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May 19, 2020

Ronald Timm
Toxics Cleanup Program
Dept. of Ecology
3190 160th Ave SE
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**RE: Final 2019 Site-Wide Groundwater Monitoring Report Transmittal
Consent Decree No. 07-2-33672-9 SEA:
Site Name: BNSF Former Maintenance and Fueling Facility
Site Address: Skykomish, WA
Facility/Site ID No.: 2104
Cleanup Site ID No.: 34**

Dear Mr. Timm:

Enclosed is the Final 2019 Site-Wide Groundwater Monitoring Report for Ecology's records.

Sincerely,

A handwritten signature in blue ink that reads "Shane C. DeGross".

Shane C. DeGross
Manager Environmental Remediation, BNSF Railway

cc: Ms. Amy Essig Desai, Farallon Consulting

**2019 SITE-WIDE
GROUNDWATER MONITORING REPORT**

**BNSF FORMER MAINTENANCE AND FUELING FACILITY
SKYKOMISH, WASHINGTON
CONSENT DECREE NO. 07-2-33672-9 SEA**

**Submitted by:
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**For:
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May 19, 2020

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EXECUTIVE SUMMARY

Quarterly groundwater monitoring was conducted in 2019 at the BNSF Railway Company (BNSF) Former Maintenance and Fueling Facility in Skykomish, Washington. Groundwater samples collected during the monitoring events were analyzed for total petroleum hydrocarbons as diesel- and as oil-range organics (herein referred to collectively as NWTPH-Dx) using Washington State Department of Ecology (Ecology) Method NWTPH-Dx.

Groundwater flow direction in 2019 generally was consistent with previous years. South (i.e., up-gradient) of the hydraulic control and containment (HCC) system barrier wall, the groundwater flow direction is predominantly toward the west-northwest. North (i.e., down-gradient) of the HCC system barrier wall, groundwater flow direction is predominantly toward the west.

Light nonaqueous-phase liquid (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 consistent with previous years. Measured LNAPL thicknesses ranged from a light trace (i.e., less than 0.01 foot) to 3.1 feet. A heavy trace of LNAPL was observed in recovery well RW-09 during the December 2019 groundwater monitoring event. LNAPL was not observed at nearby locations, including piezometer PZ-1, located east of recovery well RW-09, and the east, central, and west oil-water separator chambers (north and south) of the East Gate, indicating an isolated occurrence. Over the life cycle of the data record, measured LNAPL thicknesses have exhibited an overall decreasing or stable trend, with minor variability. LNAPL measurements at the site are subject to uncertainty due to the viscous nature of the LNAPL. Piezometers and recovery wells will continue to be monitored for LNAPL.

The site-specific NWTPH-Dx groundwater cleanup level of 208 micrograms per liter ($\mu\text{g/l}$) and absence of sheen (CUL) is applicable at the groundwater conditional point of compliance, defined as the point where groundwater enters the Skykomish River. Compliance with the CUL is assessed using monitoring wells in the Levee Zone adjacent to the Skykomish River. Reported NWTPH-Dx concentrations in the groundwater samples collected from Levee Zone monitoring wells were less than the CUL.

The site-specific NWTPH-Dx groundwater remediation level of 477 $\mu\text{g/l}$ and absence of sheen (RL) is applicable from the BNSF railyard boundary to the groundwater conditional point of compliance. Reported NWTPH-Dx concentrations in the groundwater samples collected from monitoring wells north of the BNSF railyard and outside the Levee Zone were less than the RL, with the exception of select samples collected from HCC system monitoring well 2A-W-41.

Reported NWTPH-Dx concentrations in well 2A-W-41 have been variable since December 2013. Well 2A-W-41 is down-gradient of monitoring well GW-3, which is immediately north and down-gradient of the Center Gate, where substantial biofouling by iron bacteria has been observed. Quarterly groundwater samples collected from wells 2A-W-41 and GW-3 in 2019 were analyzed by Ecology Method NWTPH-Dx both with and without a silica gel cleanup preparation process. The March, June, September, and December 2019 samples collected from well 2A-W-41 and



analyzed without silica gel cleanup had reported concentrations of 690, 510, 261, and 590 µg/l, respectively. Reported NWTPH-Dx concentrations in all of the silica gel-prepared samples collected from well 2A-W-41 were less than the RL. The results of the analyses performed with and without silica gel cleanup suggest that the results from the non-silica-gel-prepared samples are biased high due to biogenic or petroleum metabolite interferences.

During the summer of 2018, the hot water flushing (HWF) remediation system that operated at the Skykomish School in 2016 and 2017 was decommissioned, and the associated sheet pile barrier wall was removed. Former HWF system recovery well RW-10 and schoolyard monitoring wells 5-W-51, 5-W-55, and 5-W-56 were retained to evaluate post-HWF treatment groundwater quality (former recovery well RW-10 was retained for gauging only, to monitor for the presence of LNAPL). Reported NWTPH-Dx concentrations in the groundwater samples collected from wells 5-W-51 and 5-W-56 in 2019 ranged from 740 to 2,310 µg/l. A heavy trace of LNAPL was observed in recovery well RW-10 in June 2019 and a light trace of LNAPL was observed in December 2019. LNAPL or sheen were not observed in any of Levee Zone monitoring wells situated down-gradient of RW-10 in 2019. According to the Consent Decree between BNSF and Ecology, if NWTPH-Dx concentrations exceeding the RL are reported in groundwater samples collected from the schoolyard monitoring wells or down-gradient of the Skykomish School property following HWF treatment, no additional measures are required to meet the RL on or immediately down-gradient of the Skykomish School property. Contingency treatment methods, which could potentially include air-sparging, enhanced bioremediation, or similar in-place treatment measures, will be employed if NWTPH-Dx concentrations exceeding the CUL are reported in groundwater samples at the conditional point of compliance during future groundwater monitoring events.

In general, with the exceptions noted above, groundwater monitoring data indicate that LNAPL thicknesses and NWTPH-Dx concentrations in groundwater remained stable or decreased in 2019. Reported NWTPH-Dx concentrations in the groundwater samples collected from the Levee Zone monitoring wells did not exceed the CUL.

Quarterly groundwater monitoring will continue in 2020 in accordance with the Consent Decree. Additionally, the Consent Decree requires that a Long-Term Monitoring Plan be submitted following termination of the HWF remediation system operation at the Skykomish School. The draft Long-Term Monitoring Plan was submitted on November 26, 2019 and is pending Ecology review. Groundwater samples collected from monitoring wells GW-3 and 2A-W-41 will continue to be analyzed both with and without the silica gel cleanup preparation process to gain additional perspective on likely biogenic or petroleum metabolite interferences affecting the analytical results from these wells.



1.0 INTRODUCTION

This 2019 Site-Wide Groundwater Monitoring Report was prepared on behalf of BNSF Railway Company (BNSF) and describes the groundwater monitoring activities conducted in 2019 at the BNSF Former Maintenance and Fueling Facility in Skykomish, Washington (herein referred to as the Site) (Figure 1). Groundwater monitoring is being conducted as part of the Site cleanup action in accordance with Consent Decree No. 07-2-33672-9 SEA between the Washington State Department of Ecology (Ecology) and BNSF (Consent Decree). Groundwater monitoring is conducted quarterly in accordance with the Consent Decree, the 2007 Cleanup Action Plan (Ecology 2007a) (2007 CAP), and the 2010 Groundwater Monitoring Plan (AECOM 2010b) (2010 GWMP).

1.1 GROUNDWATER MONITORING OBJECTIVES

The objectives of the Site groundwater monitoring program are to:

- Monitor any changes in contaminant distribution pending completion of the cleanup action;
- Provide monitoring data to assess the effects of completed and ongoing remedial actions on groundwater quality; and
- Provide liquid-level gauging data to assess hydraulic gradients and the extent of light nonaqueous-phase liquid (LNAPL).

1.2 CLEANUP LEVELS AND REMEDIATION LEVELS

The Site-specific groundwater cleanup level established in the 2007 CAP for total petroleum hydrocarbon concentrations, defined as the sum of total petroleum hydrocarbons as diesel-range organics (DRO) and oil-range organics (ORO) analyzed using Ecology Method NWTPH-Dx (herein referred to collectively as NWTPH-Dx), is 208 micrograms per liter ($\mu\text{g/l}$) and absence of sheen (CUL). The CUL is applicable at the groundwater conditional point of compliance (CPOC), defined as the surface water boundary where groundwater enters the Skykomish River and Former Maloney Creek. The basis for the CUL is protection of sediments from being adversely impacted by groundwater. Compliance with the CUL currently is assessed using monitoring wells in the Levee Zone adjacent to the Skykomish River (Figure 1). Based on historical groundwater elevation and hydraulic gradient data, groundwater does not flow toward or discharge to Former Maloney Creek.

The Site-specific groundwater remediation level for NWTPH-Dx is 477 $\mu\text{g/l}$ and absence of sheen (RL). The RL is applicable from the BNSF railyard boundary to the groundwater CPOC, and is used to assess groundwater quality in areas of the Site north of the BNSF railyard boundary and outside the Levee Zone (Figure 1). The groundwater RL is protective of drinking water.

According to the Consent Decree, there may be isolated areas outside of the BNSF railyard boundary where the RL cannot be achieved. Ecology will not require the RL be met beneath and



down-gradient of such isolated areas (e.g., the Skykomish School property), but the CUL must still be met at the CPOC in the Levee Zone (Figure 1). Contingency treatment methods will be employed at the groundwater CPOC if a sheen, or NWTPH-Dx concentrations exceeding 208 µg/l, are reported in groundwater samples at the CPOC.

1.3 SITE DESCRIPTION

The Site includes BNSF property and public and private properties in the Town of Skykomish in King County, Washington, and encompasses an area of approximately 40 acres (Figure 1). The Site is bounded by the Skykomish River to the north, the Town of Skykomish city limits to the east, Old Cascade Highway to the south, and Former Maloney Creek to the west. Railroad Avenue separates the BNSF railyard from the main commercial district of the Town of Skykomish (Figure 1). Additional Site history and background information is presented in the Consent Decree, 2007 CAP, and Supplemental Remedial Investigation Volume 1 (The RETEC Group, Inc. 2002b).

1.4 REPORT ORGANIZATION

The remainder of this report is organized into the following sections:

- **Section 2, Groundwater Monitoring Well Network**, describes the current monitoring well network.
- **Section 3, Sampling, Analysis, and Reporting**, describes the groundwater sampling methods, laboratory analysis and reporting procedures, and data management and validation protocols used.
- **Section 4, Results and Discussion**, describes the results from the groundwater monitoring, including groundwater levels and flow directions, field parameters, and groundwater analytical results.
- **Section 5, Conclusions**, provides conclusions based on the groundwater monitoring results.
- **Section 6, Bibliography**, provides a list of the documents used in preparing this report.



2.0 GROUNDWATER MONITORING WELL NETWORK

The network of wells used for groundwater monitoring was established in the 2010 GWMP (Figure 1). In addition, the 2010 GWMP included monitoring locations within the hydraulic control and containment (HCC) system that were used to assess the performance of the HCC system (i.e., treatment of groundwater as it flowed north through the four gates within the barrier wall). These monitoring locations included sentry wells, piezometers, and HCC system gate vaults (Figure 2). The dates of the groundwater monitoring events conducted in 2019 are presented in Table 1. During this reporting period, no modifications were made to the groundwater monitoring program. Tables 2 and 3 provide additional details regarding the sampling and liquid-level gauging frequencies for the locations included in the groundwater monitoring program.



3.0 SAMPLING, ANALYSIS, AND REPORTING

This section summarizes the sampling methods, laboratory analysis and reporting procedures, and data management and validation protocols for the groundwater monitoring program. Groundwater samples collected in 2019 were analyzed by TestAmerica Laboratories, Inc. of Tacoma, Washington. The groundwater analytical results were independently validated by Saylor Data Solutions, Inc. of Kirkland, Washington.

3.1 SAMPLING METHODS

Liquid-level gauging and groundwater sampling were conducted in accordance with the 2010 GWMP. Groundwater samples were collected using low-flow sampling techniques and peristaltic pumps. The samples were collected in laboratory-supplied containers after groundwater field parameters stabilized during well purging, with the exception of the HCC system sentry wells, which were sampled after 15 minutes of well purging. The filled sample containers were placed on ice in a cooler and delivered to the analytical laboratory under standard chain-of-custody protocols.

3.2 LABORATORY ANALYSIS AND REPORTING PROCEDURES

Groundwater samples were analyzed by Ecology Method NWTPH-Dx. Groundwater samples collected from monitoring wells GW-3 and 2A-W-41 also were analyzed by Ecology Method NWTPH-Dx with a silica gel cleanup preparation process to assess whether potential biogenic substances and/or petroleum metabolites may be affecting the analytical results from these wells.

3.3 DATA MANAGEMENT AND VALIDATION PROTOCOLS

The laboratory electronic data deliverables were directly imported into an electronic database that contains existing Site data. A quality control check was performed on the imported data to ensure that they were accurately uploaded. Laboratory analytical reports are provided in Appendix A.

Saylor Data Solutions, Inc. independently validated the groundwater analytical data to assess whether the data met the quality control/validation standards described in the 2010 GWMP. The data validation procedures were based on U.S. Environmental Protection Agency (2008) Guidelines for Organic Methods Data Review; data evaluation metrics included precision, accuracy, method compliance, and completeness of the data set. The data validation results indicate that the groundwater analytical data are suitable for the intended use of assessing Site groundwater quality. Data validation reports are provided in Appendix B.



4.0 RESULTS AND DISCUSSION

The results from the 2019 Site-wide groundwater monitoring program are summarized in this section. Groundwater sampling frequency, groundwater elevation and LNAPL thickness, and groundwater-quality parameters measured during the groundwater monitoring events are summarized in Tables 3, 4, and 5, respectively. Table 6 provides groundwater analytical results for the DRO and ORO fractions and calculated total NWTPH-Dx concentrations. Groundwater elevation contour maps for the groundwater monitoring events are presented on Figures 3 through 6. Figures 7 through 10 show the NWTPH-Dx results for each groundwater monitoring event and the estimated areal extent of LNAPL. NWTPH-Dx trend plots are provided in Appendix C.

4.1 GROUNDWATER LEVELS AND GRADIENT DIRECTIONS

As noted on Figures 3 through 6, the calculated groundwater elevations at the HCC system barrier wall gate vaults and select wells and piezometers were not used for interpreting groundwater gradient and direction. Groundwater elevation data from these wells are not included because the gate vaults were not designed to provide representative water-level measurements. Groundwater elevations at some wells and piezometers were inconsistent with groundwater elevation data from nearby locations (likely due to local geological heterogeneities) and therefore were not considered representative. In other cases, it was not possible to graphically depict local details of groundwater elevation contours because the spatial scale of the groundwater elevation contour maps is too small.

Seasonal groundwater-level fluctuations of 2.57 to 6.11 feet occurred in wells and piezometers on the southern (i.e., up-gradient) side of the HCC system barrier wall. Seasonal groundwater-level fluctuations in wells and piezometers on the northern (i.e., down-gradient) side of the HCC system barrier wall were smaller, ranging from 0.06 to 4.62 feet. The HCC system barrier wall restricts groundwater flow, causing groundwater mounding on the southern side of the barrier wall, and accentuating a westerly component to groundwater flow near the wall. Groundwater elevation differentials across the central portion of the HCC system barrier wall ranged from 2.1 feet in September 2019 to 7.3 feet in March 2019, as measured in piezometer pairs adjacent to the barrier wall (i.e., one piezometer on either side of the wall).

Estimated hydraulic gradients in 2019 generally were consistent with previous years. South of the HCC system barrier wall, the gradient direction was predominantly toward the west-northwest. North of the HCC system barrier wall, the gradient direction was predominantly toward the west, subparallel to the Skykomish River flow direction. Estimated gradient magnitudes on the southern side of the HCC system barrier wall were on the order of 0.01 to 0.02 foot per foot. Estimated gradient magnitudes on the northern side of the HCC system barrier wall were on the order of 0.01 foot per foot.



4.2 FIELD PARAMETERS

Field parameters measured during well purging included temperature, pH, dissolved oxygen (DO), oxidation-reduction potential (ORP), turbidity, and specific conductivity. Table 5 presents the stabilized field parameter values recorded at the wells sampled in 2019.

Groundwater temperatures varied seasonally, ranging from 2.0 degrees Celsius (°C) in well 2A-W-10 in March 2019 to 15.8 °C in well 5-W-56 in September 2019. Groundwater pH values were generally consistent with previous years, ranging from 5.29 to 7.20. Measured DO concentrations also were generally consistent with previous years, ranging from 0.16 milligram per liter (mg/l) in well GW-2 in December 2019 to 12.84 mg/l in well MW-38R in March 2019. In general, monitoring wells with no reported detections of petroleum hydrocarbons exhibited higher DO values (average of 5.14 mg/l) than wells with reported detections (average of 3.27 mg/l), indicating that the petroleum hydrocarbons in Site groundwater are biodegrading.

ORP values were generally consistent with previous years, ranging from -194 millivolts in well 5-W-51 in December 2019 to 320 millivolts in well 2B-W-4 in June 2019. Of the 122 ORP values measured in 2019, 112 were positive. The predominantly positive ORP values and DO concentrations exceeding 1 mg/l indicate that conditions are favorable for aerobic biodegradation of petroleum hydrocarbons.

4.3 GROUNDWATER ANALYTICAL RESULTS

The NWTPH-Dx analytical results are reported as DRO and ORO fractions, which are summed to give the total NWTPH-Dx concentration. If both DRO and ORO fractions were detected, the total NWTPH-Dx concentration was calculated as the sum of the reported DRO and ORO concentrations. If either the DRO or ORO fraction was not detected, half the method detection limit (MDL) was used for the non-detected fraction in the NWTPH-Dx calculation.

The groundwater analytical results are summarized below. Table 6 shows groundwater analytical results for the DRO and ORO fractions and calculated total NWTPH-Dx concentrations. Figures 7 through 10 show the NWTPH-Dx results for each groundwater monitoring event and the estimated areal extent of LNAPL. NWTPH-Dx trend plots are provided in Appendix C.

4.3.1 Levee Zone Monitoring Wells

Monitoring wells 5-W-14 and 5-W-16 through 5-W-19 were sampled quarterly. Reported NWTPH-Dx concentrations in the groundwater samples collected from the Levee Zone monitoring wells were less than the CUL. LNAPL or sheen was not observed in any of the Levee Zone monitoring wells.

4.3.2 Schoolyard Monitoring Wells

Monitoring wells 5-W-51, 5-W-55, and 5-W-56 were sampled quarterly, and recovery well RW-10 was gauged for the presence of LNAPL quarterly. Reported NWTPH-Dx concentrations in the



groundwater samples collected from wells 5-W-51 and 5-W-56 ranged from 740 to 2,310 µg/l. Reported NWTPH-Dx concentrations in the groundwater samples collected from well 5-W-55 ranged from less than the MDL (i.e., not detected) to 230 µg/l (Table 6; Figures 7 through 10).

A heavy trace of LNAPL was observed in recovery well RW-10 during the June 2019 groundwater monitoring event and a light trace of LNAPL was observed in RW-10 during the December 2019 groundwater monitoring event. LNAPL or sheen was not observed in any of the Levee Zone monitoring wells situated down-gradient of RW-10 during any of the monitoring events.

4.3.3 Hydraulic Control and Containment System Sentry and Monitoring Wells

The sentry wells are sampled semiannually. The HCC system monitoring wells are gauged and sampled quarterly. The piezometers, recovery wells, and barrier wall gate oil-water separator chambers are gauged quarterly for the presence or absence of LNAPL or sheen and are not sampled.

Reported NWTPH-Dx concentrations in the groundwater samples collected from sentry wells ranged from less than the MDL (i.e., not detected) to 370 µg/l, with two exceptions:

- NWTPH-Dx was reported at a concentration of 620 µg/l in the September 2019 groundwater sample collected from up-gradient sentry well S2-BU in the east vault of the West Gate (Table 6; Figure 9). NWTPH-Dx was not reported at concentrations exceeding the MDL in the September 2019 groundwater sample collected from down-gradient sentry well S2-BD in the east vault of the West Gate.
- NWTPH-Dx was reported at a concentration of 701 µg/l in the September 2019 groundwater sample collected from up-gradient sentry well S4-BU in the central vault of the East Gate (Table 6; Figure 9). NWTPH-Dx was not reported at concentrations exceeding the MDL in the September 2019 groundwater sample collected from down-gradient sentry well S4-BD in the central vault of the East Gate.

The two wells noted above are sentry wells located in the up-gradient granular activated carbon (GAC)/pea gravel chamber within their respective vaults. All up-gradient sentry wells are paired with a down-gradient sentry well located in the down-gradient GAC/pea gravel chamber in the same vault to evaluate the effectiveness of groundwater treatment. NWTPH-Dx was not reported at concentrations exceeding the MDL in the sentry wells situated down-gradient of S2-BU and S4-BU in September 2019, confirming the effectiveness of the GAC in treating groundwater.

Heavy traces of LNAPL were observed in the east vault oil-water separator south chamber of the West Gate in March and December 2019, an LNAPL thickness of 0.02 feet was measured in this chamber in September 2019, and a light trace of LNAPL was observed in this chamber in June 2019 (location WG-EV-South Chamber) (Table 4). A heavy trace of LNAPL was observed in the east vault oil-water separator north chamber of the West Gate in September 2019 and light traces were observed in March and December 2019 (location WG-EV-North Chamber) (Table 4). This LNAPL may be a source of elevated NWTPH-Dx concentrations in the east vault of the West Gate. However, the reported NWTPH-Dx concentrations in all but one groundwater sample



collected from down-gradient sentry well S2-BD in the east vault of the West Gate from 2009 through 2019 were less than 200 µg/l; most results were less than 100 µg/l (Appendix C).

Monitoring wells EW-1, EW-2A, 5-W-43, 2A-W-41, 1B-W-23, 2A-W-42, and GW-1 through GW-4 were sampled quarterly. Monitoring well 2A-W-40 was sampled in March, September, and December 2019. Reported NWTPH-Dx concentrations in the groundwater samples collected from these wells were less than the RL, with the exception of the March, June, and December 2019 samples collected from well 2A-W-41, which had reported concentrations of 690, 510, and 590 µg/l, respectively (Table 6; Figures 7, 8, and 10). LNAPL or sheen was not observed in any of these monitoring wells.

Reported NWTPH-Dx concentrations in well 2A-W-41 have been variable since December 2013 as shown in the trend plot provided in Appendix C. Well 2A-W-41 is west and down-gradient of well GW-3 and the Center Gate. To evaluate whether the variable NWTPH-Dx concentrations reported in wells GW-3 and 2A-W-41 since June 2014 and December 2013, respectively, may be the result of interference from biogenic substances or petroleum metabolites, groundwater samples collected from each of these wells in 2019 were analyzed by Ecology Method NWTPH-Dx both with and without a silica gel cleanup preparation process. Reported NWTPH-Dx concentrations in the silica gel-prepared samples were less than the RL, and significantly less than the reported NWTPH-Dx concentrations in all eight associated non-silica-gel-prepared samples. The results of the analyses performed with and without a silica gel cleanup preparation process suggest that the NWTPH-Dx results from the non-silica-gel-prepared samples are biased high due to biogenic or petroleum metabolite interferences.

4.3.4 Former Air Sparge Area Monitoring Wells

Monitoring wells 1B-W-3, 1C-W-7, and 1C-W-8 were sampled quarterly. Reported NWTPH-Dx concentrations in groundwater samples collected from these wells were less than the RL. LNAPL or sheen was not observed in the former air sparge area monitoring wells.

4.3.5 Former Maloney Creek Zone Monitoring Wells

Monitoring wells MW-3, MW-4, 2A-W-9, 2A-W-10, and 2B-W-4 were sampled quarterly. Reported NWTPH-Dx concentrations in groundwater samples collected from these wells ranged from 109 to 600 µg/l, with the exception of the March, June, and December 2019 samples collected from well MW-3, which had reported concentrations of 2,620, 1,070, and 2,570 µg/l, respectively (Table 6; Figures 7, 8, and 10). Historically (between November 2000 and September 2017), reported NWTPH-Dx detections in monitoring well MW-3 fluctuated over a range of 41 to 930 µg/l, whereas since December 2017, reported NWTPH-Dx detections in well MW-3 fluctuated over a larger range of 108.5 to 3,400 µg/l with six of the eight values exceeding 1,000 µg/l.

A sulfur-like odor has been noted during purging of monitoring well MW-3, indicating the possible presence of biogenic material (i.e., non-petroleum-based organics) in groundwater. Analytical interference from biogenic material can bias the reported NWTPH-Dx concentrations high. As discussed in the 2018 Site-Wide Groundwater Monitoring Report (Farallon 2019b), groundwater



samples collected from well MW-3 in December 2017 and September 2018 were analyzed by NWTPH-Dx both with and without a silica gel cleanup preparation process. The reported NWTPH-Dx concentrations in the silica gel-treated samples (58 µg/l and below the MDL) were significantly less than the reported concentrations in the non-silica-gel-treated sample (3,400 and 109 µg/l, respectively), suggesting biogenic interference. Monitoring well MW-3 is in a former wetland area; photographs of remedial excavations completed near this well in 2011 show that woody debris was present in the excavation sidewalls (AECOM 2012d). Organic matter in soil near well MW-3 may be a source of interfering biogenic material in groundwater.

Groundwater was not encountered in monitoring well MW-3 during the September 2019 groundwater monitoring event. During the December 2019 groundwater monitoring event, woody debris was observed on the end of the water-level indicator while performing liquid level gauging in monitoring well MW-3. In addition, total depth of the well was measured at approximately 10.5 feet below ground surface. During previous groundwater monitoring events, the total depth of well MW-3 was generally measured at approximately 20 feet below ground surface. These observations indicate that monitoring well MW-3 is damaged. On February 17, 2020, a down-well camera was used to evaluate the condition of monitoring well MW-3. The results confirmed that roots have damaged and infiltrated the well casing. The presence of roots and reported NWTPH-Dx concentrations both with and without a silica gel cleanup preparation process are evidence that biogenic interferences are biasing the analytical results high in groundwater samples collected from monitoring well MW-3.

LNAPL or sheen was not observed in any of the Former Maloney Creek Zone monitoring wells.

4.3.6 Site-Wide Monitoring Wells

Monitoring wells 1A-W-4, MW-16, MW-38R, 1B-W-2, 1C-W-3, and 1C-W-4 were sampled semiannually in March and September 2019. Monitoring well 1C-W-1 was sampled quarterly. Reported NWTPH-Dx concentrations in the groundwater samples collected from wells north of the railyard were less than the RL. LNAPL or sheen was not observed in any of the Site-wide monitoring wells.



5.0 CONCLUSIONS

In general, with the exceptions noted below, the groundwater monitoring data indicate that LNAPL thicknesses and NWTPh-Dx concentrations in groundwater remained stable or decreased in 2019. Reported NWTPh-Dx concentrations in groundwater samples collected from the Levee Zone monitoring wells near the Skykomish River did not exceed the CUL.

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, consistent with previous years. Measured LNAPL thicknesses ranged from a light trace (i.e., less than 0.01 foot) to 3.1 feet. A heavy trace of LNAPL was observed in recovery well RW-09 during the December 2019 groundwater monitoring event. LNAPL was not observed at nearby locations, including piezometer PZ-1, located east of recovery well RW-09, and the east, central, and west oil-water separator chambers (north and south) of the East Gate, indicating an isolated occurrence. Over the life cycle of the data record, measured LNAPL thicknesses have exhibited an overall decreasing or stable trend, with minor variability. LNAPL measurements at the Site are subject to uncertainty due to the viscous nature of the LNAPL. Piezometers and recovery wells will continue to be monitored for LNAPL.

