics	ND	51	NWTPH-Dx	4-10-17	4-11-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	95	50-150				
	30	00 100				



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Matrix: Soil Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-5-15.0-040617			-		
Laboratory ID:	04-097-21					
Diesel Range Organics	ND	26	NWTPH-Dx	4-10-17	4-11-17	
Lube Oil Range Organics	ND	52	NWTPH-Dx	4-10-17	4-11-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	92	50-150				
Client ID:	FB-5-17.0-040617					
Laboratory ID:	04-097-22					
Diesel Range Organics	ND	27	NWTPH-Dx	4-10-17	4-11-17	
_ube Oil Range Organics	ND	53	NWTPH-Dx	4-10-17	4-11-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	104	50-150				
Client ID:	FB-6-12.0-040617					
Laboratory ID:	04-097-26					
Diesel Range Organics	ND	120	NWTPH-Dx	4-10-17	4-11-17	U1
Lube Oil	1100	52	NWTPH-Dx	4-10-17	4-11-17	•
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	119	50-150				
Client ID:	FB-7-13.0-040617					
Laboratory ID:	04-097-28					
Diesel Range Organics	ND	27	NWTPH-Dx	4-10-17	4-11-17	
Lube Oil Range Organics	ND	53	NWTPH-Dx NWTPH-Dx	4-10-17 4-10-17	4-11-17	
Surrogate:	Percent Recovery	Control Limits	INVITIEDX	4-10-17	4-11-17	
o-Terphenyl	111	50-150				
э-тегрпенуг	111	50-750				
Client ID:	FB-7-23.0-040617					
_aboratory ID:	04-097-31					
Diesel Range Organics	40	27	NWTPH-Dx	4-10-17	4-11-17	Ν
ube Oil	440	54	NWTPH-Dx	4-10-17	4-11-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	31	50-150				
	FB-8-14.0-040717					
Client ID:						
	04-097-34					
Laboratory ID:	04-097-34 ND	27	NWTPH-Dx	4-10-17	4-11-17	
Laboratory ID: Diesel Range Organics		27 55	NWTPH-Dx NWTPH-Dx	4-10-17 4-10-17	4-11-17 4-11-17	
Client ID: Laboratory ID: Diesel Range Organics Lube Oil Range Organics Surrogate:	ND					



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Matrix: Soil Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-9-6.9-040717			•		•
Laboratory ID:	04-097-35					
Diesel Range Organics	1100	26	NWTPH-Dx	4-10-17	4-11-17	
Lube Oil Range Organics	350	52	NWTPH-Dx	4-10-17	4-11-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	91	50-150				
Client ID:	FB-9-14.0-040717					
Laboratory ID:	04-097-36					
Diesel Range Organics	440	29	NWTPH-Dx	4-10-17	4-11-17	
Lube Oil Range Organics	180	57	NWTPH-Dx	4-10-17	4-11-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	94	50-150				
Client ID:	FB-10-12.8-040717					
Laboratory ID:	04-097-39					
Diesel Range Organics	4300	270	NWTPH-Dx	4-10-17	4-12-17	
Lube Oil Range Organics	4300 ND	610	NWTPH-Dx	4-10-17	4-12-17	U1
Surrogate:	Percent Recovery	Control Limits		+ -10-17	Τ -ΙΖ-ΙΙ	01
o-Terphenyl		50-150				S
o reiphenyr		00 100				0
Client ID:	FB-10-14.0-040717					
Laboratory ID:	04-097-40					
Diesel Range Organics	5900	300	NWTPH-Dx	4-10-17	4-12-17	
Lube Oil	1800	600	NWTPH-Dx	4-10-17	4-12-17	N1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl		50-150				S
Client ID:	STP-10-1					
Laboratory ID:	04-097-42					
Diesel Range Organics	17000	280	NWTPH-Dx	4-10-17	4-12-17	
Lube Oil Range Organics	ND	1000	NWTPH-Dx	4-10-17	4-12-17	U1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl		50-150				S
Client ID:	STP-10-2					
Laboratory ID:	04-097-43					
Diesel Range Organics	15000	290	NWTPH-Dx	4-10-17	4-12-17	
Lube Oil Range Organics	ND	870	NWTPH-Dx	4-10-17	4-12-17	U1
Surrogate:	Percent Recovery	Control Limits				01
o-Terphenyl		50-150				S
		00 100				0



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Client ID: Laboratory ID:	FB-10-14.0-040717 04-097-40					
Diesel Range Organics	5900	300	NWTPH-Dx	4-10-17	4-12-17	
Lube Oil	1800	600	NWTPH-Dx	4-10-17	4-12-17	N1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl		50-150				S

aboratory ID:	04-097-43						
iesel Range Organics	15000	290	NWTPH-Dx	4-10-17	4-12-17		
ube Oil Range Organics	ND	870	NWTPH-Dx	4-10-17	4-12-17	U1	
Surrogate:	Percent Recovery	Control Limits					
-Terphenyl		50-150				S	

Matrix: Soil Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	STP-10-3			•	•	
Laboratory ID:	04-097-44					
Diesel Range Organics	15000	310	NWTPH-Dx	4-10-17	4-12-17	
Lube Oil Range Organics	ND	640	NWTPH-Dx	4-10-17	4-12-17	U1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl		50-150				S
Client ID:	STP-10-4					
Laboratory ID:	04-097-45					
Diesel Range Organics	<u> </u>	290	NWTPH-Dx	4-10-17	4-12-17	
Lube Oil Range Organics	ND	290 870	NWTPH-Dx NWTPH-Dx	4-10-17 4-10-17	4-12-17 4-12-17	U1
	Percent Recovery	Control Limits		4-10-17	4-12-17	01
Surrogate: o-Terphenyl	Percent Recovery	50-150				S
о-тегрпенуг		50-150				3
Client ID:	STP-10-5					
Laboratory ID:	04-097-46					
Diesel Range Organics	22000	300	NWTPH-Dx	4-10-17	4-12-17	
Lube Oil Range Organics	ND	1300	NWTPH-Dx	4-10-17	4-12-17	U1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl		50-150				S
Client ID:	FB-9-10.0-040717					
Laboratory ID:	04-097-47					
Diesel Range Organics	60	27	NWTPH-Dx	4-10-17	4-11-17	
Lube Oil Range Organics	ND	53	NWTPH-Dx	4-10-17	4-11-17	
Surrogate:	Percent Recovery	Control Limits		1 10 11		
o-Terphenyl	115	50-150				
o reiphenyr	110	00 100				
Client ID:	FB-10-17.1-040717					
Laboratory ID:	04-097-48					
Diesel Range Organics	1300	29	NWTPH-Dx	4-10-17	4-11-17	
Lube Oil Range Organics	270	59	NWTPH-Dx	4-10-17	4-11-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	92	50-150				
Client ID:	FB-10-17.3-040717					
Laboratory ID:	04-097-49					
Diesel Range Organics	<u> </u>	290	NWTPH-Dx	4-10-17	4-12-17	
Lube Oil Range Organics	ND	290 580	NWTPH-Dx	4-10-17	4-12-17	
Surrogate:	Percent Recovery	Control Limits			7-12-11	
o-Terphenyl		50-150				S
о-тегриснуг		00-700				3



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NWTPH-Dx QUALITY CONTROL

Matrix: Soil Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK				•	-	
Laboratory ID:	MB0410S1					
Diesel Range Organics	ND	25	NWTPH-Dx	4-10-17	4-11-17	
Lube Oil Range Organics	ND	50	NWTPH-Dx	4-10-17	4-11-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	105	50-150				
METHOD BLANK						
Laboratory ID:	MB0410S3					
Diesel Range Organics	ND	25	NWTPH-Dx	4-10-17	4-11-17	
Lube Oil Range Organics	ND	50	NWTPH-Dx	4-10-17	4-11-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	123	50-150				

					Source	Percent	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Result	Recovery	Limits	RPD	Limit	Flags
DUPLICATE										
Laboratory ID:	04-09	97-01								
	ORIG	DUP								
Diesel Range Organics	7920	7310	NA	NA		NA	NA	8	NA	
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	NA	
Surrogate:										
o-Terphenyl							50-150			S,S
Laboratory ID:	04-09	97-02								
	ORIG	DUP								
Diesel Range Organics		22000	NA	NA		NA	NA	49	NA	
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	NA	U1,
Surrogate:										
o-Terphenyl							50-150			S,S
Laboratory ID:	04-09	97-45								
	ORIG	DUP								
Diesel Range Organics	16600	9690	NA	NA		NA	NA	53	NA	
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	NA	U1,
Surrogate:										
o-Terphenyl							50-150			S,S
Laboratory ID:	04-09	97-49								
¥	ORIG	DUP								
Diesel Range Organics	7040	6470	NA	NA		NA	NA	8	NA	
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	NA	
Surrogate:										
o-Terphenyl							50-150			S,S



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24

Matrix: Water Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-9-Recon-040717					
Laboratory ID:	04-097-37					
Diesel Range Organics	2.9	0.26	NWTPH-Dx	4-10-17	4-10-17	
Lube Oil Range Organics	1.2	0.41	NWTPH-Dx	4-10-17	4-10-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	96	50-150				
Client ID:	FB-10-Recon-040717					
Laboratory ID:	04-097-41					

Laboratory ID.	04-097-41						
Diesel Range Organics	57	2.6	NWTPH-Dx	4-10-17	4-11-17		
Lube Oil Range Organics	ND	4.1	NWTPH-Dx	4-10-17	4-11-17		
Surrogate:	Percent Recovery	Control Limits					
o-Terphenyl		50-150				S	

NWTPH-Dx QUALITY CONTROL

Matrix: Water Units: mg/L (ppm)

Result	PQL	Method	Date Prepared	Date Analyzed	Flags
MB0410W1					
ND	0.25	NWTPH-Dx	4-10-17	4-10-17	
ND	0.40	NWTPH-Dx	4-10-17	4-10-17	
Percent Recovery	Control Limits				
76	50-150				
	MB0410W1 ND ND Percent Recovery	MB0410W1 ND 0.25 ND 0.40 Percent Recovery Control Limits	MB0410W1ND0.25NWTPH-DxND0.40NWTPH-DxPercent RecoveryControl Limits	MB0410W1 ND 0.25 NWTPH-Dx 4-10-17 ND 0.40 NWTPH-Dx 4-10-17 Percent Recovery Control Limits Control Limits	MB0410W1 ND 0.25 NWTPH-Dx 4-10-17 4-10-17 ND 0.40 NWTPH-Dx 4-10-17 4-10-17 Percent Recovery Control Limits Control Limits Control Limits

					Source	Percent	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Result	Recovery	Limits	RPD	Limit	Flags
DUPLICATE										
Laboratory ID:	04-09	91-01								
	ORIG	DUP								
Diesel Fuel #2	122	2.10	NA	NA		NA	NA	193	NA	
Lube Oil Range Organics	6.98	1.03	NA	NA		NA	NA	149	NA	N1
Surrogate:										
o-Terphenyl						96	50-150			S

Date of Report: April 14, 2017 Samples Submitted: April 8, 2017 Laboratory Reference: 1704-097 Project: 1001-002

% MOISTURE

Date Analyzed: 4-11-17

Client ID	Lab ID	% Moisture
FS-EX-1-6.0	04-097-01	9
FS-EX-2-4.0	04-097-02	14
FS-EX-2-4.0-1	04-097-03	14
FS-EX-3-2.0	04-097-04	13
FS-EX-4-8.0	04-097-05	9
FS-EX-5-11.0	04-097-06	11
STP-8-1	04-097-07	9
STP-8-2	04-097-08	9
STP-8-3	04-097-09	10
STP-9-1	04-097-10	5
STP-9-2	04-097-11	6
STP-9-3	04-097-12	7
STP-9-3-1	04-097-13	6
FB-3-9.0-040617	04-097-15	9
FB-3-12.5-040617	04-097-16	6
FB-3-13.5-040617	04-097-17	8
FB-3-15.0-040617	04-097-18	13
FB-5-13.5-040617	04-097-20	3
FB-5-15.0-040617	04-097-21	4
FB-5-17.0-040617	04-097-22	6
FB-6-12.0-040617	04-097-26	4
FB-7-13.0-040617	04-097-28	6
FB-7-23.0-040617	04-097-31	7



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Date of Report: April 14, 2017 Samples Submitted: April 8, 2017 Laboratory Reference: 1704-097 Project: 1001-002

% MOISTURE

Date Analyzed: 4-11-17

Client ID	Lab ID	% Moisture
FB-8-14.0-040717	04-097-34	8
FB-9-6.9-040717	04-097-35	4
FB-9-14.0-040717	04-097-36	13
FB-10-12.8-040717	04-097-39	7
FB-10-14.0-040717	04-097-40	16
STP-10-1	04-097-42	10
STP-10-2	04-097-43	15
STP-10-3	04-097-44	19
STP-10-4	04-097-45	14
STP-10-5	04-097-46	18
FB-9-10.0-040717	04-097-47	6
FB-10-17.1-040717	04-097-48	15
FB-10-17.3-040717	04-097-49	14



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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.

Ζ-

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



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OnSite Environmental Inc.		Cha	in o	f (Cu	st	od	y										Pa	ige _	1	_ of _	5		
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Phone: (425) 883-3881 • www.onsite-env.com		(Check One)	6			1	T		T														1	
Faralloy	Same	Day	1 Day	Tr	K	IFP	5								NIS/Q									
Project Number: 1001-007	2 Day	/s D	1 Day	ALL	01			an-up)						81B	s 8270	3151A								
Project Name: Coleman Oil		dard (7 Days)					1	SG Clean-up)	Dian	2002	(Vino)	level)		Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A				664A				
	(TPH	analysis 5 Da	ys)	ainers		×		Acid / S	d oolite	anico	Vaters 70D/S	AHs) 1 (low-		Destici	'us Pe	Herbi	als	als		grease) 1664A				
Sampled by:		(ath an)		f Cont	B	x/BTE	×	×	260C		011 (V	evel P/	PA N	orine F	orphor	d Acid	A Meta	A Meta	als	nd gre				0
Sampled by: J.R. Clark, / D. 9 guilor		(other)		Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (Acid /	Volatiles 8260C	denard	EDB EPA 8011 (Waters Only) Semivolatiles 8270D/SIM	(with low-level PAHs) PAHs 8270D/SIM (low-level)	PCBs 8082A	anochl	Inophe	rinate	Total RCRA Metals	Total MTCA Metals	TCLP Metals	1 (oil and				% Moisture
Lab ID Sample Identification	Date Sampled	Time Sampled	Matrix	Num	LMN	LMN	LMN	IMN	Vola		EDB	(with PAH	PCB	Orga	Orga	Chlo	Tota	Tota	TCL	HEM				W %
1 FS-EX-1-6.0	46/17	1358	5	2		X		X																X
2 FS-EX=2-4.0	í.	1359		1				X																X
3 FS-EX-2-4.0-1		1359		1				X.																×
4 F5-EX-3-2.0		2400		1			6	X																X
5 F5-EX-4-8,0		1407		2		X		X																X
6 FS-EX-5-11.0		1415		1			ĺ	X																×
7 STP-8-1		1600		2		X		X																X
8 STP-8-2		1602		1				X																X
9 STP-8-3		1604		1				X														13		X
10 STP-9-1	L	1610	1	1				X																X
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Chain of Custody

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Project Number:	002		2 Days	/	3 Da					an-up)							81B	s 8270D	3151A									
Project Name:	/		Standard TPH ana	(7 Days) lysis 5 Da	iys)	Pro-				Acid / SG Clean-up)		s 8260C	ers Only)	/SIM	v-level)		icides 80	besticide	bicides (1664A					
Project Manager: Paul Sampled by:	Grabau			(athan)		Containare		CID x/BTEX	×		260C	Halogenated Volatiles	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Metals	A Metals	s	HEM (oil and grease) 1664A					
Sampled by Rugh		Date		(other)		Number of		NWTPH-HCID NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (Volatiles 8260C	alogenate	DB EPA 8	emivolatil vith low-le	AHs 8270	PCBs 8082A	rganochio	rganopho	hlorinatec	Total RCRA Metals	fotal MTCA Metals	TCLP Metals	EM (oil ar				% Moisture	
Lab ID San USTP-9-2	nple Identification	Samp 46/1		ampled	Matr			zz	z	Z	Š	Ť		50	P	đ	0	0	O	To	10	Ĕ	H.			+	×	
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14 FB-3-6,0	0-040617		11	Z3		2				X	-5	RD	o n	ot r	un													
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OnSite Environmental Inc.		Cha	ain o	of (Cu	st	00	ły											Pa	age _	3	_ of _	5	_
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1007-002	2 Day	vs [3 Days					an-up							081B	s 827(8151A						*	
Project Name: Coleman Dil		lard (7 Days) analysis 5 Da	ays)	ars				NWTPH-Dx (🗌 Acid / SG Clean-up)		s 8260C	EDB EPA 8011 (Waters Only)	/SIM	w-level)		Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides				1664A	AL A		
Project Manager: Payl Grabay				Number of Containers		BTEX		□ Acid	00	Halogenated Volatiles	11 (Wate	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)		ine Pest	ohorus f	Acid He	Metals	Metals		HEM (oil and grease) 1664A	C	X	
Sampled by: J-Ruark / D. agailon		(other)		er of (NWTPH-HCID	NWTPH-Gx/BTEX	H-Gx) XD-H	Volatiles 8260C	enated	PA 80	olatiles ow-lev	8270D,	PCBs 8082A	ochlori	lsoydo	nated /	Total RCRA Metals	Total MTCA Metals	TCLP Metals	oil and	14	10	
Lab ID Sample Identification	Date Sampled	Time Sampled	Matrix	Numb	NWTP	NWTP	NWTPH-Gx	NWTP	Volatil	Haloge	EDB E	Semiv (with le	PAHs	PCBs	Organ	Organ	Chlori	Total F	Total N	TCLP	HEM (araa	E	
211 FB-5-15.0-040617	4/4/17	1526	5	2		X	1	X																
22 FB-5-17,0 -040607		1533		2		X		X																
23 FB-6-6.5-040617		1551		2																		>	<	
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2) FB-7-8.5-040617		1742		2																		2	×	
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Chromatograms with final report
Electronic Data Deliverables (EDDs)

% Moisture

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OnSite Environmental Inc.

