

**2021 ANNUAL HYDRAULIC CONTROL AND
CONTAINMENT SYSTEM OPERATIONS REPORT**

**BNSF FORMER MAINTENANCE AND FUELING FACILITY
SKYKOMISH, WASHINGTON
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ACRONYMS AND ABBREVIATIONS

AECOM	AECOM Environment
BNSF	BNSF Railway Company
DRO	total petroleum hydrocarbons as diesel-range organics
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
Farallon	Farallon Consulting, L.L.C.
GAC	granulated activated carbon
HCC	Hydraulic Control and Containment
LNAPL	light non-aqueous phase liquid
NWTPH-Dx	the sum of diesel- and oil-range organics analyzed using Ecology Method NWTPH-Dx
NPDES	National Pollutant Discharge Elimination System
µg/l	micrograms per liter
O&M	operation and maintenance
ORO	total petroleum hydrocarbons as oil-range organics
OWS	oil-water separator
RL	remediation level
TPH	total petroleum hydrocarbons



EXECUTIVE SUMMARY

The 2021 Annual Hydraulic Control and Containment (HCC) System Operations Report describes the HCC system operation and the performance monitoring conducted during 2021 at the BNSF Railway Company (BNSF) Former Maintenance and Fueling Facility in Skykomish, Washington (herein referred to as the Site). The cleanup objective for the HCC system is to prevent light non-aqueous phase liquid (LNAPL) and groundwater with total petroleum hydrocarbon concentrations exceeding the Site-specific groundwater remediation level (RL) of 477 micrograms per liter ($\mu\text{g}/\text{l}$) from migrating from the BNSF railyard to the Skykomish River. Following completion of a 24-month passive operation pilot study, active operation of the HCC system was resumed in January 2021. Approximately 7.45 million gallons of groundwater was extracted and treated in 2021. No measurable LNAPL was recovered by the recovery well oil-skimmer storage tanks in 2021, as measurable LNAPL (greater than 0.01 foot thick) was not present.

The HCC system operated in conformance with National Pollutant Discharge Elimination System Permit No. WA0032123. The reported concentrations of lead, arsenic, and total petroleum hydrocarbons (quantified as NWTPH-Dx, defined herein as the sum of total petroleum hydrocarbons as diesel- and oil-range organics) in HCC water treatment system effluent samples were less than the respective discharge limits specified in National Pollutant Discharge Elimination System Permit No. WA0032123.

Liquid level gauging and groundwater sampling were performed to assess HCC system performance in March, June, September, and December 2021. North of the HCC system barrier wall, groundwater is inferred to generally flow toward the west and roughly parallel to the Skykomish River. South of the barrier wall, groundwater is inferred to generally flow toward the west-northwest. The inferred groundwater flow directions in 2021 were consistent with previous years following construction of the barrier wall. Based on groundwater elevations and previous HCC system pilot testing near the flow-through treatment gates in the barrier wall, groundwater is inferred to flow from south to north through three of the four gates. Previous pilot testing has shown that the Center Gate is blocked to groundwater flow due to biofouling.

LNAPL was observed in monitoring wells and piezometers up-gradient of and adjacent to the HCC system barrier wall, between the West Gate and Center Gate, which is consistent with previous years; measured LNAPL observations ranged from a light trace (i.e., less than 0.01 foot thick and thin coating of LNAPL and/or a sheen observed on the oil-water interface probe) to 1.89 feet thick. Over the lifecycle of the data record, LNAPL observations and thickness measurements in monitoring wells and piezometers up-gradient of and adjacent to the HCC system barrier wall have exhibited an overall decreasing or stable trend.

Reported concentrations of NWTPH-Dx in groundwater samples collected from monitoring wells immediately north of the HCC system barrier wall were less than the Site-specific groundwater RL of 477 $\mu\text{g}/\text{l}$ and absent of sheen, with the exception of the samples collected in March, September, and December 2021 from gate well GW-3, which is immediately north of the blocked,



biofouled Center Gate, and monitoring well 2A-W-41, which is proximate to and down-gradient of gate well GW-3. Results from gate well GW-3 and monitoring well 2A-W-41 were compared with silica gel/non-silica gel sample preparation methods and confirmed to be biased high due to biogenic and petroleum metabolite interference. Results of all samples analyzed following silica gel cleanup were less than the RL.



1.0 INTRODUCTION

The 2021 Annual Hydraulic Control and Containment (HCC) System Operations Report describes the HCC system operation and performance monitoring conducted during 2021 at the BNSF Railway Company (BNSF) Former Maintenance and Fueling Facility in Skykomish, Washington (herein referred to as the Site). The Site includes BNSF property and public and private properties within the Town of Skykomish in King County, Washington, and it encompasses an area of approximately 40 acres (Figure 1).

The HCC system was designed to meet the cleanup objective, as defined in the Cleanup Action Plan prepared by the Washington State Department of Ecology (Ecology), of preventing light nonaqueous-phase liquid (LNAPL) and groundwater with total petroleum hydrocarbon concentrations (quantified as the sum of diesel- and oil-range organics analyzed using Ecology Method NWTPH-Dx [NWTPH-Dx]) from exceeding the Site-specific remediation level (RL) of 477 micrograms per liter ($\mu\text{g/l}$) from migrating from the BNSF railyard to the Skykomish River (Ecology 2007). NWTPH-Dx is defined herein as the sum of total petroleum hydrocarbons as diesel-range organics (DRO) and as oil-range organics (ORO), based on analysis using Ecology Method NWTPH-Dx.

Site-wide groundwater monitoring and sampling events were conducted in March and September 2021 in accordance with the Long-Term Monitoring Plan (Farallon 2020). Quarterly HCC System groundwater monitoring was conducted in March, June, September, and December 2021 in accordance with the 2011 Operation and Maintenance Manual (AECOM 2011) and 2014 Addendum (Farallon 2014a).

1.1 BACKGROUND

The HCC system is part of an integrated and comprehensive cleanup action and is operated and maintained in accordance with the requirements of the Cleanup Action Plan (Ecology 2007). The HCC system design is documented in the Special Design Report (ENSR Corporation 2008b) and the 2008 Construction Plans and Specifications (ENSR Corporation 2008a). The HCC system was constructed as described in the 2008 As-Built Completion Report (AECOM 2009) and the 2009 As-Built Completion Report (AECOM 2010b).

A 24-month HCC system passive operation pilot study was completed in December 2020 in accordance with the 2018 Pilot Study Work Plan (Farallon 2018b) and emails from Ecology regarding extending the Pilot Study through 2020 (Ecology 2020a and 2020b). Active operation of the HCC system resumed on January 4, 2021 in accordance with an October 30, 2020 email from Ecology (Ecology 2020d).



1.2 REPORT ORGANIZATION

The remainder of this report is organized as follows:

- **Section 2, HCC System Description and Performance Monitoring**, provides a general description of the HCC system and a summary of the performance monitoring activities conducted during 2021, including the monitoring parameters, schedule, and results;
- **Section 3, Conclusions**, presents conclusions based on the HCC system operations and groundwater monitoring activities;
- **Section 4, Proposed Passive Operations and Monitoring**, describes HCC system operation, maintenance, and monitoring activities planned for 2022; and
- **Section 5, References**, provides a list of the documents used in preparing this report.



2.0 HCC SYSTEM DESCRIPTION AND PERFORMANCE MONITORING

This section provides a general description of the HCC system and a summary of the performance monitoring activities conducted during 2021, including the monitoring parameters, schedule, and results. HCC system performance monitoring is conducted to facilitate system performance, assess performance relative to the cleanup objective, and document compliance with the discharge limits specified in National Pollutant Discharge Elimination System (NPDES) Permit No. WA0032123 (NPDES Permit). The primary components of the HCC system are summarized in Section 2.1. The Passive Operation Pilot Study of the HCC System is summarized in Section 2.2. The HCC system performance monitoring activities and results are described in Sections 2.3 through 2.5.

2.1 HCC SYSTEM DESCRIPTION

A detailed description of the HCC system, and figures showing the HCC system layout and process and instrumentation diagrams, are provided in the HCC Operation and Maintenance (O&M) Manual (AECOM 2011).

The HCC system comprises the following primary components:

- A 1,183-foot-long groundwater barrier wall and interception trench with four flow-through treatment gates, which contain oil-water separators (OWS) and a mixture of granular activated carbon (GAC) and pea gravel media, along the northern boundary of the BNSF railyard;
- Nine groundwater extraction/LNAPL recovery wells;
- Fourteen piezometers;
- Twenty sentry wells;
- Eleven HCC system monitoring wells;
- Two groundwater injection wells;
- A water treatment system, which includes aboveground and underground water conveyance piping, an OWS, a hydrogen peroxide disinfectant system, sand filters, GAC vessels, a pH adjustment system, and influent and effluent water storage tanks; and
- A computer-based programmable logic controller that collects system operational data and is used to monitor, control, and adjust system operating parameters.

The groundwater injection wells were used intermittently in 2009 and 2010 to inject treated groundwater into the BNSF railyard subsurface. In September 2010, the discharge of treated groundwater to the injection wells ceased, and the discharge at one of the injection wells was rerouted to an up-gradient OWS chamber in the East Gate of the barrier wall. The discharge of treated groundwater to the East Gate OWS chamber was discontinued at the end of 2012. Since the end of 2012, all groundwater treated by the HCC system has been discharged to the municipal



storm sewer system (per the NPDES Permit), which discharges to the Skykomish River (Farallon 2018a).

2.2 HCC SYSTEM OPERATIONS MONITORING

HCC system operations monitoring was conducted in accordance with the HCC O&M Manual (AECOM 2011) and 2014 Addendum (Farallon 2014). HCC system operations monitoring consists of monitoring the following operational parameters and conducting inspections and sampling at the frequencies noted:

- System run-time (daily).
- Groundwater extraction and treated water discharge flow (daily).
- Influent equalization tank water level (daily).
- Effluent equalization tank water level (daily).
- Backwash-water holding tank water level (daily).
- Visual inspection of the effluent equalization tank for sheen (bimonthly).
- Visual inspection of the recovery wells and recovery well oil-skimmer storage tanks for accumulation of LNAPL (bimonthly).
- Water treatment system influent monitoring, which included sampling of primary and secondary GAC vessel influent (bimonthly). (Note: Secondary GAC vessel influent samples were collected to assess petroleum hydrocarbon loading of primary GAC vessel and are not discussed further in this report.)
- Water treatment system effluent monitoring (bimonthly):
 - Sampling of treatment system effluent and analysis by Ecology Method NWTPH-Dx; monitoring of treatment system effluent pH; and sampling of treatment system effluent and analysis for total lead and total arsenic by U.S. Environmental Protection Agency (EPA) Method 200.8.
- Groundwater elevations in piezometers and recovery wells (recorded daily by in-well pressure transducers and gauged by field personnel bimonthly).

2.3 HCC SYSTEM GROUNDWATER MONITORING

The performance of the HCC system is assessed by monitoring the following wells, piezometers, and barrier wall gate OWS chamber vaults (Figures 1 and 2):

- The 11 HCC system monitoring wells, which include:
 - Gate wells GW-1 through GW-4, installed immediately north of the barrier wall gates;



- End wells EW-1 and EW-2A, installed near the western and eastern ends of the barrier wall, respectively; and
- Monitoring wells 5-W-43, 2A-W-40, 2A-W-41, 1B-W-23, and 2A-W-42, installed along Railroad Avenue on the northern (down-gradient) side of the barrier wall;
- The 20 sentry wells (well groups S1 through S4, containing four to six wells each), installed in the GAC and pea gravel chambers of the barrier wall treatment gates;
- The six piezometer pairs (piezometers PZ-2S/PZ-2N through PZ-7S/PZ-7N), installed along the barrier wall and the two piezometers (piezometers PZ-1 and PZ-8) installed at the western and eastern ends of the barrier wall;
- The nine groundwater extraction/LNAPL recovery wells (wells RW-01 through RW-09), installed on the southern (up-gradient) side of the barrier wall; and
- The OWS chamber vaults in each vault of each barrier wall gate (Figure 2).

The HCC system monitoring wells are gauged and sampled quarterly in March, June, September, and December. The sentry wells are sampled semiannually in March and September. The piezometers, recovery wells, and barrier wall gate OWS chambers are gauged quarterly in March, June, September, and December for the presence or absence of LNAPL or sheen and are not sampled.

2.4 RESULTS OF HCC SYSTEM OPERATIONS MONITORING

The following sections summarize the results of the 2021 HCC system operations monitoring.

2.4.1 System Run-Time

The HCC water treatment system operated for approximately 8,290 hours (345.4 days) in 2021, which equates to an annual operational efficiency of approximately 95 percent. System operations were interrupted for short periods due to power outages or to perform maintenance, change out GAC and/or sand filter media, optimize system parameters, or make repairs. The system was shut down for a total of approximately 470 hours (20 days).

2.4.2 Groundwater Extraction and Treated Water Discharge Flow

Approximately 7.45 million gallons of groundwater was extracted and treated in 2021. All HCC system groundwater extracted and treated in 2021 was pumped from recovery wells RW-02, RW-03, RW-04, RW-06, RW-07, and RW-08. HCC system discharge flow rate data are summarized in Table 1.

2.4.3 Tank Water Levels

Influent equalization tank, effluent equalization tank, and backwash-water holding tank water levels were maintained within normal operating ranges.



2.4.4 Visual Inspection of Effluent Equalization Tank for Sheen

Water treatment system effluent water was monitored for the presence of sheen by visually observing the water in the effluent equalization tank, either during Site visits or via a remote video camera (i.e., web cam). No sheen was observed on the water in the effluent equalization tank.

2.4.5 Visual Inspection of Recovery Wells and Recovery Well Oil-Skimmer Tanks for Accumulation of LNAPL

Recovery wells and recovery well oil-skimmer storage tanks were inspected weekly for accumulation of LNAPL. The recovery well oil-skimmer storage tanks were pumped out as required (see Section 2.4.8, Recovered Light Nonaqueous-Phase Liquid Volumes).

2.4.6 Water Treatment System Influent Monitoring

Water treatment system influent was sampled bimonthly at the inlet to the primary GAC vessel and analyzed for NWTPH-Dx. Reported influent NWTPH-Dx concentrations ranged from 166 to 4,050 µg/l; the average reported influent NWTPH-Dx concentration was 755 µg/l. Influent NWTPH-Dx data are summarized in Table 2; laboratory analytical reports are provided in Appendix A.

2.4.7 Water Treatment System Effluent Monitoring

Water treatment system effluent was sampled bimonthly at the outlet of the secondary GAC vessel. The effluent samples were analyzed for NWTPH-Dx; one effluent sample collected during each month also was analyzed for total lead and total arsenic. In addition, the pH of the treatment system effluent was monitored weekly using a digital pH meter. The results of the effluent monitoring are summarized below:

- **NWTPH-Dx:** Reported NWTPH-Dx concentrations in the weekly treatment system effluent samples were less than the NPDES Permit discharge limit of 208 µg/l. Effluent NWTPH-Dx data are summarized in Table 2; laboratory analytical reports are provided in Appendix A.
- **pH:** Measured effluent pH ranged from 7.30 to 8.50 standard units; the average measured effluent pH was 7.66. The NPDES Permit discharge limit for pH is 6.5 to 8.5. Effluent pH data are summarized in Table 3.
- **Lead and Arsenic:** Reported total lead and total arsenic concentrations in the treatment system effluent samples were less than the respective NPDES Permit discharge limits of 17.5 and 360 µg/l. Effluent lead and arsenic data are summarized in Table 4; laboratory analytical reports are provided in Appendix A.

2.4.8 Recovered Light Nonaqueous-Phase Liquid Volumes

The belt-type oil skimmers in recovery wells RW-04, RW-07, and RW-08 were operated with approximately 2-minute run-times four to six times per day. No measurable LNAPL was recovered



by the recovery well oil skimmers in 2021, and no measurable LNAPL (greater than 0.01 foot thick) was observed in the oil skimmer storage tanks.

2.4.9 Differential Groundwater Elevations Across Barrier Wall

Six piezometer pairs installed along the barrier wall (piezometer pairs PZ-2S/PZ-2N through PZ-7S/PZ-7N) and two single piezometers, one at each end of the barrier wall (piezometers PZ-1 and PZ-8) (Figure 1), are used to monitor groundwater elevations adjacent to the barrier wall and near the flow-through treatment gates. One piezometer of each piezometer pair is on the southern (up-gradient) side of the barrier wall (designated PZ-2S, PZ-3S, etc.), and the other piezometer is on the northern (down-gradient) side of the barrier wall (designated PZ-2N, PZ-3N, etc.). Pressure transducers are installed within the piezometers and record groundwater elevation daily.

Daily groundwater elevation differentials across the barrier wall at each piezometer pair location were calculated by subtracting the groundwater elevation measured in the northern piezometer from the groundwater elevation measured in the southern piezometer. Barrier wall groundwater elevation data for the 2021 reporting period, including calculated elevation differentials at piezometer pairs, are presented in Table 5.

The largest differential elevations between piezometer pairs occurred during winter and (generally between November and January) during periods of higher groundwater elevations, and smaller differential elevations between piezometer pairs occurred during summer months (August and September). The differential elevations recorded during periods of high groundwater indicate that groundwater mounding is occurring on the southern (up-gradient) side of the barrier wall, which is expected and consistent with historical data. The differential groundwater elevation data demonstrate that the barrier wall effectively directed groundwater flow through the East Gate, West Gate, and Far West Gate during 2021. Previous pilot testing has shown that the Center Gate is blocked to groundwater flow due to the presence of iron bacteria biofouling in the up-gradient portions of the GAC and pea gravel media in this gate (Farallon 2017).

2.4.10 Service Interruptions

HCC system operations were occasionally interrupted for short periods during 2021 due to utility power outages or to perform maintenance, change out GAC and/or sand filter media, optimize system parameters, or make repairs. One service interruption exceeded 48 hours.

On October 26, 2021, the HCC system shut down with approval from Ecology's Toxic Cleanup Program (Ecology 2021), pending investigation of a reported exceedance of the total petroleum hydrocarbons (TPH) discharge limit of 208 $\mu\text{g/l}$ in the effluent sample collected on October 14, 2021, and a routine change-out of the GAC in the treatment system. The system was restarted on November 4, 2021, following change-out of the GAC in the treatment system.

The effluent sample was reanalyzed using the same extraction as the original analysis. TPH was detected at a concentration of 187 $\mu\text{g/l}$ for the reanalyzed effluent sample collected on October 14, 2021, which is less than the discharge limit of 208 $\mu\text{g/l}$. Based on the result from the reanalysis



and subsequent weekly sampling performed in October 2021, no exceedance of the discharge limit for TPH occurred.

2.5 RESULTS OF HCC SYSTEM GROUNDWATER MONITORING

The results of Site-wide groundwater monitoring conducted in 2021 are presented in the 2021 Annual Long-Term Monitoring Report (Farallon 2021). The results of groundwater monitoring conducted in 2021 to assess HCC system performance are summarized below.

North of the HCC system barrier wall, groundwater flows toward the west and roughly parallel to the Skykomish River. South of the barrier wall, groundwater flows toward the west and northwest. The groundwater flow directions were determined in 2021 to be consistent with previous years after construction of the barrier wall. Based on groundwater elevations and previous HCC system pilot testing near the flow-through treatment gates in the barrier wall, groundwater flows from south to north through three of the four gates. Groundwater elevation contours and interpreted groundwater flow directions derived from the Site-wide groundwater monitoring data for March and September 2021 are shown on Figures 3 and 5. Groundwater elevation contours were not prepared for the June and December 2021 monitoring events, as a limited subset of monitoring wells are gauged for those events and do not provide an accurate representation of groundwater flow at the Site.

The groundwater monitoring results for the locations used to monitor HCC system performance are summarized below. Groundwater field parameter data are summarized in Table 6. Groundwater analytical results for DRO, ORO, and NWTPH-Dx (i.e., the sum of DRO and ORO) are summarized in Table 7. Groundwater elevation and LNAPL thickness data from the quarterly and semiannual monitoring events are summarized in Table 8. Figures 3 through 6 show reported groundwater NWTPH-Dx concentrations and measured LNAPL thicknesses at the monitoring locations used to assess HCC system performance, as described above in Section 2.3.

2.5.1 Sentry Wells

The 20 sentry wells (wells S1-AU, S2-BD, etc.) were sampled during the March and September 2021 semiannual groundwater monitoring events. Sentry well pair S1-BD and S1-BU were also sampled in April 2021 to investigate an anomalous reported detection of NWTPH-Dx in the down-gradient sentry well S1-BD sample collected in March 2021.

NWTPH-Dx was not detected exceeding the laboratory method reporting limit in 18 of 20 wells sampled. The two sentry wells (S1-BD and S2-BU) with reported detections during 2021 are described below:

- NWTPH-Dx was detected at a concentration of 233 $\mu\text{g/l}$ in the March 2021 groundwater sample collected from down-gradient sentry well S1-BD in the west vault of the West Gate (Table 7; Figure 3). NWTPH-Dx was not detected exceeding the laboratory method reporting limits in S1-BD when the well was re-sampled in April 2021. NWTPH-Dx was not detected exceeding reporting limits at the corresponding up-gradient well S1-BU



during either the March or April 2021 sampling events. The reported detection of NWTPH-Dx in the March 2021 sample from S1-BD is attributed to a labeling error in the field.

- NWTPH-Dx was detected at a concentration of 306 $\mu\text{g/l}$ in the September 2021 groundwater sample collected from up-gradient sentry well S2-BU in the east vault of the West Gate (Table 7; Figure 3). S2-BU is in the up-gradient GAC and pea gravel chamber within its vault. All up-gradient sentry wells are paired with a down-gradient sentry well located in the down-gradient GAC and pea gravel chamber in the same vault to evaluate the effectiveness of groundwater treatment. NWTPH-Dx was not detected exceeding laboratory method reporting limits at the corresponding down-gradient well S2-BD during the September 2021 sampling event.

2.5.2 Gate Wells

All four gate wells (GW-1 through GW-4) were gauged and sampled during the groundwater monitoring events in March, June, September, and December 2021. Reported NWTPH-Dx concentrations in groundwater samples collected from the gate wells were less than the RL, with the exception of the samples collected in March, September, and December 2021 from gate well GW-3, which had reported concentrations of 770 $\mu\text{g/l}$, 640 $\mu\text{g/l}$, and 1,020 $\mu\text{g/l}$, respectively (Table 7; Figures, 3, 5, and 6). The groundwater samples from gate well GW-3 were also analyzed by a silica gel cleanup preparation process, with reported concentrations of 113 $\mu\text{g/l}$, 402 $\mu\text{g/l}$, and 351 $\mu\text{g/l}$, respectively. LNAPL or sheen was not observed in any of the gate wells (Table 8; Figures 3 through 6).

Gate well GW-3 is immediately north and down-gradient of the Center Gate, where substantial biofouling by iron bacteria has been observed with some degree of seasonality. Between June 2014 and December 2018, NWTPH-Dx concentrations ranged between 63 and 1,020 $\mu\text{g/l}$. Historically (between April 2009 and June 2014), NWTPH-Dx concentrations fluctuated over a smaller range of 34 to 184 $\mu\text{g/l}$. Increased concentration ranges in gate well GW-3 since June 2014 are the result of interference from biogenic substances and petroleum metabolites, as evidenced by split sampling with and without silica gel cleanup. NWTPH-Dx concentrations in all the silica gel-prepared samples were significantly less than the NWTPH-Dx concentrations in the non-silica gel-prepared samples, as shown on the trend plot included as Appendix B. These data demonstrate that the NWTPH-Dx results for the non-silica gel-prepared samples are biased high due to biogenic and petroleum metabolite interferences originating from the biofouled gate.

2.5.3 End Wells

The two end wells (wells EW-1 and EW-2A) were gauged and sampled during the March, June, September, and December 2021 groundwater monitoring events. NWTPH-Dx was not detected at concentrations exceeding the laboratory method reporting limit in groundwater samples collected from the end wells, with the exception of EW-1 in the December 2021 sampling event (Table 7, Figures 3 through 6). NWTPH-Dx was detected at a concentration of 94 $\mu\text{g/l}$ in the sample collected from EW-1 in December 2021, which is less than the RL of 477 $\mu\text{g/l}$. LNAPL and sheen were not observed in either of the end wells (Table 8).



2.5.4 Monitoring Wells 5-W-43, 2A-W-40, 2A-W-41, 1B-W-23, and 2A-W-42

Reported NWTPH-Dx concentrations in groundwater samples collected from these wells were less than the RL, with the exception of the samples collected in March, September, and December 2021 from monitoring well 2A-W-41, which had reported concentrations of 1,130 µg/l, 780 µg/l, and 810 µg/l, respectively (Table 7; Figures, 3, 5, and 6). The groundwater samples from gate well GW-3 were also analyzed following a silica gel cleanup preparation process, with reported concentrations of 216 µg/l, 143 µg/l, and non-detect at the laboratory method reporting limit of 57 µg/l, respectively. LNAPL or sheen was not observed in any of the gate wells (Table 8; Figures 3 through 6). LNAPL and sheen were not observed in any of these monitoring wells.

Between September 2013 and December 2018, reported NWTPH-Dx detections in monitoring well 2A-W-41 fluctuated over a range of 56 to 1,100 µg/l, with three values exceeding the RL. Historically (between December 2009 and September 2013), NWTPH-Dx results from monitoring well 2A-W-41 fluctuated over a smaller range of 26 to 175 µg/l. Monitoring well 2A-W-41 is west and down-gradient of gate well GW-3 and the Center Gate, and is also affected by biogenic substances and petroleum metabolites, similar to gate well GW-3. NWTPH-Dx concentrations in all the silica gel-prepared samples were significantly less than the NWTPH-Dx concentrations in the non-silica gel-prepared samples, as shown on the trend plot included as Appendix B. These data demonstrate that the NWTPH-Dx results for the non-silica gel-prepared samples are biased high due to biogenic and petroleum metabolite interferences originating from the biofouled gate.

2.5.5 Piezometers

The 14 piezometers were gauged for the presence or absence of LNAPL and sheen during the March, June, September, and December 2021 groundwater monitoring events. Measurable LNAPL was observed in piezometers PZ-5S and PZ-6S on the southern (up-gradient) side of the barrier wall (Table 8):

- **PZ-5S.** Measurable LNAPL was recorded in March (1.89 feet), June (0.50 foot), September (0.55 foot), and December 2021 (0.18 foot). The measured LNAPL thicknesses in 2021 were an overall slight decrease in LNAPL thickness compared with observations from 2020. LNAPL was not observed in the down-gradient piezometer (PZ-5N) paired with PZ-5S.
- **PZ-6S.** A heavy trace of LNAPL was observed in March 2021, and measurable LNAPL was recorded in June (0.05 foot), September (0.20 foot), and December 2021 (0.08 foot). LNAPL observations at piezometer PZ-6S are consistent with observations from 2020. LNAPL was not observed in the down-gradient piezometer (PZ-6N) paired with PZ-6S.

LNAPL thickness trend plots for HCC system monitoring locations that historically have contained measurable LNAPL are included in Appendix C.

2.5.6 Recovery Wells

The nine recovery wells were gauged for the presence or absence of LNAPL and sheen during the March, June, September, and December 2021 groundwater monitoring events. There was no



measurable LNAPL in recovery wells RW-01 through RW-09, and LNAPL was observed only as a light to heavy trace during 2021 (Table 8). Measurable LNAPL was observed in recovery wells RW-07 and RW-08 (Table 8):

- **RW-07.** A light trace of LNAPL was observed in March and June 2021, and measurable LNAPL was recorded in September (0.08 foot) and December 2021 (0.25 foot). LNAPL thicknesses at RW-07 in 2021 are increased compared with observations from 2020, but are generally consistent with observations from 2016, 2017, and 2018.
- **RW-08.** A light to heavy trace of LNAPL was observed in March, June, and December 2021, and measurable LNAPL was recorded in September 2021 (0.14 foot). LNAPL observations at RW-08 are generally consistent with observations from 2020.

There was no measurable LNAPL in recovery wells RW-01 through RW-06, and RW-09, and LNAPL was observed only as a light to heavy trace at those locations during 2021 (Table 8).

LNAPL thickness trend plots for HCC system monitoring locations that historically have contained measurable LNAPL are included in Appendix C.

2.5.7 Barrier Wall Gate Oil-Water Separator Chambers

Each flow-through treatment gate in the HCC system barrier wall consists of two or three concrete vaults. Each gate contains an OWS chamber on the up-gradient side of the gate (as shown on Figure 7, which shows typical construction of a treatment gate). During the March, June, September, and December 2021 monitoring events, the gate OWS vaults were monitored for LNAPL and sheen (Table 8).

A light trace of LNAPL was observed in June and December 2021 in the south (up-gradient) chamber of the east vault OWS of the West Gate (location WG-EV-South Chamber). No measurable thickness of LNAPL requiring removal was present in any of the gate vault OWS chambers in 2021.



3.0 CONCLUSIONS AND RECOMMENDATIONS

The groundwater monitoring results from 2021 and previous years indicate that the HCC system, particularly the HCC system barrier wall, continues to be effective in meeting the cleanup objective. Therefore, passive operation of the HCC system would be effective in meeting the cleanup objective for the Site.

In 2021, measured LNAPL thicknesses decreased in piezometer PZ-5S, were generally stable in piezometer PZ-6S, increased in recovery well RW-07, and were generally stable in recovery well RW-08 compared with observations from 2020. Over the lifecycle of the data record, measured LNAPL thicknesses in these piezometers and wells have exhibited an overall decreasing or stable trend, with minor variability (Appendix C). Piezometers and recovery wells will continue to be monitored for LNAPL in 2022.

Groundwater samples collected from gate well GW-3 and monitoring well 2A-W-41 will continue to be analyzed both with and without the silica gel cleanup preparation process to gain additional perspective on biogenic and petroleum metabolite interferences affecting the analytical results from these wells. Gate well GW-3 and monitoring well 2A-W-41 will continue to be monitored in 2022.

Based on the groundwater monitoring results from 2021 and the results of the Passive Operation Pilot Study completed between January 2019 and December 2020 (Farallon 2018b), it is recommended that the HCC system be operated in a passive mode with groundwater monitoring conducted in accordance with the Long-Term Monitoring Plan. The Long-Term Monitoring Plan specifies that locations down-gradient of the HCC system gates and barrier wall (gate wells GW-1 through GW-4 and monitoring well 5-W-43) be gauged and sampled for NWTPH-Dx semiannually for 2 years and annually thereafter. No changes to the Long-Term Monitoring Plan would be required to implement passive operation of the HCC system. Changes to the O&M Manual would be necessary to address passive operations, and O&M tasks specific to passive operation.

BNSF and Ecology are reviewing Consent Decree and Cleanup Action Plan amendments to include operation of the system as needed, such that free product and groundwater exceeding the 477 µg/L NWTPH-Dx remediation level does not leave the BNSF railyard facility property boundary or exit any functional gates of the containment system. Alterations of the system will require (1) approval of passive operation from Ecology and (2) a demonstration illustrating the proposed operation will meet the remediation level as described above. The demonstration must be supported by analytical laboratory data. In addition, as part of ongoing HCC system operations, testing and changeout of GAC media in the West Gate will be performed in 2022 as described below.



3.1 PROPOSED GAC MEDIA TESTING AND CHANGEOUT

The GAC media in the West Gate will be sampled in the first quarter of 2022 and replaced if necessary. If the results of the GAC media analysis indicate a remaining lifespan greater than 1 year, replacement may be postponed, and the GAC media will be sampled and analyzed ahead of the newly calculated life expectancy date.

Following replacement of the GAC media, the media will be sampled again in 5 years. Subsequent sampling and analysis will be scheduled according to the estimated remaining capacity determined from the initial sampling results.

Additionally, the GAC media may be sampled if an exceedance of the Site-specific groundwater RL from down-gradient monitoring well 5-W-43 or gate wells GW-1 through GW-4 occurs, and investigation into the root cause indicates that the exceedance may be due to breakthrough.

GAC media replacement (when warranted) will be scheduled for summer or early fall during low-water conditions to minimize the volume of groundwater that would need to be managed. Active pumping and groundwater treatment will be used prior to and during replacement of the GAC media. Passive operation will resume upon replacement of GAC media.



4.0 REFERENCES

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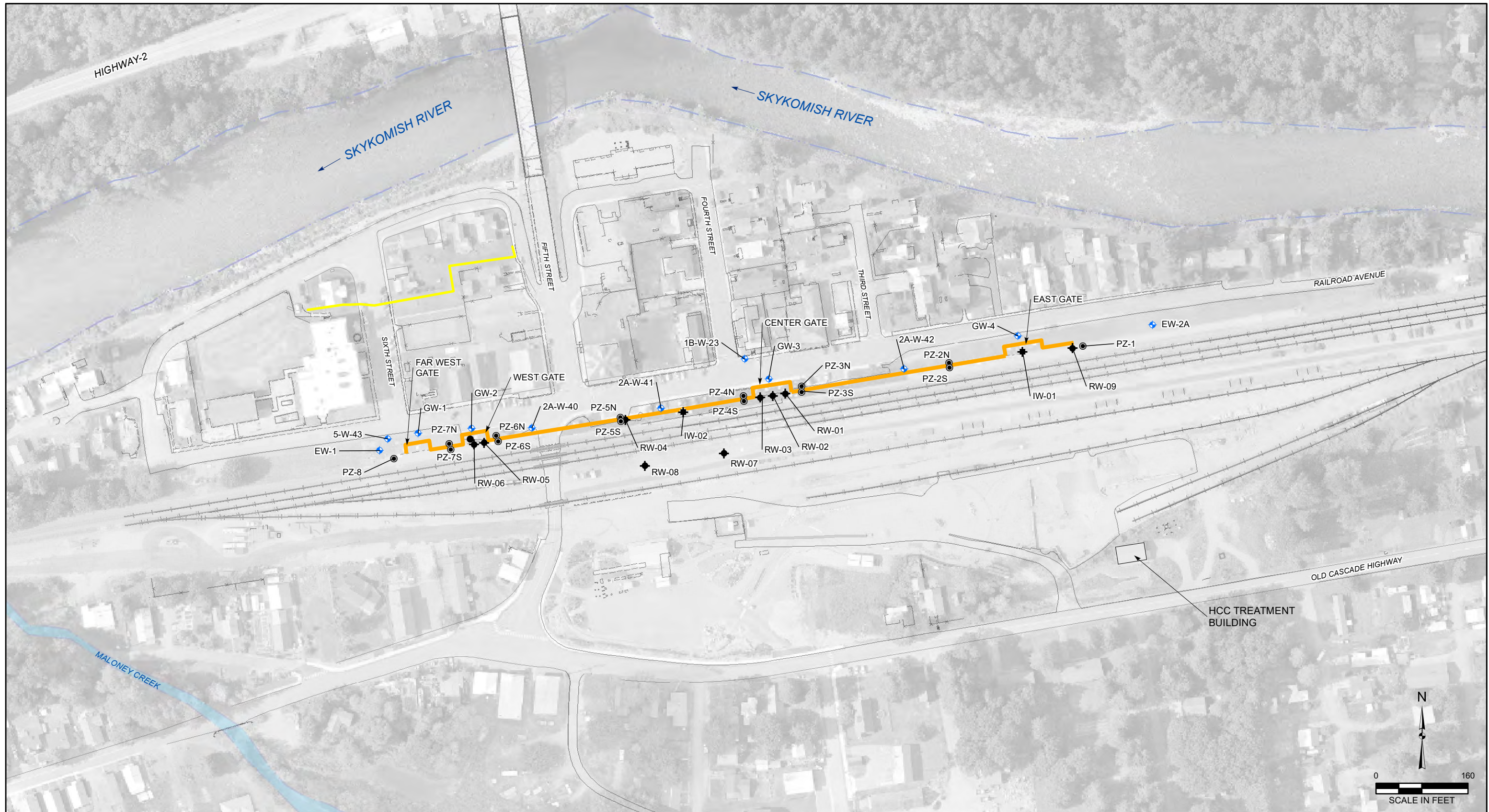


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- . 2020b. Email Regarding Skykomish – HCC Operations. From Ronald Timm. To Shane DeGross, BNSF Railway Company. June 25.
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FIGURES

2021 ANNUAL HYDRAULIC CONTROL AND CONTAINMENT SYSTEM
OPERATIONS REPORT
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Consent Decree No. 07-2-33672-9 SEA

Farallon PN: 683-071



LEGEND

- 2A-W-41 ◆ MONITORING WELL (SAMPLED SEMIANNUALLY)
- RW-04 ◆ RECOVERY WELL
- PZ-5S ● PIEZOMETER
- IW-02 ◆ INJECTION WELL
- HYDRAULIC CONTROL AND CONTAINMENT SYSTEM SHEET PILE BARRIER WALL AND GATES
- - - BNSF RAILYARD BOUNDARY
- MECHANICALLY STABILIZED EARTH WALL



NOTE
 HYDRAULIC CONTROL AND CONTAINMENT SYSTEM (HCC) SENTRY WELLS AND BARRIER WALL GATE VAULT LOCATIONS NOT SHOWN. SEE FIGURE 2 FOR BARRIER WALL GATE DETAILS.
 IMAGERY SOURCE: KING COUNTY PICTOMETRY 2015.

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DRAFT **FIGURE 1**
 SITE PLAN SHOWING 2021
 HCC SYSTEM MONITORING NETWORK
 BNSF FORMER MAINTENANCE
 AND FUELING FACILITY
 SKYKOMISH, WASHINGTON
 FARALLON PN: 683-071

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LEGEND

- RW-04 RECOVERY WELL
- PZ-5S PIEZOMETER
- IW-02 TREATED-WATER REINJECTION WELL
- WG-WV BARRIER WALL GATE VAULT
- GW-2 MONITORING WELL
- S1-AU SENTRY WELL
- HYDRAULIC CONTROL AND CONTAINMENT SYSTEM SHEET PILE BARRIER WALL AND GATE SYSTEM
- BNSF RAILYARD BOUNDARY



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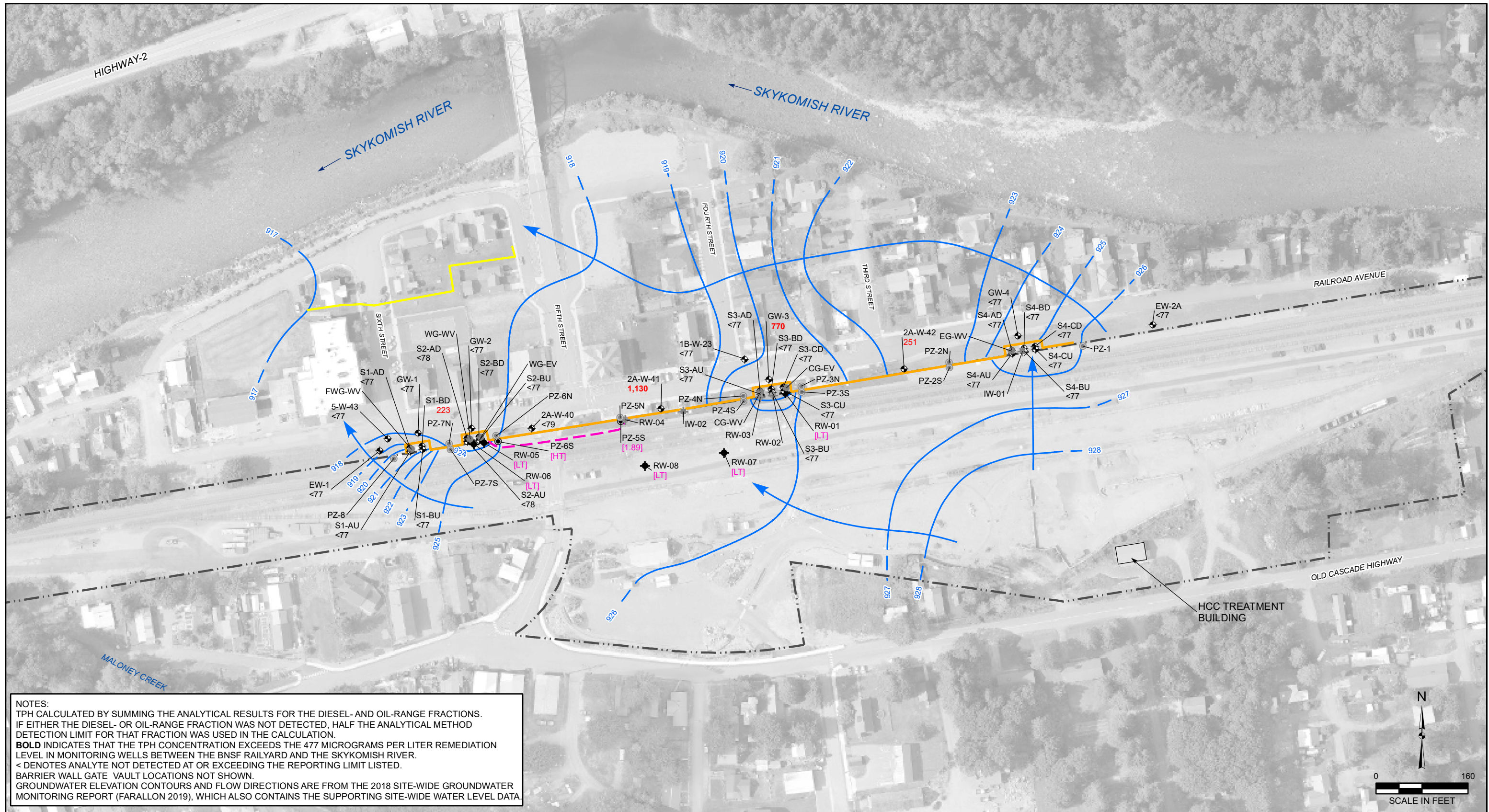
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DRAFT **FIGURE 2**

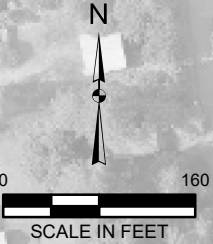
HYDRAULIC CONTROL AND CONTAINMENT SYSTEM
BARRIER WALL GATE DETAIL
BNSF FORMER MAINTENANCE
AND FUELING FACILITY
SKYKOMISH, WASHINGTON

FARALLON PN: 683-071

Date: 1/28/2020 Disk Reference: 683-067-2019-HCC



NOTES:
 TPH CALCULATED BY SUMMING THE ANALYTICAL RESULTS FOR THE DIESEL- AND OIL-RANGE FRACTIONS.
 IF EITHER THE DIESEL- OR OIL-RANGE FRACTION WAS NOT DETECTED, HALF THE ANALYTICAL METHOD
 DETECTION LIMIT FOR THAT FRACTION WAS USED IN THE CALCULATION.
BOLD INDICATES THAT THE TPH CONCENTRATION EXCEEDS THE 477 MICROGRAMS PER LITER REMEDIATION
 LEVEL IN MONITORING WELLS BETWEEN THE BNSF RAILYARD AND THE SKYKOMISH RIVER.
 < DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE REPORTING LIMIT LISTED.
 BARRIER WALL GATE VAULT LOCATIONS NOT SHOWN.
 GROUNDWATER ELEVATION CONTOURS AND FLOW DIRECTIONS ARE FROM THE 2018 SITE-WIDE GROUNDWATER
 MONITORING REPORT (FARALLON 2019), WHICH ALSO CONTAINS THE SUPPORTING SITE-WIDE WATER LEVEL DATA.



LEGEND	
2A-W-41	MONITORING WELL
RW-04	RECOVERY WELL
PZ-5S	PIEZOMETER
IW-02	INJECTION WELL
922.00	INTERPRETED GROUNDWATER ELEVATION CONTOUR IN FEET NAVD88 (INFERRED WHERE DASHED)
Blue arrow	INTERPRETED DIRECTION OF GROUNDWATER FLOW AND GRADIENT
Orange line	HYDRAULIC CONTROL AND CONTAINMENT SYSTEM SHEET PILE BARRIER WALL AND GATES
Dashed line	BNSF RAILYARD BOUNDARY
Yellow line	MECHANICALLY STABILIZED EARTH WALL

IMAGERY SOURCE: KING COUNTY PICTOMETRY 2015

223	TOTAL PETROLEUM HYDROCARBONS (TPH) IN MICROGRAMS PER LITER
<77	TPH NOT DETECTED AT OR EXCEEDING THE GIVEN REPORTING LIMIT
(HT)	ESTIMATED EXTENT OF LNAPL AS INDICATED BY MEASURABLE LNAPL THICKNESS ON GROUNDWATER SURFACE
(HT)	HEAVY TRACE - OBSERVED ON INTERFACE PROBE BY FIELD STAFF; NO MEASURABLE LNAPL THICKNESS GREATER THAN 0.01 FOOT
(LT)	LIGHT TRACE - OBSERVED ON INTERFACE PROBE BY FIELD STAFF; NO MEASURABLE LNAPL THICKNESS GREATER THAN 0.01 FOOT
[1.89]	MEASURABLE LNAPL THICKNESS IN FEET
LNAPL NAVD88	LIGHT NONAQUEOUS-PHASE LIQUID NORTH AMERICAN VERTICAL DATUM OF 1988

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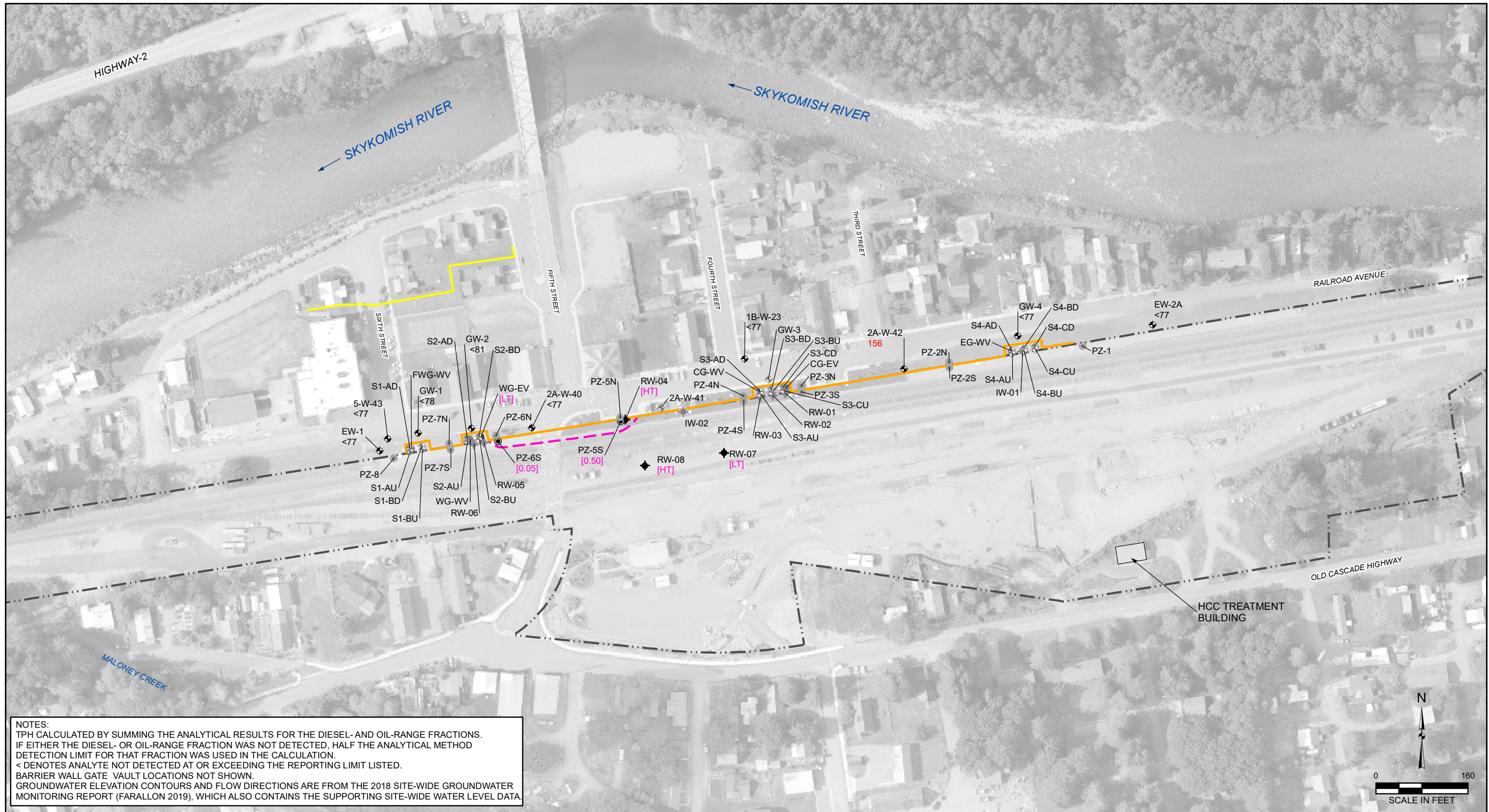
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FIGURE 3
 MARCH 2021 TOTAL PETROLEUM HYDROCARBONS IN GROUNDWATER
 BNSF FORMER MAINTENANCE AND FUELING FACILITY
 SKYKOMISH, WASHINGTON

FARALLON PN: 683-071

Disc Reference: Q:\Projects\683 BNSF\071 Groundwater_HCC 2020\Mapfiles\18B\HCC_Figure-03_TPH-GW_March_2021.mxd



NOTES:
 TPH CALCULATED BY SUMMING THE ANALYTICAL RESULTS FOR THE DIESEL- AND OIL-RANGE FRACTIONS.
 IF EITHER THE DIESEL- OR OIL-RANGE FRACTION WAS NOT DETECTED, HALF THE ANALYTICAL METHOD
 DETECTION LIMIT FOR THAT FRACTION WAS USED IN THE CALCULATION.
 < DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE REPORTING LIMIT LISTED.
 BARRIER WALL GATE VAULT LOCATIONS NOT SHOWN.
 GROUNDWATER ELEVATION CONTOURS AND FLOW DIRECTIONS ARE FROM THE 2018 SITE-WIDE GROUNDWATER
 MONITORING REPORT (FARALLON 2019), WHICH ALSO CONTAINS THE SUPPORTING SITE-WIDE WATER LEVEL DATA.

- | | |
|---|---|
| <p>2A-W-41 MONITORING WELL</p> <p>RW-04 RECOVERY WELL</p> <p>PZ-5S PIEZOMETER</p> <p>IW-02 INJECTION WELL</p> | <p>LEGEND</p> <p> HYDRAULIC CONTROL AND CONTAINMENT SYSTEM</p> <p> SHEET PILE BARRIER WALL AND GATES</p> <p> BNSF RAILYARD BOUNDARY</p> <p> MECHANICALLY STABILIZED EARTH WALL</p> |
|---|---|

- | | |
|---|--|
| <p>156</p> <p><77</p> <p> [HT]</p> <p> [LT]</p> <p>[0.50]</p> <p>LNAPL</p> <p>NAVD88</p> | <p>TOTAL PETROLEUM HYDROCARBONS (TPH) IN MICROGRAMS PER LITER</p> <p>TPH NOT DETECTED AT OR EXCEEDING THE GIVEN REPORTING LIMIT</p> <p>ESTIMATED EXTENT OF LNAPL AS INDICATED BY MEASURABLE LNAPL THICKNESS ON GROUNDWATER SURFACE</p> <p>HEAVY TRACE - OBSERVED ON INTERFACE PROBE BY FIELD STAFF; NO MEASURABLE LNAPL THICKNESS GREATER THAN 0.01 FOOT</p> <p>LIGHT TRACE - OBSERVED ON INTERFACE PROBE BY FIELD STAFF; NO MEASURABLE LNAPL THICKNESS GREATER THAN 0.01 FOOT</p> <p>MEASURABLE LNAPL THICKNESS IN FEET</p> <p>LIGHT NONAQUEOUS-PHASE LIQUID</p> <p>NORTH AMERICAN VERTICAL DATUM OF 1988</p> |
|---|--|

IMAGERY SOURCE: KING COUNTY PICTOMETRY 2015

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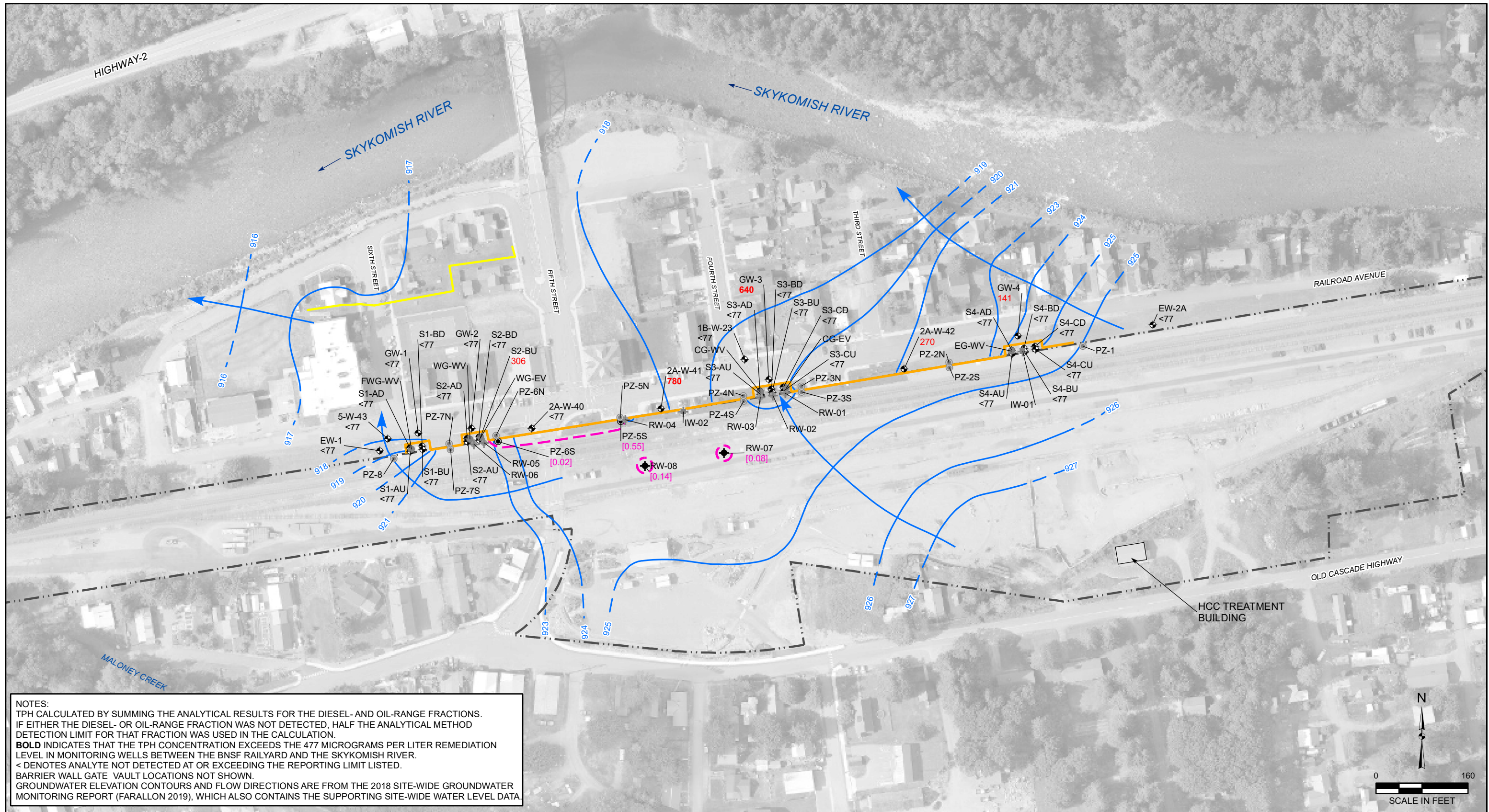
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FIGURE 4
 JUNE 2021 TOTAL PETROLEUM HYDROCARBONS IN GROUNDWATER
 BNSF FORMER MAINTENANCE AND FUELING FACILITY
 SKYKOMISH, WASHINGTON

FARALLON PN: 683-071



NOTES:
 TPH CALCULATED BY SUMMING THE ANALYTICAL RESULTS FOR THE DIESEL- AND OIL-RANGE FRACTIONS.
 IF EITHER THE DIESEL- OR OIL-RANGE FRACTION WAS NOT DETECTED, HALF THE ANALYTICAL METHOD
 DETECTION LIMIT FOR THAT FRACTION WAS USED IN THE CALCULATION.
BOLD INDICATES THAT THE TPH CONCENTRATION EXCEEDS THE 477 MICROGRAMS PER LITER REMEDIATION
 LEVEL IN MONITORING WELLS BETWEEN THE BNSF RAILYARD AND THE SKYKOMISH RIVER.
 < DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE REPORTING LIMIT LISTED.
 BARRIER WALL GATE VAULT LOCATIONS NOT SHOWN.
 GROUNDWATER ELEVATION CONTOURS AND FLOW DIRECTIONS ARE FROM THE 2018 SITE-WIDE GROUNDWATER
 MONITORING REPORT (FARALLON 2019), WHICH ALSO CONTAINS THE SUPPORTING SITE-WIDE WATER LEVEL DATA.

LEGEND	
2A-W-41	MONITORING WELL
RW-04	RECOVERY WELL
PZ-5S	PIEZOMETER
IW-02	INJECTION WELL
922.00	INTERPRETED GROUNDWATER ELEVATION CONTOUR IN FEET NAVD88 (INFERRED WHERE DASHED)
←	INTERPRETED DIRECTION OF GROUNDWATER FLOW AND GRADIENT (UNITS IN FOOT PER FOOT)
—	HYDRAULIC CONTROL AND CONTAINMENT SYSTEM SHEET PILE BARRIER WALL AND GATES
---	BNSF RAILYARD BOUNDARY
—	MECHANICALLY STABILIZED EARTH WALL

270	TOTAL PETROLEUM HYDROCARBONS (TPH) IN MICROGRAMS PER LITER
<77	TPH NOT DETECTED AT OR EXCEEDING THE GIVEN REPORTING LIMIT
[0.55]	ESTIMATED EXTENT OF LNAPL AS INDICATED BY MEASURABLE LNAPL THICKNESS ON GROUNDWATER SURFACE
[0.14]	MEASURABLE LNAPL THICKNESS IN FEET
LNAPL NAVD88	LIGHT NONAQUEOUS-PHASE LIQUID NORTH AMERICAN VERTICAL DATUM OF 1988

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FIGURE 5
 SEPTEMBER 2021 TOTAL PETROLEUM
 HYDROCARBONS IN GROUNDWATER
 BNSF FORMER MAINTENANCE
 AND FUELING FACILITY
 SKYKOMISH, WASHINGTON

FARALLON PN: 683-071

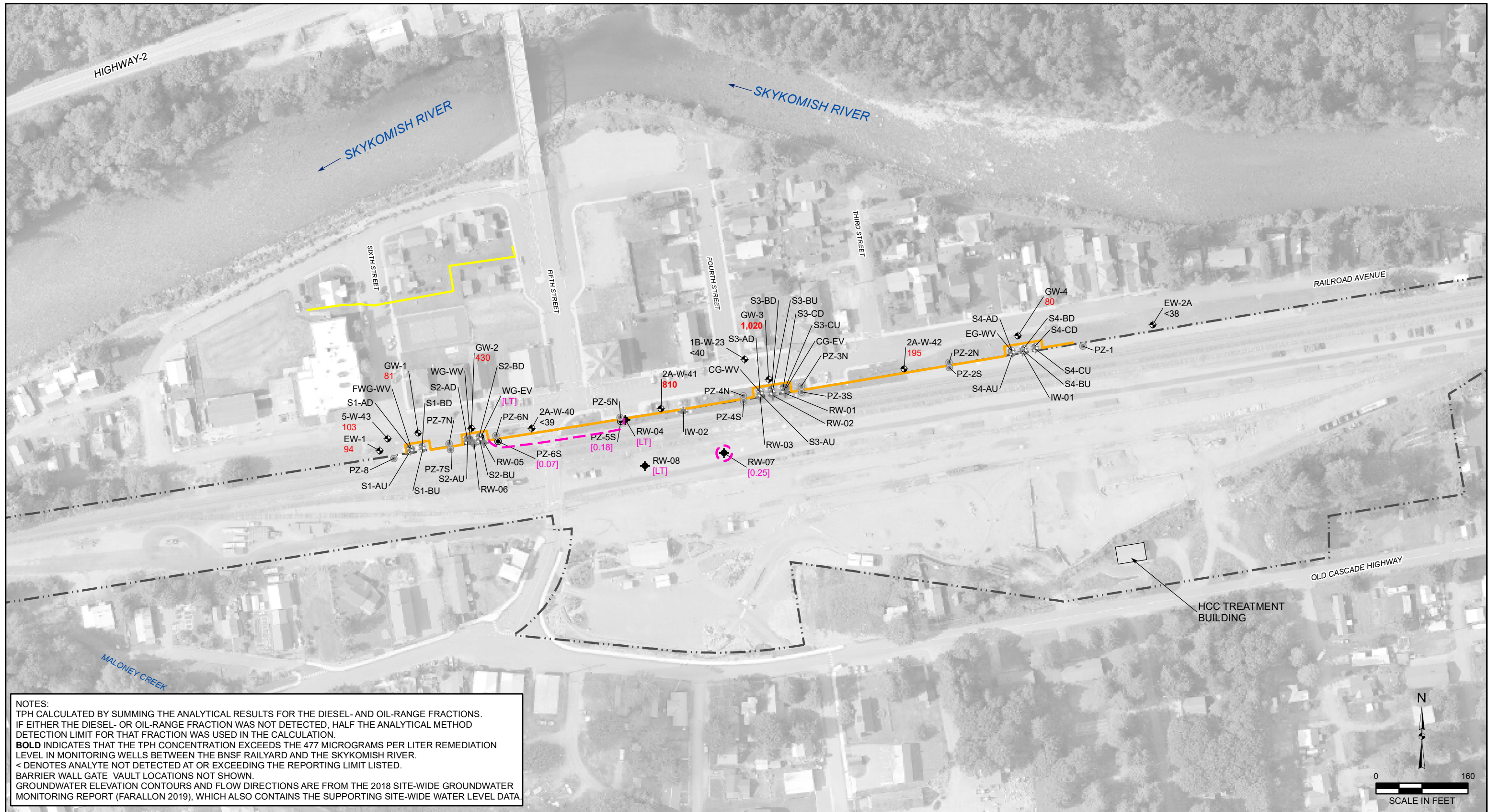
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Disc Reference:

IMAGERY SOURCE: KING COUNTY PICTOMETRY 2015



NOTES:
 TPH CALCULATED BY SUMMING THE ANALYTICAL RESULTS FOR THE DIESEL- AND OIL-RANGE FRACTIONS.
 IF EITHER THE DIESEL- OR OIL-RANGE FRACTION WAS NOT DETECTED, HALF THE ANALYTICAL METHOD
 DETECTION LIMIT FOR THAT FRACTION WAS USED IN THE CALCULATION.
BOLD INDICATES THAT THE TPH CONCENTRATION EXCEEDS THE 477 MICROGRAMS PER LITER REMEDIATION
 LEVEL IN MONITORING WELLS BETWEEN THE BNSF RAILYARD AND THE SKYKOMISH RIVER.
 < DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE REPORTING LIMIT LISTED.
 BARRIER WALL GATE VAULT LOCATIONS NOT SHOWN.
 GROUNDWATER ELEVATION CONTOURS AND FLOW DIRECTIONS ARE FROM THE 2018 SITE-WIDE GROUNDWATER
 MONITORING REPORT (FARALLON 2019), WHICH ALSO CONTAINS THE SUPPORTING SITE-WIDE WATER LEVEL DATA.

LEGEND	
2A-W-41	MONITORING WELL
RW-04	RECOVERY WELL
PZ-5S	PIEZOMETER
IW-02	INJECTION WELL
	HYDRAULIC CONTROL AND CONTAINMENT SYSTEM SHEET PILE BARRIER WALL AND GATES
	BNSF RAILYARD BOUNDARY
	MECHANICALLY STABILIZED EARTH WALL

810	TOTAL PETROLEUM HYDROCARBONS (TPH) IN MICROGRAMS PER LITER
<40	TPH NOT DETECTED AT OR EXCEEDING THE GIVEN REPORTING LIMIT
	ESTIMATED EXTENT OF LNAPL AS INDICATED BY MEASURABLE LNAPL THICKNESS ON GROUNDWATER SURFACE
[0.25]	MEASURABLE LNAPL THICKNESS IN FEET
[LT]	LIGHT TRACE - OBSERVED ON INTERFACE PROBE BY FIELD STAFF; NO MEASURABLE LNAPL THICKNESS GREATER THAN 0.01 FOOT
LNAPL NAVD88	LIGHT NONAQUEOUS-PHASE LIQUID NORTH AMERICAN VERTICAL DATUM OF 1988

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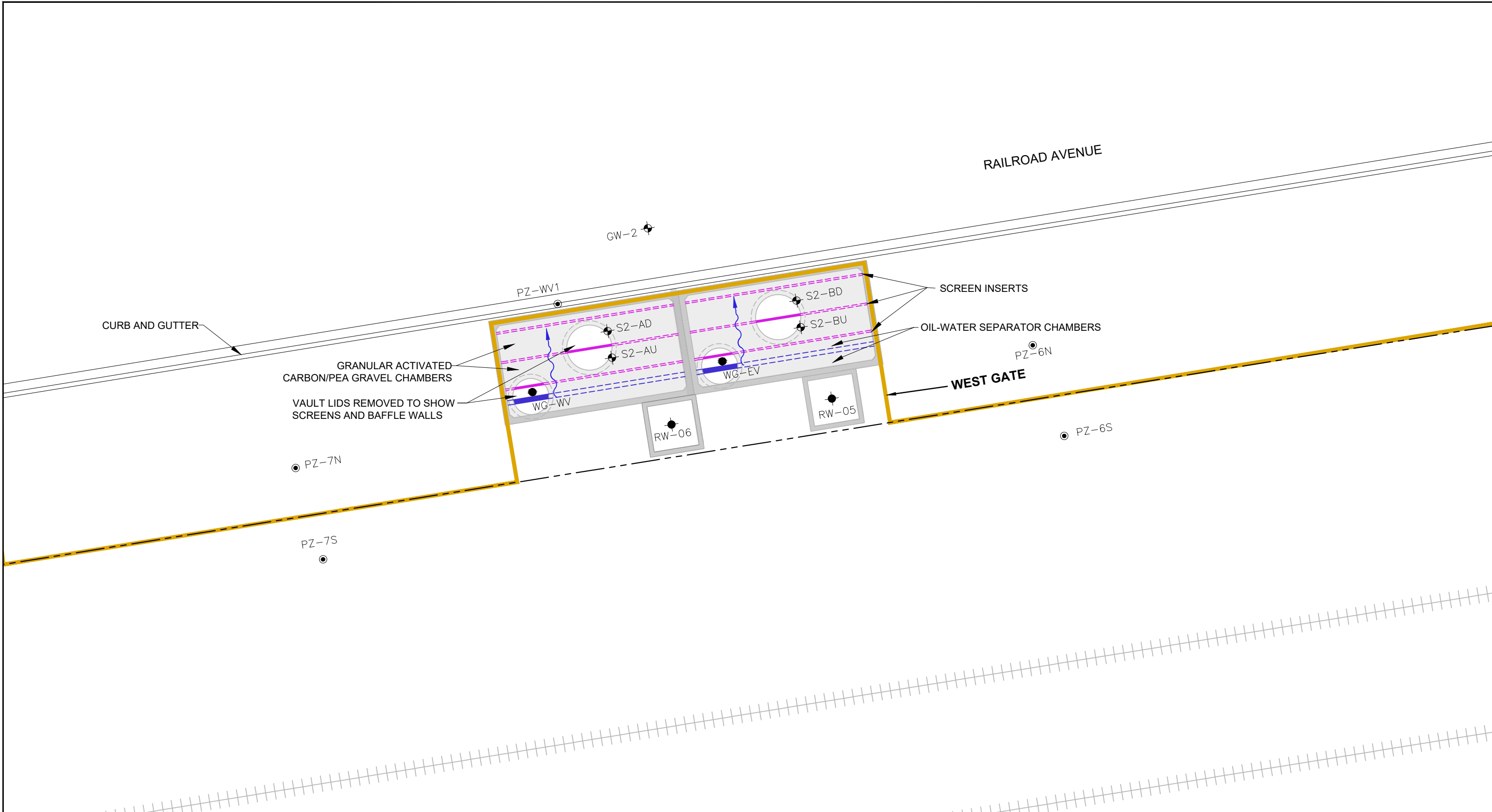
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FIGURE 6
 DECEMBER 2021 TOTAL PETROLEUM HYDROCARBONS IN GROUNDWATER
 BNSF FORMER MAINTENANCE AND FUELING FACILITY
 SKYKOMISH, WASHINGTON

FARALLON PN: 683-071

IMAGERY SOURCE: KING COUNTY PICTOMETRY 2015

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LEGEND

- GW-2 MONITORING WELL
- RW-6 RECOVERY WELL
- PZ-7S PIEZOMETER
- WG-WV BARRIER WALL GATE VAULT

- HYDRAULIC CONTROL AND CONTAINMENT (HCC) SYSTEM BARRIER WALL/GATE SYSTEM
- BNSF RAILYARD BOUNDARY
- NATURAL HYDRAULIC GRADIENT DIRECTION
- RAILROAD TRACKS

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0' SCALE IN FEET 10'



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FIGURE 7

PLAN VIEW OF HCC SYSTEM WEST GATE
SHOWING TYPICAL GATE CONSTRUCTION
BNSF FORMER MAINTENANCE AND FUELING FACILITY
SKYKOMISH, WASHINGTON

FARALLON PN: 683-071

Drawn By: MB Checked By: AM Date: 1/30/2022 Disk Reference: 683-071-HCC.dwg

TABLES

2021 ANNUAL HYDRAULIC CONTROL AND CONTAINMENT SYSTEM
OPERATIONS REPORT
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Consent Decree No. 07-2-33672-9 SEA

Farallon PN: 683-071

Table 1
HCC Water Treatment System Discharge Flow Rates
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071

Date	Cumulative Discharge Volume Since Water Treatment System Start-Up (gallons)	Calculated Average Daily Flow Rate ¹ (gallons per minute)
1/1/2021	135,891,267	0
1/2/2021	135,891,267	0
1/3/2021	135,891,267	0
1/4/2021	135,900,411	6
1/5/2021	135,930,667	21
1/6/2021	135,936,595	4
1/7/2021	135,936,595	0
1/8/2021	135,936,599	0
1/9/2021	135,968,603	22
1/10/2021	136,008,655	28
1/11/2021	136,048,571	28
1/12/2021	136,082,471	24
1/13/2021	136,095,911	28
1/14/2021	136,095,911	0
1/15/2021	136,110,239	5
1/16/2021	136,150,087	28
1/17/2021	136,189,291	27
1/18/2021	136,227,907	27
1/19/2021	136,266,003	26
1/20/2021	136,303,287	26
1/21/2021	136,340,099	26
1/22/2021	136,376,803	25
1/23/2021	136,413,371	25
1/24/2021	136,449,907	25
1/25/2021	136,486,387	25
1/26/2021	136,522,903	25
1/27/2021	136,559,487	25
1/28/2021	136,596,131	25
1/29/2021	136,632,727	25
1/30/2021	136,669,295	25
1/31/2021	136,706,359	26
2/1/2021	136,743,451	26
2/2/2021	136,783,007	27
2/3/2021	136,821,007	26
2/4/2021	136,858,555	26
2/5/2021	136,896,051	26
2/6/2021	136,932,655	25
2/7/2021	136,969,343	25
2/8/2021	136,980,275	7
2/9/2021	136,997,979	13
2/10/2021	137,025,171	19
2/11/2021	137,051,495	18
2/12/2021	137,076,951	18
2/13/2021	137,091,215	11
2/14/2021	137,114,499	16
2/15/2021	137,138,687	17
2/16/2021	137,162,159	16
NPDES Permit Discharge Limit¹		100

Table 1
HCC Water Treatment System Discharge Flow Rates
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071

Date	Cumulative Discharge Volume Since Water Treatment System Start-Up (gallons)	Calculated Average Daily Flow Rate ¹ (gallons per minute)
2/17/2021	137,172,067	7
2/18/2021	137,191,771	14
2/19/2021	137,218,059	18
2/20/2021	137,244,627	18
2/21/2021	137,271,307	19
2/22/2021	137,296,655	18
2/23/2021	137,321,455	15
2/24/2021	137,349,091	19
2/25/2021	137,374,895	18
2/26/2021	137,399,803	17
2/27/2021	137,426,843	19
2/28/2021	137,451,587	17
3/1/2021	137,475,047	16
3/2/2021	137,497,195	15
3/3/2021	137,515,071	12
3/4/2021	137,534,899	14
3/5/2021	137,553,911	13
3/6/2021	137,572,319	13
3/7/2021	137,590,083	12
3/8/2021	137,607,263	12
3/9/2021	137,623,611	11
3/10/2021	137,640,111	11
3/11/2021	137,656,679	12
3/12/2021	137,670,403	11
3/13/2021	137,688,911	11
3/14/2021	137,702,955	11
3/15/2021	137,716,951	12
3/16/2021	137,737,455	11
3/17/2021	137,753,971	11
3/18/2021	137,770,571	12
3/19/2021	137,787,387	12
3/20/2021	137,804,351	12
3/21/2021	137,821,399	12
3/22/2021	137,838,795	12
3/23/2021	137,856,247	12
3/24/2021	137,873,847	12
3/25/2021	137,891,367	12
3/26/2021	137,908,663	12
3/27/2021	137,925,691	12
3/28/2021	137,941,839	11
3/29/2021	137,943,531	7
3/30/2021	137,943,531	0
3/31/2021	137,943,531	0
4/1/2021	137,960,387	12
4/2/2021	137,976,839	11
4/3/2021	137,993,187	11
4/4/2021	138,009,463	11
NPDES Permit Discharge Limit¹		100

Table 1
HCC Water Treatment System Discharge Flow Rates
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071

Date	Cumulative Discharge Volume Since Water Treatment System Start-Up (gallons)	Calculated Average Daily Flow Rate¹ (gallons per minute)
4/5/2021	138,028,571	13
4/6/2021	138,056,179	19
4/7/2021	138,083,323	19
4/8/2021	138,107,131	17
4/9/2021	138,122,435	11
4/10/2021	138,122,551	0
4/11/2021	138,122,555	0
4/12/2021	138,142,055	14
4/13/2021	138,164,679	16
4/14/2021	138,187,347	16
4/15/2021	138,209,987	16
4/16/2021	138,232,711	16
4/17/2021	138,255,663	16
4/18/2021	138,278,815	16
4/19/2021	138,302,127	16
4/20/2021	138,325,543	16
4/21/2021	138,348,851	16
4/22/2021	138,372,039	16
4/23/2021	138,395,163	16
4/24/2021	138,416,219	15
4/25/2021	138,433,307	12
4/26/2021	138,450,387	12
4/27/2021	138,467,615	12
4/28/2021	138,484,947	12
4/29/2021	138,502,183	12
4/30/2021	138,519,475	12
5/1/2021	138,536,823	12
5/2/2021	138,554,175	12
5/3/2021	138,571,531	12
5/4/2021	138,588,807	12
5/5/2021	138,608,279	14
5/6/2021	138,631,879	16
5/7/2021	138,651,331	14
5/8/2021	138,668,839	12
5/9/2021	138,686,031	12
5/10/2021	138,703,259	12
5/11/2021	138,720,623	12
5/12/2021	138,738,115	12
5/13/2021	138,755,591	12
5/14/2021	138,773,103	12
5/15/2021	138,790,547	12
5/16/2021	138,808,419	12
5/17/2021	138,827,319	13
5/18/2021	138,850,831	16
5/19/2021	138,874,203	16
5/20/2021	138,897,211	16
5/21/2021	138,919,819	16
NPDES Permit Discharge Limit¹		100

Table 1
HCC Water Treatment System Discharge Flow Rates
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071

Date	Cumulative Discharge Volume Since Water Treatment System Start-Up (gallons)	Calculated Average Daily Flow Rate¹ (gallons per minute)
5/22/2021	138,942,055	15
5/23/2021	138,963,915	15
5/24/2021	138,985,487	15
5/25/2021	139,007,003	15
5/26/2021	139,028,727	15
5/27/2021	139,050,311	15
5/28/2021	139,071,943	15
5/29/2021	139,093,191	15
5/30/2021	139,114,087	15
5/31/2021	139,134,751	14
6/1/2021	139,156,747	15
6/2/2021	139,181,859	17
6/3/2021	139,206,875	17
6/4/2021	139,231,599	17
6/5/2021	139,256,163	17
6/6/2021	139,280,599	17
6/7/2021	139,304,859	17
6/8/2021	139,328,607	16
6/9/2021	139,352,087	16
6/10/2021	139,375,255	16
6/11/2021	139,397,975	16
6/12/2021	139,420,347	16
6/13/2021	139,442,439	15
6/14/2021	139,461,271	15
6/15/2021	139,482,855	15
6/16/2021	139,503,611	14
6/17/2021	139,523,975	14
6/18/2021	139,543,967	14
6/19/2021	139,563,491	14
6/20/2021	139,582,835	13
6/21/2021	139,600,951	13
6/22/2021	139,619,055	13
6/23/2021	139,636,835	12
6/24/2021	139,637,955	1
6/25/2021	139,654,615	12
6/26/2021	139,669,411	10
6/27/2021	139,685,183	11
6/28/2021	139,689,611	3
6/29/2021	139,700,635	8
6/30/2021	139,706,715	4
7/1/2021	139,712,155	4
7/2/2021	139,717,199	4
7/3/2021	139,717,267	0
7/4/2021	139,718,123	1
7/5/2021	139,732,843	10
7/6/2021	139,747,083	10
7/7/2021	139,763,199	11
NPDES Permit Discharge Limit¹		100

Table 1
HCC Water Treatment System Discharge Flow Rates
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071

Date	Cumulative Discharge Volume Since Water Treatment System Start-Up (gallons)	Calculated Average Daily Flow Rate ¹ (gallons per minute)
7/8/2021	139,783,711	14
7/9/2021	139,803,979	14
7/10/2021	139,824,135	14
7/11/2021	139,844,171	14
7/12/2021	139,864,015	14
7/13/2021	139,883,795	14
7/14/2021	139,903,439	14
7/15/2021	139,910,963	5
7/16/2021	139,925,855	10
7/17/2021	139,940,651	10
7/18/2021	139,955,463	10
7/19/2021	139,970,499	10
7/20/2021	139,985,539	10
7/21/2021	140,000,671	11
7/22/2021	140,016,043	11
7/23/2021	140,031,447	11
7/24/2021	140,046,879	11
7/25/2021	140,062,467	11
7/26/2021	140,078,295	11
7/27/2021	140,094,331	11
7/28/2021	140,113,291	13
7/29/2021	140,137,967	17
7/30/2021	140,162,675	17
7/31/2021	140,187,467	17
8/1/2021	140,212,231	17
8/2/2021	140,237,259	17
8/3/2021	140,262,579	18
8/4/2021	140,263,975	1
8/5/2021	140,271,423	5
8/6/2021	140,297,727	18
8/7/2021	140,324,011	18
8/8/2021	140,350,423	18
8/9/2021	140,377,119	19
8/10/2021	140,403,995	19
8/11/2021	140,430,251	18
8/12/2021	140,453,627	16
8/13/2021	140,478,923	18
8/14/2021	140,478,923	0
8/15/2021	140,478,927	0
8/16/2021	140,503,567	17
8/17/2021	140,532,035	20
8/18/2021	140,560,471	20
8/19/2021	140,589,047	20
8/20/2021	140,617,743	20
8/21/2021	140,646,635	20
8/22/2021	140,675,667	20
8/23/2021	140,704,911	20
NPDES Permit Discharge Limit¹		100

Table 1
HCC Water Treatment System Discharge Flow Rates
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071

Date	Cumulative Discharge Volume Since Water Treatment System Start-Up (gallons)	Calculated Average Daily Flow Rate ¹ (gallons per minute)
8/24/2021	140,734,211	20
8/25/2021	140,763,699	20
8/26/2021	140,793,383	21
8/27/2021	140,823,199	21
8/28/2021	140,853,115	21
8/29/2021	140,883,111	21
8/30/2021	140,913,215	21
8/31/2021	140,943,403	21
9/1/2021	140,973,695	21
9/2/2021	141,004,103	21
9/3/2021	141,034,563	21
9/4/2021	141,065,047	21
9/5/2021	141,095,503	21
9/6/2021	141,125,911	21
9/7/2021	141,156,375	21
9/8/2021	141,187,627	20
9/9/2021	141,189,079	1
9/10/2021	141,219,959	21
9/11/2021	141,250,471	21
9/12/2021	141,281,091	21
9/13/2021	141,311,703	21
9/14/2021	141,342,339	21
9/15/2021	141,372,843	21
9/16/2021	141,403,143	21
9/17/2021	141,433,219	21
9/18/2021	141,461,291	20
9/19/2021	141,491,439	21
9/20/2021	141,516,571	19
9/21/2021	141,546,703	21
9/22/2021	141,576,751	21
9/23/2021	141,606,939	21
9/24/2021	141,636,927	21
9/25/2021	141,666,631	21
9/26/2021	141,695,831	20
9/27/2021	141,724,787	20
9/28/2021	141,753,635	20
9/29/2021	141,781,979	20
9/30/2021	141,809,823	19
10/1/2021	141,837,515	19
10/2/2021	141,855,363	13
10/3/2021	141,855,363	0
10/4/2021	141,855,363	0
10/5/2021	141,863,359	6
10/6/2021	141,890,387	19
10/7/2021	141,917,087	19
10/8/2021	141,943,391	18
10/9/2021	141,969,311	18
NPDES Permit Discharge Limit¹		100

Table 1
HCC Water Treatment System Discharge Flow Rates
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071

Date	Cumulative Discharge Volume Since Water Treatment System Start-Up (gallons)	Calculated Average Daily Flow Rate¹ (gallons per minute)
10/10/2021	141,983,079	9
10/11/2021	141,983,079	0
10/12/2021	141,983,079	0
10/13/2021	141,983,079	0
10/14/2021	141,983,079	0
10/15/2021	141,983,079	0
10/16/2021	141,983,079	0
10/17/2021	141,983,079	0
10/18/2021	141,983,079	0
10/19/2021	141,983,079	0
10/20/2021	141,983,079	0
10/21/2021	141,983,079	0
10/22/2021	141,983,079	0
10/23/2021	141,983,079	0
10/24/2021	141,983,079	0
10/25/2021	141,983,079	0
10/26/2021	142,225,199	14
10/27/2021	142,225,199	0
10/28/2021	142,225,199	0
10/29/2021	142,225,199	0
10/30/2021	142,225,199	0
10/31/2021	142,225,199	0
11/1/2021	142,225,199	0
11/2/2021	142,225,199	0
11/3/2021	142,225,199	0
11/4/2021	142,235,259	1
11/5/2021	142,261,891	18
11/6/2021	142,288,927	19
11/7/2021	142,315,399	19
11/8/2021	142,340,399	17
11/9/2021	142,369,063	20
11/10/2021	142,392,083	16
11/11/2021	142,413,439	15
11/12/2021	142,435,907	16
11/13/2021	142,458,167	15
11/14/2021	142,483,523	18
11/15/2021	142,507,611	20
11/16/2021	142,534,947	17
11/17/2021	142,558,463	16
11/18/2021	142,579,203	14
11/19/2021	142,594,935	11
11/20/2021	142,610,171	11
11/21/2021	142,631,919	15
11/22/2021	142,653,455	15
11/23/2021	142,675,943	16
11/24/2021	142,701,623	18
11/25/2021	142,726,563	17
NPDES Permit Discharge Limit¹		100

Table 1
HCC Water Treatment System Discharge Flow Rates
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071

Date	Cumulative Discharge Volume Since Water Treatment System Start-Up (gallons)	Calculated Average Daily Flow Rate ¹ (gallons per minute)
11/26/2021	142,745,451	13
11/27/2021	142,761,955	11
11/28/2021	142,778,499	11
11/29/2021	142,795,159	12
11/30/2021	142,810,867	11
12/1/2021	142,827,343	11
12/2/2021	142,853,399	18
12/3/2021	142,879,815	18
12/4/2021	142,904,947	17
12/5/2021	142,928,891	17
12/6/2021	142,951,559	16
12/7/2021	142,973,787	15
12/8/2021	142,994,115	14
12/9/2021	143,012,843	13
12/10/2021	143,031,331	13
12/11/2021	143,049,887	13
12/12/2021	143,067,683	12
12/13/2021	143,088,599	15
12/14/2021	143,104,607	11
12/15/2021	143,117,879	9
12/16/2021	143,138,407	14
12/17/2021	143,155,335	12
12/18/2021	143,171,767	11
12/19/2021	143,186,127	10
12/20/2021	143,200,651	10
12/21/2021	143,221,747	15
12/22/2021	143,243,247	15
12/23/2021	143,259,147	11
12/24/2021	143,274,743	11
12/25/2021	143,282,287	5
12/26/2021	143,286,151	3
12/27/2021	143,291,219	4
12/28/2021	143,309,275	13
12/29/2021	143,321,195	9
12/30/2021	143,327,055	4
12/31/2021	143,344,571	12
NPDES Permit Discharge Limit¹		100

NOTES:

¹Discharge limit specified in NPDES Permit No. WA0032123, applicable when the Skykomish River level is less than 928.56 feet NAVD88. Discharge is not allowed when the river level exceeds 928.56 feet NAVD88.