Reported NWTPh-Dx concentrations in well 2A-W-41 have been variable since December 2013. Well 2A-W-41 is down-gradient of monitoring well GW-3, which is immediately north and down-gradient of the Center Gate, where substantial biofouling by iron bacteria has been observed. Reported NWTPh-Dx concentrations in the silica-gel-prepared samples collected from wells 2A-W-41 and GW-3 were less than the reported concentration in the non-silica-gel-prepared samples. The biofouling observations noted proximate to wells 2A-W-41 and GW-3, and results of the analyses performed with and without silica gel cleanup, suggest that the results from the non-silica-gel-prepared samples are biased high due to biogenic or petroleum metabolite interferences. Groundwater samples collected from these wells will continue to be analyzed both with and without silica gel cleanup to gain additional perspective on likely biogenic or petroleum metabolite interferences affecting the analytical results.

Quarterly groundwater monitoring will continue in 2020 in accordance with the Consent Decree. Additionally, the Consent Decree requires that a Long-Term Monitoring Plan be submitted following termination of the HWF remediation system operation at the Skykomish School. The draft Long-Term Monitoring Plan was submitted on November 26, 2019 and is pending Ecology review.



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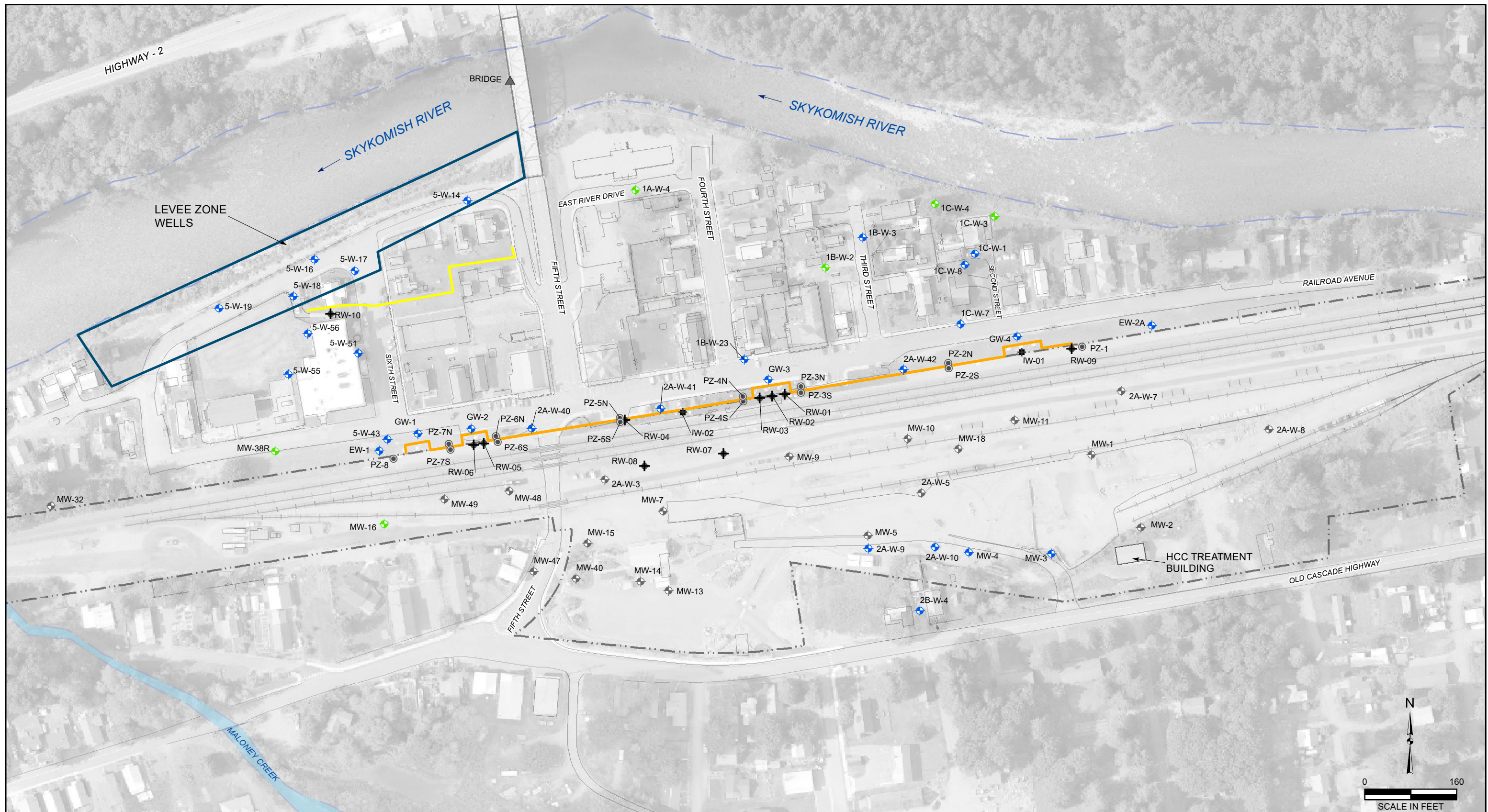


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FIGURES

**2019 SITE-WIDE GROUNDWATER MONITORING REPORT
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Consent Decree No. 07-2-33672-9 SEA**

Farallon PN: 683-067



- 2A-W-41 ◆ MONITORING WELL
- RW-4 ◆ RECOVERY WELL
- PZ-5S ● PIEZOMETER
- IW-02 ◆ INJECTION WELL
- BRIDGE ▲ BRIDGE MEASURING POINT
- ▲●◆◆◆ LIQUID LEVEL GAUGING LOCATIONS

- LEGEND**
- ◆ WELLS SAMPLED QUARTERLY
 - ◆ WELLS SAMPLED SEMIANNUALLY

- HYDRAULIC CONTROL AND CONTAINMENT SYSTEM SHEET PILE BARRIER WALL AND GATES
- - - BNSF RAILYARD BOUNDARY
- MECHANICALLY STABILIZED EARTH WALL

NOTES
 HYDRAULIC CONTROL AND CONTAINMENT SYSTEM SENTRY WELLS AND BARRIER WALL GATE VAULT LOCATIONS NOT SHOWN. SEE FIGURE 2 FOR BARRIER WALL GATE DETAILS.



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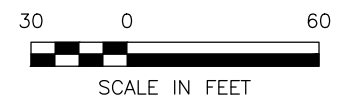
FIGURE 1
 SITE PLAN SHOWING 2019
 GROUNDWATER MONITORING NETWORK
 AND FUELING FACILITY
 SKYKOMISH, WASHINGTON
 FARALLON PN: 683-067

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LEGEND

- 2A-W-41 MONITORING WELL
- RW-04 RECOVERY WELL
- PZ-5S PIEZOMETER
- IW-02 TREATED-WATER REINJECTION WELL
- WG-WV BARRIER WALL GATE VAULT
- GW-2 WELLS SAMPLED QUARTERLY
- S1-AU WELLS SAMPLED SEMIANNUALLY
- HYDRAULIC CONTROL AND CONTAINMENT SYSTEM SHEET PILE BARRIER WALL AND GATE SYSTEM
- BNSF RAILYARD BOUNDARY





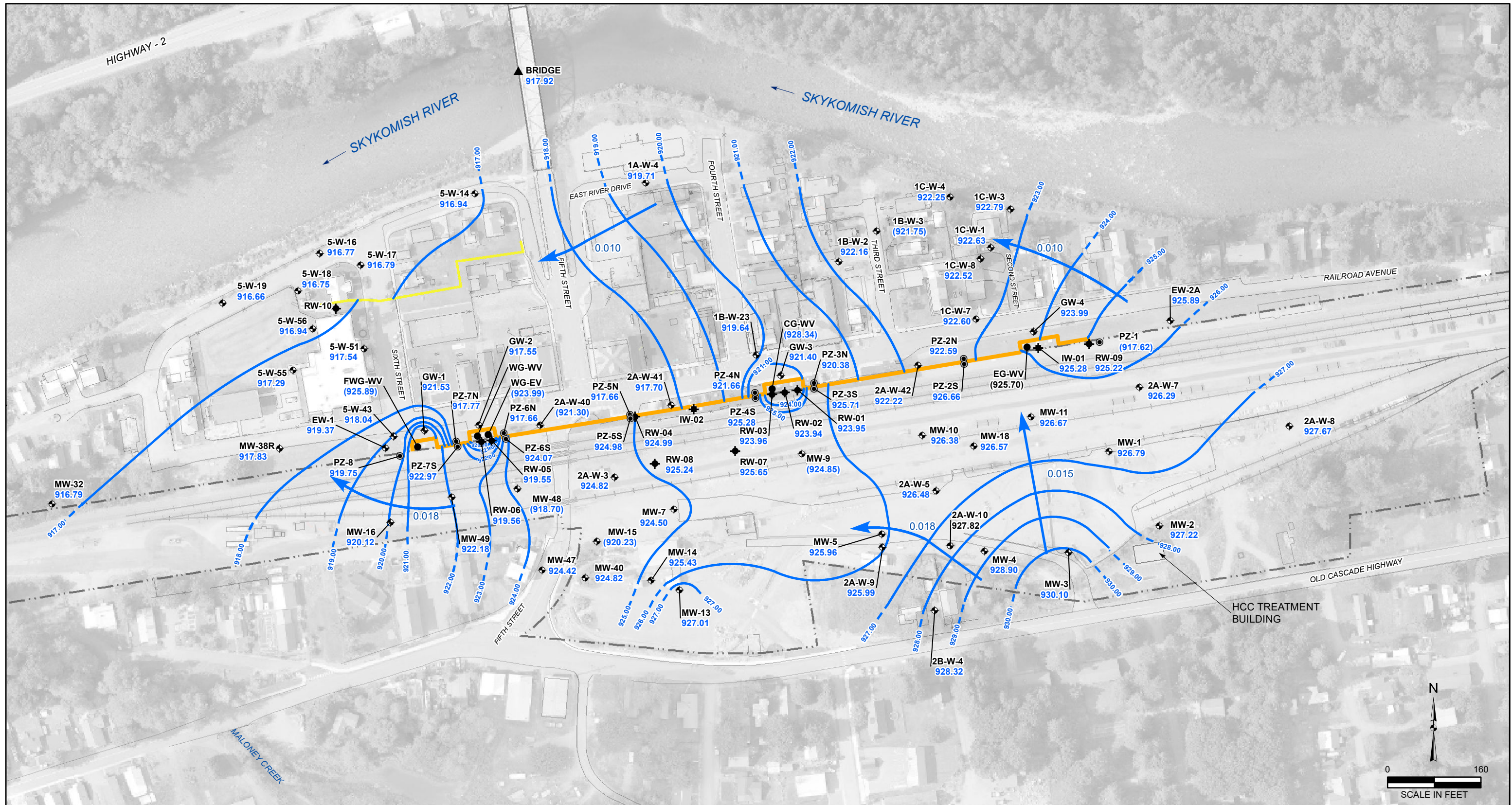
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FIGURE 2
 HYDRAULIC CONTROL AND CONTAINMENT SYSTEM
 BARRIER WALL GATE DETAIL
 BNSF FORMER MAINTENANCE
 AND FUELING FACILITY
 SKYKOMISH, WASHINGTON
 FARALLON PN: 683-067



ALL LOCATIONS ARE APPROXIMATE. FIGURES WERE PRODUCED IN COLOR. GRAYS/SCALE COPIES MAY NOT REPRODUCE ALL ORIGINAL INFORMATION.

LEGEND

- 2A-W-41 ◆ MONITORING WELL
- RW-04 ◆ RECOVERY WELL
- PZ-5S ● PIEZOMETER
- IW-02 ◆ INJECTION WELL
- FWG-WV ● BARRIER WALL GATE VAULT
- BRIDGE ▲ BRIDGE MEASURING POINT
- 917.10** GROUNDWATER OR SURFACE WATER (SKYKOMISH RIVER) ELEVATION IN FEET NAVD88 (MARCH, 2019)
- (920.50)** GROUNDWATER ELEVATION NOT USED FOR CONTOURING
- 921.00** - - - APPROXIMATE INTERPRETED GROUNDWATER ELEVATION CONTOUR IN FEET NAVD88 (INFERRED WHERE DASHED)
- 0.011** ← APPROXIMATE INTERPRETED DIRECTION OF GROUNDWATER FLOW AND GRADIENT (UNITS IN FOOT PER FOOT)

- - - BNSF RAILYARD BOUNDARY
 - HYDRAULIC CONTROL AND CONTAINMENT SYSTEM SHEET PILE BARRIER WALL AND GATES
 - MECHANICALLY STABILIZED EARTH WALL
- NOTES:
 HYDRAULIC CONTROL AND CONTAINMENT SYSTEM SENTRY WELLS NOT SHOWN. ONLY BARRIER WALL GATE VAULT LOCATIONS WHERE GROUNDWATER ELEVATIONS WERE MEASURED ARE SHOWN.
 NAVD88 = NORTH AMERICAN VERTICAL DATUM OF 1988
 IMAGERY SOURCE: KING COUNTY PICTOMETRY 2015



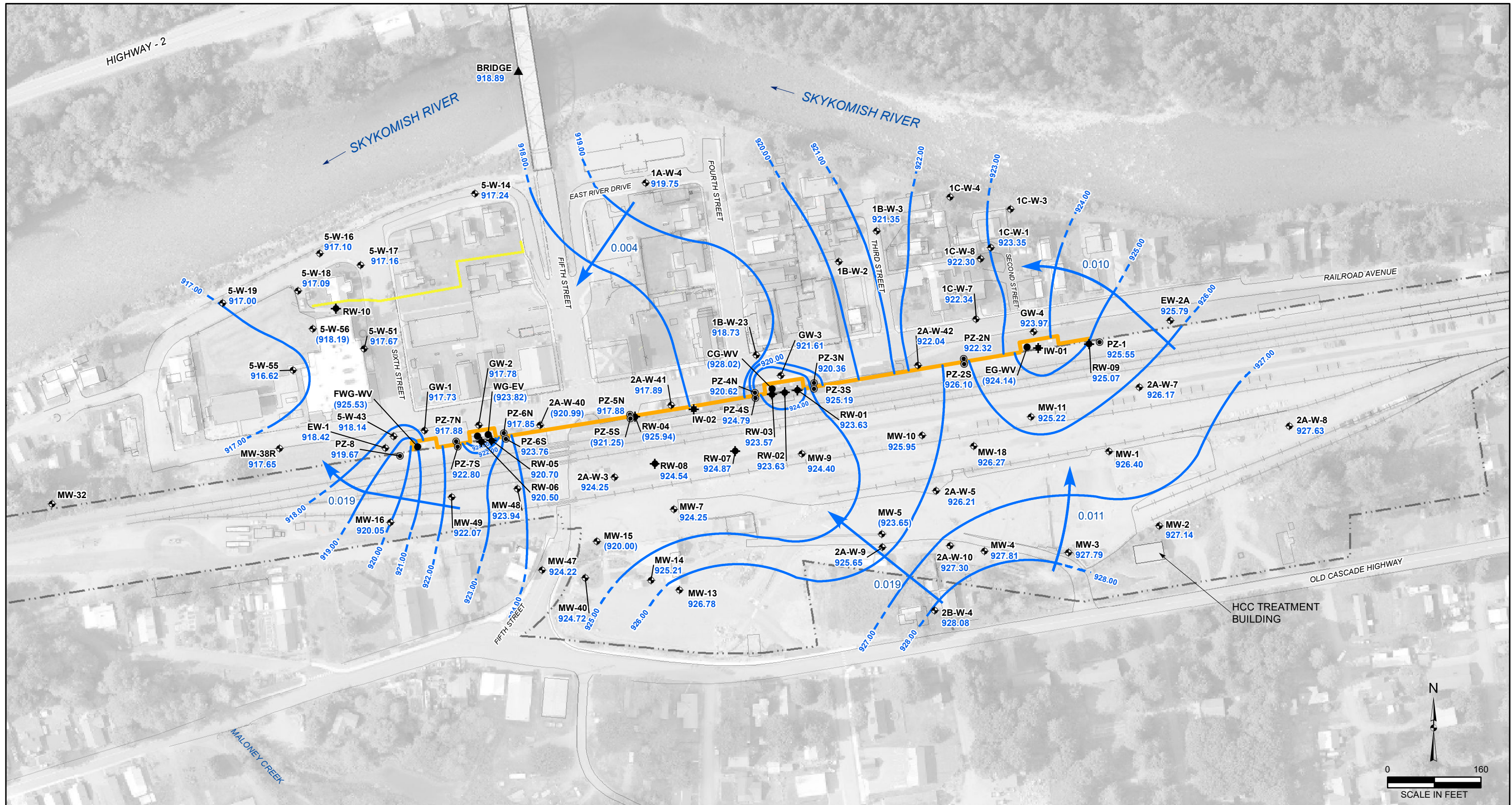
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FIGURE 3
 MARCH 2019
 GROUNDWATER ELEVATION CONTOUR MAP
 BNSF FORMER MAINTENANCE
 AND FUELING FACILITY
 SKYKOMISH, WASHINGTON
 FARALLON PN: 683-067



LEGEND

- 2A-W-41 ◆ MONITORING WELL
- RW-04 ◆ RECOVERY WELL
- PZ-5S ● PIEZOMETER
- IW-02 ◆ INJECTION WELL
- FWG-WV ● BARRIER WALL GATE VAULT
- BRIDGE ▲ BRIDGE MEASURING POINT

- 917.10** GROUNDWATER OR SURFACE WATER (SKYKOMISH RIVER) ELEVATION IN FEET NAVD88 (JUNE, 2019)
- (920.50)** GROUNDWATER ELEVATION NOT USED FOR CONTOURING
- 921.00** - - - APPROXIMATE INTERPRETED GROUNDWATER ELEVATION CONTOUR IN FEET NAVD88 (INFERRED WHERE DASHED)
- 0.011** APPROXIMATE INTERPRETED DIRECTION OF GROUNDWATER FLOW AND GRADIENT (UNITS IN FOOT PER FOOT)

- - - BNSF RAILYARD BOUNDARY
- HYDRAULIC CONTROL AND CONTAINMENT SYSTEM SHEET PILE BARRIER WALL AND GATES
- MECHANICALLY STABILIZED EARTH WALL

NOTES:
 HYDRAULIC CONTROL AND CONTAINMENT SYSTEM SENTRY WELLS NOT SHOWN. ONLY BARRIER WALL GATE VAULT LOCATIONS WHERE GROUNDWATER ELEVATIONS WERE MEASURED ARE SHOWN.
 NAVD88 = NORTH AMERICAN VERTICAL DATUM OF 1988
 IMAGERY SOURCE: KING COUNTY PICTOMETRY 2015



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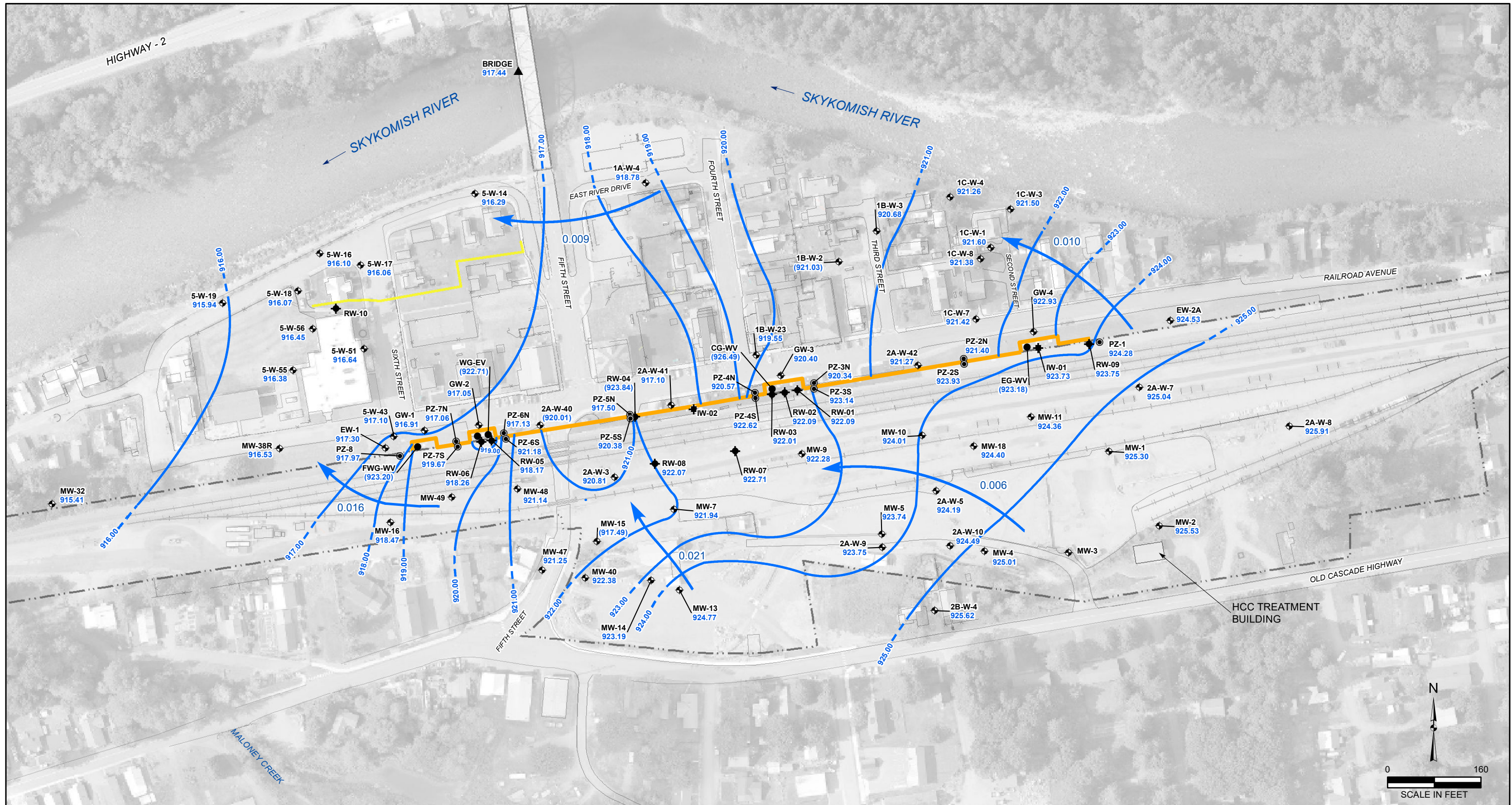
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FIGURE 4
 JUNE 2019
 GROUNDWATER ELEVATION CONTOUR MAP
 BNSF FORMER MAINTENANCE AND FUELING FACILITY
 SKYKOMISH, WASHINGTON
 FARALLON PN: 683-067



ALL LOCATIONS ARE APPROXIMATE. FIGURES WERE PRODUCED IN COLOR. GRAYSACLE COPIES MAY NOT REPRODUCE ALL ORIGINAL INFORMATION.

LEGEND	
2A-W-41	MONITORING WELL
RW-04	RECOVERY WELL
PZ-5S	PIEZOMETER
IW-02	INJECTION WELL
FWG-WV	BARRIER WALL GATE VAULT
BRIDGE	BRIDGE MEASURING POINT
917.10	GROUNDWATER OR SURFACE WATER (SKYKOMISH RIVER) ELEVATION IN FEET NAVD88 (SEPTEMBER, 2019)
(920.50)	GROUNDWATER ELEVATION NOT USED FOR CONTOURING
921.00	APPROXIMATE INTERPRETED GROUNDWATER ELEVATION CONTOUR IN FEET NAVD88 (INFERRED WHERE DASHED)
0.011	APPROXIMATE INTERPRETED DIRECTION OF GROUNDWATER FLOW AND GRADIENT (UNITS IN FOOT PER FOOT)

--- BNSF RAILYARD BOUNDARY
 --- HYDRAULIC CONTROL AND CONTAINMENT SYSTEM SHEET PILE BARRIER WALL AND GATES
 --- MECHANICALLY STABILIZED EARTH WALL

NOTES:
 HYDRAULIC CONTROL AND CONTAINMENT SYSTEM SENTRY WELLS NOT SHOWN. ONLY BARRIER WALL GATE VAULT LOCATIONS WHERE GROUNDWATER ELEVATIONS WERE MEASURED ARE SHOWN.
 NAVD88 = NORTH AMERICAN VERTICAL DATUM OF 1988
 IMAGERY SOURCE: KING COUNTY PICTOMETRY 2015

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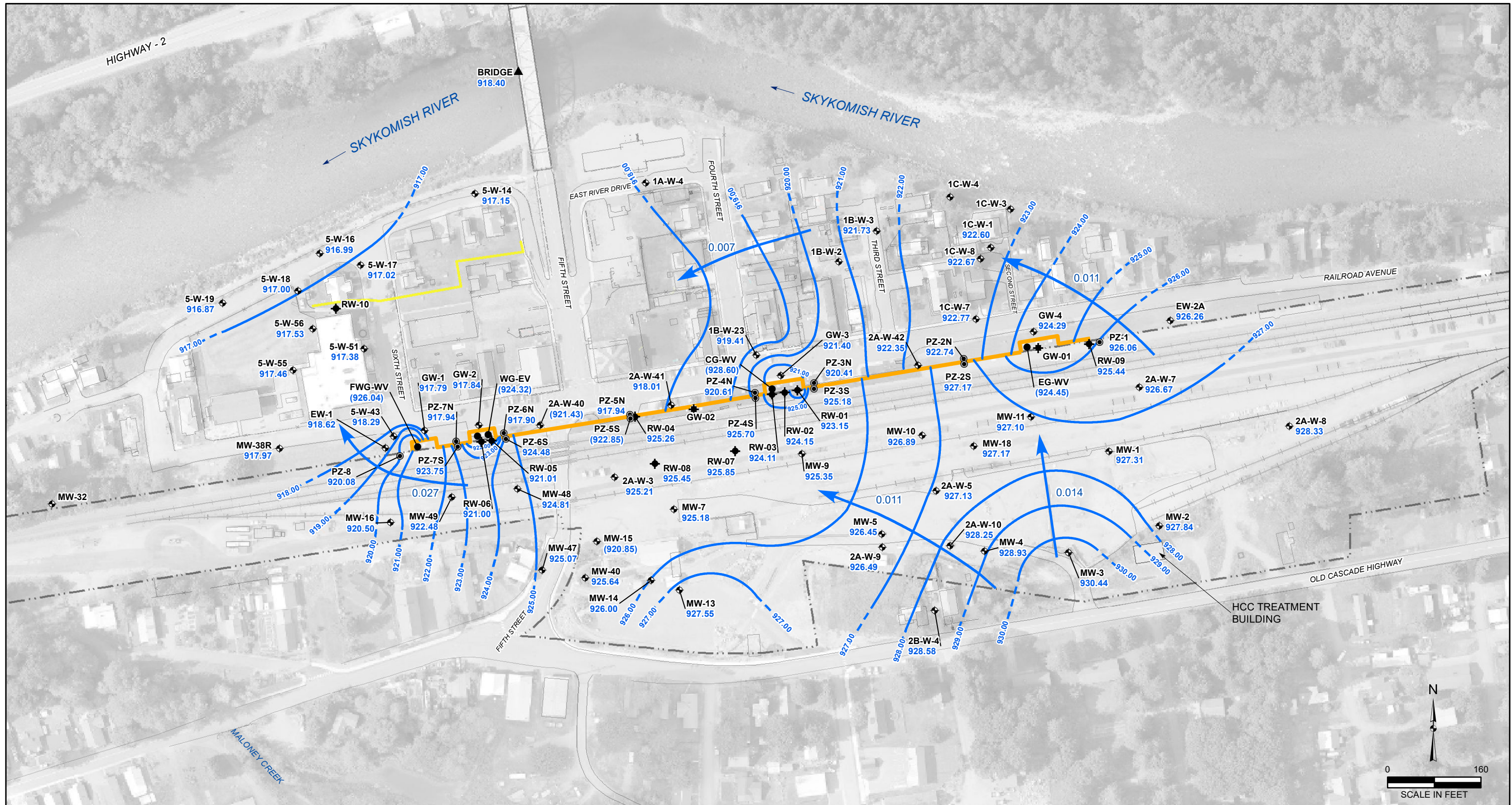
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FIGURE 5
 SEPTEMBER 2019
 GROUNDWATER ELEVATION CONTOUR MAP
 BNSF FORMER MAINTENANCE
 AND FUELING FACILITY
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LEGEND