Chain of Custody

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Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052	Turnaround Request (in working days)		Lal	oora	ator	/ Nu	mb	er:							0	4	- 0	9	7				
Phone: (425) 883-3881 • www.onsite-env.com Company: Fargl/lon Project Number: 1001-002 Project Name: Coleman Ogl Project Manager: Project Manager: P	(Check One) Same Day 1 Day 2 Days 3 Days Standard (7 Days) (TPH analysis 5 Days) □ (other) Date Time	Number of Containers.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx NWTPH-Dx (□ Acid / SG Clean-up)		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		HOLUDX		% Moisture	
Lab ID Sample Identification 31 FB-7-23,0 - 040617	Sampled Sampled Matrix 4/6/17 1840 5	2	Z I	z V		2	Ŧ		S S S	PA	P	õ	ō	Ð	10	To	Ŭ Ŭ	Ŧ	_			8	
32 FB-8-9.0-04071B	4/7/17 1015 1	2		-	5	- No	2													X		X	
37 FB-8-13.0-04077	1 4026,20	2			-	NO	>													X		X	1
34 F-B-8-14,0-04071	1025 "	2		X	>																	X	
35 FB-9-6.9-040718	1200	2	0	\Diamond	X	4																X	
30 FB-9-14.0-040717 37 FB-9-Recon-0407178	1230	2		X	X															2		X	
	1300 W	5		X	X																	Z	A
38 FB-10-5,7-040717	1350 5	2	'		-															\times			
39 FB-10-12,8-040717	1420	2		\checkmark	X	1																X	
40 FB-10-14,0 -040207	- 1425 -	2		X	X																	X	
Signature	Company		0)ate	1	Tim			Com	ment	s/Spe	ecial I	Instru	iction	IS								
Relinquished	Farallon		- (1	8/1-		185																
Received Although	- 052			1.8	. 17	9	1:5	S															
Relinquished	ikar Ref					-																	
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Received					2				Data	Pack	age:	Sta	ndar	d 🗌	Lev	vel III		Level	IV 🗆				
Reviewed/Date	Reviewed/Date																			erables	(EDDs)		

OnSite		Cha	ain o	f (Cus	st	od	y											Pa	ige _	5	_ of	5			
Environmental Inc. Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052 Decry (405 NS2 3884 - vursue works one composite	Tu (i	rnaround Req in working day	uest ys)		La	bor	ato	ry I	Nur	nbe	er:							C) 4	-	09	37				
Phone: (425) 883-3881 • www.onsite-env.com Company: Fandlon Project Number: 1001-002 Project Name: Cole Man Oil Project Manager: Paul Grahau Sampled by J.; Ruark I.D. aguidan	(TP+	ays [ndard (7 Days) H analysis 5 Da (other)	1 Day 3 Days	ber 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	(oil and grease) 1664A				% Moisture	
Lab ID Sample Identification	Date Sampled		Matrix	Number	LMN	LMN	LMN		Vola	Halo	EDB	Sem (with	PAH	PCB	Orge	Orge	Chlo	Tota	Tota	TCL	HEM (oil		_		M% TX	
41 FB-10-Recon-040717 47 STP-10-1	4/717	1536	S	52		X		X									_								TH Y	
15		1640	- [ス		X		Ý																	X	
43 STP-10-2 44 STP-10-3		1648		2		X		X																	X	
45 STP-10-4		1649		1		X		X																	X	
46 STP-10-5	1	1651	1	1				X																	X	1
47 EB-9-10.0-040717	417		S	2		X		X	-																	
48 FB-10-17.1-040717		1443	IT	M	2	X	-	X	_	-							_	_							_	
49 FB-F10-17.3-040713	d	1445	K	V		X		X					_	_										_		
Signature		Company	11			Date	1		Time			Com	ment	s/Spe	ecial	Instru	CLION	IS								
Relinquished		Faro					8/1																			
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Relinquished																										
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Received				e								Data	Pack	age:	Star	ndarc	1	Lev	el III		Level	IV 🗆				
Reviewed/Date		Reviewed/Da	ite									Chror	natog	Iram	s with	n fina	l repo	ort 🗌	Ele	ctronic	o Data	a Deliv	erables	s (EDDs)	

File :X:\BTEX\DARYL\DATA\D170412\0412009.D
Operator :
Acquired : 12 Apr 2017 4:52 pm using AcqMethod 170203B.M
Instrument : Daryl
Sample Name: 04-097-01s 1:100 rr
Misc Info :
Vial Number: 9



File :X:\BTEX\DARYL\DATA\D170412\0412023.D
Operator :
Acquired : 13 Apr 2017 12:42 am using AcqMethod 170203B.M
Instrument : Daryl
Sample Name: 04-097-05s
Misc Info :
Vial Number: 23



File :X:\BTEX\DARYL\DATA\D170412\0412026.D
Operator :
Acquired : 13 Apr 2017 2:22 am using AcqMethod 170203B.M
Instrument : Daryl
Sample Name: 04-097-16s
Misc Info :
Vial Number: 26



File :X:\BTEX\DARYL\DATA\D170412\0412024.D
Operator :
Acquired : 13 Apr 2017 1:16 am using AcqMethod 170203B.M
Instrument : Daryl
Sample Name: 04-097-17s
Misc Info :
Vial Number: 24



File :X:\BTEX\DARYL\DATA\D170412\0412025.D
Operator :
Acquired : 13 Apr 2017 1:49 am using AcqMethod 170203B.M
Instrument : Daryl
Sample Name: 04-097-18s
Misc Info :
Vial Number: 25



File :X:\BTEX\DARYL\DATA\D170412\0412014.D
Operator :
Acquired : 12 Apr 2017 7:40 pm using AcqMethod 170203B.M
Instrument : Daryl
Sample Name: 04-097-31s
Misc Info :
Vial Number: 14



File :X:\BTEX\DARYL\DATA\D170413\0413002.D
Operator :
Acquired : 13 Apr 2017 10:29 am using AcqMethod 170203B.M
Instrument : Daryl
Sample Name: 04-097-34s rr
Misc Info :
Vial Number: 2



File :X:\BTEX\DARYL\DATA\D170412\0412006.D
Operator :
Acquired : 12 Apr 2017 3:11 pm using AcqMethod 170203B.M
Instrument : Daryl
Sample Name: 04-097-36s rr
Misc Info :
Vial Number: 6



File :X:\BTEX\DARYL\DATA\D170412\0412007.D
Operator :
Acquired : 12 Apr 2017 3:45 pm using AcqMethod 170203B.M
Instrument : Daryl
Sample Name: 04-097-39s rr
Misc Info :
Vial Number: 7


```
File :X:\BTEX\DARYL\DATA\D170412\0412008.D
Operator :
Acquired : 12 Apr 2017 4:19 pm using AcqMethod 170203B.M
Instrument : Daryl
Sample Name: 04-097-40s rr
Misc Info :
Vial Number: 8
```



File : X:\BTEX\HOPE\DATA\H170411\0411004.D Operator : Acquired : 11 Apr 2017 9:06 using AcqMethod 170327B.M Instrument : Hope Sample Name: 04-097-42s 1:500 Misc Info : Vial Number: 4



File : X:\BTEX\HOPE\DATA\H170411\0411005.D
Operator :
Acquired : 11 Apr 2017 9:40 using AcqMethod 170327B.M
Instrument : Hope
Sample Name: 04-097-43s 1:500
Misc Info :
Vial Number: 5



File : Operator :	X:\BTEX\HOPE\DATA\H170411\0411006.D
	11 Apr 2017 10:13 using AcqMethod 170327B.M Hope
Sample Name:	04-097-44s 1:500
Misc Info :	
Vial Number:	6



File : Operator :	X:\BTEX\HOPE\DATA\H170411\0411007.D
	11 Apr 2017 10:47 using AcqMethod 170327B.M Hope
	04-097-45s 1:500
Misc Info : Vial Number:	



File :X:\BTEX\DARYL\DATA\D170412\0412022.D
Operator :
Acquired : 13 Apr 2017 12:09 am using AcqMethod 170203B.M
Instrument : Daryl
Sample Name: 04-097-48s
Misc Info :
Vial Number: 22



File :X:\BTEX\DARYL\DATA\D170412\0412020.D
Operator :
Acquired : 12 Apr 2017 11:02 pm using AcqMethod 170203B.M
Instrument : Daryl
Sample Name: 04-097-49s
Misc Info :
Vial Number: 20



File : X:\BTEX\HOPE\DATA\H170410\0410013.D
Operator :
Acquired : 10 Apr 2017 14:25 using AcqMethod 170327B.M
Instrument : Hope
Sample Name: 04-097-37a
Misc Info :
Vial Number: 13



File :	X:\BTEX\HOPE\DATA\H170410\0410012.D				
Operator :					
Acquired :	10 Apr 2017 13:51 using AcqMethod 170327B.M				
Instrument :					
Sample Name:	04-097-41a 1:4				
Misc Info :					
Vial Number:	12				



File :X:\DIESELS\VIGO\DATA\V170412\0412-V24.D Operator : Acquired : 13 Apr 2017 3:37 using AcqMethod V170411F.M Instrument : Vigo Sample Name: 04-097-01 10X Misc Info : Vial Number: 24



File :X:\DIESELS\VIGO\DATA\V170412\0412-V25.D Operator : Acquired : 13 Apr 2017 4:17 using AcqMethod V170411F.M Instrument : Vigo Sample Name: 04-097-02 10X Misc Info : Vial Number: 25



File :X:\DIESELS\VIGO\DATA\V170412\0412-V27.D Operator : Acquired : 13 Apr 2017 5:36 using AcqMethod V170411F.M Instrument : Vigo Sample Name: 04-097-03 10X Misc Info : Vial Number: 27



File :X:\DIESELS\VIGO\DATA\V170412\0412-V28.D
Operator :
Acquired : 13 Apr 2017 6:16 using AcqMethod V170411F.M
Instrument : Vigo
Sample Name: 04-097-04 50X
Misc Info :
Vial Number: 28



File :X:\DIESELS\VIGO\DATA\V170412\0412-V29.D Operator : Acquired : 13 Apr 2017 6:56 using AcqMethod V170411F.M Instrument : Vigo Sample Name: 04-097-05 10X Misc Info : Vial Number: 29



File :X:\DIESELS\VIGO\DATA\V170412.SEC\0412-V56.D Operator : Acquired : 12 Apr 2017 14:47 using AcqMethod V170411F.M Instrument : Vigo Sample Name: 04-097-06 10X Misc Info : Vial Number: 56



```
File :X:\DIESELS\VIGO\DATA\V170411.SEC\0411-V61.D
Operator :
Acquired : 11 Apr 2017 14:47 using AcqMethod V170313F.M
Instrument : Vigo
Sample Name: 04-097-07
Misc Info :
Vial Number: 61
```



File :X:\DIESELS\TERI\DATA\T170411\0411-T12.D Operator : ZT Acquired : 11 Apr 2017 16:17 using AcqMethod T161216F.M Instrument : Teri Sample Name: 04-097-09 Misc Info : Vial Number: 12



File :X:\DIESELS\VIGO\DATA\V170411.SEC\0411-V64.D Operator : Acquired : 11 Apr 2017 16:47 using AcqMethod V170313F.M Instrument : Vigo Sample Name: 04-097-16 Misc Info : Vial Number: 64



File :X:\DIESELS\VIGO\DATA\V170412\0412-V30.D
Operator :
Acquired : 13 Apr 2017 7:36 using AcqMethod V170411F.M
Instrument : Vigo
Sample Name: 04-097-17 10X
Misc Info :
Vial Number: 30



File :X:\DIESELS\TERI\DATA\T170411\0411-T26.D Operator : ZT Acquired : 12 Apr 2017 2:15 using AcqMethod T161216F.M Instrument : Teri Sample Name: 04-097-18 Misc Info : Vial Number: 26



File :X:\DIESELS\VIGO\DATA\V170411.SEC\0411-V81.D Operator : Acquired : 12 Apr 2017 4:05 using AcqMethod V170313F.M Instrument : Vigo Sample Name: 04-097-26 Misc Info : Vial Number: 81



File :X:\DIESELS\TERI\DATA\T170411.SEC\0411-T85.D
Operator : ZT
Acquired : 12 Apr 2017 8:37 using AcqMethod T161216F.M
Instrument : Teri
Sample Name: 04-097-31
Misc Info :
Vial Number: 85



File :X:\DIESELS\VIGO\DATA\V170411\0411-V31.D
Operator :
Acquired : 12 Apr 2017 4:05 using AcqMethod V170313F.M
Instrument : Vigo
Sample Name: 04-097-35
Misc Info :
Vial Number: 31



File :X:\DIESELS\VIGO\DATA\V170411\0411-V27.D Operator : Acquired : 12 Apr 2017 1:25 using AcqMethod V170313F.M Instrument : Vigo Sample Name: 04-097-36 Misc Info : Vial Number: 27



File :X:\DIESELS\VIGO\DATA\V170412.SEC\0412-V79.D
Operator :
Acquired : 13 Apr 2017 6:56 using AcqMethod V170411F.M
Instrument : Vigo
Sample Name: 04-097-39 10X
Misc Info :
Vial Number: 79



File :X:\DIESELS\VIGO\DATA\V170412.SEC\0412-V80.D Operator : Acquired : 13 Apr 2017 7:36 using AcqMethod V170411F.M Instrument : Vigo Sample Name: 04-097-40 10X Misc Info : Vial Number: 80



File :X:\DIESELS\VIGO\DATA\V170412.SEC\0412-V81.D Operator : Acquired : 13 Apr 2017 8:16 using AcqMethod V170411F.M Instrument : Vigo Sample Name: 04-097-42 10X Misc Info : Vial Number: 81



File :X:\DIESELS\VIGO\DATA\V170412.SEC\0412-V82.D Operator : Acquired : 13 Apr 2017 8:56 using AcqMethod V170411F.M Instrument : Vigo Sample Name: 04-097-43 10X Misc Info : Vial Number: 82



File :X:\DIESELS\TERI\DATA\T170412\0412-T28.D Operator : ZT Acquired : 13 Apr 2017 8:08 using AcqMethod T161216F.M Instrument : Teri Sample Name: 04-097-44 10X Misc Info : Vial Number: 28



File :X:\DIESELS\TERI\DATA\T170412\0412-T30.D Operator : ZT Acquired : 13 Apr 2017 9:34 using AcqMethod T161216F.M Instrument : Teri Sample Name: 04-097-45 10X Misc Info : Vial Number: 30



File :X:\DIESELS\TERI\DATA\T170412\0412-T31.D Operator : ZT Acquired : 13 Apr 2017 10:17 using AcqMethod T161216F.M Instrument : Teri Sample Name: 04-097-46 10X Misc Info : Vial Number: 31



File :X:\DIESELS\VIGO\DATA\V170411.SEC\0411-V69.D Operator : Acquired : 11 Apr 2017 20:07 using AcqMethod V170313F.M Instrument : Vigo Sample Name: 04-097-47 Misc Info : Vial Number: 69



File :X:\DIESELS\VIGO\DATA\V170411\0411-V30.D
Operator :
Acquired : 12 Apr 2017 3:25 using AcqMethod V170313F.M
Instrument : Vigo
Sample Name: 04-097-48
Misc Info :
Vial Number: 30





April 17, 2017

Paul Grabau Farallon Consulting, LLC 1201 Cornwall Avenue, Suite 105 Bellingham, WA 98225

Re: Analytical Data for Project 1001-002 Laboratory Reference No. 1704-122

Dear Paul:

Enclosed are the analytical results and associated quality control data for samples submitted on April 12, 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



Date of Report: April 17, 2017 Samples Submitted: April 12, 2017 Laboratory Reference: 1704-122 Project: 1001-002

Case Narrative

Samples were collected on April 11, 2017 and received by the laboratory on April 12, 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.