HCC = Hydraulic Control and Containment

NAVD88 = North American Vertical Datum of 1988

NPDES = National Pollutant Discharge Elimination System

Table 2
Total Petroleum Hydrocarbon Concentrations in HCC Water Treatment System Influent and Effluent
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Sample Location	Sample Date	Sample Identification	DRO ¹ (micrograms per liter)			ORO ¹ (micrograms per liter)			Calculated NWTPH-Dx ² (micrograms per liter)
			Result	MDL	MRL	Result	MDL	MRL	
Treatment System Influent (Primary GAC Vessel Influent)	1/4/2021	BEFORE GAC-1421	240	65	65	230	95	95	470
	1/12/2021	BEFORE GAC-11221	300	62	62	230	91	91	530
	1/19/2021	BEFORE GAC-11921	400	62	62	370	91	91	770
	1/25/2021	BEFORE GAC-12521	570	62	62	300	91	91	870
	2/2/2021	BEFORE GAC-2221	690	62	62	720	91	91	1410
	2/8/2021	BEFORE GAC-2821	360	62	62	330	91	91	690
	2/16/2021	BEFORE GAC-21621	420	62	62	240	91	91	660
	2/26/2021	BEFORE GAC-22621	390	62	62	370	91	91	760
	3/3/2021	BEFORE GAC-3321	470	62	62	410	91	91	880
	3/9/2021	BEFORE GAC-3921	420	62	62	350	91	91	770
	3/18/2021	BEFORE GAC-31821	620	62	62	540	91	91	1160
	3/26/2021	BEFORE GAC-32621	440	63	63	340	93	93	780
	3/30/2021	BEFORE GAC-33021	440	62	62	370	91	91	810
	4/7/2021	BEFORE GAC-4721	480	62	62	380	92	92	860
	4/12/2021	BEFORE GAC-41221	420	62	62	310	92	92	730
	4/21/2021	BEFORE GAC-42121	380	62	62	270	92	92	650
	4/29/2021	BEFORE GAC-42921	410	62	62	180	91	91	590
	5/5/2021	BEFORE GAC-5521	380	62	62	290	91	91	670
	5/13/2021	BEFORE GAC-51321	320	61	61	240	91	91	560
	5/19/2021	BEFORE GAC-51921	450	62	62	350	92	92	800
	5/26/2021	BEFORE GAC-52621	320	62	62	240	91	91	560
	6/1/2021	BEFORE GAC-6121	410	61	61	300	91	91	710
	6/8/2021	BEFORE GAC-6821	450	62	62	350	92	92	800
	6/15/2021	BEFORE GAC-61521	300	62	62	220	91	91	520
	6/22/2021	BEFORE GAC-62221	310	62	62	230	92	92	540
	7/2/2021	BEFORE GAC-7221	530	62	62	330	92	92	860
7/7/2021	BEFORE GAC-7721	400	62	62	240	92	92	640	
7/13/2021	BEFORE GAC-71321	340	62	62	300	92	92	640	
7/21/2021	BEFORE GAC-72121	470	62	62	450	92	92	920	
7/28/2021	BEFORE GAC-72821	420	62	62	270	91	91	690	

Table 2
Total Petroleum Hydrocarbon Concentrations in HCC Water Treatment System Influent and Effluent
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Sample Location	Sample Date	Sample Identification	DRO ¹ (micrograms per liter)			ORO ¹ (micrograms per liter)			Calculated NWTPH-Dx ² (micrograms per liter)
			Result	MDL	MRL	Result	MDL	MRL	
Treatment System Influent (Primary GAC Vessel Influent)	8/5/2021	BEFORE GAC-8521	410	62	62	240	91	91	650
	8/11/2021	BEFORE GAC-81121	370	62	62	290	92	92	660
	8/15/2021	BEFORE GAC-81521	390	62	62	230	92	92	620
	8/23/2021	BEFORE GAC-82321	120	62	62	<92	92	92	166
	8/29/2021	BEFORE GAC-82921	300	62	62	210	92	92	510
	9/7/2021	BEFORE GAC-9721	270	62	62	190	92	92	460
	9/15/2021	BEFORE GAC-91521	280	62	62	190	91	91	470
	9/29/2021	BEFORE GAC-92921	3300	62	62	750	91	91	4050
	10/5/2021	BEFORE GAC-10521	420	62	62	220	92	92	640
	10/14/2021	BEFORE GAC-101421	285	62	62	275	92	92	560
	10/22/2021	BEFORE GAC-102221	340	62	62	290	91	91	630
	10/26/2021	BEFORE GAC-102621	330	62	62	220	92	92	550
	11/4/2021	BEFORE GAC-11421	520	62	62	420	92	92	940
	11/8/2021	BEFORE GAC-11821	440	62	62	280	92	92	720
	11/16/2021	BEFORE GAC-111621	360	62	62	180	92	92	540
	11/24/2021	BEFORE GAC-112421	230	62	62	120	91	91	350
	12/1/2021	BEFORE GAC-12121	200	62	62	110	92	92	310
	12/7/2021	BEFORE GAC-12721	430	61	61	410	91	91	840
12/16/2021	BEFORE GAC-121621	550	55	55	380	180	180	930	
12/21/2021	BEFORE GAC-122121	440	55	55	360	180	180	800	
12/27/2021	BEFORE GAC-122721	430	100	100	360	330	330	790	

Table 2
Total Petroleum Hydrocarbon Concentrations in HCC Water Treatment System Influent and Effluent
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Sample Location	Sample Date	Sample Identification	DRO ¹ (micrograms per liter)			ORO ¹ (micrograms per liter)			Calculated NWTPH-Dx ² (micrograms per liter)
			Result	MDL	MRL	Result	MDL	MRL	
Treatment System Effluent (Secondary GAC Vessel Effluent)	1/4/2021	HCC EFF-1421	<65	65	65	<95	95	95	<80
	1/12/2021	HCC EFF-11221	<62	62	62	<91	91	91	<77
	1/19/2021	HCC EFF-11921	<62	62	62	<91	91	91	<77
	1/25/2021	HCC EFF-12521	<62	62	62	<91	91	91	<77
	2/2/2021	HCC EFF-2221	<62	62	62	<91	91	91	<77
	2/8/2021	HCC EFF-2821	<62	62	62	<91	91	91	<77
	2/16/2021	HCC EFF-21621	<62	62	62	<91	91	91	<77
	2/26/2021	HCC EFF-22621	<62	62	62	<91	91	91	<77
	3/3/2021	HCC EFF-3321	<62	62	62	<91	91	91	<77
	3/9/2021	HCC EFF-3921	<62	62	62	<91	91	91	<77
	3/18/2021	HCC EFF-31821	<62	62	62	<91	91	91	<77
	3/26/2021	HCC EFF-32621	<63	63	63	<93	93	93	<78
	3/30/2021	HCC EFF-33021	<62	62	62	<91	91	91	<77
	4/7/2021	HCC EFF-4721	<62	62	62	<92	92	92	<77
	4/12/2021	HCC EFF-41221	<62	62	62	<92	92	92	<77
	4/21/2021	HCC EFF-42121	<62	62	62	<92	92	92	<77
	4/29/2021	HCC EFF-42921	<62	62	62	<91	91	91	<77
	5/5/2021	HCC EFF-5521	<62	62	62	<91	91	91	<77
	5/13/2021	HCC EFF-51321	<62	61	61	<91	91	91	<77
	5/19/2021	HCC EFF-51921	<62	62	62	<92	92	92	<77
	5/26/2021	HCC EFF-52621	<62	62	62	<91	91	91	<77
	6/1/2021	HCC EFF-6121	<61	61	61	<91	91	91	<76
	6/8/2021	HCC EFF-6821	<62	62	62	<92	92	92	<77
	6/15/2021	HCC EFF-61521	<62	62	62	<91	91	91	<77
6/22/2021	HCC EFF-62221	<62	62	62	<92	92	92	<77	
7/2/2021	HCC EFF-7221	<62	62	62	<92	92	92	<77	
7/7/2021	HCC EFF-7721	<62	62	62	<92	92	92	<77	
7/13/2021	HCC EFF-71321	<62	62	62	<92	92	92	<77	
7/21/2021	HCC EFF-72121	<62	62	62	<92	92	92	<77	
NPDES Permit Discharge Limit³									208

Table 2
Total Petroleum Hydrocarbon Concentrations in HCC Water Treatment System Influent and Effluent
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Sample Location	Sample Date	Sample Identification	DRO ¹ (micrograms per liter)			ORO ¹ (micrograms per liter)			Calculated NWTPH-Dx ² (micrograms per liter)
			Result	MDL	MRL	Result	MDL	MRL	
Treatment System Effluent (Secondary GAC Vessel Effluent)	7/28/2021	HCC EFF-72821	<62	62	62	<91	91	91	<77
	8/5/2021	HCC EFF-8521	<62	62	62	<91	91	91	<77
	8/11/2021	HCC EFF-81121	<62	62	62	<92	92	92	<77
	8/15/2021	HCC EFF-81521	<62	62	62	<92	92	92	<77
	8/23/2021	HCC EFF-82321	<62	62	62	<92	92	92	<77
	8/29/2021	HCC EFF-82921	<62	62	62	<92	92	92	<77
	9/7/2021	HCC EFF-9721	<62	62	62	<92	92	92	<77
	9/15/2021	HCC EFF-91521	<62	62	62	<91	91	91	<77
	9/29/2021	HCC EFF-92921	<62	62	62	<91	91	91	<77
	10/5/2021	HCC EFF-10521	88	62	62	<92	92	92	88
	10/14/2021	HCC EFF-101421	86	62	62	100	92	92	187
	10/22/2021	HCC EFF-102221	100	62	62	97	91	91	197
	10/26/2021	HCC EFF-102621	130	62	62	<92	92	92	130
	11/4/2021	HCC EFF-11421	<62	62	62	<92	92	92	<77
	11/8/2021	HCC EFF-11821	<62	62	62	<92	92	92	<77
	11/16/2021	HCC EFF-111621	<62	62	62	<92	92	92	<77
	11/24/2021	HCC EFF-112421	<62	62	62	<91	91	91	<77
	12/1/2021	HCC EFF-12121	<62	62	62	<92	92	92	<77
12/7/2021	HCC EFF-12721	<61	61	61	<91	91	91	<76	
12/16/2021	HCC EFF-121621	<55	55	55	<170	170	170	<113	
12/21/2021	HCC EFF-122121	<56	56	56	<180	180	180	<118	
12/27/2021	HCC EFF-122721	<55	55	55	<180	180	180	<118	
NPDES Permit Discharge Limit³									208

NOTES:

"<" denotes analyte not detected at or exceeding the reported concentration.

¹Analyzed by Washington State Department of Ecology Method NWTPH-Dx.

²Sum of DRO and ORO, using half the method detection limit for non-detect results. Data reported previously in NPDES Discharge Monitoring Reports pursuant to NPDES Permit No. WA0032123.

³Discharge limit specified in NPDES Permit No. WA0032123.

DRO = total petroleum hydrocarbons as diesel-range organics

HCC = Hydraulic Control and Containment

J = The reported concentration is an estimated value

MDL = method detection limit

MRL = method reporting limit

NPDES = National Pollutant Discharge Elimination System

ORO = total petroleum hydrocarbons as oil-range organics

UJ = not detected at or exceeding the reported concentration; the reported concentration is an estimated value

Table 3
pH in HCC Water Treatment System Effluent
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071

Sample Date	pH ¹ (Standard Units)
1/4/2021	7.64
1/12/2021	7.30
1/19/2021	7.33
1/25/2021	7.36
2/2/2021	7.37
2/8/2021	7.36
2/16/2021	7.37
2/26/2021	7.40
3/3/2021	7.40
3/9/2021	7.43
3/18/2021	7.43
3/26/2021	7.50
3/30/2021	7.53
4/7/2021	7.48
4/12/2021	8.50
4/21/2021	7.84
4/29/2021	7.66
5/5/2021	7.62
5/13/2021	7.77
5/19/2021	7.76
5/26/2021	7.61
6/1/2021	7.66
6/8/2021	7.70
6/15/2021	7.63
6/22/2021	7.76
7/2/2021	7.72
7/7/2021	7.64
7/13/2021	7.70
7/21/2021	7.69
7/28/2021	7.62
8/5/2021	7.55
8/11/2021	7.78
8/15/2021	7.76
8/23/2021	7.78
8/29/2021	7.78
9/7/2021	7.71
9/15/2021	7.71
9/29/2021	7.67
10/5/2021	7.61
10/14/2021	7.65
10/22/2021	7.76
10/26/2021	7.70
11/4/2021	8.28
11/8/2021	7.81
11/16/2021	7.80
11/24/2021	7.70
12/1/2021	7.80
12/7/2021	7.79
12/16/2021	7.72
12/21/2021	7.73
12/27/2021	7.69
NPDES Permit Discharge Limit²	6.5-8.5

NOTES:

¹Data reported previously in NPDES Discharge Monitoring

Reports pursuant to NPDES Permit No. WA0032123.

²Discharge limit specified in NPDES Permit No. WA0032123.

HCC = Hydraulic Control and Containment

NPDES = National Pollutant Discharge Elimination System

Table 4
Metal Concentrations in HCC Water Treatment System Effluent
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071

Sample Date	Sample Identification	Analytical Results (micrograms per liter)	
		Total Lead ¹	Total Arsenic ¹
01/25/2021	HCC EFF-12521	< 0.80	< 1.0
02/26/2021	HCC EFF-22621	< 0.80	1.30
03/09/2021	HCC EFF-3921	<0.40	< 1.0
04/21/2021	HCC EFF-42121	<0.40	1.70
05/13/2021	HCC EFF-51321	<0.40	< 1.0
06/08/2021	HCC EFF-6821	<0.40	< 1.0
07/02/2021	HCC EFF-7221	<0.40	< 1.0
08/11/2021	HCC EFF-81121	< 0.40	1.50
10/05/2021	HCC EFF-10521	<0.40	< 1.0
11/16/2021	HCC EFF-111621	<0.40	< 1.0
12/07/2021	HCC EFF-12721	< 0.40	< 1.0
NPDES Permit Discharge Limit²		17.5	360

NOTES:

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

HCC = Hydraulic Control and Containment
NPDES = National Pollutant Discharge Elimination System

¹Analyzed by U.S. Environmental Protection Agency Method 200.8. Data reported previously in NPDES Discharge Monitoring Reports pursuant to NPDES Permit No. WA0032123.

²Discharge limit specified in NPDES Permit No. WA0032123.

**Table 5
HCC System Barrier Wall Groundwater Elevations
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071**

Groundwater Elevations at Piezometers (feet NAVD88) and Elevation Differentials at Piezometer Pairs (feet)																				
Date	PZ-1	PZ-2S	PZ-2N	Elevation Differential at PZ-2S/PZ-2N	PZ-3S	PZ-3N	Elevation Differential at PZ-3S/PZ-3N	PZ-4S	PZ-4N	Elevation Differential at PZ-4S/PZ-4N	PZ-5S	PZ-5N	Elevation Differential at PZ-5S/PZ-5N	PZ-6S	PZ-6N	Elevation Differential at PZ-6S/PZ-6N	PZ-7S	PZ-7N	Elevation Differential at PZ-7S/PZ-7N	PZ-8
1/1/2021	926.84	926.84	924.02	2.82	926.73	921.17	5.56	926.32	921.31	5.01	923.57	919.52	4.05	925.32	918.30	7.02	924.32	918.49	5.83	920.39
1/2/2021	927.49	927.70	924.59	3.11	927.71	921.17	6.54	927.26	921.31	5.95	924.17	919.96	4.21	926.12	918.75	7.37	925.21	919.06	6.15	920.97
1/3/2021	927.87	928.48	925.67	2.81	928.39	921.16	7.23	927.7	921.31	6.39	924.54	920.93	3.61	926.79	919.73	7.06	925.95	919.97	5.98	921.66
1/4/2021	927.74	928.44	925.13	3.31	928.20	921.14	7.06	927.5	921.29	6.21	924.40	920.32	4.08	926.59	919.26	7.33	925.72	919.52	6.20	921.47
1/5/2021	927.39	928.41	925.04	3.37	928.05	921.12	6.93	927.48	921.21	6.27	924.34	920.19	4.15	926.50	919.17	7.33	925.69	919.31	6.38	921.14
1/6/2021	927.38	928.37	924.93	3.44	928.14	921.15	6.99	927.57	921.23	6.34	924.38	920.10	4.28	926.44	918.80	7.64	925.66	919.25	6.41	921.10
1/7/2021	927.14	928.16	924.58	3.58	927.77	921.16	6.61	927.27	921.28	5.99	924.08	919.78	4.30	926.04	918.80	7.24	925.23	918.91	6.32	920.78
1/8/2021	926.88	927.87	924.17	3.70	927.35	921.13	6.22	926.99	921.25	5.74	923.89	919.60	4.29	925.70	918.61	7.09	924.87	918.69	6.18	920.42
1/9/2021	926.69	927.52	923.95	3.57	926.81	921.11	5.70	926.28	921.28	5.00	923.60	919.42	4.18	925.33	918.36	6.97	924.48	918.51	5.97	920.27
1/10/2021	926.53	927.08	923.75	3.33	926.36	921.13	5.23	925.77	921.27	4.50	923.34	919.31	4.03	925.03	918.01	7.02	924.08	918.34	5.74	920.05
1/11/2021	926.40	926.71	923.59	3.12	926.05	921.14	4.91	925.42	921.25	4.17	923.20	919.28	3.92	924.79	918.17	6.62	923.85	918.28	5.57	919.93
1/12/2021	927.21	927.15	924.02	3.13	926.97	921.13	5.84	926.49	921.25	5.24	924.00	919.52	4.48	925.53	918.31	7.22	924.49	919.08	5.41	920.58
2/21/2021	926.05	925.35	923.48	1.87	925.08	920.99	4.09	924.58	921.20	3.38	922.66	919.05	3.61	923.91	917.86	6.05	922.78	917.80	4.98	919.54
2/22/2021	927.43	927.27	924.64	2.63	927.45	921	6.45	926.71	921.20	5.51	923.79	919.67	4.12	925.17	918.24	6.93	924.19	919.55	4.64	920.66
2/23/2021	927.67	928.38	925.46	2.92	928.05	921.01	7.04	927.43	921.20	6.23	924.25	920.54	3.71	926.34	919.38	6.96	925.46	919.40	6.06	921.33
2/24/2021	927.11	928.16	924.75	3.41	927.63	920.99	6.64	927.12	921.20	5.92	924.04	919.91	4.13	925.96	918.59	7.37	925.11	918.79	6.32	920.85
2/25/2021	927.03	927.85	924.28	3.57	927.23	920.99	6.24	926.74	921.17	5.57	923.86	919.60	4.26	925.68	918.62	7.06	924.81	918.44	6.37	920.53
2/26/2021	927.05	927.84	924.35	3.49	927.30	921.02	6.28	926.84	921.16	5.68	923.96	919.57	4.39	925.84	918.42	7.42	924.94	918.42	6.52	920.65
2/27/2021	926.78	927.69	924.26	3.43	927.10	921	6.10	926.64	921.16	5.48	923.86	919.51	4.35	925.62	918.48	7.14	924.79	918.32	6.47	920.46
2/28/2021	926.66	927.42	924.07	3.35	926.86	920.98	5.88	926.42	921.21	5.21	923.68	919.38	4.30	925.45	918.30	7.15	924.52	918.19	6.33	920.31
3/1/2021	926.47	927.15	923.87	3.28	926.61	920.99	5.62	926.17	921.16	5.01	923.53	919.31	4.22	925.17	917.89	7.28	924.30	918.10	6.20	920.14
3/2/2021	926.35	926.90	923.77	3.13	926.44	920.99	5.45	925.98	921.18	4.80	923.41	919.30	4.11	925.00	917.95	7.05	924.08	918.07	6.01	920.06
3/3/2021	926.29	926.69	923.66	3.03	926.23	920.97	5.26	925.83	921.15	4.68	923.32	919.28	4.04	924.86	918.02	6.84	923.94	918.03	5.91	919.94
3/4/2021	926.42	926.52	923.63	2.89	926.16	920.99	5.17	925.69	921.18	4.51	923.26	919.24	4.02	924.77	918.28	6.49	923.83	918.00	5.83	919.93
3/5/2021	926.39	926.49	923.57	2.92	926.03	920.97	5.06	925.6	921.16	4.44	923.17	919.21	3.96	924.72	918.15	6.57	923.71	917.96	5.75	919.85
3/6/2021	926.45	926.45	923.59	2.86	926.06	921	5.06	925.59	921.16	4.43	923.16	919.24	3.92	924.72	918.17	6.55	923.71	917.99	5.72	919.90
3/7/2021	926.46	926.47	923.60	2.87	926.06	921	5.06	925.59	921.15	4.44	923.16	919.24	3.92	924.70	918.10	6.60	923.70	917.99	5.71	919.90
3/8/2021	926.23	926.47	923.61	2.86	926.07	921	5.07	925.59	921.14	4.45	923.18	919.24	3.94	924.74	918.23	6.51	923.73	917.98	5.75	919.88
3/9/2021	926.12	926.37	923.58	2.79	925.99	920.98	5.01	925.54	921.19	4.35	923.10	919.18	3.92	924.63	917.89	6.74	923.61	917.90	5.71	919.85
3/10/2021	926.04	926.26	923.49	2.77	925.83	920.96	4.87	925.39	921.16	4.23	923.06	919.18	3.88	924.52	918.12	6.40	923.56	917.91	5.65	919.73
3/11/2021	925.97	926.09	923.45	2.64	925.70	920.99	4.71	925.23	921.19	4.04	922.97	919.13	3.84	924.44	918.17	6.27	923.42	917.85	5.57	919.69
3/12/2021	925.89	925.96	923.38	2.58	925.56	920.99	4.57	925.11	921.17	3.94	922.89	919.11	3.78	924.29	917.71	6.58	923.29	917.82	5.47	919.62
3/13/2021	925.81	925.82	923.33	2.49	925.44	920.99	4.45	924.99	921.17	3.82	922.83	919.04	3.79	924.22	917.98	6.24	923.19	917.76	5.43	919.56
3/14/2021	925.80	925.70	923.29	2.41	925.36	921.01	4.35	924.86	921.15	3.71	922.75	919.08	3.67	924.06	917.79	6.27	923.07	917.80	5.27	919.52
3/15/2021	925.76	925.61	923.25	2.36	925.26	920.99	4.27	924.78	921.14	3.64	922.71	919.08	3.63	924.02	917.96	6.06	922.99	917.79	5.20	919.47
3/16/2021	925.73	925.53	923.24	2.29	925.20	921.01	4.19	924.69	921.16	3.53	922.62	919.02	3.60	923.93	917.68	6.25	922.81	917.72	5.09	919.46
3/17/2021	925.67	925.46	923.20	2.26	925.11	920.98	4.13	924.63	921.14	3.49	922.62	919.04	3.58	923.88	917.92	5.96	922.79	917.77	5.02	919.39
3/18/2021	925.65	925.44	923.21	2.23	925.07	920.98	4.09	924.62	921.17	3.45	922.57	919.04	3.53	923.85	917.77	6.08	922.71	917.76	4.95	919.38
3/19/2021	925.75	925.40	923.21	2.19	925.09	920.98	4.11	924.59	921.14	3.45	922.60	919.12	3.48	923.87	918.10	5.77	922.76	917.86	4.90	919.43
3/20/2021	925.82	925.47	923.28	2.19	925.17	921.02	4.15	924.66	921.18	3.48	922.63	919.16	3.47	923.89	918.14	5.75	922.81	917.88	4.93	919.53
3/21/2021	925.86	925.50	923.28	2.22	925.21	920.99	4.22	924.73	921.14	3.59	922.65	919.16	3.49	923.99	917.89	6.10	922.88	917.88	5.00	919.53
3/22/2021	926.29	925.96	923.49	2.47	925.68	921	4.68	925.27	921.17	4.10	923.12	919.26	3.86	924.51	917.91	6.60	923.33	918.03	5.30	919.81
3/23/2021	926.15	926.30	923.73	2.57	926.04	921	5.04	925.63	921.16	4.47	923.19	919.25	3.94	924.75	917.90	6.85	923.76	917.99	5.77	919.96
3/24/2021	926.32	926.33	923.64	2.69	926.00	921.01	4.99	925.53	921.15	4.38	923.20	919.27	3.93	924.71	918.01	6.70	923.73	918.01	5.72	919.94
3/25/2021	926.30	926.66	923.85	2.81	926.36	921	5.36	925.96	921.17	4.79	923.45	919.34	4.11	925.06	918.18	6.88	924.17	918.09	6.08	920.15
3/26/2021	926.21	926.60	923.78	2.82	926.20	920.98	5.22	925.76	921.16	4.60	923.30	919.30	4.00	924.92	918.31	6.61	924.00	918.04	5.96	920.02

Table 5
HCC System Barrier Wall Groundwater Elevations
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071

Groundwater Elevations at Piezometers (feet NAVD88) and Elevation Differentials at Piezometer Pairs (feet)																				
Date	PZ-1	PZ-2S	PZ-2N	Elevation Differential at PZ-2S/PZ-2N	PZ-3S	PZ-3N	Elevation Differential at PZ-3S/PZ-3N	PZ-4S	PZ-4N	Elevation Differential at PZ-4S/PZ-4N	PZ-5S	PZ-5N	Elevation Differential at PZ-5S/PZ-5N	PZ-6S	PZ-6N	Elevation Differential at PZ-6S/PZ-6N	PZ-7S	PZ-7N	Elevation Differential at PZ-7S/PZ-7N	PZ-8
3/27/2021	926.14	926.40	923.60	2.80	925.99	921	4.99	925.52	921.13	4.39	923.18	919.26	3.92	924.76	918.14	6.62	923.84	917.99	5.85	919.87
3/28/2021	926.19	926.28	923.54	2.74	925.88	920.99	4.89	925.4	921.16	4.24	923.04	919.23	3.81	924.58	917.80	6.78	923.61	917.94	5.67	919.84
3/29/2021	926.46	926.55	923.57	2.98	926.08	921	5.08	925.57	921.13	4.44	923.34	919.25	4.09	924.81	917.86	6.95	923.71	918.13	5.58	919.97
3/30/2021	926.20	926.67	923.74	2.93	926.32	920.97	5.35	925.96	921.16	4.80	923.36	919.33	4.03	925.00	917.99	7.01	924.09	918.05	6.04	920.03
3/31/2021	926.12	926.50	923.63	2.87	926.10	920.98	5.12	925.67	921.14	4.53	923.18	919.25	3.93	924.80	917.82	6.98	923.87	917.97	5.90	919.90
4/1/2021	926.02	926.34	923.56	2.78	925.91	920.97	4.94	925.51	921.16	4.35	923.04	919.20	3.84	924.61	917.77	6.84	923.65	917.91	5.74	919.81
4/2/2021	925.97	926.13	923.43	2.70	925.73	920.98	4.75	925.27	921.15	4.12	922.93	919.21	3.72	924.35	917.76	6.59	923.46	917.91	5.55	919.71
4/3/2021	925.95	925.99	923.43	2.56	925.63	921.02	4.61	925.16	921.16	4.00	922.88	919.23	3.65	924.31	918.10	6.21	923.36	917.97	5.39	919.71
4/4/2021	925.92	925.87	923.35	2.52	925.49	920.99	4.50	925.01	921.12	3.89	922.79	919.24	3.55	924.21	918.20	6.01	923.24	917.98	5.26	919.63
4/5/2021	925.94	925.82	923.34	2.48	925.46	921.01	4.45	924.94	921.13	3.81	922.72	919.22	3.50	924.20	918.02	6.18	923.15	917.94	5.21	919.66
4/6/2021	925.89	925.73	923.34	2.39	925.28	921.02	4.26	924.7	921.15	3.55	922.68	919.21	3.47	924.11	918.14	5.97	923.08	917.92	5.16	919.63
4/7/2021	925.84	925.64	923.27	2.37	925.19	921	4.19	924.65	921.12	3.53	922.60	919.16	3.44	923.94	917.80	6.14	922.95	917.91	5.04	919.55
4/8/2021	925.97	925.86	923.44	2.42	925.57	921	4.57	925.15	921.16	3.99	922.92	919.22	3.70	924.47	918.15	6.32	923.32	917.98	5.34	919.78
4/9/2021	925.94	925.89	923.43	2.46	925.64	921	4.64	925.28	921.12	4.16	922.90	919.26	3.64	924.27	918.09	6.18	923.38	918.00	5.38	919.72
4/10/2021	926.09	925.95	923.43	2.52	925.80	921	4.80	925.44	921.12	4.32	923.04	919.24	3.80	924.62	918.27	6.35	923.50	918.00	5.50	919.80
4/11/2021	925.96	926.12	923.55	2.57	925.92	920.99	4.93	925.6	921.16	4.44	923.07	919.28	3.79	924.59	918.19	6.40	923.62	917.99	5.63	919.83
4/12/2021	925.91	926.01	923.46	2.55	925.66	921	4.66	925.15	921.12	4.03	922.93	919.24	3.69	924.35	918.03	6.32	923.47	917.92	5.55	919.71
4/13/2021	925.86	925.87	923.36	2.51	925.46	921	4.46	924.99	921.12	3.87	922.80	919.25	3.55	924.30	917.86	6.44	923.27	917.83	5.44	919.62
4/14/2021	925.76	925.80	923.32	2.48	925.33	920.99	4.34	924.88	921.12	3.76	922.73	919.41	3.32	924.05	917.90	6.15	923.15	917.85	5.30	919.54
4/15/2021	925.76	925.69	923.30	2.39	925.25	920.99	4.26	924.74	921.15	3.59	922.67	919.45	3.22	924.10	917.94	6.16	923.04	917.87	5.17	919.54
4/16/2021	925.85	925.60	923.32	2.28	925.21	921.01	4.20	924.71	921.15	3.56	922.59	919.60	2.99	924.05	918.03	6.02	922.92	917.94	4.98	919.58
4/17/2021	926.00	925.66	923.36	2.30	925.28	921.03	4.25	924.75	921.16	3.59	922.61	919.91	2.70	924.02	918.13	5.89	922.96	918.14	4.82	919.68
4/18/2021	926.19	925.76	923.50	2.26	925.35	920.98	4.37	924.85	921.15	3.70	922.64	920.13	2.51	923.91	918.27	5.64	923.05	918.41	4.64	919.78
4/19/2021	926.35	925.92	923.74	2.18	925.50	921	4.50	924.99	921.15	3.84	922.68	920.44	2.24	924.09	918.52	5.57	923.17	918.68	4.49	919.98
4/20/2021	926.45	926.03	923.80	2.23	925.59	921.02	4.57	925	921.14	3.86	922.77	920.54	2.23	924.18	918.81	5.37	923.31	918.76	4.55	920.04
4/21/2021	926.40	926.08	923.78	2.30	925.60	920.99	4.61	925.07	921.14	3.93	922.81	920.49	2.32	924.21	918.75	5.46	923.35	918.71	4.64	920.00
4/22/2021	926.43	926.09	923.85	2.24	925.64	921.01	4.63	925.06	921.15	3.91	922.79	920.57	2.22	924.25	918.58	5.67	923.34	918.73	4.61	920.07
4/23/2021	926.44	926.13	923.84	2.29	925.63	920.99	4.64	925.1	921.15	3.95	922.82	920.62	2.20	924.40	918.81	5.59	923.38	918.75	4.63	920.04
4/24/2021	926.45	926.08	923.81	2.27	925.67	921.01	4.66	925.09	921.15	3.94	922.82	920.63	2.19	924.30	918.90	5.40	923.39	918.76	4.63	920.06
4/25/2021	926.46	926.07	923.78	2.29	925.69	921.01	4.68	925.12	921.13	3.99	922.83	920.64	2.19	924.40	918.91	5.49	923.39	918.76	4.63	920.05
4/26/2021	926.35	926.03	923.69	2.34	925.62	920.99	4.63	925.12	921.14	3.98	922.82	920.53	2.29	924.33	918.81	5.52	923.37	918.63	4.74	919.96
4/27/2021	926.27	926.01	923.61	2.40	925.57	920.98	4.59	925.07	921.15	3.92	922.76	920.37	2.39	924.33	918.49	5.84	923.28	918.50	4.78	919.90
4/28/2021	926.24	925.94	923.55	2.39	925.50	920.99	4.51	925	921.14	3.86	922.74	920.38	2.36	924.07	918.30	5.77	923.22	918.46	4.76	919.84
4/29/2021	926.28	925.90	923.57	2.33	925.51	921	4.51	924.98	921.16	3.82	922.72	920.39	2.33	924.19	918.43	5.76	923.20	918.47	4.73	919.88
4/30/2021	926.39	925.94	923.69	2.25	925.56	921	4.56	925	921.16	3.84	922.75	920.63	2.12	924.13	918.73	5.40	923.26	918.70	4.56	920.00
5/1/2021	926.51	926.01	923.87	2.14	925.62	920.99	4.63	925.09	921.16	3.93	922.78	920.79	1.99	924.10	918.72	5.38	923.32	918.88	4.44	920.11
5/2/2021	926.47	926.05	923.85	2.20	925.63	920.97	4.66	925.12	921.15	3.97	922.77	920.74	2.03	924.22	918.65	5.57	923.34	918.80	4.54	920.07
5/3/2021	926.39	926.05	923.74	2.31	925.59	920.98	4.61	925.09	921.14	3.95	922.77	920.59	2.18	924.29	918.67	5.62	923.32	918.67	4.65	920.00
5/4/2021	926.33	925.94	923.64	2.30	925.53	920.98	4.55	924.99	921.12	3.87	922.77	920.54	2.23	924.26	918.81	5.45	923.30	918.63	4.67	919.92
5/5/2021	926.34	925.98	923.65	2.33	925.48	920.97	4.51	924.95	921.14	3.81	922.72	920.52	2.20	924.30	918.75	5.55	923.27	918.65	4.62	919.94
5/6/2021	926.42	925.93	923.70	2.23	925.48	921.02	4.46	924.9	921.16	3.74	922.72	920.58	2.14	924.08	918.59	5.49	923.25	918.74	4.51	920.00
5/7/2021	926.53	926.00	923.88	2.12	925.59	921.01	4.58	925.03	921.17	3.86	922.77	920.81	1.96	924.25	919.07	5.18	923.34	918.91	4.43	920.14
5/8/2021	926.43	926.01	923.79	2.22	925.60	920.98	4.62	925.06	921.16	3.90	922.74	920.70	2.04	924.28	918.68	5.60	923.31	918.74	4.57	920.04
5/9/2021	926.32	925.93	923.64	2.29	925.52	920.99	4.53	924.98	921.14	3.84	922.76	920.63	2.13	924.28	918.76	5.52	923.30	918.60	4.70	919.95
5/10/2021	926.21	925.88	923.56	2.32	925.45	920.98	4.47	924.93	921.16	3.77	922.72	920.66	2.06	924.18	918.65	5.53	923.21	918.51	4.70	919.84
5/11/2021	926.23	925.80	923.51	2.29	925.42	921	4.42	924.87	921.14	3.73	922.68	920.72	1.96	924.06	918.45	5.61	923.16	918.52	4.64	919.84
5/12/2021	926.27	925.75	923.58	2.17	925.39	920.98	4.41	924.84	921.13	3.71	922.68	920.80	1.88	924.08	918.78	5.30	923.16	918.60	4.56	919.85

Table 5
HCC System Barrier Wall Groundwater Elevations
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071

Groundwater Elevations at Piezometers (feet NAVD88) and Elevation Differentials at Piezometer Pairs (feet)																				
Date	PZ-1	PZ-2S	PZ-2N	Elevation Differential at PZ-2S/PZ-2N	PZ-3S	PZ-3N	Elevation Differential at PZ-3S/PZ-3N	PZ-4S	PZ-4N	Elevation Differential at PZ-4S/PZ-4N	PZ-5S	PZ-5N	Elevation Differential at PZ-5S/PZ-5N	PZ-6S	PZ-6N	Elevation Differential at PZ-6S/PZ-6N	PZ-7S	PZ-7N	Elevation Differential at PZ-7S/PZ-7N	PZ-8
7/3/2021	926.07	925.87	923.59	2.28	925.55	920.99	4.56	925.13	921.20	3.93	919.05	921.97	-2.92	924.25	918.57	5.68	923.22	918.46	4.76	919.78
7/4/2021	925.99	925.72	923.45	2.27	925.39	921	4.39	924.95	921.13	3.82	919.00	921.84	-2.84	924.13	918.25	5.88	923.08	918.30	4.78	919.65
7/5/2021	925.90	925.62	923.42	2.20	925.21	920.99	4.22	924.72	921.20	3.52	919.06	921.86	-2.80	924.07	918.41	5.66	922.99	918.32	4.67	919.60
7/6/2021	925.85	925.48	923.34	2.14	925.10	921	4.10	924.6	921.16	3.44	919.04	921.67	-2.63	924.02	918.35	5.67	922.83	918.23	4.60	919.53
7/7/2021	925.79	925.38	923.26	2.12	924.98	920.99	3.99	924.46	921.12	3.34	919.03	921.75	-2.72	923.95	918.29	5.66	922.69	918.15	4.54	919.45
7/8/2021	925.71	925.30	923.21	2.09	924.90	920.96	3.94	924.4	921.11	3.29	919.04	921.70	-2.66	923.86	918.21	5.65	922.59	918.09	4.50	919.38
7/9/2021	925.65	925.25	923.21	2.04	924.87	920.98	3.89	924.37	921.15	3.22	919.04	921.60	-2.56	923.80	918.18	5.62	922.48	918.02	4.46	919.37
7/10/2021	925.58	925.17	923.15	2.02	924.77	920.96	3.81	924.29	921.13	3.16	918.99	921.54	-2.55	923.54	917.83	5.71	922.35	917.91	4.44	919.28
7/11/2021	925.59	925.08	923.14	1.94	924.74	921.01	3.73	924.19	921.08	3.11	919.00	921.53	-2.53	923.61	917.90	5.71	922.30	917.90	4.40	919.29
7/12/2021	925.53	925.07	923.12	1.95	924.69	920.99	3.70	924.21	921.13	3.08	919.01	921.50	-2.49	923.61	917.93	5.68	922.26	917.86	4.40	919.26
7/13/2021	925.47	925.00	923.08	1.92	924.61	920.96	3.65	924.13	921.12	3.01	919.02	921.42	-2.40	923.56	917.91	5.65	922.21	917.82	4.39	919.17
7/14/2021	925.44	924.97	923.08	1.89	924.58	920.97	3.61	924.11	921.14	2.97	919.03	921.44	-2.41	923.58	917.97	5.61	922.18	917.81	4.37	919.17
7/15/2021	925.38	924.93	923.06	1.87	924.57	920.96	3.61	924.13	921.13	3.00	919.01	921.47	-2.46	923.40	917.79	5.61	922.15	917.79	4.36	919.11
7/16/2021	925.36	924.90	923.04	1.86	924.51	920.98	3.53	924.04	921.15	2.89	919.01	921.46	-2.45	923.39	917.78	5.61	922.12	917.77	4.35	919.14
7/17/2021	925.32	924.83	923.01	1.82	924.44	920.99	3.45	923.99	921.14	2.85	919.07	921.41	-2.34	923.40	917.86	5.54	922.13	917.76	4.37	919.06
7/18/2021	925.29	924.77	923.03	1.74	924.43	921	3.43	923.91	921.15	2.76	919.02	921.32	-2.30	923.33	917.82	5.51	922.00	917.65	4.35	919.11
7/19/2021	925.28	924.69	922.97	1.72	924.38	921.02	3.36	923.82	921.14	2.68	919.03	921.40	-2.37	923.23	917.66	5.57	921.95	917.68	4.27	919.08
7/20/2021	925.20	924.65	922.92	1.73	924.29	920.97	3.32	923.79	921.11	2.68	919.05	921.41	-2.36	923.20	917.82	5.38	921.94	917.68	4.26	918.95
7/21/2021	925.21	924.61	922.95	1.66	924.30	921.03	3.27	923.76	921.15	2.61	918.99	921.36	-2.37	923.21	917.78	5.43	921.85	917.59	4.26	919.02
7/22/2021	925.13	924.58	922.93	1.65	924.23	920.98	3.25	923.75	921.14	2.61	919.06	921.41	-2.35	923.16	917.85	5.31	921.86	917.64	4.22	918.94
7/23/2021	925.13	924.50	922.87	1.63	924.18	921	3.18	923.61	921.11	2.50	919.05	921.41	-2.36	923.07	917.77	5.30	921.79	917.61	4.18	918.91
7/24/2021	925.09	924.48	922.90	1.58	924.18	921.03	3.15	923.61	921.15	2.46	919.05	921.40	-2.35	923.02	917.72	5.30	921.73	917.58	4.15	918.95
7/25/2021	925.09	924.45	922.91	1.54	924.15	921.03	3.12	923.6	921.17	2.43	919.03	921.38	-2.35	922.99	917.56	5.43	921.66	917.55	4.11	918.93
7/26/2021	925.02	924.44	922.88	1.56	924.08	921	3.08	923.57	921.16	2.41	919.05	921.38	-2.33	923.00	917.78	5.22	921.65	917.52	4.13	918.88
7/27/2021	925.03	924.35	922.82	1.53	924.00	921	3.00	923.48	921.10	2.38	919.03	921.31	-2.28	922.97	917.72	5.25	921.58	917.50	4.08	918.80
7/28/2021	924.95	924.35	922.85	1.50	923.98	920.98	3.00	923.48	921.14	2.34	919.01	921.29	-2.28	922.90	917.57	5.33	921.49	917.45	4.04	918.77
7/29/2021	924.93	924.33	922.86	1.47	923.95	920.99	2.96	923.45	921.15	2.30	919.01	921.30	-2.29	922.80	917.40	5.40	921.38	917.44	3.94	918.74
7/30/2021	924.88	924.26	922.84	1.42	923.88	920.98	2.90	923.37	921.13	2.24	919.03	921.33	-2.30	922.75	917.62	5.13	921.37	917.45	3.92	918.69
7/31/2021	924.88	924.21	922.82	1.39	923.88	921.01	2.87	923.29	921.15	2.14	919.03	921.34	-2.31	922.67	917.52	5.15	921.27	917.44	3.83	918.74
8/1/2021	924.88	924.17	922.81	1.36	923.84	921.02	2.82	923.25	921.16	2.09	919.03	921.33	-2.30	922.62	917.51	5.11	921.24	917.44	3.80	918.73
8/2/2021	924.85	924.11	922.76	1.35	923.75	921.01	2.74	923.19	921.12	2.07	919.00	921.30	-2.30	922.56	917.36	5.20	921.14	917.42	3.72	918.65
8/3/2021	924.86	924.09	922.78	1.31	923.76	921.03	2.73	923.14	921.15	1.99	919.01	921.27	-2.26	922.41	917.35	5.06	921.10	917.41	3.69	918.67
8/4/2021	924.79	924.11	922.80	1.31	923.89	920.98	2.91	923.47	921.14	2.33	918.99	921.21	-2.22	922.58	917.46	5.12	921.13	917.43	3.70	918.69
8/5/2021	924.80	924.05	922.80	1.25	923.80	920.99	2.81	923.26	921.12	2.14	918.99	921.22	-2.23	922.65	917.51	5.14	921.09	917.40	3.69	918.64
8/6/2021	924.72	924.02	922.76	1.26	923.66	920.99	2.67	923.1	921.16	1.94	918.99	921.25	-2.26	922.31	917.34	4.97	920.96	917.36	3.60	918.61
8/7/2021	924.72	923.97	922.74	1.23	923.60	920.99	2.61	923.01	921.14	1.87	919.05	921.27	-2.22	922.34	917.49	4.85	920.92	917.37	3.55	918.58
8/8/2021	924.82	923.93	922.74	1.19	923.61	921	2.61	922.98	921.13	1.85	919.02	921.24	-2.22	922.27	917.48	4.79	920.88	917.42	3.46	918.61
8/9/2021	924.84	924.03	922.78	1.25	923.68	921.01	2.67	923.07	921.18	1.89	919.03	921.18	-2.15	922.40	917.49	4.91	920.93	917.36	3.57	918.65
8/10/2021	924.73	924.00	922.73	1.27	923.58	920.96	2.62	923.05	921.12	1.93	919.00	921.20	-2.20	922.34	917.37	4.97	920.87	917.34	3.53	918.52
8/11/2021	924.67	923.95	922.73	1.22	923.58	920.96	2.62	923.04	921.14	1.90	919.06	921.21	-2.15	922.26	917.37	4.89	920.84	917.31	3.53	918.53
8/12/2021	924.66	923.88	922.71	1.17	923.57	921	2.57	923.05	921.13	1.92	919.02	921.19	-2.17	922.23	917.42	4.81	920.78	917.30	3.48	918.70
8/13/2021	924.58	923.84	922.70	1.14	923.48	920.97	2.51	922.96	921.13	1.83	919.02	921.12	-2.10	922.29	917.39	4.90	920.68	917.26	3.42	918.24
8/14/2021	924.57	923.80	922.66	1.14	923.59	920.99	2.60	923.16	921.13	2.03	919.02	921.09	-2.07	922.11	917.41	4.70	920.69	917.26	3.43	918.68
8/15/2021	924.51	923.77	922.63	1.14	923.57	920.99	2.58	923.16	921.13	2.03	919.00	921.03	-2.03	922.05	917.23	4.82	920.63	917.23	3.40	918.55
8/16/2021	924.46	923.71	922.60	1.11	923.32	920.97	2.35	922.77	921.12	1.65	919.00	921.01	-2.01	921.88	917.22	4.66	920.43	917.16	3.27	918.19
8/17/2021	924.45	923.64	922.59	1.05	923.22	921	2.22	922.63	921.13	1.50	919.02	921.02	-2.00	922.00	917.37	4.63	920.33	917.15	3.18	918.30

Table 5
HCC System Barrier Wall Groundwater Elevations
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071

Groundwater Elevations at Piezometers (feet NAVD88) and Elevation Differentials at Piezometer Pairs (feet)																				
Date	PZ-1	PZ-2S	PZ-2N	Elevation Differential at PZ-2S/PZ-2N	PZ-3S	PZ-3N	Elevation Differential at PZ-3S/PZ-3N	PZ-4S	PZ-4N	Elevation Differential at PZ-4S/PZ-4N	PZ-5S	PZ-5N	Elevation Differential at PZ-5S/PZ-5N	PZ-6S	PZ-6N	Elevation Differential at PZ-6S/PZ-6N	PZ-7S	PZ-7N	Elevation Differential at PZ-7S/PZ-7N	PZ-8
8/18/2021	924.43	923.55	922.54	1.01	923.12	921.01	2.11	922.5	921.11	1.39	919.05	921.02	-1.97	921.76	917.33	4.43	920.23	917.15	3.08	918.17
8/19/2021	924.35	923.51	922.52	0.99	923.06	920.96	2.10	922.46	921.11	1.35	918.99	920.98	-1.99	921.67	917.18	4.49	920.05	917.07	2.98	918.08
8/20/2021	924.35	923.46	922.53	0.93	923.04	921	2.04	922.41	921.15	1.26	918.97	920.97	-2.00	921.54	917.14	4.40	919.95	917.06	2.89	918.09
8/21/2021	924.28	923.44	922.49	0.95	922.93	920.96	1.97	922.34	921.12	1.22	919.01	920.96	-1.95	921.48	917.15	4.33	919.88	917.04	2.84	918.00
8/22/2021	924.31	923.39	922.50	0.89	922.94	921.01	1.93	922.28	921.15	1.13	919.00	921.00	-2.00	921.35	917.15	4.20	919.81	917.07	2.74	918.03
8/23/2021	924.34	923.32	922.45	0.87	922.88	921.02	1.86	922.2	921.09	1.11	918.97	920.97	-2.00	921.33	917.13	4.20	919.74	917.02	2.72	917.98
8/24/2021	924.30	923.32	922.46	0.86	922.86	921.02	1.84	922.18	921.12	1.06	918.98	920.98	-2.00	921.26	917.18	4.08	919.69	917.00	2.69	917.97
8/25/2021	924.22	923.31	922.44	0.87	922.78	920.97	1.81	922.17	921.10	1.07	919.05	921.06	-2.01	921.21	917.22	3.99	919.70	917.12	2.58	917.86
8/26/2021	924.21	923.26	922.39	0.87	922.74	921	1.74	922.11	921.10	1.01	919.06	921.08	-2.02	921.20	917.24	3.96	919.64	917.14	2.50	917.85
8/27/2021	924.23	923.18	922.37	0.81	922.73	921.02	1.71	922	921.10	0.90	919.05	921.09	-2.04	921.13	917.25	3.88	919.56	917.13	2.43	917.83
8/28/2021	924.21	923.25	922.39	0.86	922.74	920.99	1.75	922.09	921.14	0.95	919.04	921.08	-2.04	921.10	917.24	3.86	919.52	917.12	2.40	917.84
8/29/2021	924.21	923.18	922.33	0.85	922.70	921.01	1.69	921.97	921.09	0.88	919.03	921.08	-2.05	921.01	917.21	3.80	919.45	917.11	2.34	917.80
8/30/2021	924.15	923.20	922.35	0.85	922.69	921	1.69	922	921.15	0.85	919.04	921.08	-2.04	921.02	917.22	3.80	919.42	917.12	2.30	917.80
8/31/2021	924.09	923.15	922.31	0.84	922.59	920.96	1.63	921.96	921.10	0.86	919.00	921.03	-2.03	921.02	917.22	3.80	919.33	917.07	2.26	917.69
9/1/2021	924.15	923.11	922.29	0.82	922.63	921.04	1.59	921.87	921.12	0.75	918.99	921.02	-2.03	920.97	917.18	3.79	919.20	917.06	2.14	917.75
9/2/2021	924.13	923.08	922.29	0.79	922.58	921.03	1.55	921.84	921.10	0.74	918.99	921.06	-2.07	920.84	917.20	3.64	919.16	917.09	2.07	917.64
9/3/2021	924.08	923.08	922.29	0.79	922.55	921.03	1.52	921.82	921.14	0.68	919.03	921.11	-2.08	920.79	917.21	3.58	919.11	917.12	1.99	917.59
9/4/2021	923.99	923.02	922.24	0.78	922.46	920.98	1.48	921.77	921.07	0.70	919.02	921.06	-2.04	920.80	917.24	3.56	919.04	917.09	1.95	917.45
9/5/2021	923.96	922.99	922.22	0.77	922.42	920.98	1.44	921.72	921.07	0.65	919.01	921.06	-2.05	920.85	917.23	3.62	918.95	917.08	1.87	917.41
9/6/2021	923.98	922.92	922.20	0.72	922.40	921.04	1.36	921.62	921.08	0.54	919.00	921.06	-2.06	920.61	917.20	3.41	918.83	917.06	1.77	917.39
9/7/2021	923.94	922.90	922.20	0.70	922.36	921.03	1.33	921.58	921.12	0.46	919.05	921.11	-2.06	920.64	917.25	3.39	918.82	917.12	1.70	917.35
9/8/2021	923.89	922.87	922.20	0.67	922.31	921	1.31	921.56	921.15	0.41	919.00	921.11	-2.11	920.38	917.23	3.15	918.70	917.11	1.59	917.27
9/9/2021	923.88	922.86	922.17	0.69	922.49	921.02	1.47	921.97	921.16	0.81	918.99	921.06	-2.07	920.62	917.22	3.40	918.78	917.06	1.72	917.29
9/10/2021	923.84	922.82	922.18	0.64	922.28	921.01	1.27	921.53	921.10	0.43	919.01	921.10	-2.09	920.28	917.22	3.06	918.61	917.11	1.50	917.23
9/11/2021	923.82	922.77	922.15	0.62	922.19	920.99	1.20	921.43	921.09	0.34	919.02	921.12	-2.10	920.32	917.23	3.09	918.56	917.12	1.44	917.15
9/12/2021	923.86	922.69	922.13	0.56	922.14	921.03	1.11	921.29	921.06	0.23	918.98	921.06	-2.08	920.28	917.21	3.07	918.46	917.05	1.41	917.14
9/13/2021	923.85	922.67	922.14	0.53	922.14	921.04	1.10	921.25	921.08	0.17	919.03	921.07	-2.04	920.26	917.26	3.00	918.47	917.07	1.40	917.15
9/14/2021	923.76	922.67	922.11	0.56	922.06	921	1.06	921.24	921.08	0.16	919.04	921.11	-2.07	920.15	917.27	2.88	918.46	917.13	1.33	917.05
9/15/2021	923.78	922.63	922.10	0.53	922.04	920.97	1.07	921.21	921.07	0.14	919.00	921.11	-2.11	920.04	917.21	2.83	918.38	917.10	1.28	917.05
9/16/2021	923.83	922.69	922.15	0.54	922.06	920.97	1.09	921.26	921.11	0.15	919.04	921.11	-2.07	920.11	917.27	2.84	918.46	917.11	1.35	917.07
9/17/2021	923.85	922.69	922.17	0.52	922.13	921	1.13	921.25	921.09	0.16	918.99	921.07	-2.08	920.10	917.20	2.90	918.41	917.05	1.36	917.17
9/18/2021	924.57	923.13	922.45	0.68	923.00	920.99	2.01	922.39	921.05	1.34	919.03	921.11	-2.08	921.08	917.48	3.60	919.42	917.42	2.00	917.94
9/19/2021	925.06	923.85	922.81	1.04	923.67	920.99	2.68	922.96	921.02	1.94	919.04	921.08	-2.04	921.91	917.76	4.15	920.21	917.59	2.62	918.44
9/20/2021	925.62	924.88	923.26	1.62	924.80	921.03	3.77	924.17	921.08	3.09	919.01	921.12	-2.11	923.08	917.95	5.13	921.32	917.91	3.41	919.08
9/21/2021	925.56	925.37	923.24	2.13	924.83	920.98	3.85	924.16	921.01	3.15	919.05	921.14	-2.09	923.52	917.86	5.66	921.86	917.82	4.04	919.04
9/22/2021	925.38	925.32	923.15	2.17	924.75	920.97	3.78	924.17	921.01	3.16	919.03	921.11	-2.08	923.69	917.75	5.94	921.95	917.61	4.34	918.96
9/23/2021	925.28	925.18	923.11	2.07	924.69	921.03	3.66	924.07	921.09	2.98	919.05	921.15	-2.10	923.65	917.69	5.96	921.91	917.51	4.40	918.95
9/24/2021	925.12	925.04	923.02	2.02	924.54	920.98	3.56	923.98	921.07	2.91	919.03	921.18	-2.15	923.49	917.43	6.06	921.75	917.44	4.31	918.80
9/25/2021	925.03	924.88	922.98	1.90	924.41	920.99	3.42	923.85	921.08	2.77	919.02	921.15	-2.13	923.45	917.47	5.98	921.61	917.33	4.28	918.73
9/26/2021	924.87	924.65	922.86	1.79	924.21	920.98	3.23	923.66	921.02	2.64	919.05	921.18	-2.13	923.38	917.50	5.88	921.49	917.33	4.16	918.59
9/27/2021	925.09	924.74	922.94	1.80	924.49	920.97	3.52	924.03	921.05	2.98	919.01	921.18	-2.17	923.45	917.36	6.09	921.66	917.46	4.20	918.81
9/28/2021	925.48	925.06	923.10	1.96	924.76	920.99	3.77	924.21	921.04	3.17	919.04	921.18	-2.14	923.72	917.75	5.97	922.02	917.77	4.25	919.10
9/29/2021	925.90	925.73	923.35	2.38	925.28	920.98	4.30	924.76	921.02	3.74	919.00	921.26	-2.26	924.09	917.82	6.27	922.59	918.04	4.55	919.45
9/30/2021	925.98	925.93	923.39	2.54	925.43	921.01	4.42	924.8	921.07	3.73	919.03	921.22	-2.19	924.26	917.88	6.38	922.81	917.96	4.85	919.51
10/1/2021	926.19	926.22	923.53	2.69	925.73	921.01	4.72	925.22	921.01	4.21	919.01	921.47	-2.46	924.55	918.02	6.53	923.35	918.26	5.09	919.73
10/2/2021	926.02	926.22	923.43	2.79	925.72	920.98	4.74	925.32	921.06	4.26	919.03	921.31	-2.28	924.53	918.10	6.43	923.31	918.06	5.25	919.60

Table 5
HCC System Barrier Wall Groundwater Elevations
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071

Groundwater Elevations at Piezometers (feet NAVD88) and Elevation Differentials at Piezometer Pairs (feet)																				
Date	PZ-1	PZ-2S	PZ-2N	Elevation Differential at PZ-2S/PZ-2N	PZ-3S	PZ-3N	Elevation Differential at PZ-3S/PZ-3N	PZ-4S	PZ-4N	Elevation Differential at PZ-4S/PZ-4N	PZ-5S	PZ-5N	Elevation Differential at PZ-5S/PZ-5N	PZ-6S	PZ-6N	Elevation Differential at PZ-6S/PZ-6N	PZ-7S	PZ-7N	Elevation Differential at PZ-7S/PZ-7N	PZ-8
10/3/2021	925.84	926.05	923.31	2.74	925.60	920.98	4.62	925.25	921.06	4.19	919.04	921.26	-2.22	924.43	917.94	6.49	923.14	917.91	5.23	919.48
10/4/2021	925.69	925.86	923.20	2.66	925.46	920.98	4.48	925.11	921.05	4.06	919.04	921.23	-2.19	924.34	917.96	6.38	922.92	917.80	5.12	919.33
10/5/2021	925.57	925.66	923.11	2.55	925.24	921	4.24	924.76	921.02	3.74	919.02	921.25	-2.23	924.12	917.66	6.46	922.63	917.71	4.92	919.20
10/6/2021	925.47	925.49	923.10	2.39	925.04	921.01	4.03	924.48	921.08	3.40	918.98	921.20	-2.22	923.98	917.58	6.40	922.37	917.60	4.77	919.20
10/7/2021	925.48	925.36	923.07	2.29	924.94	921.01	3.93	924.37	921.08	3.29	919.02	921.23	-2.21	923.89	917.87	6.02	922.30	917.65	4.65	919.17
10/8/2021	925.41	925.27	923.05	2.22	924.84	921.01	3.83	924.27	921.07	3.20	918.99	921.24	-2.25	923.74	917.50	6.24	922.16	917.61	4.55	919.10
10/9/2021	925.33	925.15	923.01	2.14	924.75	921.01	3.74	924.17	921.08	3.09	919.04	921.25	-2.21	923.67	917.72	5.95	922.09	917.58	4.51	919.02
10/10/2021	925.46	925.15	923.04	2.11	924.99	921.02	3.97	924.56	921.09	3.47	919.02	921.25	-2.23	923.87	917.81	6.06	922.23	917.65	4.58	919.15
10/11/2021	925.59	925.41	923.10	2.31	925.20	920.98	4.22	924.83	921.05	3.78	919.01	921.24	-2.23	924.05	918.00	6.05	922.47	917.78	4.69	919.24
10/12/2021	925.59	925.53	923.12	2.41	925.28	920.97	4.31	924.89	921.05	3.84	918.98	921.23	-2.25	924.07	917.68	6.39	922.52	917.73	4.79	919.23
10/13/2021	925.55	925.52	923.15	2.37	925.25	920.99	4.26	924.87	921.10	3.77	919.01	921.25	-2.24	924.08	917.96	6.12	922.54	917.73	4.81	919.24
10/14/2021	925.54	925.46	923.13	2.33	925.20	921.01	4.19	924.81	921.11	3.70	919.00	921.28	-2.28	923.99	917.72	6.27	922.48	917.73	4.75	919.23
No data from 10/15 to 11/3																				
11/4/2021	926.43	926.57	923.58	2.99	926.17	921.01	5.16	925.66	921.15	4.51	918.99	921.76	-2.77	924.94	918.33	6.61	923.76	918.41	5.35	919.96
11/5/2021	926.68	926.80	924.04	2.76	926.43	921	5.43	925.99	921.14	4.85	918.96	922.31	-3.35	925.17	918.48	6.69	924.09	918.96	5.13	920.35
11/6/2021	926.54	926.74	923.92	2.82	926.25	920.99	5.26	925.75	921.14	4.61	918.97	922.06	-3.09	924.98	918.36	6.62	923.92	918.71	5.21	920.15
11/7/2021	926.53	926.83	923.89	2.94	926.33	920.98	5.35	925.87	921.16	4.71	918.93	921.95	-3.02	925.06	918.09	6.97	923.94	918.59	5.35	920.18
11/8/2021	926.54	926.91	923.95	2.96	926.46	920.98	5.48	926.01	921.14	4.87	918.94	921.90	-2.96	925.17	918.01	7.16	924.08	918.53	5.55	920.20
11/9/2021	926.47	926.78	923.86	2.92	926.26	920.99	5.27	925.78	921.17	4.61	918.94	921.80	-2.86	925.02	918.26	6.76	923.85	918.42	5.43	920.09
11/10/2021	926.58	926.96	923.96	3.00	926.55	921.02	5.53	926.12	921.15	4.97	918.94	921.84	-2.90	925.28	918.15	7.13	924.13	918.47	5.66	920.29
11/11/2021	926.56	926.88	923.90	2.98	926.42	921	5.42	925.96	921.12	4.84	918.93	921.83	-2.90	925.16	918.05	7.11	924.00	918.45	5.55	920.18
11/12/2021	928.98	928.00	926.66	1.34	928.15	922.7	5.45	927.63	923.25	4.38	918.95	926.47	-7.52	926.47	922.69	3.78	925.64	923.03	2.61	922.61
11/13/2021	928.56	928.51	926.59	1.92	927.97	921.86	6.11	927.36	922.28	5.08	918.94	925.28	-6.34	926.52	921.51	5.01	925.71	921.85	3.86	922.53
11/14/2021	930.19	929.07	927.68	1.39	929.13	924.63	4.50	928.15	925.10	3.05	918.92	928.05	-9.13	927.66	924.28	3.38	926.86	924.69	2.17	924.57
11/15/2021	929.66	929.11	927.33	1.78	928.93	923.62	5.31	927.91	924.00	3.91	918.93	927.01	-8.08	927.39	923.14	4.25	926.63	923.59	3.04	923.78
11/16/2021	928.67	928.96	926.52	2.44	928.59	921.69	6.90	927.8	922.07	5.73	918.94	925.11	-6.17	927.08	921.38	5.70	926.27	921.72	4.55	922.56
11/17/2021	927.75	928.61	925.64	2.97	928.01	920.95	7.06	927.42	921.15	6.27	918.92	923.59	-4.67	926.39	919.91	6.48	925.55	920.26	5.29	921.51
11/18/2021	927.28	928.20	924.93	3.27	927.55	920.99	6.56	927.06	921.17	5.89	918.91	922.88	-3.97	925.91	919.14	6.77	925.00	919.52	5.48	920.97
11/19/2021	927.03	927.83	924.48	3.35	927.20	920.98	6.22	926.78	921.17	5.61	918.96	922.49	-3.53	925.65	918.86	6.79	924.69	919.17	5.52	920.65
11/20/2021	926.81	927.47	924.17	3.30	926.88	921.02	5.86	926.43	921.14	5.29	918.94	922.21	-3.27	925.40	918.42	6.98	924.39	918.86	5.53	920.42
11/21/2021	926.61	927.16	923.95	3.21	926.56	920.99	5.57	926.1	921.16	4.94	918.97	922.03	-3.06	925.15	918.32	6.83	924.11	918.66	5.45	920.20
11/22/2021	926.45	926.86	923.79	3.07	926.24	920.98	5.26	925.79	921.16	4.63	918.93	921.85	-2.92	924.94	918.15	6.79	923.81	918.46	5.35	920.01
11/23/2021	926.50	926.63	923.71	2.92	926.18	921	5.18	925.7	921.15	4.55	918.96	921.85	-2.89	924.88	918.37	6.51	923.71	918.45	5.26	920.02
11/24/2021	926.33	926.47	923.68	2.79	926.01	921.01	5.00	925.52	921.12	4.40	918.93	921.77	-2.84	924.80	918.26	6.54	923.60	918.35	5.25	919.92
11/25/2021	926.28	926.35	923.58	2.77	925.88	921.01	4.87	925.36	921.11	4.25	918.93	921.72	-2.79	924.61	917.90	6.71	923.46	918.30	5.16	919.84
11/26/2021	927.13	927.00	924.49	2.51	926.81	921	5.81	926.35	921.13	5.22	918.95	922.72	-3.77	925.37	919.31	6.06	924.27	919.35	4.92	920.67
11/27/2021	927.11	927.35	924.75	2.60	926.93	920.98	5.95	926.5	921.14	5.36	918.97	922.81	-3.84	925.56	919.39	6.17	924.63	919.44	5.19	920.79
11/28/2021	928.45	928.19	926.37	1.82	927.85	921.79	6.06	927.31	922.15	5.16	918.93	925.18	-6.25	926.40	921.72	4.68	925.58	921.76	3.82	922.33
11/29/2021	928.07	928.27	926.07	2.20	927.79	920.98	6.81	927.21	921.35	5.86	918.93	924.35	-5.42	926.29	920.62	5.67	925.45	921.01	4.44	921.88
11/30/2021	927.90	928.16	925.69	2.47	927.72	921	6.72	927.15	921.14	6.01	918.97	923.94	-4.97	926.18	920.68	5.50	925.32	920.61	4.71	921.58
12/1/2021	927.72	928.11	925.61	2.50	927.58	921	6.58	927.05	921.16	5.89	918.95	923.70	-4.75	926.09	920.17	5.92	925.20	920.36	4.84	921.44
12/2/2021	927.39	927.91	925.11	2.80	927.29	921	6.29	926.78	921.15	5.63	918.95	923.12	-4.17	925.80	919.56	6.24	924.85	919.77	5.08	921.01
12/3/2021	927.04	927.66	924.60	3.06	926.98	920.96	6.02	926.51	921.15	5.36	918.94	922.66	-3.72	925.51	918.88	6.63	924.57	919.32	5.25	920.68
12/4/2021	926.90	927.37	924.25	3.12	926.72	920.98	5.74	926.23	921.14	5.09	918.95	922.39	-3.44	925.28	918.80	6.48	924.30	919.07	5.23	920.44
12/5/2021	926.71	927.19	924.09	3.10	926.64	920.97	5.67	926.25	921.15	5.10	918.94	922.13	-3.19	925.17	918.30	6.87	924.20	918.82	5.38	920.32
12/6/2021	926.55	926.99	923.92	3.07	926.44	920.96	5.48	926.03	921.15	4.88	918.94	921.95	-3.01	925.15	918.37	6.78	924.02	918.63	5.39	920.15

**Table 5
HCC System Barrier Wall Groundwater Elevations
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071**

Groundwater Elevations at Piezometers (feet NAVD88) and Elevation Differentials at Piezometer Pairs (feet)																				
Date	PZ-1	PZ-2S	PZ-2N	Elevation Differential at PZ-2S/PZ-2N	PZ-3S	PZ-3N	Elevation Differential at PZ-3S/PZ-3N	PZ-4S	PZ-4N	Elevation Differential at PZ-4S/PZ-4N	PZ-5S	PZ-5N	Elevation Differential at PZ-5S/PZ-5N	PZ-6S	PZ-6N	Elevation Differential at PZ-6S/PZ-6N	PZ-7S	PZ-7N	Elevation Differential at PZ-7S/PZ-7N	PZ-8
12/7/2021	926.50	926.78	923.83	2.95	926.29	920.97	5.32	925.89	921.17	4.72	918.95	921.89	-2.94	924.98	918.53	6.45	923.87	918.57	5.30	920.09
12/8/2021	926.68	927.06	924.01	3.05	926.62	920.96	5.66	926.28	921.17	5.11	918.97	922.02	-3.05	925.28	918.74	6.54	924.16	918.78	5.38	920.35
12/9/2021	926.58	927.01	924.02	2.99	926.54	920.96	5.58	926.16	921.14	5.02	918.95	921.96	-3.01	925.20	918.39	6.81	924.18	918.68	5.50	920.24
12/10/2021	926.49	926.85	923.86	2.99	926.37	920.96	5.41	925.96	921.14	4.82	918.97	921.83	-2.86	925.08	918.47	6.61	924.02	918.55	5.47	920.11
12/11/2021	927.14	927.55	924.53	3.02	927.49	920.95	6.54	927.12	921.15	5.97	918.96	922.11	-3.15	925.85	918.52	7.33	924.78	919.11	5.67	920.79
12/12/2021	927.02	927.85	924.69	3.16	927.45	920.95	6.50	927.08	921.15	5.93	918.94	922.18	-3.24	926.04	919.02	7.02	925.11	918.98	6.13	920.78
12/13/2021	926.83	927.63	924.23	3.40	927.13	920.98	6.15	926.68	921.14	5.54	918.96	921.89	-2.93	925.68	918.65	7.03	924.73	918.69	6.04	920.50
12/14/2021	926.60	927.35	923.97	3.38	926.77	920.97	5.80	926.37	921.12	5.25	918.95	921.73	-2.78	925.36	918.21	7.15	924.35	918.48	5.87	920.23
12/15/2021	926.45	926.99	923.78	3.21	926.52	921.02	5.50	926.05	921.11	4.94	918.91	921.60	-2.69	925.11	917.90	7.21	924.03	918.33	5.70	920.09
12/16/2021	926.28	926.68	923.65	3.03	926.20	921	5.20	925.7	921.12	4.58	918.92	921.52	-2.60	924.85	917.86	6.99	923.75	918.22	5.53	919.93
12/17/2021	926.10	926.40	923.52	2.88	925.91	920.98	4.93	925.44	921.09	4.35	918.90	921.42	-2.52	924.67	917.85	6.82	923.51	918.10	5.41	919.75
12/18/2021	926.11	926.22	923.48	2.74	925.79	920.97	4.82	925.31	921.09	4.22	918.93	921.36	-2.43	924.58	917.93	6.65	923.39	918.13	5.26	919.70
12/19/2021	926.49	926.67	923.95	2.72	926.43	921.02	5.41	925.96	921.11	4.85	918.90	921.63	-2.73	925.07	918.18	6.89	923.96	918.35	5.61	920.17
12/20/2021	926.30	926.63	923.81	2.82	926.26	921.01	5.25	925.77	921.14	4.63	918.97	921.57	-2.60	924.92	918.11	6.81	923.87	918.28	5.59	920.02
12/21/2021	926.14	926.48	923.64	2.84	926.00	920.95	5.05	925.53	921.14	4.39	918.93	921.41	-2.48	924.75	918.00	6.75	923.58	918.10	5.48	919.83
12/22/2021	926.54	926.73	923.77	2.96	926.21	920.96	5.25	925.73	921.10	4.63	918.93	921.57	-2.64	924.86	918.07	6.79	923.71	918.36	5.35	920.05
12/23/2021	926.85	927.18	924.20	2.98	926.82	920.98	5.84	926.42	921.13	5.29	918.89	921.78	-2.89	925.41	918.32	7.09	924.28	918.55	5.73	920.43
12/24/2021	926.68	927.19	924.11	3.08	926.79	921.01	5.78	926.35	921.08	5.27	918.96	921.74	-2.78	925.43	918.34	7.09	924.48	918.52	5.96	920.34
12/25/2021	926.49	926.99	923.88	3.11	926.61	920.98	5.63	926.24	921.07	5.17	918.95	921.65	-2.70	925.19	918.19	7.00	924.22	918.39	5.83	920.14
12/26/2021	926.37	926.77	923.71	3.06	926.41	921.01	5.40	926	921.08	4.92	918.95	921.53	-2.58	925.00	918.08	6.92	923.96	918.26	5.70	920.01
12/27/2021	926.19	926.52	923.55	2.97	926.13	920.99	5.14	925.68	921.07	4.61	918.94	921.41	-2.47	924.78	917.95	6.83	923.70	918.12	5.58	919.86
12/28/2021	926.05	926.27	923.45	2.82	925.83	920.98	4.85	925.36	921.08	4.28	918.95	921.35	-2.40	924.55	917.89	6.66	923.43	918.04	5.39	919.71
12/29/2021	925.98	926.06	923.38	2.68	925.72	921.01	4.71	925.28	921.09	4.19	918.92	921.23	-2.31	924.45	917.88	6.57	923.26	917.94	5.32	919.66
12/30/2021	925.83	925.91	923.33	2.58	925.56	920.99	4.57	925.11	921.12	3.99	918.97	921.25	-2.28	924.29	917.92	6.37	923.15	917.95	5.20	919.57
12/31/2021	925.72	925.70	923.23	2.47	925.30	920.96	4.34	924.83	921.07	3.76	918.96	921.19	-2.23	924.10	917.82	6.28	922.91	917.89	5.02	919.45
Average Elevation Differential				2.21			4.38			3.69			-0.25			5.78			4.61	
Maximum Elevation Differential				3.70			7.23			6.39			4.48			7.66			6.52	

NOTES:

Groundwater elevations are measured using dedicated water-level transducers installed in the piezometers and are referenced to North American Vertical Datum of 1988 (NAVD88).

HCC = Hydraulic Control and Containment

*Data not available due to power outage that shut down the computer and its datalogging capabilities. The computer was restarted during the subsequent operations and maintenance events.

Table 6
Stabilized Field Parameter Values at HCC System Monitoring Wells
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071

Monitoring Well	Sample Date	Sample Identification	Dissolved Oxygen (milligrams per liter)	Oxidation-Reduction Potential (millivolts)	pH (Standard Units)	Specific Conductivity (mS/cm)	Temperature (degrees Celsius)	
GW-1	3/25/2021	GW-1-032521	5.83	183.6	5.93	0.132	7.4	
	6/30/2021	GW-1-063021	1.20	-97.7	8.42	0.103	15.7	
	9/22/2021	GW-1-092221	1.41	86.5	6.42	0.118	13.1	
	12/15/2021	GW-1-121521	2.94	106.3	6.17	0.135	7.8	
GW-2	3/25/2021	GW-2-032521	3.26	236.8	6.30	0.088	6.8	
	6/30/2021	GW-2-063021	1.79	-83.7	8.58	0.099	13.7	
	9/22/2021	GW-2-092221	1.68	88.3	6.16	0.178	12.3	
	12/15/2021	GW-2-121521	6.12	100.6	6.03	0.074	7.9	
GW-3	3/26/2021	GW-3-032621	2.12	185.7	5.09	0.125	6.6	
	6/29/2021	GW-3-062921	4.20	-11.4	5.63	0.111	17.5	
	9/22/2021	GW-3-092221	4.10	191.0	5.91	0.129	12.9	
	12/15/2021	GW-3-121521	Water level low; sample collected prior to well going dry during purging					
GW-4	3/25/2021	GW-4-032521	2.84	100.4	6.93	0.124	7.5	
	6/30/2021	GW-4-063021	6.49	7.7	6.77	0.083	11.0	
	9/22/2021	GW-4-092221	7.33	4.2	6.40	0.175	12.2	
	12/15/2021	GW-4-121521	5.41	100.8	6.47	0.045	6.8	
EW-1	3/25/2021	EW-1-032521	3.71	173.5	6.09	0.098	7.2	
	6/29/2021	EW-1-062921	1.72	241.3	6.54	0.062	17.2	
	9/22/2021	EW-1-092221	1.76	116.0	6.23	0.064	10.5	
	12/15/2021	EW-1-121521	3.76	143.2	5.83	0.088	7.7	
EW-2A	3/25/2021	EW-2A-032521	7.54	234.0	6.17	0.052	6.2	
	6/30/2021	EW-2A-063021	6.96	12.0	6.83	0.061	10.3	
	9/22/2021	EW-2A-092221	5.16	45.8	5.81	0.094	10.5	
	12/15/2021	EW-2A-121521	6.02	172.3	6.04	0.062	8.2	
5-W-43	3/25/2021	5-W-43-032521	4.04	174.3	6.06	0.099	7.0	
	6/29/2021	5-W-43-062921	2.04	196.9	6.01	0.064	15.8	
	9/22/2021	5-W-43-092221	3.39	-51.6	5.92	0.122	11.2	
	12/15/2021	5-W-43-121521	1.89	91.7	5.86	0.087	7.8	
2A-W-40	3/25/2021	2A-W-40-032521	10.06	254.4	6.49	0.062	7.3	
	6/30/2021	2A-W-40-063021	7.49	8.0	8.64	0.064	18.6	
	9/22/2021	2A-W-40-092221	6.57	-12.0	6.45	0.079	11.0	
	12/15/2021	2A-W-40-121521	6.46	93.8	6.34	0.067	7.7	

Table 6
Stabilized Field Parameter Values at HCC System Monitoring Wells
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071

Monitoring Well	Sample Date	Sample Identification	Dissolved Oxygen (milligrams per liter)	Oxidation-Reduction Potential (millivolts)	pH (Standard Units)	Specific Conductivity (mS/cm)	Temperature (degrees Celsius)
2A-W-41	3/26/2021	2A-W-41-032621	1.87	23.3	5.97	0.253	7.1
	6/30/2021	2A-W-41-063021	7.67	-1.1	7.02	0.162	13.5
	9/22/2021	2A-W-41-092221	1.62	-11.7	6.50	0.199	12.6
	12/15/2021	2A-W-41-121521	4.00	-23.6	6.40	0.163	7.8
1B-W-23	3/26/2021	1B-W-23-032621	11.44	152.6	5.97	0.062	6.3
	6/29/2021	1B-W-23-062921	9.36	-8.4	8.64	0.100	19.1
	9/22/2021	1B-W-23-092221	6.83	1.7	6.01	0.154	17.3
	12/15/2021	1B-W-23-121521	10.79	118.0	6.02	0.062	6.4
2A-W-42	3/26/2021	2A-W-42-032621	0.59	234.0	5.93	0.131	7.0
	6/30/2021	2A-W-42-063021	1.61	-76.2	6.76	0.158	13.1
	9/22/2021	2A-W-42-092221	2.49	125.9	6.03	0.152	13.5
	12/15/2021	2A-W-42-121521	3.37	138.0	6.07	0.138	8.3

NOTES:

HCC = Hydraulic Control and Containment

IE = instrument error

mS/cm = milliSiemens per centimeter

Table 7
Total Petroleum Hydrocarbon Concentrations in Groundwater
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071

Well	Date	Sample Identification	DRO (µg/l) ¹			ORO (µg/l) ¹			Calculated NWTPH-Dx ² (µg/l)
			Result	MDL	MRL	Result	MDL	MRL	
Sentry Wells									
S1-AD	3/24/2021	S1-AD-032421	< 62	62	62	< 92	92	92	< 77
	9/23/2021	S1-AD-092321	< 62	62	62	< 92	92	92	< 77
S1-AU	3/24/2021	S1-AU-032421	< 62	62	62	< 92	92	92	< 77
	9/23/2021	S1-AU-092321	< 62	62	62	< 92	92	92	< 77
S1-BD	3/24/2021	S1-BD-032421	< 65	65	65	190	96	96	223
	4/12/2021	S1-BD-041221	< 62	62	62	< 91	91	91	< 77
	9/23/2021	S1-BD-092321	< 62	62	62	< 92	92	92	< 77
S1-BU	3/24/2021	S1-BU-032421	< 62	62	62	< 92	92	92	< 77
	4/12/2021	S1-BU-041221	< 62	62	62	< 91	91	91	< 77
	9/23/2021	S1-BU-092321	< 62	62	62	< 91	91	91	< 77
S2-AD	3/24/2021	S2-AD-032421	< 63	63	63	< 92	92	92	< 78
	9/23/2021	S2-AD-092321	< 62	62	62	< 91	91	91	< 77
S2-AU	3/24/2021	S2-AU-032421	< 63	63	63	< 92	92	92	< 78
	9/23/2021	S2-AU-092321	< 62	62	62	< 92	92	92	< 77
S2-BD	3/24/2021	S2-BD-032421	< 62	62	62	< 92	92	92	< 77
	9/23/2021	S2-BD-092321	< 62	62	62	< 91	91	91	< 77
S2-BU	3/24/2021	S2-BU-032421	< 62	62	62	< 91	91	91	< 77
	9/23/2021	S2-BU-092321	260	62	62	< 91	91	91	306
S3-AD	3/25/2021	S3-AD-032521	< 62	62	62	< 91	91	91	< 77
	9/23/2021	S3-AD-092321	< 62	62	62	< 92	92	92	< 77
S3-AU	3/25/2021	S3-AU-032521	< 62	62	62	< 92	92	92	< 77
	9/23/2021	S3-AU-092321	< 62	62	62	< 92	92	92	< 77
S3-BD	3/25/2021	S3-BD-032521	< 62	62	62	< 92	92	92	< 77
	9/23/2021	S3-BD-092321	< 62	62	62	< 92	92	92	< 77
S3-BU	3/25/2021	S3-BU-032521	< 62	62	62	< 91	91	91	< 77
	9/23/2021	S3-BU-092321	< 62	62	62	< 91	91	91	< 77

Table 7
Total Petroleum Hydrocarbon Concentrations in Groundwater
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071

Well	Date	Sample Identification	DRO (µg/l) ¹			ORO (µg/l) ¹			Calculated NWTPH-Dx ² (µg/l)
			Result	MDL	MRL	Result	MDL	MRL	
Sentry Wells									
S3-CD	3/25/2021	S3-CD-032521	< 62	62	62	< 92	92	92	< 77
	9/23/2021	S3-CD-092321	< 62	62	62	< 92	92	92	< 77
S3-CU	3/25/2021	S3-CU-032521	< 62	62	62	< 92	92	92	< 77
	9/23/2021	S3-CU-092321	< 62	62	62	< 92	92	92	< 77
S4-AD	3/25/2021	S4-AD-032521	< 62	62	62	< 92	92	92	< 77
	9/23/2021	S4-AD-092321	< 62	62	62	< 91	91	91	< 77
S4-AU	3/25/2021	S4-AU-032521	< 62	62	62	< 92	92	92	< 77
	9/23/2021	S4-AU-092321	< 62	62	62	< 91	91	91	< 77
S4-BD	3/25/2021	S4-BD-032521	< 62	62	62	< 92	92	92	< 77
	9/23/2021	S4-BD-092321	< 62	62	62	< 92	92	92	< 77
S4-BU	3/25/2021	S4-BU-032521	< 62	62	62	< 92	92	92	< 77
	9/23/2021	S4-BU-092321	< 62	62	62	< 91	91	91	< 77
S4-CD	3/25/2021	S4-CD-032521	< 62	62	62	< 92	92	92	< 77
	9/23/2021	S4-CD-092321	< 62	62	62	< 92	92	92	< 77
S4-CU	3/25/2021	S4-CU-032521	< 62	62	62	< 92	92	92	< 77
	9/23/2021	S4-CU-092321	< 62	62	62	< 92	92	92	< 77
Hydraulic Control and Containment System Monitoring Wells									
GW-1	3/25/2021	GW-1-032521	< 62	62	62	< 92	92	92	< 77
	6/30/2021	GW-1-063021	< 63	63	63	< 93	93	93	< 78
	9/22/2021	GW-1-092221	< 62	62	62	< 92	92	92	< 77
	12/15/2021	GW-1-121521	< 53	31	53	65 J	46	170	81 J
GW-2	3/25/2021	GW-2-032521	< 62	62	62	< 92	92	92	< 77
	6/30/2021	GW-2-063021	< 65	65	65	< 96	96	96	< 81
	9/22/2021	GW-2-092221	< 62	62	62	< 92	92	92	< 77
	12/15/2021	GW-2-121521	< 110 U	32	54	430	47	170	430
Site-Specific Remediation Level									477

Table 7
Total Petroleum Hydrocarbon Concentrations in Groundwater
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071

Well	Date	Sample Identification	DRO (µg/l) ¹			ORO (µg/l) ¹			Calculated NWTPh-Dx ² (µg/l)
			Result	MDL	MRL	Result	MDL	MRL	
Hydraulic Control and Containment System Monitoring Wells									
GW-3	3/26/2021	GW-3-032621	400 67 ³	62 62 ³	62 62 ³	370 < 92 ³	92 92 ³	92 92 ³	770 113 ³
	6/29/2021	GW-3-062921	< 62 < 62 ³	0.062 0.062 ³	62 62 ³	< 92 < 92 ³	0.092 0.092 ³	92 92 ³	< 77 < 77 ³
	9/22/2021		GW-3-092221	120 < 63 ³	63 63 ³	63 63 ³	520 370 ³	92 92 ³	92 92 ³
	12/15/2021	GW-3-121521	330 J < 41 ³ UJ	34 34 ³	58 41 ³	690 310 ³	50 50 ³	180 180 ³	1,020 J 351 ³ J
	3/25/2021	GW-4-032521	< 62	62	62	< 92	92	92	< 77
GW-4	6/30/2021	GW-4-063021	< 62	62	62	< 92	92	92	< 77
	9/22/2021	GW-4-092221	< 62	62	62	110	91	91	141
	12/15/2021	GW-4-121521	< 36 UJ	32	55	62 J	48	170	80 J
EW-1	3/25/2021	EW-1-032521	< 62	62	62	< 91	91	91	< 77
	6/29/2021	EW-1-062921	< 62	62	62	< 92	92	92	< 77
	9/22/2021	EW-1-092221	< 62	62	62	< 92	92	92	< 77
	12/15/2021	EW-1-121521	< 52	31	52	78 J	45	170	94 J
EW-2A	3/25/2021	EW-2A-032521	< 62	62	62	< 92	92	92	< 77
	6/30/2021	EW-2A-063021	< 62	62	62	< 92	92	92	< 77
	9/22/2021	EW-2A-092221	< 62	62	62	< 92	92	92	< 77
	12/15/2021	EW-2A-121521	< 52	31	52	< 170	45	170	< 38
5-W-43	3/25/2021	5-W-43-032521	< 62	62	62	< 92	92	92	< 77
	6/29/2021	5-W-43-062921	< 62	62	62	< 91	91	91	< 77
	9/22/2021	5-W-43-092221	< 62	62	62	< 91	91	91	< 77
	12/15/2021	5-W-43-121521	< 31 UJ	31	31	87 J	46	170	103 J
2A-W-40	3/25/2021	2A-W-40-032521	< 63	63	63	< 94	94	94	< 79
	6/30/2021	2A-W-40-063021	< 62	62	62	< 92	92	92	< 77
	9/22/2021	2A-W-40-092221	< 62	62	62	< 91	91	91	< 77
	12/15/2021	2A-W-40-121521	< 53	31	53	< 170	46	170	< 39
Site-Specific Remediation Level									477

Table 7
Total Petroleum Hydrocarbon Concentrations in Groundwater
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071

Well	Date	Sample Identification	DRO (µg/l) ¹			ORO (µg/l) ¹			Calculated NWTPH-Dx ² (µg/l)
			Result	MDL	MRL	Result	MDL	MRL	
Hydraulic Control and Containment System Monitoring Wells									
2A-W-41	3/26/2021	2A-W-41-032621	660 170 ³	62 62 ³	62 62 ³	470 < 92 ³	92 92 ³	92 92 ³	1,130 216 ³
	6/30/2021	2A-W-41-063021	< 63 ³	63 ³	63 ³	< 92 ³	92 ³	92 ³	< 78 ³
	9/22/2021	2A-W-41-092221	500 97 ³	62 62 ³	62 62 ³	280 < 92 ³	92 92 ³	92 92 ³	780 143 ³
	12/15/2021	2A-W-41-121521	410 J < 69 ³ U	31 31 ³	52 69 ³	400 < 160 ³	45 45 ³	160 160 ³	810 J < 57 ³
1B-W-23	3/26/2021	1B-W-23-032621	< 62	62	62	< 92	92	92	< 77
	6/29/2021	1B-W-23-062921	< 62	62	62	< 92	92	92	< 77
	9/22/2021	1B-W-23-092221	< 62	62	62	< 92	92	92	< 77
	12/15/2021	1B-W-23-121521	< 54	32	54	< 170	47	170	< 40
2A-W-42	3/26/2021	2A-W-42-032621	91	62	62	160	91	91	251
	6/30/2021	2A-W-42-063021	110	62	62	< 92	92	92	156
	9/22/2021	2A-W-42-092221	140	62	62	130	91	91	270
	12/15/2021	2A-W-42-121521	< 89 U	30	89	150 J	45	160	195 J
Site-Specific Remediation Level									477

NOTES:

Bold denotes the reported concentration exceeds the Site-specific remediation level. The remediation level is not applicable to the sentry wells or vaults in the barrier wall treatment gates.

"<" denotes analyte not reported as detected at or exceeding the listed laboratory MRL.

¹Analyzed by Washington State Department of Ecology (Ecology) Method NWTPH-Dx without silica gel cleanup unless otherwise noted.

²Sum of DRO and ORO, using half the MDL for non-detect results.

³Sample analyzed by Ecology Method NWTPH-Dx with silica gel cleanup.