- 2A-W-41 ◆ MONITORING WELL
- RW-04 ◆ RECOVERY WELL
- PZ-5S ● PIEZOMETER
- IW-02 ◆ INJECTION WELL
- FWG-WV ● BARRIER WALL GATE VAULT
- BRIDGE ▲ BRIDGE MEASURING POINT

- 917.10** GROUNDWATER OR SURFACE WATER (SKYKOMISH RIVER) ELEVATION IN FEET NAVD88 (DECEMBER, 2019)
- (920.50)** GROUNDWATER ELEVATION NOT USED FOR CONTOURING
- 921.00** - - - APPROXIMATE INTERPRETED GROUNDWATER ELEVATION CONTOUR IN FEET NAVD88 (INFERRED WHERE DASHED)
- 0.011** APPROXIMATE INTERPRETED DIRECTION OF GROUNDWATER FLOW AND GRADIENT (UNITS IN FOOT PER FOOT)

- - - BNSF RAILYARD BOUNDARY
- HYDRAULIC CONTROL AND CONTAINMENT SYSTEM SHEET PILE BARRIER WALL AND GATES
- MECHANICALLY STABILIZED EARTH WALL

NOTES:
 HYDRAULIC CONTROL AND CONTAINMENT SYSTEM SENTRY WELLS NOT SHOWN. ONLY BARRIER WALL GATE VAULT LOCATIONS WHERE GROUNDWATER ELEVATIONS WERE MEASURED ARE SHOWN.
 NAVD88 = NORTH AMERICAN VERTICAL DATUM OF 1988
 IMAGERY SOURCE: KING COUNTY PICTOMETRY 2015



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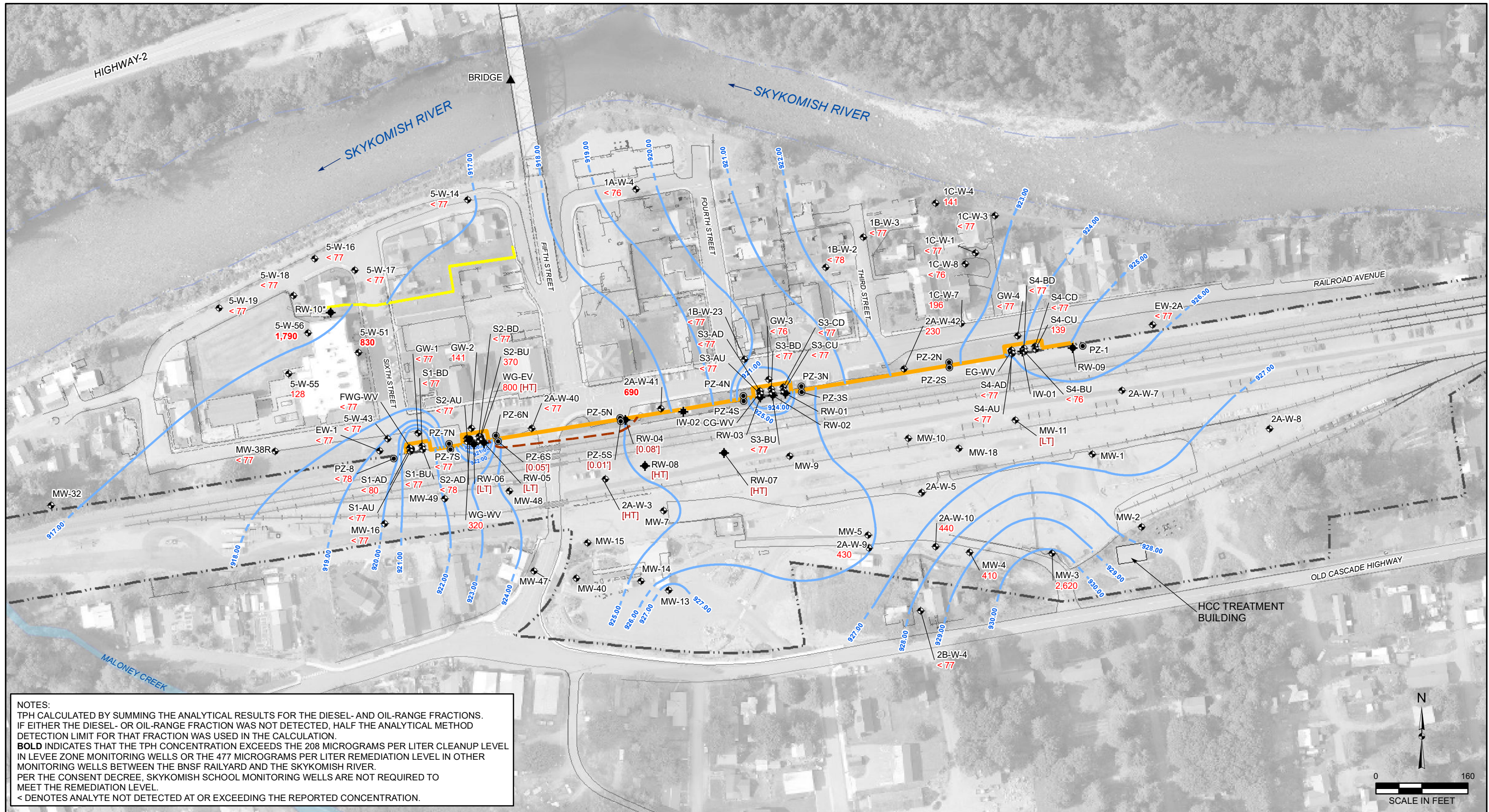
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FIGURE 6
 DECEMBER 2019
 GROUNDWATER ELEVATION CONTOUR MAP
 BNSF FORMER MAINTENANCE
 AND FUELING FACILITY
 SKYKOMISH, WASHINGTON

FARALLON PN: 683-067



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 208 MICROGRAMS PER LITER CLEANUP LEVEL
 IN LEVEE ZONE MONITORING WELLS OR THE 477 MICROGRAMS PER LITER REMEDIATION LEVEL IN OTHER
 MONITORING WELLS BETWEEN THE BNSF RAILYARD AND THE SKYKOMISH RIVER.
 PER THE CONSENT DECREE, SKYKOMISH SCHOOL MONITORING WELLS ARE NOT REQUIRED TO
 MEET THE REMEDIATION LEVEL.
 < DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE REPORTED CONCENTRATION.

LEGEND	
2A-W-41 ◆ MONITORING WELL	927.00--- APPROXIMATE INTERPRETED GROUNDWATER ELEVATION CONTOUR FEET NAVD88 (INFERRED WHERE DASHED)
RW-04 ◆ RECOVERY WELL	— HYDRAULIC CONTROL AND CONTAINMENT SYSTEM SHEET PILE BARRIER WALL AND GATES
PZ-5S ● PIEZOMETER	- - - BNSF RAILYARD BOUNDARY
IW-02 ◆ INJECTION WELL	— MECHANICALLY STABILIZED EARTH WALL
WG-EV ● BARRIER WALL GATE VAULT	
BRIDGE ▲ BRIDGE MEASURING POINT	
IMAGERY SOURCE: KING COUNTY PICTOMETRY 2015	

117	TOTAL PETROLEUM HYDROCARBONS (TPH) IN MICROGRAMS PER LITER
()	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
[1.15]	MEASURABLE LNAPL THICKNESS GREATER THAN 0.01 FOOT
*	= FORMER HOT WATER FLUSHING SYSTEM RECOVERY WELL
LNAPL	= LIGHT NONAQUEOUS-PHASE LIQUID
NAVD88	= NORTH AMERICAN VERTICAL DATUM OF 1988

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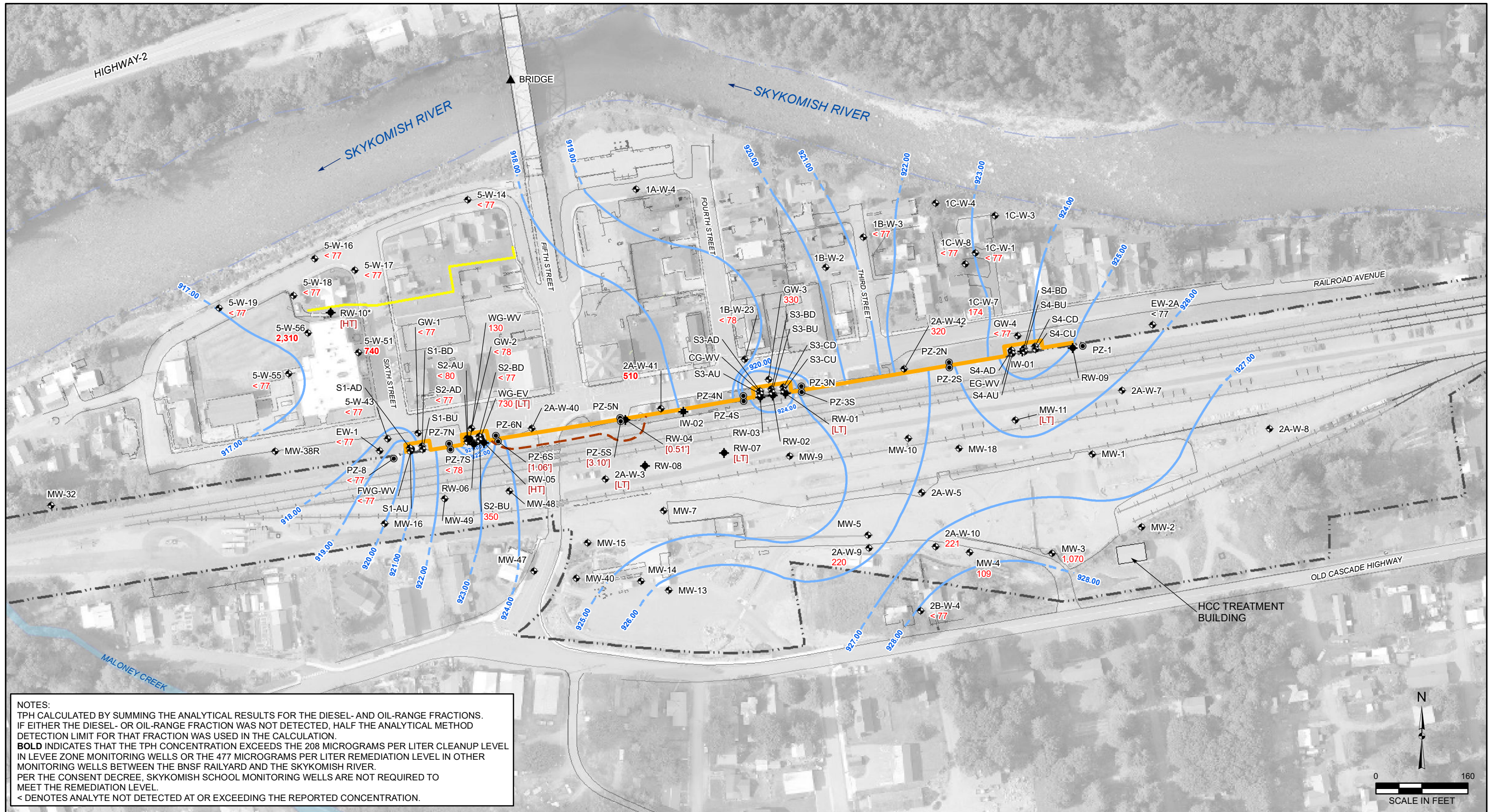
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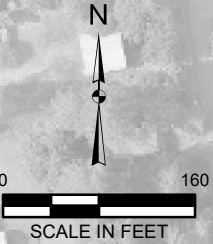
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FIGURE 7
MARCH 2019 TOTAL PETROLEUM HYDROCARBONS IN GROUNDWATER BNSF FORMER MAINTENANCE AND FUELING FACILITY SKYKOMISH, WASHINGTON
 FARALLON PN: 683-067



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 208 MICROGRAMS PER LITER CLEANUP LEVEL IN LEVEE ZONE MONITORING WELLS OR THE 477 MICROGRAMS PER LITER REMEDIATION LEVEL IN OTHER MONITORING WELLS BETWEEN THE BNSF RAILYARD AND THE SKYKOMISH RIVER.
 PER THE CONSENT DECREE, SKYKOMISH SCHOOL MONITORING WELLS ARE NOT REQUIRED TO MEET THE REMEDIATION LEVEL.
 < DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE REPORTED CONCENTRATION.



LEGEND	
2A-W-41	MONITORING WELL
RW-04	RECOVERY WELL
PZ-5S	PIEZOMETER
IW-02	INJECTION WELL
WG-EV	BARRIER WALL GATE VAULT
BRIDGE	BRIDGE MEASURING POINT
927.00	APPROXIMATE INTERPRETED GROUNDWATER ELEVATION CONTOUR FEET NAVD88 (INFERRED WHERE DASHED)
[Orange line]	HYDRAULIC CONTROL AND CONTAINMENT SYSTEM SHEET PILE BARRIER WALL AND GATES
[Dashed line]	BNSF RAILYARD BOUNDARY
[Yellow line]	MECHANICALLY STABILIZED EARTH WALL

117	TOTAL PETROLEUM HYDROCARBONS (TPH) IN MICROGRAMS PER LITER
[Red dashed line]	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
[1.15']	MEASURABLE LNAPL THICKNESS GREATER THAN 0.01 FOOT
*	= FORMER HOT WATER FLUSHING SYSTEM RECOVERY WELL
LNAPL	= LIGHT NONAQUEOUS-PHASE LIQUID
NAVD88	= NORTH AMERICAN VERTICAL DATUM OF 1988

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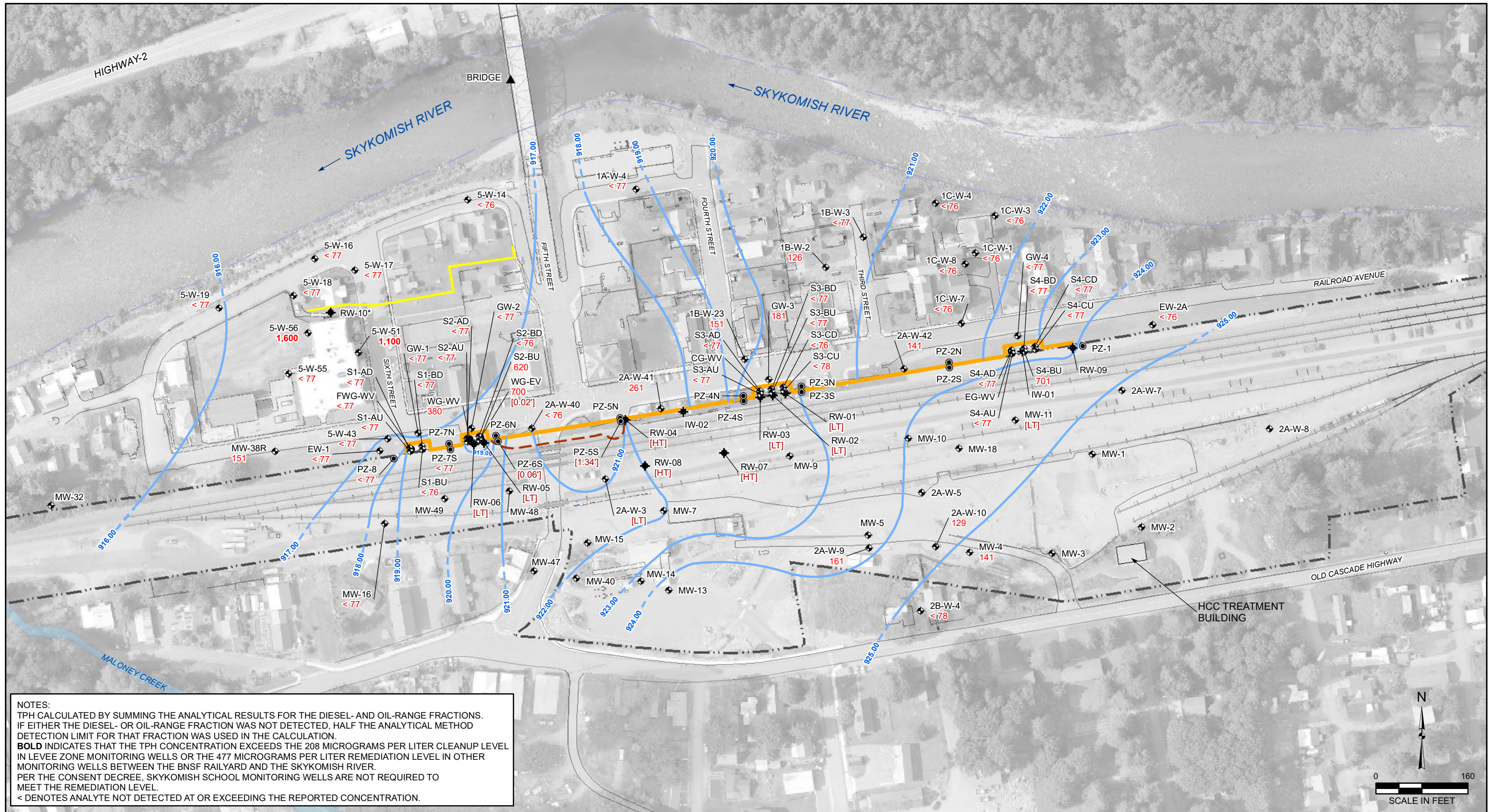
Oregon
Portland | Baker City

California
Oakland | Folsom | Irvine

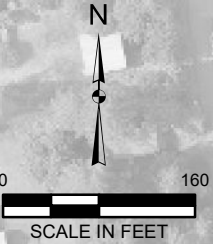
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FIGURE 8
 JUNE 2019 TOTAL PETROLEUM HYDROCARBONS IN GROUNDWATER BNSF FORMER MAINTENANCE AND FUELING FACILITY SKYKOMISH, WASHINGTON

FARALLON PN: 683-067



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 208 MICROGRAMS PER LITER CLEANUP LEVEL
 IN LEVEE ZONE MONITORING WELLS OR THE 477 MICROGRAMS PER LITER REMEDIATION LEVEL IN OTHER
 MONITORING WELLS BETWEEN THE BNSF RAILYARD AND THE SKYKOMISH RIVER.
 PER THE CONSENT DECREE, SKYKOMISH SCHOOL MONITORING WELLS ARE NOT REQUIRED TO
 MEET THE REMEDIATION LEVEL.
 < DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE REPORTED CONCENTRATION.



LEGEND	
2A-W-41 ◆ MONITORING WELL	927.00 --- APPROXIMATE INTERPRETED GROUNDWATER ELEVATION CONTOUR FEET NAVD88 (INFERRED WHERE DASHED)
RW-04 ◆ RECOVERY WELL	— HYDRAULIC CONTROL AND CONTAINMENT SYSTEM SHEET PILE BARRIER WALL AND GATES
PZ-5S ● PIEZOMETER	- - - BNSF RAILYARD BOUNDARY
IW-02 ◆ INJECTION WELL	— MECHANICALLY STABILIZED EARTH WALL
WG-EV ● BARRIER WALL GATE VAULT	
BRIDGE ▲ BRIDGE MEASURING POINT	
IMAGERY SOURCE: KING COUNTY PICTOMETRY 2015	

117	TOTAL PETROLEUM HYDROCARBONS (TPH) IN MICROGRAMS PER LITER
()	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
[1.15]	MEASURABLE LNAPL THICKNESS GREATER THAN 0.01 FOOT
*	= FORMER HOT WATER FLUSHING SYSTEM RECOVERY WELL
LNAPL	= LIGHT NONAQUEOUS-PHASE LIQUID
NAVD88	= NORTH AMERICAN VERTICAL DATUM OF 1988

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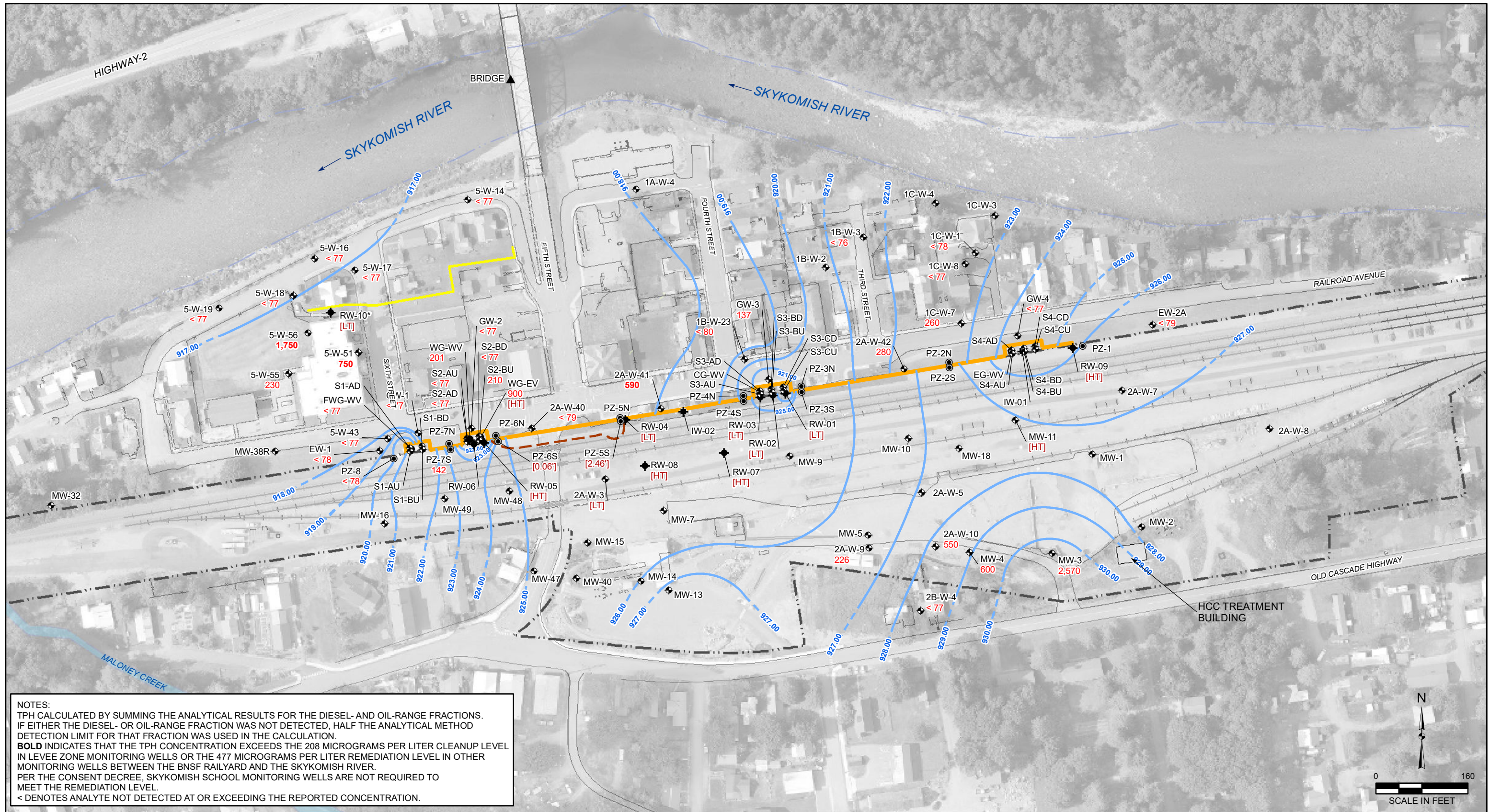
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FIGURE 9
 SEPTEMBER 2019 TOTAL PETROLEUM HYDROCARBONS IN GROUNDWATER
 BNSF FORMER MAINTENANCE AND FUELING FACILITY
 SKYKOMISH, WASHINGTON

FARALLON PN: 683-067



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 208 MICROGRAMS PER LITER CLEANUP LEVEL IN LEVEE ZONE MONITORING WELLS OR THE 477 MICROGRAMS PER LITER REMEDIATION LEVEL IN OTHER MONITORING WELLS BETWEEN THE BNSF RAILYARD AND THE SKYKOMISH RIVER.
 PER THE CONSENT DECREE, SKYKOMISH SCHOOL MONITORING WELLS ARE NOT REQUIRED TO MEET THE REMEDIATION LEVEL.
 < DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE REPORTED CONCENTRATION.

LEGEND	
2A-W-41 ◆ MONITORING WELL	927.00 --- APPROXIMATE INTERPRETED GROUNDWATER ELEVATION CONTOUR FEET NAVD88 (INFERRED WHERE DASHED)
RW-04 ◆ RECOVERY WELL	— HYDRAULIC CONTROL AND CONTAINMENT SYSTEM SHEET PILE BARRIER WALL AND GATES
PZ-5S ● PIEZOMETER	- - - BNSF RAILYARD BOUNDARY
IW-02 ◆ INJECTION WELL	— MECHANICALLY STABILIZED EARTH WALL
WG-EV ● BARRIER WALL GATE VAULT	
BRIDGE ▲ BRIDGE MEASURING POINT	
IMAGERY SOURCE: KING COUNTY PICTOMETRY 2015	

117	TOTAL PETROLEUM HYDROCARBONS (TPH) IN MICROGRAMS PER LITER
(---)	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
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*	= FORMER HOT WATER FLUSHING SYSTEM RECOVERY WELL
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FIGURE 10
 DECEMBER 2019 TOTAL PETROLEUM HYDROCARBONS IN GROUNDWATER BNSF FORMER MAINTENANCE AND FUELING FACILITY SKYKOMISH, WASHINGTON

TABLES

**2019 SITE-WIDE GROUNDWATER MONITORING REPORT
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Consent Decree No. 07-2-33672-9 SEA**

Farallon PN: 683-067

Table 1
2019 Groundwater Monitoring Event Dates
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Monitoring Event	Start Date	End Date
March Event	03/19/2019	03/22/2019
June Event	06/17/2019	06/19/2019
September Event	09/16/2019	09/19/2019
December Event	12/16/2019	12/19/2019

NOTE:

Sampling and liquid-level gauging details for the monitoring events are provided in Tables 2 and 3.

Table 2
2019 Groundwater Sampling Locations
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Area/Well Group	Well	March Monitoring Event	June Monitoring Event	September Monitoring Event	December Monitoring Event	Analyte	
Levee Zone	5-W-14	X	X	X	X	NWTPH-Dx	
	5-W-16	X	X	X	X	NWTPH-Dx	
	5-W-17	X	X	X	X	NWTPH-Dx	
	5-W-18	X	X	X	X	NWTPH-Dx	
	5-W-19	X	X	X	X	NWTPH-Dx	
Schoolyard	5-W-51	X	X ¹	X	X ¹	NWTPH-Dx	
	5-W-55	X	X ¹	X	X ¹	NWTPH-Dx	
	5-W-56	X	X ¹	X	X ¹	NWTPH-Dx	
HCC System	S1-AD	X	—	X	—	NWTPH-Dx	
	S1-AU	X	—	X	—	NWTPH-Dx	
	S1-BD	X	—	X	—	NWTPH-Dx	
	S1-BU	X	—	X	—	NWTPH-Dx	
	S2-AD	X	—	X	—	NWTPH-Dx	
	S2-AU	X	—	X	—	NWTPH-Dx	
	S2-BD	X	—	X	—	NWTPH-Dx	
	S2-BU	X	—	X	—	NWTPH-Dx	
	S3-AD	X	—	X	—	NWTPH-Dx	
	S3-AU	X	—	X	—	NWTPH-Dx	
	S3-BD	X	—	X	—	NWTPH-Dx	
	S3-BU	X	—	X	—	NWTPH-Dx	
	S3-CD	X	—	X	—	NWTPH-Dx	
	S3-CU	X	—	X	—	NWTPH-Dx	
	S4-AD	X	—	X	—	NWTPH-Dx	
	S4-AU	X	—	X	—	NWTPH-Dx	
	S4-BD	X	—	X	—	NWTPH-Dx	
	S4-BU	X	—	X	—	NWTPH-Dx	
	S4-CD	X	—	X	—	NWTPH-Dx	
	S4-CU	X	—	X	—	NWTPH-Dx	
	GW-1	X	X	X	X	X	NWTPH-Dx
	GW-2	X	X	X	X	X	NWTPH-Dx
	GW-3	X	X	X	X	X	NWTPH-Dx
	GW-4	X	X	X	X	X	NWTPH-Dx
	EW-1	X	X	X	X	X	NWTPH-Dx
	EW-2A	X	X	X	X	X	NWTPH-Dx
	5-W-43	X	X	X	X	X	NWTPH-Dx
2A-W-40	X	—	X	X	X	NWTPH-Dx	
2A-W-41	X	X	X	X	X	NWTPH-Dx	
1B-W-23	X	X	X	X	X	NWTPH-Dx	
2A-W-42	X	X	X	X	X	NWTPH-Dx	
Former Air Sparge Area	1B-W-3	X	X	X	X	NWTPH-Dx	
	1C-W-7	X	X	X	X	NWTPH-Dx	
	1C-W-8	X	X	X	X	NWTPH-Dx	

Table 2
2019 Groundwater Sampling Locations
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Area/Well Group	Well	March Monitoring Event	June Monitoring Event	September Monitoring Event	December Monitoring Event	Analyte
Former Maloney Creek Zone	MW-3	X	X	—	X	NWTPH-Dx
	MW-4	X	X	X	X	NWTPH-Dx
	2A-W-9	X	X	X	X	NWTPH-Dx
	2A-W-10	X	X	X	X	NWTPH-Dx
	2B-W-4	X	X	X	X	NWTPH-Dx
Site-Wide	1A-W-4	X	—	X	—	NWTPH-Dx
	1B-W-2	X	—	X	—	NWTPH-Dx
	1C-W-1	X	X	X	X	NWTPH-Dx
	1C-W-3	X	—	X	—	NWTPH-Dx
	1C-W-4	X	—	X	—	NWTPH-Dx
	MW-16	X	—	X	—	NWTPH-Dx
	MW-38R	X	—	X	—	NWTPH-Dx

NOTES:

"—" denotes well not sampled.