NWTPH Gx/BTEX (soil) 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.

HEM-Oil and Grease EPA 1664A Analysis

Duplicate samples with the ID BH-2-041117 were composited in the lab prior to extraction. The initial volume was brought to 1000mL with deionized water.

Please note that any other QA/QC issues associated with these extractions and analyses will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.



NWTPH-Gx/BTEX

Matrix: Soil Units: mg/kg (ppm)

ee				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	STP-11					
Laboratory ID:	04-122-01					
Benzene	ND	0.020	EPA 8021B	4-13-17	4-13-17	
Toluene	ND	0.059	EPA 8021B	4-13-17	4-13-17	
Ethyl Benzene	ND	0.059	EPA 8021B	4-13-17	4-13-17	
m,p-Xylene	ND	0.059	EPA 8021B	4-13-17	4-13-17	
o-Xylene	ND	0.059	EPA 8021B	4-13-17	4-13-17	
Gasoline	ND	5.9	NWTPH-Gx	4-13-17	4-13-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	77	63-124				


NWTPH-Gx/BTEX QUALITY CONTROL

Matrix: Soil Units: mg/kg (ppm)

······				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0413S1					
Benzene	ND	0.020	EPA 8021B	4-13-17	4-13-17	
Toluene	ND	0.050	EPA 8021B	4-13-17	4-13-17	
Ethyl Benzene	ND	0.050	EPA 8021B	4-13-17	4-13-17	
m,p-Xylene	ND	0.050	EPA 8021B	4-13-17	4-13-17	
o-Xylene	ND	0.050	EPA 8021B	4-13-17	4-13-17	
Gasoline	ND	5.0	NWTPH-Gx	4-13-17	4-13-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	72	63-124				

					Source	Ре	rcent	Recovery		RPD	
Analyte	Re	sult	Spike	Level	Result	Rec	covery	Limits	RPD	Limit	Flags
DUPLICATE											
Laboratory ID:	04-12	22-01									
	ORIG	DUP									
Benzene	ND	ND	NA	NA			NA	NA	NA	30	
Toluene	ND	ND	NA	NA			NA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA			NA	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA			NA	NA	NA	30	
o-Xylene	ND	ND	NA	NA			NA	NA	NA	30	
Gasoline	ND	ND	NA	NA			NA	NA	NA	30	
Surrogate:											
Fluorobenzene						77	75	63-124			
SPIKE BLANKS											
Laboratory ID:	SB04	13S1									
	SB	SBD	SB	SBD		SB	SBD				
Benzene	0.861	0.851	1.00	1.00		86	85	70-124	1	12	
Toluene	0.894	0.875	1.00	1.00		89	88	73-119	2	12	
Ethyl Benzene	0.910	0.895	1.00	1.00		91	90	74-117	2	12	
m,p-Xylene	0.910	0.894	1.00	1.00		91	89	75-117	2	13	
o-Xylene	0.923	0.896	1.00	1.00		92	90	75-116	3	12	
Surrogate:											
Fluorobenzene						85	82	63-124			



4

NWTPH-Gx/BTEX

Matrix: Water Units: ug/L (ppb)

ee. e.g, = (ppe)				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	BH-2-041117					
Laboratory ID:	04-122-02					
Benzene	ND	4.0	EPA 8021B	4-12-17	4-12-17	
Toluene	ND	4.0	EPA 8021B	4-12-17	4-12-17	
Ethyl Benzene	13	4.0	EPA 8021B	4-12-17	4-12-17	
m,p-Xylene	22	4.0	EPA 8021B	4-12-17	4-12-17	
o-Xylene	17	4.0	EPA 8021B	4-12-17	4-12-17	
Gasoline	1900	400	NWTPH-Gx	4-12-17	4-12-17	0
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	94	61-118				



NWTPH-Gx/BTEX QUALITY CONTROL

Matrix: Water Units: ug/L (ppb)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0412W2					
Benzene	ND	1.0	EPA 8021B	4-12-17	4-12-17	
Toluene	ND	1.0	EPA 8021B	4-12-17	4-12-17	
Ethyl Benzene	ND	1.0	EPA 8021B	4-12-17	4-12-17	
m,p-Xylene	ND	1.0	EPA 8021B	4-12-17	4-12-17	
o-Xylene	ND	1.0	EPA 8021B	4-12-17	4-12-17	
Gasoline	ND	100	NWTPH-Gx	4-12-17	4-12-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	97	61-118				

				9		Pe	rcent	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Result	Rec	overy	Limits	RPD	Limit	Flags
DUPLICATE											
Laboratory ID:	04-07	75-02									
	ORIG	DUP									
Benzene	ND	ND	NA	NA		1	NA	NA	NA	30	
Toluene	ND	ND	NA	NA		1	NA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA		1	NA	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA		1	NA	NA	NA	30	
o-Xylene	ND	ND	NA	NA		1	NA	NA	NA	30	
Gasoline	ND	ND	NA	NA		1	NA	NA	NA	30	
Surrogate:											
Fluorobenzene						99	97	61-118			
MATRIX SPIKES											
Laboratory ID:	04-07	75-01									
	MS	MSD	MS	MSD		MS	MSD				
Benzene	49.4	48.7	50.0	50.0	ND	99	97	80-120	1	13	
Toluene	51.3	49.8	50.0	50.0	ND	103	100	81-115	3	14	
Ethyl Benzene	51.8	50.7	50.0	50.0	ND	104	101	81-114	2	12	
m,p-Xylene	52.6	50.5	50.0	50.0	ND	105	101	81-114	4	13	
o-Xylene	51.6	50.3	50.0	50.0	ND	103	101	81-113	3	11	
Surrogate:											
Fluorobenzene						99	89	61-118			



6

NWTPH-Gx/BTEX

Matrix: Soil Units: mg/kg (ppm)

Analyte Client ID:	Result					
Client ID:		PQL	Method	Prepared	Analyzed	Flags
	MW-7-17.3					
Laboratory ID:	04-122-03					
Benzene	ND	0.020	EPA 8021B	4-13-17	4-13-17	
Toluene	ND	0.061	EPA 8021B	4-13-17	4-13-17	
Ethyl Benzene	ND	0.061	EPA 8021B	4-13-17	4-13-17	
m,p-Xylene	ND	0.061	EPA 8021B	4-13-17	4-13-17	
o-Xylene	ND	0.061	EPA 8021B	4-13-17	4-13-17	
Gasoline	ND	6.1	NWTPH-Gx	4-13-17	4-13-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	86	63-124				
Client ID:	MW-8-12.8					
Laboratory ID:	04-122-04					
Benzene	ND	0.020	EPA 8021B	4-13-17	4-13-17	
Toluene	ND	0.060	EPA 8021B	4-13-17	4-13-17	
Ethyl Benzene	ND	0.060	EPA 8021B	4-13-17	4-13-17	
m,p-Xylene	ND	0.060	EPA 8021B	4-13-17	4-13-17	
o-Xylene	ND	0.060	EPA 8021B	4-13-17	4-13-17	
Gasoline	ND	6.0	NWTPH-Gx	4-13-17	4-13-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	86	63-124				
Client ID:	RW-1-17.5					
Laboratory ID:	04-122-07					
Benzene	ND	0.020	EPA 8021B	4-13-17	4-13-17	
Toluene	ND	0.069	EPA 8021B	4-13-17	4-13-17	
Ethyl Benzene	ND	0.069	EPA 8021B	4-13-17	4-13-17	
m,p-Xylene	ND	0.069	EPA 8021B	4-13-17	4-13-17	
o-Xylene	ND	0.069	EPA 8021B	4-13-17	4-13-17	
Gasoline	ND	6.9	NWTPH-Gx	4-13-17	4-13-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	90	63-124				



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NWTPH-Gx/BTEX

Matrix: Soil Units: mg/kg (ppm)

Analyte Client ID:	Result					
Client ID:		PQL	Method	Prepared	Analyzed	Flags
	MW-7-13.0					
Laboratory ID:	04-122-08					
Benzene	ND	0.020	EPA 8021B	4-13-17	4-13-17	
Toluene	ND	0.058	EPA 8021B	4-13-17	4-13-17	
Ethyl Benzene	ND	0.058	EPA 8021B	4-13-17	4-13-17	
m,p-Xylene	ND	0.058	EPA 8021B	4-13-17	4-13-17	
o-Xylene	ND	0.058	EPA 8021B	4-13-17	4-13-17	
Gasoline	ND	5.8	NWTPH-Gx	4-13-17	4-13-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	89	63-124				
Client ID:	MW-8-15.0					
Laboratory ID:	04-122-09					
Benzene	ND	0.020	EPA 8021B	4-13-17	4-13-17	
Toluene	ND	0.043	EPA 8021B	4-13-17	4-13-17	
Ethyl Benzene	ND	0.043	EPA 8021B	4-13-17	4-13-17	
m,p-Xylene	ND	0.043	EPA 8021B	4-13-17	4-13-17	
o-Xylene	ND	0.043	EPA 8021B	4-13-17	4-13-17	
Gasoline	ND	4.3	NWTPH-Gx	4-13-17	4-13-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	80	63-124				
Client ID:	MW-8-17.5					
Laboratory ID:	04-122-10					
Benzene	ND	0.020	EPA 8021B	4-13-17	4-13-17	
Toluene	ND	0.055	EPA 8021B	4-13-17	4-13-17	
Ethyl Benzene	ND	0.055	EPA 8021B	4-13-17	4-13-17	
m,p-Xylene	ND	0.055	EPA 8021B	4-13-17	4-13-17	
o-Xylene	ND	0.055	EPA 8021B	4-13-17	4-13-17	
Gasoline	ND	5.5	NWTPH-Gx	4-13-17	4-13-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	90	63-124				



NWTPH-Gx/BTEX QUALITY CONTROL

Matrix: Soil Units: mg/kg (ppm)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0413S1					
Benzene	ND	0.020	EPA 8021B	4-13-17	4-13-17	
Toluene	ND	0.050	EPA 8021B	4-13-17	4-13-17	
Ethyl Benzene	ND	0.050	EPA 8021B	4-13-17	4-13-17	
m,p-Xylene	ND	0.050	EPA 8021B	4-13-17	4-13-17	
o-Xylene	ND	0.050	EPA 8021B	4-13-17	4-13-17	
Gasoline	ND	5.0	NWTPH-Gx	4-13-17	4-13-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	72	63-124				

					Source	Ре	rcent	Recovery		RPD	
Analyte	Re	sult	Spike	Level	Result	Rec	overy	Limits	RPD	Limit	Flags
DUPLICATE											
Laboratory ID:	04-12	22-01									
	ORIG	DUP									
Benzene	ND	ND	NA	NA			NA	NA	NA	30	
Toluene	ND	ND	NA	NA			NA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA			NA	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA			NA	NA	NA	30	
o-Xylene	ND	ND	NA	NA			NA	NA	NA	30	
Gasoline	ND	ND	NA	NA			NA	NA	NA	30	
Surrogate:											
Fluorobenzene						77	75	63-124			
SPIKE BLANKS											
Laboratory ID:	SB04	13S1									
	SB	SBD	SB	SBD		SB	SBD				
Benzene	0.861	0.851	1.00	1.00		86	85	70-124	1	12	
Toluene	0.894	0.875	1.00	1.00		89	88	73-119	2	12	
Ethyl Benzene	0.910	0.895	1.00	1.00		91	90	74-117	2	12	
m,p-Xylene	0.910	0.894	1.00	1.00		91	89	75-117	2	13	
o-Xylene	0.923	0.896	1.00	1.00		92	90	75-116	3	12	
Surrogate:											
Fluorobenzene						85	82	63-124			



NWTPH-Dx

Matrix: Soil Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	STP-11					
Laboratory ID:	04-122-01					
Diesel Range Organics	350	270	NWTPH-Dx	4-12-17	4-12-17	
Lube Oil Range Organics	ND	550	NWTPH-Dx	4-12-17	4-12-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl		50-150				S



NWTPH-Dx QUALITY CONTROL

Matrix: Soil Units: mg/Kg (ppm)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0412S2					
Diesel Range Organics	ND	25	NWTPH-Dx	4-12-17	4-12-17	
Lube Oil Range Organics	ND	50	NWTPH-Dx	4-12-17	4-12-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	85	50-150				

					Source	Percent	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Result	Recovery	Limits	RPD	Limit	Flags
DUPLICATE										
Laboratory ID:	04-05	59-05								
	ORIG	DUP								
Diesel Range	ND	ND	NA	NA		NA	NA	NA	NA	
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	NA	
Surrogate:										
o-Terphenyl						117 109	50-150			



NWTPH-Dx

Matrix: Water Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	BH-2-041117					
Laboratory ID:	04-122-02					
Diesel Range Organics	100	2.6	NWTPH-Dx	4-12-17	4-14-17	
Lube Oil Range Organics	10	4.2	NWTPH-Dx	4-12-17	4-14-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl		50-150				S



NWTPH-Dx QUALITY CONTROL

Matrix: Water Units: mg/L (ppm)

Flags
-

					Source	Perc	ent	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Result	Reco	very	Limits	RPD	Limit	Flags
DUPLICATE											
Laboratory ID:	04-07	75-11									
	ORIG	DUP									
Diesel Range Organics	2.82	2.43	NA	NA		N	4	NA	15	NA	
Lube Oil Range	ND	ND	NA	NA		N	4	NA	NA	NA	
Surrogate:											
o-Terphenyl						90	82	50-150			



NWTPH-Dx

Matrix: Soil Units: mg/Kg (ppm)

	Desult	DOI	Mathad	Date Dromore d	Date	Flore
Analyte Client ID:	Result MW-7-17.3	PQL	Method	Prepared	Analyzed	Flags
	04-122-03					
Laboratory ID:				4 4 9 4 7	4 4 9 4 7	
Diesel Range Organics	ND	29	NWTPH-Dx	4-12-17	4-12-17	
Lube Oil Range Organics	ND	58	NWTPH-Dx	4-12-17	4-12-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	98	50-150				
Client ID:	MW-8-12.8					
Laboratory ID:	04-122-04					
Diesel Range Organics	1400	28	NWTPH-Dx	4-12-17	4-12-17	
Lube Oil Range Organics	ND	55	NWTPH-Dx	4-12-17	4-12-17	
Surrogate:	Percent Recovery	Control Limits	· · · · ·			
o-Terphenyl	116	50-150				
Client ID:	RW-1-17.5					
Laboratory ID:	04-122-07					
Diesel Range Organics	ND	32	NWTPH-Dx	4-12-17	4-12-17	
Lube Oil Range Organics	ND	63	NWTPH-Dx	4-12-17	4-12-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	118	50-150				
Client ID:	MW-7-13.0					
Laboratory ID:	04-122-08					
Diesel Range Organics	160	28	NWTPH-Dx	4-12-17	4-12-17	
Lube Oil Range Organics	ND	56	NWTPH-Dx	4-12-17	4-12-17	
Surrogate:	Percent Recovery	Control Limits			,	
o-Terphenyl	106	50-150				
o reiplionyl	100	00 100				
Client ID:	MW-8-15.0					
Laboratory ID:	04-122-09					
Diesel Range Organics	100	26	NWTPH-Dx	4-12-17	4-12-17	
Lube Oil Range Organics	ND	51	NWTPH-Dx	4-12-17	4-12-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	116	50-150				