DRO = total petroleum hydrocarbons as diesel-range organics

J = reported concentration is an estimated value

MDL = method detection limit

MRL = method reporting limit

µg/l = micrograms per liter

ORO = total petroleum hydrocarbons as oil-range organics

U = analyte not detected above the level of the associated value

UJ = analyte was not detected and reporting limit is an estimate

Table 8
Groundwater Elevations and LNAPL Thicknesses
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071

Location	Measuring Point Elevation¹ (feet NAVD88)	Date	Depth to Water² (feet)	Water Elevation¹ (feet NAVD88)	LNAPL Thickness (feet)
GW-1	928.24	3/24/2021	10.47	917.77	—
		6/29/2021	9.02	919.22	—
		9/21/2021	10.74	917.50	—
		12/14/2021	9.92	918.32	—
GW-2	930.29	3/24/2021	13.90	916.39	—
		6/29/2021	11.22	919.07	—
		9/21/2021	12.78	917.51	—
		12/14/2021	12.11	918.18	—
GW-3	935.82	3/24/2021	14.81	921.01	—
		6/29/2021	14.70	921.12	—
		9/21/2021	15.73	920.09	—
		12/14/2021	15.94	919.88	—
GW-4	934.68	3/24/2021	10.39	924.29	—
		6/29/2021	9.65	925.03	—
		9/21/2021	10.60	924.08	—
		12/14/2021	9.69	924.99	—
EW-1	928.72	3/24/2021	10.10	918.62	—
		6/29/2021	9.25	919.47	—
		9/21/2021	10.30	918.42	—
		12/14/2021	9.85	918.87	—
EW-2A	936.2	3/24/2021	9.93	926.27	—
		6/29/2021	9.06	927.14	—
		9/21/2021	10.55	925.65	—
		12/14/2021	9.27	926.93	—
5-W-43	926.18	3/24/2021	7.89	918.29	—
		6/29/2021	6.90	919.28	—
		9/21/2021	8.24	917.94	—
		12/14/2021	7.43	918.75	—

Table 8
Groundwater Elevations and LNAPL Thicknesses
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071

Location	Measuring Point Elevation ¹ (feet NAVD88)	Date	Depth to Water ² (feet)	Water Elevation ¹ (feet NAVD88)	LNAPL Thickness (feet)
2A-W-40	933.34	3/24/2021	11.93	921.41	—
		6/29/2021	11.23	922.11	—
		9/21/2021	12.41	920.93	—
		12/14/2021	11.36	921.98	—
2A-W-41	935.22	3/24/2021	17.47	917.75	—
		6/29/2021	16.06	919.16	—
		9/21/2021	17.65	917.57	—
		12/14/2021	16.95	918.27	—
1B-W-23	936.25	3/24/2021	16.51	919.74	—
		6/29/2021	17.05	919.20	—
		9/21/2021	16.71	919.54	—
		12/14/2021	16.52	919.73	—
2A-W-42	935.37	3/24/2021	13.01	922.36	—
		6/29/2021	12.61	922.76	—
		9/21/2021	14.27	921.10	—
		12/14/2021	12.74	922.63	—
PZ-1	935.38	3/24/2021	9.30	926.08	—
		6/29/2021	8.72	926.66	—
		9/21/2021	9.85	925.53	—
		12/14/2021	8.75	926.63	—
PZ-2N	934.35	3/24/2021	11.61	922.74	—
		6/29/2021	10.92	923.43	—
		9/21/2021	12.00	922.35	—
		12/14/2021	11.22	923.13	—
PZ-2S	934.94	3/24/2021	7.84	927.10	—
		6/29/2021	7.90	927.04	—
		9/21/2021	5.79	929.15	—
		12/14/2021	6.79	928.15	—

Table 8
Groundwater Elevations and LNAPL Thicknesses
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071

Location	Measuring Point Elevation ¹ (feet NAVD88)	Date	Depth to Water ² (feet)	Water Elevation ¹ (feet NAVD88)	LNAPL Thickness (feet)
PZ-3N	934.41	3/24/2021	13.97	920.44	—
		6/29/2021	8.47	925.94	—
		9/21/2021	13.97	920.44	—
		12/14/2021	13.91	920.50	—
PZ-3S	934.45	3/24/2021	8.33	926.12	—
		6/29/2021	13.93	920.52	—
		9/21/2021	9.42	925.03	—
		12/14/2021	7.45	927.00	—
PZ-4N	935.27	3/24/2021	Well Dry	Well Dry	—
		6/29/2021	14.68	920.59	—
		9/21/2021	14.68	920.59	—
		12/14/2021	Well Dry	Well Dry	—
PZ-4S	935.31	3/24/2021	9.72	925.59	—
		6/29/2021	9.90	925.41	—
		9/21/2021	11.02	924.29	—
		12/14/2021	8.82	926.49	—
PZ-5N	933.15	3/24/2021	15.23	917.92	—
		6/29/2021	13.95	919.20	—
		9/21/2021	15.58	917.57	—
		12/14/2021	14.86	918.29	—
PZ-5S	933.46	3/24/2021	8.09 C	925.37 C	1.89
		7/13/2021	9.51 C	923.95 C	0.5
		9/21/2021	9.50 C	923.96 C	0.55
		12/14/2021	7.44 C	926.02 C	0.18
PZ-6N	931.17	3/24/2021	13.22	917.95	—
		6/29/2021	12.02	919.15	—
		9/21/2021	13.50	917.67	—
		12/14/2021	12.30	918.87	—

Table 8
Groundwater Elevations and LNAPL Thicknesses
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071

Location	Measuring Point Elevation ¹ (feet NAVD88)	Date	Depth to Water ² (feet)	Water Elevation ¹ (feet NAVD88)	LNAPL Thickness (feet)
PZ-6S	931.41	3/24/2021	6.59	924.82	Heavy Trace
		7/13/2021	7.80 C	923.61 C	0.05
		9/21/2021	7.84 C	923.57 C	0.02
		12/14/2021	5.95 C	925.46 C	0.07
PZ-7N	930.37	3/24/2021	12.48	917.89	—
		6/29/2021	11.15	919.22	—
		9/21/2021	12.75	917.62	—
		12/14/2021	12.01	918.36	—
PZ-7S	930.4	3/24/2021	6.47	923.93	—
		6/29/2021	6.65	923.75	—
		9/21/2021	8.38	922.02	—
		12/14/2021	5.77	924.63	—
PZ-8	929.48	3/24/2021	9.30	920.18	—
		6/29/2021	8.92	920.56	—
		9/21/2021	10.16	919.32	—
		12/14/2021	9.92	919.56	—
RW-01	932.84	3/24/2021	8.92	923.92	Light Trace
		9/21/2021	10.04	922.80	—
		12/14/2021	7.66	925.18	—
RW-02	933.84	3/24/2021	9.90	923.94	—
		6/29/2021	9.34	924.50	—
		9/21/2021	11.04	922.80	—
		12/14/2021	8.74	925.10	—
RW-03	933.80	3/24/2021	9.79	924.01	—
		6/29/2021	9.27	924.53	—
		9/21/2021	11.03	922.77	—
		12/14/2021	8.69	925.11	—
RW-04	931.86	3/24/2021	7.23	924.63	—
		6/29/2021	6.84	925.02	Heavy Trace
		9/21/2021	7.78	924.08	—
		12/14/2021	3.77	928.09	Light Trace

Table 8
Groundwater Elevations and LNAPL Thicknesses
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071

Location	Measuring Point Elevation ¹ (feet NAVD88)	Date	Depth to Water ² (feet)	Water Elevation ¹ (feet NAVD88)	LNAPL Thickness (feet)
RW-05	928.53	3/24/2021	6.98	921.55	Light Trace
		6/29/2021	6.77	921.76	—
		9/21/2021	9.79	918.74	—
		12/14/2021	6.56	921.97	—
RW-06	928.53	3/24/2021	7.04	921.49	Light Trace
		6/29/2021	6.81	921.72	—
		9/21/2021	9.90	918.63	—
		12/14/2021	7.84	920.69	—
RW-07	933.06	3/24/2021	7.97	925.09	Light Trace
		6/29/2021	7.59	925.47	Light Trace
		9/21/2021	8.71 C	924.35 C	0.08
		12/14/2021	6.75 C	926.31 C	0.25
RW-08	931.85	3/24/2021	7.07	924.78	Light Trace
		6/29/2021	8.79	923.06	Heavy Trace
		9/21/2021	9.74 C	922.11 C	0.14
		12/14/2021	5.64	926.21	Light Trace
RW-09	933.96	3/24/2021	8.35	925.61	—
		6/29/2021	7.89	926.07	—
		9/21/2021	9.04	924.92	—
		12/14/2021	8.00	925.96	—

Table 8
Groundwater Elevations and LNAPL Thicknesses
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071

Location	Measuring Point Elevation¹ (feet NAVD88)	Date	Depth to Water² (feet)	Water Elevation¹ (feet NAVD88)	LNAPL Thickness (feet)
EG-WV-South Chamber (formerly EG-WV or EV)	934.31	3/24/2021	9.87	924.44	—
		6/29/2021	9.14	925.17	—
		9/21/2021	10.08	924.23	—
		12/14/2021	9.40	924.91	—
EG-WV-North Chamber	934.31	3/24/2021	9.90	924.41	—
		6/29/2021	9.20	925.11	—
		9/21/2021	10.05	924.26	—
		12/14/2021	9.35	924.96	—
CG-WV-South Chamber (formerly CG-WV or CV)	937.09	3/24/2021	8.68	928.41	—
		6/29/2021	8.16	928.93	—
		9/21/2021	9.89	927.20	—
		12/14/2021	7.54	929.55	—
CG-WV-North Chamber	937.09	3/24/2021	8.68	928.41	—
		6/29/2021	8.17	928.92	—
		9/21/2021	9.89	927.20	—
		12/14/2021	7.54	929.55	—
WG-EV-South Chamber (formerly WG-EV or WV)	931.84	3/24/2021	6.97	924.87	—
		6/29/2021	11.30	920.54	Light Trace
		9/21/2021	9.05	922.79	—
		12/14/2021	7.50	924.34	Light Trace
WG-EV-North Chamber	931.84	3/24/2021	6.93	924.91	—
		6/29/2021	11.30	920.54	—
		9/21/2021	8.85	922.99	—
		12/14/2021	7.50	924.34	—

Table 8
Groundwater Elevations and LNAPL Thicknesses
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071

Location	Measuring Point Elevation ¹ (feet NAVD88)	Date	Depth to Water ² (feet)	Water Elevation ¹ (feet NAVD88)	LNAPL Thickness (feet)
FWG-WV-South Chamber (formerly FWG-WV or FWV)	930.76	3/24/2021	4.73	926.03	—
		6/29/2021	9.19	921.57	—
		9/21/2021	6.51	924.25	—
		12/14/2021	4.68	926.08	—
FWG-WV-North Chamber	930.76	3/24/2021	4.73	926.03	—
		6/29/2021	9.19	921.57	—
		9/21/2021	6.65	924.11	—
		12/14/2021	4.68	926.08	—

NOTES:

— denotes LNAPL was not observed.

LNAPL = light nonaqueous-phase liquid

Light Trace = LNAPL less than 0.01 foot thick and thin coating of LNAPL and/or a sheen observed on the oil-water interface probe NA = not applicable

Heavy Trace = LNAPL less than 0.01 foot thick and thick coating of LNAPL observed on the oil-water interface probe

¹Elevations referenced to North American Vertical Datum of 1988 (NAVD88).

²Depths referenced to measuring point (e.g., top of well casing, top of vault).

³Vault oil-water separator chamber is visually inspected for presence of LNAPL during monitoring events. LNAPL thickness measured only if measurable LNAPL is present.

**APPENDIX A
LABORATORY ANALYTICAL REPORTS**

2021 ANNUAL HYDRAULIC CONTROL AND CONTAINMENT SYSTEM
OPERATIONS REPORT
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Consent Decree No. 07-2-33672-9 SEA

Farallon PN: 683-071

ANALYTICAL REPORT

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-100257-1
Client Project/Site: Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
1/8/2021 2:48:48 PM
Urvashi Patel, Client Service Manager
Urvashi.Patel@Eurofinset.com
Designee for
Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Client Sample Results	5
QC Sample Results	7
Chronicle	8
Certification Summary	9
Sample Summary	10
Chain of Custody	11
Receipt Checklists	12

Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-100257-1

Job ID: 580-100257-1

Laboratory: Eurofins TestAmerica, Seattle

Narrative

Job Narrative 580-100257-1

Comments

No additional comments.

Receipt

The samples were received on 1/5/2021 11:12 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.1° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-347347, so an LCS and LCSD were used instead.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.



Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-100257-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-100257-1

Client Sample ID: Before GAC-010421

Lab Sample ID: 580-100257-1

Date Collected: 01/04/21 10:00

Matrix: Water

Date Received: 01/05/21 11:12

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.24		0.064		mg/L		01/06/21 11:36	01/07/21 12:11	1
Motor Oil (>C24-C36)	0.23		0.094		mg/L		01/06/21 11:36	01/07/21 12:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	78		50 - 150				01/06/21 11:36	01/07/21 12:11	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-100257-1

Client Sample ID: HCC EFF-010421

Lab Sample ID: 580-100257-2

Date Collected: 01/04/21 10:00

Matrix: Water

Date Received: 01/05/21 11:12

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.064		mg/L		01/06/21 11:36	01/07/21 12:31	1
Motor Oil (>C24-C36)	ND		0.095		mg/L		01/06/21 11:36	01/07/21 12:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	73		50 - 150				01/06/21 11:36	01/07/21 12:31	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-100257-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-347347/1-A
Matrix: Water
Analysis Batch: 347469

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 347347

Analyte	MB MB		RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac
	Result	Qualifier									
#2 Diesel (C10-C24)	ND		0.065		mg/L		01/06/21 11:36	01/07/21 11:11			1
Motor Oil (>C24-C36)	ND		0.096		mg/L		01/06/21 11:36	01/07/21 11:11			1
Surrogate		MB MB	Limits	Prepared		Analyzed		Dil Fac			
%Recovery	Qualifier										
o-Terphenyl		82	50 - 150	01/06/21 11:36	01/07/21 11:11			1			

Lab Sample ID: LCS 580-347347/2-A
Matrix: Water
Analysis Batch: 347469

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 347347

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
#2 Diesel (C10-C24)	0.500	0.442		mg/L		88	50 - 120	
Motor Oil (>C24-C36)	0.500	0.508		mg/L		102	64 - 120	
Surrogate		LCS LCS	Limits	Prepared		Analyzed		
%Recovery	Qualifier							
o-Terphenyl		96	50 - 150	01/06/21 11:36	01/07/21 11:11			

Lab Sample ID: LCSD 580-347347/3-A
Matrix: Water
Analysis Batch: 347469

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 347347

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	
									RPD	Limit
#2 Diesel (C10-C24)	0.500	0.438		mg/L		88	50 - 120	1	26	
Motor Oil (>C24-C36)	0.500	0.500		mg/L		100	64 - 120	2	24	
Surrogate		LCSD LCSD	Limits	Prepared		Analyzed				
%Recovery	Qualifier									
o-Terphenyl		98	50 - 150	01/06/21 11:36	01/07/21 11:11					

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-100257-1

Client Sample ID: Before GAC-010421

Lab Sample ID: 580-100257-1

Date Collected: 01/04/21 10:00

Matrix: Water

Date Received: 01/05/21 11:12

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Prep	3510C			347347	01/06/21 11:36	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	347469	01/07/21 12:11	ADB	TAL SEA

Client Sample ID: HCC EFF-010421

Lab Sample ID: 580-100257-2

Date Collected: 01/04/21 10:00

Matrix: Water

Date Received: 01/05/21 11:12

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Prep	3510C			347347	01/06/21 11:36	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	347469	01/07/21 12:31	ADB	TAL SEA

Laboratory References:

TAL SEA = Eurofins TestAmerica, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-100257-1

Laboratory: Eurofins TestAmerica, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C553	02-18-21

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Sample Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-100257-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-100257-1	Before GAC-010421	Water	01/04/21 10:00	01/05/21 11:12	
580-100257-2	HCC EFF-010421	Water	01/04/21 10:00	01/05/21 11:12	

1

2

3

4

5

6

7

8

9

10

11

TestAmerica Seattle

5755 8th Street East

Tacoma, WA 98424-1317
phone 253.922.2310 fax 253.922.5047

Chain of Custody Record

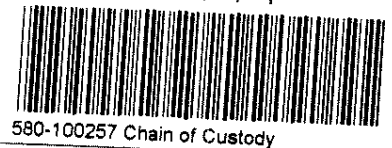


THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: DW NPDES RCRA Other:

Client Contact Farallong Consulting 975 5th Avenue Northwest Issaquah, Washington (425) 295-0800 Phone (425) 295-0850 FAX Project Name: Skykomish HCC System Site: WO # TT0100-S03		Project Manager: Pete Kingston Tel/Fax: 425-394-4146		Site Contact: Matt Bowser Lab Contact: Kristine Allen		Date: 1/4/21 Carrier:		COC No: 1 of 2 COCs Sampler: TW For Lab Use Only: Lab-in Client: Lab Sampling: / SDG No.:			
		Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below: 3 days <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Filtered Sample (Y/N) Perform MS / MSD (Y/N) NWTPH-Dx w/o silica gel cleanup		Loc: 580 100257					
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	NWTPH-Dx w/o silica gel cleanup	Sample Specific Notes	
Before GAC- 010421		1/4/21	10:00	Grab	W	2	X			***See instructions below	
HCC EFF- 010421		1/4/21	10:00	Grab	W	2	X			***See instructions below	
Therm ID: 100 Cor: 2.1 ° Unc: 3.3 °											
Cooler Desc: CR											
Packing: Bubble											
Cust. Seal: Yes NoX											
Blue Ice: Wet Dry, None											
FedEx:											
UPS:											
Lab Cour: X											
Other:											
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other							2		1		
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.							Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for Months				
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown											
Special Instructions/QC Requirements & Comments: 1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica gel cleanup needed for Dx											
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd:		Corr'd:		Therm ID No.:			
Relinquished by: [Signature]		Company: Glacier		Date/Time: 1/4/21 205		Received by: [Signature]		Company: ETA SGA		Date/Time: 1/4/21 @ 1406	
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time: 1/5/21 1112	
Relinquished by:		Company:		Date/Time:		Received in Laboratory by:		Company:		Date/Time:	



Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-100257-1

Login Number: 100257

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Hobbs, Kenneth F

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

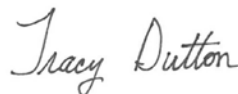
ANALYTICAL REPORT

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-100453-1
Client Project/Site: BNSF Skykomish Rush NPDES
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
1/18/2021 1:44:12 PM
Tracy Dutton, Client Relations Manager
(253)380-6574
Tracy.Dutton@Eurofinset.com

Designee for
Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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QC Sample Results	7
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Certification Summary	9
Sample Summary	10
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Receipt Checklists	12

Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-100453-1

Job ID: 580-100453-1

Laboratory: Eurofins TestAmerica, Seattle

Narrative

**Job Narrative
580-100453-1**

Comments

No additional comments.

Receipt

The samples were received on 1/13/2021 12:13 PM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.5° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-347909. A LCS/LCSD were used instead.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-100453-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-100453-1

Client Sample ID: Before GAC - 11221

Lab Sample ID: 580-100453-1

Date Collected: 01/12/21 12:30

Matrix: Water

Date Received: 01/13/21 12:13

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.30		0.062		mg/L		01/14/21 11:19	01/15/21 22:02	1
Motor Oil (>C24-C36)	0.23		0.091		mg/L		01/14/21 11:19	01/15/21 22:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	76		50 - 150				01/14/21 11:19	01/15/21 22:02	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-100453-1

Client Sample ID: HCC EFF - 11221

Lab Sample ID: 580-100453-2

Date Collected: 01/12/21 12:30

Matrix: Water

Date Received: 01/13/21 12:13

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		01/14/21 11:19	01/15/21 22:22	1
Motor Oil (>C24-C36)	ND		0.091		mg/L		01/14/21 11:19	01/15/21 22:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	71		50 - 150				01/14/21 11:19	01/15/21 22:22	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-100453-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-347909/1-A
Matrix: Water
Analysis Batch: 348046

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 347909

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065		mg/L		01/14/21 11:19	01/15/21 20:43	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		01/14/21 11:19	01/15/21 20:43	1
		MB MB	Limits			Prepared	Analyzed	Dil Fac	
Surrogate	%Recovery	Qualifier							
o-Terphenyl	74		50 - 150			01/14/21 11:19	01/15/21 20:43	1	

Lab Sample ID: LCS 580-347909/2-A
Matrix: Water
Analysis Batch: 348046

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 347909

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
								%Rec.
#2 Diesel (C10-C24)	0.500	0.484		mg/L		97	50 - 120	
Motor Oil (>C24-C36)	0.500	0.501		mg/L		100	64 - 120	
		LCS LCS	Limits			Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier						
o-Terphenyl	93		50 - 150			01/14/21 11:19	01/15/21 20:43	1

Lab Sample ID: LCSD 580-347909/3-A
Matrix: Water
Analysis Batch: 348046

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 347909

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	0.500	0.463		mg/L		93	50 - 120	5	26
Motor Oil (>C24-C36)	0.500	0.483		mg/L		97	64 - 120	4	24
		LCSD LCSD	Limits			Prepared	Analyzed	Dil Fac	
Surrogate	%Recovery	Qualifier							
o-Terphenyl	88		50 - 150			01/14/21 11:19	01/15/21 20:43	1	

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-100453-1

Client Sample ID: Before GAC - 11221

Lab Sample ID: 580-100453-1

Date Collected: 01/12/21 12:30

Matrix: Water

Date Received: 01/13/21 12:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			347909	01/14/21 11:19	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348046	01/15/21 22:02	T1W	TAL SEA

Client Sample ID: HCC EFF - 11221

Lab Sample ID: 580-100453-2

Date Collected: 01/12/21 12:30

Matrix: Water

Date Received: 01/13/21 12:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			347909	01/14/21 11:19	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348046	01/15/21 22:22	T1W	TAL SEA

Laboratory References:

TAL SEA = Eurofins TestAmerica, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-100453-1

Laboratory: Eurofins TestAmerica, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C553	02-18-21

- 1
- 2
- 3
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Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-100453-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-100453-1	Before GAC - 11221	Water	01/12/21 12:30	01/13/21 12:13	
580-100453-2	HCC EFF - 11221	Water	01/12/21 12:30	01/13/21 12:13	

- 1
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TestAmerica Seattle

5755 8th Street East

Chain of Custody Record



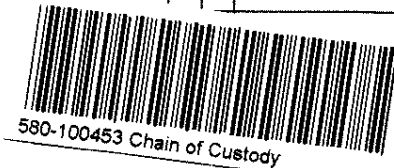
THE LEADER IN ENVIRONMENTAL TESTING

Tacoma, WA 98424-1317
phone 253.922.2310 fax 253.922.5047

Regulatory Program: DW NPDES RCRA Other:

TestAmerica Laboratories, Inc.

Client Contact		Project Manager: Pete Kingston		Site Contact: Matt Bowser		Date: 1-12-21		COC No:		
Farallong Consulting		Tel/Fax: 425-394-4146		Lab Contact: Kristine Allen		Carrier:		1 of 2 COCs		
975 5th Avenue Northwest		Analysis Turnaround Time		Filtered Sample (Y/N) Perform MS / MSD (Y/N) NWTPH-Dx w/o silica gel cleanup				Sampler: <u>TW</u>		
Issaquah, Washington		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS						For Lab Use Only:		
(425) 295-0800 Phone		TAT if different from Below <u>3 day</u>						Walk-in Client:		
(425) 295-0850 FAX		<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day						Lab Sampling:		
Project Name: Skykomish HCC System								Job / SDG No.:		
Site:										
WO # TT0100-S03										
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Sample Specific Notes:			
Before GAC- 11221		1/12/21	12:30	Grab	W	2	X	***See instructions below		
HCC EFF- 11221		1/12/21	12:30	Grab	W	2	X	***See instructions below		
Therm. ID: <u>IR6</u> Cor: <u>2.5</u> ° Unc: <u>2.9</u> °										
Cooler Desc: <u>ICE</u>										
Packing: <u>None</u>		FedEx:								
Cust. Seal: Yes <u>NoX</u>		UPS:								
Blue Ice, <u>Wet</u> Dry, None		Lab Cour: <u>A</u>								
Other:										
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other							2	1		
Possible Hazard Identification:							Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)			
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.							<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months			
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown										
Special Instructions/QC Requirements & Comments: 1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica get cleanup needed for Dx										
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd:		Corr'd:		Therm ID No.:		
Relinquished <u>[Signature]</u>		Company: <u>Calceir</u>		Date/Time: <u>1-13-21 10:00</u>		Received by: <u>[Signature]</u>		Company: <u>ETA SEA</u>		
Relinquished by:		Company:		Date/Time:		Received by: <u>[Signature]</u>		Date/Time: <u>1/13/21 @ 0913</u>		
Relinquished by:		Company:		Date/Time:		Received in Laboratory by:		Date/Time: <u>1/13/21 @ 215</u>		



Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-100453-1

Login Number: 100453

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Vallelunga, Diana L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-100628-1
Client Project/Site: Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
1/26/2021 3:28:37 PM

Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

LINKS

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results through
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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-100628-1

Job ID: 580-100628-1

Laboratory: Eurofins TestAmerica, Seattle

Narrative

CASE NARRATIVE

**Client: Farallon Consulting LLC
Project: Skykomish HCC System
Report Number: 580-100628-1**

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 01/21/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.1 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

DIESEL AND MOTOR OIL RANGE ORGANICS

Samples Before GAC-11921 (580-100628-1) and HCC EFF-11921 (580-100628-2) were analyzed for diesel and motor oil range organics in accordance with Method NWTPH-Dx. The samples were prepared and analyzed on 01/22/2021.

The following sample contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel fuel pattern used by the laboratory for quantitative purposes: Before GAC-11921 (580-100628-1).

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-348402, so an LCS and LCSD were used instead.

The following sample formed emulsions during the extraction procedure: Before GAC-11921 (580-100628-1). The emulsions were broken up using sodium sulfate and rinsed with solvent.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-100628-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-100628-1

Client Sample ID: Before GAC-11921

Lab Sample ID: 580-100628-1

Date Collected: 01/19/21 13:45

Matrix: Water

Date Received: 01/21/21 11:08

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.40		0.063		mg/L		01/22/21 09:23	01/22/21 22:52	1
Motor Oil (>C24-C36)	0.37		0.092		mg/L		01/22/21 09:23	01/22/21 22:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	85		50 - 150				01/22/21 09:23	01/22/21 22:52	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-100628-1

Client Sample ID: HCC EFF-11921

Lab Sample ID: 580-100628-2

Date Collected: 01/19/21 13:45

Matrix: Water

Date Received: 01/21/21 11:08

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		01/22/21 09:23	01/22/21 23:12	1
Motor Oil (>C24-C36)	ND		0.091		mg/L		01/22/21 09:23	01/22/21 23:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150				01/22/21 09:23	01/22/21 23:12	1



QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-100628-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-348402/1-A
Matrix: Water
Analysis Batch: 348479

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 348402

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065		mg/L		01/22/21 09:23	01/22/21 21:53	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		01/22/21 09:23	01/22/21 21:53	1
Surrogate	MB MB		Limits			Prepared	Analyzed	Dil Fac	
%Recovery	Qualifier								
o-Terphenyl	59		50 - 150			01/22/21 09:23	01/22/21 21:53	1	

Lab Sample ID: LCS 580-348402/2-A
Matrix: Water
Analysis Batch: 348479

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 348402

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.
Motor Oil (>C24-C36)	0.500	0.496		mg/L		99	64 - 120	
Surrogate	LCS LCS		Limits			%Rec	Limits	
%Recovery	Qualifier							
o-Terphenyl	96		50 - 150					

Lab Sample ID: LCSD 580-348402/3-A
Matrix: Water
Analysis Batch: 348479

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 348402

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Motor Oil (>C24-C36)	0.500	0.531		mg/L		106	64 - 120	7	24
Surrogate	LCSD LCSD		Limits			%Rec	Limits	RPD	
%Recovery	Qualifier								
o-Terphenyl	101		50 - 150						

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-100628-1

Client Sample ID: Before GAC-11921

Lab Sample ID: 580-100628-1

Date Collected: 01/19/21 13:45

Matrix: Water

Date Received: 01/21/21 11:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			348402	01/22/21 09:23	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348479	01/22/21 22:52	W1T	TAL SEA

Client Sample ID: HCC EFF-11921

Lab Sample ID: 580-100628-2

Date Collected: 01/19/21 13:45

Matrix: Water

Date Received: 01/21/21 11:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			348402	01/22/21 09:23	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348479	01/22/21 23:12	W1T	TAL SEA

Laboratory References:

TAL SEA = Eurofins TestAmerica, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-100628-1

Laboratory: Eurofins TestAmerica, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C553	02-18-21

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Sample Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-100628-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-100628-1	Before GAC-11921	Water	01/19/21 13:45	01/21/21 11:08	
580-100628-2	HCC EFF-11921	Water	01/19/21 13:45	01/21/21 11:08	

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TestAmerica Seattle

5755 8th Street East

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Tacoma, WA 98424-1317
phone 253.922.2310 fax 253.922.5047

Regulatory Program: DW NPDES RCRA Other:

TestAmerica Laboratories, Inc.

Client Contact		Project Manager: Pete Kingston		Site Contact: Matt Bowser		Date: 1-19-21		COC No:	
Farallong Consulting		Tel/Fax: 425-394-4146		Lab Contact: Kristine Allen		Carrier:		2 of 2 COCs	
975 5th Avenue Northwest		Analysis Turnaround Time		Filtered Sample (Y/N) <input type="checkbox"/> Perform MS / MSD (Y/N) <input type="checkbox"/> NWTPH-Dx w/o silica gel cleanup <input type="checkbox"/>		Loc: 580 10062E		Sampler: <u>mw</u>	
Issaquah, Washington		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below <u>3 days</u>						For Lab Use Only:	
(425) 295-0800 Phone		<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day						Walk-in Client:	
(425) 295-0850 FAX								Lab Sampling:	
Project Name: Skykomish HCC System								Job / SDG No.:	
Site:									
WO # TT0100-S03									
Sample Identification			Sample Date	Sample Time	Sample Type (C=Comp. G=Grab)	Matrix	# of Cont.	Sample Specific Notes:	
Before GAC- 11921			1/19/21	1:45	Grab	W	2	X	***See instructions below
HCC EFF- 11921			1/19/21	1:45	Grab	W	2	X	***See instructions below
Therm. ID: <u>8</u> Cor: <u>L-1</u> ° Unc: <u>1.4</u>									
Cooler Dsc: <u>L3</u>									
Packing: <u>Bub</u> FedEx:									
Cust. Seal: Yes <u>No</u> X UPS:									
Blue Ice, <u>Yes</u> Dry, None Lab Cour: <u>X</u>									
Other:									
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other								2 1	
Possible Hazard Identification:								Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.									
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown								<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months	
Special Instructions/QC Requirements & Comments: 1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica gel cleanup needed for Dx									
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No			Custody Seal No.:		Cooler Temp. (°C): Obs'd:		Corr'd:		Therm ID No.:
Relinquished by: <u>[Signature]</u>			Company: <u>Gaces</u>		Date/Time: <u>1/20/21 11:40</u>		Received by: <u>[Signature]</u>		Company: <u>EM Lab</u>
Relinquished by:			Company:		Date/Time:		Received by: <u>[Signature]</u>		Company: <u>CFA SEA</u>
Relinquished by:			Company:		Date/Time:		Received in Laboratory by:		Company: <u>[Signature]</u>



Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-100628-1

Login Number: 100628

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Hobbs, Kenneth F

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-100677-1
Client Project/Site: Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
1/28/2021 5:56:40 PM

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-100677-1

Job ID: 580-100677-1

Laboratory: Eurofins TestAmerica, Seattle

Narrative

CASE NARRATIVE

Client: Farallon Consulting LLC
Project: Skykomish HCC System
Report Number: 580-100677-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 01/25/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 10.7 C.

The Field Sampler was not listed on the Chain of Custody.

The following samples were received at the laboratory outside the required temperature criteria: Before GAC-012521 (580-100677-1) and HCC EFF-012521 (580-100677-2). There was no cooling media present in the cooler.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

DIESEL AND MOTOR OIL RANGE ORGANICS

Samples Before GAC-012521 (580-100677-1) and HCC EFF-012521 (580-100677-2) were analyzed for diesel and motor oil range organics in accordance with Method NWTPH-Dx. The samples were prepared on 01/27/2021 and analyzed on 01/28/2021.

The following samples contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel fuel pattern used by the laboratory for quantitative purposes: Before GAC-012521 (580-100677-1).

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-348642. A LCS/LCSd were used instead.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICPMS)

Sample HCC EFF-012521 (580-100677-2) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 01/26/2021 and analyzed on 01/27/2021.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-100677-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-100677-1

Client Sample ID: Before GAC-012521

Lab Sample ID: 580-100677-1

Date Collected: 01/25/21 11:00

Matrix: Water

Date Received: 01/25/21 14:38

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.57		0.062		mg/L		01/27/21 11:03	01/28/21 04:21	1
Motor Oil (>C24-C36)	0.30		0.091		mg/L		01/27/21 11:03	01/28/21 04:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	90		50 - 150				01/27/21 11:03	01/28/21 04:21	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-100677-1

Client Sample ID: HCC EFF-012521

Lab Sample ID: 580-100677-2

Date Collected: 01/25/21 11:10

Matrix: Water

Date Received: 01/25/21 14:38

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		01/27/21 11:03	01/28/21 04:41	1
Motor Oil (>C24-C36)	ND		0.091		mg/L		01/27/21 11:03	01/28/21 04:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	91		50 - 150				01/27/21 11:03	01/28/21 04:41	1

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0010		mg/L		01/26/21 10:02	01/27/21 11:11	1
Lead	ND		0.00080		mg/L		01/26/21 10:02	01/27/21 11:11	1



QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-100677-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-348642/1-A
Matrix: Water
Analysis Batch: 348690

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 348642

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.065		mg/L		01/27/21 11:03	01/28/21 03:00	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		01/27/21 11:03	01/28/21 03:00	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	87		50 - 150				01/27/21 11:03	01/28/21 03:00	1

Lab Sample ID: LCS 580-348642/2-A
Matrix: Water
Analysis Batch: 348690

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 348642

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.
#2 Diesel (C10-C24)	0.500	0.471		mg/L		94	50 - 120	
Motor Oil (>C24-C36)	0.500	0.553		mg/L		111	64 - 120	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
o-Terphenyl	106		50 - 150					

Lab Sample ID: LCSD 580-348642/3-A
Matrix: Water
Analysis Batch: 348690

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 348642

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	0.500	0.442		mg/L		88	50 - 120	6	26
Motor Oil (>C24-C36)	0.500	0.491		mg/L		98	64 - 120	12	24
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
o-Terphenyl	95		50 - 150						

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 580-348556/14-A
Matrix: Water
Analysis Batch: 348695

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 348556

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0010		mg/L		01/26/21 10:02	01/27/21 11:04	1
Lead	ND		0.00080		mg/L		01/26/21 10:02	01/27/21 11:04	1

Lab Sample ID: LCS 580-348556/15-A
Matrix: Water
Analysis Batch: 348695

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 348556

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	1.00	1.00		mg/L		100	85 - 115
Lead	1.00	1.02		mg/L		102	85 - 115

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-100677-1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 580-348556/16-A
Matrix: Water
Analysis Batch: 348695

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 348556

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD	
									%Rec.	Limit
Arsenic	1.00	0.995		mg/L		100	85 - 115	1		20
Lead	1.00	1.02		mg/L		102	85 - 115	0		20

Lab Sample ID: 580-100677-2 MS
Matrix: Water
Analysis Batch: 348695

Client Sample ID: HCC EFF-012521
Prep Type: Total/NA
Prep Batch: 348556

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits	RPD	
										%Rec.	Limit
Arsenic	ND		1.00	1.05		mg/L		105	70 - 130		
Lead	ND		1.00	1.06		mg/L		106	70 - 130		

Lab Sample ID: 580-100677-2 MSD
Matrix: Water
Analysis Batch: 348695

Client Sample ID: HCC EFF-012521
Prep Type: Total/NA
Prep Batch: 348556

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	
										%Rec.	Limit
Arsenic	ND		1.00	1.02		mg/L		102	70 - 130	2	20
Lead	ND		1.00	1.03		mg/L		103	70 - 130	3	20

Lab Sample ID: 580-100677-2 DU
Matrix: Water
Analysis Batch: 348695

Client Sample ID: HCC EFF-012521
Prep Type: Total/NA
Prep Batch: 348556

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD	
								Limit	Limit
Arsenic	ND		ND		mg/L		NC		20
Lead	ND		ND		mg/L		NC		20

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-100677-1

Client Sample ID: Before GAC-012521

Lab Sample ID: 580-100677-1

Date Collected: 01/25/21 11:00

Matrix: Water

Date Received: 01/25/21 14:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			348642	01/27/21 11:03	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348690	01/28/21 04:21	ADB	TAL SEA

Client Sample ID: HCC EFF-012521

Lab Sample ID: 580-100677-2

Date Collected: 01/25/21 11:10

Matrix: Water

Date Received: 01/25/21 14:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			348642	01/27/21 11:03	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	348690	01/28/21 04:41	ADB	TAL SEA
Total/NA	Prep	200.8			348556	01/26/21 10:02	JCP	TAL SEA
Total/NA	Analysis	200.8		1	348695	01/27/21 11:11	FCW	TAL SEA

Laboratory References:

TAL SEA = Eurofins TestAmerica, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-100677-1

Laboratory: Eurofins TestAmerica, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C553	02-18-21

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Sample Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-100677-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-100677-1	Before GAC-012521	Water	01/25/21 11:00	01/25/21 14:38	
580-100677-2	HCC EFF-012521	Water	01/25/21 11:10	01/25/21 14:38	

1

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11

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-100677-1

Login Number: 100677

List Number: 1

Creator: Blankinship, Tom X

List Source: Eurofins TestAmerica, Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Refer to Job Narrative for details.
Cooler Temperature is acceptable.	False	Refer to Job Narrative for details.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Refer to Job Narrative for details.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-100898-1
Client Project/Site: Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
2/9/2021 11:34:27 AM

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Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-100898-1

Job ID: 580-100898-1

Laboratory: Eurofins TestAmerica, Seattle

Narrative

CASE NARRATIVE

**Client: Farallon Consulting LLC
Project: Skykomish HCC System
Report Number: 580-100898-1**

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 02/04/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.8 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

DIESEL AND MOTOR OIL RANGE ORGANICS

Samples Before GAC-020221 (580-100898-1) and HCC EFF-020221 (580-100898-2) were analyzed for diesel and motor oil range organics in accordance with Method NWTPH-Dx. The samples were prepared on 02/05/2021 and analyzed on 02/07/2021.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-349321. A LCS/LCSD were used instead.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-100898-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-100898-1

Client Sample ID: Before GAC-020221

Lab Sample ID: 580-100898-1

Date Collected: 02/02/21 09:00

Matrix: Water

Date Received: 02/04/21 12:27

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.69		0.062		mg/L		02/05/21 10:36	02/07/21 05:56	1
Motor Oil (>C24-C36)	0.72		0.091		mg/L		02/05/21 10:36	02/07/21 05:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	94		50 - 150				02/05/21 10:36	02/07/21 05:56	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-100898-1

Client Sample ID: HCC EFF-020221

Lab Sample ID: 580-100898-2

Date Collected: 02/02/21 09:00

Matrix: Water

Date Received: 02/04/21 12:27

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		02/05/21 10:36	02/07/21 06:16	1
Motor Oil (>C24-C36)	ND		0.091		mg/L		02/05/21 10:36	02/07/21 06:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	78		50 - 150				02/05/21 10:36	02/07/21 06:16	1



QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-100898-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-349321/1-A
Matrix: Water
Analysis Batch: 349400

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 349321

Analyte	MB MB		RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac
	Result	Qualifier									
#2 Diesel (C10-C24)	ND		0.065		mg/L		02/05/21 10:36	02/07/21 04:57			1
Motor Oil (>C24-C36)	ND		0.096		mg/L		02/05/21 10:36	02/07/21 04:57			1
Surrogate		MB MB	Limits	Prepared		Analyzed		Dil Fac			
%Recovery	Qualifier										
o-Terphenyl		80	50 - 150	02/05/21 10:36	02/07/21 04:57			1			

Lab Sample ID: LCS 580-349321/2-A
Matrix: Water
Analysis Batch: 349400

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 349321

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
#2 Diesel (C10-C24)	0.500	0.451		mg/L		90	50 - 120	
Motor Oil (>C24-C36)	0.500	0.499		mg/L		100	64 - 120	
Surrogate		LCS LCS	Limits	Prepared		Analyzed		
%Recovery	Qualifier							
o-Terphenyl		102	50 - 150					

Lab Sample ID: LCSD 580-349321/3-A
Matrix: Water
Analysis Batch: 349400

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 349321

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	
									RPD	Limit
#2 Diesel (C10-C24)	0.500	0.459		mg/L		92	50 - 120	2	26	
Motor Oil (>C24-C36)	0.500	0.495		mg/L		99	64 - 120	1	24	
Surrogate		LCSD LCSD	Limits	Prepared		Analyzed		RPD		
%Recovery	Qualifier									
o-Terphenyl		93	50 - 150							

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-100898-1

Client Sample ID: Before GAC-020221

Lab Sample ID: 580-100898-1

Date Collected: 02/02/21 09:00

Matrix: Water

Date Received: 02/04/21 12:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			349321	02/05/21 10:36	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	349400	02/07/21 05:56	T1W	TAL SEA

Client Sample ID: HCC EFF-020221

Lab Sample ID: 580-100898-2

Date Collected: 02/02/21 09:00

Matrix: Water

Date Received: 02/04/21 12:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			349321	02/05/21 10:36	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	349400	02/07/21 06:16	T1W	TAL SEA

Laboratory References:

TAL SEA = Eurofins TestAmerica, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-100898-1

Laboratory: Eurofins TestAmerica, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C553	02-18-21

- 1
- 2
- 3
- 4
- 5
- 6
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- 9
- 10
- 11

Sample Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-100898-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-100898-1	Before GAC-020221	Water	02/02/21 09:00	02/04/21 12:27	
580-100898-2	HCC EFF-020221	Water	02/02/21 09:00	02/04/21 12:27	

- 1
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TestAmerica Seattle

5755 8th Street East

Chain of Custody Record

TestAmerica

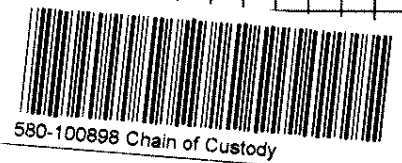
THE LEADER IN ENVIRONMENTAL TESTING

Tacoma, WA 98424-1317
phone 253.922.2310 fax 253.922.5047

Regulatory Program: DW NPDES RCRA Other:

TestAmerica Laboratories, Inc.

Client Contact		Project Manager: Pete Kingston		Site Contact: Matt Bowser		Date: 2/2/21		COC No:			
Farallong Consulting 975 5th Avenue Northwest Issaquah, Washington		Tel/Fax: 425-394-4146		Lab Contact: Kristine Allen		Carrier:		1 of 2 COCs			
(425) 295-0800 Phone (425) 295-0850 FAX		Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below <u>3 days</u>		Filtered Sample (Y/N) Perform MS / MSD (Y/N) NWTPH-Dx w/o silica gel cleanup		Loc: 580 10089E		Sampler: <u>JW</u>			
Project Name: Skykomish HCC System		<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day						For Lab Use Only: Walk-in Client:		Lab Sampling:	
Site: WO # TT0100-S03								Job / SDG No.:			
										Sample Specific Notes:	
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.					
Before GAC- 020221		2/2/21	9:40	Grab	W	2	X		***See instructions below		
HCC EFF- 020221		2/2/21	9:40	Grab	W	2	X		***See instructions below		
Therm ID: <u>JRB</u> Cor: <u>0.9</u> Unc: <u>1.1</u>											
Cooler Desc: <u>LB</u>		FedEx:									
Packing: <u>None</u>		UPS:									
Cust. Seal: Yes <u>No</u>		Lab Cour: <u>X</u>									
Blue Ice: <u>Wet</u> Dry, None		Other:									
Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4=HNO3, 5=NaOH, 6= Other							2	1			
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)						
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown					<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months						
Special Instructions/QC Requirements & Comments: 1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica get cleanup needed for Dx											
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____		Corr'd: _____		Therm ID No.:			
Relinquished by: <u>[Signature]</u>		Company: <u>Glacier</u> 2/4/21		Date/Time: <u>11:20</u>		Received by: <u>[Signature]</u>		Company: <u>EPA Lab PK</u>			
Relinquished by: <u>[Signature]</u>		Company:		Date/Time:		Received by: <u>[Signature]</u>		Company: <u>EPA SEA</u>			
Relinquished by:		Company:		Date/Time:		Received in Laboratory by:		Company:			



Picked up at EM Lab. JWS 2/4/21

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-100898-1

Login Number: 100898

List Number: 1

Creator: Hobbs, Kenneth F

List Source: Eurofins TestAmerica, Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-101022-1
Client Project/Site: Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot

M. Elaine Walker

Authorized for release by:
2/16/2021 2:24:48 PM
Elaine Walker, Project Manager II
(253)248-4972
m.elaine.walker@eurofinset.com
Designee for
Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

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results through
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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-101022-1

Job ID: 580-101022-1

Laboratory: Eurofins TestAmerica, Seattle

Narrative

CASE NARRATIVE

Client: Farallon Consulting LLC
Project: Skykomish HCC System
Report Number: 580-101022-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

Two samples were received on 02/10/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was -0.4 C.

Receipt Exceptions

The chain of custody has the date for sample HCC EFF-020821 (580-101022-2) as 2/28/21. That is erroneous. The samples were collected on 2/8/21 as indicated by the date in the ID.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

DIESEL AND MOTOR OIL RANGE ORGANICS

Samples Before GAC-020821 (580-101022-1) and HCC EFF-020821 (580-101022-2) were analyzed for diesel and motor oil range organics in accordance with Method NWTPH-Dx. The samples were prepared on 02/12/2021 and analyzed on 02/15/2021.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-101022-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-101022-1

Client Sample ID: Before GAC-020821

Lab Sample ID: 580-101022-1

Date Collected: 02/08/21 11:00

Matrix: Water

Date Received: 02/10/21 12:08

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.36		0.062		mg/L		02/12/21 10:30	02/15/21 19:17	1
Motor Oil (>C24-C36)	0.33		0.091		mg/L		02/12/21 10:30	02/15/21 19:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	83		50 - 150				02/12/21 10:30	02/15/21 19:17	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-101022-1

Client Sample ID: HCC EFF-020821

Lab Sample ID: 580-101022-2

Date Collected: 02/08/21 11:00

Matrix: Water

Date Received: 02/10/21 12:08

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		02/12/21 10:30	02/15/21 19:37	1
Motor Oil (>C24-C36)	ND		0.091		mg/L		02/12/21 10:30	02/15/21 19:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	82		50 - 150				02/12/21 10:30	02/15/21 19:37	1



QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-101022-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-349752/1-A
Matrix: Water
Analysis Batch: 349825

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 349752

Analyte	MB MB		RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac
	Result	Qualifier									
#2 Diesel (C10-C24)	ND		0.065		mg/L		02/12/21 10:30	02/15/21 18:17			1
Motor Oil (>C24-C36)	ND		0.096		mg/L		02/12/21 10:30	02/15/21 18:17			1
		MB MB	Limits			D	Prepared		Analyzed		Dil Fac
Surrogate	%Recovery	Qualifier									
o-Terphenyl	80		50 - 150				02/12/21 10:30	02/15/21 18:17			1

Lab Sample ID: LCS 580-349752/2-A
Matrix: Water
Analysis Batch: 349825

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 349752

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits	
		Result	Qualifier					
#2 Diesel (C10-C24)	0.500	0.466		mg/L		93	50 - 120	
Motor Oil (>C24-C36)	0.500	0.508		mg/L		102	64 - 120	
		LCS LCS	Limits			D	%Rec. Limits	
Surrogate	%Recovery	Qualifier						
o-Terphenyl	98		50 - 150					

Lab Sample ID: LCSD 580-349752/3-A
Matrix: Water
Analysis Batch: 349825

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 349752

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec. Limits		RPD	
		Result	Qualifier						RPD	Limit
#2 Diesel (C10-C24)	0.500	0.447		mg/L		89	50 - 120	4	26	
Motor Oil (>C24-C36)	0.500	0.530		mg/L		106	64 - 120	4	24	
		LCSD LCSD	Limits			D	%Rec. Limits		RPD	
Surrogate	%Recovery	Qualifier								
o-Terphenyl	98		50 - 150							

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-101022-1

Client Sample ID: Before GAC-020821

Lab Sample ID: 580-101022-1

Date Collected: 02/08/21 11:00

Matrix: Water

Date Received: 02/10/21 12:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			349752	02/12/21 10:30	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	349825	02/15/21 19:17	TL1	TAL SEA

Client Sample ID: HCC EFF-020821

Lab Sample ID: 580-101022-2

Date Collected: 02/08/21 11:00

Matrix: Water

Date Received: 02/10/21 12:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			349752	02/12/21 10:30	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	349825	02/15/21 19:37	TL1	TAL SEA

Laboratory References:

TAL SEA = Eurofins TestAmerica, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-101022-1

Laboratory: Eurofins TestAmerica, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C553	02-18-21

- 1
- 2
- 3
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Sample Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-101022-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-101022-1	Before GAC-020821	Water	02/08/21 11:00	02/10/21 12:08	
580-101022-2	HCC EFF-020821	Water	02/08/21 11:00	02/10/21 12:08	

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TestAmerica Seattle
5755 8th Street East

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

Tacoma, WA 98424-1317
phone 253.922.2310 fax 253.922.5047

Regulatory Program: DW NPDES RCRA Other:

101022

Client Contact			Project Manager: Pete Kingston			Site Contact: Matt Bowser			Date: 2/8/21			COC No:											
Farallong Consulting			Tel/Fax: 425-394-4146			Lab Contact: Kristine Allen			Carrier:			2 of 2 COCs											
975 5th Avenue Northwest			Analysis Turnaround Time						Filtered Sample (Y/N) Perform MS / MSD (Y/N) NWTPH-Dx w/o silica get cleanup														
Issaquah, Washington			<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS			TAT if different from Below <i>3 day</i>																	
(425) 295-0800 Phone			<input type="checkbox"/> 2 weeks																				
(425) 295-0850 FAX			<input type="checkbox"/> 1 week																				
Project Name: Skykomish HCC System			<input type="checkbox"/> 2 days						Sampler: JW			For Lab Use Only:											
Site:			<input type="checkbox"/> 1 day						Walk-in Client:			Lab Sampling:											
WO # TT0100-S03									Job / SDG No.:														
Sample Identification			Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Sample Specific Notes:															
Before GAC-020821			2/8/21	11:00	Grab	W	2	***See instructions below															
HCC EFF- 020821			2/8/21	11:08	Grab	W	2	***See instructions below															
Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6= Other												2 1											
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)																	
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown						<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months																	
Special Instructions/QC Requirements & Comments: 1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica get cleanup needed for Dx												Lg Blue A2 -0.4/0.0 wet/bub lab cov											
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No			Custody Seal No.:			Cooler Temp. (°C): Obs'd: _____			Therm ID No.:														
Relinquished by: [Signature]			Company: 6/9/21			Date/Time: 2/9/21 11:40			Received by: [Signature]			Company: _____			Date/Time: 2/9/21 @ 11:37								
Relinquished by:			Company:			Date/Time:			Received by: [Signature]			Company: EPA SEA			Date/Time: 2/10/21 12:08								
Relinquished by:			Company:			Date/Time:			Received in Laboratory by:			Company:			Date/Time:								



Picked up at GM Lab JLS 2/10/21

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-101022-1

Login Number: 101022

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	Refer to Job Narrative for details.
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-101165-1
Client Project/Site: Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
2/22/2021 4:54:07 PM

Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-101165-1

Job ID: 580-101165-1

Laboratory: Eurofins TestAmerica, Seattle

Narrative

CASE NARRATIVE

**Client: Farallon Consulting LLC
Project: Skykomish HCC System
Report Number: 580-101165-1**

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 02/18/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.0 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

DIESEL AND MOTOR OIL RANGE ORGANICS

Samples Before GAC-21621 (580-101165-1) and HCC EFF-21621 (580-101165-2) were analyzed for diesel and motor oil range organics in accordance with Method NWTPH-Dx. The samples were prepared on 02/19/2021 and analyzed on 02/20/2021.

Sample Before GAC-21621 (580-101165-1) contained a hydrocarbon pattern in the diesel range; however, the elution pattern was earlier for Motor Oil and later for C10-C24 than the typical diesel fuel pattern used by the laboratory for quantitative purposes.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-350166, so an LCS and LCSD were used instead.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-101165-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-101165-1

Client Sample ID: Before GAC-21621

Lab Sample ID: 580-101165-1

Date Collected: 02/16/21 10:30

Matrix: Water

Date Received: 02/18/21 12:11

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.42		0.062		mg/L		02/19/21 11:03	02/20/21 16:14	1
Motor Oil (>C24-C36)	0.24		0.091		mg/L		02/19/21 11:03	02/20/21 16:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	97		50 - 150				02/19/21 11:03	02/20/21 16:14	1

Client Sample Results

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-101165-1

Client Sample ID: HCC EFF-21621

Lab Sample ID: 580-101165-2

Date Collected: 02/16/21 10:30

Matrix: Water

Date Received: 02/18/21 12:11

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		02/19/21 11:03	02/20/21 16:33	1
Motor Oil (>C24-C36)	ND		0.091		mg/L		02/19/21 11:03	02/20/21 16:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	92		50 - 150				02/19/21 11:03	02/20/21 16:33	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-101165-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-350166/1-A
Matrix: Water
Analysis Batch: 350229

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 350166

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065		mg/L		02/19/21 11:03	02/20/21 14:54	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		02/19/21 11:03	02/20/21 14:54	1
Surrogate	MB MB		Limits			D	Prepared	Analyzed	Dil Fac
%Recovery	Qualifier								
o-Terphenyl	85		50 - 150				02/19/21 11:03	02/20/21 14:54	1

Lab Sample ID: LCS 580-350166/2-A
Matrix: Water
Analysis Batch: 350229

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 350166

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.	
									#2 Diesel (C10-C24)
Motor Oil (>C24-C36)	0.500	0.525		mg/L		105	64 - 120		
Surrogate	LCS LCS		Limits			D	Prepared	Analyzed	Dil Fac
%Recovery	Qualifier								
o-Terphenyl	104		50 - 150						

Lab Sample ID: LCSD 580-350166/3-A
Matrix: Water
Analysis Batch: 350229

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 350166

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Motor Oil (>C24-C36)	0.500	0.521		mg/L		104	64 - 120	1	24
Surrogate	LCSD LCSD		Limits			D	Prepared	Analyzed	Dil Fac
%Recovery	Qualifier								
o-Terphenyl	102		50 - 150						

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-101165-1

Client Sample ID: Before GAC-21621

Lab Sample ID: 580-101165-1

Date Collected: 02/16/21 10:30

Matrix: Water

Date Received: 02/18/21 12:11

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			350166	02/19/21 11:03	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	350229	02/20/21 16:14	JKM	TAL SEA

Client Sample ID: HCC EFF-21621

Lab Sample ID: 580-101165-2

Date Collected: 02/16/21 10:30

Matrix: Water

Date Received: 02/18/21 12:11

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			350166	02/19/21 11:03	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	350229	02/20/21 16:33	JKM	TAL SEA

Laboratory References:

TAL SEA = Eurofins TestAmerica, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-101165-1

Laboratory: Eurofins TestAmerica, Seattle

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-024	02-19-22
ANAB	Dept. of Defense ELAP	L2236	01-19-22
ANAB	ISO/IEC 17025	L2236	01-19-22
California	State	2901	11-05-21
Montana (UST)	State	NA	04-13-21
Oregon	NELAP	WA100007	11-05-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-20-00031	02-10-23



Sample Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-101165-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-101165-1	Before GAC-21621	Water	02/16/21 10:30	02/18/21 12:11	
580-101165-2	HCC EFF-21621	Water	02/16/21 10:30	02/18/21 12:11	

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- 10
- 11

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-101165-1

Login Number: 101165

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-101421-1
Client Project/Site: Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
3/4/2021 4:41:44 PM

Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-101421-1

Job ID: 580-101421-1

Laboratory: Eurofins TestAmerica, Seattle

Narrative

CASE NARRATIVE

**Client: Farallon Consulting LLC
Project: Skykomish HCC System
Report Number: 580-101421-1**

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 03/01/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.3 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

DIESEL AND MOTOR OIL RANGE ORGANICS

Samples Before GAC-22621 (580-101421-1) and HCC EFF-22621 (580-101421-2) were analyzed for diesel and motor oil range organics in accordance with Method NWTPH-Dx. The samples were prepared on 03/02/2021 and analyzed on 03/03/2021.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-350930, so an LCS and LCSD were used instead.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICPMS)

Sample HCC EFF-22621 (580-101421-2) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 03/01/2021 and analyzed on 03/03/2021.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-101421-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-101421-1

Client Sample ID: Before GAC-22621

Lab Sample ID: 580-101421-1

Date Collected: 02/26/21 09:00

Matrix: Water

Date Received: 03/01/21 12:44

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.39		0.062		mg/L		03/02/21 10:41	03/03/21 19:43	1
Motor Oil (>C24-C36)	0.37		0.092		mg/L		03/02/21 10:41	03/03/21 19:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150				03/02/21 10:41	03/03/21 19:43	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-101421-1

Client Sample ID: HCC EFF-22621

Lab Sample ID: 580-101421-2

Date Collected: 02/26/21 09:00

Matrix: Water

Date Received: 03/01/21 12:44

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		03/02/21 10:41	03/03/21 20:03	1
Motor Oil (>C24-C36)	ND		0.091		mg/L		03/02/21 10:41	03/03/21 20:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	74		50 - 150				03/02/21 10:41	03/03/21 20:03	1

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0013		0.0010		mg/L		03/01/21 18:28	03/03/21 14:28	1
Lead	ND		0.00040		mg/L		03/01/21 18:28	03/03/21 14:28	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-101421-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-350930/1-A
Matrix: Water
Analysis Batch: 351040

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 350930

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.065		mg/L		03/02/21 10:41	03/03/21 13:18	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		03/02/21 10:41	03/03/21 13:18	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	78		50 - 150				03/02/21 10:41	03/03/21 13:18	1

Lab Sample ID: LCS 580-350930/2-A
Matrix: Water
Analysis Batch: 351040

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 350930

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	0.500	0.469		mg/L		94	50 - 120
Motor Oil (>C24-C36)	0.500	0.529		mg/L		106	64 - 120
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
o-Terphenyl	96		50 - 150				

Lab Sample ID: LCSD 580-350930/3-A
Matrix: Water
Analysis Batch: 351040

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 350930

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	0.500	0.428		mg/L		86	50 - 120	9	26
Motor Oil (>C24-C36)	0.500	0.457		mg/L		91	64 - 120	15	24
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
o-Terphenyl	90		50 - 150						

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 580-350891/14-A
Matrix: Water
Analysis Batch: 351109

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 350891

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0010		mg/L		03/01/21 18:28	03/03/21 14:24	1
Lead	ND		0.00040		mg/L		03/01/21 18:28	03/03/21 14:24	1

Lab Sample ID: LCS 580-350891/15-A
Matrix: Water
Analysis Batch: 351109

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 350891

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	1.00	1.03		mg/L		103	85 - 115
Lead	1.00	1.04		mg/L		104	85 - 115

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-101421-1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 580-350891/16-A
Matrix: Water
Analysis Batch: 351109

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 350891

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
							Limits	RPD		
Arsenic	1.00	1.04		mg/L		104	85 - 115	1	20	
Lead	1.00	1.04		mg/L		104	85 - 115	0	20	

Lab Sample ID: 580-101348-C-2-C MS
Matrix: Water
Analysis Batch: 351109

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 350891

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
									Limits	RPD		
Arsenic	0.0016		1.00	0.932		mg/L		93	70 - 130			
Lead	ND		1.00	0.956		mg/L		96	70 - 130			

Lab Sample ID: 580-101348-C-2-D MSD
Matrix: Water
Analysis Batch: 351109

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 350891

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
									Limits	RPD		
Arsenic	0.0016		1.00	1.02		mg/L		102	70 - 130	9	20	
Lead	ND		1.00	1.02		mg/L		102	70 - 130	7	20	

Lab Sample ID: 580-101348-C-2-B DU
Matrix: Water
Analysis Batch: 351109

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 350891

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD		Limit
								RPD	Limit	
Arsenic	0.0016		0.00159		mg/L		3			20
Lead	ND		ND		mg/L		NC			20

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-101421-1

Client Sample ID: Before GAC-22621

Lab Sample ID: 580-101421-1

Date Collected: 02/26/21 09:00

Matrix: Water

Date Received: 03/01/21 12:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			350930	03/02/21 10:41	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	351040	03/03/21 19:43	JKM	TAL SEA

Client Sample ID: HCC EFF-22621

Lab Sample ID: 580-101421-2

Date Collected: 02/26/21 09:00

Matrix: Water

Date Received: 03/01/21 12:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			350930	03/02/21 10:41	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	351040	03/03/21 20:03	JKM	TAL SEA
Total/NA	Prep	200.8			350891	03/01/21 18:28	TMH	TAL SEA
Total/NA	Analysis	200.8		1	351109	03/03/21 14:28	FCW	TAL SEA

Laboratory References:

TAL SEA = Eurofins TestAmerica, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-101421-1

Laboratory: Eurofins TestAmerica, Seattle

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-024	02-19-22
ANAB	Dept. of Defense ELAP	L2236	01-19-22
ANAB	ISO/IEC 17025	L2236	01-19-22
California	State	2901	11-05-21
Montana (UST)	State	NA	04-13-21
Oregon	NELAP	WA100007	11-05-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-20-00031	02-10-23



Sample Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-101421-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-101421-1	Before GAC-22621	Water	02/26/21 09:00	03/01/21 12:44	
580-101421-2	HCC EFF-22621	Water	02/26/21 09:00	03/01/21 12:44	

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TestAmerica Seattle

5755 8th Street East

Tacoma, WA 98424-1317
phone 253.922.2310 fax 253.922.5047

Chain of Custody Record



TestAmerica Laboratories, Inc.

Regulatory Program: DW NPDES RCRA Other:

101421

Client Contact Farallog Consulting 975 5th Avenue Northwest Issaquah, Washington (425) 295-0800 Phone (425) 295-0850 FAX Project Name: Skykomish HCC System Site: WO # TT0100-S03			Project Manager: Pete Kingston Tel/Fax: 425-394-4146			Site Contact: Matt Bowser Lab Contact: Kristine Allen			Date: 2-26-20 Carrier:			COC No: 1 of 2 COCs Sampler: JW For Lab Use Only: Walk-in Client: Lab Sampling: Job / SDG No.:			
Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below <i>3 Day</i> <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day			Sample Identification			Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	NWTPH-Dx w/o silica gel cleanup	Total As, Pb (EPA 200.8)	
			Before GAC- <i>22621</i>			<i>2/26/21</i>	<i>9:00</i>	Grab	W	2			X		
			HCC EFF- <i>22621</i>			<i>2/26/21</i>	<i>9:00</i>	Grab	W	3			X	X	



Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other								2	4	1				
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample. <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown								Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months						
Special Instructions/QC Requirements & Comments: 1) DxR requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica get cleanup needed for Dx														
<p style="text-align: right;">Picked up at EM Lab JLS 3/1/21</p>														

Custody Seals Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				Custody Seal No.:				Cooler Temp. (°C): Obs'd: _____ Corr'd: _____				Therm ID No.:											
Relinquished by: <i>[Signature]</i>				Company: <i>Glacier</i>				Date/Time: <i>3/1/21 9:00</i>				Received by: <i>[Signature]</i>				Company: <i>EMCS</i>				Date/Time: <i>3/1/21 9:00</i>			
Relinquished by: _____				Company: _____				Date/Time: _____				Received by: <i>[Signature]</i>				Company: <i>EPASCA</i>				Date/Time: <i>3/1/21 12:41</i>			
Relinquished by: _____				Company: _____				Date/Time: _____				Received in Laboratory by: _____				Company: _____				Date/Time: _____			

Therm. ID: *IR09* Cor: *3.3* ° Unc: *3.1* °
Cooler Disc: *LR*
Packing: *Bubble*
Cust. Seal: Yes No
Blue Ice: Dry, None Other: _____

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-101421-1

Login Number: 101421

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-101526-1

Client Project/Site: BNSF Skykomish Rush NPDES
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
3/9/2021 4:02:14 PM

Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

LINKS

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results through
TotalAccess

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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-101526-1

Job ID: 580-101526-1

Laboratory: Eurofins TestAmerica, Seattle

Narrative

CASE NARRATIVE

Client: Farallon Consulting LLC
Project: BNSF Skykomish Rush NPDES
Report Number: 580-101526-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 03/04/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.8 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

DIESEL AND MOTOR OIL RANGE ORGANICS

Samples Before GAC-3321 (580-101526-1) and HCC EFF-3321 (580-101526-2) were analyzed for diesel and motor oil range organics in accordance with Method NWTPH-Dx. The samples were prepared on 03/05/2021 and analyzed on 03/09/2021.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-351317, so a LCS and LCSD were used instead.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-101526-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-101526-1

Client Sample ID: Before GAC-3321
 Date Collected: 03/03/21 06:30
 Date Received: 03/04/21 11:30

Lab Sample ID: 580-101526-1
 Matrix: Water

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.47		0.062		mg/L		03/05/21 14:50	03/09/21 12:18	1
Motor Oil (>C24-C36)	0.41		0.092		mg/L		03/05/21 14:50	03/09/21 12:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	82		50 - 150				03/05/21 14:50	03/09/21 12:18	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-101526-1

Client Sample ID: HCC EFF-3321

Lab Sample ID: 580-101526-2

Date Collected: 03/03/21 06:30

Matrix: Water

Date Received: 03/04/21 11:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		03/05/21 14:50	03/09/21 12:38	1
Motor Oil (>C24-C36)	ND		0.091		mg/L		03/05/21 14:50	03/09/21 12:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	77		50 - 150				03/05/21 14:50	03/09/21 12:38	1



QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-101526-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-351317/1-A
Matrix: Water
Analysis Batch: 351393

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 351317

Analyte	MB MB		RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac
	Result	Qualifier									
#2 Diesel (C10-C24)	ND		0.065		mg/L		03/05/21 14:50	03/09/21 10:58			1
Motor Oil (>C24-C36)	ND		0.096		mg/L		03/05/21 14:50	03/09/21 10:58			1
Surrogate		MB MB	Limits	Prepared		Analyzed		Dil Fac			
%Recovery	Qualifier										
o-Terphenyl		74	50 - 150	03/05/21 14:50	03/09/21 10:58			1			

Lab Sample ID: LCS 580-351317/2-A
Matrix: Water
Analysis Batch: 351393

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 351317

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
#2 Diesel (C10-C24)	0.500	0.508		mg/L		102	50 - 120	
Motor Oil (>C24-C36)	0.500	0.550		mg/L		110	64 - 120	
Surrogate		LCS LCS	Limits	Prepared		Analyzed		
%Recovery	Qualifier							
o-Terphenyl		97	50 - 150	03/05/21 14:50	03/09/21 10:58			

Lab Sample ID: LCSD 580-351317/3-A
Matrix: Water
Analysis Batch: 351393

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 351317

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	
									RPD	Limit
#2 Diesel (C10-C24)	0.500	0.485		mg/L		97	50 - 120	5	26	
Motor Oil (>C24-C36)	0.500	0.541		mg/L		108	64 - 120	2	24	
Surrogate		LCSD LCSD	Limits	Prepared		Analyzed		RPD		
%Recovery	Qualifier									
o-Terphenyl		94	50 - 150	03/05/21 14:50	03/09/21 10:58					

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-101526-1

Client Sample ID: Before GAC-3321

Lab Sample ID: 580-101526-1

Date Collected: 03/03/21 06:30

Matrix: Water

Date Received: 03/04/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			351317	03/05/21 14:50	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	351393	03/09/21 12:18	JKM	TAL SEA

Client Sample ID: HCC EFF-3321

Lab Sample ID: 580-101526-2

Date Collected: 03/03/21 06:30

Matrix: Water

Date Received: 03/04/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			351317	03/05/21 14:50	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	351393	03/09/21 12:38	JKM	TAL SEA

Laboratory References:

TAL SEA = Eurofins TestAmerica, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-101526-1

Laboratory: Eurofins TestAmerica, Seattle

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-024	02-19-22
ANAB	Dept. of Defense ELAP	L2236	01-19-22
ANAB	ISO/IEC 17025	L2236	01-19-22
California	State	2901	11-05-21
Montana (UST)	State	NA	04-13-21
Oregon	NELAP	WA100007	11-05-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-20-00031	02-10-23



Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-101526-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-101526-1	Before GAC-3321	Water	03/03/21 06:30	03/04/21 11:30	
580-101526-2	HCC EFF-3321	Water	03/03/21 06:30	03/04/21 11:30	

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TestAmerica Seattle

5755 8th Street East

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Tacoma, WA 98424-1317
phone 253.922.2310 fax 253.922.5047

Regulatory Program: DW NPDES RCRA Other:

TestAmerica Laboratories, Inc.

Client Contact		Project Manager: Pete Kingston		Site Contact: Matt Bowser		Date: 3/3/21		COC No:	
Farallong Consulting		Tel/Fax: 425-394-4146		Lab Contact: Kristine Allen		Carrier:		1 of 2 COCs	
975 5th Avenue Northwest		Analysis Turnaround Time		Filtered Sample (Y/N) Perform MS / MSD (Y/N) NWTPH-Dx w/o silica gel cleanup				Sampler: <u>TW</u>	
Issaquah, Washington		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below <u>3 Day</u>						For Lab Use Only:	
(425) 295-0800 Phone		<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day						Walk-in Client:	
(425) 295-0850 FAX								Lab Sampling:	
Project Name: Skykomish HCC System								Job / SDG No.:	
Site:									
WO # TT0100-S03									
Sample Identification		Sample Date	Sample Time	Sample Type (G=Comp, G=Grab)	Matrix	# of Cont.	Sample Specific Notes:		
Before GAC- 3321		3/3/21	630	Grab	W	2	***See instructions below		
HCC EFF- 3321		3/3/21	630	Grab	W	2	***See instructions below		
Therm. ID: <u>IR4</u> Cor: <u>0.2</u> ° Unc: <u>0.6</u> °									
Cooler Dsc: <u>LB</u>									
Packing: <u>None</u> FedEx:									
Cust. Seal: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> UPS:									
Blue Ice, <input checked="" type="checkbox"/> Dry, None <input type="checkbox"/> Lab Cour: <u>X</u>									
Other:									
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other									
Possible Hazard Identification:									
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.									
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown									
Special Instructions/QC Requirements & Comments:									
1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica get cleanup needed for Dx									
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd:		Corr'd:		Therm ID No.:	
Relinquished by: <u>[Signature]</u>		Company: <u>6/4/21 3/3/21</u>		Date/Time: <u>12:10</u>		Received by: <u>[Signature]</u>		Company: <u>EMC</u>	
Relinquished by:		Company:		Date/Time:		Received by: <u>[Signature]</u>		Company: <u>EPA SEA</u>	
Relinquished by:		Company:		Date/Time:		Received in Laboratory by:		Company: <u>[Signature]</u>	



Received at Em Lab JLD 3/14/21

Form No. CA-C-WI-002, Rev. 4.18, dated 9/5/2018

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-101526-1

Login Number: 101526

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Vallelunga, Diana L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-101655-1

Client Project/Site: BNSF Skykomish Rush NPDES
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot

M. Elaine Walker

Authorized for release by:
3/15/2021 4:42:06 PM
Elaine Walker, Project Manager II
(253)248-4972
m.elaine.walker@eurofinset.com
Designee for
Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-101655-1

Job ID: 580-101655-1

Laboratory: Eurofins TestAmerica, Seattle

Narrative

CASE NARRATIVE

Client: Farallon Consulting LLC
Project: BNSF Skykomish Rush NPDES
Report Number: 580-101655-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

Two samples were received on 3/10/2021 11:02 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.6° C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

DIESEL AND MOTOR OIL RANGE ORGANICS

Samples Before GAC-030921 (580-101655-1) and HCC EFF-030921 (580-101655-2) were analyzed for diesel and motor oil range organics in accordance with Method NWTPH-Dx. The samples were prepared on 03/11/2021 and analyzed on 03/15/2021.

The following samples contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel fuel pattern used by the laboratory for quantitative purposes: Before GAC-030921 (580-101655-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICPMS)

Sample HCC EFF-030921 (580-101655-2) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 03/11/2021 and analyzed on 03/12/2021.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-101655-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-101655-1

Client Sample ID: Before GAC-030921

Lab Sample ID: 580-101655-1

Date Collected: 03/09/21 12:40

Matrix: Water

Date Received: 03/10/21 11:02

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.42		0.062		mg/L		03/11/21 12:01	03/15/21 13:18	1
Motor Oil (>C24-C36)	0.35		0.091		mg/L		03/11/21 12:01	03/15/21 13:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	84		50 - 150				03/11/21 12:01	03/15/21 13:18	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-101655-1

Client Sample ID: HCC EFF-030921

Lab Sample ID: 580-101655-2

Date Collected: 03/09/21 12:50

Matrix: Water

Date Received: 03/10/21 11:02

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		03/11/21 12:01	03/15/21 13:37	1
Motor Oil (>C24-C36)	ND		0.091		mg/L		03/11/21 12:01	03/15/21 13:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	84		50 - 150				03/11/21 12:01	03/15/21 13:37	1

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0010		mg/L		03/11/21 08:36	03/12/21 11:13	1
Lead	ND		0.00040		mg/L		03/11/21 08:36	03/12/21 11:13	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-101655-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-351783/1-A
Matrix: Water
Analysis Batch: 352027

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 351783

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065		mg/L		03/11/21 12:01	03/15/21 12:19	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		03/11/21 12:01	03/15/21 12:19	1
MB MB									
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
<i>o</i> -Terphenyl	83		50 - 150			03/11/21 12:01	03/15/21 12:19	1	

Lab Sample ID: LCS 580-351783/2-A
Matrix: Water
Analysis Batch: 352027

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 351783

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits	RPD	Limit
		Result	Qualifier						
#2 Diesel (C10-C24)	0.500	0.485		mg/L		97	50 - 120		
Motor Oil (>C24-C36)	0.500	0.552		mg/L		110	64 - 120		
LCS LCS									
Surrogate	%Recovery	Qualifier	Limits						
<i>o</i> -Terphenyl	106		50 - 150						

Lab Sample ID: LCSD 580-351783/3-A
Matrix: Water
Analysis Batch: 352027

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 351783

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	Limit
		Result	Qualifier						
#2 Diesel (C10-C24)	0.500	0.505		mg/L		101	50 - 120	4	26
Motor Oil (>C24-C36)	0.500	0.558		mg/L		112	64 - 120	1	24
LCSD LCSD									
Surrogate	%Recovery	Qualifier	Limits						
<i>o</i> -Terphenyl	108		50 - 150						

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 580-351745/14-A
Matrix: Water
Analysis Batch: 351889

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 351745

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	ND		0.0010		mg/L		03/11/21 08:36	03/12/21 11:09	1
Lead	ND		0.00040		mg/L		03/11/21 08:36	03/12/21 11:09	1

Lab Sample ID: LCS 580-351745/15-A
Matrix: Water
Analysis Batch: 351889

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 351745

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits	RPD	Limit
		Result	Qualifier						
Arsenic	1.00	0.995		mg/L		99	85 - 115		
Lead	1.00	0.980		mg/L		98	85 - 115		

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-101655-1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 580-351745/16-A
Matrix: Water
Analysis Batch: 351889

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 351745

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD
							Limits	RPD	
Arsenic	1.00	0.997		mg/L		100	85 - 115	0	20
Lead	1.00	0.986		mg/L		99	85 - 115	1	20

Lab Sample ID: 580-101596-C-4-C MS
Matrix: Water
Analysis Batch: 351889

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 351745

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.	
									Limits	RPD
Arsenic	ND		1.00	1.04		mg/L		104	70 - 130	
Lead	0.0045		1.00	1.01		mg/L		101	70 - 130	

Lab Sample ID: 580-101596-C-4-D MSD
Matrix: Water
Analysis Batch: 351889

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 351745

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.	
									Limits	RPD
Arsenic	ND		1.00	1.05		mg/L		105	70 - 130	2
Lead	0.0045		1.00	1.04		mg/L		104	70 - 130	3

Lab Sample ID: 580-101596-C-4-B DU
Matrix: Water
Analysis Batch: 351889

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 351745

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD	
								Limits	Limit
Arsenic	ND		ND		mg/L		NC		20
Lead	0.0045		0.00477		mg/L		7		20

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-101655-1

Client Sample ID: Before GAC-030921

Lab Sample ID: 580-101655-1

Date Collected: 03/09/21 12:40

Matrix: Water

Date Received: 03/10/21 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			351783	03/11/21 12:01	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	352027	03/15/21 13:18	ADB	TAL SEA

Client Sample ID: HCC EFF-030921

Lab Sample ID: 580-101655-2

Date Collected: 03/09/21 12:50

Matrix: Water

Date Received: 03/10/21 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			351783	03/11/21 12:01	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	352027	03/15/21 13:37	ADB	TAL SEA
Total/NA	Prep	200.8			351745	03/11/21 08:36	JCP	TAL SEA
Total/NA	Analysis	200.8		1	351889	03/12/21 11:13	FCW	TAL SEA

Laboratory References:

TAL SEA = Eurofins TestAmerica, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-101655-1

Laboratory: Eurofins TestAmerica, Seattle

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-024	02-19-22
ANAB	Dept. of Defense ELAP	L2236	01-19-22
ANAB	ISO/IEC 17025	L2236	01-19-22
California	State	2901	11-05-21
Montana (UST)	State	NA	04-13-21
Oregon	NELAP	WA100007	11-05-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-20-00031	02-10-23

Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-101655-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-101655-1	Before GAC-030921	Water	03/09/21 12:40	03/10/21 11:02	
580-101655-2	HCC EFF-030921	Water	03/09/21 12:50	03/10/21 11:02	

- 1
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- 9
- 10
- 11

TestAmerica Seattle

5755 8th Street East

Tacoma, WA 98424-1317
phone 253.922.2310 fax 253.922.5047

Chain of Custody Record



THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: DW NPDES RCRA Other:

Client Contact Farallong Consulting 975 5th Avenue Northwest Issaquah, Washington (425) 295-0800 Phone (425) 295-0850 FAX Project Name: Skykomish HCC System Site: WO # TT0100-S03		Project Manager: Pete Kingston Tel/Fax: 425-394-4146		Site Contact: Matt Bowser Lab Contact: Kristine Allen		Date: Carrier:		COC No: 1 of 2 COCs		
		Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input checked="" type="checkbox"/> WORKING DAYS TAT if different from Below <u>3 DAY</u> <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Filtered Sample (Y/N) Perform MS / MSD (Y/N) NWT/PH-Dx w/o silica gel cleanup Total As, Pb (EPA 200.8)				Sampler: For Lab Use Only: Walk-in Client: Lab Sampling: Job / SDG No.:		
Sample Identification		Sample Date	Sample Time			Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Sample Specific Notes:	
Before GAC- 030921		3/9/21	1210	Grab	W	2	X	***See instructions below		
HCC EFF- 030921		3/9/21	1250	Grab	W	3	X X	***See instructions below		
143										
								530-101655 Chain of Custody		
Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4= HNO3, 5= NaOH, 6= Other										
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.								Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown								<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months		
Special Instructions/QC Requirements & Comments: 1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica gel cleanup needed for Dx										
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C):		Obs'd:		Corr'd:		Therm ID No.:
Relinquished by: <i>[Signature]</i>		Company: Farallon		Date/Time: 3/10/21 10:15		Received by: <i>[Signature]</i>		Company: EPA SEA		Date/Time: 3/10/21 11:02
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time:
Therm. ID: A2 Cor: 0.6 ° Unc: 1.0 °		any:		Date/Time:		Received in Laboratory by:		Company:		Date/Time:
Cooler Dsc: LB		FedEx:		Date/Time:		Received in Laboratory by:		Company:		Date/Time:
Packing: Subalif		UPS:		Date/Time:		Received in Laboratory by:		Company:		Date/Time:
Cust. Seal: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Lab Cour: 2		Date/Time:		Received in Laboratory by:		Company:		Date/Time:
Blue Ice, <input checked="" type="checkbox"/> Wet Dry, None		Other:		Date/Time:		Received in Laboratory by:		Company:		Date/Time:

Form No. CA-C-WI-002, Rev. 4.18, dated 9/5/2018

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-101655-1

Login Number: 101655

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Vallelunga, Diana L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-101848-1
Client Project/Site: BNSF Skykomish Rush NPDES
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
3/23/2021 4:30:32 PM
Kristine Allen, Client Service Manager
(253)248-4970
Kristine.Allen@Eurofinset.com
Designee for
Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

LINKS

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results through
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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-101848-1

Job ID: 580-101848-1

Laboratory: Eurofins TestAmerica, Seattle

Narrative

Job Narrative
580-101848-1

Comments

No additional comments.

Receipt

The samples were received on 3/18/2021 11:02 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.7° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-352444, so a LCS and LCSD were used instead.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.



Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-101848-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-101848-1

Client Sample ID: Before GAC - 31821

Lab Sample ID: 580-101848-1

Date Collected: 03/18/21 08:00

Matrix: Water

Date Received: 03/18/21 11:02

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.62		0.062		mg/L		03/19/21 11:51	03/20/21 19:17	1
Motor Oil (>C24-C36)	0.54		0.091		mg/L		03/19/21 11:51	03/20/21 19:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	96		50 - 150				03/19/21 11:51	03/20/21 19:17	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-101848-1

Client Sample ID: HCC EFF - 31821

Lab Sample ID: 580-101848-2

Date Collected: 03/18/21 08:00

Matrix: Water

Date Received: 03/18/21 11:02

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		03/19/21 11:51	03/20/21 19:38	1
Motor Oil (>C24-C36)	ND		0.091		mg/L		03/19/21 11:51	03/20/21 19:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	86		50 - 150				03/19/21 11:51	03/20/21 19:38	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-101848-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-352444/1-A

Matrix: Water

Analysis Batch: 352497

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 352444

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065		mg/L		03/19/21 11:51	03/20/21 18:18	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		03/19/21 11:51	03/20/21 18:18	1
Surrogate	MB	MB	Limits			Prepared	Analyzed	Dil Fac	
	%Recovery	Qualifier							
o-Terphenyl	80		50 - 150			03/19/21 11:51	03/20/21 18:18	1	

Lab Sample ID: LCS 580-352444/2-A

Matrix: Water

Analysis Batch: 352497

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 352444

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
#2 Diesel (C10-C24)	0.500	0.439		mg/L		88	50 - 120
Motor Oil (>C24-C36)	0.500	0.488		mg/L		98	64 - 120
Surrogate	LCS	LCS	Limits			%Rec	
	%Recovery	Qualifier					
o-Terphenyl	97		50 - 150				

Lab Sample ID: LCSD 580-352444/3-A

Matrix: Water

Analysis Batch: 352497

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 352444

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec. Limits	RPD	
		Result	Qualifier					RPD	Limit
#2 Diesel (C10-C24)	0.500	0.459		mg/L		92	50 - 120	4	26
Motor Oil (>C24-C36)	0.500	0.513		mg/L		103	64 - 120	5	24
Surrogate	LCSD	LCSD	Limits			%Rec			
	%Recovery	Qualifier							
o-Terphenyl	103		50 - 150						

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-101848-1

Client Sample ID: Before GAC - 31821

Lab Sample ID: 580-101848-1

Date Collected: 03/18/21 08:00

Matrix: Water

Date Received: 03/18/21 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			352444	03/19/21 11:51	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	352497	03/20/21 19:17	TL1	TAL SEA

Client Sample ID: HCC EFF - 31821

Lab Sample ID: 580-101848-2

Date Collected: 03/18/21 08:00

Matrix: Water

Date Received: 03/18/21 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			352444	03/19/21 11:51	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	352497	03/20/21 19:38	TL1	TAL SEA

Laboratory References:

TAL SEA = Eurofins TestAmerica, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-101848-1

Laboratory: Eurofins TestAmerica, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C553	02-17-22

1

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Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-101848-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-101848-1	Before GAC - 31821	Water	03/18/21 08:00	03/18/21 11:02	
580-101848-2	HCC EFF - 31821	Water	03/18/21 08:00	03/18/21 11:02	

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- 11

TestAmerica Seattle

5755 8th Street East

Tacoma, WA 98424-1317
phone 253.922.2310 fax 253.922.5047

Chain of Custody Record

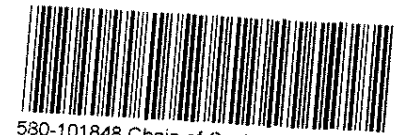


THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: DW NPDES RCRA Other:

Client Contact		Project Manager: Pete Kingston		Site Contact: Matt Bowser		Date: 3/18/21		COC No:		
Farallong Consulting		Tel/Fax: 425-394-4146		Lab Contact: Kristine Allen		Carrier:		1 of 2 COCs		
975 5th Avenue Northwest		Analysis Turnaround Time		Filtered Sample (Y/N) Perform MS /MSD (Y/N) NWTPH-Dx w/o silica gel cleanup				Sampler: JW		
Issaquah, Washington		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS						For Lab Use Only:		
(425) 295-0800 Phone		TAT if different from Below						Walk-in Client:		
(425) 295-0850 FAX		<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day						Lab Sampling:		
Project Name: Skykomish HCC System								Job / SDG No.:		
Site:								Sample Specific Notes:		
WO # TT0100-S03										
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.				
Before GAC- 31821		3/18/21	8:00	Grab	W	2		X	***See instructions below	
HCC EFF- 31821		3/18/21	8:00	Grab	W	2		X	***See instructions below	
Therm. ID: IRQ Cor: 0.7 ° Unc: 1.0 °										
Cooler Dsc: LG										
Packing: Bubble										
FedEx:										
Cust. Seal: Yes No X										
Blue Ice: Wet Dry, None										
Lab Cour: X										
Other:										
Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4= HNO3, 5= NaOH, 6= Other.							2	1		
Possible Hazard Identification:							Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)			
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.							<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months			
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown										
Special Instructions/QC Requirements & Comments: 1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica get cleanup needed for Dx										
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd:		Corr'd:		Therm ID No.:		
Relinquished by: [Signature]		Company: Glacier		Date/Time: 3/18/21 9:50		Received by: [Signature]		Company: [Signature]		
Relinquished by:		Company:		Date/Time:		Received by: [Signature]		Company: ETA-SEA		
Relinquished by:		Company:		Date/Time:		Received in Laboratory by:		Company: [Signature]		



Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-101848-1

Login Number: 101848

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Vallelunga, Diana L

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	0.7/1.0
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-102050-1
Client Project/Site: Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
4/1/2021 5:13:06 PM

Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

LINKS

Review your project
results through
TotalAccess

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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-102050-1

Job ID: 580-102050-1

Laboratory: Eurofins FGS, Seattle

Narrative

CASE NARRATIVE

Client: Farallon Consulting LLC
Project: Skykomish HCC System
Report Number: 580-102050-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 03/26/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 7.6 C.

The Field Sampler was not listed on the Chain of Custody.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

DIESEL AND MOTOR OIL RANGE ORGANICS

Samples Before GAC-032621 (580-102050-1) and HCC EFF-032621 (580-102050-2) were analyzed for diesel and motor oil range organics in accordance with Method NWTPH-Dx. The samples were prepared on 03/31/2021 and analyzed on 04/01/2021.

The (CCV 580-353382/21) recovered high biased for surrogate, o-Terphenyl. Since the analysis was followed by a successful calibration verification and the percentage recovery of this CCV is within control limits, data has been reported.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-353289, so a LCS and LCSD were used instead.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-102050-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-102050-1

Client Sample ID: Before GAC-032621

Lab Sample ID: 580-102050-1

Date Collected: 03/26/21 13:15

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.44		0.063		mg/L		03/31/21 11:44	04/01/21 14:05	1
Motor Oil (>C24-C36)	0.34		0.093		mg/L		03/31/21 11:44	04/01/21 14:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	91		50 - 150				03/31/21 11:44	04/01/21 14:05	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-102050-1

Client Sample ID: HCC EFF-032621

Lab Sample ID: 580-102050-2

Date Collected: 03/26/21 13:20

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.063		mg/L		03/31/21 11:44	04/01/21 14:25	1
Motor Oil (>C24-C36)	ND		0.093		mg/L		03/31/21 11:44	04/01/21 14:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	93		50 - 150				03/31/21 11:44	04/01/21 14:25	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-102050-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-353289/1-A
Matrix: Water
Analysis Batch: 353382

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 353289

Analyte	MB MB		RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac
	Result	Qualifier									
#2 Diesel (C10-C24)	ND		0.065		mg/L		03/31/21 11:44	04/01/21 13:05			1
Motor Oil (>C24-C36)	ND		0.096		mg/L		03/31/21 11:44	04/01/21 13:05			1
Surrogate		MB MB	Limits	Prepared		Analyzed		Dil Fac			
%Recovery	Qualifier										
o-Terphenyl		88	50 - 150	03/31/21 11:44	04/01/21 13:05			1			

Lab Sample ID: LCS 580-353289/2-A
Matrix: Water
Analysis Batch: 353382

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 353289

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
#2 Diesel (C10-C24)	0.500	0.532		mg/L		106	50 - 120	
Motor Oil (>C24-C36)	0.500	0.523		mg/L		105	64 - 120	
Surrogate		LCS LCS	Limits	Prepared		Analyzed		
%Recovery	Qualifier							
o-Terphenyl		112	50 - 150	03/31/21 11:44	04/01/21 13:05			

Lab Sample ID: LCSD 580-353289/3-A
Matrix: Water
Analysis Batch: 353382

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 353289

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	
									RPD	Limit
#2 Diesel (C10-C24)	0.500	0.510		mg/L		102	50 - 120	4	26	
Motor Oil (>C24-C36)	0.500	0.506		mg/L		101	64 - 120	3	24	
Surrogate		LCSD LCSD	Limits	Prepared		Analyzed				
%Recovery	Qualifier									
o-Terphenyl		110	50 - 150	03/31/21 11:44	04/01/21 13:05					

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-102050-1

Client Sample ID: Before GAC-032621

Lab Sample ID: 580-102050-1

Date Collected: 03/26/21 13:15

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353289	03/31/21 11:44	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353382	04/01/21 14:05	JKM	TAL SEA

Client Sample ID: HCC EFF-032621

Lab Sample ID: 580-102050-2

Date Collected: 03/26/21 13:20

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353289	03/31/21 11:44	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353382	04/01/21 14:25	JKM	TAL SEA

Laboratory References:

TAL SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-102050-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C553	02-17-22

- 1
- 2
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Sample Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-102050-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-102050-1	Before GAC-032621	Water	03/26/21 13:15	03/26/21 16:45	
580-102050-2	HCC EFF-032621	Water	03/26/21 13:20	03/26/21 16:45	

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TestAmerica Seattle
5755 8th Street East

Chain of Custody Record

102050

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Tacoma, WA 98424-1317
phone 253.922.2310 fax 253.922.5047

Regulatory Program: DW NPDES RCRA Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Pete Kingston	Site Contact: Matt Bowser	Date: 3/26/21	COC No:
Farallong Consulting	Tel/Fax: 425-394-4146	Lab Contact: Kristine Allen	Carrier:	2 of 2 COCs
975 5th Avenue Northwest	Analysis Turnaround Time			Sampler:
Issaquah, Washington	<input type="checkbox"/> CALENDAR DAYS	<input checked="" type="checkbox"/> WORKING DAYS		For Lab Use Only:
(425) 295-0800 Phone	<input checked="" type="checkbox"/> TAT if different from Below 3 days			Walk-in Client:
(425) 295-0850 FAX	<input type="checkbox"/> 2 weeks			Lab Sampling:
Project Name: Skykomish HCC System	<input type="checkbox"/> 1 week			Job / SDG No.:
Site:	<input type="checkbox"/> 2 days			
WO # TT0100-S03	<input type="checkbox"/> 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (G=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	NWTPH-Dx w/o silica get cleanup	Sample Specific Notes:
Before GAC- 032621	3/26/21	1315	Grab	W	2			X	***See instructions below
HCC EFF- 032621	3/26/21	1320	Grab	W	2			X	***See instructions below



Therm. ID: A1 Cor: 76 ° Unc: 8.1 °
Cooler Dsc: Blue
Packing: Blue
Cust. Seal: Yes No X
Blue Ice, (Wet) Dry, None
FedEx: _____
UPS: _____
Lab Cour: _____
Other: Tideo

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard Flammable Skin Irritant Poison B Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return to Client Disposal by Lab Archive for _____ Months

Special Instructions/QC Requirements & Comments: 1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica get cleanup needed for Dx

Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Relinquished by: <u>Gini Smith</u> Relinquished by: Relinquished by:	Custody Seal No.: Company: <u>Farallon</u> Date/Time: <u>3/26/21 14:40</u> Date/Time: Date/Time:	Cooler Temp. (°C): Obs'd: _____ Received by: <u>Kristine Allen</u> Received by: Received in Laboratory by:	Corr'd: _____ Company: <u>TA562</u> Company: Company:	Therm ID No.: Date/Time: <u>3/26/21 1645</u> Date/Time: Date/Time:
--	--	---	--	---

Form No. CA-C-WI-002, Rev. 4.18, dated 9/5/2018

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-102050-1

Login Number: 102050

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	Received same day of collection; chilling process has begun.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Refer to Job Narrative for details.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-102053-1

Client Project/Site: BNSF Skykomish Semi Annual
Sampling Event: Skykomish HCC System

For:

Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Peter Kingston



Authorized for release by:
4/9/2021 3:55:42 PM

Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

LINKS

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results through
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Job ID: 580-102053-1

Laboratory: Eurofins FGS, Seattle

Narrative

Job Narrative 580-102053-1

Comments

No additional comments.