¹Schoolyard wells sampled quarterly following removal of the hot water flushing remediation system.

²Sentry wells were sampled quarterly as part of the HCC System Passive Operation Pilot Study.

NWTPH-Dx = total petroleum hydrocarbons as diesel-range and oil-range organics

HCC = hydraulic control and containment

Table 3
2019 Liquid-Level Gauging Frequency
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Area/Well Group	Location	Gauging Frequency		
		Continuous ¹	Quarterly	Semiannually
Levee Zone	5-W-14	—	X	—
	5-W-16	—	X	—
	5-W-17	—	X	—
	5-W-18	—	X	—
	5-W-19	—	X	—
Schoolyard	5-W-51	—	X ²	X ²
	5-W-55	—	X ²	X ²
	5-W-56	—	X ²	X ²
	RW-10	—	X ²	—
HCC System	IW-01	—	—	X
	PZ-1	X	X	—
	PZ-2N	X	X	—
	PZ-2S	X	X	—
	PZ-3N	X	X	—
	PZ-3S	X	X	—
	PZ-4N	X	X	—
	PZ-4S	X	X	—
	PZ-5N	X	X	—
	PZ-5S	X	X	—
	PZ-6N	X	X	—
	PZ-6S	X	X	—
	PZ-7N	X	X	—
	PZ-7S	X	X	—
	PZ-8	X	X	—
	RW-01	X	X	—
	RW-02	X	X	—
	RW-03	X	X	—
	RW-04	X	X	—
	RW-05	X	X	—
RW-06	X	X	—	
RW-07	X	X	—	
RW-08	X	X	—	
RW-09	X	X	—	

Table 3
2019 Liquid-Level Gauging Frequency
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Area/Well Group	Location	Gauging Frequency		
		Continuous ¹	Quarterly	Semiannually
HCC System (continued)	EG-EV-South Chamber	—	X ³	—
	EG-EV-North Chamber	—	X ³	—
	EG-CV-South Chamber	—	X ³	—
	EG-CV-North Chamber	—	X ³	—
	EG-WV-South Chamber (formerly EG-WV or EV)	X	X	—
	EG-WV-North Chamber	—	X	—
	CG-EV-South Chamber	—	X ³	—
	CG-EV-North Chamber	—	X ³	—
	CG-CV-South Chamber	—	X ³	—
	CG-CV-North Chamber	—	X ³	—
	CG-WV-South Chamber (formerly CG-WV or CV)	X	X	—
	CG-WV-North Chamber	—	X	—
	WG-EV-South Chamber (formerly WG-EV or WV)	X	X	—
	WG-EV-North Chamber	—	X	—
	WG-WV-South Chamber	—	X ³	—
	WG-WV-North Chamber	—	X ³	—
	FWG-EV-South Chamber	—	X ³	—
	FWG-EV-North Chamber	—	X ³	—
	FWG-WV-South Chamber (formerly FWG-WV or FWV)	X	X	—
	FWG-WV-North Chamber	—	X	—
	GW-1	—	X	—
	GW-2	—	X	—
	GW-3	—	X	—
	GW-4	—	X	—
	EW-1	—	X	—
	EW-2A	—	X	—
5-W-43	—	X	—	
2A-W-40	—	X	—	
2A-W-41	—	X	—	
1B-W-23	—	X	—	
2A-W-42	—	X	—	
Former Air Sparge Area	1B-W-3	—	X	—
	1C-W-7	—	X	—
	1C-W-8	—	X	—

Table 3
2019 Liquid-Level Gauging Frequency
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Area/Well Group	Location	Gauging Frequency		
		Continuous ¹	Quarterly	Semiannually
Former Maloney Creek Zone and Surrounding Area	MW-1	—	X	—
	MW-2	—	X	—
	MW-3	—	X	—
	MW-4	—	X	—
	MW-5	—	X	—
	MW-7	—	X	—
	MW-9	—	X	—
	MW-10	—	X	—
	MW-11	—	X	—
	MW-13	—	X	—
	MW-14	—	X	—
	MW-15	—	X	—
	MW-18	—	X	—
	MW-40	—	X	—
	2A-W-3	—	X	—
	2A-W-5	—	X	—
	2A-W-7	—	X	—
	2A-W-9	—	X	—
2A-W-10	—	X	—	
2B-W-4	—	X	—	
Site-Wide	1A-W-4	—	X	—
	1B-W-2	—	—	X
	1C-W-1	—	X	—
	1C-W-3	—	—	X
	1C-W-4	—	—	X
	2A-W-8	—	X	—
	MW-16	—	X	—
	MW-32	—	—	X
	MW-38R	—	X	—
	MW-47	—	X	—
	MW-48	—	X	—
MW-49	—	X	—	
Surface Water Monitoring Station	Skykomish River Bridge	—	X	—

NOTES:

"—" denotes location not gauged at the frequency indicated.

HCC = hydraulic control and containment

¹Water-level transducers at the indicated locations provide continuous, real-time water level measurements; water levels are recorded hourly. Manual gauging for the presence of LNAPL at these locations is performed quarterly.

LNAPL = light nonaqueous-phase liquid

²Schoolyard wells gauged quarterly following removal of the hot water flushing remediation system.

³Vault chamber is visually inspected for the presence of LNAPL. Depth to water normally is not measured; LNAPL thickness is measured if measurable LNAPL is present.

Table 4
2019 Water-Level Elevations and LNAPL Thicknesses
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Location	Measuring Point Elevation¹ (feet NAVD88)	Date	Depth to Water² (feet)	Water Elevation¹ (feet NAVD88)	LNAPL Thickness (feet)
Levee Zone Monitoring Wells					
5-W-14	926.59	3/19/2019	9.65	916.94	—
		6/17/2019	9.35	917.24	—
		9/16/2019	10.30	916.29	—
		12/16/2019	9.44	917.15	—
5-W-16	925.20	3/19/2019	8.43	916.77	—
		6/17/2019	8.10	917.10	—
		9/16/2019	9.10	916.10	—
		12/16/2019	8.21	916.99	—
5-W-17	924.60	3/19/2019	7.81	916.79	—
		6/17/2019	7.44	917.16	—
		9/16/2019	8.54	916.06	—
		12/16/2019	7.58	917.02	—
5-W-18	924.64	3/19/2019	7.89	916.75	—
		6/17/2019	7.55	917.09	—
		9/16/2019	8.57	916.07	—
		12/16/2019	7.64	917.00	—
5-W-19	924.35	6/17/2019	7.35	917.00	—
		3/19/2019	7.69	916.66	—
		9/16/2019	8.41	915.94	—
		12/16/2019	7.48	916.87	—

Table 4
2019 Water-Level Elevations and LNAPL Thicknesses
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Location	Measuring Point Elevation ¹ (feet NAVD88)	Date	Depth to Water ² (feet)	Water Elevation ¹ (feet NAVD88)	LNAPL Thickness (feet)
Schoolyard Monitoring Locations					
5-W-51	925.08	3/19/2019	7.54	917.54	—
		6/17/2019	7.41	917.67	—
		9/16/2019	8.44	916.64	—
		12/16/2019	7.70	917.38	—
5-W-55	923.92	3/19/2019	6.63	917.29	—
		6/17/2019	7.30	916.62	—
		9/16/2019	7.54	916.38	—
		12/16/2019	6.46	917.46	—
5-W-56	924.76	3/19/2019	7.82	916.94	—
		6/17/2019	6.57	918.19	—
		9/16/2019	8.31	916.45	—
		12/16/2019	7.23	917.53	—
RW-10	925.11	3/19/2019	7.34	917.77	—
		6/17/2019	7.31	917.80	Heavy Trace
		9/16/2019	8.25	916.86	—
		12/16/2019	7.12	917.99	Light Trace

Table 4
2019 Water-Level Elevations and LNAPL Thicknesses
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Location	Measuring Point Elevation ¹ (feet NAVD88)	Date	Depth to Water ² (feet)	Water Elevation ¹ (feet NAVD88)	LNAPL Thickness (feet)
Hydraulic Control and Containment System Monitoring Locations					
IW-01	933.49	3/19/2019	8.21	925.28	—
		9/16/2019	9.76	923.73	—
PZ-1	935.38	3/19/2019	17.76	917.62	—
		6/17/2019	9.83	925.55	—
		9/16/2019	11.10	924.28	—
		12/16/2019	9.32	926.06	—
PZ-2N	934.35	3/19/2019	11.76	922.59	—
		6/17/2019	12.03	922.32	—
		9/16/2019	12.95	921.40	—
		12/16/2019	11.61	922.74	—
PZ-2S	934.94	3/19/2019	8.28	926.66	—
		6/17/2019	8.84	926.10	—
		9/16/2019	11.01	923.93	—
		12/16/2019	7.77	927.17	—
PZ-3N	934.41	3/19/2019	14.03	920.38	—
		6/17/2019	14.05	920.36	—
		9/16/2019	14.07	920.34	—
		12/16/2019	14.00	920.41	—
PZ-3S	934.45	3/19/2019	8.74	925.71	—
		6/17/2019	9.26	925.19	—
		9/16/2019	11.31	923.14	—
		12/16/2019	9.27	925.18	—
PZ-4N	935.27	3/19/2019	13.61	921.66	—
		6/17/2019	14.65	920.62	—
		9/16/2019	14.70	920.57	—
		12/16/2019	14.66	920.61	—
PZ-4S	935.31	3/19/2019	10.03	925.28	—
		6/17/2019	10.52	924.79	—
		9/16/2019	12.69	922.62	—
		12/16/2019	9.61	925.70	—

Table 4
2019 Water-Level Elevations and LNAPL Thicknesses
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Location	Measuring Point Elevation¹ (feet NAVD88)	Date	Depth to Water² (feet)	Water Elevation¹ (feet NAVD88)	LNAPL Thickness (feet)
PZ-5N	933.15	3/19/2019	15.49	917.66	—
		6/17/2019	15.27	917.88	—
		9/16/2019	15.65	917.50	—
		12/16/2019	15.21	917.94	—
PZ-5S	933.46	3/20/2019	8.48	924.98	0.01
		6/17/2019	12.21	921.25	3.10
		9/16/2019	13.08	920.38	1.34
		12/16/2019	10.61	922.85	2.46
PZ-6N	931.17	3/19/2019	13.51	917.66	—
		6/17/2019	13.32	917.85	—
		9/16/2019	14.04	917.13	—
		12/16/2019	13.27	917.90	—
PZ-6S	931.41	3/20/2019	7.34	924.07	0.05
		6/17/2019	7.65	923.76	1.06
		9/16/2019	10.23	921.18	0.06
		12/16/2019	6.93	924.48	0.06
PZ-7N	930.37	3/19/2019	12.60	917.77	—
		6/17/2019	12.49	917.88	—
		9/16/2019	13.31	917.06	—
		12/16/2019	12.43	917.94	—
PZ-7S	930.4	3/19/2019	7.43	922.97	—
		6/17/2019	7.60	922.80	—
		9/16/2019	10.73	919.67	—
		12/16/2019	6.65	923.75	—
PZ-8	929.48	3/19/2019	9.73	919.75	—
		6/17/2019	9.81	919.67	—
		9/16/2019	11.51	917.97	—
		12/16/2019	9.40	920.08	—

Table 4
2019 Water-Level Elevations and LNAPL Thicknesses
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Location	Measuring Point Elevation¹ (feet NAVD88)	Date	Depth to Water² (feet)	Water Elevation¹ (feet NAVD88)	LNAPL Thickness (feet)
RW-01	932.84	3/19/2019	8.89	923.95	Organic Sheen
		6/17/2019	9.21	923.63	Light Trace
		9/16/2019	10.75	922.09	Light Trace
		12/16/2019	9.69	923.15	Light Trace
RW-02	933.84	3/19/2019	9.9	923.94	Organic Sheen
		6/17/2019	10.21	923.63	—
		9/16/2019	11.75	922.09	Light Trace
		12/16/2019	9.69	924.15	Light Trace
RW-03	933.80	3/19/2019	9.84	923.96	Organic Sheen
		6/17/2019	10.23	923.57	—
		9/16/2019	11.79	922.01	Light Trace
		12/16/2019	9.69	924.11	Light Trace
RW-04	931.86	3/20/2019	6.87	924.99	0.08
		6/17/2019	5.92	925.94	0.51
		9/16/2019	8.02	923.84	Heavy Trace
		12/16/2019	6.60	925.26	Light Trace
RW-05	928.53	3/19/2019	8.98	919.55	Light Trace
		6/17/2019	7.83	920.70	Heavy Trace
		9/16/2019	10.36	918.17	Light Trace
		12/16/2019	7.52	921.01	Heavy Trace
RW-06	928.53	3/19/2019	8.97	919.56	Light Trace
		6/17/2019	8.03	920.50	—
		9/16/2019	10.27	918.26	Light Trace
		12/16/2019	7.53	921.00	—
RW-07	933.06	3/20/2019	7.41	925.65	Heavy Trace
		6/17/2019	8.19	924.87	Light Trace
		9/16/2019	10.35	922.71	Heavy Trace
		12/16/2019	7.21	925.85	Heavy Trace

Table 4
2019 Water-Level Elevations and LNAPL Thicknesses
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Location	Measuring Point Elevation¹ (feet NAVD88)	Date	Depth to Water² (feet)	Water Elevation¹ (feet NAVD88)	LNAPL Thickness (feet)
RW-08	931.85	3/20/2019	6.61	925.24	Heavy Trace
		6/17/2019	7.31	924.54	—
		9/16/2019	9.78	922.07	Heavy Trace
		12/16/2019	6.40	925.45	Heavy Trace
RW-09	933.96	3/19/2019	8.74	925.22	—
		6/17/2019	8.89	925.07	—
		9/16/2019	10.21	923.75	—
		12/16/2019	8.52	925.44	Heavy Trace
EG-EV-South Chamber ³	NA	3/19/2019	NA	NA	—
		6/17/2019	NA	NA	—
		9/16/2019	10.86	NA	—
		12/16/2019	9.22	NA	—
EG-EV-North Chamber ³	NA	3/19/2019	NA	NA	—
		6/17/2019	NA	NA	—
		9/16/2019	10.86	NA	—
		12/16/2019	9.23	NA	—
EG-CV-South Chamber ³	NA	3/19/2019	NA	NA	—
		6/17/2019	NA	NA	—
		9/16/2019	11.13	NA	—
		12/16/2019	9.76	NA	—
EG-CV-North Chamber ³	NA	3/19/2019	NA	NA	—
		6/17/2019	NA	NA	—
		9/16/2019	11.13	NA	—
		12/16/2019	9.75	NA	—
EG-WV-South Chamber (formerly EG-WV or EV)	934.31	3/19/2019	8.61	925.70	—
		6/17/2019	10.17	924.14	—
		9/16/2019	11.13	923.18	—
		12/16/2019	9.86	924.45	—

Table 4
2019 Water-Level Elevations and LNAPL Thicknesses
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Location	Measuring Point Elevation¹ (feet NAVD88)	Date	Depth to Water² (feet)	Water Elevation¹ (feet NAVD88)	LNAPL Thickness (feet)
EG-WV-North Chamber	934.31	3/19/2019	8.60	925.71	—
		6/17/2019	10.19	924.12	—
		9/16/2019	11.13	923.18	—
		12/16/2019	9.86	924.45	—
CG-EV-South Chamber ³	NA	3/19/2019	NA	NA	—
		6/17/2019	NA	NA	—
		9/16/2019	9.61	NA	—
		12/16/2019	8.41	NA	Organic Sheen
CG-EV-North Chamber ³	NA	3/19/2019	NA	NA	—
		6/17/2019	NA	NA	—
		9/16/2019	9.61	NA	—
		12/16/2019	8.40	NA	—
CG-CV-South Chamber ³	NA	3/19/2019	NA	NA	—
		6/17/2019	NA	NA	—
		9/16/2019	9.71	NA	—
		12/16/2019	8.49	NA	—
CG-CV-North Chamber ³	NA	3/19/2019	NA	NA	—
		6/17/2019	NA	NA	—
		9/16/2019	9.71	NA	—
		12/16/2019	8.49	NA	—
CG-WV-South Chamber (formerly CG-WV or CV)	937.09	3/19/2019	8.75	928.34	Organic Sheen
		6/17/2019	9.07	928.02	—
		9/16/2019	10.60	926.49	—
		12/16/2019	8.49	928.60	—
CG-WV-North Chamber	937.09	3/19/2019	8.76	928.33	—
		6/17/2019	9.09	928.00	—
		9/16/2019	10.60	926.49	—
		12/16/2019	8.49	928.60	—

Table 4
2019 Water-Level Elevations and LNAPL Thicknesses
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Location	Measuring Point Elevation¹ (feet NAVD88)	Date	Depth to Water² (feet)	Water Elevation¹ (feet NAVD88)	LNAPL Thickness (feet)
WG-EV-South Chamber (formerly WG-EV or WV)	931.84	3/19/2019	7.85	923.99	Heavy Trace
		6/17/2019	8.02	923.82	Light Trace
		9/16/2019	9.13	922.71	0.02
		12/16/2019	7.52	924.32	Heavy Trace
WG-EV-North Chamber	931.84	3/19/2019	7.85	923.99	Light Trace
		6/17/2019	8.02	923.82	—
		9/16/2019	9.15	922.69	Heavy Trace
		12/16/2019	7.52	924.32	Light Trace
WG-WV-South Chamber ³	NA	3/19/2019	NA	NA	—
		6/17/2019	NA	NA	—
		9/16/2019	9.11	NA	—
		12/16/2019	7.45	NA	—
WG-WV-North Chamber ³	NA	3/19/2019	NA	NA	—
		6/17/2019	NA	NA	—
		9/16/2019	9.11	NA	—
		12/16/2019	7.45	NA	—
FWG-EV-South Chamber ³	NA	3/19/2019	NA	NA	—
		6/17/2019	NA	NA	—
		9/16/2019	7.59	NA	—
		12/16/2019	4.76	NA	—
FWG-EV-North Chamber ³	NA	3/19/2019	NA	NA	—
		6/17/2019	NA	NA	—
		9/16/2019	7.59	NA	—
		12/16/2019	4.76	NA	—
FWG-WV-South Chamber (formerly FWG-WV or FWV)	930.76	3/19/2019	4.87	925.89	—
		6/17/2019	5.23	925.53	—
		9/16/2019	7.56	923.20	—
		12/16/2019	4.72	926.04	—

Table 4
2019 Water-Level Elevations and LNAPL Thicknesses
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Location	Measuring Point Elevation¹ (feet NAVD88)	Date	Depth to Water² (feet)	Water Elevation¹ (feet NAVD88)	LNAPL Thickness (feet)
FWG-WV-North Chamber	930.76	3/19/2019	4.87	925.89	—
		6/17/2019	5.23	925.53	—
		9/16/2019	7.56	923.20	—
		12/16/2019	4.72	926.04	—
GW-1	928.24	3/19/2019	6.71	921.53	—
		6/17/2019	10.51	917.73	—
		9/16/2019	11.33	916.91	—
		12/16/2019	10.45	917.79	—
GW-2	930.29	3/19/2019	12.74	917.55	—
		6/17/2019	12.51	917.78	—
		9/16/2019	13.24	917.05	—
		12/16/2019	12.45	917.84	—
GW-3	935.82	3/19/2019	14.42	921.40	—
		6/17/2019	14.21	921.61	—
		9/16/2019	15.42	920.40	—
		12/16/2019	14.42	921.40	—
GW-4	934.68	3/19/2019	10.69	923.99	—
		6/17/2019	10.71	923.97	—
		9/16/2019	11.75	922.93	—
		12/16/2019	10.39	924.29	—
EW-1	928.72	3/19/2019	9.35	919.37	—
		6/17/2019	10.30	918.42	—
		9/16/2019	11.42	917.30	—
		12/16/2019	10.10	918.62	—
EW-2A	936.2	3/19/2019	10.31	925.89	—
		6/17/2019	10.41	925.79	—
		9/16/2019	11.67	924.53	—
		12/16/2019	9.94	926.26	—

Table 4
2019 Water-Level Elevations and LNAPL Thicknesses
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Location	Measuring Point Elevation¹ (feet NAVD88)	Date	Depth to Water² (feet)	Water Elevation¹ (feet NAVD88)	LNAPL Thickness (feet)
5-W-43	926.18	3/19/2019	8.14	918.04	—
		6/17/2019	8.04	918.14	—
		9/16/2019	9.08	917.10	—
		12/16/2019	7.89	918.29	—
2A-W-40	933.34	3/19/2019	12.04	921.30	—
		6/17/2019	12.35	920.99	—
		9/16/2019	13.33	920.01	—
		12/16/2019	11.91	921.43	—
2A-W-41	935.22	3/19/2019	17.52	917.70	—
		6/17/2019	17.33	917.89	—
		9/16/2019	18.12	917.10	—
		12/16/2019	17.21	918.01	—
1B-W-23	936.25	3/19/2019	16.61	919.64	—
		6/17/2019	17.52	918.73	—
		9/16/2019	16.70	919.55	—
		12/16/2019	16.84	919.41	—
2A-W-42	935.37	3/19/2019	13.15	922.22	—
		6/17/2019	13.33	922.04	—
		9/16/2019	14.10	921.27	—
		12/16/2019	13.02	922.35	—

Table 4
2019 Water-Level Elevations and LNAPL Thicknesses
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Location	Measuring Point Elevation¹ (feet NAVD88)	Date	Depth to Water² (feet)	Water Elevation¹ (feet NAVD88)	LNAPL Thickness (feet)
Former Air Sparge Area Monitoring Wells					
1B-W-3	936.66	3/19/2019	14.91	921.75	—
		6/17/2019	15.31	921.35	—
		9/16/2019	15.98	920.68	—
		12/16/2019	14.93	921.73	—
1C-W-7	935.04	3/19/2019	12.44	922.60	—
		6/17/2019	12.70	922.34	—
		9/16/2019	13.62	921.42	—
		12/16/2019	12.27	922.77	—
1C-W-8	935.7	3/19/2019	13.18	922.52	—
		6/17/2019	13.40	922.30	—
		9/16/2019	14.32	921.38	—
		12/16/2019	13.03	922.67	—
Former Maloney Creek Zone and Surrounding Area Monitoring Wells					
MW-1	939.2	3/19/2019	12.41	926.79	—
		6/17/2019	12.80	926.40	—
		9/16/2019	13.90	925.30	—
		12/16/2019	11.89	927.31	—
MW-2	939.2	3/19/2019	11.98	927.22	—
		6/17/2019	12.06	927.14	—
		9/16/2019	13.67	925.53	—
		12/16/2019	11.36	927.84	—
MW-3	938.03	3/19/2019	7.93	930.10	—
		6/17/2019	10.24	927.79	—
		9/16/2019	Well Dry		
		12/16/2019	7.59	930.44	—
MW-4	936.95	3/19/2019	8.05	928.90	—
		6/17/2019	9.14	927.81	—
		9/16/2019	11.94	925.01	—
		12/16/2019	8.02	928.93	—

Table 4
2019 Water-Level Elevations and LNAPL Thicknesses
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Location	Measuring Point Elevation¹ (feet NAVD88)	Date	Depth to Water² (feet)	Water Elevation¹ (feet NAVD88)	LNAPL Thickness (feet)
MW-5	933.36	3/19/2019	7.40	925.96	—
		6/17/2019	9.71	923.65	—
		9/16/2019	9.62	923.74	—
		12/16/2019	6.91	926.45	—
MW-7	936.89	3/19/2019	12.39	924.50	—
		6/17/2019	12.64	924.25	—
		9/16/2019	14.95	921.94	—
		12/16/2019	11.71	925.18	—
MW-9	937.53	3/19/2019	12.68	924.85	—
		6/17/2019	13.13	924.40	—
		9/16/2019	15.25	922.28	—
		12/16/2019	12.18	925.35	—
MW-10	938.34	3/19/2019	11.96	926.38	—
		6/17/2019	12.39	925.95	—
		9/16/2019	14.33	924.01	—
		12/16/2019	11.45	926.89	—
MW-11	939.2	3/19/2019	12.53	926.67	Light Trace
		6/17/2019	13.98	925.22	Light Trace
		9/16/2019	14.84	924.36	Light Trace
		12/16/2019	12.10	927.10	Heavy Trace
MW-13	936.49	3/19/2019	9.48	927.01	—
		6/17/2019	9.71	926.78	—
		9/16/2019	11.72	924.77	—
		12/16/2019	8.94	927.55	—
MW-14	936.8	3/19/2019	11.37	925.43	—
		6/17/2019	11.59	925.21	—
		9/16/2019	13.61	923.19	—
		12/16/2019	10.80	926.00	—

Table 4
2019 Water-Level Elevations and LNAPL Thicknesses
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
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Location	Measuring Point Elevation¹ (feet NAVD88)	Date	Depth to Water² (feet)	Water Elevation¹ (feet NAVD88)	LNAPL Thickness (feet)
MW-15	933.32	3/19/2019	13.09	920.23	—
		6/17/2019	13.32	920.00	—
		9/16/2019	15.83	917.49	—
		12/16/2019	12.47	920.85	—
MW-18	940.68	3/19/2019	14.11	926.57	—
		6/17/2019	14.41	926.27	—
		9/16/2019	16.28	924.40	—
		12/16/2019	13.51	927.17	—
MW-40	936.95	3/19/2019	12.13	924.82	—
		6/17/2019	12.23	924.72	—
		9/16/2019	14.57	922.38	—
		12/16/2019	11.31	925.64	—
2A-W-3	934.43	3/20/2019	9.61	924.82	Heavy Trace
		6/17/2019	10.18	924.25	Light Trace
		9/16/2019	13.62	920.81	Light Trace
		12/16/2019	9.22	925.21	Light Trace
2A-W-5	939.47	3/19/2019	12.99	926.48	—
		6/17/2019	13.26	926.21	—
		9/16/2019	15.28	924.19	—
		12/16/2019	12.34	927.13	—
2A-W-7	937.76	3/19/2019	11.47	926.29	—
		6/17/2019	11.59	926.17	—
		9/16/2019	12.72	925.04	—
		12/16/2019	11.09	926.67	—
2A-W-9	936.58	3/19/2019	10.59	925.99	—
		6/17/2019	10.93	925.65	—
		9/16/2019	12.83	923.75	—
		12/16/2019	10.09	926.49	—

Table 4
2019 Water-Level Elevations and LNAPL Thicknesses
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Location	Measuring Point Elevation¹ (feet NAVD88)	Date	Depth to Water² (feet)	Water Elevation¹ (feet NAVD88)	LNAPL Thickness (feet)
2A-W-10	937.93	3/19/2019	10.11	927.82	—
		6/17/2019	10.63	927.30	—
		9/16/2019	13.44	924.49	—
		12/16/2019	9.68	928.25	—
2B-W-4	931.03	3/19/2019	2.71	928.32	—
		6/17/2019	2.95	928.08	—
		9/16/2019	5.41	925.62	—
		12/18/2019	2.45	928.58	—
Site-Wide Monitoring Wells					
1A-W-4	929.07	3/19/2019	9.36	919.71	—
		6/17/2019	9.32	919.75	—
		9/16/2019	10.29	918.78	—
		12/16/2019	NM	NM	—
1B-W-2	935.81	3/19/2019	13.65	922.16	—
		9/16/2019	14.78	921.03	—
1C-W-1	936.44	3/19/2019	13.81	922.63	—
		6/17/2019	13.09	923.35	—
		9/16/2019	14.84	921.60	—
		12/18/2019	13.84	922.60	—
1C-W-3	933.56	3/19/2019	10.77	922.79	—
		9/16/2019	12.06	921.50	—
1C-W-4	932.74	3/19/2019	10.49	922.25	—
		9/16/2019	11.48	921.26	—
2A-W-8	942.62	3/19/2019	14.95	927.67	—
		6/17/2019	14.99	927.63	—
		9/16/2019	16.71	925.91	—
		12/16/2019	14.29	928.33	—

Table 4
2019 Water-Level Elevations and LNAPL Thicknesses
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
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Location	Measuring Point Elevation ¹ (feet NAVD88)	Date	Depth to Water ² (feet)	Water Elevation ¹ (feet NAVD88)	LNAPL Thickness (feet)
MW-16	933.32	3/19/2019	13.20	920.12	—
		6/17/2019	13.27	920.05	—
		9/16/2019	14.85	918.47	—
		12/16/2019	12.82	920.50	—
MW-32	926.06	3/19/2019	9.27	916.79	—
		9/16/2019	10.65	915.41	—
MW-38R	922.56	3/19/2019	4.73	917.83	—
		6/17/2019	4.91	917.65	—
		9/16/2019	6.03	916.53	—
		12/16/2019	4.59	917.97	—
MW-47	932.61	3/19/2019	8.19	924.42	—
		6/17/2019	8.39	924.22	—
		9/16/2019	11.36	921.25	—
		12/16/2019	7.54	925.07	—
MW-48	933.9	3/19/2019	15.20	918.70	—
		6/17/2019	9.96	923.94	—
		9/16/2019	12.76	921.14	—
		12/16/2019	9.09	924.81	—
MW-49	933.14	3/19/2019	10.96	922.18	—
		6/17/2019	11.07	922.07	—
		9/16/2019	Well Buried Under Gravel		—
		12/19/2019	10.66	922.48	—
Surface Water Monitoring Station					
Skykomish River Bridge	943.09	3/19/2019	25.17	917.92	—
		6/17/2019	24.20	918.89	—
		9/16/2019	25.65	917.44	—
		12/16/2019	24.69	918.40	—

NOTES:

— denotes LNAPL was not observed.