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NWTPH-Dx

Matrix: Soil Units: mg/Kg (ppm)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	MW-8-17.5					
Laboratory ID:	04-122-10					
Diesel Range Organics	230	28	NWTPH-Dx	4-12-17	4-12-17	
Lube Oil Range Organics	ND	56	NWTPH-Dx	4-12-17	4-12-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	116	50-150				



NWTPH-Dx QUALITY CONTROL

Matrix: Soil Units: mg/Kg (ppm)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0412S2					
Diesel Range Organics	ND	25	NWTPH-Dx	4-12-17	4-12-17	
Lube Oil Range Organics	ND	50	NWTPH-Dx	4-12-17	4-12-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	85	50-150				

					Source	Percent	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Result	Recovery	Limits	RPD	Limit	Flags
DUPLICATE										
Laboratory ID:	04-12	22-04								
	ORIG	DUP								
Diesel Range Organics	1290	659	NA	NA		NA	NA	65	NA	
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	NA	
Surrogate:										
o-Terphenyl						116 110	50-150			



TOTAL METALS EPA 200.8/7470A

Matrix: Water Units: ug/L (ppb)

				Date	Date	
Analyte	Result	PQL	EPA Method	Prepared	Analyzed	Flags
Lab ID: Client ID:	04-122-02 BH-2-041117					
Arsenic	11	3.3	200.8	4-12-17	4-12-17	
Barium	110	28	200.8	4-12-17	4-12-17	
Cadmium	ND	4.4	200.8	4-12-17	4-12-17	
Chromium	ND	11	200.8	4-12-17	4-12-17	
Lead	1.9	1.1	200.8	4-12-17	4-12-17	
Mercury	ND	0.50	7470A	4-13-17	4-13-17	
Selenium	ND	5.6	200.8	4-12-17	4-12-17	
Silver	ND	11	200.8	4-12-17	4-12-17	



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TOTAL METALS EPA 200.8 METHOD BLANK QUALITY CONTROL

Date Extracted:	4-12-17
Date Analyzed:	4-12-17

Matrix:	Water
Units:	ug/L (ppb)

Lab ID: MB0412WM1

Analyte	Method	Result	PQL
Arsenic	200.8	ND	3.3
Barium	200.8	ND	28
Cadmium	200.8	ND	4.4
Chromium	200.8	ND	11
Lead	200.8	ND	1.1
Selenium	200.8	ND	5.6
Silver	200.8	ND	11



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TOTAL MERCURY EPA 7470A METHOD BLANK QUALITY CONTROL

Date Extracted:	4-13-17
Date Analyzed:	4-13-17

Matrix:	Water
Units:	ug/L (ppb)

Lab ID: MB0413W1

Analyte	Method	Result	PQL
Mercury	7470A	ND	0.50



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TOTAL METALS EPA 200.8 DUPLICATE QUALITY CONTROL

Date Extracted:	4-12-17
Date Analyzed:	4-12-17

Matrix:	Water
Units:	ug/L (ppb)

Lab ID: 04-069-06

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	19.1	20.8	9	3.3	
Barium	77.2	82.8	7	28	
Cadmium	ND	ND	NA	4.4	
Chromium	ND	ND	NA	11	
Lead	ND	ND	NA	1.1	
Selenium	ND	ND	NA	5.6	
Silver	ND	ND	NA	11	



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TOTAL MERCURY EPA 7470A DUPLICATE QUALITY CONTROL

Date Extracted:	4-13-17
Date Analyzed:	4-13-17

Matrix:	Water
Units:	ug/L (ppb)

Lab ID: 04-075-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Mercury	ND	ND	NA	0.50	



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TOTAL METALS EPA 200.8 MS/MSD QUALITY CONTROL

Date Extracted:	4-12-17
Date Analyzed:	4-12-17

Matrix:	Water
Units:	ug/L (ppb)

Lab ID: 04-069-06

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	222	267	112	259	108	3	
Barium	222	307	103	302	101	2	
Cadmium	222	237	107	235	106	1	
Chromium	222	231	104	227	102	2	
Lead	222	212	95	206	93	3	
Selenium	222	244	110	240	108	2	
Silver	222	229	103	222	100	3	



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TOTAL MERCURY EPA 7470A MS/MSD QUALITY CONTROL

Date Extracted:	4-13-17
Date Analyzed:	4-13-17

Matrix:	Water
Units:	ug/L (ppb)

Lab ID: 04-075-01

	Spike		Percent		Percent		
Analyte	Level	MS	Recovery	MSD	Recovery	RPD	Flags
Mercury	12.5	12.1	96	11.9	95	1	



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HEXANE EXTRACTABLE MATERIAL OIL AND GREASE EPA 1664A

Matrix: Water Units: mg/L (ppm)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	BH-2-041117					
Laboratory ID:	04-122-02 Comp.					
Hexane Extractable Materia	l 40	5.7	EPA 1664A	4-13-17	4-13-17	



HEXANE EXTRACTABLE MATERIAL OIL AND GREASE EPA 1664A QUALITY CONTROL

Matrix: Water Units: mg/L (ppm)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0413W1					
Hexane Extractable Material	ND	5.0	EPA 1664A	4-13-17	4-13-17	

Analyte	Re	sult	Spike	Level		rcent overv	Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS	6D04	10\\//1	•							
Laboratory ID:		<u>13W1</u> SBD	SB	SBD	SB	SBD				
HEM	35.8	37.6	40.0	40.0	90	94	81-109	4	11	



IGNITABILITY EPA 1010A

Analyte		Result	Method	Analyzed	Flags
	C C			Date	
Units:	deg F				
Matrix:	Water				

Analyte	nesuit	Method	Allalyzeu	Flays
Client ID:	BH2-041117			
Laboratory ID:	04-122-02			
Flash Point	160	EPA 1010A	4-13-17	



TOTAL SUSPENDED SOLIDS SM 2540D

Matrix: Water Units: mg/L

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	BH-2-041117					
Laboratory ID:	04-122-02					
Total Suspended Solids	380	8.0	SM 2540D	4-13-17	4-13-17	



TOTAL SUSPENDED SOLIDS SM 2540D QUALITY CONTROL

Matrix: Water Units: mg/L

			Date	Date	
Result	PQL	Method	Prepared	Analyzed	Flags
MB0413W1					
ND	4.0	SM 2540D	4-13-17	4-13-17	
	MB0413W1	MB0413W1	MB0413W1	Result PQL Method Prepared MB0413W1	Result PQL Method Prepared Analyzed MB0413W1

A I . I.	_			Source	Percent	Recovery		RPD	-
Analyte	Res	sult	Spike Level	Result	Recovery	Limits	RPD	Limit	Flags
DUPLICATE									
Laboratory ID:	04-12	22-02							
	ORIG	DUP							
Total Suspended Solids	378	394	NA	NA	NA	NA	4	20	
SPIKE BLANK									
Laboratory ID:	SB04	13W1							
	S	B	SB		SB				
Total Suspended Solids	93	3.0	100	NA	93	78-113	NA	NA	



% MOISTURE

Date Analyzed: 4-12-17

Client ID	Lab ID	% Moisture
STP-11	04-122-01	9
MW-7-17.3	04-122-03	14
MW-8-12.8	04-122-04	10
RW-1-17.5	04-122-07	21
MW-7-13.0	04-122-08	11
MW-8-15.0	04-122-09	2
MW-8-17.5	04-122-10	11



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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.

Ζ-

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



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File :X:\BTEX\DARYL\DATA\D170413\0413007.D
Operator :
Acquired : 13 Apr 2017 2:05 pm using AcqMethod 170203B.M
Instrument : Daryl
Sample Name: 04-122-01s
Misc Info :
Vial Number: 7



File :X:\BTEX\HOPE\DATA\H170412\0412014.D
Operator :
Acquired : 12 Apr 2017 6:33 pm using AcqMethod 170327B.M
Instrument : Hope
Sample Name: 04-122-02h 1:4
Misc Info :
Vial Number: 14



File :	X:\BTEX\DARYL\DATA\D170413\0413022.D
Operator :	
Acquired :	13 Apr 2017 22:41 using AcqMethod 170203B.M
Instrument :	
Sample Name:	04-122-04s
Misc Info :	
Vial Number:	22



File : X:\BTEX\DARYL\DATA\D170413\0413013.D
Operator :
Acquired : 13 Apr 2017 17:39 using AcqMethod 170203B.M
Instrument : Daryl
Sample Name: 04-122-08s
Misc Info :
Vial Number: 13



File : X:\BTEX\DARYL\DATA\D170413\0413021.D
Operator :
Acquired : 13 Apr 2017 22:08 using AcqMethod 170203B.M
Instrument : Daryl
Sample Name: 04-122-09s
Misc Info :
Vial Number: 21



File : X:\BTEX\DARYL\DATA\D170413\0413023.D
Operator :
Acquired : 13 Apr 2017 23:15 using AcqMethod 170203B.M
Instrument : Daryl
Sample Name: 04-122-10s
Misc Info :
Vial Number: 23



File :X:\DIESELS\TERI\DATA\T170412.SEC\0412-T86.D Operator : ZT Acquired : 13 Apr 2017 13:52 using AcqMethod T161216F.M Instrument : Teri Sample Name: 04-122-01 10X Misc Info : Vial Number: 86



File :X:\DIESELS\TERI\DATA\T170414\0414-T13.D
Operator : ZT
Acquired : 14 Apr 2017 17:09 using AcqMethod T161216F.M
Instrument : Teri
Sample Name: 04-122-02 10X
Misc Info :
Vial Number: 13



File :X:\DIESELS\TERI\DATA\T170412.SEC\0412-T86.D
Operator : ZT
Acquired : 13 Apr 2017 13:52 using AcqMethod T161216F.M
Instrument : Teri
Sample Name: 04-122-01 10X
Misc Info :
Vial Number: 86


File :X:\DIESELS\VIGO\DATA\V170412\0412V-54.D Operator : Acquired : 14 Apr 2017 1:32 using AcqMethod V170411F.M Instrument : Vigo Sample Name: 04-122-04 Misc Info : Vial Number: 13



```
File :X:\DIESELS\TERI\DATA\T170412.SEC\0412-T89.D
Operator : ZT
Acquired : 13 Apr 2017 17:21 using AcqMethod T161216F.M
Instrument : Teri
Sample Name: 04-122-08
Misc Info :
Vial Number: 51
```



```
File :X:\DIESELS\TERI\DATA\T170412.SEC\0412-T92.D
Operator : ZT
Acquired : 13 Apr 2017 19:29 using AcqMethod T161216F.M
Instrument : Teri
Sample Name: 04-122-09
Misc Info :
Vial Number: 54
```



File :X:\DIESELS\VIGO\DATA\V170412.SEC\0412-V96.D Operator : Acquired : 13 Apr 2017 20:13 using AcqMethod V170411F.M Instrument : Vigo Sample Name: 04-122-10 Misc Info : Vial Number: 55



OnSite Environmental Inc.	Chain c	of (Cu	st	00	ly										P	age _	1	_ of	1	1	
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Project Number:	2 Days AMPER Days	Ì	ľ			an-up)							81B	8151A						THE		
Project Name: Coleman Oil	2 Days C C C C C C C C C C C C C C C C C C C	ers				NWTPH-Dx (🗌 Acid / SG Clean-up)		Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	N/SIM	PAHs 8270D/SIM (low-level)		Organocniorine Pesticides 8081B	Chlorinated Acid Herbicides 8151A				HEM (oil and grease) 1664A		25 4 A		
Faul Grahay	7	ontain		3TEX		Acid	0	Volatile	1 (Wat	8270D I PAHs	SIM (Io		Je Pes	cid He	fletals	Aetals		grease		L		
Sampled by: J. Reconff. J. KEPP	(other)	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	H-Gx) XD-H	Volatiles 8260C	enated	PA 801	Semivolatiles 8270D/SIM (with low-level PAHs)	3270D/	PCBs 8082A	ochiori	nated A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	oil and		2	S	sture
	Date Time mpled Sampled Matrix	Numb	NWTP	NWTP	NWTPH-Gx	NWTP	Volatile	Haloge	EDB E	Semive (with lo	PAHs 8	PCBs	Organ	Chlorir	Total R	Total N	TCLP	HEM (¢	E	% Moisture
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4 MW-8-128 4/	W/07 1009 5	2		X		K																L
5 MW 8-10.5 4	11/07 0954 5	2																				
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8 MW-7-13.0 41	W/57 1606 5	2		X		X																
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12 MW-8 -17.5 41	11/07/033 5	2		X	1	X																L
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14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

April 25, 2017

Paul Grabau Farallon Consulting, LLC 1201 Cornwall Avenue, Suite 105 Bellingham, WA 98225

Re: Analytical Data for Project 1001-002 Laboratory Reference No. 1704-144

Dear Paul:

Enclosed are the analytical results and associated quality control data for samples submitted on April 14, 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



Date of Report: April 25, 2017 Samples Submitted: April 14, 2017 Laboratory Reference: 1704-144 Project: 1001-002

Case Narrative

Samples were collected on April 12 and 13, 2017 and received by the laboratory on April 14, 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.

NWTPH Gx/BTEX 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.

The MTCA Method A cleanup level of 0.030 ppm for Benzene is not achievable for sample MW-9-15.6 due to the necessary dilution of the sample.

The surrogate percent recovery is outside control limits for sample MW-9-15.6 due to matrix effects. The sample was re-analyzed with similar results.

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.



Matrix: Soil Units: mg/kg (ppm)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	MW-6-10.3					
Laboratory ID:	04-144-01					
Benzene	0.068	0.020	EPA 8021B	4-21-17	4-24-17	
Toluene	ND	0.065	EPA 8021B	4-21-17	4-24-17	
Ethyl Benzene	2.2	0.065	EPA 8021B	4-21-17	4-24-17	
m,p-Xylene	0.96	0.065	EPA 8021B	4-21-17	4-24-17	
o-Xylene	ND	0.33	EPA 8021B	4-21-17	4-24-17	U1
Gasoline	280	6.5	NWTPH-Gx	4-21-17	4-24-17	0
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	83	63-124				
Client ID:	MW-6-12.8					
Laboratory ID:	04-144-02					
Benzene	0.066	0.058	EPA 8021B	4-21-17	4-25-17	
Toluene	ND	0.29	EPA 8021B	4-21-17	4-25-17	
Ethyl Benzene	0.34	0.29	EPA 8021B	4-21-17	4-25-17	
m,p-Xylene	0.76	0.29	EPA 8021B	4-21-17	4-25-17	
o-Xylene	ND	0.29	EPA 8021B	4-21-17	4-25-17	
Gasoline	1400	29	NWTPH-Gx	4-21-17	4-25-17	0
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	105	63-124				
Client ID:	MW-9-12.8					
Laboratory ID:	04-144-07					
Benzene	ND	0.020	EPA 8021B	4-21-17	4-21-17	
Toluene	ND	0.062	EPA 8021B	4-21-17	4-21-17	
Ethyl Benzene	ND	0.062	EPA 8021B	4-21-17	4-21-17	
m,p-Xylene	ND	0.062	EPA 8021B	4-21-17	4-21-17	
o-Xylene	ND	0.062	EPA 8021B	4-21-17	4-21-17	
Gasoline	ND	6.2	NWTPH-Gx	4-21-17	4-21-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	86	63-124				



3

Matrix: Soil Units: mg/kg (ppm)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	MW-9-15.6					
Laboratory ID:	04-144-08					
Benzene	ND	0.062	EPA 8021B	4-21-17	4-25-17	
Toluene	ND	0.31	EPA 8021B	4-21-17	4-25-17	
Ethyl Benzene	0.64	0.31	EPA 8021B	4-21-17	4-25-17	
m,p-Xylene	2.7	0.31	EPA 8021B	4-21-17	4-25-17	
o-Xylene	ND	0.31	EPA 8021B	4-21-17	4-25-17	
Gasoline	1800	31	NWTPH-Gx	4-21-17	4-25-17	0
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	62	63-124				Q
Client ID:	MW-9-24.5					
Laboratory ID:	04-144-11					
Benzene	ND	0.020	EPA 8021B	4-21-17	4-24-17	
Toluene	ND	0.076	EPA 8021B	4-21-17	4-24-17	
Ethyl Benzene	ND	0.076	EPA 8021B	4-21-17	4-24-17	
m,p-Xylene	0.094	0.076	EPA 8021B	4-21-17	4-24-17	
o-Xylene	ND	0.076	EPA 8021B	4-21-17	4-24-17	
Gasoline	31	7.6	NWTPH-Gx	4-21-17	4-24-17	0
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	84	63-124				