Receipt

The samples were received on 3/26/2021 4:45 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 10 coolers at receipt time were 1.7° C, 1.9° C, 2.0° C, 2.0° C, 2.1° C, 2.4° C, 3.0° C, 3.1° C, 3.2° C and 4.0° C.

GC Semi VOA

Method NWTPH-Dx: Continuing calibration verification (CCV) standard associated with batch 580-353560 recovered outside %Drift acceptance criteria for o-Terphenyl surrogate. The %Recovery is within acceptance criteria for the surrogate in the CCV and associated samples; therefore, the data are qualified and reported.

Method NWTPH-Dx: Continuing calibration verification (CCV) standard associated with batch 580-353912 recovered outside %Drift acceptance criteria for surrogate, o-Terphenyl. The %Recovery is within acceptance criteria for the surrogate in the CCV and associated samples; therefore, the data are qualified and reported.

Method NWTPH-Dx: The following samples contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel fuel pattern used by the laboratory for quantitative purposes: 1C-W-8-032521 (580-102053-33) and 1C-W-4-032521 (580-102053-34).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-353498, so a LCS and LCSD were used instead.

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-353681, so a LCS and LCSD were used instead.

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-353765, so a LCS and LCSD were used instead.

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-353871, so a LCS and LCSD were used instead.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: S2-BU-032421

Lab Sample ID: 580-102053-1

Date Collected: 03/24/21 16:31

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/02/21 14:29	04/05/21 22:55	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		04/02/21 14:29	04/05/21 22:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	65		50 - 150				04/02/21 14:29	04/05/21 22:55	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: S2-BD-032421

Lab Sample ID: 580-102053-2

Date Collected: 03/24/21 16:31

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/02/21 14:29	04/05/21 23:34	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/02/21 14:29	04/05/21 23:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	77		50 - 150				04/02/21 14:29	04/05/21 23:34	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: S1-AU-032421

Lab Sample ID: 580-102053-3

Date Collected: 03/24/21 17:19

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/07/21 11:34	04/08/21 20:53	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/07/21 11:34	04/08/21 20:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	86		50 - 150				04/07/21 11:34	04/08/21 20:53	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: S1-AD-032421

Lab Sample ID: 580-102053-4

Date Collected: 03/24/21 17:19

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/02/21 14:29	04/06/21 00:14	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/02/21 14:29	04/06/21 00:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	74		50 - 150				04/02/21 14:29	04/06/21 00:14	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: S1-BU-032421

Lab Sample ID: 580-102053-5

Date Collected: 03/24/21 17:23

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/02/21 14:29	04/06/21 00:34	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/02/21 14:29	04/06/21 00:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150				04/02/21 14:29	04/06/21 00:34	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: S1-BD-032421

Lab Sample ID: 580-102053-6

Date Collected: 03/24/21 17:25

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		04/02/21 14:29	04/06/21 00:54	1
Motor Oil (>C24-C36)	0.19		0.096	0.096	mg/L		04/02/21 14:29	04/06/21 00:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150				04/02/21 14:29	04/06/21 00:54	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: S2-AU-032421

Lab Sample ID: 580-102053-7

Date Collected: 03/24/21 16:43

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.063	0.063	mg/L		04/02/21 14:29	04/06/21 01:14	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/02/21 14:29	04/06/21 01:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	77		50 - 150				04/02/21 14:29	04/06/21 01:14	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: S2-AD-032421

Lab Sample ID: 580-102053-8

Date Collected: 03/24/21 16:38

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.063	0.063	mg/L		04/02/21 14:29	04/06/21 01:34	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/02/21 14:29	04/06/21 01:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	70		50 - 150				04/02/21 14:29	04/06/21 01:34	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: S3-AD-032521

Lab Sample ID: 580-102053-9

Date Collected: 03/25/21 09:18

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/02/21 14:29	04/06/21 01:54	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		04/02/21 14:29	04/06/21 01:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	77		50 - 150				04/02/21 14:29	04/06/21 01:54	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: S3-AU-032521

Lab Sample ID: 580-102053-10

Date Collected: 03/25/21 09:18

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/06/21 12:14	04/07/21 20:39	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/06/21 12:14	04/07/21 20:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	67		50 - 150				04/06/21 12:14	04/07/21 20:39	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: S3-BD-032521

Lab Sample ID: 580-102053-11

Date Collected: 03/25/21 09:47

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/06/21 12:14	04/07/21 20:59	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/06/21 12:14	04/07/21 20:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	70		50 - 150				04/06/21 12:14	04/07/21 20:59	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: S3-BU-032521

Lab Sample ID: 580-102053-12

Date Collected: 03/25/21 09:47

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/06/21 12:14	04/07/21 21:19	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		04/06/21 12:14	04/07/21 21:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	70		50 - 150				04/06/21 12:14	04/07/21 21:19	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: S3-CD-032521

Lab Sample ID: 580-102053-13

Date Collected: 03/25/21 10:15

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/06/21 12:14	04/07/21 21:39	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/06/21 12:14	04/07/21 21:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	72		50 - 150				04/06/21 12:14	04/07/21 21:39	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: S3-CU-032521

Lab Sample ID: 580-102053-14

Date Collected: 03/25/21 10:15

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/06/21 12:14	04/07/21 21:59	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/06/21 12:14	04/07/21 21:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	67		50 - 150				04/06/21 12:14	04/07/21 21:59	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: S4-CU-032521

Lab Sample ID: 580-102053-15

Date Collected: 03/25/21 10:08

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/06/21 12:14	04/07/21 22:18	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/06/21 12:14	04/07/21 22:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	74		50 - 150				04/06/21 12:14	04/07/21 22:18	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: S4-CD-032521

Lab Sample ID: 580-102053-16

Date Collected: 03/25/21 10:41

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/06/21 12:14	04/07/21 22:39	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/06/21 12:14	04/07/21 22:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	70		50 - 150				04/06/21 12:14	04/07/21 22:39	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: S4-AD-032521

Lab Sample ID: 580-102053-17

Date Collected: 03/25/21 11:28

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/06/21 12:14	04/07/21 23:18	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/06/21 12:14	04/07/21 23:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	72		50 - 150				04/06/21 12:14	04/07/21 23:18	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: S4-AU-032521

Lab Sample ID: 580-102053-18

Date Collected: 03/25/21 11:28

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/06/21 12:14	04/07/21 23:38	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/06/21 12:14	04/07/21 23:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	74		50 - 150				04/06/21 12:14	04/07/21 23:38	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: S4-BD-032521

Lab Sample ID: 580-102053-19

Date Collected: 03/25/21 12:04

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/06/21 12:14	04/07/21 23:58	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/06/21 12:14	04/07/21 23:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	68		50 - 150				04/06/21 12:14	04/07/21 23:58	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: S4-BU-032521

Lab Sample ID: 580-102053-20

Date Collected: 03/25/21 12:04

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/06/21 12:14	04/08/21 00:18	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/06/21 12:14	04/08/21 00:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	72		50 - 150				04/06/21 12:14	04/08/21 00:18	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: 5-W-14-032521

Lab Sample ID: 580-102053-21

Date Collected: 03/25/21 11:35

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/06/21 12:14	04/08/21 00:38	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/06/21 12:14	04/08/21 00:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	69		50 - 150				04/06/21 12:14	04/08/21 00:38	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: 5-W-17-032521

Lab Sample ID: 580-102053-22

Date Collected: 03/25/21 10:50

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.063	0.063	mg/L		04/06/21 12:14	04/08/21 00:58	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/06/21 12:14	04/08/21 00:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	71		50 - 150				04/06/21 12:14	04/08/21 00:58	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: 5-W-16-032521

Lab Sample ID: 580-102053-23

Date Collected: 03/25/21 10:10

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.063	0.063	mg/L		04/06/21 12:14	04/08/21 01:18	1
Motor Oil (>C24-C36)	ND		0.093	0.093	mg/L		04/06/21 12:14	04/08/21 01:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	68		50 - 150				04/06/21 12:14	04/08/21 01:18	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: 5-W-19-032521

Lab Sample ID: 580-102053-24

Date Collected: 03/25/21 09:35

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/06/21 12:14	04/08/21 01:38	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/06/21 12:14	04/08/21 01:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	62		50 - 150				04/06/21 12:14	04/08/21 01:38	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: 5-W-18-032521

Lab Sample ID: 580-102053-25

Date Collected: 03/25/21 13:09

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/06/21 12:14	04/08/21 01:58	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/06/21 12:14	04/08/21 01:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	66		50 - 150				04/06/21 12:14	04/08/21 01:58	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: 5-W-180-032521

Lab Sample ID: 580-102053-26

Date Collected: 03/25/21 13:15

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/06/21 12:14	04/08/21 02:18	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/06/21 12:14	04/08/21 02:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	68		50 - 150				04/06/21 12:14	04/08/21 02:18	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: GW-2-032521

Lab Sample ID: 580-102053-27

Date Collected: 03/25/21 16:20

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/06/21 12:14	04/08/21 20:44	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/06/21 12:14	04/08/21 20:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	75		50 - 150				04/06/21 12:14	04/08/21 20:44	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: 2A-W-40-032521

Lab Sample ID: 580-102053-28

Date Collected: 03/25/21 15:15

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.063	0.063	mg/L		04/06/21 12:14	04/08/21 21:04	1
Motor Oil (>C24-C36)	ND		0.094	0.094	mg/L		04/06/21 12:14	04/08/21 21:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	71		50 - 150				04/06/21 12:14	04/08/21 21:04	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: 5-W-51-032521

Lab Sample ID: 580-102053-29

Date Collected: 03/25/21 12:50

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.24		0.062	0.062	mg/L		04/06/21 12:14	04/08/21 21:24	1
Motor Oil (>C24-C36)	0.35		0.092	0.092	mg/L		04/06/21 12:14	04/08/21 21:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	79		50 - 150				04/06/21 12:14	04/08/21 21:24	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: 5-W-55-032521

Lab Sample ID: 580-102053-30

Date Collected: 03/25/21 17:10

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/07/21 11:34	04/08/21 21:13	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/07/21 11:34	04/08/21 21:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	79		50 - 150				04/07/21 11:34	04/08/21 21:13	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: EW-2A-032521

Lab Sample ID: 580-102053-31

Date Collected: 03/25/21 12:20

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/07/21 11:34	04/08/21 21:33	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/07/21 11:34	04/08/21 21:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	85		50 - 150				04/07/21 11:34	04/08/21 21:33	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: GW-4-032521

Lab Sample ID: 580-102053-32

Date Collected: 03/25/21 14:15

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/07/21 11:34	04/08/21 21:53	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/07/21 11:34	04/08/21 21:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	86		50 - 150				04/07/21 11:34	04/08/21 21:53	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: 1C-W-8-032521

Lab Sample ID: 580-102053-33

Date Collected: 03/25/21 17:00

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.089		0.062	0.062	mg/L		04/07/21 11:34	04/08/21 22:13	1
Motor Oil (>C24-C36)	0.11		0.092	0.092	mg/L		04/07/21 11:34	04/08/21 22:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	92		50 - 150				04/07/21 11:34	04/08/21 22:13	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: 1C-W-4-032521

Lab Sample ID: 580-102053-34

Date Collected: 03/25/21 16:15

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.10		0.062	0.062	mg/L		04/07/21 11:34	04/08/21 22:33	1
Motor Oil (>C24-C36)	0.11		0.092	0.092	mg/L		04/07/21 11:34	04/08/21 22:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	81		50 - 150				04/07/21 11:34	04/08/21 22:33	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: 5-W-43-032521

Lab Sample ID: 580-102053-35

Date Collected: 03/25/21 14:55

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/07/21 11:34	04/08/21 22:53	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/07/21 11:34	04/08/21 22:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150				04/07/21 11:34	04/08/21 22:53	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: GW-1-032521

Lab Sample ID: 580-102053-36

Date Collected: 03/25/21 15:31

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/07/21 11:34	04/08/21 23:33	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/07/21 11:34	04/08/21 23:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	82		50 - 150				04/07/21 11:34	04/08/21 23:33	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: EW-1-032521

Lab Sample ID: 580-102053-37

Date Collected: 03/25/21 15:57

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/07/21 11:34	04/08/21 23:54	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		04/07/21 11:34	04/08/21 23:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	79		50 - 150				04/07/21 11:34	04/08/21 23:54	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: 5-W-56-032521

Lab Sample ID: 580-102053-38

Date Collected: 03/25/21 16:51

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.18		0.062	0.062	mg/L		04/08/21 12:15	04/08/21 23:03	1
Motor Oil (>C24-C36)	0.54		0.092	0.092	mg/L		04/08/21 12:15	04/08/21 23:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	77		50 - 150				04/08/21 12:15	04/08/21 23:03	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: MW-4-032621

Lab Sample ID: 580-102053-39

Date Collected: 03/26/21 09:51

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.092		0.062	0.062	mg/L		04/08/21 12:15	04/08/21 23:23	1
Motor Oil (>C24-C36)	0.34		0.092	0.092	mg/L		04/08/21 12:15	04/08/21 23:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	84		50 - 150				04/08/21 12:15	04/08/21 23:23	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: 2A-W-9-032621

Lab Sample ID: 580-102053-40

Date Collected: 03/26/21 10:36

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.66		0.062	0.062	mg/L		04/08/21 12:15	04/08/21 23:43	1
Motor Oil (>C24-C36)	0.38		0.091	0.091	mg/L		04/08/21 12:15	04/08/21 23:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	88		50 - 150				04/08/21 12:15	04/08/21 23:43	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: 1B-W-23-032621

Lab Sample ID: 580-102053-41

Date Collected: 03/26/21 11:35

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/08/21 12:15	04/09/21 00:03	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/08/21 12:15	04/09/21 00:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	89		50 - 150				04/08/21 12:15	04/09/21 00:03	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: 1C-W-7-032621

Lab Sample ID: 580-102053-42

Date Collected: 03/26/21 09:55

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.081		0.062	0.062	mg/L		04/08/21 12:15	04/09/21 00:23	1
Motor Oil (>C24-C36)	0.16		0.092	0.092	mg/L		04/08/21 12:15	04/09/21 00:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	86		50 - 150				04/08/21 12:15	04/09/21 00:23	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: 2A-W-42-032621

Lab Sample ID: 580-102053-43

Date Collected: 03/26/21 10:40

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.091		0.062	0.062	mg/L		04/08/21 12:15	04/09/21 00:43	1
Motor Oil (>C24-C36)	0.16		0.091	0.091	mg/L		04/08/21 12:15	04/09/21 00:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	82		50 - 150				04/08/21 12:15	04/09/21 00:43	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: 2A-W-41-032621

Lab Sample ID: 580-102053-44

Date Collected: 03/26/21 10:00

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.66		0.062	0.062	mg/L		04/08/21 12:15	04/09/21 01:03	1
Motor Oil (>C24-C36)	0.47		0.092	0.092	mg/L		04/08/21 12:15	04/09/21 01:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	91		50 - 150				04/08/21 12:15	04/09/21 01:03	1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.17		0.062	0.062	mg/L		04/08/21 12:15	04/08/21 20:04	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/08/21 12:15	04/08/21 20:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	95		50 - 150				04/08/21 12:15	04/08/21 20:04	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: 2A-W-410-032621

Lab Sample ID: 580-102053-45

Date Collected: 03/26/21 10:05

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.31		0.062	0.062	mg/L		04/08/21 12:15	04/09/21 01:42	1
Motor Oil (>C24-C36)	0.29		0.092	0.092	mg/L		04/08/21 12:15	04/09/21 01:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	81		50 - 150				04/08/21 12:15	04/09/21 01:42	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: GW-3-032621

Lab Sample ID: 580-102053-46

Date Collected: 03/26/21 11:10

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.40		0.062	0.062	mg/L		04/08/21 12:15	04/09/21 02:02	1
Motor Oil (>C24-C36)	0.37		0.092	0.092	mg/L		04/08/21 12:15	04/09/21 02:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	85		50 - 150				04/08/21 12:15	04/09/21 02:02	1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.067		0.062	0.062	mg/L		04/08/21 12:15	04/08/21 20:24	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/08/21 12:15	04/08/21 20:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	84		50 - 150				04/08/21 12:15	04/08/21 20:24	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: GW-30-032621

Lab Sample ID: 580-102053-47

Date Collected: 03/26/21 11:15

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.39		0.062	0.062	mg/L		04/08/21 12:15	04/09/21 02:22	1
Motor Oil (>C24-C36)	0.38		0.092	0.092	mg/L		04/08/21 12:15	04/09/21 02:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	85		50 - 150				04/08/21 12:15	04/09/21 02:22	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: MW-555-032621

Lab Sample ID: 580-102053-48

Date Collected: 03/26/21 09:00

Matrix: Water

Date Received: 03/26/21 16:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/08/21 12:15	04/09/21 02:41	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/08/21 12:15	04/09/21 02:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	79		50 - 150				04/08/21 12:15	04/09/21 02:41	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-353498/1-A
Matrix: Water
Analysis Batch: 353671

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 353498

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		04/02/21 14:29	04/05/21 21:55	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		04/02/21 14:29	04/05/21 21:55	1
		MB MB	Limits			D	Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier							
o-Terphenyl	78		50 - 150				04/02/21 14:29	04/05/21 21:55	1

Lab Sample ID: LCS 580-353498/2-A
Matrix: Water
Analysis Batch: 353671

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 353498

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.	
									#2 Diesel (C10-C24)
Motor Oil (>C24-C36)	0.500	0.514		mg/L		103	64 - 120		
		LCS LCS	Limits			D	Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier							
o-Terphenyl	95		50 - 150				04/02/21 14:29	04/05/21 21:55	1

Lab Sample ID: LCSD 580-353498/3-A
Matrix: Water
Analysis Batch: 353671

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 353498

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Motor Oil (>C24-C36)	0.500	0.490		mg/L		98	64 - 120	5	24
		LCSD LCSD	Limits			D	Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier							
o-Terphenyl	94		50 - 150				04/02/21 14:29	04/05/21 21:55	1

Lab Sample ID: MB 580-353681/1-A
Matrix: Water
Analysis Batch: 353818

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 353681

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		04/06/21 12:14	04/07/21 19:39	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		04/06/21 12:14	04/07/21 19:39	1
		MB MB	Limits			D	Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier							
o-Terphenyl	62		50 - 150				04/06/21 12:14	04/07/21 19:39	1

Lab Sample ID: LCS 580-353681/2-A
Matrix: Water
Analysis Batch: 353818

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 353681

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.
Motor Oil (>C24-C36)	0.500	0.475		mg/L		95	64 - 120	

Eurofins FGS, Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCS 580-353681/2-A
Matrix: Water
Analysis Batch: 353818

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 353681

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl	90		50 - 150

Lab Sample ID: LCSD 580-353681/3-A
Matrix: Water
Analysis Batch: 353818

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 353681

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	
							Limits	RPD	Limit	
#2 Diesel (C10-C24)	0.500	0.391		mg/L		78	50 - 120	2	26	
Motor Oil (>C24-C36)	0.500	0.463		mg/L		93	64 - 120	3	24	

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o-Terphenyl	86		50 - 150

Lab Sample ID: MB 580-353765/1-A
Matrix: Water
Analysis Batch: 353915

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 353765

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac
							Limits	RPD	Limit		
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		04/07/21 11:34	04/08/21 19:52	1		
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		04/07/21 11:34	04/08/21 19:52	1		

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared		Analyzed		Dil Fac
o-Terphenyl	81		50 - 150	04/07/21 11:34	04/08/21 19:52	1		

Lab Sample ID: LCS 580-353765/2-A
Matrix: Water
Analysis Batch: 353915

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 353765

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.		RPD	
							Limits	RPD	Limit	
#2 Diesel (C10-C24)	0.500	0.420		mg/L		84	50 - 120			
Motor Oil (>C24-C36)	0.500	0.470		mg/L		94	64 - 120			

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl	87		50 - 150

Lab Sample ID: LCSD 580-353765/3-A
Matrix: Water
Analysis Batch: 353915

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 353765

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	
							Limits	RPD	Limit	
#2 Diesel (C10-C24)	0.500	0.446		mg/L		89	50 - 120	6	26	
Motor Oil (>C24-C36)	0.500	0.485		mg/L		97	64 - 120	3	24	

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o-Terphenyl	89		50 - 150

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: MB 580-353871/1-A
Matrix: Water
Analysis Batch: 353912

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 353871

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		04/08/21 12:15	04/08/21 22:04	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		04/08/21 12:15	04/08/21 22:04	1
Surrogate		MB MB	Limits			Prepared	Analyzed	Dil Fac	
		%Recovery Qualifier							
o-Terphenyl		78	50 - 150			04/08/21 12:15	04/08/21 22:04	1	

Lab Sample ID: LCS 580-353871/2-A
Matrix: Water
Analysis Batch: 353912

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 353871

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
								%Rec.
#2 Diesel (C10-C24)	0.500	0.493		mg/L		99	50 - 120	
Motor Oil (>C24-C36)	0.500	0.529		mg/L		106	64 - 120	
Surrogate		LCS LCS	Limits			Prepared	Analyzed	Dil Fac
		%Recovery Qualifier						
o-Terphenyl		101	50 - 150			04/08/21 12:15	04/08/21 22:04	1

Lab Sample ID: LCSD 580-353871/3-A
Matrix: Water
Analysis Batch: 353912

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 353871

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	0.500	0.457		mg/L		91	50 - 120	8	26
Motor Oil (>C24-C36)	0.500	0.508		mg/L		102	64 - 120	4	24
Surrogate		LCSD LCSD	Limits			Prepared	Analyzed	Dil Fac	
		%Recovery Qualifier							
o-Terphenyl		96	50 - 150			04/08/21 12:15	04/08/21 22:04	1	

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Lab Sample ID: MB 580-353871/1-B
Matrix: Water
Analysis Batch: 353912

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 353871

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		04/08/21 12:15	04/08/21 19:05	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		04/08/21 12:15	04/08/21 19:05	1
Surrogate		MB MB	Limits			Prepared	Analyzed	Dil Fac	
		%Recovery Qualifier							
o-Terphenyl		84	50 - 150			04/08/21 12:15	04/08/21 19:05	1	

Lab Sample ID: LCS 580-353871/2-B
Matrix: Water
Analysis Batch: 353912

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 353871

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	0.500	0.496		mg/L		99	50 - 120
Motor Oil (>C24-C36)	0.500	0.518		mg/L		104	64 - 120

Eurofins FGS, Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup (Continued)

<i>Surrogate</i>	<i>LCS</i> <i>%Recovery</i>	<i>LCS</i> <i>Qualifier</i>	<i>Limits</i>
<i>o-Terphenyl</i>	101		50 - 150

Lab Sample ID: LCSD 580-353871/3-B
Matrix: Water
Analysis Batch: 353912

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 353871

<i>Analyte</i>	<i>Spike</i> <i>Added</i>	<i>LCSD</i> <i>Result</i>	<i>LCSD</i> <i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec.</i> <i>Limits</i>	<i>RPD</i>	<i>RPD</i> <i>Limit</i>
#2 Diesel (C10-C24)	0.500	0.454		mg/L		91	50 - 120	9	26
Motor Oil (>C24-C36)	0.500	0.508		mg/L		102	64 - 120	2	24

<i>Surrogate</i>	<i>LCSD</i> <i>%Recovery</i>	<i>LCSD</i> <i>Qualifier</i>	<i>Limits</i>
<i>o-Terphenyl</i>	95		50 - 150



Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: S2-BU-032421

Lab Sample ID: 580-102053-1

Date Collected: 03/24/21 16:31

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353498	04/02/21 14:29	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353671	04/05/21 22:55	JKM	TAL SEA

Client Sample ID: S2-BD-032421

Lab Sample ID: 580-102053-2

Date Collected: 03/24/21 16:31

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353498	04/02/21 14:29	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353671	04/05/21 23:34	JKM	TAL SEA

Client Sample ID: S1-AU-032421

Lab Sample ID: 580-102053-3

Date Collected: 03/24/21 17:19

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353765	04/07/21 11:34	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353915	04/08/21 20:53	T1W	TAL SEA

Client Sample ID: S1-AD-032421

Lab Sample ID: 580-102053-4

Date Collected: 03/24/21 17:19

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353498	04/02/21 14:29	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353671	04/06/21 00:14	JKM	TAL SEA

Client Sample ID: S1-BU-032421

Lab Sample ID: 580-102053-5

Date Collected: 03/24/21 17:23

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353498	04/02/21 14:29	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353671	04/06/21 00:34	JKM	TAL SEA

Client Sample ID: S1-BD-032421

Lab Sample ID: 580-102053-6

Date Collected: 03/24/21 17:25

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353498	04/02/21 14:29	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353671	04/06/21 00:54	JKM	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: S2-AU-032421

Lab Sample ID: 580-102053-7

Date Collected: 03/24/21 16:43

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353498	04/02/21 14:29	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353671	04/06/21 01:14	JKM	TAL SEA

Client Sample ID: S2-AD-032421

Lab Sample ID: 580-102053-8

Date Collected: 03/24/21 16:38

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353498	04/02/21 14:29	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353671	04/06/21 01:34	JKM	TAL SEA

Client Sample ID: S3-AD-032521

Lab Sample ID: 580-102053-9

Date Collected: 03/25/21 09:18

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353498	04/02/21 14:29	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353671	04/06/21 01:54	JKM	TAL SEA

Client Sample ID: S3-AU-032521

Lab Sample ID: 580-102053-10

Date Collected: 03/25/21 09:18

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353681	04/06/21 12:14	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353818	04/07/21 20:39	T1W	TAL SEA

Client Sample ID: S3-BD-032521

Lab Sample ID: 580-102053-11

Date Collected: 03/25/21 09:47

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353681	04/06/21 12:14	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353818	04/07/21 20:59	T1W	TAL SEA

Client Sample ID: S3-BU-032521

Lab Sample ID: 580-102053-12

Date Collected: 03/25/21 09:47

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353681	04/06/21 12:14	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353818	04/07/21 21:19	T1W	TAL SEA

Eurofins FGS, Seattle

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: S3-CD-032521

Lab Sample ID: 580-102053-13

Date Collected: 03/25/21 10:15

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353681	04/06/21 12:14	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353818	04/07/21 21:39	T1W	TAL SEA

Client Sample ID: S3-CU-032521

Lab Sample ID: 580-102053-14

Date Collected: 03/25/21 10:15

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353681	04/06/21 12:14	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353818	04/07/21 21:59	T1W	TAL SEA

Client Sample ID: S4-CU-032521

Lab Sample ID: 580-102053-15

Date Collected: 03/25/21 10:08

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353681	04/06/21 12:14	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353818	04/07/21 22:18	T1W	TAL SEA

Client Sample ID: S4-CD-032521

Lab Sample ID: 580-102053-16

Date Collected: 03/25/21 10:41

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353681	04/06/21 12:14	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353818	04/07/21 22:39	T1W	TAL SEA

Client Sample ID: S4-AD-032521

Lab Sample ID: 580-102053-17

Date Collected: 03/25/21 11:28

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353681	04/06/21 12:14	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353818	04/07/21 23:18	T1W	TAL SEA

Client Sample ID: S4-AU-032521

Lab Sample ID: 580-102053-18

Date Collected: 03/25/21 11:28

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353681	04/06/21 12:14	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353818	04/07/21 23:38	T1W	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: S4-BD-032521

Lab Sample ID: 580-102053-19

Date Collected: 03/25/21 12:04

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353681	04/06/21 12:14	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353818	04/07/21 23:58	T1W	TAL SEA

Client Sample ID: S4-BU-032521

Lab Sample ID: 580-102053-20

Date Collected: 03/25/21 12:04

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353681	04/06/21 12:14	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353818	04/08/21 00:18	T1W	TAL SEA

Client Sample ID: 5-W-14-032521

Lab Sample ID: 580-102053-21

Date Collected: 03/25/21 11:35

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353681	04/06/21 12:14	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353818	04/08/21 00:38	T1W	TAL SEA

Client Sample ID: 5-W-17-032521

Lab Sample ID: 580-102053-22

Date Collected: 03/25/21 10:50

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353681	04/06/21 12:14	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353818	04/08/21 00:58	T1W	TAL SEA

Client Sample ID: 5-W-16-032521

Lab Sample ID: 580-102053-23

Date Collected: 03/25/21 10:10

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353681	04/06/21 12:14	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353818	04/08/21 01:18	T1W	TAL SEA

Client Sample ID: 5-W-19-032521

Lab Sample ID: 580-102053-24

Date Collected: 03/25/21 09:35

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353681	04/06/21 12:14	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353818	04/08/21 01:38	T1W	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: 5-W-18-032521

Lab Sample ID: 580-102053-25

Date Collected: 03/25/21 13:09

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353681	04/06/21 12:14	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353818	04/08/21 01:58	T1W	TAL SEA

Client Sample ID: 5-W-180-032521

Lab Sample ID: 580-102053-26

Date Collected: 03/25/21 13:15

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353681	04/06/21 12:14	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353818	04/08/21 02:18	T1W	TAL SEA

Client Sample ID: GW-2-032521

Lab Sample ID: 580-102053-27

Date Collected: 03/25/21 16:20

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353681	04/06/21 12:14	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353912	04/08/21 20:44	T1W	TAL SEA

Client Sample ID: 2A-W-40-032521

Lab Sample ID: 580-102053-28

Date Collected: 03/25/21 15:15

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353681	04/06/21 12:14	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353912	04/08/21 21:04	T1W	TAL SEA

Client Sample ID: 5-W-51-032521

Lab Sample ID: 580-102053-29

Date Collected: 03/25/21 12:50

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353681	04/06/21 12:14	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353912	04/08/21 21:24	T1W	TAL SEA

Client Sample ID: 5-W-55-032521

Lab Sample ID: 580-102053-30

Date Collected: 03/25/21 17:10

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353765	04/07/21 11:34	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353915	04/08/21 21:13	T1W	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: EW-2A-032521

Lab Sample ID: 580-102053-31

Date Collected: 03/25/21 12:20

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353765	04/07/21 11:34	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353915	04/08/21 21:33	T1W	TAL SEA

Client Sample ID: GW-4-032521

Lab Sample ID: 580-102053-32

Date Collected: 03/25/21 14:15

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353765	04/07/21 11:34	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353915	04/08/21 21:53	T1W	TAL SEA

Client Sample ID: 1C-W-8-032521

Lab Sample ID: 580-102053-33

Date Collected: 03/25/21 17:00

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353765	04/07/21 11:34	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353915	04/08/21 22:13	T1W	TAL SEA

Client Sample ID: 1C-W-4-032521

Lab Sample ID: 580-102053-34

Date Collected: 03/25/21 16:15

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353765	04/07/21 11:34	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353915	04/08/21 22:33	T1W	TAL SEA

Client Sample ID: 5-W-43-032521

Lab Sample ID: 580-102053-35

Date Collected: 03/25/21 14:55

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353765	04/07/21 11:34	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353915	04/08/21 22:53	T1W	TAL SEA

Client Sample ID: GW-1-032521

Lab Sample ID: 580-102053-36

Date Collected: 03/25/21 15:31

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353765	04/07/21 11:34	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353915	04/08/21 23:33	T1W	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: EW-1-032521

Lab Sample ID: 580-102053-37

Date Collected: 03/25/21 15:57

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353765	04/07/21 11:34	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353915	04/08/21 23:54	T1W	TAL SEA

Client Sample ID: 5-W-56-032521

Lab Sample ID: 580-102053-38

Date Collected: 03/25/21 16:51

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353871	04/08/21 12:15	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353912	04/08/21 23:03	T1W	TAL SEA

Client Sample ID: MW-4-032621

Lab Sample ID: 580-102053-39

Date Collected: 03/26/21 09:51

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353871	04/08/21 12:15	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353912	04/08/21 23:23	T1W	TAL SEA

Client Sample ID: 2A-W-9-032621

Lab Sample ID: 580-102053-40

Date Collected: 03/26/21 10:36

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353871	04/08/21 12:15	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353912	04/08/21 23:43	T1W	TAL SEA

Client Sample ID: 1B-W-23-032621

Lab Sample ID: 580-102053-41

Date Collected: 03/26/21 11:35

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353871	04/08/21 12:15	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353912	04/09/21 00:03	T1W	TAL SEA

Client Sample ID: 1C-W-7-032621

Lab Sample ID: 580-102053-42

Date Collected: 03/26/21 09:55

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353871	04/08/21 12:15	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353912	04/09/21 00:23	T1W	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: 2A-W-42-032621

Lab Sample ID: 580-102053-43

Date Collected: 03/26/21 10:40

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353871	04/08/21 12:15	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353912	04/09/21 00:43	T1W	TAL SEA

Client Sample ID: 2A-W-41-032621

Lab Sample ID: 580-102053-44

Date Collected: 03/26/21 10:00

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353871	04/08/21 12:15	RJL	TAL SEA
Total/NA	Cleanup	3630C			353920	04/08/21 15:54	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353912	04/08/21 20:04	T1W	TAL SEA
Total/NA	Prep	3510C			353871	04/08/21 12:15	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353912	04/09/21 01:03	T1W	TAL SEA

Client Sample ID: 2A-W-410-032621

Lab Sample ID: 580-102053-45

Date Collected: 03/26/21 10:05

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353871	04/08/21 12:15	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353912	04/09/21 01:42	T1W	TAL SEA

Client Sample ID: GW-3-032621

Lab Sample ID: 580-102053-46

Date Collected: 03/26/21 11:10

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353871	04/08/21 12:15	RJL	TAL SEA
Total/NA	Cleanup	3630C			353920	04/08/21 15:54	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353912	04/08/21 20:24	T1W	TAL SEA
Total/NA	Prep	3510C			353871	04/08/21 12:15	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353912	04/09/21 02:02	T1W	TAL SEA

Client Sample ID: GW-30-032621

Lab Sample ID: 580-102053-47

Date Collected: 03/26/21 11:15

Matrix: Water

Date Received: 03/26/21 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353871	04/08/21 12:15	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353912	04/09/21 02:22	T1W	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Client Sample ID: MW-555-032621

Lab Sample ID: 580-102053-48

Date Collected: 03/26/21 09:00

Matrix: Water

Date Received: 03/26/21 16:45

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Prep	3510C			353871	04/08/21 12:15	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353912	04/09/21 02:41	T1W	TAL SEA

Laboratory References:

TAL SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310



Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C553	02-17-22

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Sample Summary

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-102053-1


Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-102053-1	S2-BU-032421	Water	03/24/21 16:31	03/26/21 16:45	
580-102053-2	S2-BD-032421	Water	03/24/21 16:31	03/26/21 16:45	
580-102053-3	S1-AU-032421	Water	03/24/21 17:19	03/26/21 16:45	
580-102053-4	S1-AD-032421	Water	03/24/21 17:19	03/26/21 16:45	
580-102053-5	S1-BU-032421	Water	03/24/21 17:23	03/26/21 16:45	
580-102053-6	S1-BD-032421	Water	03/24/21 17:25	03/26/21 16:45	
580-102053-7	S2-AU-032421	Water	03/24/21 16:43	03/26/21 16:45	
580-102053-8	S2-AD-032421	Water	03/24/21 16:38	03/26/21 16:45	
580-102053-9	S3-AD-032521	Water	03/25/21 09:18	03/26/21 16:45	
580-102053-10	S3-AU-032521	Water	03/25/21 09:18	03/26/21 16:45	
580-102053-11	S3-BD-032521	Water	03/25/21 09:47	03/26/21 16:45	
580-102053-12	S3-BU-032521	Water	03/25/21 09:47	03/26/21 16:45	
580-102053-13	S3-CD-032521	Water	03/25/21 10:15	03/26/21 16:45	
580-102053-14	S3-CU-032521	Water	03/25/21 10:15	03/26/21 16:45	
580-102053-15	S4-CU-032521	Water	03/25/21 10:08	03/26/21 16:45	
580-102053-16	S4-CD-032521	Water	03/25/21 10:41	03/26/21 16:45	
580-102053-17	S4-AD-032521	Water	03/25/21 11:28	03/26/21 16:45	
580-102053-18	S4-AU-032521	Water	03/25/21 11:28	03/26/21 16:45	
580-102053-19	S4-BD-032521	Water	03/25/21 12:04	03/26/21 16:45	
580-102053-20	S4-BU-032521	Water	03/25/21 12:04	03/26/21 16:45	
580-102053-21	5-W-14-032521	Water	03/25/21 11:35	03/26/21 16:45	
580-102053-22	5-W-17-032521	Water	03/25/21 10:50	03/26/21 16:45	
580-102053-23	5-W-16-032521	Water	03/25/21 10:10	03/26/21 16:45	
580-102053-24	5-W-19-032521	Water	03/25/21 09:35	03/26/21 16:45	
580-102053-25	5-W-18-032521	Water	03/25/21 13:09	03/26/21 16:45	
580-102053-26	5-W-180-032521	Water	03/25/21 13:15	03/26/21 16:45	
580-102053-27	GW-2-032521	Water	03/25/21 16:20	03/26/21 16:45	
580-102053-28	2A-W-40-032521	Water	03/25/21 15:15	03/26/21 16:45	
580-102053-29	5-W-51-032521	Water	03/25/21 12:50	03/26/21 16:45	
580-102053-30	5-W-55-032521	Water	03/25/21 17:10	03/26/21 16:45	
580-102053-31	EW-2A-032521	Water	03/25/21 12:20	03/26/21 16:45	
580-102053-32	GW-4-032521	Water	03/25/21 14:15	03/26/21 16:45	
580-102053-33	1C-W-8-032521	Water	03/25/21 17:00	03/26/21 16:45	
580-102053-34	1C-W-4-032521	Water	03/25/21 16:15	03/26/21 16:45	
580-102053-35	5-W-43-032521	Water	03/25/21 14:55	03/26/21 16:45	
580-102053-36	GW-1-032521	Water	03/25/21 15:31	03/26/21 16:45	
580-102053-37	EW-1-032521	Water	03/25/21 15:57	03/26/21 16:45	
580-102053-38	5-W-56-032521	Water	03/25/21 16:51	03/26/21 16:45	
580-102053-39	MW-4-032621	Water	03/26/21 09:51	03/26/21 16:45	
580-102053-40	2A-W-9-032621	Water	03/26/21 10:36	03/26/21 16:45	
580-102053-41	1B-W-23-032621	Water	03/26/21 11:35	03/26/21 16:45	
580-102053-42	1C-W-7-032621	Water	03/26/21 09:55	03/26/21 16:45	
580-102053-43	2A-W-42-032621	Water	03/26/21 10:40	03/26/21 16:45	
580-102053-44	2A-W-41-032621	Water	03/26/21 10:00	03/26/21 16:45	
580-102053-45	2A-W-410-032621	Water	03/26/21 10:05	03/26/21 16:45	
580-102053-46	GW-3-032621	Water	03/26/21 11:10	03/26/21 16:45	
580-102053-47	GW-30-032621	Water	03/26/21 11:15	03/26/21 16:45	
580-102053-48	MW-555-032621	Water	03/26/21 09:00	03/26/21 16:45	

 CHAIN OF CUSTODY	LABORATORY INFORMATION				LAB WORK ORDER:				
	Laboratory:		Project Manager:		SHIPMENT INFORMATION				
	Address:		Phone:						
City/State/ZIP:		Fax:							
BNSF PROJECT INFORMATION				CONSULTANT INFORMATION		Project Number: <i>683-071</i>			
BNSF Project Number: <i>683-071</i>		Project State of Origin: <i>Washington</i>		Company: <i>Tavelle</i>		Project Manager: <i>Amara Maignon</i>			
BNSF Project Name: <i>BNSF Skykovich Semi Annual</i>		Project City: <i>Skykovich</i>		Address: <i>915 5th AVE NW</i>		Email: <i>AmaraMaignon@tavelle.com</i>			
BNSF Contact:		BNSF Work Order No.:		City/State/Zip: <i>Spokane, WA 99227</i>		Phone: <i>425-295-0800</i> Fax:			
TURNAROUND TIME		DELIVERABLES		METHODS FOR ANALYSIS					
<input type="checkbox"/> 1-day Rush <input type="checkbox"/> 5- to 8-day Rush <input type="checkbox"/> 2-day Rush <input checked="" type="checkbox"/> Standard 10-Day <input type="checkbox"/> 3-day Rush <input type="checkbox"/> Other _____		<input type="checkbox"/> BNSF Standard (Level II) <input type="checkbox"/> Level III <input type="checkbox"/> EDD Req. Format? <input type="checkbox"/> Level IV		Loc: 580 102053 COMMENTS LAB USE					
SAMPLE INFORMATION									
Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/Grab)	Matrix	N W T P H - D X	
		Date	Time	Sampler					
<i>1 S2-BU-032421</i>	<i>2</i>	<i>3/24/21</i>	<i>1631</i>	<i>GP</i>	<i>N</i>	<i>G</i>	<i>W</i>	<i>X</i>	
<i>2 S2-BD-032421</i>			<i>1631</i>	<i>GP</i>				<i>X</i>	
<i>3 S1-AU-032421</i>			<i>1719</i>	<i>GP</i>				<i>X</i>	
<i>4 S1-AD-032421</i>			<i>1719</i>	<i>GP</i>				<i>X</i>	
<i>5 S1-BU-032421</i>			<i>1723</i>	<i>ES</i>				<i>X</i>	
<i>6 S1-BD-032421</i>			<i>1725</i>	<i>ES</i>				<i>X</i>	
<i>7 S2-AU-032421</i>			<i>1643</i>	<i>ES</i>				<i>X</i>	
<i>8 S2-AD-032421</i>			<i>1638</i>	<i>ES</i>				<i>X</i>	
<i>9 S3-AD-032521</i>		<i>3/25/21</i>	<i>918</i>	<i>GP</i>				<i>X</i>	
<i>10 S3-AU-032521</i>			<i>918</i>	<i>GP</i>				<i>X</i>	
<i>11 S3-BD-032521</i>			<i>947</i>	<i>GP</i>				<i>X</i>	
<i>12 S3-BU-032521</i>			<i>947</i>	<i>GP</i>				<i>X</i>	
<i>13 S3-CD-032521</i>			<i>1015</i>	<i>GP</i>				<i>X</i>	
<i>14 S3-CU-032521</i>	<i>2</i>		<i>1015</i>	<i>GP</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>X</i>	
<i>15 S4-CU-032521</i>	<i>2</i>		<i>1008</i>	<i>MB</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>X</i>	
Relinquished By: <i>Gunn Smith</i>		Date/Time: <i>3/26/21 1445</i>		Received By: <i>Kerry Hutz</i>		Date/Time: <i>3/26/21 1445</i>		Comments and Special Analytical Requirements:	
Relinquished By:		Date/Time:		Received By:		Date/Time:			
Relinquished By:		Date/Time:		Received By:		Date/Time:			
Received by Laboratory:		Date/Time:		Lab Remarks:		Lab Custody Intact? <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No. BNSF COC No.	

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES

DUPLICATE - CONSULTANT


TAL-1001 (0912)

 CHAIN OF CUSTODY	LABORATORY INFORMATION						LAB WORK ORDER:				
	Laboratory:			Project Manager:			SHIPMENT INFORMATION				
	Address:			Phone:							
City/State/ZIP:			Fax:								
BNSF PROJECT INFORMATION			Project State of Origin: <u>Washington</u>			CONSULTANT INFORMATION					
BNSF Project Number: <u>683-071</u>			Project City: <u>Skycross</u>			Project Number: <u>683-071</u>					
BNSF Project Name: <u>BNSF Skycross - Semi-Annual</u>			Company: <u>Farell</u>			Project Manager: <u>Amber Mounait</u>					
BNSF Contact:			BNSF Work Order No.:			Address: <u>975 5th AVE NW</u>					
						City/State/ZIP: <u>Issaquah, WA 98027</u>					
						Email: <u>Amberquit@farellconsulting.com</u>					
						Phone: <u>425-293-0600</u>					
						Fax:					
TURNAROUND TIME			DELIVERABLES			METHODS FOR ANALYSIS					
<input type="checkbox"/> 1-day Rush <input type="checkbox"/> 5- to 8-day Rush <input type="checkbox"/> 2-day Rush <input checked="" type="checkbox"/> Standard 10-Day <input type="checkbox"/> 3-day Rush <input type="checkbox"/> Other _____			<input type="checkbox"/> Other Deliverables? <input type="checkbox"/> BNSF Standard (Level II) <input type="checkbox"/> Level III <input type="checkbox"/> EDD Req. Format? <input type="checkbox"/> Level IV			METHODS FOR ANALYSIS NUTPH-DX					
SAMPLE INFORMATION									COMMENTS LAB USE		
Sample Identification	Containers	Sample Collection			Filtered Y/N						
		Date	Time	Sampler							
1 <u>S4-CD-032521</u>	<u>2</u>	<u>3/25/21</u>	<u>1041</u>	<u>MB</u>	<u>N</u>				<u>G</u>	<u>W</u>	
2 <u>S4-AD-032521</u>			<u>1128</u>	<u>GP</u>							
3 <u>S4-AU-032521</u>			<u>1128</u>	<u>GP</u>							
4 <u>S4-BD-032521</u>			<u>1204</u>	<u>GP</u>							
5 <u>S4-BU-032521</u>			<u>1204</u>	<u>GP</u>							
6 <u>S-W-14-032521</u>			<u>1135</u>	<u>ES</u>							
7 <u>S-W-17-032521</u>			<u>1050</u>	<u>ES</u>							
8 <u>S-W-16-032521</u>			<u>1010</u>	<u>ES</u>							
9 <u>S-W-19-032521</u>			<u>935</u>	<u>ES</u>							
10 <u>S-W-18-032521</u>			<u>1309</u>	<u>GP</u>							
11 <u>S-W-180-032521</u>			<u>1315</u>	<u>GP</u>							
12 <u>GW-2-032521</u>			<u>1620</u>	<u>ES</u>							
13 <u>2A-W-40-032521</u>			<u>1515</u>	<u>ES</u>							
14 <u>S-W-51-032521</u>			<u>1250</u>	<u>ES</u>							
15 <u>S-W-55-032521</u>			<u>1710</u>	<u>ES</u>							
Relinquished By: <u>Quinn Sutter</u>	Date/Time: <u>3/26/21 1445</u>	Received By: <u>[Signature]</u>	Date/Time: <u>3/26/21 1645</u>	Comments and Special Analytical Requirements:							
Relinquished By:	Date/Time:	Received By:	Date/Time:								
Relinquished By:	Date/Time:	Received By:	Date/Time:								
Received by Laboratory:	Date/Time:	Lab Remarks:	Lab: Custody Intact? <input type="checkbox"/> Yes <input type="checkbox"/> No						Custody Seal No.	BNSF COC No.	

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES

DUPLICATE - CONSULTANT

TAL-1001 (0912)

	LABORATORY INFORMATION						LAB WORK ORDER:			
	Laboratory:			Project Manager:			SHIPMENT INFORMATION			
	Address:			Phone:			Shipment Method:			
City/State/ZIP:			Fax:			Tracking Number:				
BNSF PROJECT INFORMATION				CONSULTANT INFORMATION				Project Number: 683-071		
BNSF Project Number: 683-071		Project State of Origin: Washington		Project City: Skylomish		Company: Favallin		Project Manager: Amanda Meyers		
BNSF Project Name: BNSF Skylomish Semi Annual				Address: 975 5th AVE NW		Email: Ameiguan@favallin.com				
BNSF Contact:		BNSF Work Order No.:		City/State/ZIP: Issaquah, WA 98027		Phone: 425-295-2800		Fax:		
TURNAROUND TIME <input type="checkbox"/> 1-day Rush <input type="checkbox"/> 5- to 8-day Rush <input type="checkbox"/> 2-day Rush <input checked="" type="checkbox"/> Standard 10-Day <input type="checkbox"/> 3-day Rush <input type="checkbox"/> Other _____			DELIVERABLES <input type="checkbox"/> BNSF Standard (Level II) <input type="checkbox"/> Level III <input type="checkbox"/> EDD Req. Format? <input type="checkbox"/> Level IV			<input type="checkbox"/> Other Deliverables? _____		METHODS FOR ANALYSIS NUTPH-DX Silica Gel Cleanup		
SAMPLE INFORMATION						COMMENTS				
Sample Identification	Containers	Sample Collection			Filtered Y/N			Type (Comp/Grab)	Matrix	
		Date	Time	Sampler						
1 EW-2A-032621	2	3/25/21	1220	MB	N	G	W	X		
2 GW-4-032521	1		1415	MB				X		
3 IC-W-8-032521	1		1700	MB				X		
4 IC-W-4-032521	1		1615	MB				X		
5 S-W-43-032521	1		1455	GP				X		
6 GW-1-032521	1		1531	GP				X		
7 EW-1-032521	1		1557	GP				X		
8 S-W-56-032521	1		1651	GP				X		
9 MW-4-032621	2	3/26/21	951	GP				X		
10 2A-W-9-032621	1		1036	GP				X		
11 1B-W-23-032621	1		1135	GP				X		
12 IC-W-7-032621	1		955	MB				X		
13 2A-W-42-032621	1		1640	MB				X		
14 2A-W-41-032621	1		1000	ES				X	X	
15 2A-W-410-032621	1		1005	ES				X		
Relinquished By: Gini Smith	Date/Time: 3/26/21	Received By: [Signature]	Date/Time: 3/26/21 1645	Comments and Special Analytical Requirements:						
Relinquished By:	Date/Time:	Received By:	Date/Time:							
Relinquished By:	Date/Time:	Received By:	Date/Time:							
Received by Laboratory:	Date/Time:	Lab Remarks:	Lab: Custody Intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.	BNSF COC No					

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES

DUPLICATE - CONSULTANT

TAL-1001 (0912)

 CHAIN OF CUSTODY	LABORATORY INFORMATION						LAB WORK ORDER:																					
	Laboratory:			Project Manager:			SHIPMENT INFORMATION																					
	Address:			Phone:			Shipment Method:																					
City/State/ZIP:			Fax:			Tracking Number:																						
BNSF PROJECT INFORMATION			Project State of Origin: <i>Washington</i>			CONSULTANT INFORMATION																						
BNSF Project Number: <i>683-071</i>			Project City: <i>Skysomth, WA</i>			Project Number:																						
BNSF Project Name: <i>BNSF Skysomth</i>			Company: <i>Fawell</i>			Project Manager: <i>Amanda Mougnot</i>																						
BNSF Contact:			BNSF Work Order No.:			Address: <i>975 5th AVE NW</i>																						
						City/State/ZIP: <i>Issaquah WA 98027</i>																						
TURNAROUND TIME			DELIVERABLES			METHODS FOR ANALYSIS																						
<input type="checkbox"/> 1-day Rush <input type="checkbox"/> 5- to 8-day Rush <input type="checkbox"/> 2-day Rush <input checked="" type="checkbox"/> Standard 10-Day <input type="checkbox"/> 3-day Rush <input type="checkbox"/> Other _____			<input type="checkbox"/> Other Deliverables? <input type="checkbox"/> BNSF Standard (Level II) <input type="checkbox"/> Level III <input type="checkbox"/> EDD Req. Format? <input type="checkbox"/> Level IV			<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>																						
SAMPLE INFORMATION																												
Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/Grab)	Matrix			COMMENTS	LAB USE																	
		Date	Time	Sampler																								
1 <i>GW-3-032621</i>	<i>2</i>	<i>3/26/21</i>	<i>1140</i>	<i>ES</i>	<i>N</i>	<i>G</i>	<i>W</i>	<i>X</i>	<i>X</i>																			
2 <i>GW-30-032621</i>	<i>2</i>	<i>3/26/21</i>	<i>1115</i>	<i>ES</i>	<i>N</i>	<i>G</i>	<i>W</i>	<i>X</i>																				
3 <i>MU-555-032621</i>	<i>2</i>	<i>3/26/21</i>	<i>900</i>	<i>GP</i>	<i>N</i>	<i>G</i>	<i>W</i>	<i>X</i>																				
4																												
5																												
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12																												
13																												
14																												
15																												

Relinquished By: <i>Quinn Smith</i>	Date/Time: <i>3/26/21 11:45</i>	Received By: <i>Kempthorn</i>	Date/Time: <i>3/26/21 1645</i>	Comments and Special Analytical Requirements:	
Relinquished By:	Date/Time:	Received By:	Date/Time:		
Relinquished By:	Date/Time:	Received By:	Date/Time:		
Received by Laboratory:	Date/Time:	Lab Remarks:	Lab Custody Intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.	BNSF COC No.

Therm. ID: 9 Cor: 1.9 ° Inc: 1.7 °
 Cooler Dsc: LB FedEx: _____
 Packing: _____ UPS: _____
 Cust. Seal: Yes ___ No ___ Lab Cour: _____
 Blue Ice: Dry, None Other: CP
 Therm. ID: 9 Cor: 2.0 ° Inc: 1.8 °
 Cooler Dsc: LB FedEx: _____
 Packing: _____ UPS: _____
 Cust. Seal: Yes ___ No ___ Lab Cour: _____
 Blue Ice: Dry, None Other: _____

Therm. ID: 89 Cor: 2.0 ° Inc: 3.8 °
 Cooler Dsc: LB FedEx: _____
 Packing: _____ UPS: _____
 Cust. Seal: Yes ___ No ___ Lab Cour: _____
 Blue Ice: Dry, None Other: _____

Therm. ID: 89 Cor: 3.1 ° Inc: 2.9 °
 Cooler Dsc: LB FedEx: _____
 Packing: _____ UPS: _____
 Cust. Seal: Yes ___ No + Lab Cour: _____
 Blue Ice: Dry, None Other: _____

Therm. ID: 29 Cor: 2.1 ° Inc: 1.9 °
 Cooler Dsc: LB FedEx: _____
 Packing: _____ UPS: _____
 Cust. Seal: Yes ___ No + Lab Cour: _____
 Blue Ice: Dry, None Other: _____

Therm. ID: 99 Cor: 3.0 ° Inc: 2.8 °
 Cooler Dsc: _____ FedEx: _____
 Packing: _____ UPS: _____
 Cust. Seal: Yes ___ No ___ Lab Cour: _____
 Blue Ice: Dry, None Other: _____

Therm. ID: 9 Cor: 2.4 ° Inc: 2.2 °
 Cooler Dsc: LB FedEx: _____
 Packing: _____ UPS: _____
 Cust. Seal: Yes ___ No + Lab Cour: _____
 Blue Ice: Dry, None Other: _____

Therm. ID: 9 Cor: 1.7 ° Inc: 1.5 °
 Cooler Dsc: LB FedEx: _____
 Packing: _____ UPS: _____
 Cust. Seal: Yes ___ No + Lab Cour: _____
 Blue Ice: Dry, None Other: _____

Therm. ID: 9 Cor: 2.0 ° Inc: 1.8 °
 Cooler Dsc: LB FedEx: _____
 Packing: _____ UPS: _____
 Cust. Seal: Yes ___ No + Lab Cour: _____
 Blue Ice: Dry, None Other: _____

Therm. ID: 9 Cor: 3.2 ° Inc: 3.0 °
 Cooler Dsc: _____ FedEx: _____
 Packing: _____ UPS: _____
 Cust. Seal: Yes ___ No ___ Lab Cour: _____
 Blue Ice: Dry, None Other: _____

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-102053-1

Login Number: 102053

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Hobbs, Kenneth F

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-102099-1

Client Project/Site: BNSF Skykomish Rush NPDES

For:

Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



*Authorized for release by:
4/2/2021 10:38:18 AM*

Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

LINKS

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results through
TotalAccess

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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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QC Sample Results	7
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Sample Summary	10
Chain of Custody	11
Receipt Checklists	12

Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-102099-1

Job ID: 580-102099-1

Laboratory: Eurofins FGS, Seattle

Narrative

CASE NARRATIVE

Client: Farallon Consulting LLC
Project: BNSF Skykomish Rush NPDES
Report Number: 580-102099-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 03/30/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.4 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

DIESEL AND MOTOR OIL RANGE ORGANICS

Samples Before GAC 033021 (580-102099-1) and HCC EFF 033021 (580-102099-2) were analyzed for diesel and motor oil range organics in accordance with Method NWTPH-Dx. The samples were prepared on 03/31/2021 and analyzed on 04/01/2021.

The (CCV 580-353382/21) and (CCV 580-353382/25) recovered high biased for surrogate, o-Terphenyl. Since the analysis was followed by a successful calibration verification and the percentage recovery of this CCV is within control limits, data has been reported.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-353289, so a LCS and LCSD were used instead.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-102099-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-102099-1

Client Sample ID: Before GAC 033021

Lab Sample ID: 580-102099-1

Date Collected: 03/30/21 08:30

Matrix: Water

Date Received: 03/30/21 12:07

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.44		0.062		mg/L		03/31/21 11:44	04/01/21 15:25	1
Motor Oil (>C24-C36)	0.37		0.092		mg/L		03/31/21 11:44	04/01/21 15:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	92		50 - 150				03/31/21 11:44	04/01/21 15:25	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-102099-1

Client Sample ID: HCC EFF 033021

Lab Sample ID: 580-102099-2

Date Collected: 03/30/21 08:30

Matrix: Water

Date Received: 03/30/21 12:07

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		03/31/21 11:44	04/01/21 15:45	1
Motor Oil (>C24-C36)	ND		0.091		mg/L		03/31/21 11:44	04/01/21 15:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	95		50 - 150				03/31/21 11:44	04/01/21 15:45	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-102099-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-353289/1-A
Matrix: Water
Analysis Batch: 353382

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 353289

Analyte	MB MB		RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac
	Result	Qualifier									
#2 Diesel (C10-C24)	ND		0.065		mg/L		03/31/21 11:44	04/01/21 13:05			1
Motor Oil (>C24-C36)	ND		0.096		mg/L		03/31/21 11:44	04/01/21 13:05			1
Surrogate		MB MB	Limits	Prepared		Analyzed		Dil Fac			
%Recovery	Qualifier										
o-Terphenyl		88	50 - 150			03/31/21 11:44	04/01/21 13:05		1		

Lab Sample ID: LCS 580-353289/2-A
Matrix: Water
Analysis Batch: 353382

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 353289

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
#2 Diesel (C10-C24)	0.500	0.532		mg/L		106	50 - 120	
Motor Oil (>C24-C36)	0.500	0.523		mg/L		105	64 - 120	
Surrogate		LCS LCS	Limits	Prepared		Analyzed		
%Recovery	Qualifier							
o-Terphenyl		112	50 - 150					

Lab Sample ID: LCSD 580-353289/3-A
Matrix: Water
Analysis Batch: 353382

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 353289

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	
									RPD	Limit
#2 Diesel (C10-C24)	0.500	0.510		mg/L		102	50 - 120	4	26	
Motor Oil (>C24-C36)	0.500	0.506		mg/L		101	64 - 120	3	24	
Surrogate		LCSD LCSD	Limits	Prepared		Analyzed				
%Recovery	Qualifier									
o-Terphenyl		110	50 - 150							

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-102099-1

Client Sample ID: Before GAC 033021

Lab Sample ID: 580-102099-1

Date Collected: 03/30/21 08:30

Matrix: Water

Date Received: 03/30/21 12:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353289	03/31/21 11:44	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353382	04/01/21 15:25	JKM	TAL SEA

Client Sample ID: HCC EFF 033021

Lab Sample ID: 580-102099-2

Date Collected: 03/30/21 08:30

Matrix: Water

Date Received: 03/30/21 12:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353289	03/31/21 11:44	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	353382	04/01/21 15:45	JKM	TAL SEA

Laboratory References:

TAL SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-102099-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C553	02-17-22

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-102099-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-102099-1	Before GAC 033021	Water	03/30/21 08:30	03/30/21 12:07	
580-102099-2	HCC EFF 033021	Water	03/30/21 08:30	03/30/21 12:07	

1

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TestAmerica Seattle

5755 8th Street East

Chain of Custody Record

TestAmerica

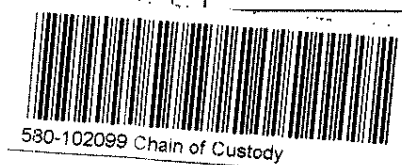
THE LEADER IN ENVIRONMENTAL TESTING

Tacoma, WA 98424-1317
phone 253.922.2310 fax 253.922.5047

Regulatory Program: DW NPDES RCRA Other:

TestAmerica Laboratories, Inc.

Client Contact		Project Manager: Pete Kingston			Site Contact: Matt Bowser			Date: 3-30-21			COC No:			
Farallong Consulting		Tel/Fax: 425-394-4146			Lab Contact: Kristine Allen			Carrier:			1 of 2 COCs			
975 5th Avenue Northwest		Analysis Turnaround Time			Filtered Sample (Y/N) Perform MS / MSD (Y/N) NWTPH-Dx w/o silica gel cleanup						Sampler: JW			
Issaquah, Washington		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS									TAT if different from Below <u>3 days</u>		For Lab Use Only:	
(425) 295-0800 Phone		<input type="checkbox"/> 2 weeks											Walk-in Client:	
(425) 295-0850 FAX		<input type="checkbox"/> 1 week											Lab Sampling:	
Project Name: Skykomish HCC System		<input type="checkbox"/> 2 days											Job / SDG No.:	
Site:		<input type="checkbox"/> 1 day									Sample Specific Notes:			
WO # TT0100-S03														
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.								
Before GAC- 033021		03/30/21	8:30	Grab	W	2		X					***See instructions below	
HCC EFF- 033021		03/30/21	8:30	Grab	W	2		X					***See instructions below	
Therm ID: <u>109</u> Cor: <u>3.4</u> ° Unc: <u>3.2</u> °														
Cooler Dsc: <u>LR</u>														
Packing: <u>None</u> FedEx: _____														
Cust. Seal: Yes <u>No</u> UPS: _____														
Blue Ice: <u>Wet</u> Dry, None Lab Cour: <u>X</u> Other: _____														
Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4=HNO3, 5=NaOH, 6= Other							2		1					
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.							Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)							
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown							<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months							
Special Instructions/QC Requirements & Comments: 1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica get cleanup needed for Dx														
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:			Cooler Temp. (°C): Obs'd:			Corr'd:		Therm ID No.:				
Relinquished by: <u>[Signature]</u>		Company: <u>6/16/21 3/30/21</u>			Date/Time: <u>10:15</u>			Received by: <u>[Signature]</u>		Company: _____		Date/Time: <u>3/30/21 9:05</u>		
Relinquished by: _____		Company: _____			Date/Time: _____			Received by: <u>[Signature]</u>		Company: <u>ETA-SEA</u>		Date/Time: <u>3/30/21 12:07</u>		
Relinquished by: _____		Company: _____			Date/Time: _____			Received in Laboratory by: _____		Company: _____		Date/Time: _____		



pickled up at CM LAB JLS 3/30/21

Form No. CA-C-WI-002, Rev. 4.18, dated 9/5/2018

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-102099-1

Login Number: 102099

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Vallelunga, Diana L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.4/3.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-102346-1
Client Project/Site: Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
4/13/2021 4:33:20 PM

Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

LINKS

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results through
TotalAccess

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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-102346-1

Job ID: 580-102346-1

Laboratory: Eurofins FGS, Seattle

Narrative

CASE NARRATIVE

**Client: Farallon Consulting LLC
Project: Skykomish HCC System
Report Number: 580-102346-1**

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 04/08/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.5 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

DIESEL AND MOTOR OIL RANGE ORGANICS

Samples Before GAC-4721 (580-102346-1) and HCC EFF-4721 (580-102346-2) were analyzed for diesel and motor oil range organics in accordance with Method NWTPH-Dx. The samples were prepared on 04/09/2021 and analyzed on 04/10/2021.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-353979, so a LCS and LCSD were used instead.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-102346-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-102346-1

Client Sample ID: Before GAC-4721

Lab Sample ID: 580-102346-1

Date Collected: 04/07/21 10:00

Matrix: Water

Date Received: 04/08/21 11:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.48		0.062		mg/L		04/09/21 11:21	04/10/21 17:38	1
Motor Oil (>C24-C36)	0.38		0.092		mg/L		04/09/21 11:21	04/10/21 17:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	76		50 - 150				04/09/21 11:21	04/10/21 17:38	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-102346-1

Client Sample ID: HCC EFF-4721

Lab Sample ID: 580-102346-2

Date Collected: 04/07/21 10:00

Matrix: Water

Date Received: 04/08/21 11:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		04/09/21 11:21	04/10/21 17:58	1
Motor Oil (>C24-C36)	ND		0.092		mg/L		04/09/21 11:21	04/10/21 17:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	76		50 - 150				04/09/21 11:21	04/10/21 17:58	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-102346-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-353979/1-A
Matrix: Water
Analysis Batch: 354069

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 353979

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065		mg/L		04/09/21 11:21	04/10/21 16:39	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		04/09/21 11:21	04/10/21 16:39	1
		MB MB	Limits			Prepared	Analyzed	Dil Fac	
Surrogate	%Recovery	Qualifier							
o-Terphenyl	74		50 - 150			04/09/21 11:21	04/10/21 16:39	1	

Lab Sample ID: LCS 580-353979/2-A
Matrix: Water
Analysis Batch: 354069

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 353979

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
								%Rec.
#2 Diesel (C10-C24)	0.500	0.408		mg/L		82	50 - 120	
Motor Oil (>C24-C36)	0.500	0.435		mg/L		87	64 - 120	
		LCS LCS	Limits			Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier						
o-Terphenyl	85		50 - 150			04/09/21 11:21	04/10/21 16:39	1

Lab Sample ID: LCSD 580-353979/3-A
Matrix: Water
Analysis Batch: 354069

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 353979

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	0.500	0.419		mg/L		84	50 - 120	3	26
Motor Oil (>C24-C36)	0.500	0.480		mg/L		96	64 - 120	10	24
		LCSD LCSD	Limits			Prepared	Analyzed	Dil Fac	
Surrogate	%Recovery	Qualifier							
o-Terphenyl	92		50 - 150			04/09/21 11:21	04/10/21 16:39	1	

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-102346-1

Client Sample ID: Before GAC-4721

Lab Sample ID: 580-102346-1

Date Collected: 04/07/21 10:00

Matrix: Water

Date Received: 04/08/21 11:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353979	04/09/21 11:21	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	354069	04/10/21 17:38	JKM	TAL SEA

Client Sample ID: HCC EFF-4721

Lab Sample ID: 580-102346-2

Date Collected: 04/07/21 10:00

Matrix: Water

Date Received: 04/08/21 11:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			353979	04/09/21 11:21	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	354069	04/10/21 17:58	JKM	TAL SEA

Laboratory References:

TAL SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-102346-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C553	02-17-22

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Sample Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-102346-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-102346-1	Before GAC-4721	Water	04/07/21 10:00	04/08/21 11:15	
580-102346-2	HCC EFF-4721	Water	04/07/21 10:00	04/08/21 11:15	

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TestAmerica Seattle

5755 8th Street East

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Tacoma, WA 98424-1317
phone 253.922.2310 fax 253.922.5047

Regulatory Program: DW NPDES RCRA Other:

TestAmerica Laboratories, Inc.

Client Contact		Project Manager: Pete Kingston		Site Contact: Matt Bowser		Date: 4/7/21		COC No:	
Farallong Consulting		Tel/Fax: 425-394-4146		Lab Contact: Kristine Allen		Carrier:		1 of 2 COCs	
975 5th Avenue Northwest		Analysis Turnaround Time		Filtered Sample (Y/N) Perform MS/MSD (Y/N) NWTPH-Dx w/o silica gel cleanup		Loc: 580 10234E		Sampler: JW	
Issaquah, Washington		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS						For Lab Use Only:	
(425) 295-0800 Phone		TAT if different from Below <u>3 day</u>						Walk-in Client:	
(425) 295-0850 FAX		<input type="checkbox"/> 2 weeks						Lab Sampling:	
Project Name: Skykomish HCC System		<input type="checkbox"/> 1 week						Job / SDG No.:	
Site:		<input type="checkbox"/> 2 days							
WO # TT0100-S03		<input type="checkbox"/> 1 day							

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	NWTPH-Dx w/o silica gel cleanup	Sample Specific Notes:
Before GAC- 4721	4/7/21		Grab	W	2		X		***See instructions below
HCC EFF- 4721	4/7/21		Grab	W	2		X		***See instructions below



580-102346 Chain of Custody

Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4= HNO3, 5= NaOH, 6= Other

Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard
 Flammable
 Skin Irritant
 Poison B
 Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Special Instructions/QC Requirements & Comments: 1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica get cleanup needed for Dx

Custody Seal Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.:	Cooler Temp. (°C):	Obs'd:	Corr'd:	Therm ID:
Relinquished by: <u>[Signature]</u>	Company: <u>Electer</u>	Date/Time: <u>4/7/21 12:50</u>	Received by: <u>[Signature]</u>	Company: <u>[Signature]</u>	Date/Time: <u>4/7/21 12:50</u>
Relinquished by:	Company:	Date/Time:	Received by: <u>[Signature]</u>	Company: <u>EFGS</u>	Date/Time: <u>4/7/21 11:15</u>
Relinquished by:	Therm. ID: <u>IR9</u>	Cor: <u>1.5</u>	Unc: <u>1.3</u>	Company:	Date/Time:
	Cooler Dsc: <u>L3 B</u>	FedEx:	UPS:	Company:	Date/Time:
	Packing: <u>Rub</u>	Lab Cour: <u>0</u>	Other:		
	Cust. Seal: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Blue Ice: <u>Wet</u> , Dry, None			

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-102346-1

Login Number: 102346

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Hobbs, Kenneth F

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-102416-1
Client Project/Site: Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
4/16/2021 2:49:32 PM

Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

LINKS

Review your project
results through
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Have a Question?



Visit us at:
www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-102416-1

Job ID: 580-102416-1

Laboratory: Eurofins FGS, Seattle

Narrative

CASE NARRATIVE

Client: Farallon Consulting LLC
Project: Skykomish HCC System
Report Number: 580-102416-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 04/13/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.1 C.

The Field Sampler was not listed on the Chain of Custody.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

DIESEL AND MOTOR OIL RANGE ORGANICS

Samples Before GAC-041221 (580-102416-1) and HCC EFF-041221 (580-102416-2) were analyzed for diesel and motor oil range organics in accordance with Method NWTPH-Dx. The samples were prepared on 04/14/2021 and analyzed on 04/15/2021.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-354317, so a LCS and LCSD were used instead.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICPMS)

Sample HCC EFF-041221 (580-102416-2) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 04/13/2021 and analyzed on 04/14/2021.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-102416-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-102416-1

Client Sample ID: Before GAC-041221

Lab Sample ID: 580-102416-1

Date Collected: 04/12/21 13:50

Matrix: Water

Date Received: 04/13/21 14:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.42		0.062		mg/L		04/14/21 11:30	04/15/21 19:56	1
Motor Oil (>C24-C36)	0.31		0.092		mg/L		04/14/21 11:30	04/15/21 19:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	78		50 - 150				04/14/21 11:30	04/15/21 19:56	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-102416-1

Client Sample ID: HCC EFF-041221

Lab Sample ID: 580-102416-2

Date Collected: 04/12/21 14:00

Matrix: Water

Date Received: 04/13/21 14:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		04/14/21 11:30	04/15/21 20:16	1
Motor Oil (>C24-C36)	ND		0.092		mg/L		04/14/21 11:30	04/15/21 20:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	82		50 - 150				04/14/21 11:30	04/15/21 20:16	1

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0028		0.0010		mg/L		04/13/21 18:18	04/14/21 17:28	1
Lead	ND		0.00040		mg/L		04/13/21 18:18	04/14/21 17:28	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-102416-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-354317/1-A
Matrix: Water
Analysis Batch: 354389

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 354317

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065		mg/L		04/14/21 11:30	04/15/21 18:56	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		04/14/21 11:30	04/15/21 18:56	1
Surrogate	MB MB		Limits			D	Prepared	Analyzed	Dil Fac
%Recovery	Qualifier								
o-Terphenyl	78		50 - 150				04/14/21 11:30	04/15/21 18:56	1

Lab Sample ID: LCS 580-354317/2-A
Matrix: Water
Analysis Batch: 354389

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 354317

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.	
								RPD	Limit
#2 Diesel (C10-C24)	0.500	0.414		mg/L		83	50 - 120		
Motor Oil (>C24-C36)	0.500	0.495		mg/L		99	64 - 120		
Surrogate	LCS LCS		Limits			D	Prepared	Analyzed	Dil Fac
%Recovery	Qualifier								
o-Terphenyl	94		50 - 150						

Lab Sample ID: LCSD 580-354317/3-A
Matrix: Water
Analysis Batch: 354389

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 354317

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	%Rec.		RPD	
								RPD	Limit	RPD	Limit
#2 Diesel (C10-C24)	0.500	0.402		mg/L		80	50 - 120	3	26		
Motor Oil (>C24-C36)	0.500	0.481		mg/L		96	64 - 120	3	24		
Surrogate	LCSD LCSD		Limits			D	Prepared	Analyzed	Dil Fac		
%Recovery	Qualifier										
o-Terphenyl	95		50 - 150								

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 580-354274/14-A
Matrix: Water
Analysis Batch: 354367

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 354274

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	ND		0.0010		mg/L		04/13/21 18:18	04/14/21 17:20	1
Lead	ND		0.00040		mg/L		04/13/21 18:18	04/14/21 17:20	1

Lab Sample ID: LCS 580-354274/15-A
Matrix: Water
Analysis Batch: 354367

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 354274

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.	
								RPD	Limit
Arsenic	1.00	0.996		mg/L		100	85 - 115		
Lead	1.00	1.00		mg/L		100	85 - 115		

Eurofins FGS, Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-102416-1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 580-354274/16-A
Matrix: Water
Analysis Batch: 354367

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 354274

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
							Limits	RPD		
Arsenic	1.00	1.00		mg/L		100	85 - 115	1	20	
Lead	1.00	1.01		mg/L		101	85 - 115	1	20	

Lab Sample ID: 580-102416-2 MS
Matrix: Water
Analysis Batch: 354367

Client Sample ID: HCC EFF-041221
Prep Type: Total/NA
Prep Batch: 354274

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
									Limits	RPD		
Arsenic	0.0028		1.00	0.899		mg/L		90	70 - 130			
Lead	ND		1.00	0.890		mg/L		89	70 - 130			

Lab Sample ID: 580-102416-2 MSD
Matrix: Water
Analysis Batch: 354367

Client Sample ID: HCC EFF-041221
Prep Type: Total/NA
Prep Batch: 354274

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
									Limits	RPD		
Arsenic	0.0028		1.00	0.934		mg/L		93	70 - 130	4	20	
Lead	ND		1.00	0.930		mg/L		93	70 - 130	4	20	

Lab Sample ID: 580-102416-2 DU
Matrix: Water
Analysis Batch: 354367

Client Sample ID: HCC EFF-041221
Prep Type: Total/NA
Prep Batch: 354274

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD		Limit
								RPD	Limit	
Arsenic	0.0028		0.00299		mg/L		6		20	
Lead	ND		ND		mg/L		NC		20	

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-102416-1

Client Sample ID: Before GAC-041221

Lab Sample ID: 580-102416-1

Date Collected: 04/12/21 13:50

Matrix: Water

Date Received: 04/13/21 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			354317	04/14/21 11:30	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	354389	04/15/21 19:56	ADB	TAL SEA

Client Sample ID: HCC EFF-041221

Lab Sample ID: 580-102416-2

Date Collected: 04/12/21 14:00

Matrix: Water

Date Received: 04/13/21 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			354317	04/14/21 11:30	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	354389	04/15/21 20:16	ADB	TAL SEA
Total/NA	Prep	200.8			354274	04/13/21 18:18	TMH	TAL SEA
Total/NA	Analysis	200.8		1	354367	04/14/21 17:28	FCW	TAL SEA

Laboratory References:

TAL SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-102416-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-21

- 1
- 2
- 3
- 4
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- 10
- 11

Sample Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-102416-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-102416-1	Before GAC-041221	Water	04/12/21 13:50	04/13/21 14:00	
580-102416-2	HCC EFF-041221	Water	04/12/21 14:00	04/13/21 14:00	

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TestAmerica Seattle
5755 8th Street East

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Tacoma, WA 98424-1317
phone 253.922.2310 fax 253.922.5047

Regulatory Program: DW NPDES RCRA Other:

1025416

TestAmerica Laboratories, Inc.

Client Contact		Project Manager: Pete Kingston		Site Contact: Matt Bowser		Date: 4/12/21		COC No:	
Farallong Consulting		Tel/Fax: 425-394-4146		Lab Contact: Kristine Allen		Carrier:		___ of 2 COCs	
975 5th Avenue Northwest		Analysis Turnaround Time		<input type="checkbox"/> CALENDAR DAYS <input checked="" type="checkbox"/> WORKING DAYS TAT if different from Below <u>3 DAY</u> <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Filtered Sample (Y/N) Perform MS / MSD (Y/N) NWTPH-Dx w/o silica gel cleanup Total As, Pb (EPA 200.8)		Sampler:	
Issaquah, Washington								For Lab Use Only:	
(425) 295-0800 Phone								Walk-in Client:	
(425) 295-0850 FAX								Lab Sampling:	
Project Name: Skykomish HCC System								Job / SDG No.:	
Site:									
WO # TT0100-S03									
Sample Identification		Sample Date	Sample Time	Sample Type (G=Comp, G=Grab)	Matrix	# of Cont.			Sample Specific Notes:
Before GAC- 071221		4/12/21	1350	Grab	W	2			***See instructions below
HCC EFF- 071221		4/12/21	1400	Grab	W	3	X	X	***See instructions below
Therm. ID: <u>A2</u> Cor: <u>3.1</u> ° Unc: <u>3.5</u> °									
Cooler Desc: <u>LO</u>									
Packing: <u>Bubble</u>		FedEx:							
Cust. Seal: Yes <u>X</u> No		UPS:							
Blue Ice, <u>Wet</u> Dry, None		Lab Cour: <u>X</u>							
Other:									
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other							2	4	1
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for ___ Months				
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown									
Special Instructions/QC Requirements & Comments: 1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica get cleanup needed for Dx									
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd: ___		Corr'd: ___		Therm ID No.:	
Relinquished by: <u>[Signature]</u>		Company: <u>Farallon</u>		Date/Time: <u>4/12/21 1300</u>		Received by:		Company: ___	
Relinquished by:		Company:		Date/Time:		Received by:		Company: ___	
Relinquished by:		Company:		Date/Time:		Received in Laboratory by: <u>[Signature]</u>		Company: <u>ETCS</u>	
								Date/Time: <u>4/12/21 1400</u>	



580-102416 Chain of Custody

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-102416-1

Login Number: 102416

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Refer to Job Narrative for details.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-102418-1
Client Project/Site: Skykomish Ground Water
Sampling Event: Skykomish HCC System

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Peter Kingston



Authorized for release by:
4/27/2021 4:49:40 PM

Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

LINKS

Review your project
results through
TotalAccess

Have a Question?

 **Ask
The
Expert**

Visit us at:

www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish Ground Water

Job ID: 580-102418-1

Job ID: 580-102418-1

Laboratory: Eurofins FGS, Seattle

Narrative

**Job Narrative
580-102418-1**

Comments

No additional comments.

Receipt

The samples were received on 4/13/2021 2:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.1° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-354874, so a LCS and LCSD were used instead.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: Skykomish Ground Water

Job ID: 580-102418-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

Job ID: 580-102418-1

Client Sample ID: S1-BU-041221

Lab Sample ID: 580-102418-1

Date Collected: 04/12/21 14:45

Matrix: Water

Date Received: 04/13/21 14:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/22/21 11:39	04/25/21 07:24	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		04/22/21 11:39	04/25/21 07:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	67		50 - 150				04/22/21 11:39	04/25/21 07:24	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

Job ID: 580-102418-1

Client Sample ID: S1-BD-041221

Lab Sample ID: 580-102418-2

Date Collected: 04/12/21 15:15

Matrix: Water

Date Received: 04/13/21 14:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/22/21 11:39	04/25/21 07:44	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		04/22/21 11:39	04/25/21 07:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	77		50 - 150				04/22/21 11:39	04/25/21 07:44	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish Ground Water

Job ID: 580-102418-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-354874/1-A
Matrix: Water
Analysis Batch: 355061

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 354874

Analyte	MB MB		RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac
	Result	Qualifier									
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		04/22/21 11:39	04/25/21 06:24			1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		04/22/21 11:39	04/25/21 06:24			1
Surrogate		MB MB	Limits			Prepared		Analyzed		Dil Fac	
		%Recovery Qualifier									
o-Terphenyl		80	50 - 150			04/22/21 11:39	04/25/21 06:24			1	

Lab Sample ID: LCS 580-354874/2-A
Matrix: Water
Analysis Batch: 355061

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 354874

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
#2 Diesel (C10-C24)	0.500	0.437		mg/L		87	50 - 120	
Motor Oil (>C24-C36)	0.500	0.467		mg/L		93	64 - 120	
Surrogate		LCS LCS	Limits			%Rec.		
		%Recovery Qualifier						
o-Terphenyl		95	50 - 150					

Lab Sample ID: LCSD 580-354874/3-A
Matrix: Water
Analysis Batch: 355061

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 354874

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	
									RPD	Limit
#2 Diesel (C10-C24)	0.500	0.449		mg/L		90	50 - 120	3	26	
Motor Oil (>C24-C36)	0.500	0.489		mg/L		98	64 - 120	5	24	
Surrogate		LCSD LCSD	Limits			%Rec.		RPD		
		%Recovery Qualifier								
o-Terphenyl		99	50 - 150							

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: Skykomish Ground Water

Job ID: 580-102418-1

Client Sample ID: S1-BU-041221

Lab Sample ID: 580-102418-1

Date Collected: 04/12/21 14:45

Matrix: Water

Date Received: 04/13/21 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			354874	04/22/21 11:39	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	355061	04/25/21 07:24	T1W	TAL SEA

Client Sample ID: S1-BD-041221

Lab Sample ID: 580-102418-2

Date Collected: 04/12/21 15:15

Matrix: Water

Date Received: 04/13/21 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			354874	04/22/21 11:39	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	355061	04/25/21 07:44	T1W	TAL SEA

Laboratory References:

TAL SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish Ground Water

Job ID: 580-102418-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-21

- 1
- 2
- 3
- 4
- 5
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- 8
- 9
- 10
- 11

Sample Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish Ground Water

Job ID: 580-102418-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-102418-1	S1-BU-041221	Water	04/12/21 14:45	04/13/21 14:00	
580-102418-2	S1-BD-041221	Water	04/12/21 15:15	04/13/21 14:00	

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LABORATORY INFORMATION

LAB WORK ORDER: 102418

Laboratory: _____ Project Manager: Nathan Lewis
 Address: _____ Phone: _____
 City/State/Zip: _____ Fax: _____

SHIPMENT INFORMATION
 Shipment Method: _____
 Tracking Number: _____

CHAIN OF CUSTODY
BNSF PROJECT INFORMATION
 BNSF Project Number: 683-071
 BNSF Project Name: Skylarish Groundwater Sampling
 BNSF Contact: _____

Project State of Origin: WA
 Project City: Skylarish
 BNSF Work Order No.: _____

CONSULTANT INFORMATION
 Company: Facallon Consulting
 Address: 975 5th Ave NW
 City/State/Zip: Issaquah, WA 98027

Project Number: 683-071
 Project Manager: Amanda Meyniot
 Email: AMeyniot@Facallonconsulting.com
 Phone: (206) 295-0800 Fax: _____

TURNAROUND TIME
 1-day Rush
 2-day Rush
 3-day Rush
 5- to 8-day Rush
 Standard 10-Day
 Other _____

DELIVERABLES
 BNSF Standard (Level II)
 Level III
 Level IV
 Other Deliverables? _____
 EDD Req. Format? _____

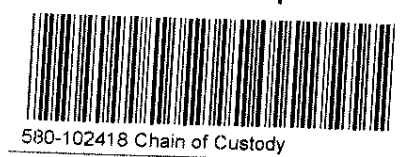
METHODS FOR ANALYSIS

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

SAMPLE INFORMATION

Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/Grab)	Matrix												
		Date	Time	Sampler															
1 <u>S1-BV-041221</u>	<u>2</u>	<u>4/12/21</u>	<u>1445</u>	<u>MB</u>	<u>N</u>	<u>G</u>	<u>W</u>	<u>X</u>											
2 <u>S1-BD-041221</u>	<u>2</u>	<u>4/12/21</u>	<u>1515</u>	<u>MB</u>	<u>N</u>	<u>G</u>	<u>W</u>	<u>X</u>											
3																			
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9																			
10																			
11																			
12																			
13																			
14																			
15																			

NUTPH - D+



Therm. ID: A2 Cor: 3.1 ° Unc: 3.5 °
 Cooler Desc: LB
 Packing: Ballot FedEx: _____
 Cust. Seal: Yes No _____ UPS: _____
 Blue Ice: Wet Dry, None _____ Lab Cour: 3
 Other: _____

Relinquished By: [Signature] Date/Time: 4/12/21 1700 Received By: _____ Date/Time: _____
 Relinquished By: _____ Date/Time: _____ Received By: _____ Date/Time: _____
 Relinquished By: _____ Date/Time: _____ Received By: _____ Date/Time: _____
 Received by Laboratory: [Signature] EFGS Date/Time: 4/13/21 1400 Lab Remarks: _____
 Lab: Custody Intact? Yes No
 Custody Seal No. _____ BNSF COC No. _____

Comments and Special Analytical Requirements:

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES

DUPLICATE - CONSULTANT

TAL-1001 (0912)



Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-102418-1

Login Number: 102418

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-102670-1
Client Project/Site: Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
4/29/2021 12:42:08 PM

Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

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results through
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-102670-1

Job ID: 580-102670-1

Laboratory: Eurofins FGS, Seattle

Narrative

CASE NARRATIVE

**Client: Farallon Consulting LLC
Project: Skykomish HCC System
Report Number: 580-102670-1**

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 04/26/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.3 C.

The Field Sampler was not listed on the Chain of Custody.

The chain of custody lists a container and a request for metals analysis. No metals sample container was received.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

DIESEL AND MOTOR OIL RANGE ORGANICS

Samples Before GAC-042121 (580-102670-1) and HCC EFF-042121 (580-102670-2) were analyzed for diesel and motor oil range organics in accordance with Method NWTPH-Dx. The samples were prepared on 04/27/2021 and analyzed on 04/28/2021.