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.

LNAPL = light nonaqueous-phase liquid

NA = not applicable

NM = not measured

Table 5
2019 Stabilized Groundwater Field Parameter Values
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Well	Date	Temperature (degrees Celsius)	pH (Standard Units)	Dissolved Oxygen (milligrams per liter)	Oxidation-Reduction Potential (millivolts)	Specific Conductivity (mS/cm)	Turbidity (NTU)
Levee Zone Monitoring Wells							
5-W-14	3/20/2019	6.36	6.48	5.94	69.5	0.052	---
	6/19/2019	8.2	6.24	6.15	209.0	0.090	15.41
	9/17/2019	9.6	6.20	5.33	192.8	0.081	---
	12/17/2019	7.2	6.31	6.78	5.5	0.094	0.27
5-W-16	3/20/2019	4.69	6.85	10.24	44.6	0.044	---
	6/19/2019	11.4	6.60	8.03	233.8	0.062	36.27
	9/17/2019	12.6	6.59	6.00	247.5	0.082	3.76
	12/17/2019	5.7	6.63	9.09	8.2	0.124	11.98
5-W-17	3/20/2019	7.21	6.44	5.27	85.1	0.055	---
	6/19/2019	8.4	6.14	6.69	238.7	0.073	13.57
	9/17/2019	9.5	6.35	5.06	176.9	0.077	---
	12/17/2019	6.8	6.30	7.04	-3.7	0.093	1.01
5-W-18	3/20/2019	5.25	6.54	4.56	25.2	0.059	---
	6/19/2019	8.8	6.00	4.80	234.0	0.098	4.75
	9/17/2019	10.2	6.40	3.58	231.6	0.098	1.99
	12/17/2019	8.0	6.44	3.41	127.7	0.100	---
5-W-19	3/20/2019	6.94	6.60	6.88	30.1	0.073	---
	6/18/2019	8.9	6.31	7.27	223.9	0.080	6.10
	9/17/2019	9.6	6.71	5.31	153.9	0.078	---
	12/17/2019	6.6	6.46	4.94	123.7	0.075	---
Schoolyard Monitoring Wells							
5-W-51	3/20/2019	6.60	6.22	0.58	72.4	0.063	---
	6/19/2019	9.2	5.97	0.76	82.8	0.095	5.50
	9/17/2019	11.2	6.06	0.35	57.5	0.089	2.30
	12/18/2019	8.3	6.06	3.51	-194.2	0.123	0.94
5-W-55	3/20/2019	6.70	6.05	3.81	121.4	0.088	---
	6/19/2019	12.1	5.85	1.25	164.1	0.129	5.13
	9/17/2019	14.8	5.90	2.69	165.0	0.111	---
	12/17/2019	8.9	6.04	3.37	146.6	0.161	---
5-W-56	3/20/2019	11.0	6.61	1.02	133.3	0.533	---
	6/19/2019	14.2	6.34	0.91	-71.7	0.843	11.39
	9/17/2019	15.8	6.42	0.93	114.8	0.847	6.51
	12/17/2019	11.6	6.14	2.83	-100.5	0.295	---

Table 5
2019 Stabilized Groundwater Field Parameter Values
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Well	Date	Temperature (degrees Celsius)	pH (Standard Units)	Dissolved Oxygen (milligrams per liter)	Oxidation-Reduction Potential (millivolts)	Specific Conductivity (mS/cm)	Turbidity (NTU)	
Hydraulic Control and Containment System Monitoring Wells								
GW-1	3/19/2019	5.70	6.26	3.25	45.9	0.067	---	
	6/18/2019	10.3	5.99	1.34	113.4	0.109	3.81	
	9/19/2019	11.6	6.11	2.03	170.7	0.082	---	
	12/18/2019	9.2	6.34	0.64	139.8	0.132	---	
GW-2	3/19/2019	7.9	5.93	7.30	289.4	0.047	11.5	
	6/18/2019	10.6	6.19	1.17	138.1	0.085	77.06	
	9/19/2019	12.0	5.89	4.94	91.4	0.115	7.6	
	12/18/2019	8.8	6.23	0.16	85.5	0.098	---	
GW-3	3/20/2019	12.4	6.20	6.13	215.8	0.091	7.32	
	6/18/2019	12.1	5.79	3.06	143.7	0.083	41.4	
	9/18/2019	12.4	5.85	6.21	116.4	0.088	---	
	12/19/2019	7.4	5.82	5.00	126.1	0.103	---	
GW-4	3/21/2019	7.13	6.16	3.71	151.1	0.086	---	
	6/19/2019	8.8	6.28	3.62	130.0	0.096	34.7	
	9/17/2019	9.4	5.93	7.68	167.1	0.072	---	
	12/18/2019	8.4	6.23	5.42	-107.8	0.124	1.24	
EW-1	3/19/2019	7.7	6.16	3.53	247.8	0.072	3.86	
	6/18/2019	8.3	5.88	2.40	228.5	0.074	3.10	
	9/19/2019	10.0	6.00	0.80	240.9	0.069	2.52	
	12/18/2019	9.5	6.11	0.99	242.2	0.086	---	
EW-2A	3/21/2019	6.1	6.01	IE	261.6	0.056	4.71	
	6/19/2019	9.7	5.78	5.71	190.0	0.050	37.2	
	9/17/2019	9.1	5.82	IE	142.4	0.061	17.6	
	12/17/2019	8.4	6.00	4.52	266.0	0.058	---	
5-W-43	3/19/2019	7.5	5.89	6.01	290.1	0.077	5.20	
	6/18/2019	8.9	5.87	2.67	209.1	0.077	3.78	
	9/19/2019	10.7	5.89	1.79	243.6	0.087	3.17	
	12/18/2019	8.9	6.14	1.68	244.7	0.088	---	
2A-W-40	3/20/2019	7.40	6.41	8.92	105.5	0.046	---	
	6/18/2019	Not Sampled						---
	9/17/2019	11.2	7.20	7.86	158.6	0.058	2.98	
	12/17/2019	8.5	6.64	5.56	255.7	0.058	---	

Table 5
2019 Stabilized Groundwater Field Parameter Values
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Well	Date	Temperature (degrees Celsius)	pH (Standard Units)	Dissolved Oxygen (milligrams per liter)	Oxidation-Reduction Potential (millivolts)	Specific Conductivity (mS/cm)	Turbidity (NTU)	
2A-W-41	3/20/2019	9.87	6.46	2.42	14.6	0.171	---	
	6/18/2019	11.9	6.19	4.86	25.7	0.146	35.7	
	9/18/2019	11.4	6.23	6.46	30.3	0.156	11.2	
	12/17/2019	9.4	6.42	0.49	-17.2	0.180	---	
1B-W-23	3/20/2019	13.20	6.13	10.01	171.2	0.072	---	
	6/18/2019	14.4	6.10	8.88	165.4	0.093	190.0	
	9/18/2019	15.8	5.97	8.07	188.4	0.088	143.3	
	12/17/2019	8.9	5.95	5.76	242.0	0.071	---	
2A-W-42	3/21/2019	7.8	5.89	IE	281.1	0.150	4.50	
	6/18/2019	10.3	5.85	1.62	121.3	0.143	56.7	
	9/18/2019	10.9	5.84	6.58	162.5	0.137	18.5	
	12/18/2019	9.1	5.98	3.23	200.0	0.157	---	
Former Air Sparge Area Monitoring Wells								
1B-W-3	3/21/2019	8.02	6.75	3.10	69.3	0.092	---	
	6/19/2019	10.1	6.63	1.86	89.2	0.136	35.5	
	9/18/2019	10.7	5.92	3.00	171.8	0.110	---	
	12/18/2019	8.6	6.33	4.02	-135.1	0.183	3.33	
1C-W-7	3/21/2019	7.41	5.87	4.01	162.9	0.075	---	
	6/19/2019	9.8	5.96	4.00	166.9	0.077	46.3	
	9/17/2019	12.4	5.96	5.32	166.2	0.109	23.2	
	12/18/2019	8.1	5.90	5.06	238.0	0.091	---	
1C-W-8	3/21/2019	7.9	6.03	1.31	275.5	0.099	6.13	
	6/19/2019	8.5	5.93	6.12	117.8	0.103	42.0	
	9/17/2019	10.6	5.8	7.21	120.2	0.153	8.1	
	12/18/2019	8.7	5.96	6.51	250.7	0.082	---	
Former Maloney Creek Zone Monitoring Wells								
MW-3	3/21/2019	3.50	6.05	6.67	100.4	0.083	---	
	6/19/2019	8.4	5.92	0.75	64.2	0.161	43.0	
	9/19/2019	Well Dry						
	12/19/2019	7.1	5.93	4.40	-51.7	0.224	1.99	
MW-4	3/21/2019	3.29	5.92	8.61	47.9	0.050	---	
	6/19/2019	8.9	5.67	0.93	125.1	0.065	35.0	
	9/18/2019	10.9	5.68	0.32	88.1	0.068	4.03	
	12/19/2019	4.8	5.60	4.34	-17.3	0.129	0.23	

Table 5
2019 Stabilized Groundwater Field Parameter Values
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Well	Date	Temperature (degrees Celsius)	pH (Standard Units)	Dissolved Oxygen (milligrams per liter)	Oxidation-Reduction Potential (millivolts)	Specific Conductivity (mS/cm)	Turbidity (NTU)
2A-W-9	3/21/2019	4.85	6.01	0.29	99.0	0.051	---
	6/19/2019	8.0	5.85	0.72	87.6	0.053	4.22
	9/18/2019	11.9	5.92	1.93	112.4	0.068	---
	12/18/2019	8.2	5.93	2.86	-145.1	0.079	3.30
2A-W-10	3/21/2019	2.04	5.70	4.56	23.8	0.050	---
	6/19/2019	8.7	5.82	0.65	215.7	0.050	3.79
	9/18/2019	11.1	5.29	2.17	164.2	0.078	---
	12/18/2019	6.2	5.44	3.07	213.3	0.103	---
2B-W-4	3/21/2019	3.14	6.20	8.78	96.9	0.057	---
	6/19/2019	8.5	6.07	4.43	319.9	0.049	3.67
	9/18/2019	13.6	5.94	3.2	244.3	0.12	2.42
	12/19/2019	7.1	6.26	4.58	238.8	0.057	---
Site-Wide Monitoring Wells							
1A-W-4	3/20/2019	8.8	6.72	2.83	241.9	0.088	41.29
	9/18/2019	9.6	6.36	9.12	190	0.079	152.7
1B-W-2	3/21/2019	7.11	6.27	7.99	133.0	0.16	---
	9/18/2019	13.2	5.88	2.05	168.7	0.239	---
1C-W-1	3/21/2019	7.48	5.63	6.75	177.2	0.053	---
	6/19/2019	9.9	5.84	6.00	148.5	0.055	34.6
	9/17/2019	11.9	5.84	7.68	155.3	0.066	38.6
	12/18/2019	8.6	5.90	6.54	246.3	0.072	---
1C-W-3	3/21/2019	7.25	5.49	8.73	196.0	0.060	---
	9/17/2019	13.8	6.18	4.75	144.5	0.095	66.85
1C-W-4	3/21/2019	7.9	5.99	7.69	261.7	0.081	5.24
	9/17/2019	10.6	5.85	6.45	158	0.068	35.3
MW-16	3/21/2019	6.18	5.91	7.65	70.1	0.038	---
	9/18/2019	11.4	5.82	1.9	230	0.073	5.86
MW-38R	3/20/2019	7.24	6.70	12.84	36.8	0.038	---
	9/17/2019	10.9	5.81	2.09	177	0.087	---

NOTES:

IE = instrument error

mS/cm = milliSiemens per centimeter

NTU = nephelometric turbidity units

--- = parameter not recorded

Turbidity values of 0.0 NTU replace turbidity values recorded in the field as negative, an indication of turbidity meter calibration error.

Table 6
2019 Total Petroleum Hydrocarbon Concentrations in Groundwater
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Well	Date	Sample Identification	DRO (µg/l) ¹			ORO (µg/l) ¹			Calculated NWTPH-Dx ² (µg/l)
			Result	MDL	MRL	Result	MDL	MRL	
Levee Zone Monitoring Wells: NWTPH-Dx results compared to the CUL = 208 µg/l									
5-W-14	3/20/2019	5-W-14-032019	< 62	62	62	< 91	91	91	< 77
	6/19/2019	5-W-14-061919	< 62	62	62	< 91	91	91	< 77
	9/17/2019	5-W-14-091719	< 61	61	61	< 91	91	91	< 76
	12/17/2019	5-W-14-121719	< 62	62	62	< 91	91	91	< 77
5-W-16	3/20/2019	5-W-16-032019	< 62	62	62	< 91	91	91	< 77
	6/19/2019	5-W-16-061919	< 62	62	62	< 91	91	91	< 77
	9/17/2019	5-W-16-091719	< 62	62	62	< 92	92	92	< 77
	12/17/2019	5-W-16-121719	< 62	62	62	< 91	91	91	< 77
5-W-17	3/20/2019	5-W-17-032019	< 62	62	62	< 91	91	91	< 77
	6/19/2019	5-W-17-061919	< 62	62	62	< 91	91	91	< 77
	9/17/2019	5-W-17-091719	< 62	62	62	< 91	91	91	< 77
	12/17/2019	5-W-17-121719	< 62	62	62	< 91	91	91	< 77
5-W-18	3/20/2019	5-W-18-032019	< 62	62	62	< 91	91	91	< 77
	6/19/2019	5-W-18-061919	< 62	62	62	< 91	91	91	< 77
	9/17/2019	5-W-18-091719	< 62	62	62	< 91	91	91	< 77
	12/17/2019	5-W-18-121719	< 62	62	62	< 91	91	91	< 77
5-W-19	3/20/2019	5-W-19-032019	< 62	62	62	< 92	92	92	< 77
	6/18/2019	5-W-19-061819	< 62	62	62	< 91	91	91	< 77
	9/17/2019	5-W-19-091719	< 62	62	62	< 91	91	91	< 77
	12/17/2019	5-W-19-121719	< 62	62	62	< 91	91	91	< 77
Schoolyard Monitoring Wells: NWTPH-Dx results compared to the RL = 477 µg/l									
5-W-51	3/20/2019	5-W-51-032019	490	62	62	340	91	91	830
	6/19/2019	5-W-51-061919	390	62	62	350	91	91	740
	9/17/2019	5-W-51-091719	480 J	62	62	620	91	91	1,100
	12/18/2019	5-W-51-121819	420	62	62	330	91	91	750
5-W-55	3/20/2019	5-W-55-032019	82	62	62	< 92	92	92	128
	6/19/2019	5-W-55-061919	< 62	62	62	< 91	91	91	< 77
	9/17/2019	5-W-55-091719	< 62	62	62	< 91	91	91	< 77
	12/17/2019	5-W-55-121719	100	62	62	130	91	91	230

Table 6
2019 Total Petroleum Hydrocarbon Concentrations in Groundwater
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Well	Date	Sample Identification	DRO (µg/l) ¹			ORO (µg/l) ¹			Calculated NWTPH-Dx ² (µg/l)
			Result	MDL	MRL	Result	MDL	MRL	
5-W-56	3/20/2019	5-W-56-032019	790	62	62	1,000	91	91	1,790
	6/19/2019	5-W-56-061919	810	62	62	1,500	92	92	2,310
	9/17/2019	5-W-56-091719	890	62	62	710	92	92	1,600
	12/17/2019	5-W-56-121719	450	62	62	1,300	91	91	1,750
Hydraulic Control and Containment System Sentry Wells and Monitoring Wells									
Locations Within and South of the HCC Barrier Wall (within Railyard): No target NWTPH-Dx concentration									
S1-AD	3/21/2019	S1-AD-032119	< 64	64	64	< 95	95	95	< 80
	9/19/2019	S1-AD-091919	< 62	62	62	< 91	91	91	< 77
S1-AU	3/21/2019	S1-AU-032119	< 62	62	62	< 91	91	91	< 77
	9/19/2019	S1-AU-091919	< 62	62	62	< 91	91	91	< 77
S1-BD	3/21/2019	S1-BD-032119	< 62	62	62	< 92	92	92	< 77
	9/19/2019	S1-BD-091919	< 62	62	62	< 91	91	91	< 77
S1-BU	3/21/2019	S1-BU-032119	< 62	62	62	< 91	91	91	< 77
	9/19/2019	S1-BU-091919	< 61	61	61	< 91	91	91	< 76
S2-AD	3/19/2019	S2-AD-031919	< 63	63	63	< 93	93	93	< 78
	9/19/2019	S2-AD-091919	< 62	62	62	< 91	91	91	< 77
S2-AU	3/19/2019	S2-AU-031919	< 62	62	62	< 92	92	92	< 77
	9/19/2019	S2-AU-091919	< 62	62	62	< 91	91	91	< 77
S2-BD	3/19/2019	S2-BD-031919	< 62	62	62	< 91	91	91	< 77
	9/19/2019	S2-BD-091919	< 61	61	61	< 91	91	91	< 76
S2-BU	3/19/2019	S2-BU-031919	250	62	62	120	91	91	370
	9/19/2019	S2-BU-091919	420	62	62	200	91	91	620
S3-AD	3/22/2019	S3-AD-032219	< 62	62	62	< 92	92	92	< 77
	9/18/2019	S3-AD-091819	< 62	62	62	< 92	92	92	< 77
S3-AU	3/22/2019	S3-AU-032219	< 62	62	62	< 91	91	91	< 77
	9/17/2019	S3-AU-091719	< 62	62	62	< 91	91	91	< 77
S3-BD	3/22/2019	S3-BD-032219	< 62	62	62	< 92	92	92	< 77
	9/18/2019	S3-BD-091819	< 62	62	62	< 91	91	91	< 77
S3-BU	3/22/2019	S3-BU-032219	< 62	62	62	< 91	91	91	< 77
	9/18/2019	S3-BU-091819	< 62	62	62	< 92	92	92	< 77

Table 6
2019 Total Petroleum Hydrocarbon Concentrations in Groundwater
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Well	Date	Sample Identification	DRO (µg/l) ¹			ORO (µg/l) ¹			Calculated NWTPH-Dx ² (µg/l)
			Result	MDL	MRL	Result	MDL	MRL	
S3-CD	3/22/2019	S3-CD-0322219	< 62	62	62	< 91	91	91	< 77
	9/18/2019	S3-CD-091819	< 61	61	61	< 91	91	91	< 76
S3-CU	3/22/2019	S3-CU-032219	< 62	62	62	< 91	91	91	< 77
	9/18/2019	S3-CU-091819	< 63	63	63	< 93	93	93	< 78
S4-AD	3/22/2019	S4-AD-032219	< 62	62	62	< 91	91	91	< 77
	9/18/2019	S4-AD-091819	< 62	62	62	< 91	91	91	< 77
S4-AU	3/22/2019	S4-AU-032219	< 62	62	62	< 91	91	91	< 77
	9/18/2019	S4-AU-091819	< 62	62	62	< 91	91	91	< 77
S4-BD	3/22/2019	S4-BD-032219	< 62	62	62	< 92	92	92	< 77
	9/18/2019	S4-BD-091819	< 62	62	62	< 91	91	91	< 77
S4-BU	3/22/2019	S4-BU-032219	< 61	61	61	< 91	91	91	< 76
	9/18/2019	S4-BU-091819	< 62	62	62	670	92	92	701
S4-CD	3/22/2019	S4-CD-032219	< 62	62	62	< 91	91	91	< 77
	9/18/2019	S4-CD-091819	< 62	62	62	< 92	92	92	< 77
S4-CU	3/22/2019	S4-CU-032219	93	62	62	< 91	91	91	139
	9/18/2019	S4-CU-091819	< 62	62	62	< 91	91	91	< 77
Locations North of the HCC Barrier Wall: NWTPH-Dx results compared to the RL = 477 µg/l									
GW-1	3/19/2019	GW-1-031919	< 62	62	62	< 91	91	91	< 77
	6/18/2019	GW-1-061819	< 62	62	62	< 91	91	91	< 77
	9/19/2019	GW-1-091919	< 62	62	62	< 91	91	91	< 77
	12/18/2019	GW-1-121819	< 62	62	62	< 92	92	92	< 77
GW-2	3/19/2019	GW-2-031919	< 62	62	62	110	91	91	141
	6/18/2019	GW-2-061819	< 63	63	63	< 93	93	93	< 78
	9/19/2019	GW-2-091919	< 62	62	62	< 91	91	91	< 77
	12/18/2019	GW-2-121819	< 62	62	62	< 91	91	91	< 77

Table 6
2019 Total Petroleum Hydrocarbon Concentrations in Groundwater
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Well	Date	Sample Identification	DRO (µg/l) ¹			ORO (µg/l) ¹			Calculated NWTPH-Dx ² (µg/l)
			Result	MDL	MRL	Result	MDL	MRL	
GW-3	3/20/2019	GW-3-032019	< 61	61	61	< 91	91	91	< 76
			< 61 ³	61	61	< 91 ³	91	91	< 76 ³
	6/18/2019	GW-3-061819	180	63	63	150	92	92	330
			< 63 ³	63	63	< 92 ³	92	92	< 78 ³
9/18/2019	GW-3-091819	< 62	62	62	150	91	91	181	
		< 62 ³	62	62	< 91 ³	91	91	< 77 ³	
12/19/2019	GW-3-121919	91	62	62	< 92	92	92	137	
		< 62 ³	62	62	< 92 ³	92	92	< 77 ³	
GW-4	3/21/2019	GW-4-032119	< 62	62	62	< 91	91	91	< 77
	6/19/2019	GW-4-061919	< 62	62	62	< 91	91	91	< 77
	9/17/2019	GW-4-091719	< 62	62	62	< 91	91	91	< 77
	12/18/2019	GW-4-121819	< 62	62	62	< 91	91	91	< 77
EW-1	3/19/2019	EW-1-031919	< 62	62	62	< 92	92	92	< 77
	6/18/2019	EW-1-061819	< 62	62	62	< 91	91	91	< 77
	9/19/2019	EW-1-091919	< 62	62	62	< 91	91	91	< 77
	12/18/2019	EW-1-121819	< 63	63	63	< 93	93	93	< 78
EW-2A	3/21/2019	EW-2A-032119	< 62	62	62	< 91	91	91	< 77
	6/19/2019	EW-2A-061919	< 62	62	62	< 92	92	92	< 77
	9/17/2019	EW-2A-091719	< 61	61	61	< 91	91	91	< 76
	12/17/2019	EW-2A-121719	< 63	63	63	< 94	94	94	< 79
5-W-43	3/19/2019	5-W-43-031919	< 62	62	62	< 92	92	92	< 77
	6/18/2019	S-W-43-061819	< 62	62	62	< 91	91	91	< 77
	9/19/2019	5-W-43-091919	< 62	62	62	< 92	92	92	< 77
	12/18/2019	5-W-43-121819	< 62	62	62	< 92	92	92	< 77
2A-W-40	3/20/2019	2A-W-40-032019	< 62	62	62	< 91	91	91	< 77
	6/18/2019	Not Sampled							
	9/17/2019	2A-W-40-091719	< 61	61	61	< 90	90	90	< 76
	12/17/2019	2A-W-40-121719	< 63	63	63	< 94	94	94	< 79

Table 6
2019 Total Petroleum Hydrocarbon Concentrations in Groundwater
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Well	Date	Sample Identification	DRO (µg/l) ¹			ORO (µg/l) ¹			Calculated NWTPH-Dx ² (µg/l)
			Result	MDL	MRL	Result	MDL	MRL	
2A-W-41	3/20/2019	2A-W-41-032019	430	62	62	260	91	91	690
			84 ³	62	62	< 91 ³	91	91	130 ³
	6/18/2019	2A-W-41-061819	280	62	62	230	92	92	510
			< 62 ³	62	62	< 92 ³	92	92	< 77 ³
9/18/2019	2A-W-41-091819	< 61	61	61	230	91	91	261	
		85 ³	61	61	< 91 ³	91	91	131 ³	
12/17/2019	2A-W-41-121719	310	62	62	280	92	92	590	
		98 ³	62	62	< 92 ³	92	92	144 ³	
1B-W-23	3/20/2019	1B-W-23-032019	< 62	62	62	< 92	92	92	< 77
	6/18/2019	1B-W-23-061819	< 63	63	63	< 93	93	93	< 78
	9/18/2019	1B-W-23-091819	< 61	61	61	120	91	91	151
	12/17/2019	1B-W-23-121719	< 64	64	64	< 95	95	95	< 80
2A-W-42	3/21/2019	2A-W-42-032119	120	62	62	110	91	91	230
	6/18/2019	2A-W-42-061819	160	62	62	160	91	91	320
	9/18/2019	2A-W-42-091819	< 62	62	62	110	91	91	141
	12/18/2019	2A-W-42-121819	150	62	62	130	91	91	280
Former Air Sparge Area Monitoring Wells: NWTPH-Dx results compared to the RL = 477 µg/l									
1B-W-3	3/21/2019	1B-W-3-032119	< 62	62	62	< 91	91	91	< 77
	6/19/2019	1B-W-3-161919	< 62	62	62	< 92	92	92	< 77
	9/18/2019	1B-W-3-091819	< 62	62	62	< 91	91	91	< 77
	12/18/2019	1B-W-3-121819	< 61	61	61	< 91	91	91	< 76
1C-W-7	3/21/2019	1C-W-7-032119	96	62	62	100	91	91	196
	6/19/2019	1C-W-7-061919	74	62	62	100	91	91	174
	9/17/2019	1C-W-7-091719	< 61	61	61	< 91	91	91	< 76
	12/18/2019	1C-W-7-121819	120	61	61	140	91	91	260
1C-W-8	3/21/2019	1C-W-8-032119	< 61	61	61	< 91	91	91	< 76
	6/19/2019	1C-W-8-061919	< 62	62	62	< 92	92	92	< 77
	9/17/2019	1C-W-8-091719	< 61	61	61	< 91	91	91	< 76
	12/18/2019	1C-W-8-121819	< 62	62	62	< 91	91	91	< 77