NWTPH-Gx/BTEX QUALITY CONTROL

Matrix: Soil Units: mg/kg (ppm)

5 5 (T)				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0421S1					
Benzene	ND	0.020	EPA 8021B	4-21-17	4-21-17	
Toluene	ND	0.050	EPA 8021B	4-21-17	4-21-17	
Ethyl Benzene	ND	0.050	EPA 8021B	4-21-17	4-21-17	
m,p-Xylene	ND	0.050	EPA 8021B	4-21-17	4-21-17	
o-Xylene	ND	0.050	EPA 8021B	4-21-17	4-21-17	
Gasoline	ND	5.0	NWTPH-Gx	4-21-17	4-21-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	78	63-124				

					Source	Pe	rcent	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Result	Rec	covery	Limits	RPD	Limit	Flags
DUPLICATE											
Laboratory ID:	04-20	08-01									
	ORIG	DUP									
Benzene	ND	ND	NA	NA			NA	NA	NA	30	
Toluene	ND	ND	NA	NA			NA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA			NA	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA			NA	NA	NA	30	
o-Xylene	ND	ND	NA	NA			NA	NA	NA	30	
Gasoline	ND	ND	NA	NA			NA	NA	NA	30	
Surrogate:											
Fluorobenzene						82	82	63-124			
SPIKE BLANKS											
Laboratory ID:	SB04	21S1									
	SB	SBD	SB	SBD		SB	SBD				
Benzene	0.796	0.820	1.00	1.00		80	82	70-124	3	12	
Toluene	0.818	0.843	1.00	1.00		82	84	73-119	3	12	
Ethyl Benzene	0.832	0.857	1.00	1.00		83	86	74-117	3	12	
m,p-Xylene	0.847	0.862	1.00	1.00		85	86	75-117	2	13	
o-Xylene	0.842	0.864	1.00	1.00		84	86	75-116	3	12	
Surrogate:											
Fluorobenzene						79	80	63-124			



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NWTPH-Dx

Matrix: Soil Units: mg/Kg (ppm)

	_			Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	MW-6-10.3					
Laboratory ID:	04-144-01					
Diesel Range Organics	10000	280	NWTPH-Dx	4-19-17	4-21-17	
Lube Oil Range Organics	ND	570	NWTPH-Dx	4-19-17	4-21-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl		50-150				S
Client ID:	MW-6-12.8					
Laboratory ID:	04-144-02					
Diesel Range Organics	3900	29	NWTPH-Dx	4-19-17	4-20-17	
Lube Oil Range Organics	ND	310	NWTPH-Dx	4-19-17	4-20-17	U1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	94	50-150				
Client ID:	MW-9-12.8					
Laboratory ID:	04-144-07					
Diesel Range Organics	ND	28	NWTPH-Dx	4-19-17	4-19-17	
Lube Oil Range Organics	ND	55	NWTPH-Dx	4-19-17	4-19-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	90	50-150				
Client ID:	MW-9-15.6					
Laboratory ID:	04-144-08					
Diesel Range Organics	15000	290	NWTPH-Dx	4-19-17	4-19-17	
Lube Oil Range Organics	ND	580	NWTPH-Dx	4-19-17	4-19-17	
Surrogate:	Percent Recovery	Control Limits				2
o-Terphenyl		50-150				S
Client ID:	MW-9-24.5					
Laboratory ID:	04-144-11					
Diesel Range Organics	280	31	NWTPH-Dx	4-19-17	4-19-17	
Lube Oil Range Organics	330	63	NWTPH-Dx	4-19-17	4-19-17	
Surrogate:	Percent Recovery	Control Limits		4-13-17	4-13-17	
o-Terphenyl	104	50-150				
o-reipnenyi	104	50-150				



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6

NWTPH-Dx QUALITY CONTROL

Matrix: Soil Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0419S3					
Diesel Range Organics	ND	25	NWTPH-Dx	4-19-17	4-20-17	
Lube Oil Range Organics	ND	50	NWTPH-Dx	4-19-17	4-20-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	78	50-150				

					Source	Percent	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Result	Recovery	Limits	RPD	Limit	Flags
DUPLICATE										
Laboratory ID:	04-15	56-22								
	ORIG	DUP								
Diesel Range Organics	37.3	32.1	NA	NA		NA	NA	15	NA	
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	NA	
Surrogate:										
o-Terphenyl						92 80	50-150			



Date of Report: April 25, 2017 Samples Submitted: April 14, 2017 Laboratory Reference: 1704-144 Project: 1001-002

% MOISTURE

Date Analyzed: 4-19-17

Client ID	Lab ID	% Moisture
MW-6-10.3	04-144-01	12
MW-6-12.8	04-144-02	13
MW-9-12.8	04-144-07	10
MW-9-15.6	04-144-08	14
MW-9-24.5	04-144-11	20



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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.

Ζ-

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



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OnSite Environmental Inc.		Ch	ain c) f (Cu	ıst	0	dy											Pa	age _	1	_ of _	2	
Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052		naround Re n working da			L	abo	rat	ory	Nu	mb	er:		0	4 -	-1	4	4							
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Project Number: 1001-062	Same	2	1 Day					an-up)							81B	s 8270D/	8151A							
Coleman Oil	Stand (TPH	dard (7 Days) analysis 5 D	ays)	GIS				/ SG Cle		s 8260C	ers Only)	/SIM	v-level)		icides 80	besticide	bicides 8				1664A			
Project Manager: Paul Grabau Sampled by: Jared Kerr		(other)		Number of Containers	HCID	NWTPH-Gx/BTEX	Gx	NWTPH-Dx (Acid / SG Clean-up)	8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	82A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides	Total RCRA Metals	Total MTCA Metals	etals	and grease)			g
Lab ID Sample Identification	Date Sampled	Time Sampled	Matrix	Number	NWTPH-HCID	NWTPH-	NWTPH-Gx	NWTPH-	Volatiles 8260C	Halogena	EDB EPA	Semivola (with low	PAHs 82	PCBs 8082A	Organoc	Organop	Chlorinat	Total RCI	Total MT	TCLP Metals	HEM (oil and			% Moisture
1 MW-6-10.3	4/12/17	1013	soil	2		X		X																X
2 MW-6-12.8	1	1030	1	1		X	2	X	2															X
3 MW-6-15.5		111														_								
4 MW-6-18.2		1125											_	_										
5 MW-9-6.0		1515				2							_											
6 mw-9-6.2		1523																						
7 MW-9-12,8		1537				X		X	\mathcal{D}															X
8 MW-9-15.6		1550				X		X)															8
8 MW-9-15.6 9 MW-9-18.7		1608		Τ																				
10 Mw-9-21.5	1	1655	1	I																				
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Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052 Phone: (425) 883-3881 • www.onsite-env.com	Turi (in	naround Req 1 working da	uest ys)		La	abo	rato	ory	Nui	mb	er:			04	4 -	-1	4	4							
Company: Facallon Project Number: 1001-002	. 🗌 Same	, buy .	1 Day					(dn-u							11B	8270D/SIM	151A								
Project Name: Coleman Oil Project Manager: Paul Grabau		lard (7 Days) analysis 5 Da		Number of Containers	0	BTEX		Acid / SG Clean-up)	C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)		Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Aetals	Metals		HEM (oil and grease) 1664A				
Sampled by: Jared Kerr	Date	(other) Time		nber of C	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (Volatiles 8260C	ogenated	3 EPA 801	nivolatiles h low-leve	Is 8270D/	PCBs 8082A	anochlori	anophosp	orinated A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	M (oil and				% Moisture
Lab ID Sample Identification	Sampled	Sampled	Matrix				NM		Vola	Halo	EDE	Sen (wit)	PAH	PCE	Org	Org	Chlo	Tota	Tota	TCL	HEN		_	+	
11 MW-9-24.5	4/13/17	0828	Soil	2		X	/	X	/					-										+	\otimes
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May 3, 2017

Paul Grabau Farallon Consulting, LLC 1201 Cornwall Avenue, Suite 105 Bellingham, WA 98225

Re: Analytical Data for Project 1001-002 Laboratory Reference No. 1704-160

Dear Paul:

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



Date of Report: May 3, 2017 Samples Submitted: April 15, 2017 Laboratory Reference: 1704-160 Project: 1001-002

Case Narrative

Samples were collected on April 13 and 14, 2017 and received by the laboratory on April 15, 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.

NWTPH Gx/BTEX 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.



Matrix: Soil Units: mg/kg (ppm)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-11-12.6					
Laboratory ID:	04-160-02					
Benzene	0.020	0.020	EPA 8021B	4-20-17	4-20-17	
Toluene	ND	0.055	EPA 8021B	4-20-17	4-20-17	
Ethyl Benzene	ND	0.055	EPA 8021B	4-20-17	4-20-17	
m,p-Xylene	ND	0.055	EPA 8021B	4-20-17	4-20-17	
o-Xylene	ND	0.055	EPA 8021B	4-20-17	4-20-17	
Gasoline	ND	5.5	NWTPH-Gx	4-20-17	4-20-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	82	63-124				
Client ID:	FB-11-23.4					
Laboratory ID:	04-160-07					
Benzene	ND	0.020	EPA 8021B	4-20-17	4-20-17	
Toluene	ND	0.059	EPA 8021B	4-20-17	4-20-17	
Ethyl Benzene	ND	0.059	EPA 8021B	4-20-17	4-20-17	
m,p-Xylene	ND	0.059	EPA 8021B	4-20-17	4-20-17	
o-Xylene	ND	0.059	EPA 8021B	4-20-17	4-20-17	
Gasoline	ND	5.9	NWTPH-Gx	4-20-17	4-20-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	81	63-124				
Client ID:	MW-10-15.7					
Laboratory ID:	04-160-11					
Benzene	ND	0.020	EPA 8021B	4-20-17	4-20-17	
Toluene	ND	0.061	EPA 8021B	4-20-17	4-20-17	
Ethyl Benzene	ND	0.061	EPA 8021B	4-20-17	4-20-17	
m,p-Xylene	ND	0.061	EPA 8021B	4-20-17	4-20-17	
o-Xylene	ND	0.061	EPA 8021B	4-20-17	4-20-17	
Gasoline	ND	6.1	NWTPH-Gx	4-20-17	4-20-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	90	63-124				



Matrix: Soil Units: mg/kg (ppm)

onits. mg/kg (ppm)				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	MW-10-25.1					
Laboratory ID:	04-160-12					
Benzene	0.13	0.092	EPA 8021B	4-20-17	4-21-17	
Toluene	ND	0.46	EPA 8021B	4-20-17	4-21-17	
Ethyl Benzene	4.5	0.46	EPA 8021B	4-20-17	4-21-17	
m,p-Xylene	4.4	0.46	EPA 8021B	4-20-17	4-21-17	
o-Xylene	0.74	0.46	EPA 8021B	4-20-17	4-21-17	
Gasoline	1300	46	NWTPH-Gx	4-20-17	4-21-17	0
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	74	63-124				
Client ID:	MW-11-5.8					
Laboratory ID:	04-160-14					
Benzene	ND	0.020	EPA 8021B	4-20-17	4-20-17	
Toluene	ND	0.050	EPA 8021B	4-20-17	4-20-17	
Ethyl Benzene	ND	0.050	EPA 8021B	4-20-17	4-20-17	
m,p-Xylene	ND	0.050	EPA 8021B	4-20-17	4-20-17	
o-Xylene	ND	0.050	EPA 8021B	4-20-17	4-20-17	
Gasoline	ND	5.0	NWTPH-Gx	4-20-17	4-20-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	75	63-124				
Client ID:	MW11-13.2					
Laboratory ID:	04-160-15					
Benzene	ND	0.024	EPA 8021B	4-20-17	4-21-17	
Toluene	ND	0.12	EPA 8021B	4-20-17	4-21-17	
Ethyl Benzene	1.0	0.12	EPA 8021B	4-20-17	4-21-17	
m,p-Xylene	0.57	0.12	EPA 8021B	4-20-17	4-21-17	
o-Xylene	0.40	0.12	EPA 8021B	4-20-17	4-21-17	
Gasoline	570	12	NWTPH-Gx	4-20-17	4-21-17	0
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	85	63-124				



4

Matrix: Soil Units: mg/kg (ppm)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	MW11-17.8					
Laboratory ID:	04-160-16					
Benzene	ND	0.020	EPA 8021B	4-20-17	4-20-17	
Toluene	ND	0.060	EPA 8021B	4-20-17	4-20-17	
Ethyl Benzene	ND	0.060	EPA 8021B	4-20-17	4-20-17	
m,p-Xylene	ND	0.060	EPA 8021B	4-20-17	4-20-17	
o-Xylene	ND	0.060	EPA 8021B	4-20-17	4-20-17	
Gasoline	12	6.0	NWTPH-Gx	4-20-17	4-20-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	88	63-124				



NWTPH-Gx/BTEX QUALITY CONTROL

Matrix: Soil Units: mg/kg (ppm)

······				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0420S1					
Benzene	ND	0.020	EPA 8021B	4-20-17	4-20-17	
Toluene	ND	0.050	EPA 8021B	4-20-17	4-20-17	
Ethyl Benzene	ND	0.050	EPA 8021B	4-20-17	4-20-17	
m,p-Xylene	ND	0.050	EPA 8021B	4-20-17	4-20-17	
o-Xylene	ND	0.050	EPA 8021B	4-20-17	4-20-17	
Gasoline	ND	5.0	NWTPH-Gx	4-20-17	4-20-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	80	63-124				

					Source			Recovery		RPD	
Analyte	Res	sult	Spike	Level	Result	Rec	overy	Limits	RPD	Limit	Flags
DUPLICATE											
Laboratory ID:	04-1	55-01									
	ORIG	DUP									
Benzene	ND	ND	NA	NA			NA	NA	NA	30	
Toluene	ND	ND	NA	NA			NA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA			NA	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA		NA		NA	NA	30	
o-Xylene	ND	ND	NA	NA			NA	NA	NA	30	
Gasoline	ND	ND	NA	NA		NA		NA	NA	30	
Surrogate:						INA					
Fluorobenzene						80	81	63-124			
SPIKE BLANKS											
Laboratory ID:	SB04	20S1									
	SB	SBD	SB	SBD		SB	SBD				
Benzene	0.804	0.819	1.00	1.00		80	82	70-124	2	12	
Toluene	0.824	0.842	1.00	1.00		82	84	73-119	2	12	
Ethyl Benzene	0.840	0.857	1.00	1.00		84	86	74-117	2	12	
m,p-Xylene	0.853	0.863	1.00	1.00		85	86	75-117	1	13	
o-Xylene	0.849	0.860	1.00	1.00		85	86	75-116	1	12	
Surrogate:											
Fluorobenzene						80	81	63-124			



6

NWTPH-Dx

Matrix: Soil Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-11-12.6					
Laboratory ID:	04-160-02					
Diesel Range Organics	ND	27	NWTPH-Dx	4-19-17	4-20-17	
Lube Oil Range Organics	ND	54	NWTPH-Dx	4-19-17	4-20-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	76	50-150				
Client ID:	FB-11-23.4					
Laboratory ID:	04-160-07					
Diesel Range Organics	140	28	NWTPH-Dx	4-19-17	4-19-17	
Lube Oil Range Organics	390	55	NWTPH-Dx	4-19-17	4-19-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	106	50-150				
Client ID:	MW-10-15.7					
Laboratory ID:	04-160-11					
Diesel Range Organics	ND	30	NWTPH-Dx	4-19-17	4-19-17	
Lube Oil Range Organics	ND	59	NWTPH-Dx	4-19-17	4-19-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	90	50-150				
Client ID:	MW-10-25.1					
Laboratory ID:	04-160-12					
Diesel Range Organics	1300	28	NWTPH-Dx	4-19-17	4-20-17	
Lube Oil Range Organics	ND	55	NWTPH-Dx	4-19-17	4-20-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	23	50-150				
Client ID:	MW-11-5.8					
Laboratory ID:	04-160-14					
Diesel Range Organics	ND	28	NWTPH-Dx	4-19-17	4-20-17	
Lube Oil Range Organics	ND	28 55	NWTPH-Dx NWTPH-Dx	4-19-17 4-19-17	4-20-17 4-20-17	
Surrogate:	Percent Recovery	Control Limits		4-13-17	4-20-17	
o-Terphenyl	81	50-150				
	01	50-150				
Client ID:	MW11-13.2					
Laboratory ID:	04-160-15					
		29	NWTPH-Dx	4-19-17	4-24-17	
	600	29				
Diesel Range Organics Lube Oil Range Organics Surrogate:	600 ND Percent Recovery	29 59	NWTPH-Dx	4-19-17	4-24-17	