The following sample contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel fuel pattern used by the laboratory for quantitative purposes: Before GAC-042121 (580-102670-1).

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-355189, so a LCS and LCSD were used instead.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-102670-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-102670-1

Client Sample ID: Before GAC-042121

Lab Sample ID: 580-102670-1

Date Collected: 04/21/21 15:30

Matrix: Water

Date Received: 04/26/21 13:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.38		0.062		mg/L		04/27/21 11:32	04/28/21 19:04	1
Motor Oil (>C24-C36)	0.27		0.092		mg/L		04/27/21 11:32	04/28/21 19:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	83		50 - 150				04/27/21 11:32	04/28/21 19:04	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-102670-1

Client Sample ID: HCC EFF-042121

Lab Sample ID: 580-102670-2

Date Collected: 04/21/21 15:40

Matrix: Water

Date Received: 04/26/21 13:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		04/27/21 11:32	04/28/21 19:24	1
Motor Oil (>C24-C36)	ND		0.091		mg/L		04/27/21 11:32	04/28/21 19:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	77		50 - 150				04/27/21 11:32	04/28/21 19:24	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-102670-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-355189/1-A
Matrix: Water
Analysis Batch: 355342

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 355189

Analyte	MB MB		RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac
	Result	Qualifier									
#2 Diesel (C10-C24)	ND		0.065		mg/L		04/27/21 11:32	04/28/21 18:05			1
Motor Oil (>C24-C36)	ND		0.096		mg/L		04/27/21 11:32	04/28/21 18:05			1
Surrogate	MB MB		Limits	Prepared		Analyzed		Dil Fac			
%Recovery	Qualifier										
<i>o</i> -Terphenyl	75		50 - 150				04/27/21 11:32	04/28/21 18:05			1

Lab Sample ID: LCS 580-355189/2-A
Matrix: Water
Analysis Batch: 355342

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 355189

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
#2 Diesel (C10-C24)	0.500	0.411		mg/L		82	50 - 120	
Motor Oil (>C24-C36)	0.500	0.453		mg/L		91	64 - 120	
Surrogate	LCS LCS		Limits	Prepared		Analyzed		
%Recovery	Qualifier							
<i>o</i> -Terphenyl	94		50 - 150					

Lab Sample ID: LCSD 580-355189/3-A
Matrix: Water
Analysis Batch: 355342

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 355189

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	
									RPD	Limit
#2 Diesel (C10-C24)	0.500	0.440		mg/L		88	50 - 120	7	26	
Motor Oil (>C24-C36)	0.500	0.479		mg/L		96	64 - 120	6	24	
Surrogate	LCSD LCSD		Limits	Prepared		Analyzed		RPD		
%Recovery	Qualifier									
<i>o</i> -Terphenyl	94		50 - 150							

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-102670-1

Client Sample ID: Before GAC-042121

Lab Sample ID: 580-102670-1

Date Collected: 04/21/21 15:30

Matrix: Water

Date Received: 04/26/21 13:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			355189	04/27/21 11:32	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	355342	04/28/21 19:04	W1T	TAL SEA

Client Sample ID: HCC EFF-042121

Lab Sample ID: 580-102670-2

Date Collected: 04/21/21 15:40

Matrix: Water

Date Received: 04/26/21 13:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			355189	04/27/21 11:32	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	355342	04/28/21 19:24	W1T	TAL SEA

Laboratory References:

TAL SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-102670-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

<u>Authority</u>	<u>Program</u>	<u>Identification Number</u>	<u>Expiration Date</u>
Washington	State	C788	07-13-21

- 1
- 2
- 3
- 4
- 5
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- 7
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- 10
- 11

Sample Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-102670-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-102670-1	Before GAC-042121	Water	04/21/21 15:30	04/26/21 13:30	
580-102670-2	HCC EFF-042121	Water	04/21/21 15:40	04/26/21 13:30	

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TestAmerica Seattle

5755 8th Street East

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Tacoma, WA 98424-1317
phone 253.922.2310 fax 253.922.5047

Regulatory Program: DW NPDES RCRA Other:

102670

TestAmerica Laboratories, Inc.

Client Contact Farallong Consulting 975 5th Avenue Northwest Issaquah, Washington (425) 295-0800 Phone (425) 295-0850 FAX Project Name: Skykomish HCC System Site: WO # TT0100-S03		Project Manager: Pete Kingston Tel/Fax: 425-394-4146		Site Contact: Matt Bowser Lab Contact: Kristine Allen		Date: 4/21/21 Carrier:		COC No: 2 of 2 COCs				
		Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input checked="" type="checkbox"/> WORKING DAYS <input checked="" type="checkbox"/> TAT if different from Below 30 days <input type="checkbox"/> 2 weeks <input checked="" type="checkbox"/> 1 week ES <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day								Sampler: For Lab Use Only: Walk-in Client: Lab Sampling: Job / SDG No.:		
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	NWTPH-Dx w/o silica gel cleanup	Total As, Pb (EPA 200.8)	Sample Specific Notes:	
Before GAC- 042121		4/21/21	1530	Grab	W	2		X			***See instructions below	
HCC EFF- 042121		4/21/21	1540	Grab	W	3		X	X		***See instructions below	
Therm. ID: A1 Cor: 3.3° Unc: 3.5°		Cooler Dsc: Met B1		Packing: Bub		FedEx:		UPS:		Cust. Seal: Yes No X		
Blue Ice, Wet Dry, None		Lab Cour: X		Other:		580-102670 Chain of Custody						
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other							2		4		1	
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.							Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown							<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for Months					
Special Instructions/QC Requirements & Comments: 1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica get cleanup needed for Dx												
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd:		Corr'd:		Therm ID No.:				
Relinquished by: <i>Quinn</i>		Company: Farallon		Date/Time: 4/21/21 1800		Received by: <i>Jay Eroll</i>		Company: EFGS		Date/Time: 4/21/21 1:30pm		
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time:		
Relinquished by:		Company:		Date/Time:		Received in Laboratory by:		Company:		Date/Time:		

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-102670-1

Login Number: 102670

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Refer to Job Narrative for details.
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-102744-1
Client Project/Site: Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
5/4/2021 3:59:30 PM

Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-102744-1

Job ID: 580-102744-1

Laboratory: Eurofins FGS, Seattle

Narrative

CASE NARRATIVE

**Client: Farallon Consulting LLC
Project: Skykomish HCC System
Report Number: 580-102744-1**

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 04/29/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 6.0 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

DIESEL AND MOTOR OIL RANGE ORGANICS

Samples Before GAC-042921 (580-102744-1) and HCC EFF-042921 (580-102744-2) were analyzed for diesel and motor oil range organics in accordance with Method NWTPH-Dx. The samples were prepared and analyzed on 04/30/2021.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-355507, so a LCS and LCSD were used instead.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-102744-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-102744-1

Client Sample ID: Before GAC-042921

Lab Sample ID: 580-102744-1

Date Collected: 04/29/21 10:58

Matrix: Water

Date Received: 04/29/21 13:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.41		0.063		mg/L		04/30/21 11:32	04/30/21 22:41	1
Motor Oil (>C24-C36)	0.18		0.093		mg/L		04/30/21 11:32	04/30/21 22:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	50		50 - 150				04/30/21 11:32	04/30/21 22:41	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-102744-1

Client Sample ID: HCC EFF-042921

Lab Sample ID: 580-102744-2

Date Collected: 04/29/21 11:00

Matrix: Water

Date Received: 04/29/21 13:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		04/30/21 11:32	04/30/21 23:01	1
Motor Oil (>C24-C36)	ND		0.091		mg/L		04/30/21 11:32	04/30/21 23:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	66		50 - 150				04/30/21 11:32	04/30/21 23:01	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-102744-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-355507/1-A
Matrix: Water
Analysis Batch: 355574

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 355507

Analyte	MB MB		RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac
	Result	Qualifier									
#2 Diesel (C10-C24)	ND		0.065		mg/L		04/30/21 11:32	04/30/21 21:20			1
Motor Oil (>C24-C36)	ND		0.096		mg/L		04/30/21 11:32	04/30/21 21:20			1
Surrogate		MB MB	Limits	Prepared		Analyzed		Dil Fac			
%Recovery	Qualifier										
o-Terphenyl		78	50 - 150	04/30/21 11:32	04/30/21 21:20			1			

Lab Sample ID: LCS 580-355507/2-A
Matrix: Water
Analysis Batch: 355574

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 355507

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
#2 Diesel (C10-C24)	0.500	0.405		mg/L		81	50 - 120	
Motor Oil (>C24-C36)	0.500	0.436		mg/L		87	64 - 120	
Surrogate		LCS LCS	Limits	Prepared		Analyzed		
%Recovery	Qualifier							
o-Terphenyl		85	50 - 150	04/30/21 11:32	04/30/21 21:20			

Lab Sample ID: LCSD 580-355507/3-A
Matrix: Water
Analysis Batch: 355574

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 355507

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	
									RPD	Limit
#2 Diesel (C10-C24)	0.500	0.346		mg/L		69	50 - 120	16	26	
Motor Oil (>C24-C36)	0.500	0.403		mg/L		81	64 - 120	8	24	
Surrogate		LCSD LCSD	Limits	Prepared		Analyzed		RPD		
%Recovery	Qualifier									
o-Terphenyl		82	50 - 150	04/30/21 11:32	04/30/21 21:20					

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-102744-1

Client Sample ID: Before GAC-042921

Lab Sample ID: 580-102744-1

Date Collected: 04/29/21 10:58

Matrix: Water

Date Received: 04/29/21 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			355507	04/30/21 11:32	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	355574	04/30/21 22:41	T1W	TAL SEA

Client Sample ID: HCC EFF-042921

Lab Sample ID: 580-102744-2

Date Collected: 04/29/21 11:00

Matrix: Water

Date Received: 04/29/21 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			355507	04/30/21 11:32	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	355574	04/30/21 23:01	T1W	TAL SEA

Laboratory References:

TAL SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-102744-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-21

- 1
- 2
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Sample Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-102744-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-102744-1	Before GAC-042921	Water	04/29/21 10:58	04/29/21 13:45	
580-102744-2	HCC EFF-042921	Water	04/29/21 11:00	04/29/21 13:45	

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Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-102744-1

Login Number: 102744

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-102906-1
Client Project/Site: Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC
Revision: 1

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
5/12/2021 4:51:40 PM

Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-102906-1

Job ID: 580-102906-1

Laboratory: Eurofins FGS, Seattle

Narrative

CASE NARRATIVE

Client: Farallon Consulting LLC
Project: Skykomish HCC System
Report Number: 580-102906-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This report has been revised to include reanalysis results for NWTPH-Dx due to a retention time issue.

RECEIPT

The samples were received on 05/06/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.9 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

DIESEL AND MOTOR OIL RANGE ORGANICS

Samples Before GAC-5521 (580-102906-1) and HCC EFF-5521 (580-102906-2) were analyzed for diesel and motor oil range organics in accordance with Method NWTPH-Dx. The samples were prepared on 05/07/2021 and analyzed on 05/10/2021.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-102906-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-102906-1

Client Sample ID: Before GAC-5521

Lab Sample ID: 580-102906-1

Date Collected: 05/05/21 07:45

Matrix: Water

Date Received: 05/06/21 11:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.38		0.062		mg/L		05/07/21 12:00	05/10/21 17:06	1
Motor Oil (>C24-C36)	0.29		0.091		mg/L		05/07/21 12:00	05/10/21 17:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	67		50 - 150				05/07/21 12:00	05/10/21 17:06	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-102906-1

Client Sample ID: HCC EFF-5521

Lab Sample ID: 580-102906-2

Date Collected: 05/05/21 07:45

Matrix: Water

Date Received: 05/06/21 11:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		05/07/21 12:00	05/10/21 17:26	1
Motor Oil (>C24-C36)	ND		0.091		mg/L		05/07/21 12:00	05/10/21 17:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	64		50 - 150				05/07/21 12:00	05/10/21 17:26	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-102906-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-356034/1-A
Matrix: Water
Analysis Batch: 356267

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 356034

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.065		mg/L		05/07/21 12:00	05/11/21 11:59	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		05/07/21 12:00	05/11/21 11:59	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	54		50 - 150				05/07/21 12:00	05/11/21 11:59	1

Lab Sample ID: LCS 580-356034/2-A
Matrix: Water
Analysis Batch: 356218

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 356034

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	0.500	0.325		mg/L		65	50 - 120
Motor Oil (>C24-C36)	0.500	0.363		mg/L		73	64 - 120
Surrogate	LCS %Recovery	LCS Qualifier	Limits				%Rec.
o-Terphenyl	75		50 - 150				

Lab Sample ID: LCSD 580-356034/3-A
Matrix: Water
Analysis Batch: 356218

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 356034

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	0.500	0.362		mg/L		72	50 - 120	11	26
Motor Oil (>C24-C36)	0.500	0.418		mg/L		84	64 - 120	14	24
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
o-Terphenyl	79		50 - 150						

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-102906-1

Client Sample ID: Before GAC-5521

Lab Sample ID: 580-102906-1

Date Collected: 05/05/21 07:45

Matrix: Water

Date Received: 05/06/21 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			356034	05/07/21 12:00	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	356218	05/10/21 17:06	JKM	TAL SEA

Client Sample ID: HCC EFF-5521

Lab Sample ID: 580-102906-2

Date Collected: 05/05/21 07:45

Matrix: Water

Date Received: 05/06/21 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			356034	05/07/21 12:00	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	356218	05/10/21 17:26	JKM	TAL SEA

Laboratory References:

TAL SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-102906-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-21

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Sample Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-102906-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-102906-1	Before GAC-5521	Water	05/05/21 07:45	05/06/21 11:50	
580-102906-2	HCC EFF-5521	Water	05/05/21 07:45	05/06/21 11:50	

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- 11

TestAmerica Seattle

5755 8th Street East

Tacoma, WA 98424-1317
phone 253.922.2310 fax 253.922.5047

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: DW NPDES RCRA Other:

102906

Client Contact		Project Manager: Pete Kingston		Site Contact: Matt Bowser		Date: 5-5-21		COC No:	
Farallong Consulting		Tel/Fax: 425-394-4146		Lab Contact: Kristine Allen		Carrier:		1 of 2 COCs	
975 5th Avenue Northwest		Analysis Turnaround Time		Filtered Sample (Y/N) Perform MS / MSD (Y/N) NWTPH-Dx w/o silica gel cleanup				Sampler: TW	
Issaquah, Washington		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below <u>3 DAY</u>						For Lab Use Only:	
(425) 295-0800 Phone		<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day						Walk-in Client:	
(425) 295-0850 FAX								Lab Sampling:	
Project Name: Skykomish HCC System								Job / SDG No.:	
Site:									
WO # TT0100-S03									
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.			Sample Specific Notes:
Before GAC- 5521		5-5-21	7:45	Grab	W	2			***See instructions below
HCC EFF- 5521		5-5-21	7:45	Grab	W	2			***See instructions below
Therm. ID: 129 Cor: 0.9 ° Unc: 0.7 °									
Cooler Desc: LR									
Packing: bub									
Cust. Seal: Yes No <input checked="" type="checkbox"/>									
Blue Ice: Wet, Dry, None									
FedEx:									
UPS:									
Lab Cour: <input checked="" type="checkbox"/>									
Other:									
Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4=HNO3, 5=NaOH, 6= Other									
Possible Hazard Identification:									
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.									
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown									
<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months									
Special Instructions/QC Requirements & Comments: 1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica get cleanup needed for Dx									
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd:		Corr'd:		Therm ID No.:	
Relinquished by: <i>[Signature]</i>		Company: Glacier		Date/Time: 5-5-21 10:40		Received by: <i>[Signature]</i>		Company: ERLab	
Relinquished by:		Company:		Date/Time:		Received by: <i>[Signature]</i>		Company: EFGS	
Relinquished by:		Company:		Date/Time:		Received in Laboratory by:		Company: EFGS	



580-102906 Chain of Custody

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-102906-1

Login Number: 102906

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-103086-1
Client Project/Site: Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
5/20/2021 5:16:35 PM

Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-103086-1

Job ID: 580-103086-1

Laboratory: Eurofins FGS, Seattle

Narrative

CASE NARRATIVE

**Client: Farallon Consulting LLC
Project: Skykomish HCC System
Report Number: 580-103086-1**

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 05/14/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.6 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

DIESEL AND MOTOR OIL RANGE ORGANICS

Samples Before GAC-051321 (580-103086-1) and HCC EFF-051321 (580-103086-2) were analyzed for diesel and motor oil range organics in accordance with Method NWTPH-Dx. The samples were prepared on 05/17/2021 and analyzed on 05/18/2021.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICPMS)

Sample HCC EFF-051321 (580-103086-2) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared on 05/17/2021 and analyzed on 05/19/2021.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-103086-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-103086-1

Client Sample ID: Before GAC-051321

Lab Sample ID: 580-103086-1

Date Collected: 05/13/21 14:05

Matrix: Water

Date Received: 05/14/21 13:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.32		0.062		mg/L		05/17/21 11:29	05/18/21 20:52	1
Motor Oil (>C24-C36)	0.24		0.091		mg/L		05/17/21 11:29	05/18/21 20:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	87		50 - 150				05/17/21 11:29	05/18/21 20:52	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-103086-1

Client Sample ID: HCC EFF-051321

Lab Sample ID: 580-103086-2

Date Collected: 05/13/21 14:15

Matrix: Water

Date Received: 05/14/21 13:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		05/17/21 11:29	05/18/21 21:12	1
Motor Oil (>C24-C36)	ND		0.091		mg/L		05/17/21 11:29	05/18/21 21:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	72		50 - 150				05/17/21 11:29	05/18/21 21:12	1

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0017		0.0010		mg/L		05/17/21 08:48	05/19/21 01:56	1
Lead	ND		0.00040		mg/L		05/17/21 08:48	05/19/21 01:56	1



QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-103086-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-356721/1-A
Matrix: Water
Analysis Batch: 356860

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 356721

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.065		mg/L		05/17/21 11:29	05/18/21 19:53	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		05/17/21 11:29	05/18/21 19:53	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	81		50 - 150				05/17/21 11:29	05/18/21 19:53	1

Lab Sample ID: LCS 580-356721/2-A
Matrix: Water
Analysis Batch: 356860

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 356721

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	0.500	0.478		mg/L		96	50 - 120
Motor Oil (>C24-C36)	0.500	0.483		mg/L		97	64 - 120
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
o-Terphenyl	95		50 - 150				

Lab Sample ID: LCSD 580-356721/3-A
Matrix: Water
Analysis Batch: 356860

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 356721

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	0.500	0.458		mg/L		92	50 - 120	4	26
Motor Oil (>C24-C36)	0.500	0.477		mg/L		95	64 - 120	1	24
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
o-Terphenyl	92		50 - 150						

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 580-356692/13-A
Matrix: Water
Analysis Batch: 356903

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 356692

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0010		mg/L		05/17/21 08:48	05/19/21 01:06	1
Lead	ND		0.00040		mg/L		05/17/21 08:48	05/19/21 01:06	1

Lab Sample ID: LCS 580-356692/14-A
Matrix: Water
Analysis Batch: 356903

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 356692

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	1.00	1.02		mg/L		102	85 - 115
Lead	1.00	0.976		mg/L		98	85 - 115

Eurofins FGS, Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-103086-1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 580-356692/15-A
Matrix: Water
Analysis Batch: 356903

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 356692

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD
							Limits	RPD	
Arsenic	1.00	1.02		mg/L		102	85 - 115	0	20
Lead	1.00	0.968		mg/L		97	85 - 115	1	20

Lab Sample ID: 580-103072-A-1-C MS
Matrix: Water
Analysis Batch: 356903

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 356692

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.	
									Limits	RPD
Arsenic	ND		1.00	1.07		mg/L		107	70 - 130	
Lead	ND		1.00	0.964		mg/L		96	70 - 130	

Lab Sample ID: 580-103072-A-1-D MSD
Matrix: Water
Analysis Batch: 356903

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 356692

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.	
									Limits	RPD
Arsenic	ND		1.00	1.09		mg/L		109	70 - 130	2
Lead	ND		1.00	0.984		mg/L		98	70 - 130	2

Lab Sample ID: 580-103072-A-1-B DU
Matrix: Water
Analysis Batch: 356903

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 356692

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD	
								Limit	Limit
Arsenic	ND		ND		mg/L		NC	20	
Lead	ND		ND		mg/L		NC	20	

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-103086-1

Client Sample ID: Before GAC-051321

Lab Sample ID: 580-103086-1

Date Collected: 05/13/21 14:05

Matrix: Water

Date Received: 05/14/21 13:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			356721	05/17/21 11:29	PMS	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	356860	05/18/21 20:52	TL1	FGS SEA

Client Sample ID: HCC EFF-051321

Lab Sample ID: 580-103086-2

Date Collected: 05/13/21 14:15

Matrix: Water

Date Received: 05/14/21 13:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			356721	05/17/21 11:29	PMS	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	356860	05/18/21 21:12	TL1	FGS SEA
Total/NA	Prep	200.8			356692	05/17/21 08:48	JLS	FGS SEA
Total/NA	Analysis	200.8		1	356903	05/19/21 01:56	FCW	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-103086-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-21

1

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Sample Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-103086-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-103086-1	Before GAC-051321	Water	05/13/21 14:05	05/14/21 13:30	
580-103086-2	HCC EFF-051321	Water	05/13/21 14:15	05/14/21 13:30	

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TestAmerica Seattle
5755 8th Street East

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

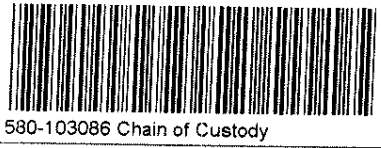
Tacoma, WA 98424-1317
phone 253.922.2310 fax 253.922.5047

Regulatory Program: DW NPDES RCRA Other:

103086

TestAmerica Laboratories, Inc.

Client Contact Farallong Consulting 975 5th Avenue Northwest Issaquah, Washington (425) 295-0800 Phone (425) 295-0850 FAX Project Name: Skykomish HCC System Site: WO # TT0100-S03		Project Manager: Pete Kingston Tel/Fax: 425-394-4146		Site Contact: Matt Bowser Lab Contact: Kristine Allen		Date: Carrier:		COC No: 1 of 2 COCs				
		Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day						Sampler: For Lab Use Only: Walk-in Client: Lab Sampling: Job / SDG No.:				
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	NWTPH-Dx w/o silica gel cleanup	Total As, Pb (EPA 200.8)	Sample Specific Notes:	
Before GAC- 051321		5/13/21	1405	Grab	W	2		X			***See instructions below	
HCC EFF- 051321		5/13/21	1415	Grab	W	3		X	X		***See instructions below	
Therm. ID: A1 Cor: 2.6° Unc: 2.5°												
Cooler Desc: <u>EGS</u>												
Packing: <u>Box</u>												
Cust. Seal: Yes <u>No</u> X												
Blue Ice <u>Wet</u> Dry, None												
FedEx:												
UPS:												
Lab Cour: X												
Other:												
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other							2	4	1			
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.							Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
<input checked="" type="checkbox"/> Non-Hazardous <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown							<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months					
Special Instructions/QC Requirements & Comments: 1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica gel cleanup needed for Dx												
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd:		Corr'd:		Therm ID No.:				
Relinquished by: <u>[Signature]</u>		Company: <u>Farallong</u>		Date/Time: <u>5/13/21 1800</u>		Received by: <u>[Signature]</u>		Company: <u>EGS</u>		Date/Time: <u>5/14/21 1330</u>		
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time:		
Relinquished by:		Company:		Date/Time:		Received in Laboratory by:		Company:		Date/Time:		



Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-103086-1

Login Number: 103086

List Source: Eurofins FGS, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Refer to Job Narrative for details.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-103188-1
Client Project/Site: Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
5/26/2021 3:37:13 PM

Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-103188-1

Job ID: 580-103188-1

Laboratory: Eurofins FGS, Seattle

Narrative

CASE NARRATIVE

**Client: Farallon Consulting LLC
Project: Skykomish HCC System
Report Number: 580-103188-1**

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 05/20/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.8 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

DIESEL AND MOTOR OIL RANGE ORGANICS

Samples Before GAC-51921 (580-103188-1) and HCC EFF-51921 (580-103188-2) were analyzed for diesel and motor oil range organics in accordance with Method NWTPH-Dx. The samples were prepared on 05/20/2021 and analyzed on 05/25/2021.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-357032, so a LCS and LCSD were used instead.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-103188-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-103188-1

Client Sample ID: Before GAC-51921

Lab Sample ID: 580-103188-1

Date Collected: 05/19/21 09:00

Matrix: Water

Date Received: 05/20/21 11:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.45		0.062		mg/L		05/20/21 17:01	05/25/21 00:25	1
Motor Oil (>C24-C36)	0.35		0.091		mg/L		05/20/21 17:01	05/25/21 00:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	82		50 - 150				05/20/21 17:01	05/25/21 00:25	1

Client Sample Results

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-103188-1

Client Sample ID: HCC EFF-51921

Lab Sample ID: 580-103188-2

Date Collected: 05/19/21 09:00

Matrix: Water

Date Received: 05/20/21 11:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		05/20/21 17:01	05/25/21 00:44	1
Motor Oil (>C24-C36)	ND		0.092		mg/L		05/20/21 17:01	05/25/21 00:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	75		50 - 150				05/20/21 17:01	05/25/21 00:44	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-103188-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-357032/1-A
Matrix: Water
Analysis Batch: 357329

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 357032

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065		mg/L		05/20/21 17:01	05/24/21 23:05	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		05/20/21 17:01	05/24/21 23:05	1
		MB MB	Limits			Prepared	Analyzed	Dil Fac	
Surrogate	%Recovery	Qualifier							
o-Terphenyl	78		50 - 150			05/20/21 17:01	05/24/21 23:05	1	

Lab Sample ID: LCS 580-357032/2-A
Matrix: Water
Analysis Batch: 357329

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 357032

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
								%Rec.
#2 Diesel (C10-C24)	0.500	0.449		mg/L		90	50 - 120	
Motor Oil (>C24-C36)	0.500	0.472		mg/L		94	64 - 120	
		LCS LCS	Limits			Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier						
o-Terphenyl	94		50 - 150			05/20/21 17:01	05/24/21 23:05	1

Lab Sample ID: LCSD 580-357032/3-A
Matrix: Water
Analysis Batch: 357329

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 357032

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	0.500	0.450		mg/L		90	50 - 120	0	26
Motor Oil (>C24-C36)	0.500	0.471		mg/L		94	64 - 120	0	24
		LCSD LCSD	Limits			Prepared	Analyzed	Dil Fac	
Surrogate	%Recovery	Qualifier							
o-Terphenyl	88		50 - 150			05/20/21 17:01	05/24/21 23:05	1	

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-103188-1

Client Sample ID: Before GAC-51921

Lab Sample ID: 580-103188-1

Date Collected: 05/19/21 09:00

Matrix: Water

Date Received: 05/20/21 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			357032	05/20/21 17:01	JBT	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	357329	05/25/21 00:25	RBL	FGS SEA

Client Sample ID: HCC EFF-51921

Lab Sample ID: 580-103188-2

Date Collected: 05/19/21 09:00

Matrix: Water

Date Received: 05/20/21 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			357032	05/20/21 17:01	JBT	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	357329	05/25/21 00:44	RBL	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-103188-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-21

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Sample Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-103188-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-103188-1	Before GAC-51921	Water	05/19/21 09:00	05/20/21 11:45	
580-103188-2	HCC EFF-51921	Water	05/19/21 09:00	05/20/21 11:45	

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Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-103188-1

Login Number: 103188

List Source: Eurofins FGS, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-103393-1

Client Project/Site: BNSF Skykomish Rush NPDES
Sampling Event: Skykomish - GAC/HCC

For:

Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
6/2/2021 3:13:06 PM

Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-103393-1

Job ID: 580-103393-1

Laboratory: Eurofins FGS, Seattle

Narrative

CASE NARRATIVE

Client: Farallon Consulting LLC
Project: BNSF Skykomish Rush NPDES
Report Number: 580-103393-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 05/27/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.7 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

DIESEL AND MOTOR OIL RANGE ORGANICS

Samples Before GAC - 5/26/21 (580-103393-1) and HCC EFF - 5/26/21 (580-103393-2) were analyzed for diesel and motor oil range organics in accordance with Method NWTPH-Dx. The samples were prepared on 06/01/2021 and analyzed on 06/01/2021 and 06/02/2021.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-357958, so a LCS and LCSD were used instead.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-103393-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-103393-1

Client Sample ID: Before GAC - 5/26/21

Lab Sample ID: 580-103393-1

Date Collected: 05/26/21 10:00

Matrix: Water

Date Received: 05/27/21 11:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.32		0.062		mg/L		06/01/21 11:47	06/01/21 23:40	1
Motor Oil (>C24-C36)	0.24		0.091		mg/L		06/01/21 11:47	06/01/21 23:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	68		50 - 150				06/01/21 11:47	06/01/21 23:40	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-103393-1

Client Sample ID: HCC EFF - 5/26/21

Lab Sample ID: 580-103393-2

Date Collected: 05/26/21 10:00

Matrix: Water

Date Received: 05/27/21 11:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		06/01/21 11:47	06/02/21 00:00	1
Motor Oil (>C24-C36)	ND		0.091		mg/L		06/01/21 11:47	06/02/21 00:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	65		50 - 150				06/01/21 11:47	06/02/21 00:00	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-103393-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-357958/1-A
Matrix: Water
Analysis Batch: 358012

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 357958

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065		mg/L		06/01/21 11:47	06/01/21 22:20	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		06/01/21 11:47	06/01/21 22:20	1
		MB MB	Limits			Prepared	Analyzed	Dil Fac	
Surrogate	%Recovery	Qualifier							
o-Terphenyl	72		50 - 150			06/01/21 11:47	06/01/21 22:20	1	

Lab Sample ID: LCS 580-357958/2-A
Matrix: Water
Analysis Batch: 358012

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 357958

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
								%Rec.
#2 Diesel (C10-C24)	0.500	0.418		mg/L		84	50 - 120	
Motor Oil (>C24-C36)	0.500	0.477		mg/L		95	64 - 120	
		LCS LCS	Limits			Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier						
o-Terphenyl	80		50 - 150			06/01/21 11:47	06/01/21 22:20	1

Lab Sample ID: LCSD 580-357958/3-A
Matrix: Water
Analysis Batch: 358012

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 357958

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	0.500	0.472		mg/L		94	50 - 120	12	26
Motor Oil (>C24-C36)	0.500	0.517		mg/L		103	64 - 120	8	24
		LCSD LCSD	Limits			Prepared	Analyzed	Dil Fac	
Surrogate	%Recovery	Qualifier							
o-Terphenyl	93		50 - 150			06/01/21 11:47	06/01/21 22:20	1	

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-103393-1

Client Sample ID: Before GAC - 5/26/21

Lab Sample ID: 580-103393-1

Date Collected: 05/26/21 10:00

Matrix: Water

Date Received: 05/27/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			357958	06/01/21 11:47	PMS	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	358012	06/01/21 23:40	ADB	FGS SEA

Client Sample ID: HCC EFF - 5/26/21

Lab Sample ID: 580-103393-2

Date Collected: 05/26/21 10:00

Matrix: Water

Date Received: 05/27/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			357958	06/01/21 11:47	PMS	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	358012	06/02/21 00:00	ADB	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-103393-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-21

1

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Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-103393-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-103393-1	Before GAC - 5/26/21	Water	05/26/21 10:00	05/27/21 11:30	
580-103393-2	HCC EFF - 5/26/21	Water	05/26/21 10:00	05/27/21 11:30	

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Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-103393-1

Login Number: 103393

List Number: 1

Creator: Vallelunga, Diana L

List Source: Eurofins FGS, Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-103504-1
Client Project/Site: Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
6/7/2021 4:37:04 PM

Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

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Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-103504-1

Job ID: 580-103504-1

Laboratory: Eurofins FGS, Seattle

Narrative

CASE NARRATIVE

**Client: Farallon Consulting LLC
Project: Skykomish HCC System
Report Number: 580-103504-1**

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 06/02/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.3 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

DIESEL AND MOTOR OIL RANGE ORGANICS

Samples Before GAC-6121 (580-103504-1) and HCC EFF-6121 (580-103504-2) were analyzed for diesel and motor oil range organics in accordance with Method NWTPH-Dx. The samples were prepared on 06/03/2021 and analyzed on 06/04/2021.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-358155, so a LCS and LCSD were used instead.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-103504-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-103504-1

Client Sample ID: Before GAC-6121

Lab Sample ID: 580-103504-1

Date Collected: 06/01/21 10:30

Matrix: Water

Date Received: 06/02/21 11:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.41		0.062		mg/L		06/03/21 08:47	06/04/21 02:52	1
Motor Oil (>C24-C36)	0.30		0.091		mg/L		06/03/21 08:47	06/04/21 02:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	85		50 - 150				06/03/21 08:47	06/04/21 02:52	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-103504-1

Client Sample ID: HCC EFF-6121

Lab Sample ID: 580-103504-2

Date Collected: 06/01/21 10:30

Matrix: Water

Date Received: 06/02/21 11:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.061		mg/L		06/03/21 08:47	06/04/21 03:11	1
Motor Oil (>C24-C36)	ND		0.091		mg/L		06/03/21 08:47	06/04/21 03:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	77		50 - 150				06/03/21 08:47	06/04/21 03:11	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-103504-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-358155/1-A
Matrix: Water
Analysis Batch: 358234

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 358155

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.065		mg/L		06/03/21 08:47	06/04/21 01:52	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		06/03/21 08:47	06/04/21 01:52	1
MB MB									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	68		50 - 150				06/03/21 08:47	06/04/21 01:52	1

Lab Sample ID: LCS 580-358155/2-A
Matrix: Water
Analysis Batch: 358234

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 358155

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	0.500	0.518		mg/L		104	50 - 120
Motor Oil (>C24-C36)	0.500	0.580		mg/L		116	64 - 120
LCS LCS							
Surrogate	%Recovery	Qualifier	Limits				
<i>o</i> -Terphenyl	97		50 - 150				

Lab Sample ID: LCSD 580-358155/3-A
Matrix: Water
Analysis Batch: 358234

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 358155

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	0.500	0.477		mg/L		95	50 - 120	8	26
Motor Oil (>C24-C36)	0.500	0.547		mg/L		109	64 - 120	6	24
LCSD LCSD									
Surrogate	%Recovery	Qualifier	Limits						
<i>o</i> -Terphenyl	89		50 - 150						

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-103504-1

Client Sample ID: Before GAC-6121

Lab Sample ID: 580-103504-1

Date Collected: 06/01/21 10:30

Matrix: Water

Date Received: 06/02/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			358155	06/03/21 08:47	PMS	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	358234	06/04/21 02:52	ADB	FGS SEA

Client Sample ID: HCC EFF-6121

Lab Sample ID: 580-103504-2

Date Collected: 06/01/21 10:30

Matrix: Water

Date Received: 06/02/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			358155	06/03/21 08:47	PMS	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	358234	06/04/21 03:11	ADB	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310



Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-103504-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-21

- 1
- 2
- 3
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Sample Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-103504-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-103504-1	Before GAC-6121	Water	06/01/21 10:30	06/02/21 11:30	
580-103504-2	HCC EFF-6121	Water	06/01/21 10:30	06/02/21 11:30	

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TestAmerica Seattle

5755 8th Street East

Tacoma, WA 98424-1317
phone 253.922.2310 fax 253.922.5047

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: DW NPDES RCRA Other:

Client Contact		Project Manager: Pete Kingston		Site Contact: Matt Bowser		Date: 6/1/21		COC No:	
Farallong Consulting		Tel/Fax: 425-394-4146		Lab Contact: Kristine Allen		Carrier:		1 of 2 COCs	
975 5th Avenue Northwest		Analysis Turnaround Time		Filtered Sample (Y/N) Perform MS / MSD (Y/N) NWTPH-Dx w/o silica gel cleanup				Sampler: TW	
Issaquah, Washington		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below 3 day						For Lab Use Only:	
(425) 295-0800 Phone		<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day						Walk-in Client:	
(425) 295-0850 FAX								Lab Sampling:	
Project Name: Skykomish HCC System								Job / SDG No.:	
Site:								103504	
WO # TT0100-S03								Sample Specific Notes:	
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.			
Before GAC- 6121		6/1/21	10:30	Grab	W	2		X	***See instructions below
HCC EFF- 6121		6/1/21	10:30	Grab	W	2		X	***See instructions below
Therm ID: A1 Cor: 0.3 ° Unc: 0.5 °									
Cooler Dsc: Log B1									
Packing: Box B FedEx:									
Cust. Seal: Yes No X UPS:									
Blue Ice: Wet Dry, None Lab Cour: X Other:									
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other							2	1	
Possible Hazard Identification:							Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.							<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months		
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown									
Special Instructions/QC Requirements & Comments: 1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica get cleanup needed for Dx									
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd:		Corr'd:		Therm ID No.:	
Relinquished by: <i>[Signature]</i>		Company: <i>Gracier</i>		Date/Time: <i>6/1/21 12:50</i>		Received by: <i>[Signature]</i>		Company: <i>EMUB</i>	
Relinquished by:		Company:		Date/Time:		Received by: <i>[Signature]</i>		Company: <i>EPGE</i>	
Relinquished by:		Company:		Date/Time:		Received in Laboratory by:		Company: <i>EPGE</i>	



Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-103504-1

Login Number: 103504

List Source: Eurofins FGS, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-103689-1
Client Project/Site: Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC
Revision: 2

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
7/8/2021 4:12:10 PM

Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

LINKS

Review your project
results through
TotalAccess

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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-103689-1

Job ID: 580-103689-1

Laboratory: Eurofins FGS, Seattle

Narrative

**Job Narrative
580-103689-1**

Comments

This report has been revised. Client samples IDs were switched at client request after it was determined that they had been switched in the field. The report was revised a second time to update the case narrative.

Receipt

The samples were received on 6/9/2021 11:07 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.8° C.

GC Semi VOA

Method NWTPH-Dx: The following samples contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel fuel pattern used by the laboratory for quantitative purposes: Before GAC-060821 (580-103689-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-358808, so a LCS and LCSD were used instead.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.



Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-103689-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-103689-1

Client Sample ID: HCC EFF-060821

Lab Sample ID: 580-103689-1

Date Collected: 06/08/21 11:35

Matrix: Water

Date Received: 06/09/21 11:07

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		06/10/21 09:24	06/10/21 23:05	1
Motor Oil (>C24-C36)	ND		0.092		mg/L		06/10/21 09:24	06/10/21 23:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	77		50 - 150				06/10/21 09:24	06/10/21 23:05	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-103689-1

Client Sample ID: Before GAC-060821

Lab Sample ID: 580-103689-2

Date Collected: 06/08/21 11:45

Matrix: Water

Date Received: 06/09/21 11:07

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.45		0.062		mg/L		06/10/21 09:24	06/10/21 23:26	1
Motor Oil (>C24-C36)	0.35		0.092		mg/L		06/10/21 09:24	06/10/21 23:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	77		50 - 150				06/10/21 09:24	06/10/21 23:26	1

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0010		mg/L		06/09/21 15:50	06/10/21 14:09	1
Lead	ND		0.00040		mg/L		06/09/21 15:50	06/10/21 14:09	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-103689-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-358808/1-A
Matrix: Water
Analysis Batch: 358942

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 358808

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065		mg/L		06/10/21 09:24	06/10/21 21:26	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		06/10/21 09:24	06/10/21 21:26	1
Surrogate		MB MB	Limits			Prepared	Analyzed	Dil Fac	
		%Recovery Qualifier							
o-Terphenyl		80	50 - 150			06/10/21 09:24	06/10/21 21:26	1	

Lab Sample ID: LCS 580-358808/2-A
Matrix: Water
Analysis Batch: 358942

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 358808

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	0.500	0.442		mg/L		88	50 - 120
Motor Oil (>C24-C36)	0.500	0.462		mg/L		92	64 - 120
Surrogate		LCS LCS	Limits			%Rec	
		%Recovery Qualifier					
o-Terphenyl		96	50 - 150				

Lab Sample ID: LCSD 580-358808/3-A
Matrix: Water
Analysis Batch: 358942

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 358808

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	0.500	0.388		mg/L		78	50 - 120	13	26
Motor Oil (>C24-C36)	0.500	0.417		mg/L		83	64 - 120	10	24
Surrogate		LCSD LCSD	Limits			%Rec			
		%Recovery Qualifier							
o-Terphenyl		89	50 - 150						

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 580-358756/14-A
Matrix: Water
Analysis Batch: 358955

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 358756

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	ND		0.0010		mg/L		06/09/21 15:50	06/10/21 14:05	1
Lead	ND		0.00040		mg/L		06/09/21 15:50	06/10/21 14:05	1

Lab Sample ID: LCS 580-358756/15-A
Matrix: Water
Analysis Batch: 358955

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 358756

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	1.00	0.979		mg/L		98	85 - 115
Lead	1.00	0.978		mg/L		98	85 - 115

Eurofins FGS, Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-103689-1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 580-358756/16-A
Matrix: Water
Analysis Batch: 358955

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 358756

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD
							Limits	RPD	
Arsenic	1.00	1.00		mg/L		100	85 - 115	3	20
Lead	1.00	1.00		mg/L		100	85 - 115	3	20

Lab Sample ID: 580-103580-D-1-C MS
Matrix: Water
Analysis Batch: 358955

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 358756

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.	
									Limits	RPD
Arsenic	0.0016		1.00	1.02		mg/L		102	70 - 130	
Lead	ND		1.00	1.01		mg/L		101	70 - 130	

Lab Sample ID: 580-103580-D-1-D MSD
Matrix: Water
Analysis Batch: 358955

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 358756

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.	
									Limits	RPD
Arsenic	0.0016		1.00	1.05		mg/L		105	70 - 130	3
Lead	ND		1.00	1.05		mg/L		105	70 - 130	3

Lab Sample ID: 580-103580-D-1-B DU
Matrix: Water
Analysis Batch: 358955

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 358756

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD	
								Limit	Limit
Arsenic	0.0016		0.00176		mg/L		10	20	
Lead	ND		ND		mg/L		NC	20	

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-103689-1

Client Sample ID: HCC EFF-060821

Lab Sample ID: 580-103689-1

Date Collected: 06/08/21 11:35

Matrix: Water

Date Received: 06/09/21 11:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			358808	06/10/21 09:24	N1B	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	358942	06/10/21 23:05	W1T	FGS SEA

Client Sample ID: Before GAC-060821

Lab Sample ID: 580-103689-2

Date Collected: 06/08/21 11:45

Matrix: Water

Date Received: 06/09/21 11:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			358808	06/10/21 09:24	N1B	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	358942	06/10/21 23:26	W1T	FGS SEA
Total/NA	Prep	200.8			358756	06/09/21 15:50	TMH	FGS SEA
Total/NA	Analysis	200.8		1	358955	06/10/21 14:09	FCW	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-103689-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-21

- 1
- 2
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- 10
- 11

Sample Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-103689-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-103689-1	HCC EFF-060821	Water	06/08/21 11:35	06/09/21 11:07	
580-103689-2	Before GAC-060821	Water	06/08/21 11:45	06/09/21 11:07	

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TestAmerica Seattle
5755 8th Street East

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Tacoma, WA 98424-1317
phone 253.922.2310 fax 253.922.5047

Regulatory Program: DW NPDES RCRA Other:

103689

TestAmerica Laboratories, Inc.

Client Contact		Project Manager: Pete Kingston		Site Contact: Matt Bowser		Date:		COC No:	
Farallong Consulting		Tel/Fax: 425-394-4146		Lab Contact: Kristine Allen		Carrier:		1 of 2 COCs	
975 5th Avenue Northwest		Analysis Turnaround Time		Filtered Sample (Y/N) Perform MS / MSD (Y/N) NWTPH-Dx w/o silica get cleanup Total As, Pb (EPA 200.8)				Sampler: For Lab Use Only: Walk-in Client: Lab Sampling:	
Issaquah, Washington		<input type="checkbox"/> CALENDAR DAYS <input checked="" type="checkbox"/> WORKING DAYS TAT if different from Below <u>3 DAY</u>							
(425) 295-0800 Phone		<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day							
(425) 295-0850 FAX									
Project Name: Skykomish HCC System		Site:						Job / SDG No.:	
WO # TT0100-S03								Sample Specific Notes:	
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	NWTPH-Dx w/o silica get cleanup	Total As, Pb (EPA 200.8)
Before GAC- 060821	6/8/21	1135	Grab	W	2		X		
HCC EFF- 060821	6/8/21	1145	Grab	W	3		X	X	
Therm. ID: <u>IR8</u> Cor: <u>1.8</u> ° Unc: <u>0.3</u> ° Cooler Dsc: <u>Lg B1</u> Packing: <u>Bub</u> FedEx: _____ Cust. Seal: Yes ___ No <u>X</u> UPS: _____ Blue Ice <u>Wet</u> Dry, None Lab Cour: <u>X</u> Other: _____									
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other						2 4 1			
Possible Hazard Identification:						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)			
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.						<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months			
<input checked="" type="checkbox"/> Non-Hazardous <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown									
Special Instructions/QC Requirements & Comments: 1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica get cleanup needed for Dx									
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd:		Corr'd:		Therm ID No.:	
Relinquished by: _____		Company: <u>Farallon</u>		Date/Time: <u>6/8/21 1330</u>		Received by: _____		Company: _____	
Relinquished by: _____		Company: _____		Date/Time: _____		Received by: _____		Company: <u>ETG</u>	
Relinquished by: _____		Company: _____		Date/Time: _____		Received in Laboratory by: _____		Company: _____	



Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-103689-1

Login Number: 103689

List Source: Eurofins FGS, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-103825-1
Client Project/Site: Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
6/16/2021 4:49:26 PM

Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-103825-1

Job ID: 580-103825-1

Laboratory: Eurofins FGS, Seattle

Narrative

CASE NARRATIVE

**Client: Farallon Consulting LLC
Project: Skykomish HCC System
Report Number: 580-103825-1**

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 06/15/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.8 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

DIESEL AND MOTOR OIL RANGE ORGANICS

Samples Before GAC-61521-1 (580-103825-1) and HCC EFF-61521-1 (580-103825-2) were analyzed for diesel and motor oil range organics in accordance with Method NWTPH-Dx. The samples were prepared on 06/15/2021 and analyzed on 06/16/2021.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-103825-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-103825-1

Client Sample ID: Before GAC-61521-1

Lab Sample ID: 580-103825-1

Date Collected: 06/15/21 06:30

Matrix: Water

Date Received: 06/15/21 11:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.30		0.062		mg/L		06/15/21 14:20	06/16/21 14:25	1
Motor Oil (>C24-C36)	0.22		0.091		mg/L		06/15/21 14:20	06/16/21 14:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	72		50 - 150				06/15/21 14:20	06/16/21 14:25	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-103825-1

Client Sample ID: HCC EFF-61521-1

Lab Sample ID: 580-103825-2

Date Collected: 06/15/21 06:30

Matrix: Water

Date Received: 06/15/21 11:30

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		06/15/21 14:20	06/16/21 14:45	1
Motor Oil (>C24-C36)	ND		0.091		mg/L		06/15/21 14:20	06/16/21 14:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	76		50 - 150				06/15/21 14:20	06/16/21 14:45	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-103825-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-359319/1-A
Matrix: Water
Analysis Batch: 359414

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 359319

Analyte	MB MB		RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac
	Result	Qualifier									
#2 Diesel (C10-C24)	ND		0.065		mg/L		06/15/21 14:20	06/16/21 13:26			1
Motor Oil (>C24-C36)	ND		0.096		mg/L		06/15/21 14:20	06/16/21 13:26			1
		MB MB	Limits			Prepared		Analyzed		Dil Fac	
Surrogate	%Recovery	Qualifier									
o-Terphenyl	75		50 - 150			06/15/21 14:20	06/16/21 13:26			1	

Lab Sample ID: LCS 580-359319/2-A
Matrix: Water
Analysis Batch: 359414

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 359319

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
#2 Diesel (C10-C24)	0.500	0.404		mg/L		81	50 - 120	
Motor Oil (>C24-C36)	0.500	0.430		mg/L		86	64 - 120	
		LCS LCS	Limits			%Rec.		RPD
Surrogate	%Recovery	Qualifier						
o-Terphenyl	86		50 - 150					

Lab Sample ID: LCSD 580-359319/3-A
Matrix: Water
Analysis Batch: 359414

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 359319

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	
									RPD	Limit
#2 Diesel (C10-C24)	0.500	0.435		mg/L		87	50 - 120	7	26	
Motor Oil (>C24-C36)	0.500	0.476		mg/L		95	64 - 120	10	24	
		LCSD LCSD	Limits			%Rec.		RPD		
Surrogate	%Recovery	Qualifier								
o-Terphenyl	94		50 - 150							

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-103825-1

Client Sample ID: Before GAC-61521-1

Lab Sample ID: 580-103825-1

Date Collected: 06/15/21 06:30

Matrix: Water

Date Received: 06/15/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			359319	06/15/21 14:20	N1B	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	359414	06/16/21 14:25	ADB	FGS SEA

Client Sample ID: HCC EFF-61521-1

Lab Sample ID: 580-103825-2

Date Collected: 06/15/21 06:30

Matrix: Water

Date Received: 06/15/21 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			359319	06/15/21 14:20	N1B	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	359414	06/16/21 14:45	ADB	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-103825-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-21

- 1
- 2
- 3
- 4
- 5
- 6
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- 9
- 10
- 11

Sample Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-103825-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-103825-1	Before GAC-61521-1	Water	06/15/21 06:30	06/15/21 11:30	
580-103825-2	HCC EFF-61521-1	Water	06/15/21 06:30	06/15/21 11:30	

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TestAmerica Seattle

5755 8th Street East

Chain of Custody Record

TestAmerica


THE LEADER IN ENVIRONMENTAL TESTING

Tacoma, WA 98424-1317
phone 253.922.2310 fax 253.922.5047

Regulatory Program: DW NPDES RCRA Other:

103825

TestAmerica Laboratories, Inc.

Client Contact		Project Manager: Pete Kingston		Site Contact: Matt Bowser		Date: 6-15-21		COC No:	
Farallong Consulting		Tel/Fax: 425-394-4146		Lab Contact: Kristine Allen		Carrier:		1 of 2 COCs	
975 5th Avenue Northwest		Analysis Turnaround Time		Filtered Sample (Y/N) Perform MS/MSD (Y/N) NWTPH-Dx w/o silica gel cleanup				Sampler: JW	
Issaquah, Washington		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS						For Lab Use Only:	
(425) 295-0800 Phone		TAT if different from Below _____						Walk-in Client:	
(425) 295-0850 FAX		<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input checked="" type="checkbox"/> 1 day						Lab Sampling:	
Project Name: Skykomish HCC System								Job / SDG No.:	
Site:									
WO # TT0100-S03									
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.			Sample Specific Notes:
Before GAC- 61521-1		6/15/21	6:30	Grab	W	2	X		***See instructions below
HCC EFF- 61521-1		6/15/21	6:30	Grab	W	2	X		***See instructions below
Therm. ID: AL Cor: 0.8 ° Unc: 1.0 °									
Cooler Dsc: LG Bi									
Packing: Bub									
Cust. Seal: Yes No X									
Blue Ice, Wet Dry, None									
FedEx:									
UPS:									
Lab Cour: X									
Other:									
		 580-103825 Chain of Custody							
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other							2	1	
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown					<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months				
Special Instructions/QC Requirements & Comments: 1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica get cleanup needed for Dx									
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd:		Corr'd:		Therm ID No.:	
Relinquished by: [Signature]		Company: Glacier 6-15-21		Date/Time: 9:35		Received by: [Signature]		Company: EFG	
Relinquished by:		Company:		Date/Time:		Received by:		Date/Time: 6/15/21 11:30	
Relinquished by:		Company:		Date/Time:		Received in Laboratory by:		Date/Time:	

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-103825-1

Login Number: 103825

List Source: Eurofins FGS, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-103992-1

Client Project/Site: BNSF Skykomish Rush NPDES
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
6/25/2021 4:34:29 PM

Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

LINKS

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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-103992-1

Job ID: 580-103992-1

Laboratory: Eurofins FGS, Seattle

Narrative

CASE NARRATIVE

Client: Farallon Consulting LLC
Project: BNSF Skykomish Rush NPDES
Report Number: 580-103992-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 06/22/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 4.8 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

DIESEL AND MOTOR OIL RANGE ORGANICS

Samples Before GAC-62221 (580-103992-1) and HCC EFF-62221 (580-103992-2) were analyzed for diesel and motor oil range organics in accordance with Method NWTPH-Dx. The samples were prepared and analyzed on 06/23/2021.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-360064, so a LCS and LCSD were used instead.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-103992-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-103992-1

Client Sample ID: Before GAC-62221

Lab Sample ID: 580-103992-1

Date Collected: 06/22/21 08:45

Matrix: Water

Date Received: 06/22/21 11:18

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.31		0.062		mg/L		06/23/21 13:04	06/23/21 20:37	1
Motor Oil (>C24-C36)	0.23		0.091		mg/L		06/23/21 13:04	06/23/21 20:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	69		50 - 150				06/23/21 13:04	06/23/21 20:37	1

Client Sample Results

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-103992-1

Client Sample ID: HCC EFF-62221

Lab Sample ID: 580-103992-2

Date Collected: 06/22/21 08:45

Matrix: Water

Date Received: 06/22/21 11:18

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		06/23/21 13:04	06/23/21 20:57	1
Motor Oil (>C24-C36)	ND		0.092		mg/L		06/23/21 13:04	06/23/21 20:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	67		50 - 150				06/23/21 13:04	06/23/21 20:57	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-103992-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-360064/1-A
Matrix: Water
Analysis Batch: 360122

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 360064

Analyte	MB MB		RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac
	Result	Qualifier									
#2 Diesel (C10-C24)	ND		0.065		mg/L		06/23/21 13:04	06/23/21 19:37			1
Motor Oil (>C24-C36)	ND		0.096		mg/L		06/23/21 13:04	06/23/21 19:37			1
		MB MB	Limits			Prepared		Analyzed		Dil Fac	
Surrogate	%Recovery	Qualifier									
o-Terphenyl	68		50 - 150			06/23/21 13:04	06/23/21 19:37			1	

Lab Sample ID: LCS 580-360064/2-A
Matrix: Water
Analysis Batch: 360122

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 360064

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
#2 Diesel (C10-C24)	0.500	0.347		mg/L		69	50 - 120	
Motor Oil (>C24-C36)	0.500	0.361		mg/L		72	64 - 120	
		LCS LCS	Limits			%Rec.		RPD
Surrogate	%Recovery	Qualifier						
o-Terphenyl	77		50 - 150					

Lab Sample ID: LCSD 580-360064/3-A
Matrix: Water
Analysis Batch: 360122

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 360064

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	
									RPD	Limit
#2 Diesel (C10-C24)	0.500	0.329		mg/L		66	50 - 120	5	26	
Motor Oil (>C24-C36)	0.500	0.334		mg/L		67	64 - 120	8	24	
		LCSD LCSD	Limits			%Rec.		RPD		
Surrogate	%Recovery	Qualifier								
o-Terphenyl	70		50 - 150							

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-103992-1

Client Sample ID: Before GAC-62221

Lab Sample ID: 580-103992-1

Date Collected: 06/22/21 08:45

Matrix: Water

Date Received: 06/22/21 11:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			360064	06/23/21 13:04	PMS	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	360122	06/23/21 20:37	TL1	FGS SEA

Client Sample ID: HCC EFF-62221

Lab Sample ID: 580-103992-2

Date Collected: 06/22/21 08:45

Matrix: Water

Date Received: 06/22/21 11:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			360064	06/23/21 13:04	PMS	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	360122	06/23/21 20:57	TL1	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-103992-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-21

1

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Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-103992-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-103992-1	Before GAC-62221	Water	06/22/21 08:45	06/22/21 11:18	
580-103992-2	HCC EFF-62221	Water	06/22/21 08:45	06/22/21 11:18	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

TestAmerica Seattle

5755 8th Street East

Chain of Custody Record

TestAmerica

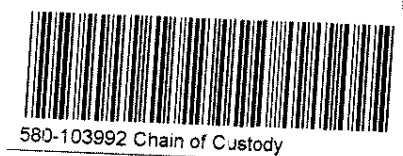
THE LEADER IN ENVIRONMENTAL TESTING

Tacoma, WA 98424-1317
phone 253.922.2310 fax 253.922.5047

Regulatory Program: DW NPDES RCRA Other:

TestAmerica Laboratories, Inc.

Client Contact		Project Manager: Pete Kingston		Site Contact: Matt Bowser		Date: 6-22-21		COC No:	
Farallong Consulting		Tel/Fax: 425-394-4146		Lab Contact: Kristine Allen		Carrier:		1 of 2 COCs	
975 5th Avenue Northwest		Analysis Turnaround Time		Filtered Sample (Y / N) Perform MS / MSD (Y / N) NMT/PH-Dx w/o silica gel cleanup				Sampler: TW For Lab Use Only: Walk-in Client: Lab Sampling: Job / SDG No.:	
Issaquah, Washington		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS							
(425) 295-0800 Phone		TAT if different from Below <i>3 days</i>							
(425) 295-0850 FAX		<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day							
Project Name: Skykomish HCC System									
Site:									
WO # TT0100-S03									
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.			Sample Specific Notes:
Before GAC- 62221		6/22/21	8:45	Grab	W	2			***See instructions below
HCC EFF- 62221		6/22/21	8:45	Grab	W	2			***See instructions below
Therm. ID: <i>IR8</i> Cor: <i>4.8°</i> Unc: <i>0.3°</i>		Cooler Desc: <i>LA BI</i>		Packing: <i>Bubb</i>		Cust. Seal: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Blue Ice: <input checked="" type="checkbox"/> Wet Dry, None	
FedEx:		UPS:		Lab Cour: <input checked="" type="checkbox"/>		Other:			
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other									
Possible Hazard Identification:		Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown				<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months					
Special Instructions/QC Requirements & Comments: 1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica gel cleanup needed for Dx									
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd:		Corr'd:		Therm ID No.:	
Relinquished by: <i>[Signature]</i>		Company: <i>Galaciel</i>		Date/Time: <i>6/22/21 10:15</i>		Received by: <i>[Signature]</i>		Company: <i>ETGS</i>	
Relinquished by:		Company:		Date/Time:		Received by:		Date/Time: <i>6/22/21 11:18</i>	
Relinquished by:		Company:		Date/Time:		Received in Laboratory by:		Date/Time:	



Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-103992-1

Login Number: 103992

List Source: Eurofins FGS, Seattle

List Number: 1

Creator: Vallelunga, Diana L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-104179-1

Client Project/Site: BNSF Former Maintenance and Fueling
Facility

Sampling Event: Skykomish HCC System

For:

Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Peter Kingston



Authorized for release by:
7/19/2021 11:58:05 AM

Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

LINKS

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results through
Total Access

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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Former Maintenance and Fueling Facility

Job ID: 580-104179-1

Job ID: 580-104179-1

Laboratory: Eurofins FGS, Seattle

Narrative

Job Narrative 580-104179-1

Comments

No additional comments.

Receipt

The samples were received on 7/1/2021 10:05 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 3.4° C, 5.9° C and 8.0° C.

Receipt Exceptions

The following samples were received at the laboratory outside the required temperature criteria: 2A-W-40-063021 (580-104179-10), GW-1-063021 (580-104179-11), GW-2-063021 (580-104179-12) and MW-555-063021 (580-104179-13).

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 580-361452. A laboratory control sample/laboratory control sample duplicate (LCS/LCSD) were used instead.

Method 3510C: The following sample formed emulsions during the extraction procedure: 1B-W-23-062921 (580-104179-5). The emulsions were broken up using additional sodium sulfate filtration and methylene chloride rinsing.

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-361551. A laboratory control sample/laboratory control sample duplicate (LCS/LCSD) were used instead.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Former Maintenance and Fueling Facility

Job ID: 580-104179-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Maintenance and Fueling Facility

Job ID: 580-104179-1

Client Sample ID: 5-W-43-062921

Lab Sample ID: 580-104179-1

Date Collected: 06/29/21 13:10

Matrix: Water

Date Received: 07/01/21 10:05

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		07/09/21 12:16	07/09/21 22:11	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		07/09/21 12:16	07/09/21 22:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	76		50 - 150				07/09/21 12:16	07/09/21 22:11	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Maintenance and Fueling Facility

Job ID: 580-104179-1

Client Sample ID: GW-3-062921

Lab Sample ID: 580-104179-2

Date Collected: 06/29/21 13:15

Matrix: Water

Date Received: 07/01/21 10:05

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		07/09/21 12:16	07/14/21 22:25	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		07/09/21 12:16	07/14/21 22:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	71		50 - 150				07/09/21 12:16	07/14/21 22:25	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Maintenance and Fueling Facility

Job ID: 580-104179-1

Client Sample ID: GW-30-062921

Lab Sample ID: 580-104179-3

Date Collected: 06/29/21 13:15

Matrix: Water

Date Received: 07/01/21 10:05

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		07/09/21 12:16	07/09/21 22:51	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		07/09/21 12:16	07/09/21 22:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	68		50 - 150				07/09/21 12:16	07/09/21 22:51	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Maintenance and Fueling Facility

Job ID: 580-104179-1

Client Sample ID: EW-1-062921

Lab Sample ID: 580-104179-4

Date Collected: 06/29/21 14:10

Matrix: Water

Date Received: 07/01/21 10:05

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		07/09/21 12:16	07/09/21 23:11	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		07/09/21 12:16	07/09/21 23:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	72		50 - 150				07/09/21 12:16	07/09/21 23:11	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Maintenance and Fueling Facility

Job ID: 580-104179-1

Client Sample ID: 1B-W-23-062921

Lab Sample ID: 580-104179-5

Date Collected: 06/29/21 14:20

Matrix: Water

Date Received: 07/01/21 10:05

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		07/09/21 12:16	07/09/21 23:32	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		07/09/21 12:16	07/09/21 23:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	68		50 - 150				07/09/21 12:16	07/09/21 23:32	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Maintenance and Fueling Facility

Job ID: 580-104179-1

Client Sample ID: EW-2A-063021

Lab Sample ID: 580-104179-6

Date Collected: 06/30/21 08:20

Matrix: Water

Date Received: 07/01/21 10:05

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		07/09/21 12:16	07/09/21 23:52	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		07/09/21 12:16	07/09/21 23:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	71		50 - 150				07/09/21 12:16	07/09/21 23:52	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Maintenance and Fueling Facility

Job ID: 580-104179-1

Client Sample ID: GW-4-063021

Lab Sample ID: 580-104179-7

Date Collected: 06/30/21 09:00

Matrix: Water

Date Received: 07/01/21 10:05

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		07/09/21 12:16	07/10/21 00:12	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		07/09/21 12:16	07/10/21 00:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	64		50 - 150				07/09/21 12:16	07/10/21 00:12	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Maintenance and Fueling Facility

Job ID: 580-104179-1

Client Sample ID: 2A-W-42-063021

Lab Sample ID: 580-104179-8

Date Collected: 06/30/21 09:50

Matrix: Water

Date Received: 07/01/21 10:05

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.11		0.062	0.062	mg/L		07/09/21 12:16	07/10/21 00:52	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		07/09/21 12:16	07/10/21 00:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	72		50 - 150				07/09/21 12:16	07/10/21 00:52	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Maintenance and Fueling Facility

Job ID: 580-104179-1

Client Sample ID: 2A-W-41-063021

Lab Sample ID: 580-104179-9

Date Collected: 06/30/21 10:35

Matrix: Water

Date Received: 07/01/21 10:05

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.063	0.063	mg/L		07/10/21 16:02	07/11/21 00:59	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		07/10/21 16:02	07/11/21 00:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	81		50 - 150				07/10/21 16:02	07/11/21 00:59	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Maintenance and Fueling Facility

Job ID: 580-104179-1

Client Sample ID: 2A-W-40-063021

Lab Sample ID: 580-104179-10

Date Collected: 06/30/21 11:40

Matrix: Water

Date Received: 07/01/21 10:05

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		07/10/21 16:02	07/11/21 03:57	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		07/10/21 16:02	07/11/21 03:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	78		50 - 150				07/10/21 16:02	07/11/21 03:57	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Maintenance and Fueling Facility

Job ID: 580-104179-1

Client Sample ID: GW-1-063021

Lab Sample ID: 580-104179-11

Date Collected: 06/30/21 13:50

Matrix: Water

Date Received: 07/01/21 10:05

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.063	0.063	mg/L		07/10/21 16:02	07/11/21 04:17	1
Motor Oil (>C24-C36)	ND		0.093	0.093	mg/L		07/10/21 16:02	07/11/21 04:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	79		50 - 150				07/10/21 16:02	07/11/21 04:17	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Maintenance and Fueling Facility

Job ID: 580-104179-1

Client Sample ID: GW-2-063021

Lab Sample ID: 580-104179-12

Date Collected: 06/30/21 12:45

Matrix: Water

Date Received: 07/01/21 10:05

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		07/10/21 16:02	07/11/21 04:37	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		07/10/21 16:02	07/11/21 04:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	74		50 - 150				07/10/21 16:02	07/11/21 04:37	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Maintenance and Fueling Facility

Job ID: 580-104179-1

Client Sample ID: MW-555-063021

Lab Sample ID: 580-104179-13

Date Collected: 06/30/21 14:15

Matrix: Water

Date Received: 07/01/21 10:05

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.070		0.063	0.063	mg/L		07/10/21 16:02	07/11/21 04:56	1
Motor Oil (>C24-C36)	ND		0.093	0.093	mg/L		07/10/21 16:02	07/11/21 04:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	75		50 - 150				07/10/21 16:02	07/11/21 04:56	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Maintenance and Fueling Facility

Job ID: 580-104179-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-361452/1-A
Matrix: Water
Analysis Batch: 361513

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 361452

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		07/09/21 12:16	07/09/21 21:11	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		07/09/21 12:16	07/09/21 21:11	1
		MB MB	Limits			D	Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier							
o-Terphenyl	81		50 - 150				07/09/21 12:16	07/09/21 21:11	1

Lab Sample ID: LCS 580-361452/2-A
Matrix: Water
Analysis Batch: 361513

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 361452

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.	
									#2 Diesel (C10-C24)
Motor Oil (>C24-C36)	0.500	0.445		mg/L		89	64 - 120		
		LCS LCS	Limits			D	Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier							
o-Terphenyl	83		50 - 150				07/09/21 12:16	07/09/21 21:11	1

Lab Sample ID: LCSD 580-361452/3-A
Matrix: Water
Analysis Batch: 361513

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 361452

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	%Rec.	RPD	
									RPD	Limit
#2 Diesel (C10-C24)	0.500	0.388		mg/L		78	50 - 120		3	26
Motor Oil (>C24-C36)	0.500	0.419		mg/L		84	64 - 120		6	24
		LCSD LCSD	Limits			D	Prepared	Analyzed	Dil Fac	
Surrogate	%Recovery	Qualifier								
o-Terphenyl	78		50 - 150				07/09/21 12:16	07/09/21 21:11	1	

Lab Sample ID: MB 580-361551/1-A
Matrix: Water
Analysis Batch: 361556

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 361551

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		07/10/21 16:02	07/11/21 01:19	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		07/10/21 16:02	07/11/21 01:19	1
		MB MB	Limits			D	Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier							
o-Terphenyl	74		50 - 150				07/10/21 16:02	07/11/21 01:19	1

Lab Sample ID: LCS 580-361551/2-A
Matrix: Water
Analysis Batch: 361556

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 361551

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.
Motor Oil (>C24-C36)	0.500	0.506		mg/L		101	64 - 120	

Eurofins FGS, Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Maintenance and Fueling Facility

Job ID: 580-104179-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCS 580-361551/2-A
Matrix: Water
Analysis Batch: 361556

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 361551

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	94		50 - 150

Lab Sample ID: LCSD 580-361551/3-A
Matrix: Water
Analysis Batch: 361556

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 361551

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec.		RPD	Limit
		Result	Qualifier				Limits	RPD		
#2 Diesel (C10-C24)	0.500	0.416		mg/L		83	50 - 120	2	26	
Motor Oil (>C24-C36)	0.500	0.492		mg/L		98	64 - 120	3	24	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	92		50 - 150

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Lab Sample ID: MB 580-361452/1-B
Matrix: Water
Analysis Batch: 361977

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 361452

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		07/09/21 12:16	07/14/21 21:25	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		07/09/21 12:16	07/14/21 21:25	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
<i>o</i> -Terphenyl	86		50 - 150	07/09/21 12:16	07/14/21 21:25	1

Lab Sample ID: LCS 580-361452/2-B
Matrix: Water
Analysis Batch: 361977

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 361452

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec.	
		Result	Qualifier				Limits	RPD
#2 Diesel (C10-C24)	0.500	0.411		mg/L		82	50 - 120	
Motor Oil (>C24-C36)	0.500	0.465		mg/L		93	64 - 120	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	82		50 - 150

Lab Sample ID: LCSD 580-361452/3-B
Matrix: Water
Analysis Batch: 361977

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 361452

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec.		RPD	Limit
		Result	Qualifier				Limits	RPD		
#2 Diesel (C10-C24)	0.500	0.407		mg/L		81	50 - 120	1	26	
Motor Oil (>C24-C36)	0.500	0.451		mg/L		90	64 - 120	3	24	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	78		50 - 150

Eurofins FGS, Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Maintenance and Fueling Facility

Job ID: 580-104179-1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup (Continued)

Lab Sample ID: MB 580-361551/1-B
Matrix: Water
Analysis Batch: 361556

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 361551

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		07/10/21 16:02	07/11/21 00:00	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		07/10/21 16:02	07/11/21 00:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	75		50 - 150	07/10/21 16:02	07/11/21 00:00	1

Lab Sample ID: LCS 580-361551/2-B
Matrix: Water
Analysis Batch: 361556

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 361551

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
#2 Diesel (C10-C24)	0.500	0.420		mg/L		84	50 - 120
Motor Oil (>C24-C36)	0.500	0.523		mg/L		105	64 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	94		50 - 150

Lab Sample ID: LCSD 580-361551/3-B
Matrix: Water
Analysis Batch: 361556

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 361551

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	0.500	0.432		mg/L		86	50 - 120	3	26
Motor Oil (>C24-C36)	0.500	0.537		mg/L		107	64 - 120	3	24

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	94		50 - 150

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Former Maintenance and Fueling Facility

Job ID: 580-104179-1

Client Sample ID: 5-W-43-062921

Lab Sample ID: 580-104179-1

Date Collected: 06/29/21 13:10

Matrix: Water

Date Received: 07/01/21 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			361452	07/09/21 12:16	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	361513	07/09/21 22:11	T1W	FGS SEA

Client Sample ID: GW-3-062921

Lab Sample ID: 580-104179-2

Date Collected: 06/29/21 13:15

Matrix: Water

Date Received: 07/01/21 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			361452	07/09/21 12:16	JHR	FGS SEA
Total/NA	Cleanup	3630C			361959	07/14/21 16:28	RBL	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	361977	07/14/21 22:25	TL1	FGS SEA

Client Sample ID: GW-30-062921

Lab Sample ID: 580-104179-3

Date Collected: 06/29/21 13:15

Matrix: Water

Date Received: 07/01/21 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			361452	07/09/21 12:16	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	361513	07/09/21 22:51	T1W	FGS SEA

Client Sample ID: EW-1-062921

Lab Sample ID: 580-104179-4

Date Collected: 06/29/21 14:10

Matrix: Water

Date Received: 07/01/21 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			361452	07/09/21 12:16	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	361513	07/09/21 23:11	T1W	FGS SEA

Client Sample ID: 1B-W-23-062921

Lab Sample ID: 580-104179-5

Date Collected: 06/29/21 14:20

Matrix: Water

Date Received: 07/01/21 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			361452	07/09/21 12:16	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	361513	07/09/21 23:32	T1W	FGS SEA

Client Sample ID: EW-2A-063021

Lab Sample ID: 580-104179-6

Date Collected: 06/30/21 08:20

Matrix: Water

Date Received: 07/01/21 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			361452	07/09/21 12:16	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	361513	07/09/21 23:52	T1W	FGS SEA

Eurofins FGS, Seattle

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Former Maintenance and Fueling Facility

Job ID: 580-104179-1

Client Sample ID: GW-4-063021

Lab Sample ID: 580-104179-7

Date Collected: 06/30/21 09:00

Matrix: Water

Date Received: 07/01/21 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			361452	07/09/21 12:16	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	361513	07/10/21 00:12	T1W	FGS SEA

Client Sample ID: 2A-W-42-063021

Lab Sample ID: 580-104179-8

Date Collected: 06/30/21 09:50

Matrix: Water

Date Received: 07/01/21 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			361452	07/09/21 12:16	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	361513	07/10/21 00:52	T1W	FGS SEA

Client Sample ID: 2A-W-41-063021

Lab Sample ID: 580-104179-9

Date Collected: 06/30/21 10:35

Matrix: Water

Date Received: 07/01/21 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			361551	07/10/21 16:02	JBT	FGS SEA
Total/NA	Cleanup	3630C			361554	07/10/21 20:07	JBT	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	361556	07/11/21 00:59	T1W	FGS SEA

Client Sample ID: 2A-W-40-063021

Lab Sample ID: 580-104179-10

Date Collected: 06/30/21 11:40

Matrix: Water

Date Received: 07/01/21 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			361551	07/10/21 16:02	JBT	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	361556	07/11/21 03:57	T1W	FGS SEA

Client Sample ID: GW-1-063021

Lab Sample ID: 580-104179-11

Date Collected: 06/30/21 13:50

Matrix: Water

Date Received: 07/01/21 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			361551	07/10/21 16:02	JBT	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	361556	07/11/21 04:17	T1W	FGS SEA

Client Sample ID: GW-2-063021

Lab Sample ID: 580-104179-12

Date Collected: 06/30/21 12:45

Matrix: Water

Date Received: 07/01/21 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			361551	07/10/21 16:02	JBT	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	361556	07/11/21 04:37	T1W	FGS SEA

Eurofins FGS, Seattle

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Former Maintenance and Fueling Facility

Job ID: 580-104179-1

Client Sample ID: MW-555-063021

Lab Sample ID: 580-104179-13

Date Collected: 06/30/21 14:15

Matrix: Water

Date Received: 07/01/21 10:05

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Prep	3510C			361551	07/10/21 16:02	JBT	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	361556	07/11/21 04:56	T1W	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310



Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Former Maintenance and Fueling Facility

Job ID: 580-104179-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-21 *

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

* Accreditation/Certification renewal pending - accreditation/certification considered valid.


Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Former Maintenance and Fueling Facility

Job ID: 580-104179-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-104179-1	5-W-43-062921	Water	06/29/21 13:10	07/01/21 10:05	
580-104179-2	GW-3-062921	Water	06/29/21 13:15	07/01/21 10:05	
580-104179-3	GW-30-062921	Water	06/29/21 13:15	07/01/21 10:05	
580-104179-4	EW-1-062921	Water	06/29/21 14:10	07/01/21 10:05	
580-104179-5	1B-W-23-062921	Water	06/29/21 14:20	07/01/21 10:05	
580-104179-6	EW-2A-063021	Water	06/30/21 08:20	07/01/21 10:05	
580-104179-7	GW-4-063021	Water	06/30/21 09:00	07/01/21 10:05	
580-104179-8	2A-W-42-063021	Water	06/30/21 09:50	07/01/21 10:05	
580-104179-9	2A-W-41-063021	Water	06/30/21 10:35	07/01/21 10:05	
580-104179-10	2A-W-40-063021	Water	06/30/21 11:40	07/01/21 10:05	
580-104179-11	GW-1-063021	Water	06/30/21 13:50	07/01/21 10:05	
580-104179-12	GW-2-063021	Water	06/30/21 12:45	07/01/21 10:05	
580-104179-13	MW-555-063021	Water	06/30/21 14:15	07/01/21 10:05	

Chain of Custody Record

Client Information Client Contact: Amanda Meuniot Company: Farallon Consulting LLC Address: 975 5th AV NW City: Issaquah, WA 98027 State, Zip: WA 98027 Phone: 425 295 0800 Email:		Lab PM: Nathan Lewis E-Mail: nmeuniot@farallon.com State of Origin: WA									
Sample #: Emi Smith Phone: (425) 200-8138 PWSID:		Carrier Tracking No(s): State of Origin: WA									
Due Date Requested: FAT Requested (days): Standard Compliance Project: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No PO #: 425 295 0800 Purchase Order not required WO #:		Analysis Requested Barcode:  580-104179 Chain of Custody Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - Ash#02 P - Na2CO3S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)									
Project Name: BNSF Former Maintenance and Fueling Facility Site: BNSF Skykomish		Job #: 104179 Page: 1 of 1 Special Instructions/Note: Silica Gel Cleanup									
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (Wet, Sealed, Overweight, Retention, Amb)	Field Entered Sample Type or No	Therm. ID	IR9 Cor.	IR9 Unc.	Therm. ID	IR9 Cor.	IR9 Unc.
5-W-43-062921	6/29/21	1310	G	W	N	X	IR9	3.4	X	IR9	3.0
GN-3-062921		1315		W	N	X					
GN-30-062921		1315		W	N	X					
EW-1-062921		1410		W	N	X					
1B-W-23-062921		1420		W	N	X					
EW-2A-063021	6/30/21	0820		W	N	X					
GN-4-063021		0900		W	N	X					
2A-W-42-063021		0950		W	N	X					
2A-W-41-063021		1035		W	N	X					
2A-W-40-063021		1140		W	N	X					
GN-2-063021				W	N	X					
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)											
Empty Kit Relinquished by: _____ Date: _____ Relinquished by: Emi Smith Date: 6/30/21 1630 Relinquished by: _____ Date: _____ Relinquished by: _____ Date: _____ Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.: _____											
Special Instructions/QC Requirements: Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Method of Shipment: _____ Received by: Emi Smith Date/Time: 7/7/21 10.25 Company: FGS Received by: _____ Date/Time: _____ Company: _____ Received by: _____ Date/Time: _____ Company: _____ Cooler Temperature(s) °C and Other Remarks: _____											

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-104179-1

Login Number: 104179

List Source: Eurofins FGS, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	Samples -10, -11, -12 & -13 received out of temp.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	Sample GW-2-063021 is listed twice.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-104267-1
Client Project/Site: BNSF Skykomish Rush NPDES

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
7/9/2021 10:52:51 AM

Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104267-1

Job ID: 580-104267-1

Laboratory: Eurofins FGS, Seattle

Narrative

CASE NARRATIVE

Client: Farallon Consulting LLC
Project: BNSF Skykomish Rush NPDES
Report Number: 580-104267-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 07/06/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 8.4 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

DIESEL AND MOTOR OIL RANGE ORGANICS

Samples Before GAC- 070221 (580-104267-1) and HCC EFF- 070221 (580-104267-2) were analyzed for diesel and motor oil range organics in accordance with Method NWTPH-Dx. The samples were prepared and analyzed on 07/07/2021.

The following samples were received at the laboratory outside the required temperature criteria: Before GAC- 070221 (580-104267-1) and HCC EFF- 070221 (580-104267-2).

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-361152, so a LCS and LCSD were used instead.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICPMS)

Sample HCC EFF- 070221 (580-104267-2) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The samples were prepared and analyzed on 07/07/2021.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104267-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104267-1

Client Sample ID: Before GAC- 070221

Lab Sample ID: 580-104267-1

Date Collected: 07/02/21 15:15

Matrix: Water

Date Received: 07/06/21 11:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.53		0.062		mg/L		07/07/21 09:08	07/07/21 15:36	1
Motor Oil (>C24-C36)	0.33		0.092		mg/L		07/07/21 09:08	07/07/21 15:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	71		50 - 150				07/07/21 09:08	07/07/21 15:36	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104267-1

Client Sample ID: HCC EFF- 070221

Lab Sample ID: 580-104267-2

Date Collected: 07/02/21 15:25

Matrix: Water

Date Received: 07/06/21 11:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		07/07/21 09:08	07/07/21 15:56	1
Motor Oil (>C24-C36)	ND		0.092		mg/L		07/07/21 09:08	07/07/21 15:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	65		50 - 150				07/07/21 09:08	07/07/21 15:56	1

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0010		mg/L		07/07/21 08:34	07/07/21 16:14	1
Lead	ND		0.00040		mg/L		07/07/21 08:34	07/07/21 16:14	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104267-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-361152/1-A
Matrix: Water
Analysis Batch: 361198

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 361152

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.065		mg/L		07/07/21 09:08	07/07/21 14:35	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		07/07/21 09:08	07/07/21 14:35	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	72		50 - 150				07/07/21 09:08	07/07/21 14:35	1

Lab Sample ID: LCS 580-361152/2-A
Matrix: Water
Analysis Batch: 361198

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 361152

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
#2 Diesel (C10-C24)	0.500	0.400		mg/L		80	50 - 120	
Motor Oil (>C24-C36)	0.500	0.438		mg/L		88	64 - 120	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
o-Terphenyl	86		50 - 150					

Lab Sample ID: LCSD 580-361152/3-A
Matrix: Water
Analysis Batch: 361198

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 361152

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	0.500	0.380		mg/L		76	50 - 120	5	26
Motor Oil (>C24-C36)	0.500	0.419		mg/L		84	64 - 120	4	24
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
o-Terphenyl	81		50 - 150						

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 580-361145/14-A
Matrix: Water
Analysis Batch: 361261

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 361145

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0010		mg/L		07/07/21 08:34	07/07/21 16:11	1
Lead	ND		0.00040		mg/L		07/07/21 08:34	07/07/21 16:11	1

Lab Sample ID: LCS 580-361145/15-A
Matrix: Water
Analysis Batch: 361261

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 361145

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
Arsenic	1.00	0.991		mg/L		99	85 - 115	
Lead	1.00	0.981		mg/L		98	85 - 115	

Eurofins FGS, Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104267-1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 580-361145/16-A
Matrix: Water
Analysis Batch: 361261

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 361145

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD
							Limits	RPD	
Arsenic	1.00	0.986		mg/L		99	85 - 115	1	20
Lead	1.00	0.983		mg/L		98	85 - 115	0	20

Lab Sample ID: 580-104267-2 MS
Matrix: Water
Analysis Batch: 361261

Client Sample ID: HCC EFF- 070221
Prep Type: Total/NA
Prep Batch: 361145

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.	
									Limits	RPD
Arsenic	ND		1.00	1.02		mg/L		102	70 - 130	
Lead	ND		1.00	1.01		mg/L		101	70 - 130	

Lab Sample ID: 580-104267-2 MSD
Matrix: Water
Analysis Batch: 361261

Client Sample ID: HCC EFF- 070221
Prep Type: Total/NA
Prep Batch: 361145

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.	
									Limits	RPD
Arsenic	ND		1.00	1.03		mg/L		103	70 - 130	1
Lead	ND		1.00	1.01		mg/L		101	70 - 130	1

Lab Sample ID: 580-104267-2 DU
Matrix: Water
Analysis Batch: 361261

Client Sample ID: HCC EFF- 070221
Prep Type: Total/NA
Prep Batch: 361145

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD	
								Limit	Limit
Arsenic	ND		ND		mg/L		NC		20
Lead	ND		ND		mg/L		NC		20

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104267-1

Client Sample ID: Before GAC- 070221

Lab Sample ID: 580-104267-1

Date Collected: 07/02/21 15:15

Matrix: Water

Date Received: 07/06/21 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			361152	07/07/21 09:08	N1B	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	361198	07/07/21 15:36	T1W	FGS SEA

Client Sample ID: HCC EFF- 070221

Lab Sample ID: 580-104267-2

Date Collected: 07/02/21 15:25

Matrix: Water

Date Received: 07/06/21 11:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			361152	07/07/21 09:08	N1B	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	361198	07/07/21 15:56	T1W	FGS SEA
Total/NA	Prep	200.8			361145	07/07/21 08:34	C1K	FGS SEA
Total/NA	Analysis	200.8		1	361261	07/07/21 16:14	FCW	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104267-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-21

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Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104267-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-104267-1	Before GAC- 070221	Water	07/02/21 15:15	07/06/21 11:50	
580-104267-2	HCC EFF- 070221	Water	07/02/21 15:25	07/06/21 11:50	

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- 3
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- 9
- 10
- 11

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-104267-1

Login Number: 104267

List Source: Eurofins FGS, Seattle

List Number: 1

Creator: Greene, Ashton R

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	Cooler temperature outside required temperature criteria.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	No Name
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-104830-1

Client Project/Site: BNSF Skykomish Rush NPDES
Sampling Event: Skykomish - GAC/HCC

For:

Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
8/6/2021 3:22:23 PM

Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104830-1

Job ID: 580-104830-1

Laboratory: Eurofins FGS, Seattle

Narrative

CASE NARRATIVE

Client: Farallon Consulting LLC
Project: BNSF Skykomish Rush NPDES
Report Number: 580-104830-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 07/29/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.1 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

DIESEL AND MOTOR OIL RANGE ORGANICS

Samples Before GAC-72821 (580-104830-1) and HCC EFF-72821 (580-104830-2) were analyzed for diesel and motor oil range organics in accordance with Method NWTPH-Dx. The samples were prepared and analyzed on 08/03/2021.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-363839, so an LCS and LCSD were used instead.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104830-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104830-1

Client Sample ID: Before GAC-72821

Lab Sample ID: 580-104830-1

Date Collected: 07/28/21 09:00

Matrix: Water

Date Received: 07/29/21 10:27

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.42		0.062		mg/L		08/03/21 10:04	08/03/21 21:24	1
Motor Oil (>C24-C36)	0.27		0.092		mg/L		08/03/21 10:04	08/03/21 21:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	56		50 - 150				08/03/21 10:04	08/03/21 21:24	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104830-1

Client Sample ID: HCC EFF-72821

Lab Sample ID: 580-104830-2

Date Collected: 07/28/21 09:00

Matrix: Water

Date Received: 07/29/21 10:27

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		08/03/21 10:04	08/03/21 21:44	1
Motor Oil (>C24-C36)	ND		0.091		mg/L		08/03/21 10:04	08/03/21 21:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	78		50 - 150				08/03/21 10:04	08/03/21 21:44	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104830-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-363839/1-A
Matrix: Water
Analysis Batch: 363939

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 363839

Analyte	MB MB		RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac
	Result	Qualifier									
#2 Diesel (C10-C24)	ND		0.065		mg/L		08/03/21 10:04	08/03/21 20:24			1
Motor Oil (>C24-C36)	ND		0.096		mg/L		08/03/21 10:04	08/03/21 20:24			1
		MB MB	Limits			D	Prepared		Analyzed		Dil Fac
Surrogate	%Recovery	Qualifier									
o-Terphenyl	67		50 - 150				08/03/21 10:04	08/03/21 20:24			1

Lab Sample ID: LCS 580-363839/2-A
Matrix: Water
Analysis Batch: 363939

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 363839

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
#2 Diesel (C10-C24)	0.500	0.341		mg/L		68	50 - 120	
Motor Oil (>C24-C36)	0.500	0.450		mg/L		90	64 - 120	
		LCS LCS	Limits			D	%Rec. Limits	
Surrogate	%Recovery	Qualifier						
o-Terphenyl	80		50 - 150					

Lab Sample ID: LCSD 580-363839/3-A
Matrix: Water
Analysis Batch: 363939

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 363839

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	
									RPD	Limit
#2 Diesel (C10-C24)	0.500	0.357		mg/L		71	50 - 120	4	26	
Motor Oil (>C24-C36)	0.500	0.425		mg/L		85	64 - 120	6	24	
		LCSD LCSD	Limits			D	%Rec. Limits		RPD	
Surrogate	%Recovery	Qualifier								
o-Terphenyl	71		50 - 150							

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104830-1

Client Sample ID: Before GAC-72821

Lab Sample ID: 580-104830-1

Date Collected: 07/28/21 09:00

Matrix: Water

Date Received: 07/29/21 10:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			363839	08/03/21 10:04	BJM	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	363939	08/03/21 21:24	TL1	FGS SEA

Client Sample ID: HCC EFF-72821

Lab Sample ID: 580-104830-2

Date Collected: 07/28/21 09:00

Matrix: Water

Date Received: 07/29/21 10:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			363839	08/03/21 10:04	BJM	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	363939	08/03/21 21:44	TL1	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104830-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-22

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Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104830-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-104830-1	Before GAC-72821	Water	07/28/21 09:00	07/29/21 10:27
580-104830-2	HCC EFF-72821	Water	07/28/21 09:00	07/29/21 10:27

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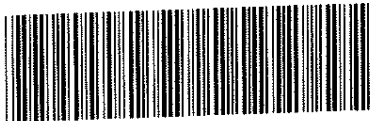
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580-104830 Chain of Custody

Chain of Custody Record



THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: DW NPDES RCRA Other:

Client Contact		Project Manager: Amanda Meugniot				Site Contact: Matt Bowser		Date: 7-28-21		COC No:			
Farallong Consulting		Tel/Fax: 425-295-0800				Lab Contact: Nathan Lewis		Carrier:		1 of 2 COCs			
975 5th Avenue Northwest		Analysis Turnaround Time				Filtered Sample (Y/N)		Perform MS/MSD (Y/N)		NWTPH-Dx w/o silica gel cleanup		Sampler: TW	
Issaquah, Washington		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS										For Lab Use Only:	
(425) 295-0800 Phone		TAT if different from Below 3 Day										Walk-in Client:	
(425) 295-0850 FAX		<input type="checkbox"/> 2 weeks										Lab Sampling:	
Project Name: Skykomish HCC System		<input type="checkbox"/> 1 week								Job / SDG No.:			
Site:		<input type="checkbox"/> 2 days											
WO # TT0100-S03		<input type="checkbox"/> 1 day											
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.						Sample Specific Notes:	
Before GAC- 72821		7/28/21	9:00	Grab	W	2						***See instructions below	
HCC EFF- 72821		7/28/21	9:00	Grab	W	2						***See instructions below	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other							2	1					
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.							Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)						
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown							<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months						
Special Instructions/QC Requirements & Comments: 1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica gel cleanup needed for Dx													
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:				Cooler Temp. (°C): Obs'd:		Corr'd:		Therm ID No.:			
Relinquished by: <i>[Signature]</i>		Company: <i>Glacier</i>		Date/Time: <i>7/28/21 11:32</i>		Received by: <i>[Signature]</i>		Company: <i>EMC</i>		Date/Time: <i>7/28/21 11:32</i>			
Relinquished by:		Company:		Date/Time:		Received by: <i>[Signature]</i>		Company: <i>EPB</i>		Date/Time: <i>7/28/21 10:27</i>			
Relinquished by:		Company:		Date/Time:		Received in Laboratory by:		Company:		Date/Time:			

Therm. ID: AQ Cor: 1.1 ° Unc: 1.4 °
Cooler Desc: LAB FedEx: _____
Packing: BUB UPS: _____
Cust. Seal: Yes ___ No X Lab Cour: X
Blue Ice: Wet Dry, None Other: _____



Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-104830-1

Login Number: 104830

List Source: Eurofins FGS, Seattle

List Number: 1

Creator: Greene, Ashton R

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-104303-1

Client Project/Site: BNSF Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
7/12/2021 3:28:00 PM

Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

LINKS

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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish HCC System

Job ID: 580-104303-1

Job ID: 580-104303-1

Laboratory: Eurofins FGS, Seattle

Narrative

CASE NARRATIVE

Client: Farallon Consulting LLC
Project: BNSF Skykomish HCC System
Report Number: 580-104303-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 07/07/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.6 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

DIESEL AND MOTOR OIL RANGE ORGANICS

Samples Before GAC- 7721 (580-104303-1) and HCC EFF- 7721 (580-104303-2) were analyzed for diesel and motor oil range organics in accordance with Method NWTPH-Dx. The samples were prepared on 07/10/2021 and analyzed on 07/11/2021.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-361551, so a LCS and LCSD were used instead.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish HCC System

Job ID: 580-104303-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish HCC System

Job ID: 580-104303-1

Client Sample ID: Before GAC- 7721

Lab Sample ID: 580-104303-1

Date Collected: 07/07/21 08:15

Matrix: Water

Date Received: 07/07/21 12:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.40		0.062		mg/L		07/10/21 16:02	07/11/21 02:38	1
Motor Oil (>C24-C36)	0.24		0.092		mg/L		07/10/21 16:02	07/11/21 02:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	84		50 - 150				07/10/21 16:02	07/11/21 02:38	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish HCC System

Job ID: 580-104303-1

Client Sample ID: HCC EFF- 7721

Lab Sample ID: 580-104303-2

Date Collected: 07/07/21 08:15

Matrix: Water

Date Received: 07/07/21 12:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		07/10/21 16:02	07/11/21 03:18	1
Motor Oil (>C24-C36)	ND		0.092		mg/L		07/10/21 16:02	07/11/21 03:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	65		50 - 150				07/10/21 16:02	07/11/21 03:18	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish HCC System

Job ID: 580-104303-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-361551/1-A
Matrix: Water
Analysis Batch: 361556

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 361551

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065		mg/L		07/10/21 16:02	07/11/21 01:19	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		07/10/21 16:02	07/11/21 01:19	1
		MB MB	Limits			Prepared	Analyzed	Dil Fac	
Surrogate	%Recovery	Qualifier							
o-Terphenyl	74		50 - 150			07/10/21 16:02	07/11/21 01:19	1	

Lab Sample ID: LCS 580-361551/2-A
Matrix: Water
Analysis Batch: 361556

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 361551

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
								%Rec.
#2 Diesel (C10-C24)	0.500	0.423		mg/L		85	50 - 120	
Motor Oil (>C24-C36)	0.500	0.506		mg/L		101	64 - 120	
		LCS LCS	Limits			Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier						
o-Terphenyl	94		50 - 150			07/10/21 16:02	07/11/21 01:19	1

Lab Sample ID: LCSD 580-361551/3-A
Matrix: Water
Analysis Batch: 361556

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 361551

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	0.500	0.416		mg/L		83	50 - 120	2	26
Motor Oil (>C24-C36)	0.500	0.492		mg/L		98	64 - 120	3	24
		LCSD LCSD	Limits			Prepared	Analyzed	Dil Fac	
Surrogate	%Recovery	Qualifier							
o-Terphenyl	92		50 - 150			07/10/21 16:02	07/11/21 01:19	1	

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish HCC System

Job ID: 580-104303-1

Client Sample ID: Before GAC- 7721

Lab Sample ID: 580-104303-1

Date Collected: 07/07/21 08:15

Matrix: Water

Date Received: 07/07/21 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			361551	07/10/21 16:02	JBT	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	361556	07/11/21 02:38	T1W	FGS SEA

Client Sample ID: HCC EFF- 7721

Lab Sample ID: 580-104303-2

Date Collected: 07/07/21 08:15

Matrix: Water

Date Received: 07/07/21 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			361551	07/10/21 16:02	JBT	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	361556	07/11/21 03:18	T1W	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish HCC System

Job ID: 580-104303-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-21

- 1
- 2
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Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish HCC System

Job ID: 580-104303-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-104303-1	Before GAC- 7721	Water	07/07/21 08:15	07/07/21 12:15	
580-104303-2	HCC EFF- 7721	Water	07/07/21 08:15	07/07/21 12:15	

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Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-104303-1

Login Number: 104303

List Number: 1

Creator: Vallelunga, Diana L

List Source: Eurofins FGS, Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

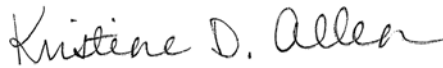
Laboratory Job ID: 580-104475-1

Client Project/Site: BNSF Skykomish Rush NPDES

For:

Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
7/20/2021 6:01:29 PM

Kristine Allen, Client Service Manager
(253)248-4970

Kristine.Allen@Eurofinset.com

Designee for

Nathan Lewis, Project Manager I
(253)922-2310

Nathan.Lewis@Eurofinset.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104475-1

Job ID: 580-104475-1

Laboratory: Eurofins FGS, Seattle

Narrative

**Job Narrative
580-104475-1**

Comments

No additional comments.