Table 6
2019 Total Petroleum Hydrocarbon Concentrations in Groundwater
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Well	Date	Sample Identification	DRO (µg/l) ¹			ORO (µg/l) ¹			Calculated NWTPH-Dx ² (µg/l)
			Result	MDL	MRL	Result	MDL	MRL	
Former Maloney Creek Zone Monitoring Wells (within Railyard): No target NWTPH-Dx concentration									
MW-3	3/21/2019	MW-3-032119	720	62	62	1,900	92	92	2,620
	6/19/2019	MW-3-061919	330	62	62	740	91	91	1,070
	9/18/2019	Well Dry							
	12/19/2019	MW-3-121919	770	62	62	1,800	92	92	2,570
MW-4	3/21/2019	MW-4-032119	120	62	62	290	91	91	410
	6/19/2019	MW-4-061919	63	62	62	< 91	91	91	109
	9/18/2019	MW-4-091819	< 62	62	62	110	92	92	141
	12/19/2019	MW-4-121919	160	62	62	440	91	91	600
2A-W-9	3/21/2019	2A-W-9-032119	240	62	62	190	92	92	430
	6/19/2019	2A-W-9-061919	100	62	62	120	91	91	220
	9/18/2019	2A-W-9-091819	< 62	62	62	130	91	91	161
	12/18/2019	2A-W-9-121819	180	61	61	< 91	91	91	226
2A-W-10	3/21/2019	2A-W-10-032119	120	62	62	320	91	91	440
	6/19/2019	2A-W-10-061919	< 62	62	62	190	91	91	221
	9/18/2019	2A-W-10-091819	< 61	61	61	98	91	91	129
	12/18/2019	2A-W-10-121819	140	62	62	410	91	91	550
2B-W-4	3/21/2019	2B-W-4-032119	< 62	62	62	< 91	91	91	< 77
	6/19/2019	2B-W-4-061919	< 62	62	62	< 91	91	91	< 77
	9/18/2019	2B-W-4-091819	< 63	63	63	< 93	93	93	< 78
	12/19/2019	2B-W-4-121919	< 62	62	62	< 92	92	92	< 77
Site-Wide Monitoring Wells									
Locations North of the Railyard: NWTPH-Dx results compared to the RL = 477 µg/l									
1A-W-4	3/20/2019	1A-W-4-032019	< 61	61	61	< 91	91	91	< 76
	9/18/2019	1A-W-4-091819	< 62	62	62	< 91	91	91	< 77
1B-W-2	3/21/2019	1B-W-2-032119	< 63	63	63	< 93	93	93	< 78
	9/18/2019	1B-W-2-091819	< 62	62	62	95	91	91	126

Table 6
2019 Total Petroleum Hydrocarbon Concentrations in Groundwater
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067

Well	Date	Sample Identification	DRO (µg/l) ¹			ORO (µg/l) ¹			Calculated NWTPH-Dx ² (µg/l)
			Result	MDL	MRL	Result	MDL	MRL	
1C-W-1	3/21/2019	1C-W-1-032119	< 62	62	62	< 92	92	92	< 77
	6/19/2019	1C-W-1-061919	< 62	62	62	< 91	91	91	< 77
	9/17/2019	1C-W-1-091719	< 61	61	61	< 91	91	91	< 76
	12/18/2019	1C-W-1-121819	< 63	63	63	< 92	92	92	< 78
1C-W-3	3/21/2019	1C-W-3-032119	< 62	62	62	< 92	92	92	< 77
	9/17/2019	1C-W-3-091719	< 61	61	61	< 91	91	91	< 76
1C-W-4	3/21/2019	1C-W-4-032119	95	62	62	< 91	91	91	141
	9/17/2019	1C-W-4-091719	< 61	61	61	< 91	91	91	< 76
MW-38R	3/20/2019	MW-38R-032019	< 62	62	62	< 92	92	92	< 77
	9/17/2019	MW-38R-091719	< 62	62	62	120	91	91	151
Locations Within the Railyard: No target NWTPH-Dx concentration									
MW-16	3/21/2019	MW-16-032119	< 62	62	62	< 91	91	91	< 77
	9/18/2019	MW-16-091819	< 62	62	62	< 92	92	92	< 77

NOTES:

Results in **bold** denote concentrations exceeding the 208 µg/l NWTPH-Dx cleanup level (Levee Zone wells) or the 477 µg/l NWTPH-Dx remediation level (wells outside the Levee Zone and between the BNSF railyard and the Skykomish River).

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

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.

⁴Sample collected for follow-up analysis due to elevated NWTPH-Dx concentration reported in the September 2018 sample collected from well S2-BD.

CUL = Cleanup Level

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

RL = Remediation Level

**APPENDIX A
LABORATORY ANALYTICAL REPORTS
(PROVIDED ON COMPACT DISC IN PRINTED REPORT)**

2019 SITE-WIDE GROUNDWATER MONITORING REPORT
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Consent Decree No. 07-2-33672-9 SEA

Farallon PN: 683-067

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: 580-84844-1

Client Project/Site: BNSF Skykomish Monthly

For:

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

Attn: Peter Kingston



Authorized for release by:
3/28/2019 12:14:32 PM

Kristine Allen, Manager of Project Management
(253)248-4970

kristine.allen@testamericainc.com

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www.testamericainc.com

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 Monthly

TestAmerica Job ID: 580-84844-1

Job ID: 580-84844-1

Laboratory: TestAmerica Seattle

Narrative

**Job Narrative
580-84844-1**

Comments

No additional comments.

Receipt

The samples were received on 3/22/2019 2:53 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 11 coolers at receipt time were 0.3° C, 0.6° C, 1.0° C, 1.0° C, 1.4° C, 1.4° C, 1.5° C, 1.5° C, 2.0° C, 2.6° C and 2.9° C.

GC Semi VOA

Method(s) 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: WG-WV-031919 (580-84844-5), S2-BU-031919 (580-84844-6) and WG-EV-031919 (580-84844-12).

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 Skykomish Monthly

TestAmerica Job ID: 580-84844-1

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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

TestAmerica Job ID: 580-84844-1

Client Sample ID: 5-W-43-031919

Lab Sample ID: 580-84844-1

Date Collected: 03/19/19 17:07

Matrix: Water

Date Received: 03/25/19 14:53

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		03/26/19 10:36	03/26/19 20:05	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		03/26/19 10:36	03/26/19 20:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	97		50 - 150				03/26/19 10:36	03/26/19 20:05	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

TestAmerica Job ID: 580-84844-1

Client Sample ID: EW-1-031919

Lab Sample ID: 580-84844-2

Date Collected: 03/19/19 16:36

Matrix: Water

Date Received: 03/25/19 14:53

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		03/26/19 10:36	03/26/19 20:25	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		03/26/19 10:36	03/26/19 20:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	100		50 - 150				03/26/19 10:36	03/26/19 20:25	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

TestAmerica Job ID: 580-84844-1

Client Sample ID: PZ-8-031919

Lab Sample ID: 580-84844-3

Date Collected: 03/19/19 15:45

Matrix: Water

Date Received: 03/25/19 14:53

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		03/26/19 10:36	03/26/19 20:46	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		03/26/19 10:36	03/26/19 20:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	89		50 - 150				03/26/19 10:36	03/26/19 20:46	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

TestAmerica Job ID: 580-84844-1

Client Sample ID: FGW-WV-031919

Lab Sample ID: 580-84844-4

Date Collected: 03/19/19 15:00

Matrix: Water

Date Received: 03/25/19 14:53

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		03/26/19 10:36	03/26/19 21:06	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		03/26/19 10:36	03/26/19 21:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	103		50 - 150				03/26/19 10:36	03/26/19 21:06	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

TestAmerica Job ID: 580-84844-1

Client Sample ID: WG-WV-031919

Lab Sample ID: 580-84844-5

Date Collected: 03/19/19 14:20

Matrix: Water

Date Received: 03/25/19 14:53

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.19		0.062	0.062	mg/L		03/26/19 10:36	03/26/19 21:26	1
Motor Oil (>C24-C36)	0.13		0.091	0.091	mg/L		03/26/19 10:36	03/26/19 21:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	92		50 - 150				03/26/19 10:36	03/26/19 21:26	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

TestAmerica Job ID: 580-84844-1

Client Sample ID: S2-BU-031919

Lab Sample ID: 580-84844-6

Date Collected: 03/19/19 11:55

Matrix: Water

Date Received: 03/25/19 14:53

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.25		0.062	0.062	mg/L		03/26/19 10:36	03/26/19 21:46	1
Motor Oil (>C24-C36)	0.12		0.091	0.091	mg/L		03/26/19 10:36	03/26/19 21:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	84		50 - 150				03/26/19 10:36	03/26/19 21:46	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

TestAmerica Job ID: 580-84844-1

Client Sample ID: S2-AD-031919

Lab Sample ID: 580-84844-7

Date Collected: 03/19/19 11:40

Matrix: Water

Date Received: 03/25/19 14:53

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		03/27/19 07:11	03/27/19 18:23	1
Motor Oil (>C24-C36)	ND		0.093	0.093	mg/L		03/27/19 07:11	03/27/19 18:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	88		50 - 150				03/27/19 07:11	03/27/19 18:23	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

TestAmerica Job ID: 580-84844-1

Client Sample ID: S2-AU-031919

Lab Sample ID: 580-84844-8

Date Collected: 03/19/19 11:18

Matrix: Water

Date Received: 03/25/19 14:53

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		03/26/19 10:36	03/26/19 22:46	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		03/26/19 10:36	03/26/19 22:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	97		50 - 150				03/26/19 10:36	03/26/19 22:46	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

TestAmerica Job ID: 580-84844-1

Client Sample ID: GW-1-031919

Lab Sample ID: 580-84844-9

Date Collected: 03/19/19 17:20

Matrix: Water

Date Received: 03/25/19 14:53

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		03/26/19 10:36	03/26/19 23:06	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/26/19 10:36	03/26/19 23:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	99		50 - 150				03/26/19 10:36	03/26/19 23:06	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

TestAmerica Job ID: 580-84844-1

Client Sample ID: PZ-75-031919

Lab Sample ID: 580-84844-10

Date Collected: 03/19/19 16:11

Matrix: Water

Date Received: 03/25/19 14:53

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		03/26/19 10:36	03/26/19 23:26	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/26/19 10:36	03/26/19 23:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	93		50 - 150				03/26/19 10:36	03/26/19 23:26	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

TestAmerica Job ID: 580-84844-1

Client Sample ID: FWG-EV-031919

Lab Sample ID: 580-84844-11

Date Collected: 03/19/19 14:38

Matrix: Water

Date Received: 03/25/19 14:53

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		03/26/19 10:36	03/26/19 23:47	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/26/19 10:36	03/26/19 23:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	100		50 - 150				03/26/19 10:36	03/26/19 23:47	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

TestAmerica Job ID: 580-84844-1

Client Sample ID: WG-EV-031919

Lab Sample ID: 580-84844-12

Date Collected: 03/19/19 14:25

Matrix: Water

Date Received: 03/25/19 14:53

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	0.062	mg/L		03/26/19 10:36	03/27/19 00:07	1
Motor Oil (>C24-C36)	0.28		0.092	0.092	mg/L		03/26/19 10:36	03/27/19 00:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	89		50 - 150				03/26/19 10:36	03/27/19 00:07	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

TestAmerica Job ID: 580-84844-1

Client Sample ID: S2-BD-031919

Lab Sample ID: 580-84844-13

Date Collected: 03/19/19 12:18

Matrix: Water

Date Received: 03/25/19 14:53

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		03/26/19 10:36	03/27/19 00:27	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/26/19 10:36	03/27/19 00:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	95		50 - 150				03/26/19 10:36	03/27/19 00:27	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

TestAmerica Job ID: 580-84844-1

Client Sample ID: GW-2-031919

Lab Sample ID: 580-84844-14

Date Collected: 03/19/19 17:54

Matrix: Water

Date Received: 03/25/19 14:53

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		03/26/19 10:36	03/27/19 00:47	1
Motor Oil (>C24-C36)	0.11		0.091	0.091	mg/L		03/26/19 10:36	03/27/19 00:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	107		50 - 150				03/26/19 10:36	03/27/19 00:47	1



QC Sample Results

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Monthly

TestAmerica Job ID: 580-84844-1

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

Lab Sample ID: MB 580-297119/1-A

Matrix: Water

Analysis Batch: 297203

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 297119

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		03/26/19 10:36	03/26/19 19:05	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		03/26/19 10:36	03/26/19 19:05	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	106		50 - 150	03/26/19 10:36	03/26/19 19:05	1

Lab Sample ID: LCS 580-297119/2-A

Matrix: Water

Analysis Batch: 297203

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 297119

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	0.500	0.425		mg/L		85	50 - 120
Motor Oil (>C24-C36)	0.500	0.468		mg/L		94	64 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	91		50 - 150

Lab Sample ID: LCSD 580-297119/3-A

Matrix: Water

Analysis Batch: 297203

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 297119

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	0.500	0.396		mg/L		79	50 - 120	7	26
Motor Oil (>C24-C36)	0.500	0.463		mg/L		93	64 - 120	1	24

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	82		50 - 150

Lab Sample ID: MB 580-297217/1-A

Matrix: Water

Analysis Batch: 297262

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 297217

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		03/27/19 07:11	03/27/19 17:16	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		03/27/19 07:11	03/27/19 17:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	103		50 - 150	03/27/19 07:11	03/27/19 17:16	1

Lab Sample ID: LCS 580-297217/2-A

Matrix: Water

Analysis Batch: 297262

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 297217

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	0.500	0.410		mg/L		82	50 - 120
Motor Oil (>C24-C36)	0.500	0.520		mg/L		104	64 - 120

TestAmerica Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

TestAmerica Job ID: 580-84844-1

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

Lab Sample ID: LCS 580-297217/2-A

Matrix: Water

Analysis Batch: 297262

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 297217

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
<i>o-Terphenyl</i>	94	LCS	50 - 150

Lab Sample ID: LCSD 580-297217/3-A

Matrix: Water

Analysis Batch: 297262

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 297217

<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>%Rec. Limits</i>	<i>RPD</i>	<i>Limit</i>
#2 Diesel (C10-C24)	0.500	0.458		mg/L	-	92	50 - 120	11	26
Motor Oil (>C24-C36)	0.500	0.530		mg/L	-	106	64 - 120	2	24

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
<i>o-Terphenyl</i>	93	LCSD	50 - 150

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

TestAmerica Job ID: 580-84844-1

Client Sample ID: 5-W-43-031919

Lab Sample ID: 580-84844-1

Date Collected: 03/19/19 17:07

Matrix: Water

Date Received: 03/25/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297119	03/26/19 10:36	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297203	03/26/19 20:05	JCM	TAL SEA

Client Sample ID: EW-1-031919

Lab Sample ID: 580-84844-2

Date Collected: 03/19/19 16:36

Matrix: Water

Date Received: 03/25/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297119	03/26/19 10:36	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297203	03/26/19 20:25	JCM	TAL SEA

Client Sample ID: PZ-8-031919

Lab Sample ID: 580-84844-3

Date Collected: 03/19/19 15:45

Matrix: Water

Date Received: 03/25/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297119	03/26/19 10:36	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297203	03/26/19 20:46	JCM	TAL SEA

Client Sample ID: FGW-WV-031919

Lab Sample ID: 580-84844-4

Date Collected: 03/19/19 15:00

Matrix: Water

Date Received: 03/25/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297119	03/26/19 10:36	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297203	03/26/19 21:06	JCM	TAL SEA

Client Sample ID: WG-WV-031919

Lab Sample ID: 580-84844-5

Date Collected: 03/19/19 14:20

Matrix: Water

Date Received: 03/25/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297119	03/26/19 10:36	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297203	03/26/19 21:26	JCM	TAL SEA

Client Sample ID: S2-BU-031919

Lab Sample ID: 580-84844-6

Date Collected: 03/19/19 11:55

Matrix: Water

Date Received: 03/25/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297119	03/26/19 10:36	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297203	03/26/19 21:46	JCM	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

TestAmerica Job ID: 580-84844-1

Client Sample ID: S2-AD-031919

Lab Sample ID: 580-84844-7

Date Collected: 03/19/19 11:40

Matrix: Water

Date Received: 03/25/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297217	03/27/19 07:11	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297262	03/27/19 18:23	W1T	TAL SEA

Client Sample ID: S2-AU-031919

Lab Sample ID: 580-84844-8

Date Collected: 03/19/19 11:18

Matrix: Water

Date Received: 03/25/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297119	03/26/19 10:36	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297203	03/26/19 22:46	JCM	TAL SEA

Client Sample ID: GW-1-031919

Lab Sample ID: 580-84844-9

Date Collected: 03/19/19 17:20

Matrix: Water

Date Received: 03/25/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297119	03/26/19 10:36	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297203	03/26/19 23:06	JCM	TAL SEA

Client Sample ID: PZ-75-031919

Lab Sample ID: 580-84844-10

Date Collected: 03/19/19 16:11

Matrix: Water

Date Received: 03/25/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297119	03/26/19 10:36	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297203	03/26/19 23:26	JCM	TAL SEA

Client Sample ID: FWG-EV-031919

Lab Sample ID: 580-84844-11

Date Collected: 03/19/19 14:38

Matrix: Water

Date Received: 03/25/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297119	03/26/19 10:36	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297203	03/26/19 23:47	JCM	TAL SEA

Client Sample ID: WG-EV-031919

Lab Sample ID: 580-84844-12

Date Collected: 03/19/19 14:25

Matrix: Water

Date Received: 03/25/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297119	03/26/19 10:36	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297203	03/27/19 00:07	JCM	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Monthly

TestAmerica Job ID: 580-84844-1

Client Sample ID: S2-BD-031919

Lab Sample ID: 580-84844-13

Date Collected: 03/19/19 12:18

Matrix: Water

Date Received: 03/25/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297119	03/26/19 10:36	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297203	03/27/19 00:27	JCM	TAL SEA

Client Sample ID: GW-2-031919

Lab Sample ID: 580-84844-14

Date Collected: 03/19/19 17:54

Matrix: Water

Date Received: 03/25/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297119	03/26/19 10:36	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297203	03/27/19 00:47	JCM	TAL SEA

Laboratory References:

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

Accreditation/Certification Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Monthly

TestAmerica Job ID: 580-84844-1

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	17-024	01-19-20
ANAB	DoD / DOE		L2236	01-19-22
ANAB	ISO/IEC 17025		L2236	01-19-22
California	State Program	9	2901	11-05-19
Montana (UST)	State Program	8	N/A	04-30-20
Nevada	State Program	9	WA000502019-1	07-31-19
Oregon	NELAP	10	WA100007	11-05-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-14-00126	02-10-20
Washington	State Program	10	C553	02-17-20

Sample Summary


Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Monthly

TestAmerica Job ID: 580-84844-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-84844-1	5-W-43-031919	Water	03/19/19 17:07	03/25/19 14:53
580-84844-2	EW-1-031919	Water	03/19/19 16:36	03/25/19 14:53
580-84844-3	PZ-8-031919	Water	03/19/19 15:45	03/25/19 14:53
580-84844-4	FGW-WV-031919	Water	03/19/19 15:00	03/25/19 14:53
580-84844-5	WG-WV-031919	Water	03/19/19 14:20	03/25/19 14:53
580-84844-6	S2-BU-031919	Water	03/19/19 11:55	03/25/19 14:53
580-84844-7	S2-AD-031919	Water	03/19/19 11:40	03/25/19 14:53
580-84844-8	S2-AU-031919	Water	03/19/19 11:18	03/25/19 14:53
580-84844-9	GW-1-031919	Water	03/19/19 17:20	03/25/19 14:53
580-84844-10	PZ-75-031919	Water	03/19/19 16:11	03/25/19 14:53
580-84844-11	FWG-EV-031919	Water	03/19/19 14:38	03/25/19 14:53
580-84844-12	WG-EV-031919	Water	03/19/19 14:25	03/25/19 14:53
580-84844-13	S2-BD-031919	Water	03/19/19 12:18	03/25/19 14:53
580-84844-14	GW-2-031919	Water	03/19/19 17:54	03/25/19 14:53

84844

10 of 1

 <p>CHAIN OF CUSTODY</p>	LABORATORY INFORMATION Laboratory: _____ Project Manager: _____ Address: _____ Phone: _____ City/State/ZIP: _____ Fax: _____						LAB WORK ORDER: _____					
	BNSF PROJECT INFORMATION BNSF Project Number: 683-067 Project State of Origin: _____ BNSF Project Name: BNSF - Skykomish - Monthly Project City: _____ BNSF Contact: _____ BNSF Work Order No.: _____						SHIPMENT INFORMATION Shipment Method: _____ Tracking Number: _____					
	CONSULTANT INFORMATION Company: Farallon Consulting Project Manager: Pete Kingston Address: 975 5th AVE NW City/State/ZIP: Issaquah, WA Email: pkingston@farallonconsulting.com Phone: _____ Fax: _____						Project Number: 683-067					
TURNAROUND TIME <input type="checkbox"/> 1-day Rush <input type="checkbox"/> 2-day Rush <input checked="" type="checkbox"/> 3-day Rush <input type="checkbox"/> 5- to 8-day Rush <input type="checkbox"/> Standard 10-Day <input type="checkbox"/> Other _____		DELIVERABLES <input checked="" 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? _____		METHODS FOR ANALYSIS (Grid for analysis methods)						COMMENTS (Comments field)		
SAMPLE INFORMATION												
Sample Identification		Containers	Sample Collection			Filtered Y/N	Type (Comp/Grab)	Matrix	NW TPH - DX (Vertical text)		LAB USE	
			Date	Time	Sampler							
1 S-W-43-031919		2	3/19/19	1707	CB	N	G	Water	X			
2 EW-1-031919				1636	CB				X			
3 PZ-8-031919				1545	CB				X			
4 FGW-WV-031919				1500	CB				X			
5 WG-WV-031919				1420	CB				X			
6 S2-BU-031919				1155	CB				X			
7 S2-AB-031919				1140	CB				X			
8 S2-AU-031919				1118	CB				X			
9 GW-1-031919				1720	GP				X			
10 PZ-7S-031919				1611	GP				X			
11 FWG-EV-031919				1438	GP				X			
12 WG-EV-031919				1425	GP				X			
13 S2-BD-031919				1218	GP				X			
14 GW-2-031919				1754	GP				X			
15												
Relinquished By: <i>[Signature]</i> Date/Time: 3/22/19		Received By: <i>[Signature]</i> Date/Time: 3/22/19 @ 11:55		Comments and Special Analytical Requirements: _____								
Relinquished By: <i>[Signature]</i> Date/Time: 3/22/19 @ 14:53		Received By: <i>[Signature]</i> Date/Time: 3/22/19 @ 14:53										
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)

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-84844-1

Login Number: 84844

List Source: TestAmerica Seattle

List Number: 1

Creator: Luna, Francisco J

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.	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	
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

TestAmerica Laboratories, Inc.

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

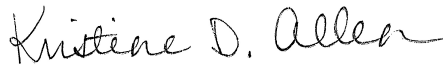
TestAmerica Job ID: 580-84853-1

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:
4/2/2019 4:26:53 PM

Kristine Allen, Manager of Project Management
(253)248-4970
kristine.allen@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



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www.testamericainc.com

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

TestAmerica Job ID: 580-84853-1

Job ID: 580-84853-1

Laboratory: TestAmerica Seattle

Narrative

Job Narrative 580-84853-1

Comments

No additional comments.

Receipt

The samples were received on 3/22/2019 2:53 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 11 coolers at receipt time were 0.1° C, 0.3° C, 1.0° C, 1.0° C, 1.4° C, 1.4° C, 1.5° C, 1.5° C, 2.0° C, 2.6° C and 2.9° C.

Receipt Exceptions

The samples were submitted with the following errors that were confirmed by the client. The client submitted a revised COC.

The following sample was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC). The client instructed the lab to add to the end of the sample event and add Dx analysis. MW-30-032119 (580-84853-53)

Sample 2B-W-4-032119 (580-84853-22) was listed twice on the COC however we only received one set of containers. The second occurrence was crossed off the COC.

Several sample dates on page 2 of the COC do not match the container nor the sample ID format. The client confirmed that all of these samples in question were collected on 3/21/19 as the label states. The COC was revised to include the correct sample date.

Sample S4-CU-032219 1009 is missing from the container submission however we have received 2 sets of containers for S4-BU-032219. There was an underlying label on these containers that has this missing S4-CU-032219 (580-84853-40) sample ID as well as it's correct collection time. This container was labeled as S4-CU-032219.

GC Semi VOA

Method(s) NWTPH-Dx: The continuing calibration verification (CCV) associated with batch 580-297262 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 following samples are impacted: 1C-W-1-032119 (580-84853-29), 1C-W-3-032119 (580-84853-34), 1B-W-3-032119 (580-84853-35), S1-BD-032119 (580-84853-36), S1-AU-032119 (580-84853-37), S1-BU-032119 (580-84853-38), S1-AD-032119 (580-84853-39), S4-CD-032219 (580-84853-41), S4-BD-032219 (580-84853-42), S4-BU-032219 (580-84853-43), S3-AU-032219 (580-84853-44), S3-BU-032219 (580-84853-45), S4-AD-032219 (580-84853-46), S3-CU-032219 (580-84853-47) and (CCV 580-297262/19).

Method(s) NWTPH-Dx: The following samples were reanalyzed for motor oil due to a failing motor oil CCV in the initial analysis. 1C-W-8-032119 (580-84853-30), MW-16-032119 (580-84853-31), 1B-W-2-032119 (580-84853-32), 1C-W-4-032119 (580-84853-33) and S4-CU-032219 (580-84853-40)

Method(s) 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: 2A-W-41-032019 (580-84853-9) and MW-30-032119 (580-84853-53).

Method(s) 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: 2A-W-410-032019 (580-84853-10), 5-W-51-032019 (580-84853-12), 5-W-56-032019 (580-84853-13), 5-W-560-032019 (580-84853-14), 5-W-55-032019 (580-84853-15), 2A-W-10-032119 (580-84853-20), MW-4-032119 (580-84853-21) and 2A-W-9-032119 (580-84853-25).

Method(s) 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: 2A-W-10-032119 (580-84853-20), MW-4-032119 (580-84853-21), 2A-W-9-032119 (580-84853-25), 1C-W-7-032119 (580-84853-26), 2A-W-42-032119 (580-84853-27) and MW-3-032119 (580-84853-28).

Method(s) NWTPH-Dx: The continuing calibration verification (CCV) standard associated with batch 580-297186 recovered outside %Drift acceptance criteria for o-Terphenyl surrogate. The %Recovery is within acceptance criteria for the surrogate in the CCV and associated

Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Job ID: 580-84853-1 (Continued)

Laboratory: TestAmerica Seattle (Continued)

samples; therefore, the data are qualified and reported. (CCV 580-297186/14) and (CCV 580-297186/25)

Method(s) NWTPH-Dx: The continuing calibration verification (CCV) associated with batch 580-297186 recovered above the upper control limit for #2 Diesel (C10-C24). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: MW-38R-032019 (580-84853-16), MW-380R-032019 (580-84853-17), 5-W-14-032019 (580-84853-18), 5-W-16-032019 (580-84853-19), 2B-W-4-032119 (580-84853-22), GW-4-032119 (580-84853-23), EW-2A-032119 (580-84853-24) and (CCV 580-297186/25).