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NWTPH-Dx

Matrix: Soil Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW11-17.8					
Laboratory ID:	04-160-16					
Diesel Range Organics	58	28	NWTPH-Dx	4-19-17	4-24-17	
Lube Oil Range Organics	ND	56	NWTPH-Dx	4-19-17	4-24-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	90	50-150				



NWTPH-Dx QUALITY CONTROL

Matrix: Soil Units: mg/Kg (ppm)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0419S3					
Diesel Range Organics	ND	25	NWTPH-Dx	4-19-17	4-20-17	
Lube Oil Range Organics	ND	50	NWTPH-Dx	4-19-17	4-20-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	78	50-150				

					Source	Pere	cent	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Result	Reco	overy	Limits	RPD	Limit	Flags
DUPLICATE											
Laboratory ID:	04-15	56-22									
	ORIG	DUP									
Lube Oil Range	ND	ND	NA	NA		N	A	NA	NA	NA	
Diesel Range Organics	37.3	32.1	NA	NA		N	A	NA	15	NA	
Surrogate:											
o-Terphenyl						92	80	50-150			



Date of Report: May 3, 2017 Samples Submitted: April 15, 2017 Laboratory Reference: 1704-160 Project: 1001-002

% MOISTURE

Date Analyzed: 4-19-17

Client ID	Lab ID	% Moisture
FB-11-12.6	04-160-02	8
FB-11-23.4	04-160-07	9
MW-10-15.7	04-160-11	15
MW-10-25.1	04-160-12	9
MW-11-5.8	04-160-14	10
MW11-13.2	04-160-15	11
MW11-17.8	04-160-16	15



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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.

Ζ-

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



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Page _] _ of _ 2_

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Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052	Turnaround Request (in working days) Laboratory Numb					er:	04-160																
Phone: (425) 883-3881 • www.onsite-env.com Company: Favallon Project Number: 1001-002 Project Name: Coleman 0:1 Project Manager: Paul Grabau Sampled by: Jared Kerr	□ Sam □ 2 Da ✓ Stan (TPH	ys [dard (7 Days) analysis 5 Da (other) Time	1 Day 3 Days ays)	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx NWTPH-Dx (Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organophosphorus Pesticides 8270D/SIM		Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A				% Moisture
Lab ID Sample Identification I FB-11-10.5	Sampled 4/13	Sampled	Matrix Soil	2	ź	ź	Z Z	>	<u> </u>		°, S	ЪЧ	e c	5 5	Ó	P	ل و	TC	포		_	+	%
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3 FB-11-15.8		1458		+		2	6	1	-	-		-			-					-		\square	
4 FB-11-16.4		1503		+				-				-		+	+					-	-	$\left \right $	_
5 FB-11-18.0		1516		-				+	+						-					-		$\left \right $	_
6 FB-20.5 FB-11-20.8		1540		\top				+				+	+	-					_	-	+		_
7 FB-11-23.4		1547		T	6	X	(X)	5												-			R
8 FB-11-25.0	1	1603		\top			Ċ						+							-	-		_
9 MW-10-5.8	4/14	0833												1									
10 MW-10-10,5	L	0850	1	t																			_
Signature	Co	ompany			[Date		Tim	ie		Com	ments	/Speci	al Inst	ructio	ns							
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OnSite Environmental Inc.		Cha	ain o	of (Cu	st	00	ly										Pa	ige _	2	_ of _	2		
Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052		rnaround Rei in working da			La	aboi	rato	ory l	Num	be	r:)4												
Company: Facallon	-	(Check One)												WI									
Project Number:	_ □ Sam		1 Day					(dn-						в	\$270D/S	51A					V			
Project Name: Coleman 0:1	- 2 Da	dard (7 Days)	3 Days					G Clean	000	2000	(VINC)	(levi		es 8081	icides 8	des 81				54A	30.			
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Sampled by: Jared Kerr		(other)		Number of Containers	-HCID	NWTPH-Gx/BTEX	-Gx	NWTPH-Dx (Acid / SG Clean-up)	8260C	naiogenated volatiles 82000	EDB EPA 8011 (Waters Only) Semivolatiles 8270D/SIM	PAHs 8270D/SIM (low-level)	382A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	etals	HEM (oil and grease) 1664A	1010		en	2
Lab ID Sample Identification	Date Sampled	Time Sampled	Matrix	Number	NWTPH-HCID	NWTPH-	NWTPH-Gx	NWTPH	Volatiles 8260C	паюдеп	Semivols	PAHs 82	PCBs 8082A	Organoc	Organop	Chlorina	Total RC	Total MT	TCLP Metals	HEM (oil	17		% Moisture	// Interes
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13 MW-10-301		1058																						
14 MW-11-5.8		1438				X	$\left(\right)$	X															X	3
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16 MW-11-17.8		1540				X	(D															Q	D
17 MW-11-22.2		1618	L																					
18 No. 2 Diescl off road	4/14	1630	Liquid	3																(X			
19 MW-8- Product	4/13	1000	Liquid	Z																(\otimes			
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April 27, 2017

Javan Ruark Farallon Consulting, LLC 975 5th Avenue NW Issaquah, WA 98027

Re: Analytical Data for Project 1001-002 Laboratory Reference No. 1704-213

Dear Javan:

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



Date of Report: April 27, 2017 Samples Submitted: April 22, 2017 Laboratory Reference: 1704-213 Project: 1001-002

Case Narrative

Samples were collected on April 20 and 21, 2017 and received by the laboratory on April 22, 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.



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

Matrix: Water Units: ug/L (ppb)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	MW-5-042017					
Laboratory ID:	04-213-01					
Benzene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
Toluene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
Ethyl Benzene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
m,p-Xylene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
o-Xylene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
Gasoline	ND	100	NWTPH-Gx	4-27-17	4-27-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	93	61-118				
Client ID:	MW-4-042017					
Laboratory ID:	04-213-02					
Benzene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
Toluene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
Ethyl Benzene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
m,p-Xylene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
o-Xylene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
Gasoline	ND	100	NWTPH-Gx	4-27-17	4-27-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	93	61-118				
Client ID:	MW-3-042017					
Laboratory ID:	04-213-03					
Benzene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
Toluene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
Ethyl Benzene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
m,p-Xylene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
o-Xylene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
Gasoline	ND	100	NWTPH-Gx	4-25-17	4-25-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	95	61-118				



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Matrix: Water Units: ug/L (ppb)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	MW-2-042017					
Laboratory ID:	04-213-04					
Benzene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
Toluene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
Ethyl Benzene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
m,p-Xylene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
o-Xylene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
Gasoline	ND	100	NWTPH-Gx	4-25-17	4-25-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	98	61-118				
Client ID:	MW-7-042017					
Laboratory ID:	04-213-05					
Benzene	3.2	1.0	EPA 8021B	4-25-17	4-25-17	
Toluene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
Ethyl Benzene	15	1.0	EPA 8021B	4-25-17	4-25-17	
m,p-Xylene	7.7	1.0	EPA 8021B	4-25-17	4-25-17	
o-Xylene	3.7	1.0	EPA 8021B	4-25-17	4-25-17	
Gasoline	1100	100	NWTPH-Gx	4-25-17	4-25-17	0
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	89	61-118				
Client ID:	MW-6-042017					
Laboratory ID:	04-213-06					
Benzene	5.0	4.0	EPA 8021B	4-25-17	4-25-17	
Toluene	ND	4.0	EPA 8021B	4-25-17	4-25-17	
Ethyl Benzene	6.2	4.0	EPA 8021B	4-25-17	4-25-17	
m,p-Xylene	23	4.0	EPA 8021B	4-25-17	4-25-17	
o-Xylene	14	4.0	EPA 8021B	4-25-17	4-25-17	
Gasoline	880	400	NWTPH-Gx	4-25-17	4-25-17	0
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	91	61-118				



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Matrix: Water Units: ug/L (ppb)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	MW-10-042117					
Laboratory ID:	04-213-07					
Benzene	3.4	1.0	EPA 8021B	4-25-17	4-25-17	
Toluene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
Ethyl Benzene	11	1.0	EPA 8021B	4-25-17	4-25-17	
m,p-Xylene	7.8	1.0	EPA 8021B	4-25-17	4-25-17	
o-Xylene	4.7	1.0	EPA 8021B	4-25-17	4-25-17	
Gasoline	1900	100	NWTPH-Gx	4-25-17	4-25-17	0
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	90	61-118				
Client ID:	MW-11-042117					
Laboratory ID:	04-213-08					
Benzene	28	1.0	EPA 8021B	4-25-17	4-25-17	
Toluene	4.1	1.0	EPA 8021B	4-25-17	4-25-17	
Ethyl Benzene	8.2	1.0	EPA 8021B	4-25-17	4-25-17	
m,p-Xylene	20	1.0	EPA 8021B	4-25-17	4-25-17	
o-Xylene	6.1	1.0	EPA 8021B	4-25-17	4-25-17	
Gasoline	1400	100	NWTPH-Gx	4-25-17	4-25-17	0
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	97	61-118				
Client ID:	MW-1-042117					
Laboratory ID:	04-213-10					
Benzene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
Toluene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
Ethyl Benzene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
m,p-Xylene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
o-Xylene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
Gasoline	210	100	NWTPH-Gx	4-25-17	4-25-17	0
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	98	61-118				



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5

Matrix: Water Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	BH-2-042117		Method	Flepaleu	Analyzeu	i lags
Laboratory ID:	04-213-11					
Benzene	<u> </u>	1.0	EPA 8021B	4-25-17	4-25-17	
Toluene	3.3	1.0	EPA 8021B	4-25-17	4-25-17	
Ethyl Benzene	12	1.0	EPA 8021B	4-25-17	4-25-17	
m,p-Xylene	22	1.0	EPA 8021B	4-25-17	4-25-17	
o-Xylene	17	1.0	EPA 8021B	4-25-17	4-25-17	
Gasoline	1500	100	NWTPH-Gx	4-25-17	4-25-17	0
Surrogate:	Percent Recovery	Control Limits	INWITTI-GA	4-23-17	4-23-17	0
Fluorobenzene	96	61-118				
Fluorobenzene	90	01-110				
Client ID:	Baker Tank-042117					
Laboratory ID:	04-213-12					
Benzene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
Toluene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
Ethyl Benzene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
m,p-Xylene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
o-Xylene	3.2	1.0	EPA 8021B	4-25-17	4-25-17	
Gasoline	240	100	NWTPH-Gx	4-25-17	4-25-17	0
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	90	61-118				
Client ID:	BH-1-042117					
Laboratory ID:	04-213-13					
Benzene	15	1.0	EPA 8021B	4-25-17	4-25-17	
Toluene	2.8	1.0	EPA 8021B	4-25-17	4-25-17	
Ethyl Benzene	8.3	1.0	EPA 8021B	4-25-17	4-25-17	
m,p-Xylene	10	1.0	EPA 8021B	4-25-17	4-25-17	
o-Xylene	8.5	1.0	EPA 8021B	4-25-17	4-25-17	
Gasoline	820	100	NWTPH-Gx	4-25-17	4-25-17	0
Surrogate:	Percent Recovery	Control Limits		. 20	. 20	
Fluorobenzene	95	61-118				



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

Matrix: Water Units: ug/L (ppb)

onno: ug/2 (ppo)				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	RW-1-042117					
Laboratory ID:	04-213-14					
Benzene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
Toluene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
Ethyl Benzene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
m,p-Xylene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
o-Xylene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
Gasoline	ND	100	NWTPH-Gx	4-25-17	4-25-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	90	61-118				
Client ID:	BH-3-042117					
Laboratory ID:	04-213-15					
Benzene	1.8	1.0	EPA 8021B	4-25-17	4-25-17	
Toluene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
Ethyl Benzene	5.4	1.0	EPA 8021B	4-25-17	4-25-17	
m,p-Xylene	5.4	1.0	EPA 8021B	4-25-17	4-25-17	
o-Xylene	2.8	1.0	EPA 8021B	4-25-17	4-25-17	
Gasoline	1800	100	NWTPH-Gx	4-25-17	4-25-17	0
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	95	61-118				


NWTPH-Gx/BTEX METHOD BLANK QUALITY CONTROL

Matrix: Water Units: ug/L (ppb)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0425W1					
Benzene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
Toluene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
Ethyl Benzene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
m,p-Xylene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
o-Xylene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
Gasoline	ND	100	NWTPH-Gx	4-25-17	4-25-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	95	61-118				
Laboratory ID:	MB0425W2					
Benzene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
Toluene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
Ethyl Benzene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
m,p-Xylene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
o-Xylene	ND	1.0	EPA 8021B	4-25-17	4-25-17	
Gasoline	ND	100	NWTPH-Gx	4-25-17	4-25-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	94	61-118				
Laboratory ID:	MB0427W1					
Gasoline	ND	100	NWTPH-Gx	4-27-17	4-27-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	94	61-118				



NWTPH-Gx/BTEX QUALITY CONTROL

Matrix: Water Units: ug/L (ppb)

					Source	Per	cent	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Result	Rec	overy	Limits	RPD	Limit	Flage
DUPLICATE											
Laboratory ID:	04-21	3-01									
	ORIG	DUP									
Benzene	ND	ND	NA	NA		Ν	IA	NA	NA	30	
Toluene	ND	ND	NA	NA		Ν	IA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA		Ν	IA	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA		Ν	IA	NA	NA	30	
o-Xylene	ND	ND	NA	NA		Ν	IA	NA	NA	30	
Gasoline	ND	ND	NA	NA		Ν	IA	NA	NA	30	
Surrogate:											
Fluorobenzene						93	90	61-118			
Laboratory ID:	04-21	13-02									
	ORIG	DUP									
Benzene	ND	ND	NA	NA		Ν	IA	NA	NA	30	
Toluene	ND	ND	NA	NA		Ν	IA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA		Ν	IA	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA		Ν	IA	NA	NA	30	
o-Xylene	ND	ND	NA	NA		Ν	IA	NA	NA	30	
Gasoline	ND	ND	NA	NA		Ν	JA	NA	ND	30	
Surrogate:											
Fluorobenzene						93	97	61-118			
MATRIX SPIKES											
Laboratory ID:	04-21	3-02									
	MS	MSD	MS	MSD		MS	MSD				
Benzene	46.7	48.3	50.0	50.0	ND	93	97	80-120	3	13	
Toluene	47.3	49.4	50.0	50.0	ND	95	99	81-115	4	14	
Ethyl Benzene	48.3	50.5	50.0	50.0	ND	97	101	81-114	4	12	
m,p-Xylene	47.6	50.1	50.0	50.0	ND	95	100	81-114	5	13	
o-Xylene	47.6	50.1	50.0	50.0	ND	95	100	81-113	5	11	
Surrogate:											
Fluorobenzene						96	98	61-118			