Receipt

The samples were received on 7/14/2021 11:15 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.6° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-362447, so a LCS and LCSD were used instead.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.



Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104475-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104475-1

Client Sample ID: Before GAC-071321

Lab Sample ID: 580-104475-1

Date Collected: 07/13/21 11:25

Matrix: Water

Date Received: 07/14/21 11:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.34		0.062		mg/L		07/20/21 09:46	07/20/21 13:26	1
Motor Oil (>C24-C36)	0.30		0.092		mg/L		07/20/21 09:46	07/20/21 13:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	72		50 - 150				07/20/21 09:46	07/20/21 13:26	1

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Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104475-1

Client Sample ID: HCC EFF-071321

Lab Sample ID: 580-104475-2

Date Collected: 07/13/21 11:35

Matrix: Water

Date Received: 07/14/21 11:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.063		mg/L		07/20/21 09:46	07/20/21 13:46	1
Motor Oil (>C24-C36)	ND		0.092		mg/L		07/20/21 09:46	07/20/21 13:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	65		50 - 150				07/20/21 09:46	07/20/21 13:46	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104475-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-362447/1-A

Matrix: Water

Analysis Batch: 362487

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 362447

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065		mg/L		07/20/21 09:46	07/20/21 12:27	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		07/20/21 09:46	07/20/21 12:27	1
Surrogate	MB	MB	Limits			Prepared	Analyzed	Dil Fac	
	%Recovery	Qualifier							
<i>o</i> -Terphenyl	61		50 - 150			07/20/21 09:46	07/20/21 12:27	1	

Lab Sample ID: LCS 580-362447/2-A

Matrix: Water

Analysis Batch: 362487

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 362447

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
#2 Diesel (C10-C24)	0.500	0.307		mg/L		61	50 - 120
Motor Oil (>C24-C36)	0.500	0.343		mg/L		69	64 - 120
Surrogate	LCS	LCS	Limits			%Rec	
	%Recovery	Qualifier					
<i>o</i> -Terphenyl	63		50 - 150				

Lab Sample ID: LCSD 580-362447/3-A

Matrix: Water

Analysis Batch: 362487

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 362447

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec. Limits	RPD	
		Result	Qualifier					RPD	Limit
#2 Diesel (C10-C24)	0.500	0.311		mg/L		62	50 - 120	1	26
Motor Oil (>C24-C36)	0.500	0.370		mg/L		74	64 - 120	8	24
Surrogate	LCSD	LCSD	Limits			%Rec			
	%Recovery	Qualifier							
<i>o</i> -Terphenyl	60		50 - 150						

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104475-1

Client Sample ID: Before GAC-071321

Lab Sample ID: 580-104475-1

Date Collected: 07/13/21 11:25

Matrix: Water

Date Received: 07/14/21 11:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			362447	07/20/21 09:46	N1B	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	362487	07/20/21 13:26	ADB	FGS SEA

Client Sample ID: HCC EFF-071321

Lab Sample ID: 580-104475-2

Date Collected: 07/13/21 11:35

Matrix: Water

Date Received: 07/14/21 11:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			362447	07/20/21 09:46	N1B	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	362487	07/20/21 13:46	ADB	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104475-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-21 *



* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104475-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-104475-1	Before GAC-071321	Water	07/13/21 11:25	07/14/21 11:15	
580-104475-2	HCC EFF-071321	Water	07/13/21 11:35	07/14/21 11:15	

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TestAmerica Seattle

5755 8th Street East

Tacoma, WA 98424-1317
phone 253.922.2310 fax 253.922.5047

Chain of Custody Record

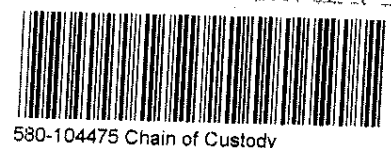


THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: DW NPDES RCRA Other:

Client Contact		Project Manager: Pete Kingston			Site Contact: Matt Bowser			Date:			COC No:		
Farallong Consulting		Tel/Fax: 425-394-4146			Lab Contact: Kristine Allen			Carrier:			1 of 2 COCs		
975 5th Avenue Northwest		Analysis Turnaround Time			Filtered Sample (Y/N) Perform MS / MSD (Y/N) NWT/PH-Dx w/o silica gel cleanup						Sampler: For Lab Use Only: Walk-in Client: Lab Sampling: Job / SDG No.: Sample Specific Notes:		
Issaquah, Washington		<input type="checkbox"/> CALENDAR DAYS <input checked="" type="checkbox"/> WORKING DAYS TAT if different from Below <u>3 DAY</u>											
(425) 295-0800 Phone		<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day											
(425) 295-0850 FAX													
Project Name: Skykomish HCC System		Site:											
WO # TT0100-S03													
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.							
Before GAC- 071321		7/13/21	1125	Grab	W	2	X				***See instructions below		
HCC EFF- 071321		7/13/21	1135	Grab	W	2	X				***See instructions below		
Therm. ID: A1 Cor: 0.6° Unc: 0.3°													
Cooler Dsc: LABI													
Packing: Bub													
Cust. Seal: Yes No X													
Blue Ice, Wet Dry, None													
FedEx:													
UPS:													
Lab Cour: X													
Other:													
Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4= HNO3, 5= NaOH, 6= Other							2						
Possible Hazard Identification:							Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)						
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.							<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months						
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown													
Special Instructions/QC Requirements & Comments: 1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica gel cleanup needed for Dx													
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:			Cooler Temp. (°C): Obs'd: _____			Corr'd: _____			Therm ID No.: _____		
Relinquished by: <i>[Signature]</i>		Company: Farallon		Date/Time: 7/13/21 1510		Received by: <i>[Signature]</i>		Company: EMLAL		Date/Time: 7/13/21 3:10p			
Relinquished by:		Company:		Date/Time:		Received by: <i>[Signature]</i>		Company: EFGS		Date/Time: 7/14/21 11:15			
Relinquished by:		Company:		Date/Time:		Received in Laboratory by:		Company:		Date/Time:			



Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-104475-1

Login Number: 104475

List Source: Eurofins FGS, Seattle

List Number: 1

Creator: Greene, Ashton R

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	No Name
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-104667-1

Client Project/Site: BNSF Skykomish Rush NPDES
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
7/29/2021 5:13:55 PM

Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

LINKS

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results through
TotalAccess

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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Sample Summary	10
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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104667-1

Job ID: 580-104667-1

Laboratory: Eurofins FGS, Seattle

Narrative

CASE NARRATIVE
Client: Farallon Consulting LLC
Project: BNSF Skykomish Rush NPDES
Report Number: 580-104667-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 07/22/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.0 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

DIESEL AND MOTOR OIL RANGE ORGANICS

Samples Before GAC-072121 (580-104667-1) and HCC EFF-072121 (580-104667-2) were analyzed for diesel and motor oil range organics in accordance with Method NWTPH-Dx. The samples were prepared on 07/23/2021 and analyzed on 07/24/2021 and 07/26/2021.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104667-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104667-1

Client Sample ID: Before GAC-072121

Lab Sample ID: 580-104667-1

Date Collected: 07/21/21 11:10

Matrix: Water

Date Received: 07/22/21 11:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.47		0.062		mg/L		07/23/21 10:02	07/26/21 16:46	1
Motor Oil (>C24-C36)	0.45		0.092		mg/L		07/23/21 10:02	07/26/21 16:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	68		50 - 150				07/23/21 10:02	07/26/21 16:46	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104667-1

Client Sample ID: HCC EFF-072121

Lab Sample ID: 580-104667-2

Date Collected: 07/21/21 11:20

Matrix: Water

Date Received: 07/22/21 11:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		07/23/21 10:02	07/24/21 18:09	1
Motor Oil (>C24-C36)	ND		0.092		mg/L		07/23/21 10:02	07/24/21 18:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	72		50 - 150				07/23/21 10:02	07/24/21 18:09	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104667-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-362834/1-A

Matrix: Water

Analysis Batch: 362940

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 362834

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065		mg/L		07/23/21 10:02	07/24/21 15:43	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		07/23/21 10:02	07/24/21 15:43	1
Surrogate	MB	MB	Limits			Prepared	Analyzed	Dil Fac	
%Recovery	Qualifier								
o-Terphenyl	67		50 - 150			07/23/21 10:02	07/24/21 15:43	1	

Lab Sample ID: LCS 580-362834/2-A

Matrix: Water

Analysis Batch: 362940

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 362834

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
#2 Diesel (C10-C24)	0.500	0.460		mg/L		92	50 - 120
Motor Oil (>C24-C36)	0.500	0.505		mg/L		101	64 - 120
Surrogate	LCS	LCS	Limits			%Rec	
%Recovery	Qualifier						
o-Terphenyl	87		50 - 150				

Lab Sample ID: LCSD 580-362834/3-A

Matrix: Water

Analysis Batch: 362940

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 362834

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec. Limits	RPD	
		Result	Qualifier					RPD	Limit
#2 Diesel (C10-C24)	0.500	0.462		mg/L		92	50 - 120	1	26
Motor Oil (>C24-C36)	0.500	0.494		mg/L		99	64 - 120	2	24
Surrogate	LCSD	LCSD	Limits			%Rec			
%Recovery	Qualifier								
o-Terphenyl	93		50 - 150						

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104667-1

Client Sample ID: Before GAC-072121

Lab Sample ID: 580-104667-1

Date Collected: 07/21/21 11:10

Matrix: Water

Date Received: 07/22/21 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			362834	07/23/21 10:02	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	362970	07/26/21 16:46	RJL	FGS SEA

Client Sample ID: HCC EFF-072121

Lab Sample ID: 580-104667-2

Date Collected: 07/21/21 11:20

Matrix: Water

Date Received: 07/22/21 11:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			362834	07/23/21 10:02	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	362940	07/24/21 18:09	T1W	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104667-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-22

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-104667-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-104667-1	Before GAC-072121	Water	07/21/21 11:10	07/22/21 11:25
580-104667-2	HCC EFF-072121	Water	07/21/21 11:20	07/22/21 11:25

1

2

3

4

5

6

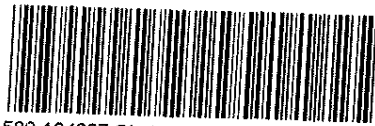
7

8

9

10

11



580-104667 Chain of Custody

Chain of Custody Record

TestAmerica Laboratories, Inc.

DW NPDES RCRA Other:

Client Contact		Project Manager: Amanda Meugniot		Site Contact: Matt Bowser		Date: 7/21/21		COC No:	
Farallong Consulting		Tel/Fax: 425-295-0800		Lab Contact: Nathan Lewis		Carrier:		1 of 2 COCs	
975 5th Avenue Northwest		Analysis Turnaround Time		Filtered Sample (Y/N) Perform MS / MSD (Y/N) NWT/PH-Dx w/o silica get cleanup				Sampler:	
Issaquah, Washington		<input type="checkbox"/> CALENDAR DAYS <input checked="" type="checkbox"/> WORKING DAYS TAT if different from Below <u>3 DAY</u>						For Lab Use Only:	
(425) 295-0800 Phone		<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day						Walk-in Client:	
(425) 295-0850 FAX								Lab Sampling:	
Project Name: Skykomish HCC System								Job / SDG No.:	
Site:									
WO # TT0100-S03									
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.			Sample Specific Notes:
Before GAC- 072121		7/21/21	1110	Grab	W	2	X		***See instructions below
HCC EFF- 072121		7/21/21	1120	Grab	W	2	X		***See instructions below
Therm. ID: IR9 Cor: 3.0° Unc: 3.0°									
Cooler Dsc: Lab									
Packing: Bub		FedEx:							
Cust. Seal: Yes No X		UPS:							
Blue Ice, Wet Dry, None		Lab Cour: X							
Other:									
Preservation Used: 1= ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other							2	1	
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown					<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months				
Special Instructions/QC Requirements & Comments: 1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica get cleanup needed for Dx									
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd:		Corr'd:		Therm ID No.:	
Relinquished by: <u>Matt Bowser</u>		Company: <u>Farallon</u>		Date/Time: <u>7/21/21 13:10</u>		Received by: <u>[Signature]</u>		Company: <u>ELLab</u>	
Relinquished by:		Company:		Date/Time:		Received by: <u>[Signature]</u>		Company: <u>EPGs</u>	
Relinquished by:		Company:		Date/Time:		Received in Laboratory by:		Company: <u>EPGs</u>	

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-104667-1

Login Number: 104667

List Source: Eurofins FGS, Seattle

List Number: 1

Creator: Vallelunga, Diana L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-105013-1

Client Project/Site: BNSF Skykomish Rush NPDES
Sampling Event: Skykomish - GAC/HCC

For:

Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
8/16/2021 3:34:54 PM

Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

LINKS

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results through
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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105013-1

Job ID: 580-105013-1

Laboratory: Eurofins FGS, Seattle

Narrative

CASE NARRATIVE

Client: Farallon Consulting LLC
Project: BNSF Skykomish Rush NPDES
Report Number: 580-105013-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 08/05/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was -2.3 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

DIESEL AND MOTOR OIL RANGE ORGANICS

Samples Before GAC-8521 (580-105013-1) and HCC EFF-8521 (580-105013-2) were analyzed for diesel and motor oil range organics in accordance with Method NWTPH-Dx. The samples were prepared on 08/11/2021 and analyzed on 08/13/2021.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-364788, so an LCS and LCSD were used instead.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105013-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105013-1

Client Sample ID: Before GAC-8521
Date Collected: 08/05/21 08:30
Date Received: 08/05/21 11:05

Lab Sample ID: 580-105013-1
Matrix: Water

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.10		0.062		mg/L		08/11/21 17:04	08/13/21 12:25	1
Motor Oil (>C24-C36)	ND		0.091		mg/L		08/11/21 17:04	08/13/21 12:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	77		50 - 150				08/11/21 17:04	08/13/21 12:25	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105013-1

Client Sample ID: HCC EFF-8521

Lab Sample ID: 580-105013-2

Date Collected: 08/05/21 08:30

Matrix: Water

Date Received: 08/05/21 11:05

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		08/11/21 17:04	08/13/21 13:26	1
Motor Oil (>C24-C36)	ND		0.091		mg/L		08/11/21 17:04	08/13/21 13:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	76		50 - 150				08/11/21 17:04	08/13/21 13:26	1



QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105013-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-364788/1-A
Matrix: Water
Analysis Batch: 364934

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 364788

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065		mg/L		08/11/21 17:04	08/13/21 11:45	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		08/11/21 17:04	08/13/21 11:45	1
		MB MB	Limits			Prepared	Analyzed	Dil Fac	
Surrogate	%Recovery	Qualifier							
o-Terphenyl	76		50 - 150			08/11/21 17:04	08/13/21 11:45	1	

Lab Sample ID: LCS 580-364788/2-A
Matrix: Water
Analysis Batch: 364934

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 364788
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Motor Oil (>C24-C36)	0.500	0.457		mg/L		91	64 - 120
		LCS LCS	Limits			%Rec	
Surrogate	%Recovery	Qualifier					
o-Terphenyl	85		50 - 150				

Lab Sample ID: LCSD 580-364788/3-A
Matrix: Water
Analysis Batch: 365047

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 364788
%Rec.

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	
								RPD	Limit
#2 Diesel (C10-C24)	0.500	0.327		mg/L		65	50 - 120	18	26
Motor Oil (>C24-C36)	0.500	0.389		mg/L		78	64 - 120	16	24
		LCSD LCSD	Limits			%Rec			
Surrogate	%Recovery	Qualifier							
o-Terphenyl	65		50 - 150						

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105013-1

Client Sample ID: Before GAC-8521
Date Collected: 08/05/21 08:30
Date Received: 08/05/21 11:05

Lab Sample ID: 580-105013-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			364788	08/11/21 17:04	BJM	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	364934	08/13/21 12:25	ADB	FGS SEA

Client Sample ID: HCC EFF-8521
Date Collected: 08/05/21 08:30
Date Received: 08/05/21 11:05

Lab Sample ID: 580-105013-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			364788	08/11/21 17:04	BJM	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	364934	08/13/21 13:26	ADB	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310



Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105013-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-22

1

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11

Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105013-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-105013-1	Before GAC-8521	Water	08/05/21 08:30	08/05/21 11:05
580-105013-2	HCC EFF-8521	Water	08/05/21 08:30	08/05/21 11:05

1

2

3

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11

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-105013-1

Login Number: 105013

List Source: Eurofins FGS, Seattle

List Number: 1

Creator: Greene, Ashton R

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-105171-1

Client Project/Site: BNSF Skykomish Rush NPDES
Sampling Event: Skykomish - GAC/HCC

For:

Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
8/24/2021 2:52:08 PM
Pauline Matlock, Project Manager
(253)922-2310
pauline.matlock@eurofinset.com

Designee for
Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105171-1

Job ID: 580-105171-1

Laboratory: Eurofins FGS, Seattle

Narrative

**Job Narrative
580-105171-1**

Comments

No additional comments.

Receipt

The samples were received on 8/12/2021 12:05 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.0° C.

GC Semi VOA

Method NWTPH-Dx: The following samples contained a hydrocarbon pattern in the diesel range; however, the elution pattern was #2 Diesel (C10-C24) later than the typical diesel fuel pattern used by the laboratory for quantitative purposes. Also Motor Oil (>C24-C36) was earlier than the typical diesel fuel pattern used by the laboratory for quantitative purposes: Before GAC-81121 (580-105171-1) and HCC EFF-81121 (580-105171-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105171-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105171-1

Client Sample ID: Before GAC-81121

Lab Sample ID: 580-105171-1

Date Collected: 08/11/21 13:20

Matrix: Water

Date Received: 08/12/21 12:05

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.37		0.062		mg/L		08/18/21 11:58	08/20/21 18:30	1
Motor Oil (>C24-C36)	0.29		0.092		mg/L		08/18/21 11:58	08/20/21 18:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	79		50 - 150				08/18/21 11:58	08/20/21 18:30	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105171-1

Client Sample ID: HCC EFF-81121

Lab Sample ID: 580-105171-2

Date Collected: 08/11/21 13:30

Matrix: Water

Date Received: 08/12/21 12:05

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		08/18/21 11:58	08/20/21 18:50	1
Motor Oil (>C24-C36)	ND		0.092		mg/L		08/18/21 11:58	08/20/21 18:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	73		50 - 150				08/18/21 11:58	08/20/21 18:50	1

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0015		0.0010		mg/L		08/12/21 18:26	08/13/21 14:19	1
Lead	ND		0.00040		mg/L		08/12/21 18:26	08/13/21 14:19	1



QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105171-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-365428/1-A
Matrix: Water
Analysis Batch: 365684

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 365428

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.065		mg/L		08/18/21 11:58	08/20/21 17:31	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		08/18/21 11:58	08/20/21 17:31	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	84		50 - 150				08/18/21 11:58	08/20/21 17:31	1

Lab Sample ID: LCS 580-365428/2-A
Matrix: Water
Analysis Batch: 365684

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 365428

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
#2 Diesel (C10-C24)	0.500	0.440		mg/L		88	50 - 120	
Motor Oil (>C24-C36)	0.500	0.517		mg/L		103	64 - 120	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
o-Terphenyl	92		50 - 150					

Lab Sample ID: LCSD 580-365428/3-A
Matrix: Water
Analysis Batch: 365684

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 365428

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	0.500	0.421		mg/L		84	50 - 120	4	26
Motor Oil (>C24-C36)	0.500	0.465		mg/L		93	64 - 120	11	24
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
o-Terphenyl	83		50 - 150						

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 580-364915/14-A
Matrix: Water
Analysis Batch: 365143

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 364915

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0010		mg/L		08/12/21 18:26	08/13/21 14:12	1
Lead	ND		0.00040		mg/L		08/12/21 18:26	08/13/21 14:12	1

Lab Sample ID: LCS 580-364915/15-A
Matrix: Water
Analysis Batch: 365143

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 364915

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
Arsenic	1.00	0.982		mg/L		98	85 - 115	
Lead	1.00	0.969		mg/L		97	85 - 115	

Eurofins FGS, Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105171-1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 580-364915/16-A
Matrix: Water
Analysis Batch: 365143

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 364915

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD
							Limits	RPD	
Arsenic	1.00	0.980		mg/L		98	85 - 115	0	20
Lead	1.00	0.965		mg/L		96	85 - 115	0	20

Lab Sample ID: 580-105171-2 MS
Matrix: Water
Analysis Batch: 365143

Client Sample ID: HCC EFF-81121
Prep Type: Total/NA
Prep Batch: 364915

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.	
									Limits	RPD
Arsenic	0.0015		1.00	1.04		mg/L		103	70 - 130	
Lead	ND		1.00	1.00		mg/L		100	70 - 130	

Lab Sample ID: 580-105171-2 MSD
Matrix: Water
Analysis Batch: 365143

Client Sample ID: HCC EFF-81121
Prep Type: Total/NA
Prep Batch: 364915

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.	
									Limits	RPD
Arsenic	0.0015		1.00	1.04		mg/L		104	70 - 130	0
Lead	ND		1.00	1.02		mg/L		102	70 - 130	1

Lab Sample ID: 580-105171-2 DU
Matrix: Water
Analysis Batch: 365143

Client Sample ID: HCC EFF-81121
Prep Type: Total/NA
Prep Batch: 364915

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD	
								Limit	Limit
Arsenic	0.0015		0.00149		mg/L		0.8	20	
Lead	ND		ND		mg/L		NC	20	

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105171-1

Client Sample ID: Before GAC-81121

Lab Sample ID: 580-105171-1

Date Collected: 08/11/21 13:20

Matrix: Water

Date Received: 08/12/21 12:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			365428	08/18/21 11:58	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	365684	08/20/21 18:30	RJL	FGS SEA

Client Sample ID: HCC EFF-81121

Lab Sample ID: 580-105171-2

Date Collected: 08/11/21 13:30

Matrix: Water

Date Received: 08/12/21 12:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			365428	08/18/21 11:58	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	365684	08/20/21 18:50	RJL	FGS SEA
Total/NA	Prep	200.8			364915	08/12/21 18:26	TMH	FGS SEA
Total/NA	Analysis	200.8		1	365143	08/13/21 14:19	FCW	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105171-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-22

- 1
- 2
- 3
- 4
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- 9
- 10
- 11

Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105171-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-105171-1	Before GAC-81121	Water	08/11/21 13:20	08/12/21 12:05
580-105171-2	HCC EFF-81121	Water	08/11/21 13:30	08/12/21 12:05

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11



580-105171 Chain of Custody

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: DW NPDES RCRA Other:

TestAmerica Laboratories, Inc.

Client Contact: Farallog Consulting 975 5th Avenue Northwest Issaquah, Washington (425) 295-0800 Phone (425) 295-0850 FAX		Project Manager: Amanda Meugniot Tel/Fax: 425-295-0800		Site Contact: Matt Bowser		Date:		COC No:			
Project Name: Skykomish HCC System Site: WO # TT0100-S03		Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input checked="" type="checkbox"/> WORKING DAYS TAT if different from Below <u>3 DAY</u> <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Lab Contact: Nathan Lewis		Carrier:		1 of 2 COCs			
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	NWTPH-Dx w/o silica gel cleanup	Total As, Pb (EPA 200.8)	
Before GAC- 081121		8/11/21	1320	Grab	W	2		X			
HCC EFF- 081121		8/11/21	1330	Grab	W	3		X	X		
Therm. ID: <u>A2</u> Cor: <u>0.0</u> ° Unc: <u>0.3</u> °		Cooler Dsc: <u>466</u>		Packing: <u>BA</u>		Cust. Seal: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		FedEx: _____		UPS: _____	
Blue Ice: <input checked="" type="checkbox"/> Wet, <input type="checkbox"/> Dry, <input type="checkbox"/> None		Lab Cour: <u>X</u>		Other: _____							
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other							2 4 1				
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.							Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown							<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months				
Special Instructions/QC Requirements & Comments: 1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica get cleanup needed for Dx											
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____		Therm ID No.:					
Relinquished by: <u>[Signature]</u>		Company: <u>Farallon</u>		Date/Time: <u>8/11/21 15:10</u>		Received by: <u>[Signature]</u>		Company: <u>EMLab</u>		Date/Time: <u>8/11/21 10:05</u>	
Relinquished by:		Company:		Date/Time:		Received by: <u>[Signature]</u>		Company: <u>EPOS</u>		Date/Time: <u>8/10/21 10:05</u>	
Relinquished by:		Company:		Date/Time:		Received in Laboratory by:		Company:		Date/Time:	

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-105171-1

Login Number: 105171

List Number: 1

Creator: Greene, Ashton R

List Source: Eurofins FGS, Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-105235-1

Client Project/Site: BNSF Skykomish Rush NPDES
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
8/25/2021 3:45:42 PM
Pauline Matlock, Project Manager
(253)922-2310
pauline.matlock@eurofinset.com
Designee for
Nathan Lewis, Project Manager I
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Nathan.Lewis@Eurofinset.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105235-1

Job ID: 580-105235-1

Laboratory: Eurofins FGS, Seattle

Narrative

**Job Narrative
580-105235-1**

Comments

No additional comments.

Receipt

The samples were received on 8/16/2021 11:45 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was -0.2° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105235-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105235-1

Client Sample ID: Before GAC-81521

Lab Sample ID: 580-105235-1

Date Collected: 08/15/21 16:15

Matrix: Water

Date Received: 08/16/21 11:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.39		0.062		mg/L		08/23/21 10:43	08/24/21 20:55	1
Motor Oil (>C24-C36)	0.23		0.091		mg/L		08/23/21 10:43	08/24/21 20:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	88		50 - 150				08/23/21 10:43	08/24/21 20:55	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105235-1

Client Sample ID: HCC EFF-81521

Lab Sample ID: 580-105235-2

Date Collected: 08/15/21 16:15

Matrix: Water

Date Received: 08/16/21 11:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		08/23/21 10:43	08/24/21 21:15	1
Motor Oil (>C24-C36)	ND		0.092		mg/L		08/23/21 10:43	08/24/21 21:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	85		50 - 150				08/23/21 10:43	08/24/21 21:15	1



QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105235-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-365803/1-A
Matrix: Water
Analysis Batch: 365972

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 365803

Analyte	MB MB		RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac
	Result	Qualifier									
#2 Diesel (C10-C24)	ND		0.065		mg/L		08/23/21 10:43	08/24/21 19:14			1
Motor Oil (>C24-C36)	ND		0.096		mg/L		08/23/21 10:43	08/24/21 19:14			1
		MB MB	Limits			Prepared		Analyzed		Dil Fac	
Surrogate	%Recovery	Qualifier									
o-Terphenyl	85		50 - 150			08/23/21 10:43	08/24/21 19:14			1	

Lab Sample ID: LCS 580-365803/2-A
Matrix: Water
Analysis Batch: 365972

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 365803

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
#2 Diesel (C10-C24)	0.500	0.393		mg/L		79	50 - 120	
Motor Oil (>C24-C36)	0.500	0.498		mg/L		100	64 - 120	
		LCS LCS	Limits			%Rec.		RPD
Surrogate	%Recovery	Qualifier						
o-Terphenyl	95		50 - 150					

Lab Sample ID: LCSD 580-365803/3-A
Matrix: Water
Analysis Batch: 365972

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 365803

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	
									RPD	Limit
#2 Diesel (C10-C24)	0.500	0.422		mg/L		84	50 - 120	7	26	
Motor Oil (>C24-C36)	0.500	0.516		mg/L		103	64 - 120	3	24	
		LCSD LCSD	Limits			%Rec.		RPD		
Surrogate	%Recovery	Qualifier								
o-Terphenyl	100		50 - 150							

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105235-1

Client Sample ID: Before GAC-81521

Lab Sample ID: 580-105235-1

Date Collected: 08/15/21 16:15

Matrix: Water

Date Received: 08/16/21 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			365803	08/23/21 10:43	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	365972	08/24/21 20:55	T1W	FGS SEA

Client Sample ID: HCC EFF-81521

Lab Sample ID: 580-105235-2

Date Collected: 08/15/21 16:15

Matrix: Water

Date Received: 08/16/21 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			365803	08/23/21 10:43	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	365972	08/24/21 21:15	T1W	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105235-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-22

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105235-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-105235-1	Before GAC-81521	Water	08/15/21 16:15	08/16/21 11:45
580-105235-2	HCC EFF-81521	Water	08/15/21 16:15	08/16/21 11:45

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

TestAmerica Seattle

5755 8th Street East

Tacoma, WA 98424-1317
phone 253.922.2310 fax 253.922.5047

Chain of Custody Record



580-105235 Chain of Custody

Regulatory Program: DW NPDES RCRA Other:

Client Contact Farallong Consulting 975 5th Avenue Northwest Issaquah, Washington (425) 295-0800 Phone (425) 295-0850 FAX Project Name: Skykomish HCC System Site: WO # TT0100-S03		Project Manager: Amanda Meugniot Tel/Fax: 425-295-0800		Site Contact: Matt Bowser Lab Contact: Nathan Lewis		Date: 8-15-21 Carrier:		COC No: 2 of 2 COCs	
		Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below <i>30 days</i> <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Filtered Sample (Y/N) Perform MS / MSD (Y/N) NWTPH-Dx w/o silica gel cleanup				Sampler: For Lab Use Only: Walk-in Client: Lab Sampling:	
								Job / SDG No.:	
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.		Sample Specific Notes:	
Before GAC- 81521		8-15-21	16:15	Grab	W	2	X	***See instructions below	
HCC EFF- 81521		8-15-21	16:15	Grab	W	2	X	***See instructions below	
Therm. ID: <i>IR6</i> Cor: <i>0.2</i> Unc: <i>0.2</i>		Cooler Dsc: <i>Low</i>		Packing: <i>BUB</i>		FedEx: _____		Cust. Seal: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Blue Ice <input checked="" type="checkbox"/> Dry, None		UPS: _____		Lab Cour: <i>X</i>		Other: _____			
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other									
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.								Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown								<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months	
Special Instructions/QC Requirements & Comments: 1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica gel cleanup needed for Dx									
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd:		Corr'd:		Therm ID No.:	
Relinquished by: <i>[Signature]</i>		Company: <i>GIGIEX</i>		Date/Time: <i>8/16/21 09:45</i>		Received by: <i>[Signature]</i>		Company: <i>EMLAB</i>	
Relinquished by: _____		Company: _____		Date/Time: _____		Received by: <i>[Signature]</i>		Company: <i>EIC</i>	
Relinquished by: _____		Company: _____		Date/Time: _____		Received in Laboratory by: _____		Company: _____	

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-105235-1

Login Number: 105235

List Source: Eurofins FGS, Seattle

List Number: 1

Creator: Greene, Ashton R

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

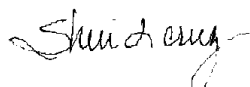
ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-105415-1
Client Project/Site: BNSF Skykomish Rush NPDES
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
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Sheri.Cruz@Eurofinset.com

Designee for
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105415-1

Job ID: 580-105415-1

Laboratory: Eurofins FGS, Seattle

Narrative

CASE NARRATIVE

Client: Farallon Consulting LLC
Project: BNSF Skykomish Rush NPDES
Report Number: 580-105415-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 08/24/2021; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.5 C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

DIESEL AND MOTOR OIL RANGE ORGANICS

Samples Before GAC (580-105415-1) and HCC EFF (580-105415-2) were analyzed for diesel and motor oil range organics in accordance with Method NWTPH-Dx. The samples were prepared and analyzed on 08/26/2021.

The continuing calibration verification (CCV) associated with batch 580-366207 recovered above the upper control limit for Motor Oil (>C24-C36). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: Before GAC (580-105415-1), HCC EFF (580-105415-2) and (CCV 580-366207/26).

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-366132, so a LCS and LCSD were used instead.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105415-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105415-1

Client Sample ID: Before GAC

Lab Sample ID: 580-105415-1

Date Collected: 08/23/21 09:00

Matrix: Water

Date Received: 08/24/21 10:36

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.12		0.062		mg/L		08/26/21 09:44	08/26/21 20:28	1
Motor Oil (>C24-C36)	ND		0.092		mg/L		08/26/21 09:44	08/26/21 20:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	67		50 - 150				08/26/21 09:44	08/26/21 20:28	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105415-1

Client Sample ID: HCC EFF

Lab Sample ID: 580-105415-2

Date Collected: 08/23/21 09:00

Matrix: Water

Date Received: 08/24/21 10:36

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		08/26/21 09:44	08/26/21 20:48	1
Motor Oil (>C24-C36)	ND		0.092		mg/L		08/26/21 09:44	08/26/21 20:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	65		50 - 150				08/26/21 09:44	08/26/21 20:48	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105415-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-366132/1-A
Matrix: Water
Analysis Batch: 366207

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 366132

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065		mg/L		08/26/21 09:44	08/26/21 19:29	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		08/26/21 09:44	08/26/21 19:29	1
Surrogate	MB MB		Limits			D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
o-Terphenyl	76		50 - 150				08/26/21 09:44	08/26/21 19:29	1

Lab Sample ID: LCS 580-366132/2-A
Matrix: Water
Analysis Batch: 366207

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 366132

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	Limits	
									%Rec.
#2 Diesel (C10-C24)	0.500	0.411		mg/L		82	50 - 120		
Motor Oil (>C24-C36)	0.500	0.459		mg/L		92	64 - 120		
Surrogate	LCS LCS		Limits			D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
o-Terphenyl	81		50 - 150				08/26/21 09:44	08/26/21 19:29	1

Lab Sample ID: LCSD 580-366132/3-A
Matrix: Water
Analysis Batch: 366207

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 366132

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	0.500	0.408		mg/L		82	50 - 120	1	26
Motor Oil (>C24-C36)	0.500	0.426		mg/L		85	64 - 120	7	24
Surrogate	LCSD LCSD		Limits			D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
o-Terphenyl	78		50 - 150				08/26/21 09:44	08/26/21 19:29	1

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105415-1

Client Sample ID: Before GAC

Date Collected: 08/23/21 09:00

Date Received: 08/24/21 10:36

Lab Sample ID: 580-105415-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			366132	08/26/21 09:44	PMS	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	366207	08/26/21 20:28	TL1	FGS SEA

Client Sample ID: HCC EFF

Date Collected: 08/23/21 09:00

Date Received: 08/24/21 10:36

Lab Sample ID: 580-105415-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			366132	08/26/21 09:44	PMS	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	366207	08/26/21 20:48	TL1	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105415-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-22

1

2

3

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10

11

Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-105415-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-105415-1	Before GAC	Water	08/23/21 09:00	08/24/21 10:36
580-105415-2	HCC EFF	Water	08/23/21 09:00	08/24/21 10:36

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Chain of Custody Record



530-105415 Chain of Custody

Tacoma, WA 98424-1317
 phone 253.922.2310 fax 253.922.5047

Regulatory Program: DW NPDES RCRA Other:

Client Contact Farallong Consulting 975 5th Avenue Northwest Issaquah, Washington (425) 295-0800 Phone (425) 295-0850 FAX Project Name: Skykomish HCC System Site: WO # TT0100-S03			Project Manager: Amanda Meugniot Tel/Fax: 425-295-0800			Site Contact: Matt Bowser Lab Contact: Nathan Lewis			Date: 8-23-21 Carrier:			COC No: 1 of 2 COCs Sampler: JW For Lab Use Only: Walk-in Client: Lab Sampling: Job / SDG No.: Sample Specific Notes:					
Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below 3 DAY <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day						Filtered Sample (Y/N) Perform MS / MSD (Y/N) NWTPH-Dx w/o silica get cleanup											
Sample Identification Before GAC- HCC EFF-			Sample Date 8/23/21 8/23/21	Sample Time 900 400	Sample Type (C=Comp, G=Grab) Grab Grab							Matrix W W	# of Cont. 2 2	<input checked="" type="checkbox"/> X <input checked="" type="checkbox"/> X			
Therm. ID: A2 Cor: 0.5° Unc: 0.8° Cooler Desc: Lager Packing: Blue Cust. Seal: Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Blue Ice: <input checked="" type="checkbox"/> Wet, Dry, None FedEx: <input type="checkbox"/> UPS: <input type="checkbox"/> Lab Cour: <input checked="" type="checkbox"/> Other:																	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 2 1						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months											
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample. <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown						Special Instructions/QC Requirements & Comments: 1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica get cleanup needed for Dx											
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No			Custody Seal No.:			Cooler Temp. (°C): Obs'd:			Corr'd:			Therm ID No.:					
Relinquished by: [Signature]			Company: Quicret			Date/Time: 8/23/21 11:38			Received by: [Signature]			Company: EMLab			Date/Time: 8/23/21 11:30		
Relinquished by:			Company:			Date/Time:			Received by: [Signature]			Company: EFCOS			Date/Time: 8/23/21 10:36		
Relinquished by:			Company:			Date/Time:			Received in Laboratory by:			Company:			Date/Time:		

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-105415-1

Login Number: 105415

List Source: Eurofins FGS, Seattle

List Number: 1

Creator: Greene, Ashton R

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-105563-1
Client Project/Site: Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
9/8/2021 9:16:55 AM
Pauline Matlock, Project Manager
(253)922-2310
pauline.matlock@eurofinset.com
Designee for
Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

LINKS

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results through
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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-105563-1

Job ID: 580-105563-1

Laboratory: Eurofins FGS, Seattle

Narrative

Job Narrative
580-105563-1

Comments

No additional comments.

Receipt

The samples were received on 8/31/2021 12:15 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.1° C.

GC Semi VOA

Method NWTPH-Dx: The continuing calibration verification (CCV) associated with batch 580-367143 recovered above the upper control limit for Motor Oil (>C24-C36). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: HCC EFF-82921 (580-105563-2) and (CCV 580-367143/8).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-105563-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-105563-1

Client Sample ID: Before GAC-82921

Lab Sample ID: 580-105563-1

Date Collected: 08/29/21 18:30

Matrix: Water

Date Received: 08/31/21 12:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.30		0.062		mg/L		09/02/21 11:27	09/03/21 21:40	1
Motor Oil (>C24-C36)	0.21		0.092		mg/L		09/02/21 11:27	09/03/21 21:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	88		50 - 150				09/02/21 11:27	09/03/21 21:40	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-105563-1

Client Sample ID: HCC EFF-82921

Lab Sample ID: 580-105563-2

Date Collected: 08/29/21 18:30

Matrix: Water

Date Received: 08/31/21 12:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		09/07/21 14:43	09/07/21 19:10	1
Motor Oil (>C24-C36)	ND		0.092		mg/L		09/07/21 14:43	09/07/21 19:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	75		50 - 150				09/07/21 14:43	09/07/21 19:10	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-105563-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-366838/1-A
Matrix: Water
Analysis Batch: 367029

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 366838

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065		mg/L		09/02/21 11:27	09/03/21 20:21	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		09/02/21 11:27	09/03/21 20:21	1
Surrogate	MB	MB	Limits			Prepared	Analyzed	Dil Fac	
	%Recovery	Qualifier							
o-Terphenyl	91		50 - 150			09/02/21 11:27	09/03/21 20:21	1	

Lab Sample ID: LCS 580-366838/2-A
Matrix: Water
Analysis Batch: 367029

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 366838

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits
		Result	Qualifier				
#2 Diesel (C10-C24)	0.500	0.530		mg/L		106	50 - 120
Motor Oil (>C24-C36)	0.500	0.547		mg/L		109	64 - 120
Surrogate	LCS	LCS	Limits			%Rec.	
	%Recovery	Qualifier					
o-Terphenyl	98		50 - 150				

Lab Sample ID: LCSD 580-366838/3-A
Matrix: Water
Analysis Batch: 367029

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 366838

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	Limit
		Result	Qualifier						
#2 Diesel (C10-C24)	0.500	0.522		mg/L		104	50 - 120	2	26
Motor Oil (>C24-C36)	0.500	0.559		mg/L		112	64 - 120	2	24
Surrogate	LCSD	LCSD	Limits			%Rec.			
	%Recovery	Qualifier							
o-Terphenyl	102		50 - 150						

Lab Sample ID: MB 580-367107/1-A
Matrix: Water
Analysis Batch: 367143

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 367107

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065		mg/L		09/07/21 14:43	09/07/21 18:10	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		09/07/21 14:43	09/07/21 18:10	1
Surrogate	MB	MB	Limits			Prepared	Analyzed	Dil Fac	
	%Recovery	Qualifier							
o-Terphenyl	71		50 - 150			09/07/21 14:43	09/07/21 18:10	1	

Lab Sample ID: LCS 580-367107/2-A
Matrix: Water
Analysis Batch: 367143

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 367107

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits
		Result	Qualifier				
#2 Diesel (C10-C24)	0.500	0.388		mg/L		78	50 - 120
Motor Oil (>C24-C36)	0.500	0.506		mg/L		101	64 - 120

Eurofins FGS, Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-105563-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCS 580-367107/2-A
Matrix: Water
Analysis Batch: 367143

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 367107

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
<i>o-Terphenyl</i>	82		50 - 150

Lab Sample ID: LCSD 580-367107/3-A
Matrix: Water
Analysis Batch: 367143

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 367107

<i>Analyte</i>	<i>Spike Added</i>	<i>LCSD Result</i>	<i>LCSD Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>Limits</i>	<i>RPD</i>	<i>Limit</i>
#2 Diesel (C10-C24)	0.500	0.413		mg/L		83	50 - 120	6	26
Motor Oil (>C24-C36)	0.500	0.513		mg/L		103	64 - 120	2	24

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
<i>o-Terphenyl</i>	85		50 - 150

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-105563-1

Client Sample ID: Before GAC-82921

Lab Sample ID: 580-105563-1

Date Collected: 08/29/21 18:30

Matrix: Water

Date Received: 08/31/21 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			366838	09/02/21 11:27	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	367029	09/03/21 21:40	ADB	FGS SEA

Client Sample ID: HCC EFF-82921

Lab Sample ID: 580-105563-2

Date Collected: 08/29/21 18:30

Matrix: Water

Date Received: 08/31/21 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			367107	09/07/21 14:43	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	367143	09/07/21 19:10	JSM	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-105563-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-22

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Sample Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-105563-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-105563-1	Before GAC-82921	Water	08/29/21 18:30	08/31/21 12:15
580-105563-2	HCC EFF-82921	Water	08/29/21 18:30	08/31/21 12:15

1

2

3

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7

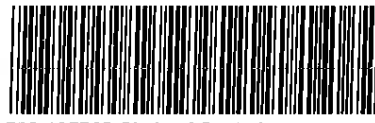
8

9

10

11

Therm. ID: TR 8 Cor: 1.1 ° Unc: 1.3 °
 Cooler Disc: (93)
 Packing: Bubble FedEx: _____
 UPS: _____
 Cust. Seal: Yes No No X
 Lab Cour: X
 Blue Ice, Wet, Dry, None Other: _____



580-105563 Chain of Custody

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: DW NPDES RCRA Other: _____

105563

Client Contact Farallong Consulting 975 5th Avenue Northwest Issaquah, Washington (425) 295-0800 Phone (425) 295-0850 FAX Project Name: Skykomish HCC System Site: WO # TT0100-S03	Project Manager: Amanda Meugniot Tel/Fax: 425-295-0800	Site Contact: Matt Bowser Lab Contact: Nathan Lewis	Date: 8-29-21 Carrier:	COC No: 2 of 2 COCs Sampler: JW For Lab Use Only: Walk-in Client: Lab Sampling: Job / SDG No.:
---	--	--	---	--

Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
 TAT if different from Below 3 days
 2 weeks
 1 week
 2 days
 1 day

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	NWTPH-Dx w/o silica gel cleanup	Sample Specific Notes
Before GAC- 82921	8/29/21	18:30	Grab	W	2		X		***See instructions below
HCC EFF- 82921	8/29/21	18:30	Grab	W	2		X		***See instructions below

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification:
 Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
 Non-Hazard Flammable Skin Irritant Poison B Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return to Client Disposal by Lab Archive for _____ Months

Special Instructions/QC Requirements & Comments: 1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica gel cleanup needed for Dx

Custody Seals Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.:	Cooler Temp. (°C): Obs'd: _____	Corr'd: _____	Therm ID No.:
Relinquished by: <u>[Signature]</u>	Company: <u>Glacier</u>	Date/Time: <u>8/30/21 70-15</u>	Received by: <u>[Signature]</u>	Company: <u>[Signature]</u>
Relinquished by: _____	Company: _____	Date/Time: _____	Received by: _____	Company: _____
Relinquished by: _____	Company: _____	Date/Time: _____	Received in Laboratory by: <u>[Signature]</u>	Company: <u>EEG</u>

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-105563-1

Login Number: 105563

List Source: Eurofins FGS, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-105704-1
Client Project/Site: Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
9/14/2021 1:38:18 PM

Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-105704-1

Job ID: 580-105704-1

Laboratory: Eurofins FGS, Seattle

Narrative

**Job Narrative
580-105704-1**

Comments

No additional comments.

Receipt

The samples were received on 9/8/2021 12:02 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.9° C.

Receipt Exceptions

The chain of custody requests metals analysis on sample HCC EFF-9721 (580-105704-2) but a nitric preserved container was not received. The samples are not logged in for metals analysis.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-367489. Laboratory control sample/laboratory control sample duplicate were created and substituted for MS/MSD/DUP.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.



Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-105704-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-105704-1

Client Sample ID: Before GAC-9721

Lab Sample ID: 580-105704-1

Date Collected: 09/07/21 09:30

Matrix: Water

Date Received: 09/08/21 12:02

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.27		0.062		mg/L		09/10/21 11:07	09/11/21 03:39	1
Motor Oil (>C24-C36)	0.19		0.092		mg/L		09/10/21 11:07	09/11/21 03:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	63		50 - 150				09/10/21 11:07	09/11/21 03:39	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-105704-1

Client Sample ID: HCC EFF-9721

Lab Sample ID: 580-105704-2

Date Collected: 09/07/21 09:30

Matrix: Water

Date Received: 09/08/21 12:02

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		09/10/21 11:07	09/11/21 03:59	1
Motor Oil (>C24-C36)	ND		0.092		mg/L		09/10/21 11:07	09/11/21 03:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	69		50 - 150				09/10/21 11:07	09/11/21 03:59	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-105704-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-367489/1-A
Matrix: Water
Analysis Batch: 367549

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 367489

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065		mg/L		09/10/21 11:07	09/11/21 02:39	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		09/10/21 11:07	09/11/21 02:39	1
Surrogate	MB MB		Limits			D	Prepared	Analyzed	Dil Fac
%Recovery	Qualifier								
o-Terphenyl	76		50 - 150				09/10/21 11:07	09/11/21 02:39	1

Lab Sample ID: LCS 580-367489/2-A
Matrix: Water
Analysis Batch: 367549

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 367489

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.	
									#2 Diesel (C10-C24)
Motor Oil (>C24-C36)	0.500	0.483		mg/L		97	64 - 120		
Surrogate	LCS LCS		Limits			D	Prepared	Analyzed	Dil Fac
%Recovery	Qualifier								
o-Terphenyl	83		50 - 150						

Lab Sample ID: LCSD 580-367489/3-A
Matrix: Water
Analysis Batch: 367549

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 367489

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Motor Oil (>C24-C36)	0.500	0.471		mg/L		94	64 - 120	3	24
Surrogate	LCSD LCSD		Limits			D	Prepared	Analyzed	Dil Fac
%Recovery	Qualifier								
o-Terphenyl	85		50 - 150						

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-105704-1

Client Sample ID: Before GAC-9721

Lab Sample ID: 580-105704-1

Date Collected: 09/07/21 09:30

Matrix: Water

Date Received: 09/08/21 12:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			367489	09/10/21 11:07	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	367549	09/11/21 03:39	TL1	FGS SEA

Client Sample ID: HCC EFF-9721

Lab Sample ID: 580-105704-2

Date Collected: 09/07/21 09:30

Matrix: Water

Date Received: 09/08/21 12:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			367489	09/10/21 11:07	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	367549	09/11/21 03:59	TL1	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-105704-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-22

- 1
- 2
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- 10
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Sample Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-105704-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-105704-1	Before GAC-9721	Water	09/07/21 09:30	09/08/21 12:02
580-105704-2	HCC EFF-9721	Water	09/07/21 09:30	09/08/21 12:02

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TestAmerica Seattle

5755 8th Street East

Tacoma, WA 98424-1317
phone 253.922.2310 fax 253.922.504.

Therm. ID: A1 Cor: 1.9 ° Unc: 1.4 °
Cooler Dsc: L9 Blv
Packing: twb FedEx: _____
Cust. Seal: Yes No UPS: _____
Blue Ice: Wet, Dry, None Lab Cour: X
Other: _____

Chain of Custody Record



TestAmerica Laboratories, Inc.

Regulatory Program: DW NPDES RCRA Other:

105704

Client Contact		Project Manager: Amanda Meugniot		Site Contact: Matt Bowser		Date: 9-7-2021		COC No:		
Farallong Consulting		Tel/Fax: 425-295-0800		Lab Contact: Nathan Lewis		Carrier:		1 of 2 COCs		
975 5th Avenue Northwest		Analysis Turnaround Time		Filtered Sample (Y/N) Perform MS/MSD (Y/N) NWT/PH-Dx w/o silica gel cleanup Total As, Pb (EPA 200.8)				Sampler: <u>TW</u>		
Issaquah, Washington		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS						For Lab Use Only: Walk-in Client: Lab Sampling:		
(425) 295-0800 Phone		TAT if different from Below <u>3 DAY</u>								
(425) 295-0850 FAX		<input type="checkbox"/> 2 weeks								
Project Name: Skykomish HCC System		<input type="checkbox"/> 1 week								
Site:		<input type="checkbox"/> 2 days				Job / SDG No.:				
WO # TT0100-S03		<input type="checkbox"/> 1 day						Sample Specific Notes:		
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.				
Before GAC-9721		9/7/21	9:30	Grab	W	2	X		***See instructions below	
HCC EFF-9721		9/7/21	9:30	Grab	W	3	X	X	***See instructions below	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other							2	4	1	
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.							Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)			
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown							<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months			
Special Instructions/QC Requirements & Comments: 1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica get cleanup needed for Dx										
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd:		Corr'd:		Therm ID No.:		
Relinquished by: <u>[Signature]</u>		Company: <u>Glacier</u> Date/Time: <u>9/7/21 12:03</u>		Received by: <u>[Signature]</u>		Company: <u>EMCB</u> Date/Time: <u>9/7/21 12:03</u>				
Relinquished by:		Company:		Date/Time:		Received by:		Company:		
Relinquished by:		Company:		Date/Time:		Received in Laboratory by:		Company:		



580-105704 Chain of Custody

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-105704-1

Login Number: 105704

List Source: Eurofins FGS, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-105902-1
Client Project/Site: Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
9/21/2021 2:23:12 PM
Tracy Dutton, Client Relations Manager
(253)380-6574
Tracy.Dutton@Eurofinset.com

Designee for
Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-105902-1

Job ID: 580-105902-1

Laboratory: Eurofins FGS, Seattle

Narrative

**Job Narrative
580-105902-1**

Comments

No additional comments.

Receipt

The samples were received on 9/16/2021 12:25 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.4° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-368035, so an LCS and an LCSD were created and used instead.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.



Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-105902-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-105902-1

Client Sample ID: Before GAC-091521

Lab Sample ID: 580-105902-1

Date Collected: 09/15/21 15:17

Matrix: Water

Date Received: 09/16/21 12:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.28		0.062		mg/L		09/16/21 14:23	09/17/21 18:51	1
Motor Oil (>C24-C36)	0.19		0.092		mg/L		09/16/21 14:23	09/17/21 18:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	74		50 - 150				09/16/21 14:23	09/17/21 18:51	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-105902-1

Client Sample ID: HCC EFF-091521

Lab Sample ID: 580-105902-2

Date Collected: 09/15/21 15:23

Matrix: Water

Date Received: 09/16/21 12:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		09/16/21 14:23	09/17/21 19:11	1
Motor Oil (>C24-C36)	ND		0.091		mg/L		09/16/21 14:23	09/17/21 19:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	77		50 - 150				09/16/21 14:23	09/17/21 19:11	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-105902-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-368035/1-A
Matrix: Water
Analysis Batch: 368094

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 368035

Analyte	MB MB		RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac
	Result	Qualifier									
#2 Diesel (C10-C24)	ND		0.065		mg/L		09/16/21 14:23	09/17/21 17:52			1
Motor Oil (>C24-C36)	ND		0.096		mg/L		09/16/21 14:23	09/17/21 17:52			1
Surrogate		MB MB	Limits	Prepared		Analyzed		Dil Fac			
%Recovery	Qualifier										
o-Terphenyl		88	50 - 150	09/16/21 14:23	09/17/21 17:52			1			

Lab Sample ID: LCS 580-368035/2-A
Matrix: Water
Analysis Batch: 368094

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 368035

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
#2 Diesel (C10-C24)	0.500	0.525		mg/L		105	50 - 120	
Motor Oil (>C24-C36)	0.500	0.524		mg/L		105	64 - 120	
Surrogate		LCS LCS	Limits	Prepared		Analyzed		
%Recovery	Qualifier							
o-Terphenyl		86	50 - 150					

Lab Sample ID: LCSD 580-368035/3-A
Matrix: Water
Analysis Batch: 368094

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 368035

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	
									RPD	Limit
#2 Diesel (C10-C24)	0.500	0.459		mg/L		92	50 - 120	13	26	
Motor Oil (>C24-C36)	0.500	0.476		mg/L		95	64 - 120	10	24	
Surrogate		LCSD LCSD	Limits	Prepared		Analyzed				
%Recovery	Qualifier									
o-Terphenyl		80	50 - 150							

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-105902-1

Client Sample ID: Before GAC-091521

Lab Sample ID: 580-105902-1

Date Collected: 09/15/21 15:17

Matrix: Water

Date Received: 09/16/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			368035	09/16/21 14:23	BJM	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	368094	09/17/21 18:51	W1T	FGS SEA

Client Sample ID: HCC EFF-091521

Lab Sample ID: 580-105902-2

Date Collected: 09/15/21 15:23

Matrix: Water

Date Received: 09/16/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			368035	09/16/21 14:23	BJM	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	368094	09/17/21 19:11	W1T	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-105902-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-22

1

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Sample Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-105902-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-105902-1	Before GAC-091521	Water	09/15/21 15:17	09/16/21 12:50
580-105902-2	HCC EFF-091521	Water	09/15/21 15:23	09/16/21 12:50

- 1
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Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-105902-1

Login Number: 105902

List Source: Eurofins FGS, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Refer to Job Narrative for details.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-106108-1

Client Project/Site: BNSF Skykomish Semi Annual
Sampling Event: Skykomish HCC System

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Peter Kingston

M. Elaine Walker

Authorized for release by:
10/13/2021 5:42:09 PM
Elaine Walker, Project Manager II
(253)248-4972
m.elaine.walker@eurofinset.com
Designee for
Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

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Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Job ID: 580-106108-1

Laboratory: Eurofins FGS, Seattle

Narrative

Job Narrative 580-106108-1

Receipt

The samples were received on 9/23/2021 4:50 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 9 coolers at receipt time were -1.6° C, -1.1° C, -0.3° C, 1.6° C, 1.8° C, 2.6° C, 4.1° C, 4.2° C and 4.9° C.

Receipt Exceptions

Receipt Exceptions

One of the two container labels for each of the following samples did not match the information listed on the Chain-of-Custody (COC) and the other label: 5-W-55-092221 (580-106108-22), 5-W-180-092221 (580-106108-23)

GC Semi VOA

Method NWTPH-Dx: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 580-369025 and analytical batch 580-369171 recovered outside control limits for the following analytes: Motor Oil (>C24-C36). These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method NWTPH-Dx: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 580-369139 and analytical batch 580-369290 recovered outside control limits for the following analytes: #2 Diesel (C10-C24) and Motor Oil (>C24-C36). These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method NWTPH-Dx: Surrogate recovery for the following samples were outside control limits: GW-3-092221 (580-106108-18) and S1-BU-092321 (580-106108-48). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method NWTPH-Dx: The following samples were re-prepared outside of preparation holding time due to quantity of analytes present in laboratory control samples: 1C-W-7-092221 (580-106108-6), GW-4-092221 (580-106108-7), 2A-W-9-092221 (580-106108-10), 2A-W-42-092221 (580-106108-12), MW-4-092221 (580-106108-19), 2A-W-410-092221 (580-106108-24), GW-30-092221 (580-106108-25) and 5-W-19-092121 (580-106108-27). Both sets of data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
H	Sample was prepped or analyzed beyond the specified holding time
S1-	Surrogate recovery exceeds control limits, low biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: 5-W-51-092221

Lab Sample ID: 580-106108-1

Date Collected: 09/22/21 09:25

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.44		0.062	0.062	mg/L		10/05/21 11:17	10/06/21 16:55	1
Motor Oil (>C24-C36)	0.36		0.091	0.091	mg/L		10/05/21 11:17	10/06/21 16:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	81		50 - 150				10/05/21 11:17	10/06/21 16:55	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: 5-W-18-092221

Lab Sample ID: 580-106108-2

Date Collected: 09/22/21 10:10

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		10/05/21 11:17	10/06/21 17:15	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/05/21 11:17	10/06/21 17:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	70		50 - 150				10/05/21 11:17	10/06/21 17:15	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: 5-W-43-092221

Lab Sample ID: 580-106108-3

Date Collected: 09/22/21 10:55

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		10/05/21 11:17	10/06/21 17:56	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/05/21 11:17	10/06/21 17:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	67		50 - 150				10/05/21 11:17	10/06/21 17:56	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: 2A-W-40-092221

Lab Sample ID: 580-106108-4

Date Collected: 09/22/21 11:40

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND	*+	0.062	0.062	mg/L		09/29/21 10:56	10/07/21 12:07	1
Motor Oil (>C24-C36)	ND	*+	0.091	0.091	mg/L		09/29/21 10:56	10/07/21 12:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	83		50 - 150				09/29/21 10:56	10/07/21 12:07	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: 1B-W-23-092221

Lab Sample ID: 580-106108-5

Date Collected: 09/22/21 12:05

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND	*+	0.062	0.062	mg/L		09/29/21 10:56	10/01/21 00:01	1
Motor Oil (>C24-C36)	ND	*+	0.092	0.092	mg/L		09/29/21 10:56	10/01/21 00:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	76		50 - 150				09/29/21 10:56	10/01/21 00:01	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: 1C-W-7-092221

Lab Sample ID: 580-106108-6

Date Collected: 09/22/21 15:00

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.096	*+	0.062	0.062	mg/L		09/29/21 10:56	10/01/21 00:21	1
Motor Oil (>C24-C36)	0.091	*+	0.091	0.091	mg/L		09/29/21 10:56	10/01/21 00:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	83		50 - 150				09/29/21 10:56	10/01/21 00:21	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.10	H	0.062	0.062	mg/L		10/08/21 10:18	10/08/21 19:51	1
Motor Oil (>C24-C36)	ND	H	0.091	0.091	mg/L		10/08/21 10:18	10/08/21 19:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	74		50 - 150				10/08/21 10:18	10/08/21 19:51	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: GW-4-092221

Lab Sample ID: 580-106108-7

Date Collected: 09/22/21 15:55

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND	*+	0.062	0.062	mg/L		09/29/21 10:56	10/01/21 00:40	1
Motor Oil (>C24-C36)	0.11	*+	0.091	0.091	mg/L		09/29/21 10:56	10/01/21 00:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	76		50 - 150				09/29/21 10:56	10/01/21 00:40	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil (>C24-C36)	0.14	H	0.091	0.091	mg/L		10/08/21 10:18	10/08/21 20:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	74		50 - 150				10/08/21 10:18	10/08/21 20:11	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: EW-2A-092221

Lab Sample ID: 580-106108-8

Date Collected: 09/22/21 15:10

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND	*+	0.062	0.062	mg/L		09/29/21 10:56	10/01/21 01:00	1
Motor Oil (>C24-C36)	ND	*+	0.092	0.092	mg/L		09/29/21 10:56	10/01/21 01:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	74		50 - 150				09/29/21 10:56	10/01/21 01:00	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: MW-555-092221

Lab Sample ID: 580-106108-9

Date Collected: 09/22/21 16:45

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND	*+	0.062	0.062	mg/L		09/29/21 10:56	10/01/21 01:20	1
Motor Oil (>C24-C36)	ND	*+	0.091	0.091	mg/L		09/29/21 10:56	10/01/21 01:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	75		50 - 150				09/29/21 10:56	10/01/21 01:20	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: 2A-W-9-092221

Lab Sample ID: 580-106108-10

Date Collected: 09/22/21 15:36

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.22	*+	0.062	0.062	mg/L		09/29/21 10:56	10/01/21 01:39	1
Motor Oil (>C24-C36)	0.42	*+	0.091	0.091	mg/L		09/29/21 10:56	10/01/21 01:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	78		50 - 150				09/29/21 10:56	10/01/21 01:39	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.40	H	0.062	0.062	mg/L		10/08/21 10:18	10/08/21 20:31	1
Motor Oil (>C24-C36)	0.66	H	0.091	0.091	mg/L		10/08/21 10:18	10/08/21 20:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	87		50 - 150				10/08/21 10:18	10/08/21 20:31	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: 1C-W-4092221

Lab Sample ID: 580-106108-11

Date Collected: 09/22/21 14:17

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND	*+	0.062	0.062	mg/L		09/29/21 10:56	10/01/21 02:19	1
Motor Oil (>C24-C36)	ND	*+	0.091	0.091	mg/L		09/29/21 10:56	10/01/21 02:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	84		50 - 150				09/29/21 10:56	10/01/21 02:19	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: 2A-W-42-092221

Lab Sample ID: 580-106108-12

Date Collected: 09/22/21 13:22

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.14	*+	0.062	0.062	mg/L		09/29/21 10:56	10/01/21 02:38	1
Motor Oil (>C24-C36)	0.13	*+	0.091	0.091	mg/L		09/29/21 10:56	10/01/21 02:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	84		50 - 150				09/29/21 10:56	10/01/21 02:38	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.18	H	0.062	0.062	mg/L		10/08/21 10:18	10/08/21 20:51	1
Motor Oil (>C24-C36)	0.12	H	0.091	0.091	mg/L		10/08/21 10:18	10/08/21 20:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	74		50 - 150				10/08/21 10:18	10/08/21 20:51	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: 2A-W-41-092221

Lab Sample ID: 580-106108-13

Date Collected: 09/22/21 11:59

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.50		0.062	0.062	mg/L		10/05/21 11:17	10/06/21 18:16	1
Motor Oil (>C24-C36)	0.28		0.092	0.092	mg/L		10/05/21 11:17	10/06/21 18:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	78		50 - 150				10/05/21 11:17	10/06/21 18:16	1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.097		0.062	0.062	mg/L		10/05/21 11:17	10/06/21 15:15	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		10/05/21 11:17	10/06/21 15:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	78		50 - 150				10/05/21 11:17	10/06/21 15:15	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: GW-1-092221

Lab Sample ID: 580-106108-14

Date Collected: 09/22/21 11:06

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND	*+	0.062	0.062	mg/L		09/29/21 10:56	10/01/21 02:58	1
Motor Oil (>C24-C36)	ND	*+	0.092	0.092	mg/L		09/29/21 10:56	10/01/21 02:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	73		50 - 150				09/29/21 10:56	10/01/21 02:58	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: 5-W-56-092221

Lab Sample ID: 580-106108-15

Date Collected: 09/22/21 09:40

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.90	++	0.062	0.062	mg/L		09/29/21 10:56	10/01/21 03:18	1
#2 Diesel (C10-C24)	0.85	++	0.062	0.062	mg/L		09/29/21 10:56	10/07/21 13:26	1
Motor Oil (>C24-C36)	1.2	++	0.092	0.092	mg/L		09/29/21 10:56	10/01/21 03:18	1
Motor Oil (>C24-C36)	1.4	++	0.092	0.092	mg/L		09/29/21 10:56	10/07/21 13:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	79		50 - 150	09/29/21 10:56	10/01/21 03:18	1
<i>o</i> -Terphenyl	76		50 - 150	09/29/21 10:56	10/07/21 13:26	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: EW-1-092221

Lab Sample ID: 580-106108-16

Date Collected: 09/22/21 10:27

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND	*+	0.062	0.062	mg/L		09/29/21 10:56	10/01/21 03:37	1
Motor Oil (>C24-C36)	ND	*+	0.092	0.092	mg/L		09/29/21 10:56	10/01/21 03:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	75		50 - 150				09/29/21 10:56	10/01/21 03:37	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: 1C-W-8-092221

Lab Sample ID: 580-106108-17

Date Collected: 09/22/21 14:38

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND	*+	0.062	0.062	mg/L		09/29/21 10:56	10/01/21 03:57	1
Motor Oil (>C24-C36)	ND	*+	0.092	0.092	mg/L		09/29/21 10:56	10/01/21 03:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	77		50 - 150				09/29/21 10:56	10/01/21 03:57	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: GW-3-092221

Lab Sample ID: 580-106108-18

Date Collected: 09/22/21 12:36

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.12		0.063	0.063	mg/L		10/05/21 11:17	10/06/21 18:36	1
Motor Oil (>C24-C36)	0.52		0.092	0.092	mg/L		10/05/21 11:17	10/06/21 18:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	42	S1-	50 - 150				10/05/21 11:17	10/06/21 18:36	1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.063	0.063	mg/L		10/05/21 11:17	10/06/21 15:35	1
Motor Oil (>C24-C36)	0.37		0.092	0.092	mg/L		10/05/21 11:17	10/06/21 15:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	42	S1-	50 - 150				10/05/21 11:17	10/06/21 15:35	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: MW-4-092221

Lab Sample ID: 580-106108-19

Date Collected: 09/22/21 15:41

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.12	*+	0.062	0.062	mg/L		09/29/21 10:56	10/01/21 04:17	1
Motor Oil (>C24-C36)	0.29	*+	0.092	0.092	mg/L		09/29/21 10:56	10/01/21 04:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	87		50 - 150				09/29/21 10:56	10/01/21 04:17	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.15	H	0.062	0.062	mg/L		10/08/21 10:18	10/08/21 21:12	1
Motor Oil (>C24-C36)	0.29	H	0.092	0.092	mg/L		10/08/21 10:18	10/08/21 21:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	76		50 - 150				10/08/21 10:18	10/08/21 21:12	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: GW-2-092221

Lab Sample ID: 580-106108-20

Date Collected: 09/22/21 11:12

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND	*+	0.062	0.062	mg/L		09/29/21 10:56	10/01/21 04:37	1
Motor Oil (>C24-C36)	ND	*+	0.092	0.092	mg/L		09/29/21 10:56	10/01/21 04:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	75		50 - 150				09/29/21 10:56	10/01/21 04:37	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: 5-W-14-092221

Lab Sample ID: 580-106108-21

Date Collected: 09/22/21 10:24

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		09/30/21 11:02	10/04/21 18:02	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		09/30/21 11:02	10/04/21 18:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	60		50 - 150				09/30/21 11:02	10/04/21 18:02	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: 5-W-55-092221

Lab Sample ID: 580-106108-22

Date Collected: 09/22/21 09:34

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.063	0.063	mg/L		09/30/21 11:02	10/04/21 18:22	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		09/30/21 11:02	10/04/21 18:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	70		50 - 150				09/30/21 11:02	10/04/21 18:22	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: 5-W-180-092221

Lab Sample ID: 580-106108-23

Date Collected: 09/22/21 10:10

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		09/30/21 11:02	10/04/21 18:42	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		09/30/21 11:02	10/04/21 18:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	70		50 - 150				09/30/21 11:02	10/04/21 18:42	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: 2A-W-410-092221

Lab Sample ID: 580-106108-24

Date Collected: 09/22/21 12:10

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.30	*+	0.062	0.062	mg/L		09/29/21 10:56	10/01/21 04:56	1
Motor Oil (>C24-C36)	0.24	*+	0.092	0.092	mg/L		09/29/21 10:56	10/01/21 04:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150				09/29/21 10:56	10/01/21 04:56	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.33	H	0.062	0.062	mg/L		10/08/21 10:18	10/08/21 21:32	1
Motor Oil (>C24-C36)	0.21	H	0.092	0.092	mg/L		10/08/21 10:18	10/08/21 21:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	78		50 - 150				10/08/21 10:18	10/08/21 21:32	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: GW-30-092221

Lab Sample ID: 580-106108-25

Date Collected: 09/22/21 12:36

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND	*+	0.062	0.062	mg/L		09/29/21 10:56	10/01/21 05:16	1
Motor Oil (>C24-C36)	0.14	*+	0.092	0.092	mg/L		09/29/21 10:56	10/01/21 05:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	75		50 - 150				09/29/21 10:56	10/01/21 05:16	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil (>C24-C36)	0.20	H	0.092	0.092	mg/L		10/08/21 10:18	10/08/21 21:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	71		50 - 150				10/08/21 10:18	10/08/21 21:52	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: 5-W-16-092221

Lab Sample ID: 580-106108-26

Date Collected: 09/21/21 16:35

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND	*+	0.062	0.062	mg/L		09/29/21 10:56	10/01/21 05:55	1
Motor Oil (>C24-C36)	ND	*+	0.092	0.092	mg/L		09/29/21 10:56	10/01/21 05:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	71		50 - 150				09/29/21 10:56	10/01/21 05:55	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: 5-W-19-092121

Lab Sample ID: 580-106108-27

Date Collected: 09/21/21 16:30

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND	*+	0.062	0.062	mg/L		09/29/21 10:56	10/01/21 06:15	1
Motor Oil (>C24-C36)	0.096	*+	0.091	0.091	mg/L		09/29/21 10:56	10/01/21 06:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	72		50 - 150				09/29/21 10:56	10/01/21 06:15	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil (>C24-C36)	ND	H	0.091	0.091	mg/L		10/08/21 10:18	10/08/21 22:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	66		50 - 150				10/08/21 10:18	10/08/21 22:32	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: 5-W-17-092121

Lab Sample ID: 580-106108-28

Date Collected: 09/21/21 16:50

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND	*+	0.062	0.062	mg/L		09/29/21 10:56	10/01/21 06:35	1
Motor Oil (>C24-C36)	ND	*+	0.091	0.091	mg/L		09/29/21 10:56	10/01/21 06:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	66		50 - 150				09/29/21 10:56	10/01/21 06:35	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: S1-AU-092321

Lab Sample ID: 580-106108-29

Date Collected: 09/23/21 08:45

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		09/30/21 11:02	10/04/21 19:02	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		09/30/21 11:02	10/04/21 19:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	63		50 - 150				09/30/21 11:02	10/04/21 19:02	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: S1-AD-092321

Lab Sample ID: 580-106108-30

Date Collected: 09/23/21 08:45

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		09/30/21 11:02	10/04/21 19:22	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		09/30/21 11:02	10/04/21 19:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	63		50 - 150				09/30/21 11:02	10/04/21 19:22	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: S2-AD-092321

Lab Sample ID: 580-106108-31

Date Collected: 09/23/21 09:35

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		09/30/21 11:02	10/04/21 19:41	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		09/30/21 11:02	10/04/21 19:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	66		50 - 150				09/30/21 11:02	10/04/21 19:41	1



Client Sample Results

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: S2-AU-092321

Lab Sample ID: 580-106108-32

Date Collected: 09/23/21 09:35

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		09/30/21 11:02	10/04/21 20:01	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		09/30/21 11:02	10/04/21 20:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	67		50 - 150				09/30/21 11:02	10/04/21 20:01	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: S3-AD-092321

Lab Sample ID: 580-106108-33

Date Collected: 09/23/21 10:30

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		09/30/21 11:02	10/04/21 20:21	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		09/30/21 11:02	10/04/21 20:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	66		50 - 150				09/30/21 11:02	10/04/21 20:21	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: S3-AU-092321

Lab Sample ID: 580-106108-34

Date Collected: 09/23/21 10:30

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		10/05/21 11:17	10/06/21 18:56	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		10/05/21 11:17	10/06/21 18:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	69		50 - 150				10/05/21 11:17	10/06/21 18:56	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: S3-CD-092321

Lab Sample ID: 580-106108-35

Date Collected: 09/23/21 11:25

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		10/05/21 11:17	10/06/21 19:16	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		10/05/21 11:17	10/06/21 19:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	69		50 - 150				10/05/21 11:17	10/06/21 19:16	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: S3-CU-092321

Lab Sample ID: 580-106108-36

Date Collected: 09/23/21 11:25

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		10/05/21 11:17	10/06/21 19:36	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		10/05/21 11:17	10/06/21 19:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	77		50 - 150				10/05/21 11:17	10/06/21 19:36	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: S4-AD-092321

Lab Sample ID: 580-106108-37

Date Collected: 09/23/21 12:25

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		10/05/21 11:17	10/06/21 19:56	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/05/21 11:17	10/06/21 19:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	59		50 - 150				10/05/21 11:17	10/06/21 19:56	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: S4-AU-092321

Lab Sample ID: 580-106108-38

Date Collected: 09/23/21 12:25

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		10/05/21 11:17	10/06/21 20:16	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/05/21 11:17	10/06/21 20:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	65		50 - 150				10/05/21 11:17	10/06/21 20:16	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: S4-CD-092321

Lab Sample ID: 580-106108-39

Date Collected: 09/23/21 13:18

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		10/05/21 11:17	10/06/21 20:37	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		10/05/21 11:17	10/06/21 20:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	63		50 - 150				10/05/21 11:17	10/06/21 20:37	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: S4-CU-092321

Lab Sample ID: 580-106108-40

Date Collected: 09/23/21 13:18

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		10/05/21 11:17	10/06/21 20:57	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		10/05/21 11:17	10/06/21 20:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	68		50 - 150				10/05/21 11:17	10/06/21 20:57	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: S4-BU-092321

Lab Sample ID: 580-106108-41

Date Collected: 09/23/21 13:05

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		10/05/21 11:17	10/06/21 21:37	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/05/21 11:17	10/06/21 21:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	69		50 - 150				10/05/21 11:17	10/06/21 21:37	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: S4-BD-092321

Lab Sample ID: 580-106108-42

Date Collected: 09/23/21 12:20

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		10/05/21 11:17	10/06/21 21:57	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		10/05/21 11:17	10/06/21 21:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	65		50 - 150				10/05/21 11:17	10/06/21 21:57	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: S3-BU-092321

Lab Sample ID: 580-106108-43

Date Collected: 09/23/21 11:40

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		10/05/21 11:17	10/06/21 22:17	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/05/21 11:17	10/06/21 22:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	64		50 - 150				10/05/21 11:17	10/06/21 22:17	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: S3-BD-092321

Lab Sample ID: 580-106108-44

Date Collected: 09/23/21 11:10

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		10/05/21 11:17	10/06/21 22:38	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		10/05/21 11:17	10/06/21 22:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	72		50 - 150				10/05/21 11:17	10/06/21 22:38	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: S2-BU-092321

Lab Sample ID: 580-106108-45

Date Collected: 09/23/21 10:25

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.26		0.062	0.062	mg/L		10/05/21 11:17	10/06/21 22:58	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/05/21 11:17	10/06/21 22:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	81		50 - 150				10/05/21 11:17	10/06/21 22:58	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: S2-BD-092321

Lab Sample ID: 580-106108-46

Date Collected: 09/23/21 09:55

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		10/05/21 11:17	10/06/21 23:38	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/05/21 11:17	10/06/21 23:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	69		50 - 150				10/05/21 11:17	10/06/21 23:38	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: S1-BD-092321

Lab Sample ID: 580-106108-47

Date Collected: 09/23/21 08:40

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		10/05/21 11:17	10/06/21 23:58	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		10/05/21 11:17	10/06/21 23:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	71		50 - 150				10/05/21 11:17	10/06/21 23:58	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: S1-BU-092321

Lab Sample ID: 580-106108-48

Date Collected: 09/23/21 09:10

Matrix: Water

Date Received: 09/23/21 16:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		10/06/21 10:53	10/07/21 03:59	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/06/21 10:53	10/07/21 03:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	49	S1-	50 - 150				10/06/21 10:53	10/07/21 03:59	1



QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-369139/1-A
Matrix: Water
Analysis Batch: 369290

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 369139

Analyte	MB	MB	RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac
	Result	Qualifier									
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		09/29/21 10:56	09/30/21 22:42			1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		09/29/21 10:56	09/30/21 22:42			1
		MB	MB								
Surrogate	%Recovery	Qualifier	Limits			Prepared		Analyzed		Dil Fac	
o-Terphenyl	53		50 - 150			09/29/21 10:56		09/30/21 22:42		1	

Lab Sample ID: LCS 580-369139/2-A
Matrix: Water
Analysis Batch: 369290

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 369139

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits				
		Result	Qualifier								
#2 Diesel (C10-C24)	0.500	0.675	*+	mg/L		135	50 - 120				
Motor Oil (>C24-C36)	0.500	0.927	*+	mg/L		185	64 - 120				
		LCS	LCS								
Surrogate	%Recovery	Qualifier	Limits								
o-Terphenyl	109		50 - 150								

Lab Sample ID: LCSD 580-369139/3-A
Matrix: Water
Analysis Batch: 369290

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 369139

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec. Limits		RPD	RPD	Limit
		Result	Qualifier								
#2 Diesel (C10-C24)	0.500	0.683	*+	mg/L		137	50 - 120	1	3	26	
Motor Oil (>C24-C36)	0.500	0.953	*+	mg/L		191	64 - 120	3		24	
		LCSD	LCSD								
Surrogate	%Recovery	Qualifier	Limits								
o-Terphenyl	101		50 - 150								

Lab Sample ID: MB 580-369266/1-A
Matrix: Water
Analysis Batch: 369555

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 369266

Analyte	MB	MB	RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac
	Result	Qualifier									
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		09/30/21 11:02	10/04/21 11:37			1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		09/30/21 11:02	10/04/21 11:37			1
		MB	MB								
Surrogate	%Recovery	Qualifier	Limits			Prepared		Analyzed		Dil Fac	
o-Terphenyl	68		50 - 150			09/30/21 11:02		10/04/21 11:37		1	

Lab Sample ID: LCS 580-369266/2-A
Matrix: Water
Analysis Batch: 369555

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 369266

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits			
		Result	Qualifier							
#2 Diesel (C10-C24)	0.500	0.377		mg/L		75	50 - 120			
Motor Oil (>C24-C36)	0.500	0.399		mg/L		80	64 - 120			

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QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCS 580-369266/2-A
Matrix: Water
Analysis Batch: 369555

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 369266

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl	90		50 - 150

Lab Sample ID: LCSD 580-369266/3-A
Matrix: Water
Analysis Batch: 369555

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 369266

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
							Limits	RPD		
#2 Diesel (C10-C24)	0.500	0.313		mg/L		63	50 - 120	19	26	
Motor Oil (>C24-C36)	0.500	0.353		mg/L		71	64 - 120	12	24	

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o-Terphenyl	77		50 - 150

Lab Sample ID: MB 580-369655/1-A
Matrix: Water
Analysis Batch: 369746

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 369655

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		10/05/21 11:17	10/06/21 15:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	66		50 - 150	10/05/21 11:17	10/06/21 15:55	1

Lab Sample ID: LCS 580-369655/2-A
Matrix: Water
Analysis Batch: 369746

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 369655

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	
							Limits	RPD
#2 Diesel (C10-C24)	0.500	0.367		mg/L		73	50 - 120	
Motor Oil (>C24-C36)	0.500	0.445		mg/L		89	64 - 120	

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl	85		50 - 150

Lab Sample ID: LCSD 580-369655/3-A
Matrix: Water
Analysis Batch: 369746

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 369655

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
							Limits	RPD		
#2 Diesel (C10-C24)	0.500	0.446		mg/L		89	50 - 120	19	26	
Motor Oil (>C24-C36)	0.500	0.496		mg/L		99	64 - 120	11	24	

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o-Terphenyl	95		50 - 150

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: MB 580-369754/1-A
Matrix: Water
Analysis Batch: 369746

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 369754

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		10/06/21 10:53	10/07/21 01:39	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		10/06/21 10:53	10/07/21 01:39	1
		MB MB	Limits			Prepared	Analyzed	Dil Fac	
Surrogate	%Recovery	Qualifier							
o-Terphenyl	55		50 - 150			10/06/21 10:53	10/07/21 01:39	1	

Lab Sample ID: LCS 580-369754/3-A
Matrix: Water
Analysis Batch: 369746

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 369754

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
								%Rec.
#2 Diesel (C10-C24)	0.500	0.318		mg/L		64	50 - 120	
Motor Oil (>C24-C36)	0.500	0.428		mg/L		86	64 - 120	
		LCS LCS	Limits			Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier						
o-Terphenyl	86		50 - 150			10/06/21 10:53	10/07/21 01:39	1

Lab Sample ID: LCSD 580-369754/4-A
Matrix: Water
Analysis Batch: 369746

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 369754

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	0.500	0.325		mg/L		65	50 - 120	2	26
Motor Oil (>C24-C36)	0.500	0.469		mg/L		94	64 - 120	9	24
		LCSD LCSD	Limits			Prepared	Analyzed	Dil Fac	
Surrogate	%Recovery	Qualifier							
o-Terphenyl	91		50 - 150			10/06/21 10:53	10/07/21 01:39	1	

Lab Sample ID: MB 580-370022/1-A
Matrix: Water
Analysis Batch: 370099

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 370022

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		10/08/21 10:18	10/08/21 18:51	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		10/08/21 10:18	10/08/21 18:51	1
		MB MB	Limits			Prepared	Analyzed	Dil Fac	
Surrogate	%Recovery	Qualifier							
o-Terphenyl	75		50 - 150			10/08/21 10:18	10/08/21 18:51	1	