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 Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: 5-W-18-032019

Lab Sample ID: 580-84853-1

Date Collected: 03/20/19 11:04

Matrix: Water

Date Received: 03/22/19 14:53

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		03/26/19 10:36	03/27/19 01:07	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/26/19 10:36	03/27/19 01:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	89		50 - 150				03/26/19 10:36	03/27/19 01:07	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: 5-W-19-032019

Lab Sample ID: 580-84853-2

Date Collected: 03/20/19 11:11

Matrix: Water

Date Received: 03/22/19 14:53

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		03/26/19 10:36	03/27/19 01:27	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		03/26/19 10:36	03/27/19 01:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	96		50 - 150				03/26/19 10:36	03/27/19 01:27	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: 5-W-17-032019

Lab Sample ID: 580-84853-3

Date Collected: 03/20/19 12:14

Matrix: Water

Date Received: 03/22/19 14:53

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		03/26/19 10:36	03/27/19 01:47	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/26/19 10:36	03/27/19 01:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	99		50 - 150				03/26/19 10:36	03/27/19 01:47	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: 5-W-170-032019

Lab Sample ID: 580-84853-4

Date Collected: 03/20/19 12:16

Matrix: Water

Date Received: 03/22/19 14:53

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		03/26/19 10:36	03/27/19 02:27	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		03/26/19 10:36	03/27/19 02:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	99		50 - 150				03/26/19 10:36	03/27/19 02:27	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: 1A-W-4-032019

Lab Sample ID: 580-84853-5

Date Collected: 03/20/19 16:30

Matrix: Water

Date Received: 03/22/19 14:53

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	0.061	mg/L		03/26/19 10:36	03/27/19 02:47	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/26/19 10:36	03/27/19 02:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	97		50 - 150				03/26/19 10:36	03/27/19 02:47	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: GW-3-032019

Lab Sample ID: 580-84853-6

Date Collected: 03/20/19 14:35

Matrix: Water

Date Received: 03/22/19 14:53

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	0.061	mg/L		03/27/19 12:46	03/31/19 23:04	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/19 12:46	03/31/19 23:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	101		50 - 150				03/27/19 12:46	03/31/19 23:04	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		0.061	0.061	mg/L		03/27/19 12:46	03/31/19 16:22	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/19 12:46	03/31/19 16:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	113		50 - 150				03/27/19 12:46	03/31/19 16:22	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: GW-30-032019

Lab Sample ID: 580-84853-7

Date Collected: 03/20/19 14:45

Matrix: Water

Date Received: 03/22/19 14:53

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	0.061	mg/L		03/26/19 10:36	03/27/19 03:08	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/26/19 10:36	03/27/19 03:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	88		50 - 150				03/26/19 10:36	03/27/19 03:08	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: 1B-W-23-032019

Lab Sample ID: 580-84853-8

Date Collected: 03/20/19 14:30

Matrix: Water

Date Received: 03/22/19 14:53

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		03/26/19 12:18	03/30/19 12:00	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		03/26/19 12:18	03/30/19 12:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	104		50 - 150				03/26/19 12:18	03/30/19 12:00	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: 2A-W-41-032019

Lab Sample ID: 580-84853-9

Date Collected: 03/20/19 15:55

Matrix: Water

Date Received: 03/22/19 14:53

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	0.062	mg/L		03/27/19 12:46	03/31/19 23:24	1
Motor Oil (>C24-C36)	0.26		0.091	0.091	mg/L		03/27/19 12:46	03/31/19 23:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	97		50 - 150				03/27/19 12:46	03/31/19 23:24	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)	0.084		0.062	0.062	mg/L		03/27/19 12:46	03/31/19 16:42	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/19 12:46	03/31/19 16:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	115		50 - 150				03/27/19 12:46	03/31/19 16:42	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: 2A-W-410-032019

Lab Sample ID: 580-84853-10

Date Collected: 03/20/19 16:20

Matrix: Water

Date Received: 03/22/19 14:53

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	0.062	mg/L		03/26/19 12:18	03/30/19 12:21	1
Motor Oil (>C24-C36)	0.14		0.092	0.092	mg/L		03/26/19 12:18	03/30/19 12:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	93		50 - 150				03/26/19 12:18	03/30/19 12:21	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: 2A-W-40-032019

Lab Sample ID: 580-84853-11

Date Collected: 03/20/19 17:55

Matrix: Water

Date Received: 03/22/19 14:53

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		03/26/19 12:18	03/30/19 12:43	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/26/19 12:18	03/30/19 12:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	103		50 - 150				03/26/19 12:18	03/30/19 12:43	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: 5-W-51-032019

Lab Sample ID: 580-84853-12

Date Collected: 03/20/19 13:54

Matrix: Water

Date Received: 03/22/19 14:53

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.49		0.062	0.062	mg/L		03/26/19 12:18	03/30/19 13:06	1
Motor Oil (>C24-C36)	0.34		0.091	0.091	mg/L		03/26/19 12:18	03/30/19 13:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	92		50 - 150				03/26/19 12:18	03/30/19 13:06	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: 5-W-56-032019

Lab Sample ID: 580-84853-13

Date Collected: 03/20/19 15:09

Matrix: Water

Date Received: 03/22/19 14:53

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.79		0.062	0.062	mg/L		03/26/19 12:18	03/30/19 13:28	1
Motor Oil (>C24-C36)	1.0		0.091	0.091	mg/L		03/26/19 12:18	03/30/19 13:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	78		50 - 150				03/26/19 12:18	03/30/19 13:28	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: 5-W-560-032019

Lab Sample ID: 580-84853-14

Date Collected: 03/20/19 15:20

Matrix: Water

Date Received: 03/22/19 14:53

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.81		0.062	0.062	mg/L		03/26/19 12:18	03/30/19 13:50	1
Motor Oil (>C24-C36)	0.98		0.091	0.091	mg/L		03/26/19 12:18	03/30/19 13:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	78		50 - 150				03/26/19 12:18	03/30/19 13:50	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: 5-W-55-032019

Lab Sample ID: 580-84853-15

Date Collected: 03/20/19 15:21

Matrix: Water

Date Received: 03/22/19 14:53

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.082		0.062	0.062	mg/L		03/26/19 12:18	03/30/19 14:12	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		03/26/19 12:18	03/30/19 14:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	109		50 - 150				03/26/19 12:18	03/30/19 14:12	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: MW-38R-032019

Lab Sample ID: 580-84853-16

Date Collected: 03/20/19 17:04

Matrix: Water

Date Received: 03/22/19 14:53

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		03/26/19 12:18	03/30/19 14:57	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		03/26/19 12:18	03/30/19 14:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	102		50 - 150				03/26/19 12:18	03/30/19 14:57	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: MW-380R-032019

Lab Sample ID: 580-84853-17

Date Collected: 03/20/19 17:02

Matrix: Water

Date Received: 03/22/19 14:53

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		03/26/19 12:18	03/30/19 15:19	1
Motor Oil (>C24-C36)	ND		0.093	0.093	mg/L		03/26/19 12:18	03/30/19 15:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	107		50 - 150				03/26/19 12:18	03/30/19 15:19	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: 5-W-14-032019

Lab Sample ID: 580-84853-18

Date Collected: 03/20/19 12:54

Matrix: Water

Date Received: 03/22/19 14:53

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		03/26/19 12:18	03/30/19 15:42	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/26/19 12:18	03/30/19 15:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	102		50 - 150				03/26/19 12:18	03/30/19 15:42	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: 5-W-16-032019

Lab Sample ID: 580-84853-19

Date Collected: 03/20/19 11:59

Matrix: Water

Date Received: 03/22/19 14:53

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		03/26/19 12:18	03/30/19 16:05	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/26/19 12:18	03/30/19 16:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	107		50 - 150				03/26/19 12:18	03/30/19 16:05	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: 2A-W-10-032119

Lab Sample ID: 580-84853-20

Date Collected: 03/21/19 09:54

Matrix: Water

Date Received: 03/22/19 14:53

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		03/26/19 12:18	04/01/19 20:03	1
Motor Oil (>C24-C36)	0.32		0.091	0.091	mg/L		03/26/19 12:18	03/30/19 16:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	111		50 - 150				03/26/19 12:18	03/30/19 16:27	1
<i>o</i> -Terphenyl	92		50 - 150				03/26/19 12:18	04/01/19 20:03	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: MW-4-032119

Lab Sample ID: 580-84853-21

Date Collected: 03/21/19 10:56

Matrix: Water

Date Received: 03/22/19 14:53

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		03/26/19 12:18	04/01/19 20:23	1
Motor Oil (>C24-C36)	0.29		0.091	0.091	mg/L		03/26/19 12:18	03/30/19 16:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	106		50 - 150				03/26/19 12:18	03/30/19 16:50	1
<i>o</i> -Terphenyl	87		50 - 150				03/26/19 12:18	04/01/19 20:23	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: 2B-W-4-032119

Lab Sample ID: 580-84853-22

Date Collected: 03/21/19 12:04

Matrix: Water

Date Received: 03/22/19 14:53

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		03/26/19 12:18	03/30/19 17:13	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/26/19 12:18	03/30/19 17:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	105		50 - 150				03/26/19 12:18	03/30/19 17:13	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: GW-4-032119

Lab Sample ID: 580-84853-23

Date Collected: 03/21/19 09:50

Matrix: Water

Date Received: 03/22/19 14:53

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		03/26/19 12:18	03/30/19 17:35	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/26/19 12:18	03/30/19 17:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	113		50 - 150				03/26/19 12:18	03/30/19 17:35	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: EW-2A-032119

Lab Sample ID: 580-84853-24

Date Collected: 03/21/19 09:50

Matrix: Water

Date Received: 03/22/19 14:53

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		03/26/19 12:18	03/30/19 17:58	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/26/19 12:18	03/30/19 17:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	111		50 - 150				03/26/19 12:18	03/30/19 17:58	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: 2A-W-9-032119

Lab Sample ID: 580-84853-25

Date Collected: 03/21/19 09:54

Matrix: Water

Date Received: 03/22/19 14:53

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		03/26/19 12:18	04/01/19 20:43	1
Motor Oil (>C24-C36)	0.19		0.092	0.092	mg/L		03/26/19 12:18	03/30/19 18:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	106		50 - 150				03/26/19 12:18	03/30/19 18:20	1
<i>o</i> -Terphenyl	101		50 - 150				03/26/19 12:18	04/01/19 20:43	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: 1C-W-7-032119

Lab Sample ID: 580-84853-26

Date Collected: 03/21/19 10:45

Matrix: Water

Date Received: 03/22/19 14:53

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		03/26/19 12:18	04/01/19 21:04	1
Motor Oil (>C24-C36)	0.10		0.091	0.091	mg/L		03/26/19 12:18	04/01/19 21:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	95		50 - 150				03/26/19 12:18	04/01/19 21:04	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: 2A-W-42-032119

Lab Sample ID: 580-84853-27

Date Collected: 03/21/19 11:05

Matrix: Water

Date Received: 03/22/19 14:53

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		03/26/19 12:18	04/01/19 21:24	1
Motor Oil (>C24-C36)	0.11		0.091	0.091	mg/L		03/26/19 12:18	04/01/19 21:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	83		50 - 150				03/26/19 12:18	04/01/19 21:24	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: MW-3-032119

Lab Sample ID: 580-84853-28

Date Collected: 03/21/19 11:21

Matrix: Water

Date Received: 03/22/19 14:53

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.72		0.062	0.062	mg/L		03/26/19 12:18	04/01/19 21:44	1
Motor Oil (>C24-C36)	1.9		0.092	0.092	mg/L		03/26/19 12:18	04/01/19 21:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	85		50 - 150				03/26/19 12:18	04/01/19 21:44	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: 1C-W-1-032119

Lab Sample ID: 580-84853-29

Date Collected: 03/21/19 12:30

Matrix: Water

Date Received: 03/22/19 14:53

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		03/27/19 07:11	03/27/19 19:07	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		03/27/19 07:11	03/27/19 19:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	109		50 - 150				03/27/19 07:11	03/27/19 19:07	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: 1C-W-8-032119

Lab Sample ID: 580-84853-30

Date Collected: 03/21/19 12:40

Matrix: Water

Date Received: 03/22/19 14:53

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	0.061	mg/L		03/27/19 07:11	03/27/19 19:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	92		50 - 150				03/27/19 07:11	03/27/19 19:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/19 07:11	03/28/19 22:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	104		50 - 150				03/27/19 07:11	03/28/19 22:33	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: MW-16-032119

Lab Sample ID: 580-84853-31

Date Collected: 03/21/19 13:00

Matrix: Water

Date Received: 03/22/19 14:53

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		03/27/19 07:11	03/27/19 19:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	100		50 - 150				03/27/19 07:11	03/27/19 19:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/19 07:11	03/28/19 22:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	117		50 - 150				03/27/19 07:11	03/28/19 22:54	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: 1B-W-2-032119

Lab Sample ID: 580-84853-32

Date Collected: 03/21/19 14:18

Matrix: Water

Date Received: 03/22/19 14:53

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		03/27/19 07:11	03/27/19 20:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	96		50 - 150				03/27/19 07:11	03/27/19 20:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil (>C24-C36)	ND		0.093	0.093	mg/L		03/27/19 07:11	03/28/19 23:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	114		50 - 150				03/27/19 07:11	03/28/19 23:14	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: 1C-W-4-032119

Lab Sample ID: 580-84853-33

Date Collected: 03/21/19 15:05

Matrix: Water

Date Received: 03/22/19 14:53

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.095		0.062	0.062	mg/L		03/27/19 07:11	03/27/19 20:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	91		50 - 150				03/27/19 07:11	03/27/19 20:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/19 07:11	03/28/19 23:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	100		50 - 150				03/27/19 07:11	03/28/19 23:34	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: 1C-W-3-032119

Lab Sample ID: 580-84853-34

Date Collected: 03/21/19 15:00

Matrix: Water

Date Received: 03/22/19 14:53

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		03/27/19 07:11	03/27/19 20:57	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		03/27/19 07:11	03/27/19 20:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	100		50 - 150				03/27/19 07:11	03/27/19 20:57	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: 1B-W-3-032119

Lab Sample ID: 580-84853-35

Date Collected: 03/21/19 15:05

Matrix: Water

Date Received: 03/22/19 14:53

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		03/27/19 07:11	03/27/19 21:19	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/19 07:11	03/27/19 21:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	94		50 - 150				03/27/19 07:11	03/27/19 21:19	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: S1-BD-032119

Lab Sample ID: 580-84853-36

Date Collected: 03/21/19 16:05

Matrix: Water

Date Received: 03/22/19 14:53

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		03/27/19 07:11	03/27/19 21:41	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		03/27/19 07:11	03/27/19 21:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	97		50 - 150				03/27/19 07:11	03/27/19 21:41	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: S1-AU-032119

Lab Sample ID: 580-84853-37

Date Collected: 03/21/19 16:10

Matrix: Water

Date Received: 03/22/19 14:53

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		03/27/19 07:11	03/27/19 22:03	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/19 07:11	03/27/19 22:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	92		50 - 150				03/27/19 07:11	03/27/19 22:03	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: S1-BU-032119

Lab Sample ID: 580-84853-38

Date Collected: 03/21/19 16:05

Matrix: Water

Date Received: 03/22/19 14:53

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		03/27/19 07:11	03/27/19 22:25	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/19 07:11	03/27/19 22:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	96		50 - 150				03/27/19 07:11	03/27/19 22:25	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: S1-AD-032119

Lab Sample ID: 580-84853-39

Date Collected: 03/21/19 16:10

Matrix: Water

Date Received: 03/22/19 14:53

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	0.064	mg/L		03/27/19 07:11	03/27/19 23:08	1
Motor Oil (>C24-C36)	ND		0.095	0.095	mg/L		03/27/19 07:11	03/27/19 23:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	91		50 - 150				03/27/19 07:11	03/27/19 23:08	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: S4-CU-032219

Lab Sample ID: 580-84853-40

Date Collected: 03/22/19 10:06

Matrix: Water

Date Received: 03/22/19 14:53

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.093		0.062	0.062	mg/L		03/27/19 07:11	03/27/19 23:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	93		50 - 150				03/27/19 07:11	03/27/19 23:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/19 07:11	03/28/19 23:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	106		50 - 150				03/27/19 07:11	03/28/19 23:54	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: S4-CD-032219

Lab Sample ID: 580-84853-41

Date Collected: 03/22/19 10:09

Matrix: Water

Date Received: 03/22/19 14:53

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		03/27/19 07:11	03/27/19 23:52	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/19 07:11	03/27/19 23:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	90		50 - 150				03/27/19 07:11	03/27/19 23:52	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: S4-BD-032219

Lab Sample ID: 580-84853-42

Date Collected: 03/22/19 09:37

Matrix: Water

Date Received: 03/22/19 14:53

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		03/27/19 07:11	03/28/19 00:14	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		03/27/19 07:11	03/28/19 00:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	92		50 - 150				03/27/19 07:11	03/28/19 00:14	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: S4-BU-032219

Lab Sample ID: 580-84853-43

Date Collected: 03/22/19 09:37

Matrix: Water

Date Received: 03/22/19 14:53

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	0.061	mg/L		03/27/19 07:11	03/28/19 00:36	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/19 07:11	03/28/19 00:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	89		50 - 150				03/27/19 07:11	03/28/19 00:36	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: S3-AU-032219

Lab Sample ID: 580-84853-44

Date Collected: 03/22/19 08:55

Matrix: Water

Date Received: 03/22/19 14:53

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		03/27/19 07:11	03/28/19 00:57	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/19 07:11	03/28/19 00:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	91		50 - 150				03/27/19 07:11	03/28/19 00:57	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: S3-BU-032219

Lab Sample ID: 580-84853-45

Date Collected: 03/22/19 08:58

Matrix: Water

Date Received: 03/22/19 14:53

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		03/27/19 07:11	03/28/19 01:19	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/19 07:11	03/28/19 01:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	95		50 - 150				03/27/19 07:11	03/28/19 01:19	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: S4-AD-032219

Lab Sample ID: 580-84853-46

Date Collected: 03/22/19 10:05

Matrix: Water

Date Received: 03/22/19 14:53

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		03/27/19 07:11	03/28/19 01:41	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/19 07:11	03/28/19 01:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	90		50 - 150				03/27/19 07:11	03/28/19 01:41	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: S3-CU-032219

Lab Sample ID: 580-84853-47

Date Collected: 03/22/19 09:30

Matrix: Water

Date Received: 03/22/19 14:53

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		03/27/19 07:11	03/28/19 02:03	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/19 07:11	03/28/19 02:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	92		50 - 150				03/27/19 07:11	03/28/19 02:03	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: S4-AU-032219

Lab Sample ID: 580-84853-48

Date Collected: 03/22/19 10:05

Matrix: Water

Date Received: 03/22/19 14:53

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		03/27/19 12:46	04/01/19 05:27	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/19 12:46	04/01/19 05:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	90		50 - 150				03/27/19 12:46	04/01/19 05:27	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: S3-BD-032219

Lab Sample ID: 580-84853-49

Date Collected: 03/22/19 08:55

Matrix: Water

Date Received: 03/22/19 14:53

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		03/27/19 12:46	04/01/19 03:46	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		03/27/19 12:46	04/01/19 03:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	103		50 - 150				03/27/19 12:46	04/01/19 03:46	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: S3-AD-032219

Lab Sample ID: 580-84853-50

Date Collected: 03/22/19 08:55

Matrix: Water

Date Received: 03/22/19 14:53

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		03/27/19 12:46	04/01/19 04:06	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		03/27/19 12:46	04/01/19 04:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	94		50 - 150				03/27/19 12:46	04/01/19 04:06	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: MW-555-032219

Lab Sample ID: 580-84853-51

Date Collected: 03/22/19 11:05

Matrix: Water

Date Received: 03/22/19 14:53

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		03/27/19 12:46	04/01/19 04:26	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/19 12:46	04/01/19 04:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	90		50 - 150				03/27/19 12:46	04/01/19 04:26	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: S3-CD-0322219

Lab Sample ID: 580-84853-52

Date Collected: 03/22/19 09:30

Matrix: Water

Date Received: 03/22/19 14:53

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		03/27/19 12:46	04/01/19 04:46	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/19 12:46	04/01/19 04:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	93		50 - 150				03/27/19 12:46	04/01/19 04:46	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: MW-30-032119

Lab Sample ID: 580-84853-53

Date Collected: 03/21/19 11:28

Matrix: Water

Date Received: 03/22/19 14:53

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.64		0.062	0.062	mg/L		03/27/19 12:46	04/01/19 05:06	1
Motor Oil (>C24-C36)	1.9		0.092	0.092	mg/L		03/27/19 12:46	04/01/19 05:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	89		50 - 150				03/27/19 12:46	04/01/19 05:06	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

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

Lab Sample ID: MB 580-297119/1-A

Matrix: Water

Analysis Batch: 297203

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 297119

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		03/26/19 10:36	03/26/19 19:05	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		03/26/19 10:36	03/26/19 19:05	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	106		50 - 150	03/26/19 10:36	03/26/19 19:05	1

Lab Sample ID: LCS 580-297119/2-A

Matrix: Water

Analysis Batch: 297203

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 297119

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	0.500	0.425		mg/L		85	50 - 120
Motor Oil (>C24-C36)	0.500	0.468		mg/L		94	64 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	91		50 - 150

Lab Sample ID: LCSD 580-297119/3-A

Matrix: Water

Analysis Batch: 297203

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 297119

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	0.500	0.396		mg/L		79	50 - 120	7	26
Motor Oil (>C24-C36)	0.500	0.463		mg/L		93	64 - 120	1	24

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	82		50 - 150

Lab Sample ID: MB 580-297143/1-A

Matrix: Water

Analysis Batch: 297186

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 297143

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		03/26/19 12:18	03/30/19 10:54	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		03/26/19 12:18	03/30/19 10:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	101		50 - 150	03/26/19 12:18	03/30/19 10:54	1

Lab Sample ID: LCS 580-297143/2-A

Matrix: Water

Analysis Batch: 297186

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 297143

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	0.500	0.441		mg/L		88	50 - 120
Motor Oil (>C24-C36)	0.500	0.421		mg/L		84	64 - 120

TestAmerica Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

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

Lab Sample ID: LCS 580-297143/2-A
Matrix: Water
Analysis Batch: 297186

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 297143

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	108		50 - 150

Lab Sample ID: LCSD 580-297143/3-A
Matrix: Water
Analysis Batch: 297186

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 297143

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	0.500	0.461		mg/L		92	50 - 120	4	26
Motor Oil (>C24-C36)	0.500	0.449		mg/L		90	64 - 120	7	24

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	113		50 - 150

Lab Sample ID: MB 580-297217/1-A
Matrix: Water
Analysis Batch: 297262

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 297217

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		03/27/19 07:11	03/27/19 17:16	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		03/27/19 07:11	03/27/19 17:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	103		50 - 150	03/27/19 07:11	03/27/19 17:16	1

Lab Sample ID: LCS 580-297217/2-A
Matrix: Water
Analysis Batch: 297262

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 297217

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
#2 Diesel (C10-C24)	0.500	0.410		mg/L		82	50 - 120
Motor Oil (>C24-C36)	0.500	0.520		mg/L		104	64 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	94		50 - 150

Lab Sample ID: LCSD 580-297217/3-A
Matrix: Water
Analysis Batch: 297262

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 297217

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	0.500	0.458		mg/L		92	50 - 120	11	26
Motor Oil (>C24-C36)	0.500	0.530		mg/L		106	64 - 120	2	24

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	93		50 - 150

TestAmerica Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

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

Lab Sample ID: MB 580-297265/1-A

Matrix: Water

Analysis Batch: 297618

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 297265

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		03/27/19 12:46	03/31/19 21:44	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		03/27/19 12:46	03/31/19 21:44	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	120		50 - 150				03/27/19 12:46	03/31/19 21:44	1

Lab Sample ID: LCS 580-297265/2-A

Matrix: Water

Analysis Batch: 297618

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 297265

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits		
#2 Diesel (C10-C24)	0.500	0.432		mg/L		86	50 - 120		
Motor Oil (>C24-C36)	0.500	0.486		mg/L		97	64 - 120		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
<i>o</i> -Terphenyl	87		50 - 150						

Lab Sample ID: LCSD 580-297265/3-A

Matrix: Water

Analysis Batch: 297618

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 297265

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	0.500	0.485		mg/L		97	50 - 120	11	26
Motor Oil (>C24-C36)	0.500	0.556		mg/L		111	64 - 120	13	24
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
<i>o</i> -Terphenyl	90		50 - 150						

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Lab Sample ID: MB 580-297265/1-B

Matrix: Water

Analysis Batch: 297618

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 297265

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		03/27/19 12:46	03/31/19 15:22	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		03/27/19 12:46	03/31/19 15:22	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	113		50 - 150				03/27/19 12:46	03/31/19 15:22	1

Lab Sample ID: LCS 580-297265/2-B

Matrix: Water

Analysis Batch: 297618

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 297265

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits		
#2 Diesel (C10-C24)	0.500	0.462		mg/L		92	50 - 120		

TestAmerica Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

(Continued)

Lab Sample ID: LCS 580-297265/2-B

Matrix: Water

Analysis Batch: 297618

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 297265

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Motor Oil (>C24-C36)	0.500	0.548		mg/L		110	64 - 120
Surrogate		%Recovery	Qualifier				Limits
<i>o-Terphenyl</i>		100					50 - 150

Lab Sample ID: LCSD 580-297265/3-B

Matrix: Water

Analysis Batch: 297618

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 297265

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
#2 Diesel (C10-C24)	0.500	0.429		mg/L		86	50 - 120	7	26
Motor Oil (>C24-C36)	0.500	0.507		mg/L		101	64 - 120	8	24
Surrogate		%Recovery	Qualifier				Limits		
<i>o-Terphenyl</i>		95					50 - 150		

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: 5-W-18-032019

Date Collected: 03/20/19 11:04

Date Received: 03/22/19 14:53

Lab Sample ID: 580-84853-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297119	03/26/19 10:36	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297203	03/27/19 01:07	JCM	TAL SEA

Client Sample ID: 5-W-19-032019

Date Collected: 03/20/19 11:11

Date Received: 03/22/19 14:53

Lab Sample ID: 580-84853-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297119	03/26/19 10:36	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297203	03/27/19 01:27	JCM	TAL SEA

Client Sample ID: 5-W-17-032019

Date Collected: 03/20/19 12:14

Date Received: 03/22/19 14:53

Lab Sample ID: 580-84853-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297119	03/26/19 10:36	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297203	03/27/19 01:47	JCM	TAL SEA

Client Sample ID: 5-W-170-032019

Date Collected: 03/20/19 12:16

Date Received: 03/22/19 14:53

Lab Sample ID: 580-84853-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297119	03/26/19 10:36	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297203	03/27/19 02:27	JCM	TAL SEA

Client Sample ID: 1A-W-4-032019

Date Collected: 03/20/19 16:30

Date Received: 03/22/19 14:53

Lab Sample ID: 580-84853-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297119	03/26/19 10:36	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297203	03/27/19 02:47	JCM	TAL SEA

Client Sample ID: GW-3-032019

Date Collected: 03/20/19 14:35

Date Received: 03/22/19 14:53

Lab Sample ID: 580-84853-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297265	03/27/19 12:46	KO	TAL SEA
Total/NA	Cleanup	3630C			297314	03/27/19 18:34	BAH	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297618	03/31/19 16:22	W1T	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297265	03/27/19 12:46	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297618	03/31/19 23:04	W1T	TAL SEA

Client Sample ID: GW-30-032019

Lab Sample ID: 580-84853-7

Date Collected: 03/20/19 14:45

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297119	03/26/19 10:36	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297203	03/27/19 03:08	JCM	TAL SEA