Matrix: Water Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-5-042017			•	-	
Laboratory ID:	04-213-01					
Diesel Range Organics	ND	0.26	NWTPH-Dx	4-24-17	4-24-17	
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	4-24-17	4-24-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	81	50-150				
Client ID:	MW-4-042017					
Laboratory ID:	04-213-02					
Diesel Range Organics	ND	0.26	NWTPH-Dx	4-24-17	4-24-17	
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	4-24-17	4-24-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	93	50-150				
Client ID:	MW-3-042017					
Laboratory ID:	04-213-03					
Diesel Range Organics	ND	0.26	NWTPH-Dx	4-24-17	4-24-17	
ube Oil Range Organics	ND	0.41	NWTPH-Dx	4-24-17	4-24-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	95	50-150				
Client ID:	MW-2-042017					
Laboratory ID:	04-213-04					
Diesel Range Organics	ND	0.26	NWTPH-Dx	4-24-17	4-24-17	
Lube Oil Range Organics	ND	0.20	NWTPH-Dx NWTPH-Dx	4-24-17 4-24-17		
	Percent Recovery	Control Limits		4-24-17	4-24-17	
Surrogate:	•					
o-Terphenyl	100	50-150				
Client ID:	MW-7-042017					
_aboratory ID:	04-213-05					
Diesel Range Organics	1.3	0.26	NWTPH-Dx	4-24-17	4-24-17	
_ube Oil	0.42	0.41	NWTPH-Dx	4-24-17	4-24-17	N1
Surrogate:	Percent Recovery	Control Limits				
p-Terphenyl	90	50-150				
Client ID:	MW/_6_042047					
	MW-6-042017					
Laboratory ID:	04-213-06	0.05		4 0 4 4 7	4.04.47	
Diesel Range Organics	1.8	0.25	NWTPH-Dx	4-24-17	4-24-17	N LA
Lube Oil	0.48	0.41	NWTPH-Dx	4-24-17	4-24-17	N1
Surrogate: o-Terphenyl	Percent Recovery	Control Limits 50-150				
o Lornhonul	95					



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Matrix:	Water
Units:	mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-10-042117					
Laboratory ID:	04-213-07					
Diesel Range Organics	3.8	0.26	NWTPH-Dx	4-25-17	4-25-17	
Lube Oil	0.73	0.41	NWTPH-Dx	4-25-17	4-25-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	98	50-150				
Client ID:	MW-11-042117					
Laboratory ID:	04-213-08					
Diesel Range Organics	1.7	0.26	NWTPH-Dx	4-25-17	4-25-17	
Lube Oil	1.0	0.41	NWTPH-Dx	4-25-17	4-25-17	N1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	90	50-150				
Client ID:	MW-1-042117					
Laboratory ID:	04-213-10					
Diesel Range Organics	0.73	0.26	NWTPH-Dx	4-25-17	4-25-17	
Lube Oil	0.51	0.41	NWTPH-Dx	4-25-17	4-25-17	
Surrogate:	Percent Recovery	Control Limits		0	0	
o-Terphenyl	107	50-150				
Client ID:	BH-2-042117					
Laboratory ID:	04-213-11					
Diesel Range Organics	2.6	0.26	NWTPH-Dx	4-25-17	4-25-17	
Lube Oil	0.63	0.20	NWTPH-Dx	4-25-17	4-25-17	N1
Surrogate:	Percent Recovery	Control Limits		4-23-17	4-23-17	INI
o-Terphenyl	113	50-150				
o-reipnenyi	113	50-750				
Client ID:	Baker Tank-042117					
Laboratory ID:	04-213-12	0.00		4.05.47	4 05 47	
Diesel Range Organics	1.3	0.26	NWTPH-Dx	4-25-17	4-25-17	N LA
Lube Oil	0.55	0.41	NWTPH-Dx	4-25-17	4-25-17	N1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	99	50-150				
Client ID:	BH-1-042117					
Laboratory ID:	04-213-13					
Diesel Range Organics	1.9	0.26	NWTPH-Dx	4-25-17	4-25-17	
				1 05 13	4 95 45	N 14
Lube Oil	0.97	0.41	NWTPH-Dx	4-25-17	4-25-17	N1
Lube Oil Surrogate:	0.97 Percent Recovery	0.41 Control Limits	NWTPH-Dx	4-25-17	4-25-17	N1



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Matrix: Water Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	RW-1-042117			•		
Laboratory ID:	04-213-14					
Diesel Range Organics	0.84	0.26	NWTPH-Dx	4-25-17	4-25-17	
Lube Oil	0.54	0.41	NWTPH-Dx	4-25-17	4-25-17	N1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	125	50-150				
Client ID:	BH-3-042117					
Laboratory ID:	04-213-15					
Diesel Range Organics	2.4	0.26	NWTPH-Dx	4-25-17	4-27-17	
Lube Oil	0.66	0.41	NWTPH-Dx	4-25-17	4-27-17	
Surrogate:	Percent Recovery	Control Limits				
— · ·						

o-Terphenyl 111 50-150

NWTPH-Dx QUALITY CONTROL

Matrix: Water Units: mg/L (ppm)

onits. mg/L (ppm)							D	ate	Date		
Analyte	F	Result	PC	ΣL	Methe	bd	Pre	bared	Analyzed	Fla	igs
METHOD BLANK											
Laboratory ID:	MB	0424W1									
Diesel Range Organics		ND	-	25	NWTPF	l-Dx	4-2	4-17	4-24-17		
Lube Oil Range Organics		ND	0.4	40	NWTPF	l-Dx	4-2	4-17	4-24-17		
Surrogate:	Perce	nt Recovery	Contro	l Limits							
o-Terphenyl		85	50-	150							
Laboratory ID:	MB	0425W1									
Diesel Range Organics		ND	0.2	25	NWTPF	l-Dx	4-2	5-17	4-25-17		
Lube Oil Range Organics		ND	0.4	40	NWTPF	l-Dx	4-2	5-17	4-25-17		
Surrogate:	Perce	nt Recovery	Contro	l Limits							
o-Terphenyl		89	50-	150							
					_						
					Source	Perc	ent	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Result	Reco	very	Limits	RPD	Limit	Flags
DUPLICATE											
Laboratory ID:	04-15	56-05									
	ORIG	DUP									
Diesel Range Organics	0.608	0.517	NA	NA		N	A	NA	16	NA	
Lube Oil Range	ND	ND	NA	NA		N	A	NA	NA	NA	
Surrogate:											
o-Terphenyl						85	82	50-150			
DUPLICATE											
Laboratory ID:	04-2	13-07									
	ORIG	DUP									
Diesel Range Organics	3.78	3.22	NA	NA		N	A	NA	16	NA	
Lube Oil Range Organics	0.731	0.802	NA	NA		N	•	NA	9	NA	

Surrogate:

o-Terphenyl

98 97 50-150



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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.

Ζ-

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



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OnSite Environmental Inc.

Chain of Custody

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Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052		naround Req n working da			La	bor	ato	ry I	Nun	nbe	er:						0	4	-2	21	3			
Phone: (425) 883-3881 • www.onsite-env.com Company: Farallon Project Number: I 001-002 Project Name: Cdeman 0;1 Project Manager: Tavan Rvark Sampled by: Tared Kerr	. □ Sam □ 2 Da • ₩ Stan (TPH	2007000 8 00	1 Day	er of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	H-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	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	Aetals	il and grease) 1664A				ture
Lab ID Sample Identification	Date Sampled	Time Sampled	Matrix	Number	NWTP	NWTPI	NWTPH-Gx	NWTPI	Volatile	Haloge	EDB EI	Semivo (with lo	PAHs 8	PCBs 8082A	Organo	Chlorin	Total R	Total M	TCLP Metals	HEM (oil and				% Moisture
MW-5-042017	4/20	1331	water	5		X		X																
2 MW-4-042017 3 MW-3-042017 4 MW-2-042017	j	1533				X		X																
3 MW-3-042017		1707				X	X	<																
4 MW-2-042017		1810				X		<																
5 MW-7-042017 6 MW-6-042017		1900				X	>	Ċ																
6 MW-6-042017	1	1945				X		X																
7 MW-10-042017	4/21	0907				X		X																
8 MW-11-042017)	1017				X		X																
9 MW-9-042/17		1240			-	X	->	<	_	- 14	04	D-	DD	1										
10 MW-1-042117	, and an	1357	L	I	>	K	7	X																
Signature	Co	ompany	1			Date			Time			Com	nents	s/Speci	al Insti	uction	ns	Director	Sec.					
Relinquished		Faral	161			4/2	22/		_	42	_													
Received hu		R	Het	ĩ	4	f(z)	zli	7	112	42	2													
Relinquished Received					_			_			_													
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Reviewed/Date		Reviewed/Dat	te								-			grams v								 s (EDF	Ds)	_

OnSite Environmental Inc.

Chain of Custody

		Pa	ge	2	of	2
_	-	-		-		

Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052	Tur (i		La	abo	rato	ory N	lum	ıbe	er:				(0 4	1 -	2	1:	3						
Phone: (425) 883-3881 • www.onsite-env.com Company: Facallon Project Number: IOOI-OO2 Project Name: Coleman 0,1 Project Manager: Javan Ruark Sampled by: Sared Kear		ys dard (7 Davs) analysis 5 Da (other)	🗌 1 Day 🗙 3 Days	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)	semuoratiles 52/DU/SIM (with low-level PAHs) PAHs 8270D/SIM ((ow-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
Lab ID Sample Identification	Date Sampled	Time Sampled	Matrix	-	MN	MN	MN	MN	Vola	Halo	EDB	with PAH	PCB	Orga	Orga	Chlo	Tota	Tota	TCLI	HEN	_			W %
11 BH-2-042117	4/21	1450	water	5		X		X	_													_	_	
12 Baker Tank-042117		1550		4		X		X	_	_										_			_	
13 BH-1-042117		1709		\square		X		X		_											_		_	
14 RW-1-042117		1820		<u> </u>		X	_	X		_	_	_									_	_	_	
15 BH-3-042117		1910				X		X	_	_			-									_	_	
16 MW-8-042117	-	2005	1	1	-	X		X	HO	LD) - D	3				_						_	_	
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Reviewed/Date		Reviewed/Da	te								C	Chromat	ogran	ns wit	h fina	l repo	ort 🗌	Eleo	ctronic	c Data	. Delive	rables	(EDDs) 🗆

File : X:\BTEX\HOPE\DATA\H170425\0425008.D
Operator :
Acquired : 25 Apr 2017 14:09 using AcqMethod 170327B.M
Instrument : Hope
Sample Name: 04-213-01c
Misc Info :
Vial Number: 8



File : X:\BTEX\HOPE\DATA\H170425\0425009.D
Operator :
Acquired : 25 Apr 2017 14:43 using AcqMethod 170327B.M
Instrument : Hope
Sample Name: 04-213-02c
Misc Info :
Vial Number: 9



File	:	X:\BTEX\HOPE\DATA\H170425\0425025.D
Operator	:	
Acquired	:	26 Apr 2017 00:30 using AcqMethod 170327B.M
Instrument	:	Норе
Sample Name	:	04-213-05c
Misc Info	:	
Vial Number	:	25



File : X:\BTEX\DARYL\DATA\D170425\0425010.D
Operator :
Acquired : 25 Apr 2017 18:35 using AcqMethod 170203B.M
Instrument : Daryl
Sample Name: 04-213-06c 1:4
Misc Info :
Vial Number: 10



File :	: X:\BTEX\HOPE\DATA\H170425\0425021.D
Operator :	
Acquired :	: 25 Apr 2017 22:16 using AcqMethod 170327B.M
Instrument :	: Hope
Sample Name:	: 04-213-07c
Misc Info :	
Vial Number:	: 21



File : X:\BTEX\HOPE\DATA\H170425\0425017.D
Operator :
Acquired : 25 Apr 2017 20:03 using AcqMethod 170327B.M
Instrument : Hope
Sample Name: 04-213-08c
Misc Info :
Vial Number: 17



File :	X:\BTEX\HOPE\DATA\H170425\0425018.D
Operator :	
Acquired :	25 Apr 2017 20:36 using AcqMethod 170327B.M
Instrument :	Норе
Sample Name:	04-213-10c
Misc Info :	
Vial Number:	18



File : X:\BTEX\HOPE\DATA\H170425\0425022.D Operator : Acquired : 25 Apr 2017 22:49 using AcqMethod 170327B.M Instrument : Hope Sample Name: 04-213-11c Misc Info : Vial Number: 22



File : X:\BTEX\HOPE\DATA\H170425\0425019.D
Operator :
Acquired : 25 Apr 2017 21:09 using AcqMethod 170327B.M
Instrument : Hope
Sample Name: 04-213-12c
Misc Info :
Vial Number: 19



File : X:\BTEX\HOPE\DATA\H170425\0425023.D Operator : Acquired : 25 Apr 2017 23:23 using AcqMethod 170327B.M Instrument : Hope Sample Name: 04-213-13c Misc Info : Vial Number: 23



File : X:\BTEX\HOPE\DATA\H170425\0425024.D
Operator :
Acquired : 25 Apr 2017 23:56 using AcqMethod 170327B.M
Instrument : Hope
Sample Name: 04-213-15c
Misc Info :
Vial Number: 24



```
File :X:\DIESELS\TERI\DATA\T170424\0424-T13.D
Operator : ZT
Acquired : 25 Apr 2017 0:07 using AcqMethod T161216F.M
Instrument : Teri
Sample Name: 04-213-05
Misc Info :
Vial Number: 13
```



File :X:\DIESELS\TERI\DATA\T170424\0424-T14.D
Operator : ZT
Acquired : 25 Apr 2017 0:50 using AcqMethod T161216F.M
Instrument : Teri
Sample Name: 04-213-06
Misc Info :
Vial Number: 14



File :X:\DIESELS\TERI\DATA\T170425.SEC\0425-T61.D Operator : ZT Acquired : 25 Apr 2017 16:16 using AcqMethod T161216F.M Instrument : Teri Sample Name: 04-213-07 Misc Info : Vial Number: 61



File :X:\DIESELS\TERI\DATA\T170425\0425-T10.D Operator : ZT Acquired : 25 Apr 2017 15:33 using AcqMethod T161216F.M Instrument : Teri Sample Name: 04-213-08 Misc Info : Vial Number: 10



File :X:\DIESELS\VIGO\DATA\V170425.SEC\0425-V62.D
Operator :
Acquired : 25 Apr 2017 16:10 using AcqMethod V170412F.M
Instrument : Vigo
Sample Name: 04-213-10
Misc Info :
Vial Number: 62



File :X:\DIESELS\VIGO\DATA\V170425\0425-V12.D Operator : Acquired : 25 Apr 2017 16:10 using AcqMethod V170412F.M Instrument : Vigo Sample Name: 04-213-11 Misc Info : Vial Number: 12



```
File :X:\DIESELS\TERI\DATA\T170425.SEC\0425-T62.D
Operator : ZT
Acquired : 25 Apr 2017 16:59 using AcqMethod T161216F.M
Instrument : Teri
Sample Name: 04-213-12
Misc Info :
Vial Number: 62
```



```
File :X:\DIESELS\TERI\DATA\T170425\0425-T12.D
Operator : ZT
Acquired : 25 Apr 2017 16:59 using AcqMethod T161216F.M
Instrument : Teri
Sample Name: 04-213-13
Misc Info :
Vial Number: 12
```



File :X:\DIESELS\VIGO\DATA\V170425\0425-V13.D
Operator :
Acquired : 25 Apr 2017 16:50 using AcqMethod V170412F.M
Instrument : Vigo
Sample Name: 04-213-14
Misc Info :
Vial Number: 13



File :X:\DIESELS\TERI\DATA\T170427.SEC\0427-T55.D Operator : ZT Acquired : 27 Apr 2017 11:00 using AcqMethod T161216F.M Instrument : Teri Sample Name: 04-213-15 RR Misc Info : Vial Number: 55





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

October 10, 2017

Javan Ruark Farallon Consulting, LLC 975 5th Avenue NW Issaquah, WA 98027

Re: Analytical Data for Project 1001-002 Laboratory Reference No. 1709-386

Dear Javan:

Enclosed are the analytical results and associated quality control data for samples submitted on September 30, 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



Date of Report: October 10, 2017 Samples Submitted: September 30, 2017 Laboratory Reference: 1709-386 Project: 1001-002

Case Narrative

Samples were collected on September 28 and 29, 2017 and received by the laboratory on September 30, 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.