Lab Sample ID: LCS 580-370022/2-A
Matrix: Water
Analysis Batch: 370099

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 370022

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	0.500	0.403		mg/L		81	50 - 120
Motor Oil (>C24-C36)	0.500	0.464		mg/L		93	64 - 120

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QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCS 580-370022/2-A
Matrix: Water
Analysis Batch: 370099

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 370022

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	87		50 - 150

Lab Sample ID: LCSD 580-370022/3-A
Matrix: Water
Analysis Batch: 370099

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 370022

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec.		RPD	Limit
		Result	Qualifier				Limits	RPD		
#2 Diesel (C10-C24)	0.500	0.373		mg/L		75	50 - 120	8	26	
Motor Oil (>C24-C36)	0.500	0.464		mg/L		93	64 - 120	0	24	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	83		50 - 150

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Lab Sample ID: MB 580-369655/1-B
Matrix: Water
Analysis Batch: 369746

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 369655

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		10/05/21 11:17	10/06/21 14:14	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		10/05/21 11:17	10/06/21 14:14	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
<i>o</i> -Terphenyl	67		50 - 150	10/05/21 11:17	10/06/21 14:14	1

Lab Sample ID: LCS 580-369655/2-B
Matrix: Water
Analysis Batch: 369746

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 369655

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec.	
		Result	Qualifier				Limits	RPD
#2 Diesel (C10-C24)	0.500	0.396		mg/L		79	50 - 120	
Motor Oil (>C24-C36)	0.500	0.475		mg/L		95	64 - 120	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	91		50 - 150

Lab Sample ID: LCSD 580-369655/3-B
Matrix: Water
Analysis Batch: 369746

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 369655

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec.		RPD	Limit
		Result	Qualifier				Limits	RPD		
#2 Diesel (C10-C24)	0.500	0.469		mg/L		94	50 - 120	17	26	
Motor Oil (>C24-C36)	0.500	0.520		mg/L		104	64 - 120	9	24	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	93		50 - 150

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Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: 5-W-51-092221

Lab Sample ID: 580-106108-1

Date Collected: 09/22/21 09:25

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369655	10/05/21 11:17	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369746	10/06/21 16:55	ADB	FGS SEA

Client Sample ID: 5-W-18-092221

Lab Sample ID: 580-106108-2

Date Collected: 09/22/21 10:10

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369655	10/05/21 11:17	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369746	10/06/21 17:15	ADB	FGS SEA

Client Sample ID: 5-W-43-092221

Lab Sample ID: 580-106108-3

Date Collected: 09/22/21 10:55

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369655	10/05/21 11:17	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369746	10/06/21 17:56	ADB	FGS SEA

Client Sample ID: 2A-W-40-092221

Lab Sample ID: 580-106108-4

Date Collected: 09/22/21 11:40

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369139	09/29/21 10:56	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369949	10/07/21 12:07	JAE	FGS SEA

Client Sample ID: 1B-W-23-092221

Lab Sample ID: 580-106108-5

Date Collected: 09/22/21 12:05

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369139	09/29/21 10:56	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369290	10/01/21 00:01	JSM	FGS SEA

Client Sample ID: 1C-W-7-092221

Lab Sample ID: 580-106108-6

Date Collected: 09/22/21 15:00

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369139	09/29/21 10:56	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369290	10/01/21 00:21	JSM	FGS SEA
Total/NA	Prep	3510C	RE		370022	10/08/21 10:18	BJM	FGS SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	370099	10/08/21 19:51	T1W	FGS SEA

Eurofins FGS, Seattle

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: GW-4-092221

Lab Sample ID: 580-106108-7

Date Collected: 09/22/21 15:55

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369139	09/29/21 10:56	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369290	10/01/21 00:40	JSM	FGS SEA
Total/NA	Prep	3510C	RE		370022	10/08/21 10:18	BJM	FGS SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	370099	10/08/21 20:11	T1W	FGS SEA

Client Sample ID: EW-2A-092221

Lab Sample ID: 580-106108-8

Date Collected: 09/22/21 15:10

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369139	09/29/21 10:56	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369290	10/01/21 01:00	JSM	FGS SEA

Client Sample ID: MW-555-092221

Lab Sample ID: 580-106108-9

Date Collected: 09/22/21 16:45

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369139	09/29/21 10:56	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369290	10/01/21 01:20	JSM	FGS SEA

Client Sample ID: 2A-W-9-092221

Lab Sample ID: 580-106108-10

Date Collected: 09/22/21 15:36

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369139	09/29/21 10:56	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369290	10/01/21 01:39	JSM	FGS SEA
Total/NA	Prep	3510C	RE		370022	10/08/21 10:18	BJM	FGS SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	370099	10/08/21 20:31	T1W	FGS SEA

Client Sample ID: 1C-W-4092221

Lab Sample ID: 580-106108-11

Date Collected: 09/22/21 14:17

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369139	09/29/21 10:56	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369290	10/01/21 02:19	JSM	FGS SEA

Client Sample ID: 2A-W-42-092221

Lab Sample ID: 580-106108-12

Date Collected: 09/22/21 13:22

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369139	09/29/21 10:56	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369290	10/01/21 02:38	JSM	FGS SEA

Eurofins FGS, Seattle

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: 2A-W-42-092221

Lab Sample ID: 580-106108-12

Date Collected: 09/22/21 13:22

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C	RE		370022	10/08/21 10:18	BJM	FGS SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	370099	10/08/21 20:51	T1W	FGS SEA

Client Sample ID: 2A-W-41-092221

Lab Sample ID: 580-106108-13

Date Collected: 09/22/21 11:59

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369655	10/05/21 11:17	JHR	FGS SEA
Total/NA	Cleanup	3630C			369700	10/05/21 17:06	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369746	10/06/21 15:15	ADB	FGS SEA
Total/NA	Prep	3510C			369655	10/05/21 11:17	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369746	10/06/21 18:16	ADB	FGS SEA

Client Sample ID: GW-1-092221

Lab Sample ID: 580-106108-14

Date Collected: 09/22/21 11:06

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369139	09/29/21 10:56	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369290	10/01/21 02:58	JSM	FGS SEA

Client Sample ID: 5-W-56-092221

Lab Sample ID: 580-106108-15

Date Collected: 09/22/21 09:40

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369139	09/29/21 10:56	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369290	10/01/21 03:18	JSM	FGS SEA
Total/NA	Prep	3510C			369139	09/29/21 10:56	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369949	10/07/21 13:26	JAE	FGS SEA

Client Sample ID: EW-1-092221

Lab Sample ID: 580-106108-16

Date Collected: 09/22/21 10:27

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369139	09/29/21 10:56	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369290	10/01/21 03:37	JSM	FGS SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: 1C-W-8-092221

Lab Sample ID: 580-106108-17

Date Collected: 09/22/21 14:38

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369139	09/29/21 10:56	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369290	10/01/21 03:57	JSM	FGS SEA

Client Sample ID: GW-3-092221

Lab Sample ID: 580-106108-18

Date Collected: 09/22/21 12:36

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369655	10/05/21 11:17	JHR	FGS SEA
Total/NA	Cleanup	3630C			369700	10/05/21 17:06	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369746	10/06/21 15:35	ADB	FGS SEA
Total/NA	Prep	3510C			369655	10/05/21 11:17	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369746	10/06/21 18:36	ADB	FGS SEA

Client Sample ID: MW-4-092221

Lab Sample ID: 580-106108-19

Date Collected: 09/22/21 15:41

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369139	09/29/21 10:56	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369290	10/01/21 04:17	JSM	FGS SEA
Total/NA	Prep	3510C	RE		370022	10/08/21 10:18	BJM	FGS SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	370099	10/08/21 21:12	T1W	FGS SEA

Client Sample ID: GW-2-092221

Lab Sample ID: 580-106108-20

Date Collected: 09/22/21 11:12

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369139	09/29/21 10:56	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369290	10/01/21 04:37	JSM	FGS SEA

Client Sample ID: 5-W-14-092221

Lab Sample ID: 580-106108-21

Date Collected: 09/22/21 10:24

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369266	09/30/21 11:02	BJM	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369555	10/04/21 18:02	JAE	FGS SEA

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: 5-W-55-092221

Lab Sample ID: 580-106108-22

Date Collected: 09/22/21 09:34

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369266	09/30/21 11:02	BJM	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369555	10/04/21 18:22	JAE	FGS SEA

Client Sample ID: 5-W-180-092221

Lab Sample ID: 580-106108-23

Date Collected: 09/22/21 10:10

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369266	09/30/21 11:02	BJM	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369555	10/04/21 18:42	JAE	FGS SEA

Client Sample ID: 2A-W-410-092221

Lab Sample ID: 580-106108-24

Date Collected: 09/22/21 12:10

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369139	09/29/21 10:56	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369290	10/01/21 04:56	JSM	FGS SEA
Total/NA	Prep	3510C	RE		370022	10/08/21 10:18	BJM	FGS SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	370099	10/08/21 21:32	T1W	FGS SEA

Client Sample ID: GW-30-092221

Lab Sample ID: 580-106108-25

Date Collected: 09/22/21 12:36

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369139	09/29/21 10:56	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369290	10/01/21 05:16	JSM	FGS SEA
Total/NA	Prep	3510C	RE		370022	10/08/21 10:18	BJM	FGS SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	370099	10/08/21 21:52	T1W	FGS SEA

Client Sample ID: 5-W-16-092221

Lab Sample ID: 580-106108-26

Date Collected: 09/21/21 16:35

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369139	09/29/21 10:56	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369290	10/01/21 05:55	JSM	FGS SEA

Client Sample ID: 5-W-19-092121

Lab Sample ID: 580-106108-27

Date Collected: 09/21/21 16:30

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369139	09/29/21 10:56	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369290	10/01/21 06:15	JSM	FGS SEA

Eurofins FGS, Seattle

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: 5-W-19-092121

Lab Sample ID: 580-106108-27

Date Collected: 09/21/21 16:30

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C	RE		370022	10/08/21 10:18	BJM	FGS SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	370099	10/08/21 22:32	T1W	FGS SEA

Client Sample ID: 5-W-17-092121

Lab Sample ID: 580-106108-28

Date Collected: 09/21/21 16:50

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369139	09/29/21 10:56	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369290	10/01/21 06:35	JSM	FGS SEA

Client Sample ID: S1-AU-092321

Lab Sample ID: 580-106108-29

Date Collected: 09/23/21 08:45

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369266	09/30/21 11:02	BJM	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369555	10/04/21 19:02	JAE	FGS SEA

Client Sample ID: S1-AD-092321

Lab Sample ID: 580-106108-30

Date Collected: 09/23/21 08:45

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369266	09/30/21 11:02	BJM	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369555	10/04/21 19:22	JAE	FGS SEA

Client Sample ID: S2-AD-092321

Lab Sample ID: 580-106108-31

Date Collected: 09/23/21 09:35

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369266	09/30/21 11:02	BJM	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369555	10/04/21 19:41	JAE	FGS SEA

Client Sample ID: S2-AU-092321

Lab Sample ID: 580-106108-32

Date Collected: 09/23/21 09:35

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369266	09/30/21 11:02	BJM	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369555	10/04/21 20:01	JAE	FGS SEA

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: S3-AD-092321

Lab Sample ID: 580-106108-33

Date Collected: 09/23/21 10:30

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369266	09/30/21 11:02	BJM	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369555	10/04/21 20:21	JAE	FGS SEA

Client Sample ID: S3-AU-092321

Lab Sample ID: 580-106108-34

Date Collected: 09/23/21 10:30

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369655	10/05/21 11:17	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369746	10/06/21 18:56	ADB	FGS SEA

Client Sample ID: S3-CD-092321

Lab Sample ID: 580-106108-35

Date Collected: 09/23/21 11:25

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369655	10/05/21 11:17	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369746	10/06/21 19:16	ADB	FGS SEA

Client Sample ID: S3-CU-092321

Lab Sample ID: 580-106108-36

Date Collected: 09/23/21 11:25

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369655	10/05/21 11:17	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369746	10/06/21 19:36	ADB	FGS SEA

Client Sample ID: S4-AD-092321

Lab Sample ID: 580-106108-37

Date Collected: 09/23/21 12:25

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369655	10/05/21 11:17	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369746	10/06/21 19:56	ADB	FGS SEA

Client Sample ID: S4-AU-092321

Lab Sample ID: 580-106108-38

Date Collected: 09/23/21 12:25

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369655	10/05/21 11:17	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369746	10/06/21 20:16	ADB	FGS SEA

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: S4-CD-092321

Lab Sample ID: 580-106108-39

Date Collected: 09/23/21 13:18

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369655	10/05/21 11:17	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369746	10/06/21 20:37	ADB	FGS SEA

Client Sample ID: S4-CU-092321

Lab Sample ID: 580-106108-40

Date Collected: 09/23/21 13:18

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369655	10/05/21 11:17	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369746	10/06/21 20:57	ADB	FGS SEA

Client Sample ID: S4-BU-092321

Lab Sample ID: 580-106108-41

Date Collected: 09/23/21 13:05

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369655	10/05/21 11:17	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369746	10/06/21 21:37	ADB	FGS SEA

Client Sample ID: S4-BD-092321

Lab Sample ID: 580-106108-42

Date Collected: 09/23/21 12:20

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369655	10/05/21 11:17	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369746	10/06/21 21:57	ADB	FGS SEA

Client Sample ID: S3-BU-092321

Lab Sample ID: 580-106108-43

Date Collected: 09/23/21 11:40

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369655	10/05/21 11:17	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369746	10/06/21 22:17	ADB	FGS SEA

Client Sample ID: S3-BD-092321

Lab Sample ID: 580-106108-44

Date Collected: 09/23/21 11:10

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369655	10/05/21 11:17	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369746	10/06/21 22:38	ADB	FGS SEA

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Client Sample ID: S2-BU-092321

Lab Sample ID: 580-106108-45

Date Collected: 09/23/21 10:25

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369655	10/05/21 11:17	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369746	10/06/21 22:58	ADB	FGS SEA

Client Sample ID: S2-BD-092321

Lab Sample ID: 580-106108-46

Date Collected: 09/23/21 09:55

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369655	10/05/21 11:17	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369746	10/06/21 23:38	ADB	FGS SEA

Client Sample ID: S1-BD-092321

Lab Sample ID: 580-106108-47

Date Collected: 09/23/21 08:40

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369655	10/05/21 11:17	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369746	10/06/21 23:58	ADB	FGS SEA

Client Sample ID: S1-BU-092321

Lab Sample ID: 580-106108-48

Date Collected: 09/23/21 09:10

Matrix: Water

Date Received: 09/23/21 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369754	10/06/21 10:53	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369746	10/07/21 03:59	ADB	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-22

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Sample Summary

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

Job ID: 580-106108-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-106108-1	5-W-51-092221	Water	09/22/21 09:25	09/23/21 16:50
580-106108-2	5-W-18-092221	Water	09/22/21 10:10	09/23/21 16:50
580-106108-3	5-W-43-092221	Water	09/22/21 10:55	09/23/21 16:50
580-106108-4	2A-W-40-092221	Water	09/22/21 11:40	09/23/21 16:50
580-106108-5	1B-W-23-092221	Water	09/22/21 12:05	09/23/21 16:50
580-106108-6	1C-W-7-092221	Water	09/22/21 15:00	09/23/21 16:50
580-106108-7	GW-4-092221	Water	09/22/21 15:55	09/23/21 16:50
580-106108-8	EW-2A-092221	Water	09/22/21 15:10	09/23/21 16:50
580-106108-9	MW-555-092221	Water	09/22/21 16:45	09/23/21 16:50
580-106108-10	2A-W-9-092221	Water	09/22/21 15:36	09/23/21 16:50
580-106108-11	1C-W-4092221	Water	09/22/21 14:17	09/23/21 16:50
580-106108-12	2A-W-42-092221	Water	09/22/21 13:22	09/23/21 16:50
580-106108-13	2A-W-41-092221	Water	09/22/21 11:59	09/23/21 16:50
580-106108-14	GW-1-092221	Water	09/22/21 11:06	09/23/21 16:50
580-106108-15	5-W-56-092221	Water	09/22/21 09:40	09/23/21 16:50
580-106108-16	EW-1-092221	Water	09/22/21 10:27	09/23/21 16:50
580-106108-17	1C-W-8-092221	Water	09/22/21 14:38	09/23/21 16:50
580-106108-18	GW-3-092221	Water	09/22/21 12:36	09/23/21 16:50
580-106108-19	MW-4-092221	Water	09/22/21 15:41	09/23/21 16:50
580-106108-20	GW-2-092221	Water	09/22/21 11:12	09/23/21 16:50
580-106108-21	5-W-14-092221	Water	09/22/21 10:24	09/23/21 16:50
580-106108-22	5-W-55-092221	Water	09/22/21 09:34	09/23/21 16:50
580-106108-23	5-W-180-092221	Water	09/22/21 10:10	09/23/21 16:50
580-106108-24	2A-W-410-092221	Water	09/22/21 12:10	09/23/21 16:50
580-106108-25	GW-30-092221	Water	09/22/21 12:36	09/23/21 16:50
580-106108-26	5-W-16-092221	Water	09/21/21 16:35	09/23/21 16:50
580-106108-27	5-W-19-092121	Water	09/21/21 16:30	09/23/21 16:50
580-106108-28	5-W-17-092121	Water	09/21/21 16:50	09/23/21 16:50
580-106108-29	S1-AU-092321	Water	09/23/21 08:45	09/23/21 16:50
580-106108-30	S1-AD-092321	Water	09/23/21 08:45	09/23/21 16:50
580-106108-31	S2-AD-092321	Water	09/23/21 09:35	09/23/21 16:50
580-106108-32	S2-AU-092321	Water	09/23/21 09:35	09/23/21 16:50
580-106108-33	S3-AD-092321	Water	09/23/21 10:30	09/23/21 16:50
580-106108-34	S3-AU-092321	Water	09/23/21 10:30	09/23/21 16:50
580-106108-35	S3-CD-092321	Water	09/23/21 11:25	09/23/21 16:50
580-106108-36	S3-CU-092321	Water	09/23/21 11:25	09/23/21 16:50
580-106108-37	S4-AD-092321	Water	09/23/21 12:25	09/23/21 16:50
580-106108-38	S4-AU-092321	Water	09/23/21 12:25	09/23/21 16:50
580-106108-39	S4-CD-092321	Water	09/23/21 13:18	09/23/21 16:50
580-106108-40	S4-CU-092321	Water	09/23/21 13:18	09/23/21 16:50
580-106108-41	S4-BU-092321	Water	09/23/21 13:05	09/23/21 16:50
580-106108-42	S4-BD-092321	Water	09/23/21 12:20	09/23/21 16:50
580-106108-43	S3-BU-092321	Water	09/23/21 11:40	09/23/21 16:50
580-106108-44	S3-BD-092321	Water	09/23/21 11:10	09/23/21 16:50
580-106108-45	S2-BU-092321	Water	09/23/21 10:25	09/23/21 16:50
580-106108-46	S2-BD-092321	Water	09/23/21 09:55	09/23/21 16:50
580-106108-47	S1-BD-092321	Water	09/23/21 08:40	09/23/21 16:50
580-106108-48	S1-BU-092321	Water	09/23/21 09:10	09/23/21 16:50



 CHAIN OF CUSTODY		LABORATORY INFORMATION				LAB WORK ORDER:			
		Laboratory:		Project Manager:		SHIPMENT INFORMATION			
		Address:		Phone:		Shipment Method:			
City/State/ZIP:		Fax:		Tracking Number: 106108					
BNSF PROJECT INFORMATION			CONSULTANT INFORMATION			Project Number: 683-071			
BNSF Project Number: 683-071		Project State of Origin:	Company: Farallon Consulting		Project Manager: Amanda Meuniot				
BNSF Project Name: BNSF Skykomish Semi Annual		Project City:	Address: 975 5th Ave NW		Email: ameuniot@farallonconsulting.com				
BNSF Contact:		BNSF Work Order No.:	City/State/ZIP: Issaquah WA		Phone: 425-295-0800				
TURNAROUND TIME		DELIVERABLES		METHODS FOR ANALYSIS					
<input type="checkbox"/> 1-day Rush <input type="checkbox"/> 5- to 8-day Rush <input type="checkbox"/> 2-day Rush <input checked="" type="checkbox"/> Standard 10-Day <input type="checkbox"/> 3-day Rush <input type="checkbox"/> Other _____		<input type="checkbox"/> BNSF Standard (Level II) <input type="checkbox"/> Level III <input type="checkbox"/> EDD Req, Formal? <input type="checkbox"/> Level IV		(Samples as per list on) NUTPH - Dx Silica gel cleanup NUTPH - Dx			 580-106108 Chain of Custody		
SAMPLE INFORMATION									
Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/Grab)	Matrix	COMMENTS	LAB USE
		Date	Time	Sampler					
1 5-W-51-092221	2	9/22/21	0925	ES	N	G	W		-1
2 5-W-18-092221			1010						
3 5-W-43-092221			1055						-3
4 2A-W-40-092221			1140						
5 1B-W-23-092221			1235						-5
6 1C-W-7-092221			1350						
7 GW-4-092221			1555						-7
8 EW-2A-092221			1510						
9 MW-555-092221			1645	GP					-9
10 2A-W-9-092221			1536						
11 1C-W-4-092221			1417						-11
12 2A-W-42-092221			1322						
13 2A-W-41-092221			1159						-13
14 GW-1-092221			1106						
15 5-W-56-092221			0940						-15
Relinquished By: <u>Gini Smith</u>		Date/Time: <u>9/23/21 1650</u>		Received By: <u>[Signature]</u>		Date/Time: <u>9/23/21 1650</u>		Comments and Special Analytical Requirements:	
Relinquished By:		Date/Time:		Received By:		Date/Time:			
Relinquished By:		Date/Time:		Received By:		Date/Time:			
Received by Laboratory:		Date/Time:		Lab Remarks:		Lab: Custody Intact? <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No. BNSF COC No	


ORIGINAL - RETURN TO LABORATORY WITH SAMPLES

DUPLICATE - CONSULTANT

TAL-1001 (0912)

 CHAIN OF CUSTODY		LABORATORY INFORMATION						LAB WORK ORDER:	
		Laboratory: _____			Project Manager: _____			SHIPMENT INFORMATION	
Address: _____			Phone: _____			Shipment Method: _____			
City/State/ZIP: _____			Fax: _____			Tracking Number: _____			
BNSF PROJECT INFORMATION				CONSULTANT INFORMATION				Project Number: 683-071	
BNSF Project Number: 683-071		Project State of Origin: _____		Company: Farallon Consulting		Project Manager: Amanda Meugniot			
BNSF Project Name: BNSF Skykomish Semi Annual		Project City: _____		Address: 975 5th Ave NW		Email: ameugniot@farallonconsulting.com			
BNSF Contact: _____		BNSF Work Order No.: _____		City/State/ZIP: Issaquah		Phone: 425-295-0800		Fax: _____	
TURNAROUND TIME			DELIVERABLES			METHODS FOR ANALYSIS			
<input type="checkbox"/> 1-day Rush <input type="checkbox"/> 5- to 8-day Rush <input type="checkbox"/> 2-day Rush <input checked="" type="checkbox"/> Standard 10-Day <input type="checkbox"/> 3-day Rush <input type="checkbox"/> Other _____			<input type="checkbox"/> Other Deliverables? <input type="checkbox"/> BNSF Standard (Level II) <input type="checkbox"/> Level III <input type="checkbox"/> EDD Req. Format? <input type="checkbox"/> Level IV			_____ _____ _____			
SAMPLE INFORMATION									
Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/Grab)	Matrix	COMMENTS	LAB USE
		Date	Time	Sampler					
1 EW-1-092221	2	9/22/21	1027	GP	N	G	W		
2 1C-W-8-092221			1438	EB					-17
3 GW-3-092221			1236						
4 MW-4-092221			1541						-19
5 GW-2-092221			1112						
6 5-W-14-092221			1024						-21
7 5-W-55-092221			0934	I					
8 5-W-180-092221			1010	ES					-23
9 2A-W-410-092221			1210	GP					
10 GW-30-092221			1236	EB					-25
11 5-W-16-092121		9/21/21	1635	I					
12 5-W-19-092121			1630	GP					-27
13 5-W-17-092121			1650	ES					
14 S1-AU-092321		9/23/21	0845	EB					-29
15 S1-AD-092321			0845	I					
Relinquished By: EMISMAHA		Date/Time: 9/23/21 1650		Received By: Tom Blum		Date/Time: 9/23/21 1650		Comments and Special Analytical Requirements:	
Relinquished By: _____		Date/Time: _____		Received By: _____		Date/Time: _____			
Relinquished By: _____		Date/Time: _____		Received By: _____		Date/Time: _____			
Received by Laboratory: _____		Date/Time: _____		Lab Remarks: _____		Lab Custody Intact? <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No. _____ BNSF COC No. _____	

One silica gel cleanup
 NUTPH-Dx
 MURPH-Dx w/
 Silica gel cleanup

		LABORATORY INFORMATION				LAB WORK ORDER:			
		Laboratory:		Project Manager:		SHIPMENT INFORMATION			
		Address:		Phone:		Shipment Method:			
City/State/ZIP:		Fax:		Tracking Number:					
BNSF PROJECT INFORMATION			CONSULTANT INFORMATION			Project Number: 683-071			
BNSF Project Number: 683-071			Project City:			Project Manager: Annanda Meunier			
BNSF Project Name: BNSF Skykomish Semi annual			Company: Farallon Consulting			Email: ameunier@farallonconsulting.com			
BNSF Contact:			BNSF Work Order No.:			Phone: 425-295-0800 Fax:			
TURNAROUND TIME		DELIVERABLES			METHODS FOR ANALYSIS				
<input type="checkbox"/> 1-day Rush <input type="checkbox"/> 5- to 8-day Rush <input type="checkbox"/> 2-day Rush <input checked="" type="checkbox"/> Standard 10-Day <input type="checkbox"/> 3-day Rush <input type="checkbox"/> Other _____		<input type="checkbox"/> BNSF Standard (Level II) _____ <input type="checkbox"/> Level III _____ <input type="checkbox"/> Level IV _____			<input type="checkbox"/> Other Deliverables? _____ <input type="checkbox"/> EDD Req. Format? _____				
SAMPLE INFORMATION									
Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/Grab)	Matrix	COMMENTS	LAB USE
		Date	Time	Sampler					
1 S2-AD-092321	2	9/23/21	0935	EB	N	G	W	X	-31
2 S2-AU-092321			0935					X	
3 S3-AD-092321			1030					X	-33
4 S3-AU-092321			1030					X	
5 S3-CD-092321			1125					X	-35
6 S3-CU-092321			1125					X	
7 S4-AD-092321			1225					X	-37
8 S4-AU-092321			1225					X	
9 S4-CD-092321			1318					X	-39
10 S4-CU-092321			1318					X	
11 S4-BU-092321			1305	ES				X	-41
12 S4-BD-092321			1220					X	
13 S3-BU-092321			1140					X	-43
14 S3-BD-092321			1110					X	
15 S2-BU-092321			1025					X	-45
Relinquished By: Emi Swartz		Date/Time: 9/23/21 11050		Received By: Tom [Signature]		Date/Time: 9/23/21 1650		Comments and Special Analytical Requirements:	
Relinquished By:		Date/Time:		Received By:		Date/Time:			
Relinquished By:		Date/Time:		Received By:		Date/Time:			
Received by Laboratory:		Date/Time:		Lab Remarks:		Lab: Custody Intact? <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No. BNSF COC No.	

NUTPH - Dx
(NO Silica gel Cleanup)

 CHAIN OF CUSTODY	LABORATORY INFORMATION				LAB WORK ORDER:				
	Laboratory:		Project Manager:		SHIPMENT INFORMATION				
	Address:		Phone:		Shipment Method:				
City/State/ZIP:		Fax:		Tracking Number:					
BNSF PROJECT INFORMATION			CONSULTANT INFORMATION			Project Number: 083-071			
BNSF Project Number: 083-071		Project State of Origin:	Company: Farallon consulting		Project Manager: Amanda Meuniot				
BNSF Project Name: BNSF Skykomish Sem; Annual		Project City:	Address: 975 5th Ave NW		Email: ameuniot@farallonconsulting.com				
BNSF Contact:		BNSF Work Order No.:	City/State/ZIP: Issaquah		Phone: 425-295-0800				
TURNAROUND TIME		DELIVERABLES		METHODS FOR ANALYSIS					
<input type="checkbox"/> 1-day Rush <input type="checkbox"/> 5- to 8-day Rush <input type="checkbox"/> 2-day Rush <input checked="" type="checkbox"/> Standard 10-Day <input type="checkbox"/> 3-day Rush <input type="checkbox"/> Other _____		<input type="checkbox"/> BNSF Standard (Level II) <input type="checkbox"/> Level III <input type="checkbox"/> EDD Req. Format? <input type="checkbox"/> Level IV		<input type="checkbox"/> Other Deliverables? <input type="checkbox"/> Other _____					
SAMPLE INFORMATION									
Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/Grab)	Matrix	COMMENTS	LAB USE
		Date	Time	Sampler					
1 S2-BD-092321	2	9/23/21	0955	ES	N	G	W	XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX	-47
2 S1-BD-092321	1	1	0840	1	1	1	1		
3 S7-BU-092321	1	1	0910	1	1	1	1		
emb									
Relinquished By: EMJ SMITH		Date/Time: 9/23/21 1650	Received By: Tom B...		Date/Time: 9/23/21 1650	Comments and Special Analytical Requirements:			
Relinquished By:		Date/Time:	Received By:		Date/Time:				
Relinquished By:		Date/Time:	Received By:		Date/Time:				
Received by Laboratory:		Date/Time:	Lab Remarks:		Lab. Custody Intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.		BNSF COC No.	

WUPH-DX
 (No silica gel cleaning)

Therm. ID: RR9 Cor: 2.6 ° Unc: 2.6 °
Cooler Dsc: Lg Blv FedEx:
Packing: Exb UPS:
Cust. Seal: Yes No ~~X~~ Lab Cour:
Blue Ice, Wet Dry, None Other: C102

Therm. ID: RR9 Cor: 1.3 ° Unc: 1.3 °
Cooler Dsc: Lg Blv FedEx:
Packing: Exb UPS:
Cust. Seal: Yes No ~~X~~ Lab Cour:
Blue Ice, Wet Dry, None Other:

Therm. ID: RR9 Cor: 1.6 ° Unc: 1.6 °
Cooler Dsc: Lg Blv FedEx:
Packing: Exb UPS:
Cust. Seal: Yes No ~~X~~ Lab Cour:
Blue Ice, Wet Dry, None Other:

Therm. ID: RR9 Cor: 1.1 ° Unc: 1.1 °
Cooler Dsc: Lg Blv FedEx:
Packing: Exb UPS:
Cust. Seal: Yes No ~~X~~ Lab Cour:
Blue Ice, Wet Dry, None Other:

Therm. ID: RR9 Cor: 4.9 ° Unc: 4.9 °
Cooler Dsc: Lg Blv FedEx:
Packing: Exb UPS:
Cust. Seal: Yes No ~~X~~ Lab Cour:
Blue Ice, Wet Dry, None Other:

Therm. ID: RR9 Cor: 4.1 ° Unc: 4.1 °
Cooler Dsc: Lg Blv FedEx:
Packing: Exb UPS:
Cust. Seal: Yes No ~~X~~ Lab Cour:
Blue Ice, Wet Dry, None Other:

Therm. ID: RR9 Cor: 4.2 ° Unc: 4.2 °
Cooler Dsc: Lg Blv FedEx:
Packing: Exb UPS:
Cust. Seal: Yes No ~~X~~ Lab Cour:
Blue Ice, Wet Dry, None Other:

Therm. ID: RR9 Cor: 1.6 ° Unc: 1.6 °
Cooler Dsc: Lg Blv FedEx:
Packing: Exb UPS:
Cust. Seal: Yes No ~~X~~ Lab Cour:
Blue Ice, Wet Dry, None Other:

Therm. ID: RR9 Cor: 6.3 ° Unc: 6.3 °
Cooler Dsc: Lg Blv FedEx:
Packing: Exb UPS:
Cust. Seal: Yes No ~~X~~ Lab Cour:
Blue Ice, Wet Dry, None Other:



Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-106108-1

Login Number: 106108

List Source: Eurofins FGS, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310


Laboratory Job ID: 580-106283-1

Client Project/Site: BNSF Skykomish Rush NPDES
Sampling Event: Skykomish - GAC/HCC

For:

Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
10/6/2021 1:15:32 PM

Tracy Dutton, Client Relations Manager
(253)380-6574

Tracy.Dutton@Eurofinset.com

Designee for

Nathan Lewis, Project Manager I
(253)922-2310

Nathan.Lewis@Eurofinset.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Sample Summary	10
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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-106283-1

Job ID: 580-106283-1

Laboratory: Eurofins FGS, Seattle

Narrative

Job Narrative 580-106283-1

Comments

No additional comments.

Receipt

The samples were received on 9/30/2021 12:05 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.9° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-369392. Laboratory control sample/laboratory control sample duplicate were created and substituted for MS/MSD/DUP.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-106283-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-106283-1

Client Sample ID: Before GAC-92921

Lab Sample ID: 580-106283-1

Date Collected: 09/29/21 06:35

Matrix: Water

Date Received: 09/30/21 12:05

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	3.3		0.062		mg/L		10/01/21 10:17	10/05/21 05:11	1
Motor Oil (>C24-C36)	0.75		0.092		mg/L		10/01/21 10:17	10/05/21 05:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	79		50 - 150				10/01/21 10:17	10/05/21 05:11	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-106283-1

Client Sample ID: HCC EFF-92921

Lab Sample ID: 580-106283-2

Date Collected: 09/29/21 06:35

Matrix: Water

Date Received: 09/30/21 12:05

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.080		0.062		mg/L		10/01/21 10:17	10/05/21 04:51	1
Motor Oil (>C24-C36)	ND		0.091		mg/L		10/01/21 10:17	10/05/21 04:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	71		50 - 150				10/01/21 10:17	10/05/21 04:51	1



QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-106283-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-369392/1-A
Matrix: Water
Analysis Batch: 369559

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 369392

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065		mg/L		10/01/21 10:17	10/05/21 00:50	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		10/01/21 10:17	10/05/21 00:50	1
		MB MB	Limits			Prepared	Analyzed	Dil Fac	
Surrogate	%Recovery	Qualifier							
o-Terphenyl	71		50 - 150			10/01/21 10:17	10/05/21 00:50	1	

Lab Sample ID: LCS 580-369392/2-A
Matrix: Water
Analysis Batch: 369559

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 369392

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
								%Rec.
#2 Diesel (C10-C24)	0.500	0.409		mg/L		82	50 - 120	
Motor Oil (>C24-C36)	0.500	0.455		mg/L		91	64 - 120	
		LCS LCS	Limits			Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier						
o-Terphenyl	82		50 - 150			10/01/21 10:17	10/05/21 00:50	1

Lab Sample ID: LCSD 580-369392/3-A
Matrix: Water
Analysis Batch: 369559

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 369392

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	0.500	0.370		mg/L		74	50 - 120	10	26
Motor Oil (>C24-C36)	0.500	0.464		mg/L		93	64 - 120	2	24
		LCSD LCSD	Limits			Prepared	Analyzed	Dil Fac	
Surrogate	%Recovery	Qualifier							
o-Terphenyl	91		50 - 150			10/01/21 10:17	10/05/21 00:50	1	

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-106283-1

Client Sample ID: Before GAC-92921

Lab Sample ID: 580-106283-1

Date Collected: 09/29/21 06:35

Matrix: Water

Date Received: 09/30/21 12:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369392	10/01/21 10:17	BJM	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369559	10/05/21 05:11	JAE	FGS SEA

Client Sample ID: HCC EFF-92921

Lab Sample ID: 580-106283-2

Date Collected: 09/29/21 06:35

Matrix: Water

Date Received: 09/30/21 12:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369392	10/01/21 10:17	BJM	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369559	10/05/21 04:51	JAE	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-106283-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-22

1

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Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-106283-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-106283-1	Before GAC-92921	Water	09/29/21 06:35	09/30/21 12:05
580-106283-2	HCC EFF-92921	Water	09/29/21 06:35	09/30/21 12:05

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-106283-1

Login Number: 106283

List Number: 1

Creator: Vallelunga, Diana L

List Source: Eurofins FGS, Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-106416-1

Client Project/Site: BNSF Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
10/8/2021 12:49:17 PM

Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish HCC System

Job ID: 580-106416-1

Job ID: 580-106416-1

Laboratory: Eurofins FGS, Seattle

Narrative

**Job Narrative
580-106416-1**

Comments

No additional comments.

Receipt

The samples were received on 10/5/2021 12:35 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 5.2° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-369754. Laboratory control sample/laboratory control sample duplicate were created and substituted for MS/MSD/DUP.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.



Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish HCC System

Job ID: 580-106416-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish HCC System

Job ID: 580-106416-1

Client Sample ID: Before GAC-10521

Lab Sample ID: 580-106416-1

Date Collected: 10/05/21 07:00

Matrix: Water

Date Received: 10/05/21 12:35

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.42		0.062		mg/L		10/06/21 10:53	10/07/21 03:19	1
Motor Oil (>C24-C36)	0.22		0.091		mg/L		10/06/21 10:53	10/07/21 03:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150				10/06/21 10:53	10/07/21 03:19	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish HCC System

Job ID: 580-106416-1

Client Sample ID: HCC EFF-10521

Lab Sample ID: 580-106416-2

Date Collected: 10/05/21 07:00

Matrix: Water

Date Received: 10/05/21 12:35

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.088		0.062		mg/L		10/06/21 10:53	10/07/21 03:39	1
Motor Oil (>C24-C36)	ND		0.092		mg/L		10/06/21 10:53	10/07/21 03:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	67		50 - 150				10/06/21 10:53	10/07/21 03:39	1

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0010		mg/L		10/05/21 18:03	10/06/21 19:43	1
Lead	ND		0.00040		mg/L		10/05/21 18:03	10/06/21 19:43	1



QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish HCC System

Job ID: 580-106416-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-369754/1-A
Matrix: Water
Analysis Batch: 369746

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 369754

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065		mg/L		10/06/21 10:53	10/07/21 01:39	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		10/06/21 10:53	10/07/21 01:39	1
Surrogate	MB MB		Limits			D	Prepared	Analyzed	Dil Fac
%Recovery	Qualifier								
o-Terphenyl	55		50 - 150				10/06/21 10:53	10/07/21 01:39	1

Lab Sample ID: LCS 580-369754/3-A
Matrix: Water
Analysis Batch: 369746

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 369754

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.	
								RPD	Limit
#2 Diesel (C10-C24)	0.500	0.318		mg/L		64	50 - 120		
Motor Oil (>C24-C36)	0.500	0.428		mg/L		86	64 - 120		
Surrogate	LCS LCS		Limits			D	Prepared	Analyzed	Dil Fac
%Recovery	Qualifier								
o-Terphenyl	86		50 - 150						

Lab Sample ID: LCSD 580-369754/4-A
Matrix: Water
Analysis Batch: 369746

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 369754

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	%Rec.		RPD	
								RPD	Limit	RPD	Limit
#2 Diesel (C10-C24)	0.500	0.325		mg/L		65	50 - 120			2	26
Motor Oil (>C24-C36)	0.500	0.469		mg/L		94	64 - 120			9	24
Surrogate	LCSD LCSD		Limits			D	Prepared	Analyzed	Dil Fac		
%Recovery	Qualifier										
o-Terphenyl	91		50 - 150								

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 580-369712/14-A
Matrix: Water
Analysis Batch: 369888

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 369712

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	ND		0.0010		mg/L		10/05/21 18:03	10/06/21 19:40	1
Lead	ND		0.00040		mg/L		10/05/21 18:03	10/06/21 19:40	1

Lab Sample ID: LCS 580-369712/15-A
Matrix: Water
Analysis Batch: 369888

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 369712

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.	
								RPD	Limit
Arsenic	1.00	1.06		mg/L		106	85 - 115		
Lead	1.00	0.955		mg/L		96	85 - 115		

Eurofins FGS, Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish HCC System

Job ID: 580-106416-1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 580-369712/16-A
Matrix: Water
Analysis Batch: 369888

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 369712

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD
							Limits	RPD	
Arsenic	1.00	1.06		mg/L		106	85 - 115	0	20
Lead	1.00	0.959		mg/L		96	85 - 115	0	20

Lab Sample ID: 580-106200-B-1-C MS
Matrix: Water
Analysis Batch: 369888

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 369712

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.	
									Limits	RPD
Arsenic	ND		1.00	1.10		mg/L		110	70 - 130	
Lead	ND		1.00	0.991		mg/L		99	70 - 130	

Lab Sample ID: 580-106200-B-1-D MSD
Matrix: Water
Analysis Batch: 369888

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 369712

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.	
									Limits	RPD
Arsenic	ND		1.00	1.09		mg/L		109	70 - 130	1
Lead	ND		1.00	0.983		mg/L		98	70 - 130	1

Lab Sample ID: 580-106200-B-1-B DU
Matrix: Water
Analysis Batch: 369888

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 369712

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD	
								Limit	Limit
Arsenic	ND		ND		mg/L		NC	20	
Lead	ND		ND		mg/L		NC	20	

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish HCC System

Job ID: 580-106416-1

Client Sample ID: Before GAC-10521

Lab Sample ID: 580-106416-1

Date Collected: 10/05/21 07:00

Matrix: Water

Date Received: 10/05/21 12:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369754	10/06/21 10:53	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369746	10/07/21 03:19	ADB	FGS SEA

Client Sample ID: HCC EFF-10521

Lab Sample ID: 580-106416-2

Date Collected: 10/05/21 07:00

Matrix: Water

Date Received: 10/05/21 12:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			369754	10/06/21 10:53	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	369746	10/07/21 03:39	ADB	FGS SEA
Total/NA	Prep	200.8			369712	10/05/21 18:03	JLS	FGS SEA
Total/NA	Analysis	200.8		1	369888	10/06/21 19:43	FCW	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish HCC System

Job ID: 580-106416-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-22

- 1
- 2
- 3
- 4
- 5
- 6
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- 10
- 11

Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish HCC System

Job ID: 580-106416-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-106416-1	Before GAC-10521	Water	10/05/21 07:00	10/05/21 12:35
580-106416-2	HCC EFF-10521	Water	10/05/21 07:00	10/05/21 12:35

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Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-106416-1

Login Number: 106416

List Source: Eurofins FGS, Seattle

List Number: 1

Creator: Vallelunga, Diana L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-106763-1
Client Project/Site: BNSF Skykomish Rush NPDES
Sampling Event: Skykomish - GAC/HCC
Revision: 1

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
11/5/2021 11:34:04 AM

Pauline Matlock, Project Manager
(253)922-2310
pauline.matlock@eurofinset.com

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Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-106763-1

Job ID: 580-106763-1

Laboratory: Eurofins FGS, Seattle

Narrative

Job Narrative 580-106763-1

Comments

No additional comments.

Revision

The report being provided is a revision of the original report sent on 10/26/2021. The report (revision 1) is being revised due to: Client would like confirmation analysis results reported.

Receipt

The samples were received on 10/19/2021 12:40 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.9° C.

GC Semi VOA

Method NWTPH-Dx: Continuing calibration verification (CCV) standard associated with batch 580-372173 recovered outside %Drift acceptance criteria for o-Terphenyl surrogate. The %Recovery is within acceptance criteria for the surrogate in the CCV and associated samples; therefore, the data are qualified and reported. Additionally, the samples were re-analyzed in analytical batch 580-371325, and these results have been reported alongside the original values. Affected samples: Before GAC-101421 (580-106763-1), HCC EFF-101421 (580-106763-2) and (CCVRT 580-372173/3)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-371281, so an LCS and LCSD were created and used instead.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-106763-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-106763-1

Client Sample ID: Before GAC-101421

Lab Sample ID: 580-106763-1

Date Collected: 10/14/21 17:45

Matrix: Water

Date Received: 10/19/21 12:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.27		0.062		mg/L		10/21/21 18:01	10/22/21 13:18	1
#2 Diesel (C10-C24)	0.30		0.062		mg/L		10/21/21 18:01	11/03/21 01:01	1
Motor Oil (>C24-C36)	0.27		0.092		mg/L		10/21/21 18:01	10/22/21 13:18	1
Motor Oil (>C24-C36)	0.28		0.092		mg/L		10/21/21 18:01	11/03/21 01:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	74		50 - 150	10/21/21 18:01	10/22/21 13:18	1
<i>o</i> -Terphenyl	88		50 - 150	10/21/21 18:01	11/03/21 01:01	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-106763-1

Client Sample ID: HCC EFF-101421

Lab Sample ID: 580-106763-2

Date Collected: 10/14/21 17:45

Matrix: Water

Date Received: 10/19/21 12:40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.087		0.062		mg/L		10/21/21 18:01	10/22/21 13:37	1
#2 Diesel (C10-C24)	0.086		0.062		mg/L		10/21/21 18:01	11/03/21 01:21	1
Motor Oil (>C24-C36)	0.13		0.092		mg/L		10/21/21 18:01	10/22/21 13:37	1
Motor Oil (>C24-C36)	0.10		0.092		mg/L		10/21/21 18:01	11/03/21 01:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	73		50 - 150	10/21/21 18:01	10/22/21 13:37	1
o-Terphenyl	84		50 - 150	10/21/21 18:01	11/03/21 01:21	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-106763-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-371281/1-A
Matrix: Water
Analysis Batch: 371325

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 371281

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065		mg/L		10/21/21 18:01	10/22/21 11:59	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		10/21/21 18:01	10/22/21 11:59	1
Surrogate	MB MB		Limits			D	Prepared	Analyzed	Dil Fac
%Recovery	Qualifier								
<i>o</i> -Terphenyl	63		50 - 150				10/21/21 18:01	10/22/21 11:59	1

Lab Sample ID: LCS 580-371281/2-A
Matrix: Water
Analysis Batch: 371325

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 371281

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	Limits	
									%Rec.
#2 Diesel (C10-C24)	0.500	0.372		mg/L		74	50 - 120		
Motor Oil (>C24-C36)	0.500	0.453		mg/L		91	64 - 120		
Surrogate	LCS LCS		Limits			D	Prepared	Analyzed	Dil Fac
%Recovery	Qualifier								
<i>o</i> -Terphenyl	81		50 - 150						

Lab Sample ID: LCSD 580-371281/3-A
Matrix: Water
Analysis Batch: 371325

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 371281

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	0.500	0.373		mg/L		75	50 - 120	0	26
Motor Oil (>C24-C36)	0.500	0.396		mg/L		79	64 - 120	13	24
Surrogate	LCSD LCSD		Limits			D	Prepared	Analyzed	Dil Fac
%Recovery	Qualifier								
<i>o</i> -Terphenyl	82		50 - 150						

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-106763-1

Client Sample ID: Before GAC-101421

Lab Sample ID: 580-106763-1

Date Collected: 10/14/21 17:45

Matrix: Water

Date Received: 10/19/21 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			371281	10/21/21 18:01	BJM	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	371325	10/22/21 13:18	JAE	FGS SEA
Total/NA	Prep	3510C			371281	10/21/21 18:01	BJM	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	372173	11/03/21 01:01	W1T	FGS SEA

Client Sample ID: HCC EFF-101421

Lab Sample ID: 580-106763-2

Date Collected: 10/14/21 17:45

Matrix: Water

Date Received: 10/19/21 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			371281	10/21/21 18:01	BJM	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	371325	10/22/21 13:37	JAE	FGS SEA
Total/NA	Prep	3510C			371281	10/21/21 18:01	BJM	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	372173	11/03/21 01:21	W1T	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-106763-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-22

1

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Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-106763-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-106763-1	Before GAC-101421	Water	10/14/21 17:45	10/19/21 12:40
580-106763-2	HCC EFF-101421	Water	10/14/21 17:45	10/19/21 12:40

- 1
- 2
- 3
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- 8
- 9
- 10
- 11

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-106763-1

Login Number: 106763

List Number: 1

Creator: Vallelunga, Diana L

List Source: Eurofins FGS, Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-106942-1
Client Project/Site: BNSF Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
10/31/2021 2:30:17 PM

Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish HCC System

Job ID: 580-106942-1

Job ID: 580-106942-1

Laboratory: Eurofins FGS, Seattle

Narrative

**Job Narrative
580-106942-1**

Comments

No additional comments.

Receipt

The samples were received on 10/26/2021 1:15 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 14.6° C.

Receipt Exceptions

The following sample(s) was received at the laboratory outside the required temperature criteria:14.6/14.9

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-371693. So laboratory control sample/laboratory control sample duplicate were created and substituted for MS/MSD/DUP.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.



Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish HCC System

Job ID: 580-106942-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish HCC System

Job ID: 580-106942-1

Client Sample ID: Before GAC

Lab Sample ID: 580-106942-1

Date Collected: 10/22/21 06:00

Matrix: Water

Date Received: 10/26/21 13:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.34		0.062		mg/L		10/27/21 10:54	10/30/21 06:19	1
Motor Oil (>C24-C36)	0.29		0.092		mg/L		10/27/21 10:54	10/30/21 06:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	85		50 - 150				10/27/21 10:54	10/30/21 06:19	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish HCC System

Job ID: 580-106942-1

Client Sample ID: HCC EFF

Lab Sample ID: 580-106942-2

Date Collected: 10/22/21 06:00

Matrix: Water

Date Received: 10/26/21 13:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.10		0.062		mg/L		10/27/21 10:54	10/30/21 06:38	1
Motor Oil (>C24-C36)	0.097		0.091		mg/L		10/27/21 10:54	10/30/21 06:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	83		50 - 150				10/27/21 10:54	10/30/21 06:38	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish HCC System

Job ID: 580-106942-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-371693/1-A
Matrix: Water
Analysis Batch: 371896

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 371693

Analyte	MB MB		RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac
	Result	Qualifier									
#2 Diesel (C10-C24)	ND		0.065		mg/L		10/27/21 10:54	10/30/21 04:22			1
Motor Oil (>C24-C36)	ND		0.096		mg/L		10/27/21 10:54	10/30/21 04:22			1
		MB MB	Limits			D	Prepared		Analyzed		Dil Fac
Surrogate	%Recovery	Qualifier									
o-Terphenyl	81		50 - 150				10/27/21 10:54	10/30/21 04:22			1

Lab Sample ID: LCS 580-371693/2-A
Matrix: Water
Analysis Batch: 371896

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 371693

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
#2 Diesel (C10-C24)	0.500	0.409		mg/L		82	50 - 120	
Motor Oil (>C24-C36)	0.500	0.465		mg/L		93	64 - 120	
		LCS LCS	Limits			D	%Rec. Limits	
Surrogate	%Recovery	Qualifier						
o-Terphenyl	96		50 - 150					

Lab Sample ID: LCSD 580-371693/3-A
Matrix: Water
Analysis Batch: 371896

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 371693

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	
									RPD	Limit
#2 Diesel (C10-C24)	0.500	0.376		mg/L		75	50 - 120	8	26	
Motor Oil (>C24-C36)	0.500	0.457		mg/L		91	64 - 120	2	24	
		LCSD LCSD	Limits			D	%Rec. Limits		RPD	
Surrogate	%Recovery	Qualifier								
o-Terphenyl	94		50 - 150							

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish HCC System

Job ID: 580-106942-1

Client Sample ID: Before GAC

Date Collected: 10/22/21 06:00

Date Received: 10/26/21 13:15

Lab Sample ID: 580-106942-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			371693	10/27/21 10:54	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	371896	10/30/21 06:19	ADB	FGS SEA

Client Sample ID: HCC EFF

Date Collected: 10/22/21 06:00

Date Received: 10/26/21 13:15

Lab Sample ID: 580-106942-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			371693	10/27/21 10:54	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	371896	10/30/21 06:38	ADB	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish HCC System

Job ID: 580-106942-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-22

- 1
- 2
- 3
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- 10
- 11

Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish HCC System

Job ID: 580-106942-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-106942-1	Before GAC	Water	10/22/21 06:00	10/26/21 13:15
580-106942-2	HCC EFF	Water	10/22/21 06:00	10/26/21 13:15

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Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-106942-1

Login Number: 106942

List Source: Eurofins FGS, Seattle

List Number: 1

Creator: Vallelunga, Diana L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	Cooler temperature outside required temperature criteria.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-106975-1

Client Project/Site: BNSF Skykomish Rush NPDES
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
11/1/2021 1:26:06 PM

Nathan Lewis, Project Manager I
(253)922-2310
Nathan.Lewis@Eurofinset.com

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Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-106975-1

Job ID: 580-106975-1

Laboratory: Eurofins FGS, Seattle

Narrative

**Job Narrative
580-106975-1**

Comments

No additional comments.

Receipt

The samples were received on 10/27/2021 12:45 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.1° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-371835, so an LCS and an LCSD were created and used instead.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.



Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-106975-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-106975-1

Client Sample ID: Before GAC-102621

Lab Sample ID: 580-106975-1

Date Collected: 10/26/21 16:30

Matrix: Water

Date Received: 10/27/21 12:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.33		0.062		mg/L		10/28/21 14:44	10/30/21 13:23	1
Motor Oil (>C24-C36)	0.22		0.092		mg/L		10/28/21 14:44	10/30/21 13:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	68		50 - 150				10/28/21 14:44	10/30/21 13:23	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-106975-1

Client Sample ID: HCC EFF-102621

Lab Sample ID: 580-106975-2

Date Collected: 10/26/21 16:30

Matrix: Water

Date Received: 10/27/21 12:45

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.13		0.062		mg/L		10/28/21 14:44	10/30/21 13:43	1
Motor Oil (>C24-C36)	ND		0.092		mg/L		10/28/21 14:44	10/30/21 13:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	77		50 - 150				10/28/21 14:44	10/30/21 13:43	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-106975-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-371835/1-A
Matrix: Water
Analysis Batch: 371972

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 371835

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065		mg/L		10/28/21 14:44	10/30/21 12:03	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		10/28/21 14:44	10/30/21 12:03	1
Surrogate	MB MB		Limits			D	Prepared	Analyzed	Dil Fac
%Recovery	Qualifier								
o-Terphenyl	64		50 - 150				10/28/21 14:44	10/30/21 12:03	1

Lab Sample ID: LCS 580-371835/2-A
Matrix: Water
Analysis Batch: 371972

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 371835

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.	
									#2 Diesel (C10-C24)
Motor Oil (>C24-C36)	0.500	0.437		mg/L		87	64 - 120		
Surrogate	LCS LCS		Limits			D	Prepared	Analyzed	Dil Fac
%Recovery	Qualifier								
o-Terphenyl	80		50 - 150						

Lab Sample ID: LCSD 580-371835/3-A
Matrix: Water
Analysis Batch: 371972

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 371835

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Motor Oil (>C24-C36)	0.500	0.460		mg/L		92	64 - 120	5	24
Surrogate	LCSD LCSD		Limits			D	Prepared	Analyzed	Dil Fac
%Recovery	Qualifier								
o-Terphenyl	79		50 - 150						

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-106975-1

Client Sample ID: Before GAC-102621

Lab Sample ID: 580-106975-1

Date Collected: 10/26/21 16:30

Matrix: Water

Date Received: 10/27/21 12:45

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Prep	3510C			371835	10/28/21 14:44	BJM	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	371972	10/30/21 13:23	JAE	FGS SEA

Client Sample ID: HCC EFF-102621

Lab Sample ID: 580-106975-2

Date Collected: 10/26/21 16:30

Matrix: Water

Date Received: 10/27/21 12:45

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Prep	3510C			371835	10/28/21 14:44	BJM	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	371972	10/30/21 13:43	JAE	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-106975-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-22

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-106975-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-106975-1	Before GAC-102621	Water	10/26/21 16:30	10/27/21 12:45
580-106975-2	HCC EFF-102621	Water	10/26/21 16:30	10/27/21 12:45

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Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-106975-1

Login Number: 106975

List Source: Eurofins FGS, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-107200-1
Client Project/Site: Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
11/10/2021 2:02:42 PM

Pauline Matlock, Project Manager
(253)922-2310
pauline.matlock@eurofinset.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-107200-1

Job ID: 580-107200-1

Laboratory: Eurofins FGS, Seattle

Narrative

**Job Narrative
580-107200-1**

Comments

No additional comments.

Receipt

The samples were received on 11/4/2021 12:51 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.6° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-372786. So laboratory control sample/laboratory control sample duplicate were created and substituted for MS/MSD/DUP.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.



Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-107200-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-107200-1

Client Sample ID: Before GAC-11421

Lab Sample ID: 580-107200-1

Date Collected: 11/04/21 10:40

Matrix: Water

Date Received: 11/04/21 12:51

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.52		0.062		mg/L		11/09/21 11:18	11/09/21 16:50	1
Motor Oil (>C24-C36)	0.42		0.091		mg/L		11/09/21 11:18	11/09/21 16:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	88		50 - 150				11/09/21 11:18	11/09/21 16:50	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-107200-1

Client Sample ID: HCC EFF-11421

Lab Sample ID: 580-107200-2

Date Collected: 11/04/21 10:40

Matrix: Water

Date Received: 11/04/21 12:51

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		11/09/21 11:18	11/09/21 17:10	1
Motor Oil (>C24-C36)	ND		0.092		mg/L		11/09/21 11:18	11/09/21 17:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	74		50 - 150				11/09/21 11:18	11/09/21 17:10	1



QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-107200-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-372786/1-A
Matrix: Water
Analysis Batch: 372775

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 372786

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.065		mg/L		11/09/21 11:18	11/09/21 15:50	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		11/09/21 11:18	11/09/21 15:50	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150				11/09/21 11:18	11/09/21 15:50	1

Lab Sample ID: LCS 580-372786/2-A
Matrix: Water
Analysis Batch: 372775

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 372786

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	0.500	0.387		mg/L		77	50 - 120
Motor Oil (>C24-C36)	0.500	0.480		mg/L		96	64 - 120
Surrogate	LCS %Recovery	LCS Qualifier	Limits				%Rec.
<i>o</i> -Terphenyl	93		50 - 150				

Lab Sample ID: LCSD 580-372786/3-A
Matrix: Water
Analysis Batch: 372775

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 372786

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	0.500	0.396		mg/L		79	50 - 120	2	26
Motor Oil (>C24-C36)	0.500	0.505		mg/L		101	64 - 120	5	24
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
<i>o</i> -Terphenyl	98		50 - 150						

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-107200-1

Client Sample ID: Before GAC-11421

Lab Sample ID: 580-107200-1

Date Collected: 11/04/21 10:40

Matrix: Water

Date Received: 11/04/21 12:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			372786	11/09/21 11:18	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	372775	11/09/21 16:50	JAE	FGS SEA

Client Sample ID: HCC EFF-11421

Lab Sample ID: 580-107200-2

Date Collected: 11/04/21 10:40

Matrix: Water

Date Received: 11/04/21 12:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			372786	11/09/21 11:18	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	372775	11/09/21 17:10	JAE	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-107200-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-22

1

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Sample Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-107200-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-107200-1	Before GAC-11421	Water	11/04/21 10:40	11/04/21 12:51
580-107200-2	HCC EFF-11421	Water	11/04/21 10:40	11/04/21 12:51

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TestAmerica Seattle

5755 8th Street East

Tacoma, WA 98424-1317
phone 253.922.2310 fax 253.922.5047

Chain of Custody Record



TestAmerica Laboratories, Inc.

107200

Regulatory Program: DW NPDES RCRA Other:

Client Contact: Farallong Consulting
Project Manager: Amanda Meugniot
Site Contact: Matt Bowser
Date: 11-4-2021
COC No: 1 of 2 COCs

975 5th Avenue Northwest
Tel/Fax: 425-295-0800
Lab Contact: Nathan Lewis
Carrier:

Issaquah, Washington
Analysis Turnaround Time
Sampler: TW

(425) 295-0800 Phone
CALENDAR DAYS WORKING DAYS
For Lab Use Only:

(425) 295-0850 FAX
TAT if different from Below 3 DAY
Walk-in Client:

Project Name: Skykomish HCC System
2 weeks
Lab Sampling:

Site:
1 week
Job / SDG No.:

WO # TT0100-S03
2 days
Sample Specific Notes:

1 day
Sample Identification

Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	NWTPH-Dx w/o silica gel cleanup	Sample Specific Notes
11/4/21	10:40	Grab	W	2		X		***See instructions below
11/4/21	10:40	Grab	W	2		X		***See instructions below

Before GAC- 11421	11/4/21	10:40	Grab	W	2		X	***See instructions below
-------------------	---------	-------	------	---	---	--	---	---------------------------

HCC EFF- 11421	11/4/21	10:40	Grab	W	2		X	***See instructions below
----------------	---------	-------	------	---	---	--	---	---------------------------



Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Non-Hazard Flammable Skin Irritant Poison B Unknown Return to Client Disposal by Lab Archive for _____ Months

Special Instructions/QC Requirements & Comments: 1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica gel cleanup needed for Dx

Custody Seals Intact: Yes No
Custody Seal No.:
Cooler Temp. (°C): Obs'd: Corr'd: Therm ID No.:

Relinquished by: [Signature] Company: Glacier Date/Time: 11/4/21 12:05 Received by: [Signature] Company: EM Lab P&K Date/Time: 11/4/21 12:05

Relinquished by: Company: Date/Time: Received by: Company: Date/Time:

Relinquished by: Company: Date/Time: Received in Laboratory by: [Signature] Company: EFC Date/Time: 11/4/21 12:57

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-107200-1

Login Number: 107200

List Source: Eurofins FGS, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-107316-1

Client Project/Site: BNSF Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
11/15/2021 11:23:21 AM

Pauline Matlock, Project Manager
(253)922-2310
pauline.matlock@eurofinset.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish HCC System

Job ID: 580-107316-1

Job ID: 580-107316-1

Laboratory: Eurofins FGS, Seattle

Narrative

**Job Narrative
580-107316-1**

Comments

No additional comments.

Receipt

The samples were received on 11/9/2021 11:20 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.7° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method 3510C: The following sample formed emulsions during the extraction procedure: Before GAC-11821 (580-107316-1). These emulsions were broken up using additional sodium sulfate filtration and methylene chloride rinses.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.



Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish HCC System

Job ID: 580-107316-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish HCC System

Job ID: 580-107316-1

Client Sample ID: Before GAC-11821

Lab Sample ID: 580-107316-1

Date Collected: 11/08/21 10:00

Matrix: Water

Date Received: 11/09/21 11:20

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.44		0.062		mg/L		11/11/21 13:41	11/12/21 18:34	1
Motor Oil (>C24-C36)	0.28		0.091		mg/L		11/11/21 13:41	11/12/21 18:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	84		50 - 150				11/11/21 13:41	11/12/21 18:34	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish HCC System

Job ID: 580-107316-1

Client Sample ID: HCC EFF-11821

Lab Sample ID: 580-107316-2

Date Collected: 11/08/21 10:00

Matrix: Water

Date Received: 11/09/21 11:20

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		11/11/21 13:41	11/12/21 19:14	1
Motor Oil (>C24-C36)	ND		0.092		mg/L		11/11/21 13:41	11/12/21 19:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	73		50 - 150				11/11/21 13:41	11/12/21 19:14	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish HCC System

Job ID: 580-107316-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-373033/1-A
Matrix: Water
Analysis Batch: 373109

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 373033

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065		mg/L		11/11/21 13:41	11/12/21 16:33	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		11/11/21 13:41	11/12/21 16:33	1
		MB MB	Limits			Prepared	Analyzed	Dil Fac	
Surrogate	%Recovery	Qualifier							
<i>o</i> -Terphenyl	80		50 - 150			11/11/21 13:41	11/12/21 16:33	1	

Lab Sample ID: LCS 580-373033/2-A
Matrix: Water
Analysis Batch: 373109

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 373033

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
								%Rec.
#2 Diesel (C10-C24)	0.500	0.378		mg/L		76	50 - 120	
Motor Oil (>C24-C36)	0.500	0.500		mg/L		100	64 - 120	
		LCS LCS	Limits			Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier						
<i>o</i> -Terphenyl	100		50 - 150			11/11/21 13:41	11/12/21 16:33	1

Lab Sample ID: LCSD 580-373033/3-A
Matrix: Water
Analysis Batch: 373109

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 373033

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	0.500	0.423		mg/L		85	50 - 120	11	26
Motor Oil (>C24-C36)	0.500	0.498		mg/L		100	64 - 120	0	24
		LCSD LCSD	Limits			Prepared	Analyzed	Dil Fac	
Surrogate	%Recovery	Qualifier							
<i>o</i> -Terphenyl	100		50 - 150			11/11/21 13:41	11/12/21 16:33	1	

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish HCC System

Job ID: 580-107316-1

Client Sample ID: Before GAC-11821

Lab Sample ID: 580-107316-1

Date Collected: 11/08/21 10:00

Matrix: Water

Date Received: 11/09/21 11:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			373033	11/11/21 13:41	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	373109	11/12/21 18:34	JAE	FGS SEA

Client Sample ID: HCC EFF-11821

Lab Sample ID: 580-107316-2

Date Collected: 11/08/21 10:00

Matrix: Water

Date Received: 11/09/21 11:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			373033	11/11/21 13:41	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	373109	11/12/21 19:14	JAE	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish HCC System

Job ID: 580-107316-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-22

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish HCC System

Job ID: 580-107316-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-107316-1	Before GAC-11821	Water	11/08/21 10:00	11/09/21 11:20
580-107316-2	HCC EFF-11821	Water	11/08/21 10:00	11/09/21 11:20

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580-107316 Chain of Custody

Chain of Custody Record



THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: DW NPDES RCRA Other:

TestAmerica Laboratories, Inc.

Client Contact Farallong Consulting 975 5th Avenue Northwest Issaquah, Washington (425) 295-0800 Phone (425) 295-0850 FAX Project Name: Skykomish HCC System Site: WO # TT0100-S03		Project Manager: Amanda Meugniot Tel/Fax: 425-295-0800 Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below <u>3 day</u> <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Site Contact: Matt Bowser Lab Contact: Nathan Lewis Date: 11/8/21 Carrier:		COC No: <u>2</u> of <u>2</u> COCs Sampler: <u>TW</u> For Lab Use Only: Walk-in Client: Lab Sampling: Job / SDG No.:											
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	NWTPH-Dx w/o silica gel cleanup									Sample Specific Notes:
Before GAC- 11821	11/8/21	10:00	Grab	W	2		X										***See instructions below
HCC EFF- 11821	11/8/21	10:00	Grab	W	2		X										***See instructions below
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other						2 1											
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample. <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months											
Special Instructions/QC Requirements & Comments: 1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica get cleanup needed for Dx																	
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd:		Corr'd:		Therm ID No.:									
Relinquished by: <u>[Signature]</u>		Company: <u>Glacier</u>		Date/Time: <u>11/8/21 11:46</u>		Received by: <u>[Signature]</u>		Company: <u>EMLAB P&K</u>		Date/Time: <u>11/8/21 12:41</u>							
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time:							
Relinquished by:		Company:		Date/Time:		Received in Laboratory by: <u>[Signature]</u>		Company: <u>ETES</u>		Date/Time: <u>11/9/21 11:20</u>							

128 0.7/1.0 48 R.H/K. 11/13/2021

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-107316-1

Login Number: 107316

List Source: Eurofins FGS, Seattle

List Number: 1

Creator: Greene, Ashton R

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-107527-1

Client Project/Site: BNSF Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC

For:

Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
11/19/2021 7:43:48 PM

Pauline Matlock, Project Manager
(253)922-2310
pauline.matlock@eurofinset.com

LINKS

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results through
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish HCC System

Job ID: 580-107527-1

Job ID: 580-107527-1

Laboratory: Eurofins FGS, Seattle

Narrative

Job Narrative 580-107527-1

Comments

No additional comments.

Receipt

The samples were received on 11/16/2021 12:03 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 8.9° C.

Receipt Exceptions

The Chain-of-Custody (COC) was incomplete as received and/or improperly completed: The sampling time has been omitted. Sampling time was logged in per container labels.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 580-373766. So laboratory control sample/laboratory control sample duplicate were created and substituted for MS/MSD/DUP.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.



Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish HCC System

Job ID: 580-107527-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish HCC System

Job ID: 580-107527-1

Client Sample ID: Before GAC-111621

Lab Sample ID: 580-107527-1

Date Collected: 11/16/21 08:45

Matrix: Water

Date Received: 11/16/21 12:03

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.36		0.062		mg/L		11/18/21 15:56	11/19/21 16:23	1
Motor Oil (>C24-C36)	0.18		0.091		mg/L		11/18/21 15:56	11/19/21 16:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	74		50 - 150				11/18/21 15:56	11/19/21 16:23	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish HCC System

Job ID: 580-107527-1

Client Sample ID: HCC EFF-111621

Lab Sample ID: 580-107527-2

Date Collected: 11/16/21 08:45

Matrix: Water

Date Received: 11/16/21 12:03

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		11/18/21 15:56	11/19/21 16:43	1
Motor Oil (>C24-C36)	ND		0.092		mg/L		11/18/21 15:56	11/19/21 16:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	70		50 - 150				11/18/21 15:56	11/19/21 16:43	1

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0010		mg/L		11/16/21 20:09	11/17/21 08:32	1
Lead	ND		0.00040		mg/L		11/16/21 20:09	11/17/21 08:32	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish HCC System

Job ID: 580-107527-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-373766/1-A
Matrix: Water
Analysis Batch: 373811

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 373766

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.065		mg/L		11/18/21 15:56	11/19/21 15:02	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		11/18/21 15:56	11/19/21 15:02	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	63		50 - 150				11/18/21 15:56	11/19/21 15:02	1

Lab Sample ID: LCS 580-373766/2-A
Matrix: Water
Analysis Batch: 373811

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 373766

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits		
#2 Diesel (C10-C24)	0.500	0.370		mg/L		74	50 - 120		
Motor Oil (>C24-C36)	0.500	0.417		mg/L		83	64 - 120		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
o-Terphenyl	85		50 - 150						

Lab Sample ID: LCSD 580-373766/3-A
Matrix: Water
Analysis Batch: 373811

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 373766

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	0.500	0.359		mg/L		72	50 - 120	3	26
Motor Oil (>C24-C36)	0.500	0.429		mg/L		86	64 - 120	3	24
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
o-Terphenyl	84		50 - 150						

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 580-373522/14-A
Matrix: Water
Analysis Batch: 373579

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 373522

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0010		mg/L		11/16/21 20:09	11/17/21 08:20	1
Lead	ND		0.00040		mg/L		11/16/21 20:09	11/17/21 08:20	1

Lab Sample ID: LCS 580-373522/15-A
Matrix: Water
Analysis Batch: 373579

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 373522

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits		
Arsenic	1.00	0.933		mg/L		93	85 - 115		
Lead	1.00	1.01		mg/L		101	85 - 115		

Eurofins FGS, Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish HCC System

Job ID: 580-107527-1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 580-373522/16-A
Matrix: Water
Analysis Batch: 373579

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 373522

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD
							Limits	RPD	
Arsenic	1.00	0.930		mg/L		93	85 - 115	0	20
Lead	1.00	1.01		mg/L		101	85 - 115	0	20

Lab Sample ID: 580-107527-2 MS
Matrix: Water
Analysis Batch: 373579

Client Sample ID: HCC EFF-111621
Prep Type: Total/NA
Prep Batch: 373522

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.	
									Limits	RPD
Arsenic	ND		1.00	0.935		mg/L		93	70 - 130	
Lead	ND		1.00	1.01		mg/L		101	70 - 130	

Lab Sample ID: 580-107527-2 MSD
Matrix: Water
Analysis Batch: 373579

Client Sample ID: HCC EFF-111621
Prep Type: Total/NA
Prep Batch: 373522

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.	
									Limits	RPD
Arsenic	ND		1.00	0.957		mg/L		96	70 - 130	2
Lead	ND		1.00	1.04		mg/L		104	70 - 130	3

Lab Sample ID: 580-107527-2 DU
Matrix: Water
Analysis Batch: 373579

Client Sample ID: HCC EFF-111621
Prep Type: Total/NA
Prep Batch: 373522

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD	
								Limit	Limit
Arsenic	ND		ND		mg/L		NC	20	
Lead	ND		ND		mg/L		NC	20	

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish HCC System

Job ID: 580-107527-1

Client Sample ID: Before GAC-111621

Lab Sample ID: 580-107527-1

Date Collected: 11/16/21 08:45

Matrix: Water

Date Received: 11/16/21 12:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			373766	11/18/21 15:56	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	373811	11/19/21 16:23	ADB	FGS SEA

Client Sample ID: HCC EFF-111621

Lab Sample ID: 580-107527-2

Date Collected: 11/16/21 08:45

Matrix: Water

Date Received: 11/16/21 12:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			373766	11/18/21 15:56	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	373811	11/19/21 16:43	ADB	FGS SEA
Total/NA	Prep	200.8			373522	11/16/21 20:09	ABP	FGS SEA
Total/NA	Analysis	200.8		1	373579	11/17/21 08:32	FCW	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish HCC System

Job ID: 580-107527-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-22

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish HCC System

Job ID: 580-107527-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-107527-1	Before GAC-111621	Water	11/16/21 08:45	11/16/21 12:03
580-107527-2	HCC EFF-111621	Water	11/16/21 08:45	11/16/21 12:03

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Chain of Custody Record

107527

Regulatory Program: DW NPDES RCRA Other:

Client Contact		Project Manager: Amanda Meugniot		Site Contact: Matt Bowser		Date: 11/16/21		COC No:		
Farallong Consulting		Tel/Fax: 425-295-0800		Lab Contact: Nathan Lewis		Carrier:		1 of 2 COCs		
975 5th Avenue Northwest		Analysis Turnaround Time								
Issaquah, Washington		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below <i>3 days</i>								
(425) 295-0800 Phone		<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day								
(425) 295-0850 FAX										
Project Name: Skykomish HCC System										
Site:										
WO # TT0100-S03										
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	NWTPH-Dx w/o silica gel cleanup	Total As, Pb (EPA 200.8)	Sample Specific Notes:
Before GAC- 111621	11/16/21		Grab	W	2		X			***See instructions below
HCC EFF- 111621	11/16/21		Grab	W	3		X	X		***See instructions below
						 580-107527 Chain of Custody				
Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4=HNO3, 5=NaOH; 6= Other						2 4 1				
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown						<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months				
Special Instructions/QC Requirements & Comments: 1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No silica gel cleanup needed for Dx c lidra Lg Blu/wet/bub A1 8.9/9.2										
Custody Seal Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd:		Corr'd:		Therm ID No.:		
Relinquished by: <i>[Signature]</i>		Company: <i>GES</i>		Date/Time: <i>11/16/21 9:00</i>		Received by: <i>[Signature]</i>		Company: <i>Farallon</i>		Date/Time: <i>11/16/21 9:00</i>
Relinquished by: <i>[Signature]</i>		Company: <i>Farallon</i>		Date/Time: <i>11/16/21 1203</i>		Received by: <i>[Signature]</i>		Company:		Date/Time: <i>11/16/21 1203</i>
Relinquished by:		Company:		Date/Time:		Received in Laboratory by:		Company:		Date/Time:

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-107527-1

Login Number: 107527

List Source: Eurofins FGS, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	Received same day of collection; chilling process has begun.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	No sample date and/or time on COC, logged in per container labels.
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-107878-1
Client Project/Site: Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
12/3/2021 4:57:21 PM

Pauline Matlock, Project Manager
(253)922-2310
pauline.matlock@eurofinset.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-107878-1

Job ID: 580-107878-1

Laboratory: Eurofins FGS, Seattle

Narrative

Job Narrative
580-107878-1

Comments

No additional comments.

Receipt

The samples were received on 11/30/2021 10:10 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.9° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-107878-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-107878-1

Client Sample ID: Before GAC-112421

Lab Sample ID: 580-107878-1

Date Collected: 11/24/21 07:45

Matrix: Water

Date Received: 11/30/21 10:10

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.23		0.062		mg/L		12/01/21 14:52	12/02/21 20:40	1
Motor Oil (>C24-C36)	0.12		0.092		mg/L		12/01/21 14:52	12/02/21 20:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	92		50 - 150				12/01/21 14:52	12/02/21 20:40	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-107878-1

Client Sample ID: HCC EFF-112421

Lab Sample ID: 580-107878-2

Date Collected: 11/24/21 07:45

Matrix: Water

Date Received: 11/30/21 10:10

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		12/01/21 14:52	12/02/21 21:00	1
Motor Oil (>C24-C36)	ND		0.091		mg/L		12/01/21 14:52	12/02/21 21:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	74		50 - 150				12/01/21 14:52	12/02/21 21:00	1



QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-107878-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-374757/1-A
Matrix: Water
Analysis Batch: 374831

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 374757

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065		mg/L		12/01/21 14:52	12/02/21 11:39	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		12/01/21 14:52	12/02/21 11:39	1
		MB MB	Limits			Prepared	Analyzed	Dil Fac	
Surrogate	%Recovery	Qualifier							
o-Terphenyl	94		50 - 150			12/01/21 14:52	12/02/21 11:39	1	

Lab Sample ID: LCS 580-374757/2-A
Matrix: Water
Analysis Batch: 374831

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 374757

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
								%Rec.
#2 Diesel (C10-C24)	0.500	0.458		mg/L		92	50 - 120	
Motor Oil (>C24-C36)	0.500	0.512		mg/L		102	64 - 120	
		LCS LCS	Limits			Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier						
o-Terphenyl	105		50 - 150			12/01/21 14:52	12/02/21 11:39	1

Lab Sample ID: LCSD 580-374757/3-A
Matrix: Water
Analysis Batch: 374831

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 374757

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	0.500	0.444		mg/L		89	50 - 120	3	26
Motor Oil (>C24-C36)	0.500	0.474		mg/L		95	64 - 120	8	24
		LCSD LCSD	Limits			Prepared	Analyzed	Dil Fac	
Surrogate	%Recovery	Qualifier							
o-Terphenyl	109		50 - 150			12/01/21 14:52	12/02/21 11:39	1	

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-107878-1

Client Sample ID: Before GAC-112421

Lab Sample ID: 580-107878-1

Date Collected: 11/24/21 07:45

Matrix: Water

Date Received: 11/30/21 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			374757	12/01/21 14:52	M1E	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	374831	12/02/21 20:40	JAE	FGS SEA

Client Sample ID: HCC EFF-112421

Lab Sample ID: 580-107878-2

Date Collected: 11/24/21 07:45

Matrix: Water

Date Received: 11/30/21 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			374757	12/01/21 14:52	M1E	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	374831	12/02/21 21:00	JAE	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-107878-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-22

- 1
- 2
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- 10
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Sample Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-107878-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-107878-1	Before GAC-112421	Water	11/24/21 07:45	11/30/21 10:10
580-107878-2	HCC EFF-112421	Water	11/24/21 07:45	11/30/21 10:10

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Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-107878-1

Login Number: 107878

List Source: Eurofins FGS, Seattle

List Number: 1

Creator: Vallelunga, Diana L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	




ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-107970-1
Client Project/Site: Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
12/7/2021 6:50:03 PM
Kristine Allen, Client Service Manager
(253)248-4970
Kristine.Allen@Eurofinset.com

Designee for
Pauline Matlock, Project Manager
(253)922-2310
pauline.matlock@eurofinset.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-107970-1

Job ID: 580-107970-1

Laboratory: Eurofins FGS, Seattle

Narrative

**Job Narrative
580-107970-1**

Comments

No additional comments.

Receipt

The samples were received on 12/2/2021 12:50 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.6° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-107970-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-107970-1

Client Sample ID: Before GAC-12121

Lab Sample ID: 580-107970-1

Date Collected: 12/01/21 13:30

Matrix: Water

Date Received: 12/02/21 12:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.20		0.063		mg/L		12/06/21 10:27	12/06/21 23:42	1
Motor Oil (>C24-C36)	0.11		0.092		mg/L		12/06/21 10:27	12/06/21 23:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	67		50 - 150				12/06/21 10:27	12/06/21 23:42	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-107970-1

Client Sample ID: HCC EFF-12121

Lab Sample ID: 580-107970-2

Date Collected: 12/01/21 13:30

Matrix: Water

Date Received: 12/02/21 12:50

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062		mg/L		12/06/21 10:27	12/07/21 00:02	1
Motor Oil (>C24-C36)	ND		0.092		mg/L		12/06/21 10:27	12/07/21 00:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	52		50 - 150				12/06/21 10:27	12/07/21 00:02	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-107970-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-375093/1-A
Matrix: Water
Analysis Batch: 375163

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 375093

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065		mg/L		12/06/21 10:27	12/06/21 22:23	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		12/06/21 10:27	12/06/21 22:23	1
		MB MB	Limits			Prepared	Analyzed	Dil Fac	
Surrogate	%Recovery	Qualifier							
o-Terphenyl	77		50 - 150			12/06/21 10:27	12/06/21 22:23	1	

Lab Sample ID: LCS 580-375093/2-A
Matrix: Water
Analysis Batch: 375163

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 375093

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
								%Rec.
#2 Diesel (C10-C24)	0.500	0.369		mg/L		74	50 - 120	
Motor Oil (>C24-C36)	0.500	0.390		mg/L		78	64 - 120	
		LCS LCS	Limits			Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier						
o-Terphenyl	80		50 - 150			12/06/21 10:27	12/06/21 22:23	1

Lab Sample ID: LCSD 580-375093/3-A
Matrix: Water
Analysis Batch: 375163

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 375093

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	0.500	0.429		mg/L		86	50 - 120	15	26
Motor Oil (>C24-C36)	0.500	0.430		mg/L		86	64 - 120	10	24
		LCSD LCSD	Limits			Prepared	Analyzed	Dil Fac	
Surrogate	%Recovery	Qualifier							
o-Terphenyl	91		50 - 150			12/06/21 10:27	12/06/21 22:23	1	

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-107970-1

Client Sample ID: Before GAC-12121

Lab Sample ID: 580-107970-1

Date Collected: 12/01/21 13:30

Matrix: Water

Date Received: 12/02/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			375093	12/06/21 10:27	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	375163	12/06/21 23:42	ADB	FGS SEA

Client Sample ID: HCC EFF-12121

Lab Sample ID: 580-107970-2

Date Collected: 12/01/21 13:30

Matrix: Water

Date Received: 12/02/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			375093	12/06/21 10:27	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	375163	12/07/21 00:02	ADB	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-107970-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-22

- 1
- 2
- 3
- 4
- 5
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- 7
- 8
- 9
- 10
- 11

Sample Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-107970-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-107970-1	Before GAC-12121	Water	12/01/21 13:30	12/02/21 12:50
580-107970-2	HCC EFF-12121	Water	12/01/21 13:30	12/02/21 12:50

- 1
- 2
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Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-107970-1

Login Number: 107970

List Number: 1

Creator: Blankinship, Tom X

List Source: Eurofins FGS, Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-108175-1
Client Project/Site: Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
12/13/2021 9:34:25 PM

Pauline Matlock, Project Manager
(253)922-2310
pauline.matlock@eurofinset.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-108489-1
Client Project/Site: BNSF Former Fueling Facility

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Peter Kingston



Authorized for release by:
12/31/2021 12:58:48 PM

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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Job ID: 580-108489-1

Laboratory: Eurofins FGS, Seattle

Narrative

**Job Narrative
580-108489-1**

Comments

No additional comments.

Receipt

The samples were received on 12/16/2021 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.1° C.

Receipt Exceptions

500 mL amber bottles were used for this sample. Proper container is 250 mL or 1 L for this method. This was logged in for the prep method using a volume of 250mL.

GC Semi VOA

Method NWTPH-Dx: Surrogate recovery for the following samples were outside control limits: GW-1-121521 (580-108489-2) and MW-555-121521 (580-108489-13). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: EW-1-121521

Lab Sample ID: 580-108489-1

Date Collected: 12/15/21 09:15

Matrix: Water

Date Received: 12/16/21 10:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.052	0.031	mg/L		12/29/21 14:03	12/30/21 15:12	1
Motor Oil (>C24-C36)	0.078	J	0.17	0.045	mg/L		12/29/21 14:03	12/30/21 15:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	70		50 - 150				12/29/21 14:03	12/30/21 15:12	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: GW-1-121521

Lab Sample ID: 580-108489-2

Date Collected: 12/15/21 09:47

Matrix: Water

Date Received: 12/16/21 10:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.053	0.031	mg/L		12/29/21 14:03	12/30/21 15:31	1
Motor Oil (>C24-C36)	0.065	J	0.17	0.046	mg/L		12/29/21 14:03	12/30/21 15:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	42	S1-	50 - 150				12/29/21 14:03	12/30/21 15:31	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: 2A-W-41-121521

Lab Sample ID: 580-108489-3

Date Collected: 12/15/21 10:45

Matrix: Water

Date Received: 12/16/21 10:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.41		0.052	0.031	mg/L		12/29/21 14:03	12/30/21 15:50	1
Motor Oil (>C24-C36)	0.40		0.16	0.045	mg/L		12/29/21 14:03	12/30/21 15:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	77		50 - 150				12/29/21 14:03	12/30/21 15:50	1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.069		0.052	0.031	mg/L		12/29/21 14:03	12/30/21 20:41	1
Motor Oil (>C24-C36)	ND		0.16	0.045	mg/L		12/29/21 14:03	12/30/21 20:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	81		50 - 150				12/29/21 14:03	12/30/21 20:41	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: 2A-W-42-121521

Lab Sample ID: 580-108489-4

Date Collected: 12/15/21 12:03

Matrix: Water

Date Received: 12/16/21 10:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.089		0.051	0.030	mg/L		12/29/21 14:03	12/30/21 16:10	1
Motor Oil (>C24-C36)	0.15	J	0.16	0.045	mg/L		12/29/21 14:03	12/30/21 16:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	67		50 - 150				12/29/21 14:03	12/30/21 16:10	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: EW-2A-121521

Lab Sample ID: 580-108489-5

Date Collected: 12/15/21 14:15

Matrix: Water

Date Received: 12/16/21 10:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.052	0.031	mg/L		12/29/21 14:03	12/30/21 16:29	1
Motor Oil (>C24-C36)	ND		0.17	0.045	mg/L		12/29/21 14:03	12/30/21 16:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	59		50 - 150				12/29/21 14:03	12/30/21 16:29	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: GW-3-121521

Lab Sample ID: 580-108489-6

Date Collected: 12/15/21 10:50

Matrix: Water

Date Received: 12/16/21 10:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.33		0.058	0.034	mg/L		12/29/21 14:03	12/30/21 16:49	1
Motor Oil (>C24-C36)	0.69		0.18	0.050	mg/L		12/29/21 14:03	12/30/21 16:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	72		50 - 150				12/29/21 14:03	12/30/21 16:49	1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.041	J	0.058	0.034	mg/L		12/29/21 14:03	12/30/21 21:00	1
Motor Oil (>C24-C36)	0.31		0.18	0.050	mg/L		12/29/21 14:03	12/30/21 21:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	75		50 - 150				12/29/21 14:03	12/30/21 21:00	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: GW-30-121521

Lab Sample ID: 580-108489-7

Date Collected: 12/15/21 11:05

Matrix: Water

Date Received: 12/16/21 10:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.29		0.056	0.033	mg/L		12/29/21 14:03	12/30/21 17:08	1
Motor Oil (>C24-C36)	0.29		0.18	0.049	mg/L		12/29/21 14:03	12/30/21 17:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	70		50 - 150				12/29/21 14:03	12/30/21 17:08	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: GW-4-121521

Lab Sample ID: 580-108489-8

Date Collected: 12/15/21 14:26

Matrix: Water

Date Received: 12/16/21 10:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.036	J	0.055	0.032	mg/L		12/29/21 14:03	12/30/21 17:27	1
Motor Oil (>C24-C36)	0.062	J	0.17	0.048	mg/L		12/29/21 14:03	12/30/21 17:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	59		50 - 150				12/29/21 14:03	12/30/21 17:27	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: 5-W-43-121521

Lab Sample ID: 580-108489-9

Date Collected: 12/15/21 09:09

Matrix: Water

Date Received: 12/16/21 10:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.031	J	0.053	0.031	mg/L		12/29/21 14:03	12/30/21 17:47	1
Motor Oil (>C24-C36)	0.087	J	0.17	0.046	mg/L		12/29/21 14:03	12/30/21 17:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	69		50 - 150				12/29/21 14:03	12/30/21 17:47	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: GW-2-121521

Lab Sample ID: 580-108489-10

Date Collected: 12/15/21 09:47

Matrix: Water

Date Received: 12/16/21 10:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.11		0.054	0.032	mg/L		12/29/21 14:03	12/30/21 18:06	1
Motor Oil (>C24-C36)	0.43		0.17	0.047	mg/L		12/29/21 14:03	12/30/21 18:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	63		50 - 150				12/29/21 14:03	12/30/21 18:06	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: 2A-W-40-121521

Lab Sample ID: 580-108489-11

Date Collected: 12/15/21 10:27

Matrix: Water

Date Received: 12/16/21 10:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.053	0.031	mg/L		12/29/21 14:03	12/30/21 18:45	1
Motor Oil (>C24-C36)	ND		0.17	0.046	mg/L		12/29/21 14:03	12/30/21 18:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	58		50 - 150				12/29/21 14:03	12/30/21 18:45	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: 1B-W-23-121521

Lab Sample ID: 580-108489-12

Date Collected: 12/15/21 12:12

Matrix: Water

Date Received: 12/16/21 10:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.054	0.032	mg/L		12/29/21 14:03	12/30/21 19:04	1
Motor Oil (>C24-C36)	ND		0.17	0.047	mg/L		12/29/21 14:03	12/30/21 19:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	58		50 - 150				12/29/21 14:03	12/30/21 19:04	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: MW-555-121521

Lab Sample ID: 580-108489-13

Date Collected: 12/15/21 17:50

Matrix: Water

Date Received: 12/16/21 10:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.059		0.054	0.032	mg/L		12/29/21 14:03	12/30/21 19:23	1
Motor Oil (>C24-C36)	ND		0.17	0.047	mg/L		12/29/21 14:03	12/30/21 19:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	28	S1-	50 - 150				12/29/21 14:03	12/30/21 19:23	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-377032/1-A
Matrix: Water
Analysis Batch: 377075

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377032

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.055	0.033	mg/L		12/29/21 14:03	12/30/21 11:38	1
Motor Oil (>C24-C36)	ND		0.18	0.048	mg/L		12/29/21 14:03	12/30/21 11:38	1
Surrogate		MB MB	Limits			Prepared	Analyzed	Dil Fac	
		%Recovery Qualifier							
o-Terphenyl		66	50 - 150			12/29/21 14:03	12/30/21 11:38	1	

Lab Sample ID: LCS 580-377032/2-A
Matrix: Water
Analysis Batch: 377075

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377032

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.
Motor Oil (>C24-C36)	4.00	3.16		mg/L		79	64 - 120	
Surrogate		LCS LCS	Limits			Prepared	Analyzed	Dil Fac
		%Recovery Qualifier						
o-Terphenyl		80	50 - 150			12/29/21 14:03	12/30/21 11:38	1

Lab Sample ID: LCSD 580-377032/3-A
Matrix: Water
Analysis Batch: 377075

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 377032

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Motor Oil (>C24-C36)	4.00	3.54		mg/L		88	64 - 120	11	24
Surrogate		LCSD LCSD	Limits			Prepared	Analyzed	Dil Fac	
		%Recovery Qualifier							
o-Terphenyl		91	50 - 150			12/29/21 14:03	12/30/21 19:43	1	

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Lab Sample ID: MB 580-377032/1-B
Matrix: Water
Analysis Batch: 377075

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377032

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.055	0.033	mg/L		12/29/21 14:03	12/30/21 19:43	1
Motor Oil (>C24-C36)	ND		0.18	0.048	mg/L		12/29/21 14:03	12/30/21 19:43	1
Surrogate		MB MB	Limits			Prepared	Analyzed	Dil Fac	
		%Recovery Qualifier							
o-Terphenyl		73	50 - 150			12/29/21 14:03	12/30/21 19:43	1	

Lab Sample ID: LCS 580-377032/2-B
Matrix: Water
Analysis Batch: 377075

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377032

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.
Motor Oil (>C24-C36)	4.00	3.71		mg/L		93	64 - 120	

Eurofins FGS, Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup (Continued)

<i>Surrogate</i>	<i>LCS</i> <i>%Recovery</i>	<i>LCS</i> <i>Qualifier</i>	<i>Limits</i>
<i>o-Terphenyl</i>	84		50 - 150

Lab Sample ID: LCSD 580-377032/3-B
Matrix: Water
Analysis Batch: 377075

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 377032

<i>Analyte</i>	<i>Spike</i> <i>Added</i>	<i>LCSD</i> <i>Result</i>	<i>LCSD</i> <i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec.</i> <i>Limits</i>	<i>RPD</i> <i>RPD</i>	<i>RPD</i> <i>Limit</i>
#2 Diesel (C10-C24)	4.00	3.47		mg/L		87	50 - 120	11	26
Motor Oil (>C24-C36)	4.00	4.49		mg/L		112	64 - 120	19	24

<i>Surrogate</i>	<i>LCSD</i> <i>%Recovery</i>	<i>LCSD</i> <i>Qualifier</i>	<i>Limits</i>
<i>o-Terphenyl</i>	94		50 - 150



Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: EW-1-121521

Lab Sample ID: 580-108489-1

Date Collected: 12/15/21 09:15

Matrix: Water

Date Received: 12/16/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			377032	12/29/21 14:03	M1E	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377075	12/30/21 15:12	JAE	FGS SEA

Client Sample ID: GW-1-121521

Lab Sample ID: 580-108489-2

Date Collected: 12/15/21 09:47

Matrix: Water

Date Received: 12/16/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			377032	12/29/21 14:03	M1E	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377075	12/30/21 15:31	JAE	FGS SEA

Client Sample ID: 2A-W-41-121521

Lab Sample ID: 580-108489-3

Date Collected: 12/15/21 10:45

Matrix: Water

Date Received: 12/16/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			377032	12/29/21 14:03	M1E	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377075	12/30/21 15:50	JAE	FGS SEA
Total/NA	Prep	3510C			377032	12/29/21 14:03	M1E	FGS SEA
Total/NA	Cleanup	3630C			377065	12/29/21 21:48	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377075	12/30/21 20:41	JAE	FGS SEA

Client Sample ID: 2A-W-42-121521

Lab Sample ID: 580-108489-4

Date Collected: 12/15/21 12:03

Matrix: Water

Date Received: 12/16/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			377032	12/29/21 14:03	M1E	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377075	12/30/21 16:10	JAE	FGS SEA

Client Sample ID: EW-2A-121521

Lab Sample ID: 580-108489-5

Date Collected: 12/15/21 14:15

Matrix: Water

Date Received: 12/16/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			377032	12/29/21 14:03	M1E	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377075	12/30/21 16:29	JAE	FGS SEA

Client Sample ID: GW-3-121521

Lab Sample ID: 580-108489-6

Date Collected: 12/15/21 10:50

Matrix: Water

Date Received: 12/16/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			377032	12/29/21 14:03	M1E	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377075	12/30/21 16:49	JAE	FGS SEA

Eurofins FGS, Seattle

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: GW-3-121521

Lab Sample ID: 580-108489-6

Date Collected: 12/15/21 10:50

Matrix: Water

Date Received: 12/16/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			377032	12/29/21 14:03	M1E	FGS SEA
Total/NA	Cleanup	3630C			377065	12/29/21 21:48	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377075	12/30/21 21:00	JAE	FGS SEA

Client Sample ID: GW-30-121521

Lab Sample ID: 580-108489-7

Date Collected: 12/15/21 11:05

Matrix: Water

Date Received: 12/16/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			377032	12/29/21 14:03	M1E	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377075	12/30/21 17:08	JAE	FGS SEA

Client Sample ID: GW-4-121521

Lab Sample ID: 580-108489-8

Date Collected: 12/15/21 14:26

Matrix: Water

Date Received: 12/16/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			377032	12/29/21 14:03	M1E	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377075	12/30/21 17:27	JAE	FGS SEA

Client Sample ID: 5-W-43-121521

Lab Sample ID: 580-108489-9

Date Collected: 12/15/21 09:09

Matrix: Water

Date Received: 12/16/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			377032	12/29/21 14:03	M1E	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377075	12/30/21 17:47	JAE	FGS SEA

Client Sample ID: GW-2-121521

Lab Sample ID: 580-108489-10

Date Collected: 12/15/21 09:47

Matrix: Water

Date Received: 12/16/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			377032	12/29/21 14:03	M1E	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377075	12/30/21 18:06	JAE	FGS SEA

Client Sample ID: 2A-W-40-121521

Lab Sample ID: 580-108489-11

Date Collected: 12/15/21 10:27

Matrix: Water

Date Received: 12/16/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			377032	12/29/21 14:03	M1E	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377075	12/30/21 18:45	JAE	FGS SEA

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: 1B-W-23-121521

Lab Sample ID: 580-108489-12

Date Collected: 12/15/21 12:12

Matrix: Water

Date Received: 12/16/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			377032	12/29/21 14:03	M1E	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377075	12/30/21 19:04	JAE	FGS SEA

Client Sample ID: MW-555-121521

Lab Sample ID: 580-108489-13

Date Collected: 12/15/21 17:50

Matrix: Water

Date Received: 12/16/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			377032	12/29/21 14:03	M1E	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377075	12/30/21 19:23	JAE	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-22

1

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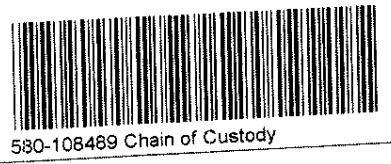
Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-108489-1	EW-1-121521	Water	12/15/21 09:15	12/16/21 10:00
580-108489-2	GW-1-121521	Water	12/15/21 09:47	12/16/21 10:00
580-108489-3	2A-W-41-121521	Water	12/15/21 10:45	12/16/21 10:00
580-108489-4	2A-W-42-121521	Water	12/15/21 12:03	12/16/21 10:00
580-108489-5	EW-2A-121521	Water	12/15/21 14:15	12/16/21 10:00
580-108489-6	GW-3-121521	Water	12/15/21 10:50	12/16/21 10:00
580-108489-7	GW-30-121521	Water	12/15/21 11:05	12/16/21 10:00
580-108489-8	GW-4-121521	Water	12/15/21 14:26	12/16/21 10:00
580-108489-9	5-W-43-121521	Water	12/15/21 09:09	12/16/21 10:00
580-108489-10	GW-2-121521	Water	12/15/21 09:47	12/16/21 10:00
580-108489-11	2A-W-40-121521	Water	12/15/21 10:27	12/16/21 10:00
580-108489-12	1B-W-23-121521	Water	12/15/21 12:12	12/16/21 10:00
580-108489-13	MW-555-121521	Water	12/15/21 17:50	12/16/21 10:00

- 1
- 2
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- 11



LABORATORY INFORMATION						LAB WORK ORDER:			
Laboratory:			Project Manager:			SHIPMENT INFORMATION			
Address:			Phone:			Shipment Method:			
City/State/ZIP:			Fax:			Tracking Number:			
BNSF PROJECT INFORMATION			CONSULTANT INFORMATION			Project Number: 683-071			
Project State of Origin: Skykomish, WA			Company: Farallon Consulting			Project Manager: Amanda Meugniot			
BNSF Project Number:			Address: 975 5th Ave			Email: ameugniot@farallonconsulting.com			
BNSF Project Name: BNSF Former Fueling Facility			City/State/ZIP: Issaquah, WA 98027			Phone: 425-394-4445			
BNSF Contact:			BNSF Work Order No.:			Fax:			
TURNAROUND TIME		DELIVERABLES		METHODS FOR ANALYSIS					
<input type="checkbox"/> 1-day Rush <input type="checkbox"/> 2-day Rush <input type="checkbox"/> 3-day Rush		<input type="checkbox"/> 5- to 8-day Rush <input checked="" type="checkbox"/> Standard 10-Day <input type="checkbox"/> Other _____		<input type="checkbox"/> Other Deliverables? <input type="checkbox"/> BNSF Standard (Level II) <input type="checkbox"/> Level III <input type="checkbox"/> Level IV <input type="checkbox"/> EDD Req. Format?					
SAMPLE INFORMATION									
Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/Grab)	Matrix	COMMENTS	LAB USE
		Date	Time	Sampler					
1 EW-1-121521	2	12/15/21	0915	GP	N	G	W		
2 GW-1-121521	2		0947						
3 2A-W-41-121521	4		1045						
4 2A-W-42-121521	2		1203						
5 EW-2A-121521	2		1415						
6 GW-3-121521	4		1050	EB					
7 GW-30-121521	4		1105						
8 GW-4-121521	2		1426						
9 5-W-43-121521	2		0909						
10 GW-2-121521	2		0947						
11 2A-W-40-121521	2		1027						
12 1B-W-23-121521	2		1212						
13 MW-555-121521	2		1750						
emb									
Relinquished By: <i>Eileen Rye</i>		Date/Time: 12/16/21 1000		Received By: <i>Jan Stankovic</i>		Date/Time: 12/16/21 1000		Comments and Special Analytical Requirements:	
Relinquished By:		Date/Time:		Received By:		Date/Time:		clidno Ly Blu/wet/bob A2 0.1/0.4 w6	
Relinquished By:		Date/Time:		Received By:		Date/Time:		BNSF COC No	
Received by Laboratory:		Date/Time:		Lab Remarks:		Lab. Custody Intact? <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.	

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES

DUPLICATE - CONSULTANT

TAL-1001 (0912)

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-108489-1

Login Number: 108489

List Source: Eurofins FGS, Seattle

List Number: 1

Creator: Greene, Ashton R

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	False	Improper containers received for -13
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-108175-1

Job ID: 580-108175-1

Laboratory: Eurofins FGS, Seattle

Narrative

**Job Narrative
580-108175-1**

Comments

No additional comments.

Receipt

The samples were received on 12/8/2021 12:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.9° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-108175-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-108175-1

Client Sample ID: Before GAC-12721

Lab Sample ID: 580-108175-1

Date Collected: 12/07/21 11:00

Matrix: Water

Date Received: 12/08/21 15:09

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.43		0.062		mg/L		12/13/21 09:47	12/13/21 17:54	1
Motor Oil (>C24-C36)	0.41		0.091		mg/L		12/13/21 09:47	12/13/21 17:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	91		50 - 150				12/13/21 09:47	12/13/21 17:54	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-108175-1

Client Sample ID: HCC EFF-12721

Lab Sample ID: 580-108175-2

Date Collected: 12/07/21 11:00

Matrix: Water

Date Received: 12/08/21 15:09

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.061		mg/L		12/13/21 09:47	12/13/21 18:14	1
Motor Oil (>C24-C36)	ND		0.091		mg/L		12/13/21 09:47	12/13/21 18:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150				12/13/21 09:47	12/13/21 18:14	1

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0010		mg/L		12/09/21 13:14	12/12/21 05:43	1
Lead	ND		0.00040		mg/L		12/09/21 13:14	12/12/21 05:43	1



QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-108175-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-375670/1-A
Matrix: Water
Analysis Batch: 375769

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 375670

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065		mg/L		12/13/21 09:47	12/13/21 16:14	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		12/13/21 09:47	12/13/21 16:14	1
Surrogate	MB	MB	Limits			D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
o-Terphenyl	84		50 - 150				12/13/21 09:47	12/13/21 16:14	1

Lab Sample ID: LCS 580-375670/2-A
Matrix: Water
Analysis Batch: 375769

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 375670

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits
		Result	Qualifier				
#2 Diesel (C10-C24)	1.00	0.900		mg/L		90	50 - 120
Motor Oil (>C24-C36)	1.00	0.878		mg/L		88	64 - 120
Surrogate	LCS	LCS	Limits			%Rec.	Limits
	%Recovery	Qualifier					
o-Terphenyl	102		50 - 150				

Lab Sample ID: LCSD 580-375670/3-A
Matrix: Water
Analysis Batch: 375769

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 375670

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	Limit
		Result	Qualifier						
#2 Diesel (C10-C24)	1.00	0.807		mg/L		81	50 - 120	11	26
Motor Oil (>C24-C36)	1.00	0.829		mg/L		83	64 - 120	6	24
Surrogate	LCSD	LCSD	Limits			%Rec.	Limits	RPD	Limit
	%Recovery	Qualifier							
o-Terphenyl	105		50 - 150						

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 580-375461/14-A
Matrix: Water
Analysis Batch: 375667

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 375461

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	ND		0.0010		mg/L		12/09/21 13:14	12/11/21 10:36	1
Lead	ND		0.00040		mg/L		12/09/21 13:14	12/11/21 10:36	1

Lab Sample ID: LCS 580-375461/15-A
Matrix: Water
Analysis Batch: 375667

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 375461

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits
		Result	Qualifier				
Arsenic	1.00	0.947		mg/L		95	85 - 115
Lead	1.00	0.989		mg/L		99	85 - 115

Eurofins FGS, Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-108175-1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 580-375461/16-A
Matrix: Water
Analysis Batch: 375667

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 375461

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD	
									%Rec.	Limit
Arsenic	1.00	0.945		mg/L		95	85 - 115	0	20	
Lead	1.00	0.962		mg/L		96	85 - 115	3	20	

Lab Sample ID: 580-107904-F-1-C MS
Matrix: Water
Analysis Batch: 375667

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 375461

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits	RPD	
										%Rec.	Limit
Arsenic	ND		1.00	1.00		mg/L		100	70 - 130		
Lead	ND		1.00	1.05		mg/L		105	70 - 130		

Lab Sample ID: 580-107904-F-1-D MSD
Matrix: Water
Analysis Batch: 375667

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 375461

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	
										%Rec.	Limit
Arsenic	ND		1.00	1.02		mg/L		102	70 - 130	2	20
Lead	ND		1.00	1.02		mg/L		102	70 - 130	2	20

Lab Sample ID: 580-107904-F-1-B DU
Matrix: Water
Analysis Batch: 375667

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 375461

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD	
								Limit	Limit
Arsenic	ND		ND		mg/L		NC	20	
Lead	ND		ND		mg/L		NC	20	

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-108175-1

Client Sample ID: Before GAC-12721

Lab Sample ID: 580-108175-1

Date Collected: 12/07/21 11:00

Matrix: Water

Date Received: 12/08/21 15:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			375670	12/13/21 09:47	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	375769	12/13/21 17:54	JAE	FGS SEA

Client Sample ID: HCC EFF-12721

Lab Sample ID: 580-108175-2

Date Collected: 12/07/21 11:00

Matrix: Water

Date Received: 12/08/21 15:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			375670	12/13/21 09:47	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	375769	12/13/21 18:14	JAE	FGS SEA
Total/NA	Prep	200.8			375461	12/09/21 13:14	ABP	FGS SEA
Total/NA	Analysis	200.8		1	375675	12/12/21 05:43	FCW	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-108175-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-22

- 1
- 2
- 3
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- 10
- 11

Sample Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-108175-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-108175-1	Before GAC-12721	Water	12/07/21 11:00	12/08/21 15:09
580-108175-2	HCC EFF-12721	Water	12/07/21 11:00	12/08/21 15:09

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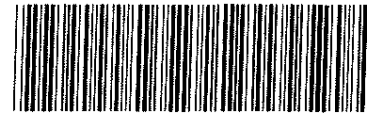
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Regulatory Program: DW NPDES RCRA

TestAmerica Laboratories, Inc.

Client Contact Farallong Consulting 975 5th Avenue Northwest Issaquah, Washington (425) 295-0800 Phone (425) 295-0850 FAX Project Name: Skykomish HCC System Site: WO # TT0100-S03		Project Manager: Amanda Meugniot Tel/Fax: 425-295-0800 Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below <u>3 DAY</u> <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Site Contact: Matt Bowser Lab Contact: Nathan Lewis Date: <u>12/7/21</u> Carrier:		COC No: <u>2</u> of <u>2</u> COCs Sampler: <u>TW</u> For Lab Use Only: Walk-in Client: Lab Sampling: Job / SDG No.: Sample Specific Notes:													
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	NWTPH-Dx w/o silica gel cleanup	Total As, Pb (EPA 200.8)										
Before GAC- <u>12721</u>	<u>12/7/21</u>	<u>11:00</u>	Grab	W	2		X												***See instructions below
HCC EFF- <u>12721</u>	<u>12/7/21</u>	<u>11:00</u>	Grab	W	3		X	X											***See instructions below
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other						2 4 1													
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample. <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal													
Special Instructions/QC Requirements & Comments: 1) DxRx requires special limits 0.208 mg/L, cumulative, Final Volume of 2 mL required 2) No s						Therm. ID: <u>308</u> Cor: <u>2.9</u> ° Unc: <u>3.2</u> ° Cooler Dsc: <u>LB</u> FedEx: _____ Packing: <u>BUB</u> UPS: _____ Cust. Seal: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Lab Cour: <u>P</u> Blue Ice: <u>Wet, Dry, None</u> Other: _____ <u>@ 105 1330</u>													
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd:		Relinquished by: <u>[Signature]</u> Company: <u>Glacier</u> Date/Time: <u>12/8/21 11:35</u>		Received by: <u>[Signature]</u> Company: <u>EM Lab</u> Date/Time: <u>12/10/21 11:30</u>		Relinquished by: <u>[Signature]</u> Company:		Received by: <u>[Signature]</u> Company: <u>EPGS</u> Date/Time: <u>12/8/21 12:00</u>		Relinquished by:		Received in Laboratory by: <u>[Signature]</u> Company:		Date/Time:	

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Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-108175-1

Login Number: 108175

List Number: 1

Creator: Presley, Kim A

List Source: Eurofins FGS, Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-108489-1
Client Project/Site: BNSF Former Fueling Facility

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Peter Kingston



Authorized for release by:
12/31/2021 12:58:48 PM

Pauline Matlock, Project Manager
(253)922-2310
pauline.matlock@eurofinset.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Job ID: 580-108489-1

Laboratory: Eurofins FGS, Seattle

Narrative

**Job Narrative
580-108489-1**

Comments

No additional comments.

Receipt

The samples were received on 12/16/2021 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.1° C.

Receipt Exceptions

500 mL amber bottles were used for this sample. Proper container is 250 mL or 1 L for this method. This was logged in for the prep method using a volume of 250mL.

GC Semi VOA

Method NWTPH-Dx: Surrogate recovery for the following samples were outside control limits: GW-1-121521 (580-108489-2) and MW-555-121521 (580-108489-13). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: EW-1-121521

Lab Sample ID: 580-108489-1

Date Collected: 12/15/21 09:15

Matrix: Water

Date Received: 12/16/21 10:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.052	0.031	mg/L		12/29/21 14:03	12/30/21 15:12	1
Motor Oil (>C24-C36)	0.078	J	0.17	0.045	mg/L		12/29/21 14:03	12/30/21 15:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	70		50 - 150				12/29/21 14:03	12/30/21 15:12	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: GW-1-121521

Lab Sample ID: 580-108489-2

Date Collected: 12/15/21 09:47

Matrix: Water

Date Received: 12/16/21 10:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.053	0.031	mg/L		12/29/21 14:03	12/30/21 15:31	1
Motor Oil (>C24-C36)	0.065	J	0.17	0.046	mg/L		12/29/21 14:03	12/30/21 15:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	42	S1-	50 - 150				12/29/21 14:03	12/30/21 15:31	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: 2A-W-41-121521

Lab Sample ID: 580-108489-3

Date Collected: 12/15/21 10:45

Matrix: Water

Date Received: 12/16/21 10:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.41		0.052	0.031	mg/L		12/29/21 14:03	12/30/21 15:50	1
Motor Oil (>C24-C36)	0.40		0.16	0.045	mg/L		12/29/21 14:03	12/30/21 15:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	77		50 - 150				12/29/21 14:03	12/30/21 15:50	1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.069		0.052	0.031	mg/L		12/29/21 14:03	12/30/21 20:41	1
Motor Oil (>C24-C36)	ND		0.16	0.045	mg/L		12/29/21 14:03	12/30/21 20:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	81		50 - 150				12/29/21 14:03	12/30/21 20:41	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: 2A-W-42-121521

Lab Sample ID: 580-108489-4

Date Collected: 12/15/21 12:03

Matrix: Water

Date Received: 12/16/21 10:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.089		0.051	0.030	mg/L		12/29/21 14:03	12/30/21 16:10	1
Motor Oil (>C24-C36)	0.15	J	0.16	0.045	mg/L		12/29/21 14:03	12/30/21 16:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	67		50 - 150				12/29/21 14:03	12/30/21 16:10	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: EW-2A-121521

Lab Sample ID: 580-108489-5

Date Collected: 12/15/21 14:15

Matrix: Water

Date Received: 12/16/21 10:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.052	0.031	mg/L		12/29/21 14:03	12/30/21 16:29	1
Motor Oil (>C24-C36)	ND		0.17	0.045	mg/L		12/29/21 14:03	12/30/21 16:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	59		50 - 150				12/29/21 14:03	12/30/21 16:29	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: GW-3-121521

Lab Sample ID: 580-108489-6

Date Collected: 12/15/21 10:50

Matrix: Water

Date Received: 12/16/21 10:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.33		0.058	0.034	mg/L		12/29/21 14:03	12/30/21 16:49	1
Motor Oil (>C24-C36)	0.69		0.18	0.050	mg/L		12/29/21 14:03	12/30/21 16:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	72		50 - 150				12/29/21 14:03	12/30/21 16:49	1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.041	J	0.058	0.034	mg/L		12/29/21 14:03	12/30/21 21:00	1
Motor Oil (>C24-C36)	0.31		0.18	0.050	mg/L		12/29/21 14:03	12/30/21 21:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	75		50 - 150				12/29/21 14:03	12/30/21 21:00	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: GW-30-121521

Lab Sample ID: 580-108489-7

Date Collected: 12/15/21 11:05

Matrix: Water

Date Received: 12/16/21 10:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.29		0.056	0.033	mg/L		12/29/21 14:03	12/30/21 17:08	1
Motor Oil (>C24-C36)	0.29		0.18	0.049	mg/L		12/29/21 14:03	12/30/21 17:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	70		50 - 150				12/29/21 14:03	12/30/21 17:08	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: GW-4-121521

Lab Sample ID: 580-108489-8

Date Collected: 12/15/21 14:26

Matrix: Water

Date Received: 12/16/21 10:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.036	J	0.055	0.032	mg/L		12/29/21 14:03	12/30/21 17:27	1
Motor Oil (>C24-C36)	0.062	J	0.17	0.048	mg/L		12/29/21 14:03	12/30/21 17:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	59		50 - 150				12/29/21 14:03	12/30/21 17:27	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: 5-W-43-121521

Lab Sample ID: 580-108489-9

Date Collected: 12/15/21 09:09

Matrix: Water

Date Received: 12/16/21 10:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.031	J	0.053	0.031	mg/L		12/29/21 14:03	12/30/21 17:47	1
Motor Oil (>C24-C36)	0.087	J	0.17	0.046	mg/L		12/29/21 14:03	12/30/21 17:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	69		50 - 150				12/29/21 14:03	12/30/21 17:47	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: GW-2-121521

Lab Sample ID: 580-108489-10

Date Collected: 12/15/21 09:47

Matrix: Water

Date Received: 12/16/21 10:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.11		0.054	0.032	mg/L		12/29/21 14:03	12/30/21 18:06	1
Motor Oil (>C24-C36)	0.43		0.17	0.047	mg/L		12/29/21 14:03	12/30/21 18:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	63		50 - 150				12/29/21 14:03	12/30/21 18:06	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: 2A-W-40-121521

Lab Sample ID: 580-108489-11

Date Collected: 12/15/21 10:27

Matrix: Water

Date Received: 12/16/21 10:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.053	0.031	mg/L		12/29/21 14:03	12/30/21 18:45	1
Motor Oil (>C24-C36)	ND		0.17	0.046	mg/L		12/29/21 14:03	12/30/21 18:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	58		50 - 150				12/29/21 14:03	12/30/21 18:45	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: 1B-W-23-121521

Lab Sample ID: 580-108489-12

Date Collected: 12/15/21 12:12

Matrix: Water

Date Received: 12/16/21 10:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.054	0.032	mg/L		12/29/21 14:03	12/30/21 19:04	1
Motor Oil (>C24-C36)	ND		0.17	0.047	mg/L		12/29/21 14:03	12/30/21 19:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	58		50 - 150				12/29/21 14:03	12/30/21 19:04	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: MW-555-121521

Lab Sample ID: 580-108489-13

Date Collected: 12/15/21 17:50

Matrix: Water

Date Received: 12/16/21 10:00

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.059		0.054	0.032	mg/L		12/29/21 14:03	12/30/21 19:23	1
Motor Oil (>C24-C36)	ND		0.17	0.047	mg/L		12/29/21 14:03	12/30/21 19:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	28	S1-	50 - 150				12/29/21 14:03	12/30/21 19:23	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-377032/1-A
Matrix: Water
Analysis Batch: 377075

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377032

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.055	0.033	mg/L		12/29/21 14:03	12/30/21 11:38	1
Motor Oil (>C24-C36)	ND		0.18	0.048	mg/L		12/29/21 14:03	12/30/21 11:38	1
Surrogate		MB MB	Limits			Prepared	Analyzed	Dil Fac	
		%Recovery Qualifier							
o-Terphenyl		66	50 - 150			12/29/21 14:03	12/30/21 11:38	1	

Lab Sample ID: LCS 580-377032/2-A
Matrix: Water
Analysis Batch: 377075

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377032

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
#2 Diesel (C10-C24)	4.00	2.79		mg/L		70	50 - 120
Motor Oil (>C24-C36)	4.00	3.16		mg/L		79	64 - 120
Surrogate		LCS LCS	Limits			%Rec.	
		%Recovery Qualifier					
o-Terphenyl		80	50 - 150				

Lab Sample ID: LCSD 580-377032/3-A
Matrix: Water
Analysis Batch: 377075

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 377032

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	Limits	RPD	Limit
		Result	Qualifier						
#2 Diesel (C10-C24)	4.00	3.01		mg/L		75	50 - 120	8	26
Motor Oil (>C24-C36)	4.00	3.54		mg/L		88	64 - 120	11	24
Surrogate		LCSD LCSD	Limits			%Rec.	RPD		
		%Recovery Qualifier							
o-Terphenyl		91	50 - 150						

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Lab Sample ID: MB 580-377032/1-B
Matrix: Water
Analysis Batch: 377075

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377032

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.055	0.033	mg/L		12/29/21 14:03	12/30/21 19:43	1
Motor Oil (>C24-C36)	ND		0.18	0.048	mg/L		12/29/21 14:03	12/30/21 19:43	1
Surrogate		MB MB	Limits			Prepared	Analyzed	Dil Fac	
		%Recovery Qualifier							
o-Terphenyl		73	50 - 150			12/29/21 14:03	12/30/21 19:43	1	

Lab Sample ID: LCS 580-377032/2-B
Matrix: Water
Analysis Batch: 377075

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377032

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
#2 Diesel (C10-C24)	4.00	3.09		mg/L		77	50 - 120
Motor Oil (>C24-C36)	4.00	3.71		mg/L		93	64 - 120

Eurofins FGS, Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup (Continued)

<i>Surrogate</i>	<i>LCS</i> <i>%Recovery</i>	<i>LCS</i> <i>Qualifier</i>	<i>Limits</i>
<i>o-Terphenyl</i>	84		50 - 150

Lab Sample ID: LCSD 580-377032/3-B
Matrix: Water
Analysis Batch: 377075

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 377032

<i>Analyte</i>	<i>Spike</i> <i>Added</i>	<i>LCSD</i> <i>Result</i>	<i>LCSD</i> <i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec.</i> <i>Limits</i>	<i>RPD</i> <i>RPD</i>	<i>RPD</i> <i>Limit</i>
#2 Diesel (C10-C24)	4.00	3.47		mg/L		87	50 - 120	11	26
Motor Oil (>C24-C36)	4.00	4.49		mg/L		112	64 - 120	19	24

<i>Surrogate</i>	<i>LCSD</i> <i>%Recovery</i>	<i>LCSD</i> <i>Qualifier</i>	<i>Limits</i>
<i>o-Terphenyl</i>	94		50 - 150



Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: EW-1-121521

Lab Sample ID: 580-108489-1

Date Collected: 12/15/21 09:15

Matrix: Water

Date Received: 12/16/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			377032	12/29/21 14:03	M1E	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377075	12/30/21 15:12	JAE	FGS SEA

Client Sample ID: GW-1-121521

Lab Sample ID: 580-108489-2

Date Collected: 12/15/21 09:47

Matrix: Water

Date Received: 12/16/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			377032	12/29/21 14:03	M1E	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377075	12/30/21 15:31	JAE	FGS SEA

Client Sample ID: 2A-W-41-121521

Lab Sample ID: 580-108489-3

Date Collected: 12/15/21 10:45

Matrix: Water

Date Received: 12/16/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			377032	12/29/21 14:03	M1E	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377075	12/30/21 15:50	JAE	FGS SEA
Total/NA	Prep	3510C			377032	12/29/21 14:03	M1E	FGS SEA
Total/NA	Cleanup	3630C			377065	12/29/21 21:48	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377075	12/30/21 20:41	JAE	FGS SEA

Client Sample ID: 2A-W-42-121521

Lab Sample ID: 580-108489-4

Date Collected: 12/15/21 12:03

Matrix: Water

Date Received: 12/16/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			377032	12/29/21 14:03	M1E	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377075	12/30/21 16:10	JAE	FGS SEA

Client Sample ID: EW-2A-121521

Lab Sample ID: 580-108489-5

Date Collected: 12/15/21 14:15

Matrix: Water

Date Received: 12/16/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			377032	12/29/21 14:03	M1E	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377075	12/30/21 16:29	JAE	FGS SEA

Client Sample ID: GW-3-121521

Lab Sample ID: 580-108489-6

Date Collected: 12/15/21 10:50

Matrix: Water

Date Received: 12/16/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			377032	12/29/21 14:03	M1E	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377075	12/30/21 16:49	JAE	FGS SEA

Eurofins FGS, Seattle

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: GW-3-121521

Lab Sample ID: 580-108489-6

Date Collected: 12/15/21 10:50

Matrix: Water

Date Received: 12/16/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			377032	12/29/21 14:03	M1E	FGS SEA
Total/NA	Cleanup	3630C			377065	12/29/21 21:48	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377075	12/30/21 21:00	JAE	FGS SEA

Client Sample ID: GW-30-121521

Lab Sample ID: 580-108489-7

Date Collected: 12/15/21 11:05

Matrix: Water

Date Received: 12/16/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			377032	12/29/21 14:03	M1E	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377075	12/30/21 17:08	JAE	FGS SEA

Client Sample ID: GW-4-121521

Lab Sample ID: 580-108489-8

Date Collected: 12/15/21 14:26

Matrix: Water

Date Received: 12/16/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			377032	12/29/21 14:03	M1E	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377075	12/30/21 17:27	JAE	FGS SEA

Client Sample ID: 5-W-43-121521

Lab Sample ID: 580-108489-9

Date Collected: 12/15/21 09:09

Matrix: Water

Date Received: 12/16/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			377032	12/29/21 14:03	M1E	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377075	12/30/21 17:47	JAE	FGS SEA

Client Sample ID: GW-2-121521

Lab Sample ID: 580-108489-10

Date Collected: 12/15/21 09:47

Matrix: Water

Date Received: 12/16/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			377032	12/29/21 14:03	M1E	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377075	12/30/21 18:06	JAE	FGS SEA

Client Sample ID: 2A-W-40-121521

Lab Sample ID: 580-108489-11

Date Collected: 12/15/21 10:27

Matrix: Water

Date Received: 12/16/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			377032	12/29/21 14:03	M1E	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377075	12/30/21 18:45	JAE	FGS SEA

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Client Sample ID: 1B-W-23-121521

Lab Sample ID: 580-108489-12

Date Collected: 12/15/21 12:12

Matrix: Water

Date Received: 12/16/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			377032	12/29/21 14:03	M1E	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377075	12/30/21 19:04	JAE	FGS SEA

Client Sample ID: MW-555-121521

Lab Sample ID: 580-108489-13

Date Collected: 12/15/21 17:50

Matrix: Water

Date Received: 12/16/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			377032	12/29/21 14:03	M1E	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377075	12/30/21 19:23	JAE	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-22

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Former Fueling Facility

Job ID: 580-108489-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-108489-1	EW-1-121521	Water	12/15/21 09:15	12/16/21 10:00
580-108489-2	GW-1-121521	Water	12/15/21 09:47	12/16/21 10:00
580-108489-3	2A-W-41-121521	Water	12/15/21 10:45	12/16/21 10:00
580-108489-4	2A-W-42-121521	Water	12/15/21 12:03	12/16/21 10:00
580-108489-5	EW-2A-121521	Water	12/15/21 14:15	12/16/21 10:00
580-108489-6	GW-3-121521	Water	12/15/21 10:50	12/16/21 10:00
580-108489-7	GW-30-121521	Water	12/15/21 11:05	12/16/21 10:00
580-108489-8	GW-4-121521	Water	12/15/21 14:26	12/16/21 10:00
580-108489-9	5-W-43-121521	Water	12/15/21 09:09	12/16/21 10:00
580-108489-10	GW-2-121521	Water	12/15/21 09:47	12/16/21 10:00
580-108489-11	2A-W-40-121521	Water	12/15/21 10:27	12/16/21 10:00
580-108489-12	1B-W-23-121521	Water	12/15/21 12:12	12/16/21 10:00
580-108489-13	MW-555-121521	Water	12/15/21 17:50	12/16/21 10:00

- 1
- 2
- 3
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- 11



580-108489 Chain of Custody

LABORATORY INFORMATION						LAB WORK ORDER:			
Laboratory:			Project Manager:			SHIPMENT INFORMATION			
Address:			Phone:			Shipment Method:			
City/State/ZIP:			Fax:			Tracking Number:			
BNSF PROJECT INFORMATION			CONSULTANT INFORMATION			Project Number: 683-071			
Project State of Origin: _____			Company: Farallon Consulting			Project Manager: Amanda Meugniot			
BNSF Project Number: _____			Address: 975 5th Ave			Email: ameugniot@farallonconsulting.com			
Project City: Skykomish, WA			City/State/ZIP: Issaquah, WA 98027			Phone: 425-394-4445			
BNSF Project Name: BNSF Former Fueling Facility			BNSF Work Order No.: _____			Fax: _____			
TURNAROUND TIME		DELIVERABLES		METHODS FOR ANALYSIS					
<input type="checkbox"/> 1-day Rush <input type="checkbox"/> 2-day Rush <input type="checkbox"/> 3-day Rush <input type="checkbox"/> 5- to 8-day Rush <input checked="" type="checkbox"/> Standard 10-Day <input type="checkbox"/> Other _____		<input type="checkbox"/> Other Deliverables? <input type="checkbox"/> BNSF Standard (Level II) <input type="checkbox"/> Level III <input type="checkbox"/> Level IV <input type="checkbox"/> EDD Req. Format?		MULTPH - DX (w/sg cleanup) MULTPH - DX (w/sg cleanup)					
SAMPLE INFORMATION									
Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/Grab)	Matrix	COMMENTS	LAB USE
		Date	Time	Sampler					
1 EW-1-121521	2	121521	0915	GP	N	G	W		
2 GW-1-121521	2		0947						
3 2A-W-41-121521	4		1045						
4 2A-W-42-121521	2		1203						
5 EW-2A-121521	2		1415						
6 GW-3-121521	4		1050	EB					
7 GW-30-121521	4		1105						
8 GW-4-121521	2		1426						
9 5-W-43-121521	2		0909						
10 GW-2-121521	2		0947						
11 2A-W-40-121521	2		1027						
12 1B-W-23-121521	2		1212						
13 MW-555-121521	2		1750						
emb									
Relinquished By: Eileen Rye		Date/Time: 12/16/21 1000		Received By: Jan Stankovic		Date/Time: 12/16/21 1000		Comments and Special Analytical Requirements:	
Relinquished By: _____		Date/Time: _____		Received By: _____		Date/Time: _____		clid no Ly Blu/wet/bob A2 0.1/0.4 w6	
Relinquished By: _____		Date/Time: _____		Received By: _____		Date/Time: _____		Custody Seal No. _____ BNSF COC No. _____	
Received by Laboratory: _____		Date/Time: _____		Lab Remarks: _____		Lab. Custody Intact? <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No. _____ BNSF COC No. _____	

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES

DUPLICATE - CONSULTANT

TAL-1001 (0912)

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-108489-1

Login Number: 108489

List Source: Eurofins FGS, Seattle

List Number: 1

Creator: Greene, Ashton R

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	False	Improper containers received for -13
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-108532-1
Client Project/Site: Skykomish HCC System
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
12/22/2021 12:07:10 PM

Pauline Matlock, Project Manager
(253)922-2310
pauline.matlock@eurofinset.com

LINKS

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results through
TotalAccess

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-108532-1

Job ID: 580-108532-1

Laboratory: Eurofins FGS, Seattle

Narrative

**Job Narrative
580-108532-1**

Comments

No additional comments.

Receipt

The samples were received on 12/17/2021 2:15 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was -0.2° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-108532-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-108532-1

Client Sample ID: Before GAC-121621

Lab Sample ID: 580-108532-1

Date Collected: 12/16/21 06:30

Matrix: Water

Date Received: 12/17/21 14:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.55		0.055		mg/L		12/21/21 10:18	12/21/21 15:48	1
Motor Oil (>C24-C36)	0.38		0.18		mg/L		12/21/21 10:18	12/21/21 15:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	95		50 - 150				12/21/21 10:18	12/21/21 15:48	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-108532-1

Client Sample ID: HCC EFF-121621

Lab Sample ID: 580-108532-2

Date Collected: 12/16/21 06:30

Matrix: Water

Date Received: 12/17/21 14:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.055		mg/L		12/21/21 10:18	12/21/21 16:07	1
Motor Oil (>C24-C36)	ND		0.17		mg/L		12/21/21 10:18	12/21/21 16:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	85		50 - 150				12/21/21 10:18	12/21/21 16:07	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: Skykomish HCC System

Job ID: 580-108532-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-376476/1-A
Matrix: Water
Analysis Batch: 376501

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 376476

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.055		mg/L		12/21/21 10:18	12/21/21 14:31	1
Motor Oil (>C24-C36)	ND		0.18		mg/L		12/21/21 10:18	12/21/21 14:31	1
		MB MB	Limits			Prepared	Analyzed	Dil Fac	
Surrogate	%Recovery	Qualifier							
o-Terphenyl	82		50 - 150			12/21/21 10:18	12/21/21 14:31	1	

Lab Sample ID: LCS 580-376476/2-A
Matrix: Water
Analysis Batch: 376501

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 376476

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
								%Rec.
#2 Diesel (C10-C24)	4.00	3.30		mg/L		82	50 - 120	
Motor Oil (>C24-C36)	4.00	3.72		mg/L		93	64 - 120	
		LCS LCS	Limits			Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier						
o-Terphenyl	102		50 - 150			12/21/21 10:18	12/21/21 14:31	1

Lab Sample ID: LCSD 580-376476/3-A
Matrix: Water
Analysis Batch: 376501

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 376476

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	4.00	3.51		mg/L		88	50 - 120	6	26
Motor Oil (>C24-C36)	4.00	4.13		mg/L		103	64 - 120	10	24
		LCSD LCSD	Limits			Prepared	Analyzed	Dil Fac	
Surrogate	%Recovery	Qualifier							
o-Terphenyl	109		50 - 150			12/21/21 10:18	12/21/21 14:31	1	

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-108532-1

Client Sample ID: Before GAC-121621

Lab Sample ID: 580-108532-1

Date Collected: 12/16/21 06:30

Matrix: Water

Date Received: 12/17/21 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			376476	12/21/21 10:18	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	376501	12/21/21 15:48	JAE	FGS SEA

Client Sample ID: HCC EFF-121621

Lab Sample ID: 580-108532-2

Date Collected: 12/16/21 06:30

Matrix: Water

Date Received: 12/17/21 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			376476	12/21/21 10:18	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	376501	12/21/21 16:07	JAE	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-108532-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-22

- 1
- 2
- 3
- 4
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- 9
- 10
- 11

Sample Summary

Client: Farallon Consulting LLC
Project/Site: Skykomish HCC System

Job ID: 580-108532-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-108532-1	Before GAC-121621	Water	12/16/21 06:30	12/17/21 14:15
580-108532-2	HCC EFF-121621	Water	12/16/21 06:30	12/17/21 14:15

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Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-108532-1

Login Number: 108532

List Source: Eurofins FGS, Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins FGS, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-108687-1

Client Project/Site: BNSF Skykomish Rush NPDES
Sampling Event: Skykomish - GAC/HCC

For:

Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
12/29/2021 5:55:24 PM

Pauline Matlock, Project Manager
(253)922-2310
pauline.matlock@eurofinset.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-108687-1

Job ID: 580-108687-1

Laboratory: Eurofins FGS, Seattle

Narrative

**Job Narrative
580-108687-1**

Comments

No additional comments.

Receipt

The samples were received on 12/22/2021 11:55 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 5.6° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-108687-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-108687-1

Client Sample ID: Before GAC-122121

Lab Sample ID: 580-108687-1

Date Collected: 12/21/21 07:30

Matrix: Water

Date Received: 12/22/21 11:55

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.44		0.055		mg/L		12/28/21 15:44	12/29/21 04:53	1
Motor Oil (>C24-C36)	0.36		0.18		mg/L		12/28/21 15:44	12/29/21 04:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	74		50 - 150				12/28/21 15:44	12/29/21 04:53	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-108687-1

Client Sample ID: HCC EFF-122121

Lab Sample ID: 580-108687-2

Date Collected: 12/21/21 07:30

Matrix: Water

Date Received: 12/22/21 11:55

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.056		mg/L		12/28/21 15:44	12/29/21 05:12	1
Motor Oil (>C24-C36)	ND		0.18		mg/L		12/28/21 15:44	12/29/21 05:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	65		50 - 150				12/28/21 15:44	12/29/21 05:12	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-108687-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-376932/1-A
Matrix: Water
Analysis Batch: 376807

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 376932

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.055		mg/L		12/28/21 15:44	12/29/21 03:56	1
Motor Oil (>C24-C36)	ND		0.18		mg/L		12/28/21 15:44	12/29/21 03:56	1
		MB MB	Limits			Prepared	Analyzed	Dil Fac	
Surrogate	%Recovery	Qualifier							
o-Terphenyl	69		50 - 150			12/28/21 15:44	12/29/21 03:56	1	

Lab Sample ID: LCS 580-376932/2-A
Matrix: Water
Analysis Batch: 376807

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 376932

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
								%Rec.
#2 Diesel (C10-C24)	4.00	2.74		mg/L		68	50 - 120	
Motor Oil (>C24-C36)	4.00	3.37		mg/L		84	64 - 120	
		LCS LCS	Limits			Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier						
o-Terphenyl	86		50 - 150			12/28/21 15:44	12/29/21 03:56	1

Lab Sample ID: LCSD 580-376932/3-A
Matrix: Water
Analysis Batch: 376807

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 376932

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	4.00	2.71		mg/L		68	50 - 120	1	26
Motor Oil (>C24-C36)	4.00	3.26		mg/L		82	64 - 120	3	24
		LCSD LCSD	Limits			Prepared	Analyzed	Dil Fac	
Surrogate	%Recovery	Qualifier							
o-Terphenyl	83		50 - 150			12/28/21 15:44	12/29/21 03:56	1	

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-108687-1

Client Sample ID: Before GAC-122121

Lab Sample ID: 580-108687-1

Date Collected: 12/21/21 07:30

Matrix: Water

Date Received: 12/22/21 11:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			376932	12/28/21 15:44	JBT	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	376807	12/29/21 04:53	JAE	FGS SEA

Client Sample ID: HCC EFF-122121

Lab Sample ID: 580-108687-2

Date Collected: 12/21/21 07:30

Matrix: Water

Date Received: 12/22/21 11:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			376932	12/28/21 15:44	JBT	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	376807	12/29/21 05:12	JAE	FGS SEA

Laboratory References:

FGS SEA = Eurofins FGS, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-108687-1

Laboratory: Eurofins FGS, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-22

- 1
- 2
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- 11

Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-108687-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-108687-1	Before GAC-122121	Water	12/21/21 07:30	12/22/21 11:55
580-108687-2	HCC EFF-122121	Water	12/21/21 07:30	12/22/21 11:55

- 1
- 2
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Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-108687-1

Login Number: 108687

List Number: 1

Creator: Vallelunga, Diana L

List Source: Eurofins FGS, Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins Northwest, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-108785-1

Client Project/Site: BNSF Skykomish Rush NPDES
Sampling Event: Skykomish - GAC/HCC

For:
Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Amanda Meuginot



Authorized for release by:
1/4/2022 5:14:35 PM

Pauline Matlock, Project Manager
(253)922-2310
pauline.matlock@eurofinset.com

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Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-108785-1

Job ID: 580-108785-1

Laboratory: Eurofins Northwest, Seattle

Narrative

**Job Narrative
580-108785-1**

Comments

No additional comments.

Receipt

The samples were received on 12/29/2021 10:25 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.3° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-108785-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-108785-1

Client Sample ID: Before GAC-122721

Lab Sample ID: 580-108785-1

Date Collected: 12/27/21 09:00

Matrix: Water

Date Received: 12/29/21 10:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.43		0.10		mg/L		12/31/21 11:59	01/02/22 19:21	1
Motor Oil (>C24-C36)	0.36		0.33		mg/L		12/31/21 11:59	01/02/22 19:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	71		50 - 150				12/31/21 11:59	01/02/22 19:21	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-108785-1

Client Sample ID: HCC EFF-122721

Lab Sample ID: 580-108785-2

Date Collected: 12/27/21 09:00

Matrix: Water

Date Received: 12/29/21 10:25

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.055		mg/L		01/03/22 11:09	01/04/22 01:53	1
Motor Oil (>C24-C36)	ND		0.18		mg/L		01/03/22 11:09	01/04/22 01:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	75		50 - 150				01/03/22 11:09	01/04/22 01:53	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-108785-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-377195/1-A
Matrix: Water
Analysis Batch: 377246

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377195

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.11		mg/L		12/31/21 11:59	01/02/22 17:44	1
Motor Oil (>C24-C36)	ND		0.35		mg/L		12/31/21 11:59	01/02/22 17:44	1
MB MB									
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
<i>o</i> -Terphenyl	72		50 - 150			12/31/21 11:59	01/02/22 17:44	1	

Lab Sample ID: LCS 580-377195/2-A
Matrix: Water
Analysis Batch: 377246

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377195

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits	RPD	Limit
		Result	Qualifier						
#2 Diesel (C10-C24)	4.00	3.06		mg/L		76	50 - 120		
Motor Oil (>C24-C36)	4.00	3.34		mg/L		83	64 - 120		
LCS LCS									
Surrogate	%Recovery	Qualifier	Limits						
<i>o</i> -Terphenyl	87		50 - 150						

Lab Sample ID: LCSD 580-377195/3-A
Matrix: Water
Analysis Batch: 377246

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 377195

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	Limit
		Result	Qualifier						
#2 Diesel (C10-C24)	4.00	3.02		mg/L		75	50 - 120	1	26
Motor Oil (>C24-C36)	4.00	3.40		mg/L		85	64 - 120	2	24
LCSD LCSD									
Surrogate	%Recovery	Qualifier	Limits						
<i>o</i> -Terphenyl	88		50 - 150						

Lab Sample ID: MB 580-377287/1-A
Matrix: Water
Analysis Batch: 377292

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377287

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.055		mg/L		01/03/22 11:09	01/03/22 19:51	1
Motor Oil (>C24-C36)	ND		0.18		mg/L		01/03/22 11:09	01/03/22 19:51	1
MB MB									
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
<i>o</i> -Terphenyl	86		50 - 150			01/03/22 11:09	01/03/22 19:51	1	

Lab Sample ID: LCS 580-377287/2-A
Matrix: Water
Analysis Batch: 377292

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377287

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits	RPD	Limit
		Result	Qualifier						
#2 Diesel (C10-C24)	4.00	2.75		mg/L		69	50 - 120		
Motor Oil (>C24-C36)	4.00	3.71		mg/L		93	64 - 120		

Eurofins Northwest, Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-108785-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCS 580-377287/2-A
Matrix: Water
Analysis Batch: 377292

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377287

<i>Surrogate</i>	<i>LCS %Recovery</i>	<i>LCS Qualifier</i>	<i>Limits</i>
<i>o-Terphenyl</i>	70		50 - 150

Lab Sample ID: LCSD 580-377287/3-A
Matrix: Water
Analysis Batch: 377292

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 377287

<i>Analyte</i>	<i>Spike Added</i>	<i>LCSD Result</i>	<i>LCSD Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>Limits</i>	<i>RPD</i>	<i>Limit</i>
#2 Diesel (C10-C24)	4.00	2.89		mg/L		72	50 - 120	5	26
Motor Oil (>C24-C36)	4.00	3.82		mg/L		96	64 - 120	3	24

<i>Surrogate</i>	<i>LCSD %Recovery</i>	<i>LCSD Qualifier</i>	<i>Limits</i>
<i>o-Terphenyl</i>	78		50 - 150

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-108785-1

Client Sample ID: Before GAC-122721

Lab Sample ID: 580-108785-1

Date Collected: 12/27/21 09:00

Matrix: Water

Date Received: 12/29/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			377195	12/31/21 11:59	RJL	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377246	01/02/22 19:21	JAE	FGS SEA

Client Sample ID: HCC EFF-122721

Lab Sample ID: 580-108785-2

Date Collected: 12/27/21 09:00

Matrix: Water

Date Received: 12/29/21 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			377287	01/03/22 11:09	JHR	FGS SEA
Total/NA	Analysis	NWTPH-Dx		1	377292	01/04/22 01:53	JAE	FGS SEA

Laboratory References:

FGS SEA = Eurofins Northwest, Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310



Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-108785-1

Laboratory: Eurofins Northwest, Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-22

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Rush NPDES

Job ID: 580-108785-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-108785-1	Before GAC-122721	Water	12/27/21 09:00	12/29/21 10:25
580-108785-2	HCC EFF-122721	Water	12/27/21 09:00	12/29/21 10:25

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-108785-1

Login Number: 108785

List Source: Eurofins Northwest, Seattle

List Number: 1

Creator: Vallelunga, Diana L

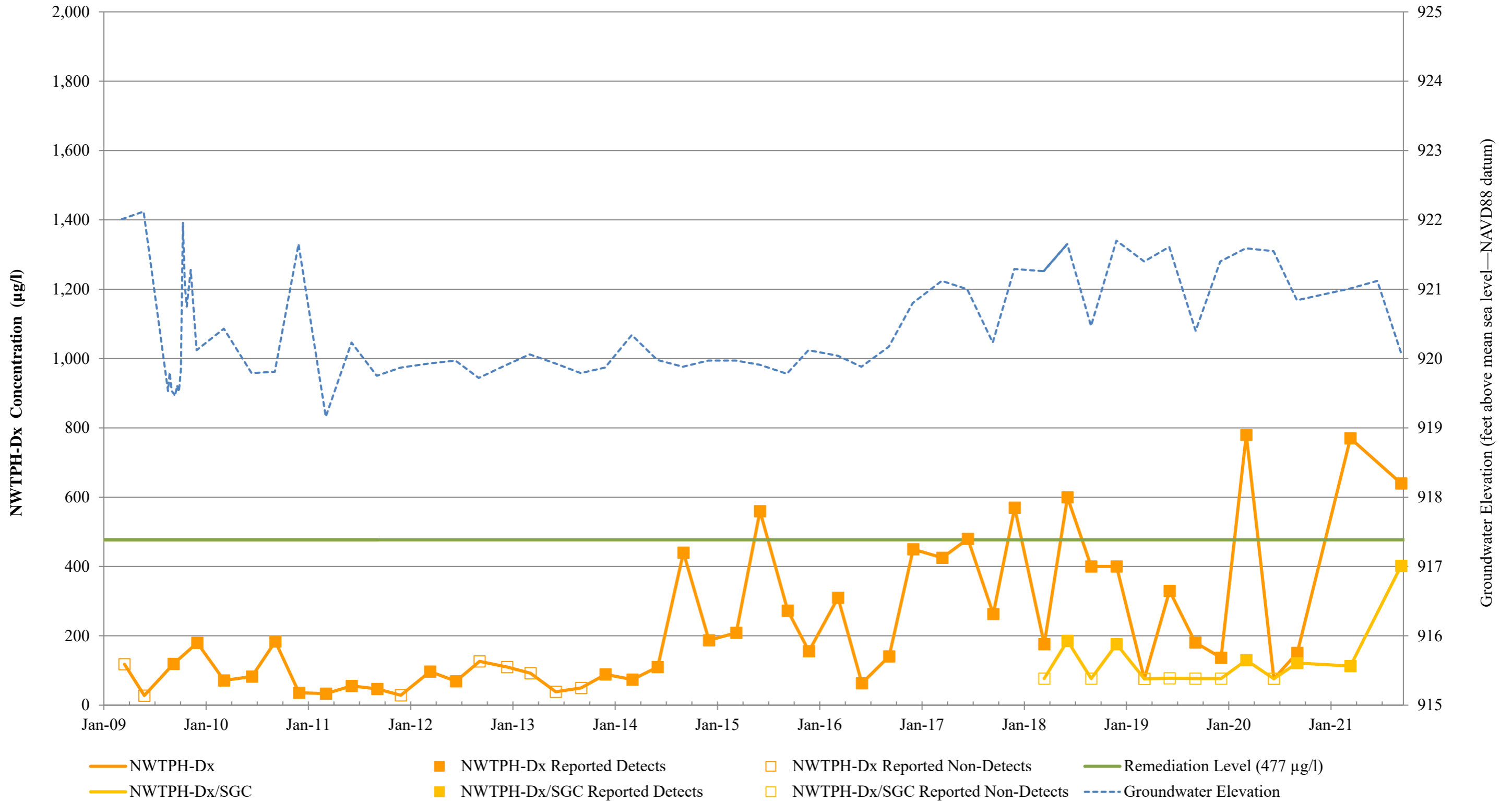
Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

**APPENDIX B
NWTPH-DX AND NWTPH-DX/SGC GW-3 TREND PLOT**

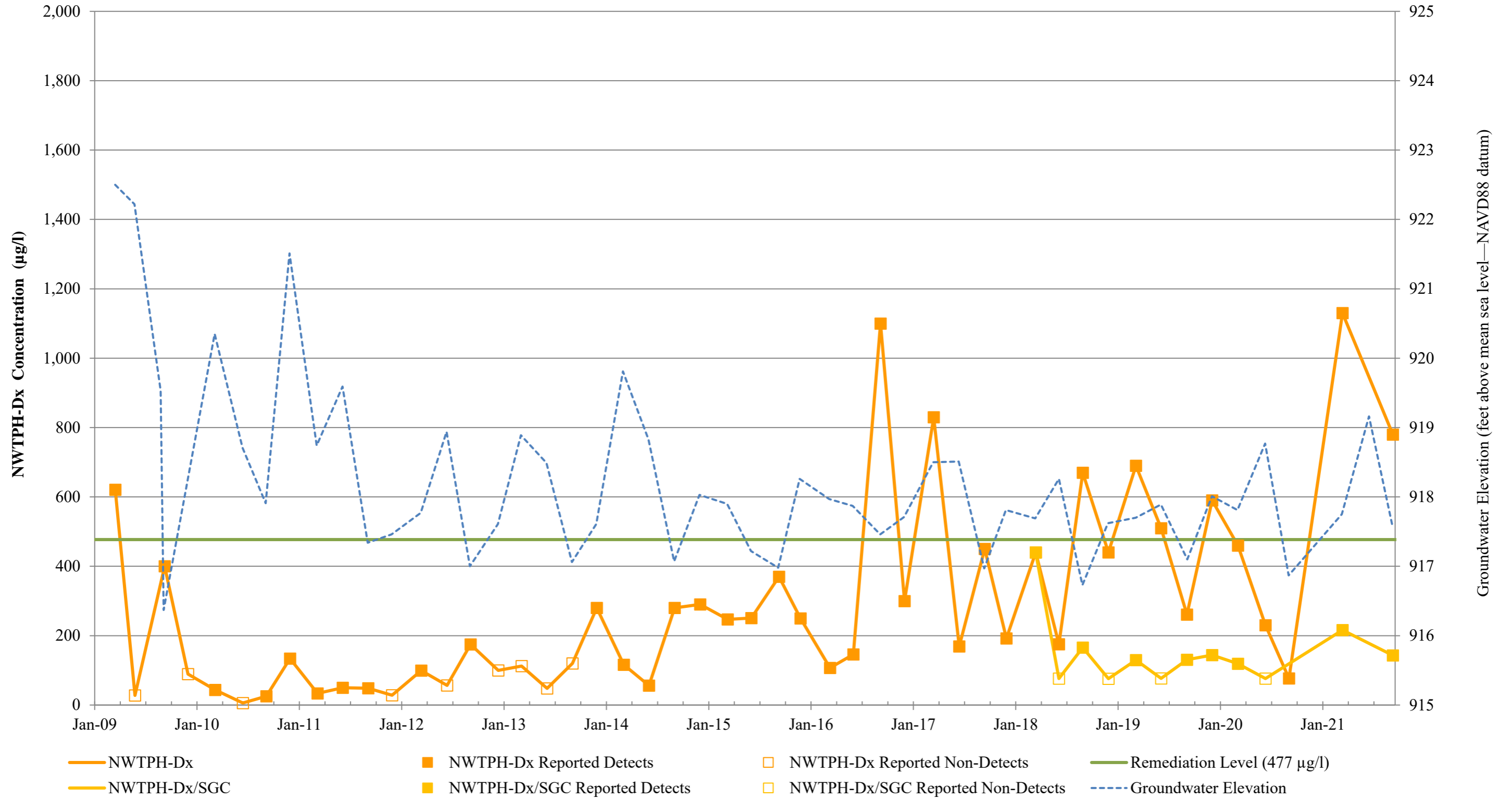
2021 ANNUAL HYDRAULIC CONTROL AND CONTAINMENT SYSTEM
OPERATIONS REPORT
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Consent Decree No. 07-2-33672-9 SEA

Farallon PN: 683-071

NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071
Well GW-3



NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071
Well 2A-W-41

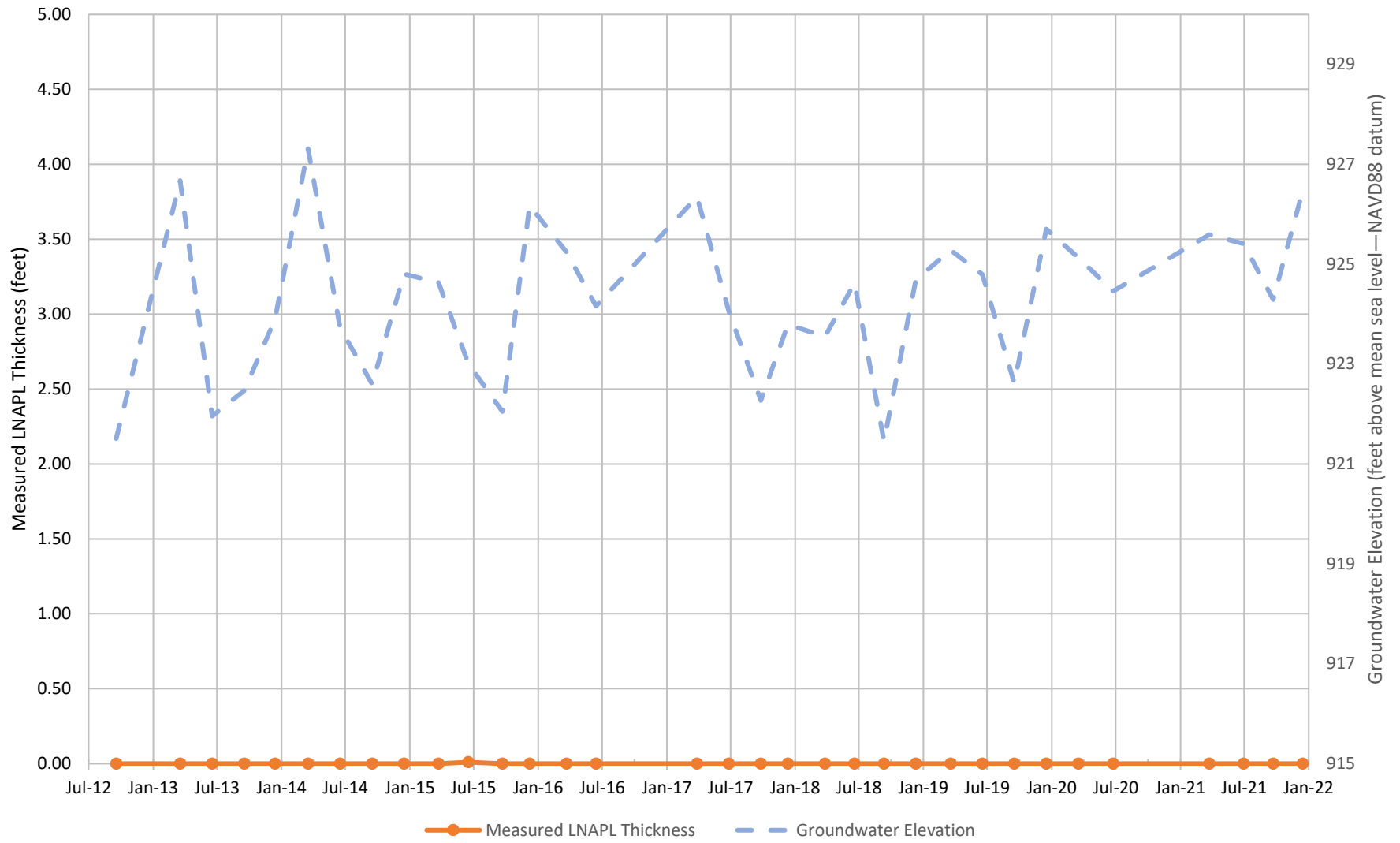


**APPENDIX C
LNAPL TREND PLOTS**

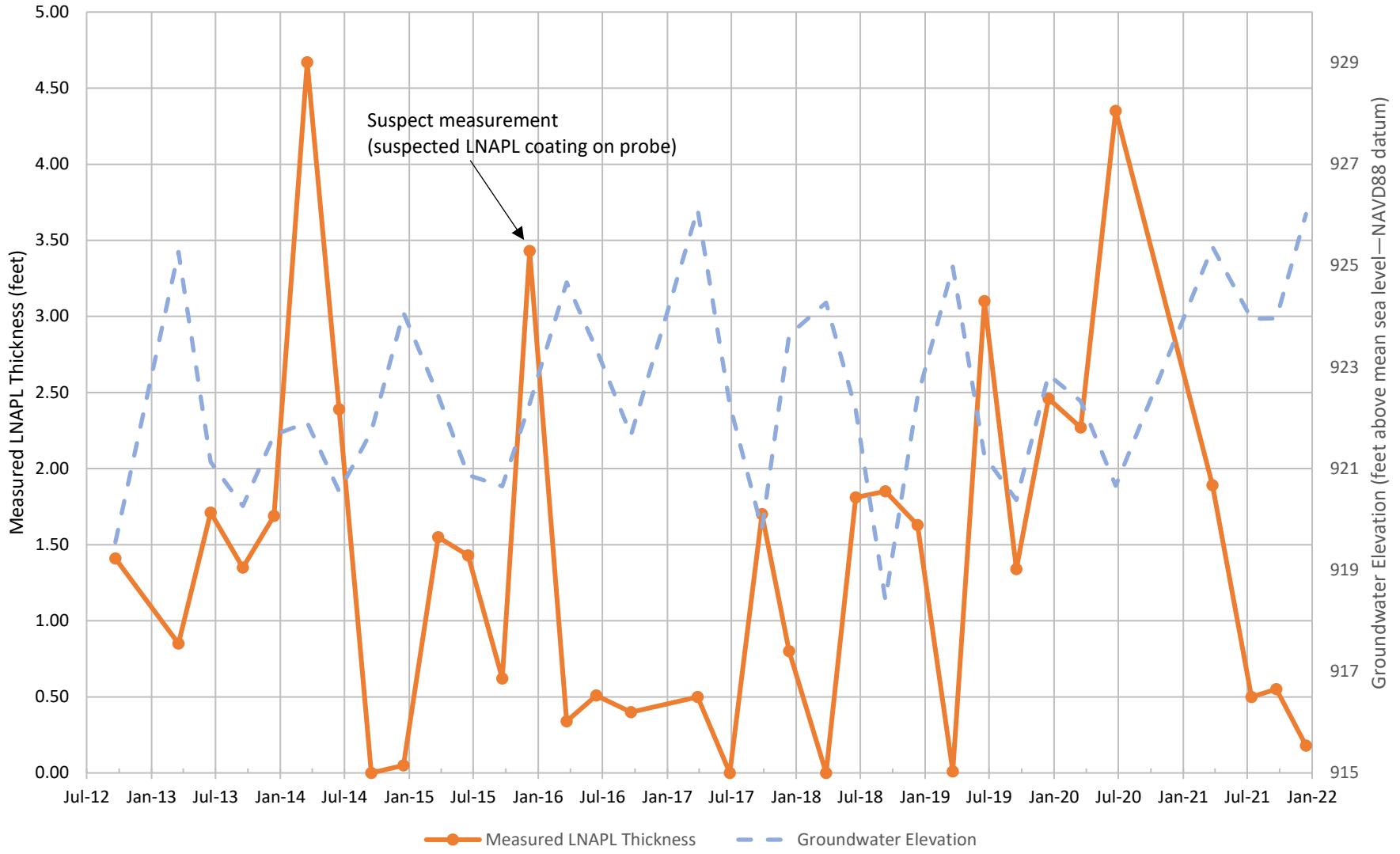
2021 ANNUAL HYDRAULIC CONTROL AND CONTAINMENT SYSTEM
OPERATIONS REPORT
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Consent Decree No. 07-2-33672-9 SEA

Farallon PN: 683-071

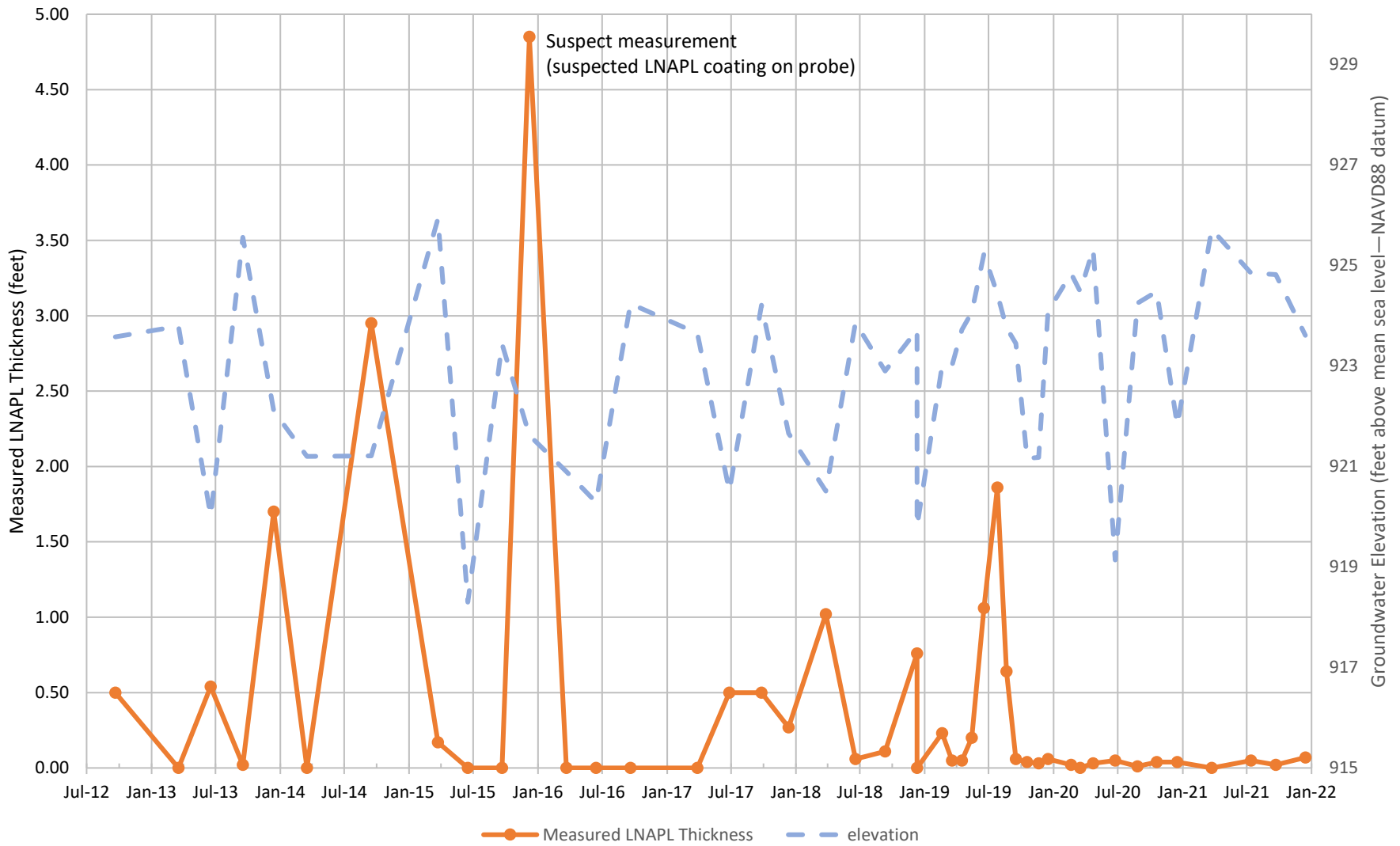
LNAPL Thickness Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071
Piezometer PZ-4S



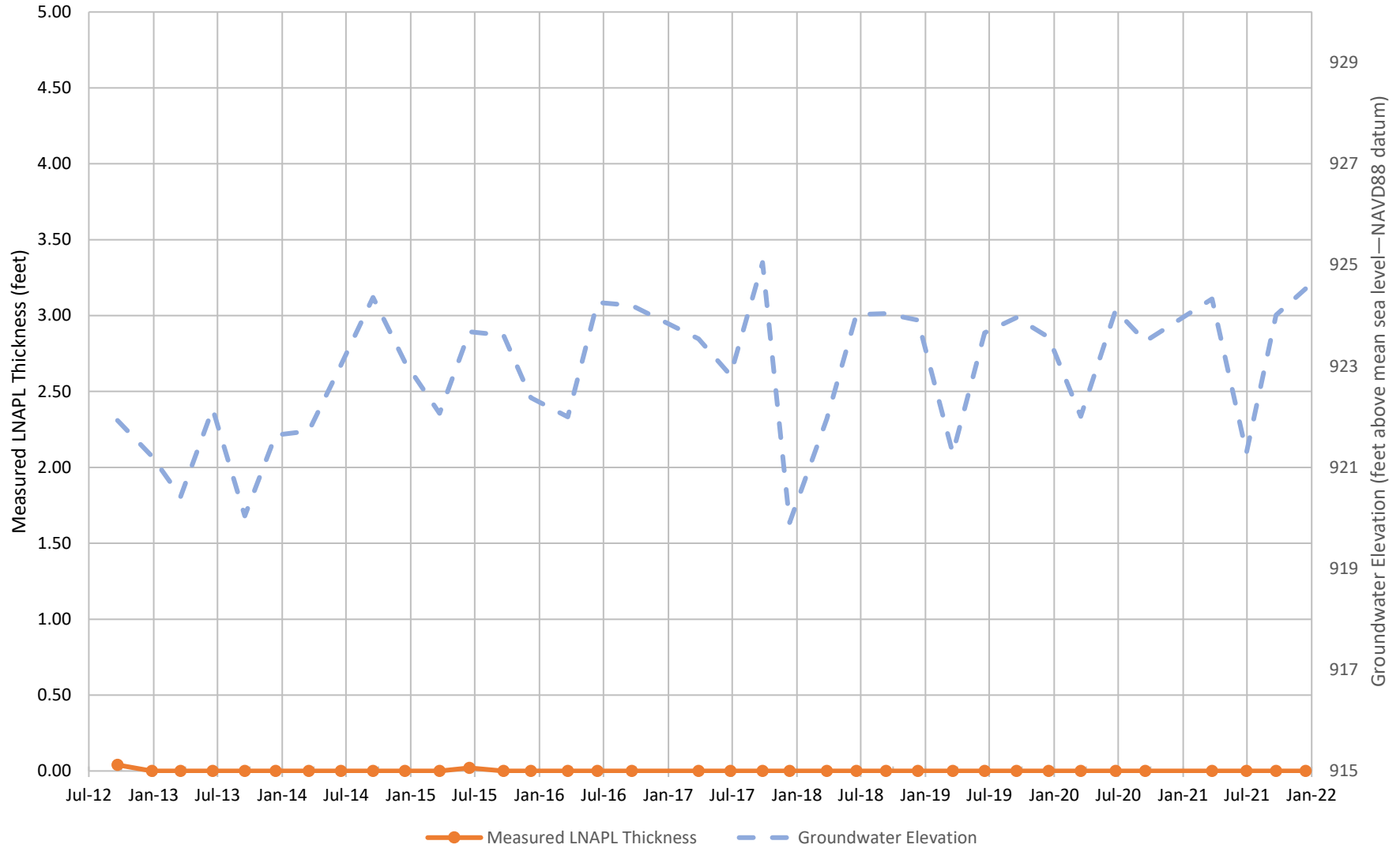
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BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071
Piezometer PZ-5S



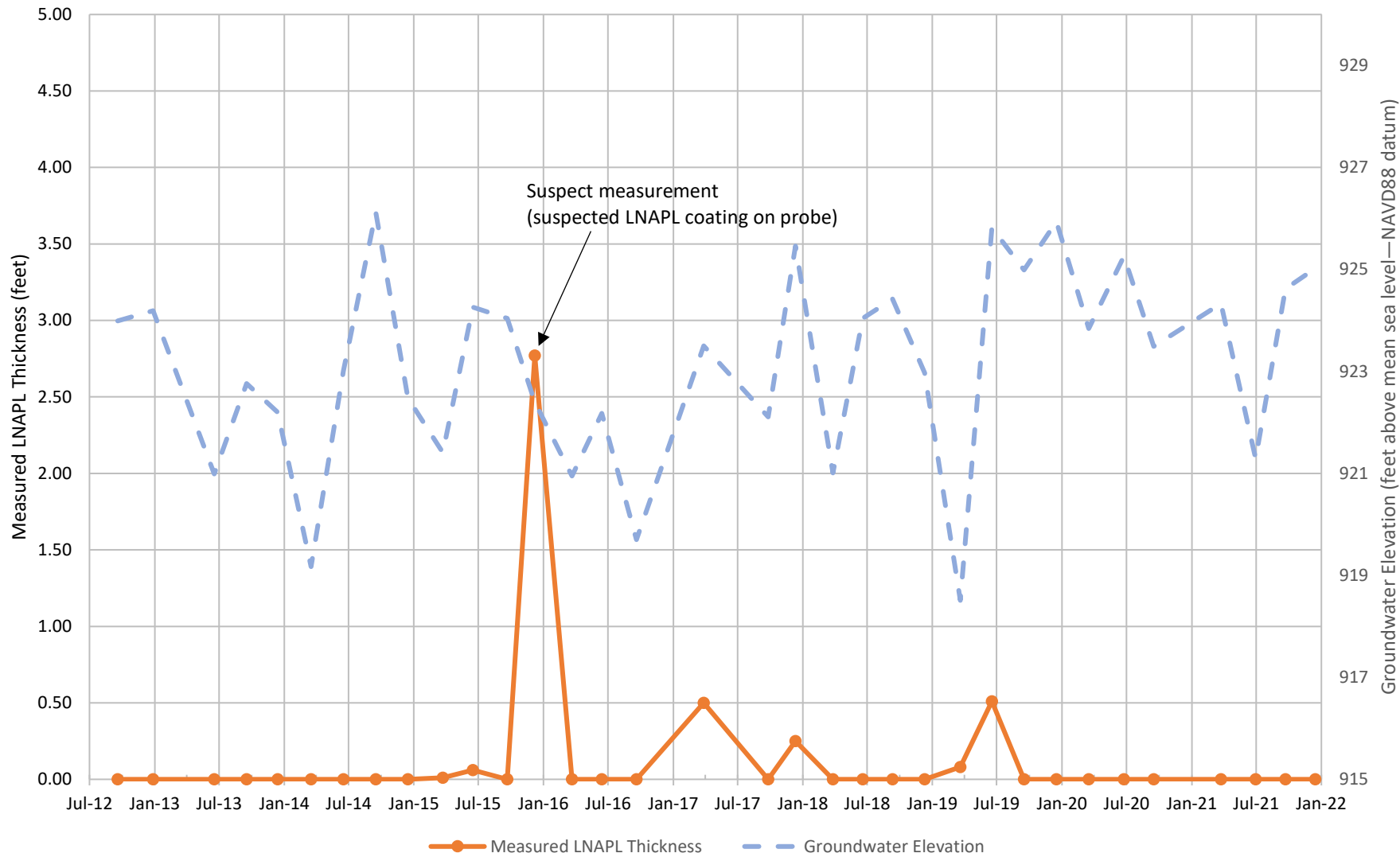
LNAPL Thickness Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071
Piezometer PZ-6S



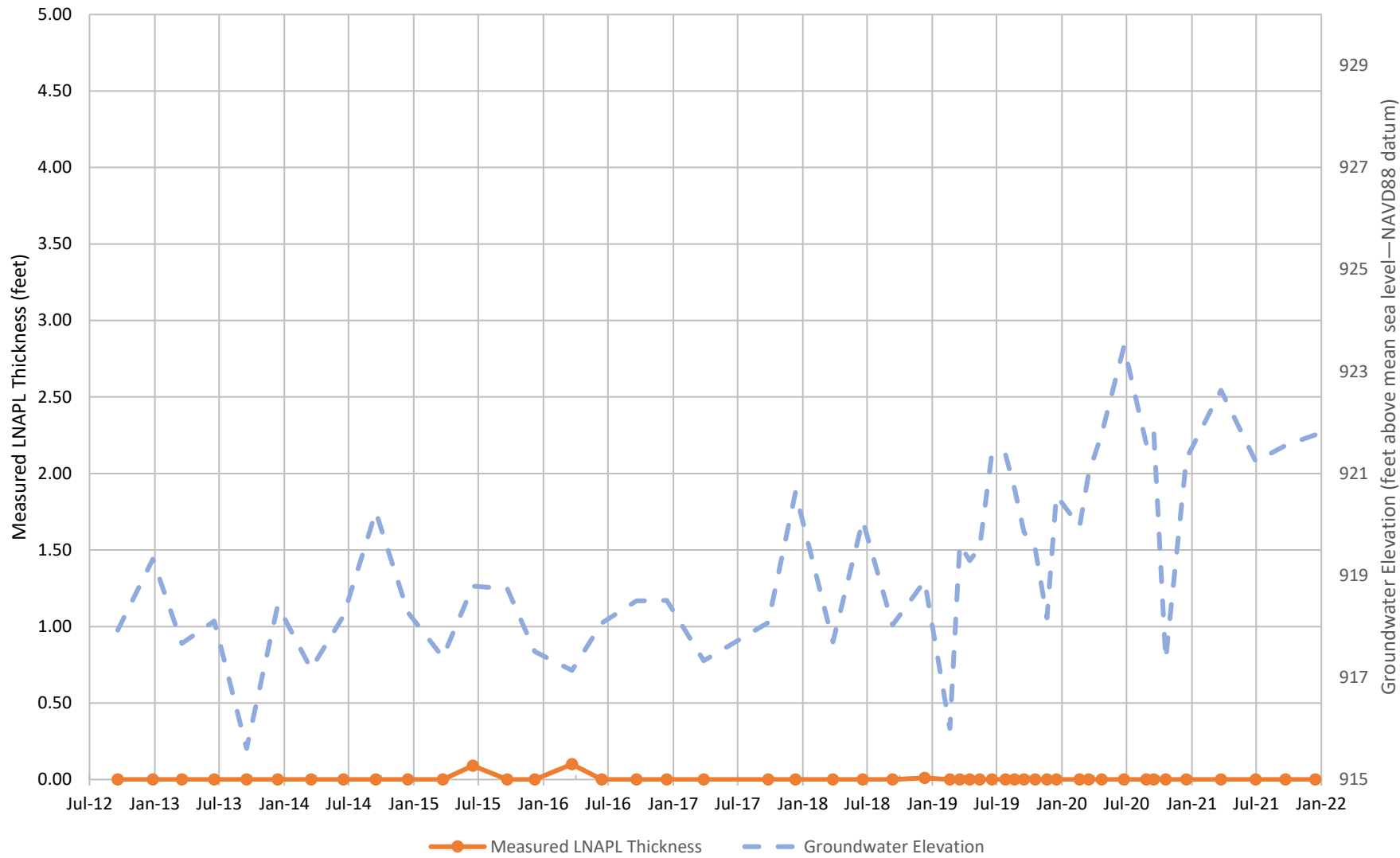
LNAPL Thickness Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071
Recovery Well RW-03



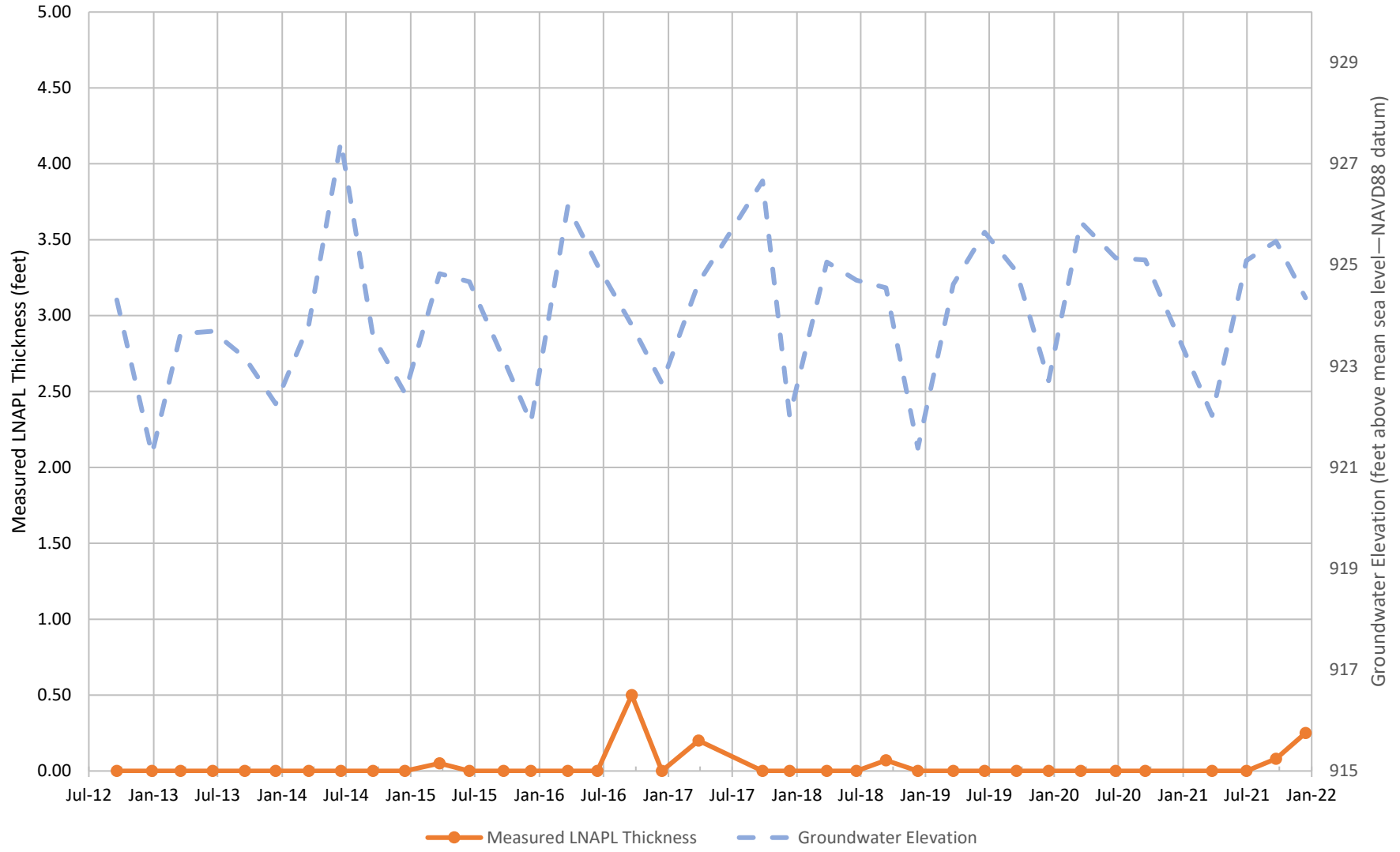
LNAPL Thickness Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071
Recovery Well RW-04



LNAPL Thickness Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071
Recovery Well RW-05



LNAPL Thickness Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071
Recovery Well RW-07



LNAPL Thickness Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-071
Recovery Well RW-08