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

Matrix: Water Units: ug/L (ppb)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	MW-5-092817					
Laboratory ID:	09-386-01					
Benzene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
Toluene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
Ethyl Benzene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
m,p-Xylene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
o-Xylene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
Gasoline	ND	100	NWTPH-Gx	10-2-17	10-2-17	
Surrogate:	-					
Fluorobenzene	brobenzene 93 61-118					
Client ID:	ient ID: MW-3-092817					
Laboratory ID:	atory ID: 09-386-02					
Benzene	ne ND 1.0		EPA 8021B	10-2-17	10-2-17	
Toluene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
Ethyl Benzene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
m,p-Xylene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
o-Xylene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
Gasoline	ND	100	NWTPH-Gx	10-2-17	10-2-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	95	61-118				
Client ID:	MW-4-092817					
Laboratory ID:	09-386-03					
Benzene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
Toluene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
Ethyl Benzene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
m,p-Xylene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
o-Xylene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
Gasoline	ND 100		NWTPH-Gx	10-2-17	10-2-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	110	61-118				



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

Matrix: Water Units: ug/L (ppb)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	MW-7-092817					
Laboratory ID:	09-386-04					
Benzene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
Toluene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
Ethyl Benzene	ND			10-2-17	10-2-17	
m,p-Xylene	ND			10-2-17	10-2-17	
o-Xylene	ND 1.0		EPA 8021B	10-2-17	10-2-17	
Gasoline	ND 100		NWTPH-Gx	10-2-17	10-2-17	
Surrogate:						
Fluorobenzene	90 61-118					
Client ID:						
Laboratory ID:	09-386-05					
Benzene			EPA 8021B	10-2-17	10-2-17	
Toluene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
Ethyl Benzene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
m,p-Xylene	4.3	1.0	EPA 8021B	10-2-17	10-2-17	
o-Xylene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
Gasoline	530	100	NWTPH-Gx	10-2-17	10-2-17	0
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	88	61-118				
Client ID:	MW-1-092917					
Laboratory ID:	09-386-06					
Benzene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
Toluene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
Ethyl Benzene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
m,p-Xylene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
o-Xylene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
Gasoline	200 100		NWTPH-Gx	10-2-17	10-2-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	113	61-118				



4

Matrix: Water Units: ug/L (ppb)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	BH-3-092917					
Laboratory ID:	09-386-07					
Benzene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
Toluene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
Ethyl Benzene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
m,p-Xylene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
o-Xylene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
Gasoline	150	100	NWTPH-Gx	10-2-17	10-2-17	0
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	robenzene 93 61-118					
Client ID:						
Laboratory ID:						
Benzene	ND 1.0		EPA 8021B	10-2-17	10-2-17	
Toluene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
Ethyl Benzene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
m,p-Xylene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
o-Xylene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
Gasoline	ND	100	NWTPH-Gx	10-2-17	10-2-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	93	61-118				
Client ID:	MW-10-092917					
Laboratory ID:	09-386-09					
Benzene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
Toluene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
Ethyl Benzene	13	1.0	EPA 8021B	10-2-17	10-2-17	
m,p-Xylene	18	1.0	EPA 8021B	10-2-17	10-2-17	
o-Xylene	8.7	1.0	EPA 8021B	10-2-17	10-2-17	
Gasoline	1900 100		NWTPH-Gx	10-2-17	10-2-17	0
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	111	61-118				



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5

Matrix: Water Units: ug/L (ppb)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	MW-11-092917					
Laboratory ID:	09-386-10					
Benzene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
Toluene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
Ethyl Benzene	1.9	1.0	EPA 8021B	10-2-17	10-2-17	
m,p-Xylene	11	1.0	EPA 8021B	10-2-17	10-2-17	
o-Xylene	1.5	1.0	EPA 8021B	10-2-17	10-2-17	
Gasoline	1000	100	NWTPH-Gx	10-2-17	10-2-17	0
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	nzene 93 61-118					
Client ID:						
Laboratory ID:	09-386-11					
Benzene			EPA 8021B	10-2-17	10-2-17	
Toluene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
Ethyl Benzene	4.1	1.0	EPA 8021B	10-2-17	10-2-17	
m,p-Xylene	22	1.0	EPA 8021B	10-2-17	10-2-17	
o-Xylene	5.2	1.0	EPA 8021B	10-2-17	10-2-17	
Gasoline	1300	100	NWTPH-Gx	10-2-17	10-2-17	0
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	91	61-118				
Client ID:	MW-9-092917					
Laboratory ID:	09-386-12					
Benzene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
Toluene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
Ethyl Benzene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
m,p-Xylene	1.5	1.0	EPA 8021B	10-2-17	10-2-17	
o-Xylene	ND	1.0	EPA 8021B	10-2-17	10-2-17	
Gasoline	500	100	NWTPH-Gx	10-2-17	10-2-17	0
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	90	61-118				



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NWTPH-Gx/BTEX QUALITY CONTROL

Matrix: Water Units: ug/L (ppb)

	Date	Date				
d Flags	Analyzed	Prepared	Method	PQL	Result	Analyte
						METHOD BLANK
					MB1002W1	Laboratory ID:
7	10-2-17	10-2-17	EPA 8021B	1.0	ND	Benzene
7	10-2-17	10-2-17	EPA 8021B	1.0	ND	Toluene
7	10-2-17	10-2-17	EPA 8021B	1.0	ND	Ethyl Benzene
7	10-2-17	10-2-17	EPA 8021B	1.0	ND	m,p-Xylene
7	10-2-17	10-2-17	EPA 8021B	1.0	ND	o-Xylene
7	10-2-17	10-2-17	NWTPH-Gx	100	ND	Gasoline
				Control Limits	Percent Recovery	Surrogate:
				61-118	112	Fluorobenzene
					MB1002W2	Laboratory ID:
7	10-2-17	10-2-17	EPA 8021B	1.0	ND	Benzene
7	10-2-17	10-2-17	EPA 8021B	1.0	ND	Toluene
7	10-2-17	10-2-17	EPA 8021B	1.0	ND	Ethyl Benzene
7	10-2-17	10-2-17	EPA 8021B	1.0	ND	m,p-Xylene
7	10-2-17	10-2-17	EPA 8021B	1.0	ND	o-Xylene
7	10-2-17	10-2-17	NWTPH-Gx	100	ND	Gasoline
				Control Limits	Percent Recovery	Surrogate:
				61-118	115	Fluorobenzene
7	10-2-17	10-2-17	EPA 8021B	1.0 100 Control Limits	ND ND Percent Recovery	m,p-Xylene o-Xylene Gasoline Surrogate:



NWTPH-Gx/BTEX QUALITY CONTROL

Matrix: Water Units: ug/L (ppb)

				Source Perc		cent	Recovery		RPD		
Analyte	Res	sult	Spike	Level	Result	Reco	overy	Limits	RPD	Limit	Flags
DUPLICATE											
Laboratory ID:	09-37	76-12									
	ORIG	DUP									
Benzene	ND	ND	NA	NA		N	А	NA	NA	30	
Toluene	ND	ND	NA	NA		N	A	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA		N	A	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA		N	A	NA	NA	30	
o-Xylene	ND	ND	NA	NA		N	A	NA	NA	30	
Gasoline	ND	ND	NA	NA		Ν	A	NA	NA	30	
Surrogate:											
Fluorobenzene						107	97	61-118			
Laboratory ID:	09-37	76-13									
	ORIG	DUP									
Benzene	ND	ND	NA	NA		N	A	NA	NA	30	
Toluene	ND	ND	NA	NA		N	A	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA		N	A	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA		N	A	NA	NA	30	
o-Xylene	ND	ND	NA	NA		N	A	NA	NA	30	
Gasoline	ND	ND	NA	NA		N	A	NA	NA	30	
Surrogate:											
Fluorobenzene						96	93	61-118			
SPIKE BLANKS											
Laboratory ID:	SB10	02W1									
	SB	SBD	SB	SBD		SB	SBD				
Benzene	54.2	56.4	50.0	50.0		108	113	79-120	4	11	
Toluene	54.1	56.4	50.0	50.0		108	113	79-118	4	12	
Ethyl Benzene	53.6	55.9	50.0	50.0		107	112	80-117	4	12	
m,p-Xylene	53.4	55.5	50.0	50.0		107	111	80-117	4	12	
o-Xylene	53.5	55.3	50.0	50.0		107	111	80-116	3	11	
Surrogate:											
Fluorobenzene						96	85	61-118			



8

Matrix: Water Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW-5-092817				-	
Laboratory ID:	09-386-01					
Diesel Range Organics	ND	0.26	NWTPH-Dx	10-6-17	10-8-17	
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	10-6-17	10-8-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	89	50-150				
Client ID:	MW-3-092817					
Laboratory ID:	poratory ID: 09-386-02					
Diesel Range Organics	ND	0.26	NWTPH-Dx	10-6-17	10-8-17	
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	10-6-17	10-8-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	97	50-150				
Client ID:						
Laboratory ID:	09-386-03					
Diesel Range Organics	ND	0.26	NWTPH-Dx	10-6-17	10-8-17	
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	10-6-17	10-8-17	
Surrogate:	Percent Recovery	Control Limits		10 0 11	10011	
o-Terphenyl	92	50-150				
	NW 7 000047					
Client ID:	MW-7-092817					
Laboratory ID:	09-386-04	0.00		40.0.47	40.0.47	
Diesel Range Organics	0.52	0.26	NWTPH-Dx	10-6-17	10-8-17	114
Lube Oil Range Organics	ND	0.47	NWTPH-Dx	10-6-17	10-8-17	U1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	96	50-150				
Client ID:	MW-6-092817					
Laboratory ID:	09-386-05					
Diesel Range Organics	0.76	0.26	NWTPH-Dx	10-6-17	10-8-17	
Lube Oil	0.43	0.41	NWTPH-Dx	10-6-17	10-8-17	N1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	94	50-150				
Client ID:	MW-1-092917					
	MW-1-092917 09-386-06					
Laboratory ID:	09-386-06	0.26	NWTPH-Dx	10-6-17	10-8-17	
Laboratory ID: Diesel Range Organics	09-386-06 0.41	0.26 0.41	NWTPH-Dx NWTPH-Dx	10-6-17 10-6-17	10-8-17 10-8-17	
Client ID: Laboratory ID: Diesel Range Organics Lube Oil Range Organics Surrogate:	09-386-06	0.26 0.41 Control Limits	NWTPH-Dx NWTPH-Dx	10-6-17 10-6-17	10-8-17 10-8-17	



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Matrix: Water Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	BH-3-092917	-				- 5-
Laboratory ID:	09-386-07					
Diesel Range Organics	1.2	0.26	NWTPH-Dx	10-6-17	10-8-17	
Lube Oil	0.55	0.41	NWTPH-Dx	10-6-17	10-8-17	N1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	95	50-150				
Client ID:	RW-1-092917					
Laboratory ID:	09-386-08					
Diesel Range Organics	0.36	0.26	NWTPH-Dx	10-6-17	10-8-17	
Lube Oil	0.44	0.41	NWTPH-Dx	10-6-17	10-8-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	89	50-150				
Client ID:	MW-10-092917					
Laboratory ID:	09-386-09					
Diesel Range Organics	16	0.26	NWTPH-Dx	10-6-17	10-8-17	
Lube Oil	1.3	0.42	NWTPH-Dx	10-6-17	10-8-17	N1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	102	50-150				
Client ID:	MW-11-092917					
Laboratory ID:	09-386-10					
Diesel Range Organics	3.1	0.26	NWTPH-Dx	10-6-17	10-8-17	
Lube Oil	0.72	0.20	NWTPH-Dx	10-6-17	10-8-17	N1
Surrogate:	Percent Recovery	Control Limits	NWITH DX	10017	10017	111
o-Terphenyl	99	50-150				
Client ID:	MW-8-092917					
Laboratory ID:	09-386-11					
Diesel Range Organics	2.1	0.26	NWTPH-Dx	10-6-17	10-8-17	
Lube Oil	0.69	0.41	NWTPH-Dx	10-6-17	10-8-17	N1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	97	50-150				
Client ID:	MW-9-092917					
Laboratory ID:	09-386-12					
Diesel Range Organics	1.2	0.26	NWTPH-Dx	10-6-17	10-8-17	
Dieser Range Organius		-				
	0.67	0.41	NWTPH-Dx	10-6-17	10-8-17	N1
Lube Oil Surrogate:		0.41 Control Limits	NWTPH-Dx	10-6-17	10-8-17	N1



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NWTPH-Dx QUALITY CONTROL

Matrix: Water Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1006W1					
Diesel Range Organics	ND	0.25	NWTPH-Dx	10-6-17	10-8-17	
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	10-6-17	10-8-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	93	50-150				

					Source	Percer	nt	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Result	Recove	ery	Limits	RPD	Limit	Flags
DUPLICATE											
Laboratory ID:	09-38	36-01									
	ORIG	DUP									
Diesel Range	ND	ND	NA	NA		NA		NA	NA	NA	
Lube Oil Range	ND	ND	NA	NA		NA		NA	NA	NA	
Surrogate:											
o-Terphenyl						89	89	50-150			
Laboratory ID:	09-38	36-09									
	ORIG	DUP									
Diesel Range Organics	15.7	9.42	NA	NA		NA		NA	50	NA	
Lube Oil	1.26	1.10	NA	NA		NA		NA	14	NA	N1
Surrogate:											
o-Terphenyl						102	98	50-150			





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.

Ζ-

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



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	Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052	Tur (i	naround Req n working da	uest ys)		L	abo	orat	ory	Nun	nbe	er:					()9) -	3	8	6		_		
Company Project N	tarallon		(Check One) e Day [1 Day													WIS/OC									
Project N	1001-002	2 Day	ys [3 Days					Acid / SG Clean-up)			0		_	1000		les 82//									
Project N	Coleman Oil		dard (7 Days) analysis 5 Da	ays)	ers				/ SG O	0960		ers Only	/SIM	w-level	o colorio		Pesticid	incide) 1664A				
Sampled	Javan Ruark		(other)		Number of Containers	HCID	NWTPH-Gx/BTEX	GX		Volatiles 8260C Halocensted Volatiles 82600		EUB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	70D/SIM (Io	162A blovino Dovi		Organopnosphorus Pesticides 82/UU/SIM	ופת ארות נופ	Total RCRA Metals	Total MTCA Metals	etals	HEM (oil and grease) 1664A				Ire
Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number	NWTPH-HCID	NWTPH-	NWTPH-GX	NWTPH-Dx (Volatiles 8260C		EUB EN	Semivola (with low	PAHs 82	PUBS 8082A	Cigai loc	Organop		Total RC	Total MT	TCLP Metals	HEM (oil				% Moisture
1	MW-5-092817	9/28	1430	water	5		X		X																	
2	MW-3-092-817	1	1600	.	1		X		X																	
3	MW-4-092817		1707				X		X																	
4	MW-7-092817		1830				X		X																	
5	MW-6-092817	1	1942				X		X																	
6	MW-1-092917	9/29	0930				X		Х																	
7	BH-3-092917	1	1055				X		Х																	
8	RW-1-092917		1237				X		Х																	
9	MW-10-092917	-	1615				X		X																	
10	MW-11-092917	1	1737	1	4		X		Х																	
	Signature	C	ompany		2		Date	1	-	Time			Com	ment	s/Spe	cial l	nstruc	tion	s							
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ah	OnSite Chain of Custody														Page _ 2_ of _ 2_												
Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052			Turnaround Request (in working days)				Laboratory Number: 09-386																				
Company: Project Number: Project Name: Project Manager: Sampled by:	Phone: (425) 883-3881 · www.onsite-env.com Farallon 1001-002 Colemon Oil) 1 Day 3 Days) ays)	Number of Containers		TEX		Acid / SG Clean-up)				Semivolatiles 8270D/SIM (with low-level PAHs)	(JD/SIM (Jow-level)	32A	Organochlorine Pesticides 8081B	WIS/Q	erbicides 8151A		Aetals		HEM (oil and grease) 1664A					0
Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number	NWTPH-HCID	NWTPH-	NWTPH-GX	NWTPH-Dx (Volatiles 8260C	Halogena	EDB EPA	Semivola (with low-	PAHs 827	PCBs 8082A	Jrganocr	Organopł	Chlorinat	fotal RCF	fotal MTC	TCLP Metals	HEM (oil a					% Moisture
11		9/29	1844	water	5		X	-	X					_			0	0			-	-					3
12	MW-8-092917 MW-9-092917	9/22	1955	water	5	-	X		X																	+	
	Signature		ompany				Date			Time			Com	ment	s/Spe	cial	Instru	ction	S								
Relinquished Received	n) Farallon					9/30/17 9/2/17			1120																		
Relinquished Received Relinquished																											
Received											_	_	Data	Paol	200	Sto	ndar	4 🗆	Low			Louis		1			_
Reviewed/Date			Reviewed/Date										Data Package: Standard Level III Level IV Chromatograms with final report Electronic Data Deliverables (EDDs)												-		