Client Sample ID: 1B-W-23-032019

Lab Sample ID: 580-84853-8

Date Collected: 03/20/19 14:30

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297143	03/26/19 12:18	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297186	03/30/19 12:00	T1W	TAL SEA

Client Sample ID: 2A-W-41-032019

Lab Sample ID: 580-84853-9

Date Collected: 03/20/19 15:55

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297265	03/27/19 12:46	KO	TAL SEA
Total/NA	Cleanup	3630C			297314	03/27/19 18:34	BAH	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297618	03/31/19 16:42	W1T	TAL SEA
Total/NA	Prep	3510C			297265	03/27/19 12:46	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297618	03/31/19 23:24	W1T	TAL SEA

Client Sample ID: 2A-W-410-032019

Lab Sample ID: 580-84853-10

Date Collected: 03/20/19 16:20

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297143	03/26/19 12:18	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297186	03/30/19 12:21	T1W	TAL SEA

Client Sample ID: 2A-W-40-032019

Lab Sample ID: 580-84853-11

Date Collected: 03/20/19 17:55

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297143	03/26/19 12:18	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297186	03/30/19 12:43	T1W	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: 5-W-51-032019

Lab Sample ID: 580-84853-12

Date Collected: 03/20/19 13:54

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297143	03/26/19 12:18	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297186	03/30/19 13:06	T1W	TAL SEA

Client Sample ID: 5-W-56-032019

Lab Sample ID: 580-84853-13

Date Collected: 03/20/19 15:09

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297143	03/26/19 12:18	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297186	03/30/19 13:28	T1W	TAL SEA

Client Sample ID: 5-W-560-032019

Lab Sample ID: 580-84853-14

Date Collected: 03/20/19 15:20

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297143	03/26/19 12:18	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297186	03/30/19 13:50	T1W	TAL SEA

Client Sample ID: 5-W-55-032019

Lab Sample ID: 580-84853-15

Date Collected: 03/20/19 15:21

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297143	03/26/19 12:18	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297186	03/30/19 14:12	T1W	TAL SEA

Client Sample ID: MW-38R-032019

Lab Sample ID: 580-84853-16

Date Collected: 03/20/19 17:04

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297143	03/26/19 12:18	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297186	03/30/19 14:57	T1W	TAL SEA

Client Sample ID: MW-380R-032019

Lab Sample ID: 580-84853-17

Date Collected: 03/20/19 17:02

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297143	03/26/19 12:18	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297186	03/30/19 15:19	T1W	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: 5-W-14-032019

Lab Sample ID: 580-84853-18

Date Collected: 03/20/19 12:54

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297143	03/26/19 12:18	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297186	03/30/19 15:42	T1W	TAL SEA

Client Sample ID: 5-W-16-032019

Lab Sample ID: 580-84853-19

Date Collected: 03/20/19 11:59

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297143	03/26/19 12:18	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297186	03/30/19 16:05	T1W	TAL SEA

Client Sample ID: 2A-W-10-032119

Lab Sample ID: 580-84853-20

Date Collected: 03/21/19 09:54

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297143	03/26/19 12:18	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297186	03/30/19 16:27	T1W	TAL SEA
Total/NA	Prep	3510C			297143	03/26/19 12:18	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297706	04/01/19 20:03	CJ	TAL SEA

Client Sample ID: MW-4-032119

Lab Sample ID: 580-84853-21

Date Collected: 03/21/19 10:56

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297143	03/26/19 12:18	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297186	03/30/19 16:50	T1W	TAL SEA
Total/NA	Prep	3510C			297143	03/26/19 12:18	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297706	04/01/19 20:23	CJ	TAL SEA

Client Sample ID: 2B-W-4-032119

Lab Sample ID: 580-84853-22

Date Collected: 03/21/19 12:04

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297143	03/26/19 12:18	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297186	03/30/19 17:13	T1W	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: GW-4-032119

Lab Sample ID: 580-84853-23

Date Collected: 03/21/19 09:50

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297143	03/26/19 12:18	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297186	03/30/19 17:35	T1W	TAL SEA

Client Sample ID: EW-2A-032119

Lab Sample ID: 580-84853-24

Date Collected: 03/21/19 09:50

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297143	03/26/19 12:18	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297186	03/30/19 17:58	T1W	TAL SEA

Client Sample ID: 2A-W-9-032119

Lab Sample ID: 580-84853-25

Date Collected: 03/21/19 09:54

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297143	03/26/19 12:18	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297186	03/30/19 18:20	T1W	TAL SEA
Total/NA	Prep	3510C			297143	03/26/19 12:18	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297706	04/01/19 20:43	CJ	TAL SEA

Client Sample ID: 1C-W-7-032119

Lab Sample ID: 580-84853-26

Date Collected: 03/21/19 10:45

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297143	03/26/19 12:18	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297706	04/01/19 21:04	CJ	TAL SEA

Client Sample ID: 2A-W-42-032119

Lab Sample ID: 580-84853-27

Date Collected: 03/21/19 11:05

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297143	03/26/19 12:18	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297706	04/01/19 21:24	CJ	TAL SEA

Client Sample ID: MW-3-032119

Lab Sample ID: 580-84853-28

Date Collected: 03/21/19 11:21

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297143	03/26/19 12:18	KO	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: MW-3-032119

Lab Sample ID: 580-84853-28

Date Collected: 03/21/19 11:21

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	NWTPH-Dx		1	297706	04/01/19 21:44	CJ	TAL SEA

Client Sample ID: 1C-W-1-032119

Lab Sample ID: 580-84853-29

Date Collected: 03/21/19 12:30

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297217	03/27/19 07:11	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297262	03/27/19 19:07	W1T	TAL SEA

Client Sample ID: 1C-W-8-032119

Lab Sample ID: 580-84853-30

Date Collected: 03/21/19 12:40

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297217	03/27/19 07:11	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297262	03/27/19 19:29	W1T	TAL SEA
Total/NA	Prep	3510C	RA		297217	03/27/19 07:11	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RA	1	297341	03/28/19 22:33	TL1	TAL SEA

Client Sample ID: MW-16-032119

Lab Sample ID: 580-84853-31

Date Collected: 03/21/19 13:00

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297217	03/27/19 07:11	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297262	03/27/19 19:51	W1T	TAL SEA
Total/NA	Prep	3510C	RA		297217	03/27/19 07:11	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RA	1	297341	03/28/19 22:54	TL1	TAL SEA

Client Sample ID: 1B-W-2-032119

Lab Sample ID: 580-84853-32

Date Collected: 03/21/19 14:18

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297217	03/27/19 07:11	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297262	03/27/19 20:13	W1T	TAL SEA
Total/NA	Prep	3510C	RA		297217	03/27/19 07:11	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RA	1	297341	03/28/19 23:14	TL1	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: 1C-W-4-032119

Lab Sample ID: 580-84853-33

Date Collected: 03/21/19 15:05

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297217	03/27/19 07:11	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297262	03/27/19 20:35	W1T	TAL SEA
Total/NA	Prep	3510C	RA		297217	03/27/19 07:11	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RA	1	297341	03/28/19 23:34	TL1	TAL SEA

Client Sample ID: 1C-W-3-032119

Lab Sample ID: 580-84853-34

Date Collected: 03/21/19 15:00

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297217	03/27/19 07:11	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297262	03/27/19 20:57	W1T	TAL SEA

Client Sample ID: 1B-W-3-032119

Lab Sample ID: 580-84853-35

Date Collected: 03/21/19 15:05

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297217	03/27/19 07:11	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297262	03/27/19 21:19	W1T	TAL SEA

Client Sample ID: S1-BD-032119

Lab Sample ID: 580-84853-36

Date Collected: 03/21/19 16:05

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297217	03/27/19 07:11	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297262	03/27/19 21:41	W1T	TAL SEA

Client Sample ID: S1-AU-032119

Lab Sample ID: 580-84853-37

Date Collected: 03/21/19 16:10

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297217	03/27/19 07:11	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297262	03/27/19 22:03	W1T	TAL SEA

Client Sample ID: S1-BU-032119

Lab Sample ID: 580-84853-38

Date Collected: 03/21/19 16:05

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297217	03/27/19 07:11	KO	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: S1-BU-032119

Lab Sample ID: 580-84853-38

Date Collected: 03/21/19 16:05

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	NWTPH-Dx		1	297262	03/27/19 22:25	W1T	TAL SEA

Client Sample ID: S1-AD-032119

Lab Sample ID: 580-84853-39

Date Collected: 03/21/19 16:10

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297217	03/27/19 07:11	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297262	03/27/19 23:08	W1T	TAL SEA

Client Sample ID: S4-CU-032219

Lab Sample ID: 580-84853-40

Date Collected: 03/22/19 10:06

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297217	03/27/19 07:11	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297262	03/27/19 23:30	W1T	TAL SEA
Total/NA	Prep	3510C	RA		297217	03/27/19 07:11	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RA	1	297341	03/28/19 23:54	TL1	TAL SEA

Client Sample ID: S4-CD-032219

Lab Sample ID: 580-84853-41

Date Collected: 03/22/19 10:09

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297217	03/27/19 07:11	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297262	03/27/19 23:52	W1T	TAL SEA

Client Sample ID: S4-BD-032219

Lab Sample ID: 580-84853-42

Date Collected: 03/22/19 09:37

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297217	03/27/19 07:11	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297262	03/28/19 00:14	W1T	TAL SEA

Client Sample ID: S4-BU-032219

Lab Sample ID: 580-84853-43

Date Collected: 03/22/19 09:37

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297217	03/27/19 07:11	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297262	03/28/19 00:36	W1T	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: S3-AU-032219

Lab Sample ID: 580-84853-44

Date Collected: 03/22/19 08:55

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297217	03/27/19 07:11	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297262	03/28/19 00:57	W1T	TAL SEA

Client Sample ID: S3-BU-032219

Lab Sample ID: 580-84853-45

Date Collected: 03/22/19 08:58

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297217	03/27/19 07:11	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297262	03/28/19 01:19	W1T	TAL SEA

Client Sample ID: S4-AD-032219

Lab Sample ID: 580-84853-46

Date Collected: 03/22/19 10:05

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297217	03/27/19 07:11	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297262	03/28/19 01:41	W1T	TAL SEA

Client Sample ID: S3-CU-032219

Lab Sample ID: 580-84853-47

Date Collected: 03/22/19 09:30

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297217	03/27/19 07:11	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297262	03/28/19 02:03	W1T	TAL SEA

Client Sample ID: S4-AU-032219

Lab Sample ID: 580-84853-48

Date Collected: 03/22/19 10:05

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297265	03/27/19 12:46	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297618	04/01/19 05:27	W1T	TAL SEA

Client Sample ID: S3-BD-032219

Lab Sample ID: 580-84853-49

Date Collected: 03/22/19 08:55

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297265	03/27/19 12:46	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297618	04/01/19 03:46	W1T	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1

Client Sample ID: S3-AD-032219

Lab Sample ID: 580-84853-50

Date Collected: 03/22/19 08:55

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297265	03/27/19 12:46	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297618	04/01/19 04:06	W1T	TAL SEA

Client Sample ID: MW-555-032219

Lab Sample ID: 580-84853-51

Date Collected: 03/22/19 11:05

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297265	03/27/19 12:46	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297618	04/01/19 04:26	W1T	TAL SEA

Client Sample ID: S3-CD-032219

Lab Sample ID: 580-84853-52

Date Collected: 03/22/19 09:30

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297265	03/27/19 12:46	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297618	04/01/19 04:46	W1T	TAL SEA

Client Sample ID: MW-30-032119

Lab Sample ID: 580-84853-53

Date Collected: 03/21/19 11:28

Matrix: Water

Date Received: 03/22/19 14:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			297265	03/27/19 12:46	KO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	297618	04/01/19 05:06	W1T	TAL SEA

Laboratory References:

TAL SEA = TestAmerica 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

TestAmerica Job ID: 580-84853-1

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	17-024	01-19-20
ANAB	DoD / DOE		L2236	01-19-22
ANAB	ISO/IEC 17025		L2236	01-19-22
California	State Program	9	2901	11-05-19
Montana (UST)	State Program	8	N/A	04-30-20
Nevada	State Program	9	WA000502019-1	07-31-19
Oregon	NELAP	10	WA100007	11-05-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-14-00126	02-10-20
Washington	State Program	10	C553	02-17-20


Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Semi Annual

TestAmerica Job ID: 580-84853-1


Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-84853-1	5-W-18-032019	Water	03/20/19 11:04	03/22/19 14:53
580-84853-2	5-W-19-032019	Water	03/20/19 11:11	03/22/19 14:53
580-84853-3	5-W-17-032019	Water	03/20/19 12:14	03/22/19 14:53
580-84853-4	5-W-170-032019	Water	03/20/19 12:16	03/22/19 14:53
580-84853-5	1A-W-4-032019	Water	03/20/19 16:30	03/22/19 14:53
580-84853-6	GW-3-032019	Water	03/20/19 14:35	03/22/19 14:53
580-84853-7	GW-30-032019	Water	03/20/19 14:45	03/22/19 14:53
580-84853-8	1B-W-23-032019	Water	03/20/19 14:30	03/22/19 14:53
580-84853-9	2A-W-41-032019	Water	03/20/19 15:55	03/22/19 14:53
580-84853-10	2A-W-410-032019	Water	03/20/19 16:20	03/22/19 14:53
580-84853-11	2A-W-40-032019	Water	03/20/19 17:55	03/22/19 14:53
580-84853-12	5-W-51-032019	Water	03/20/19 13:54	03/22/19 14:53
580-84853-13	5-W-56-032019	Water	03/20/19 15:09	03/22/19 14:53
580-84853-14	5-W-560-032019	Water	03/20/19 15:20	03/22/19 14:53
580-84853-15	5-W-55-032019	Water	03/20/19 15:21	03/22/19 14:53
580-84853-16	MW-38R-032019	Water	03/20/19 17:04	03/22/19 14:53
580-84853-17	MW-380R-032019	Water	03/20/19 17:02	03/22/19 14:53
580-84853-18	5-W-14-032019	Water	03/20/19 12:54	03/22/19 14:53
580-84853-19	5-W-16-032019	Water	03/20/19 11:59	03/22/19 14:53
580-84853-20	2A-W-10-032119	Water	03/21/19 09:54	03/22/19 14:53
580-84853-21	MW-4-032119	Water	03/21/19 10:56	03/22/19 14:53
580-84853-22	2B-W-4-032119	Water	03/21/19 12:04	03/22/19 14:53
580-84853-23	GW-4-032119	Water	03/21/19 09:50	03/22/19 14:53
580-84853-24	EW-2A-032119	Water	03/21/19 09:50	03/22/19 14:53
580-84853-25	2A-W-9-032119	Water	03/21/19 09:54	03/22/19 14:53
580-84853-26	1C-W-7-032119	Water	03/21/19 10:45	03/22/19 14:53
580-84853-27	2A-W-42-032119	Water	03/21/19 11:05	03/22/19 14:53
580-84853-28	MW-3-032119	Water	03/21/19 11:21	03/22/19 14:53
580-84853-29	1C-W-1-032119	Water	03/21/19 12:30	03/22/19 14:53
580-84853-30	1C-W-8-032119	Water	03/21/19 12:40	03/22/19 14:53
580-84853-31	MW-16-032119	Water	03/21/19 13:00	03/22/19 14:53
580-84853-32	1B-W-2-032119	Water	03/21/19 14:18	03/22/19 14:53
580-84853-33	1C-W-4-032119	Water	03/21/19 15:05	03/22/19 14:53
580-84853-34	1C-W-3-032119	Water	03/21/19 15:00	03/22/19 14:53
580-84853-35	1B-W-3-032119	Water	03/21/19 15:05	03/22/19 14:53
580-84853-36	S1-BD-032119	Water	03/21/19 16:05	03/22/19 14:53
580-84853-37	S1-AU-032119	Water	03/21/19 16:10	03/22/19 14:53
580-84853-38	S1-BU-032119	Water	03/21/19 16:05	03/22/19 14:53
580-84853-39	S1-AD-032119	Water	03/21/19 16:10	03/22/19 14:53
580-84853-40	S4-CU-032219	Water	03/22/19 10:06	03/22/19 14:53
580-84853-41	S4-CD-032219	Water	03/22/19 10:09	03/22/19 14:53
580-84853-42	S4-BD-032219	Water	03/22/19 09:37	03/22/19 14:53
580-84853-43	S4-BU-032219	Water	03/22/19 09:37	03/22/19 14:53
580-84853-44	S3-AU-032219	Water	03/22/19 08:55	03/22/19 14:53
580-84853-45	S3-BU-032219	Water	03/22/19 08:58	03/22/19 14:53
580-84853-46	S4-AD-032219	Water	03/22/19 10:05	03/22/19 14:53
580-84853-47	S3-CU-032219	Water	03/22/19 09:30	03/22/19 14:53
580-84853-48	S4-AU-032219	Water	03/22/19 10:05	03/22/19 14:53
580-84853-49	S3-BD-032219	Water	03/22/19 08:55	03/22/19 14:53
580-84853-50	S3-AD-032219	Water	03/22/19 08:55	03/22/19 14:53
580-84853-51	MW-555-032219	Water	03/22/19 11:05	03/22/19 14:53
580-84853-52	S3-CD-0322219	Water	03/22/19 09:30	03/22/19 14:53
580-84853-53	MW-30-032119	Water	03/21/19 11:28	03/22/19 14:53

TestAmerica Seattle

	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: 683-067		
BNSF Project Number: 683-067				Company: Farallon Consulting				Project Manager: Pete Kingston		
BNSF Project Name: BNSF - Skykomish - Semi Annual				Address: 975 5th AVE NW				Email: pkingston@farallonconsulting.com		
BNSF Contact:				City/State/ZIP: Issaquah, WA				Phone: 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 checked="" 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?				NWTPH-DX SGC-NWTPH-DX				
SAMPLE INFORMATION										
Sample Identification		Containers	Sample Collection			Filtered Y/N	Type (Comp/Grab)	Matrix		
			Date	Time	Sampler				COMMENTS	LAB USE
1 5-W-18-032019		2	3/20/19	1104	GP	N	E	W	X	
2 5-W-19-032019				1111	AB				X	
3 5-W-17-032019				1214	CB				X	
4 5-W-170-032019				1216	CB				X	
5 1A-W-4-032019				1630	NT				X	
6 6W-3-032019				1435	NT				X	X
7 6W-30-032019				1445	NT				X	
8 1B-W-23-032019				1430	AB				X	
9 2A-W-41-032019				1555	AB				X	X
10 2A-W-410-032019				1620	AB				X	
11 2A-W-40-032019				1755	AB				X	
12 5-W-51-032019				1354	GP				X	
13 5-W-56-032019				1509	GP				X	
14 5-W-560-032019				1520	GP				X	
15 5-W-558-032019		V	V	1521	CHI	V	V	V	X	
Relinquished By: <i>Cristal B...</i>		Date/Time: 03/22/19 1453	Received By: <i>Tom Bl...</i>				Date/Time: 3/22/19 1453		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



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 CHAIN OF CUSTODY		LABORATORY INFORMATION						LAB WORK ORDER:	
		Laboratory:			Project Manager:			SHIPMENT INFORMATION	
		Address:			Phone:			Shipment Method:	
BNSF PROJECT INFORMATION		Project State of Origin:			CONSULTANT INFORMATION			Project Number:	
BNSF Project Number: 683-067		Project City:			Company: Fawallon Consulting			Project Manager: Pete Kingston	
BNSF Project Name: BNSF-Sykomisler Semi-Annual		BNSF Work Order No.:			Address: 475 SR AVE NW			Email: pkingston@fawallonconsulting.com	
BNSF Contact:		City/State/ZIP: Issaquah, WA 98027			Phone:			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 checked="" 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?				NUTPH-0 X [Empty grid for analysis methods]			
SAMPLE INFORMATION									
Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/Grab)	Matrix	COMMENTS	LAB USE
		Date	Time	Sampler					
1 MW-38A-032019	2	3/20/19	1704	GP	N	W	X		
2 MW-380A-032019			1702	GP			X		
3 5-W-14-032019			1254	GP			X		
4 5-W-16-032019			1159	GP			X		
5 2A-W-10-032119			0954	GP			X		
6 MW-4-032119			1056	GP			X		
7 2B-W-4-032119			1204	GP			X		
8 6-W-4-032119			0950	AB			X		
9 EW-2A-032119			0950	NT			X		
10 2A-W9-032119			0954	CH			X		
11 1C-W-7-032119			1045	AB			X		
12 2A-W-42-03219			1105	NT			X		
13 MW-3-032119			1121	CH			X		
14 2B-W-4-032119			1204	GP			X		
15 1C-W-1-032119			1230	AB			X		
Relinquished By: Chantal Bafina	Date/Time: 03/22/19 1453	Received By: Tom Blum	Date/Time: 3/22/19 1453	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)

84853 3 of 5

 <p>CHAIN OF CUSTODY</p>	LABORATORY INFORMATION				LAB WORK ORDER:						
	Laboratory: _____ Project Manager: _____		Address: _____ Phone: _____		SHIPMENT INFORMATION						
	City/State/ZIP: _____ Fax: _____				Shipment Method: _____ Tracking Number: _____						
BNSF PROJECT INFORMATION				CONSULTANT INFORMATION				LABORATORY INFORMATION			
BNSF Project Number: 683-067				Project State of Origin: WA				Project Number: 683-067			
BNSF Project Name: BNSF Skykomish - Semi Annual				Project City: Skykomish				Company: Farallon Consulting			
BNSF Contact: _____				BNSF Work Order No.: _____				Address: 975 Strave NE Issaquah, WA 98027			
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 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	METHODS FOR ANALYSIS	COMMENTS	LAB USE	
		Date	Time	Sampler							
1 IC-W-8-032119	↓	03/22/19	Z	1240	GP	N G W	X				
2 MW-16-032119	↓			1300							
3 1B-W-2-032119	↓			1418							
4 1C-W-4-032119	↓			1505							
5 1C-W-3-032119	↓			1500							
6 1B-W-3-032119	↓			1505							
7 S1-BD-032119	↓			1605							
8 S1-AU-032119	↓			1610							
9 S1-BU-032119	↓			1605							
10 S1-AD-032119	↓			1610							
11 S4-CU-032219	↓	03/22/19		1006							
12 S4-CD-032219	↓			1009							
13 S4-BD-032219	↓			0937							
14 S4-BU-032219	↓			0937							
15 S3-AU-032219	↓			0855							
Relinquished By: <i>Christina...</i>		Date/Time: 03/23/19 @ 1453		Received By: <i>Tom...</i>		Date/Time: 3/22/19 1453		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)

84853 4 of 5

 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: 683-067			
BNSF Project Number: 603-067			Project City:			Project Manager: Pete Kingston			
BNSF Project Name: BNSF Skykomish - Semi-Annual			Company: Farallon Consulting			Email: pkingston@farallonconsulting.com			
BNSF Contact:			BNSF Work Order No.:			City/State/ZIP: Issaquah WA 98025			
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 checked="" type="checkbox"/> BNSF Standard (Level II) <input type="checkbox"/> Level III <input type="checkbox"/> EDD Req. Format? <input type="checkbox"/> Level IV				NUTPH-D* X			
SAMPLE INFORMATION									
Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/Grab)	Matrix	COMMENTS	LAB USE
		Date	Time	Sampler					
1 5-W-14-032019	2	3/20/19	1254	GP	N	G	W	X	
2 5-W-16-032019			1159	GP					
3 5-W-18-032019			1104	GP					
4 5-W-19-032019			1111	CB					
5 5-W-17-032019			1214	CB					
6 5-W-170-032019			1216	CB					
7 5-W-51-032019			1354	GP					
8 5-W-56-032019			1509	GP					
9 5-W-560-032019			1520	GP					
10 5-W-55-032019			1521	GP					
11 MW-38R-032019			1704	GP					
12 MW-380R-032019			1702	GP					
13 5W-14-032019			1254	GP					
14 5-W-16-032019	2	3/22/19	1159	GP					
Retinquished By: Chantal Barber		Date/Time: 03/22/19 (21453)	Received By: Tom Blank		Date/Time: 3/22/19 1453	Comments and Special Analytical Requirements:			
Retinquished By:		Date/Time:	Received By:		Date/Time:				
Retinquished 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)

84853 5 of 5

 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						
BNSF Project Number: 683-067		Project State of Origin:	Company: Parallon Consulting		Project Number: 683-067				
BNSF Project Name: BNSF Skykomish - Semiannual		Project City:	Address: 975 5th Ave NW		Project Manager: Pete Kryston				
BNSF Contact:		BNSF Work Order No.:	City/State/ZIP: Issaquah WA 98027		Email: pkryston@parallonconsult.com				
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"/> 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 S3-BU-032219	2	03/22/19	0858	GP	N	G	W		
2 S4-AD-032219	↓		1005						
3 S3-CU-032219	↓		0930						
4 S4-AU-032219	↓		1005						
5 S3-BD-032219	↓		0855						
6 S3-AD-032219	↓		0855						
7 MW-555-032219	↓		1105						
Relinquished By: <i>Chad B...</i>		Date/Time: 03/23/19 @ 4:53		Received By: <i>Tom Blunk</i>		Date/Time: 3/22/19 14:53		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)

Therm. ID: A2 Cor: 1.5 ° Unc: 1.9 °
Cooler Dsc: LB FedEX: _____
Packing: _____ UPS: _____
Cust. Seal: Yes No Lab Cour: _____
Blue Ice, Dry, None Other: CD

Therm. ID: A7 Cor: 0.6 ° Unc: 1.0 °
Cooler Dsc: LG FedEX: _____
Packing: B2B UPS: _____
Cust. Seal: Yes No Lab Cour: _____
Blue Ice, Dry, None Other: CD

Therm. ID: A7 Cor: 1.4 ° Unc: 1.9 °
Cooler Dsc: LG FedEX: _____
Packing: B UPS: _____
Cust. Seal: Yes No Lab Cour: _____
Blue Ice, Dry, None Other: CD

Therm. ID: A7 Cor: 2.0 ° Unc: 2.4 °
Cooler Dsc: LG FedEX: _____
Packing: B2B UPS: _____
Cust. Seal: Yes No Lab Cour: _____
Blue Ice, Dry, None Other: CD

Therm. ID: A2 Cor: 2.9 ° Unc: 3.3 °
Cooler Dsc: LG FedEX: _____
Packing: B2B UPS: _____
Cust. Seal: Yes No Lab Cour: _____
Blue Ice, Dry, None Other: CD

Therm. ID: A2 Cor: 1.0 ° Unc: 1.4 °
Cooler Dsc: LG FedEX: _____
Packing: B2B UPS: _____
Cust. Seal: Yes No Lab Cour: _____
Blue Ice, Dry, None Other: CD

Therm. ID: A2 Cor: 2.6 ° Unc: 3.0 °
Cooler Dsc: LG FedEX: _____
Packing: B2B UPS: _____
Cust. Seal: Yes No Lab Cour: _____
Blue Ice, Dry, None Other: CD

Therm. ID: A2 Cor: 1.0 ° Unc: 1.1 °
Cooler Dsc: LG FedEX: _____
Packing: B2B UPS: _____
Cust. Seal: Yes No Lab Cour: _____
Blue Ice, Dry, None Other: CD

Therm. ID: A2 Cor: 0.3 ° Unc: 0.7 °
Cooler Dsc: LG FedEX: _____
Packing: B2B UPS: _____
Cust. Seal: Yes No Lab Cour: _____
Blue Ice, Dry, None Other: CD

Therm. ID: A2 Cor: 1.4 ° Unc: 1.4 °
Cooler Dsc: B2B FedEX: _____
Packing: _____ UPS: _____
Cust. Seal: Yes No Lab Cour: _____
Blue Ice, Dry, None Other: CD

Therm. ID: A2 Cor: 1.5 ° Unc: 1.9 °
Cooler Dsc: LG FedEX: _____
Packing: B2B UPS: _____
Cust. Seal: Yes No Lab Cour: _____
Blue Ice, Dry, None Other: CD

Revised 3/22/19

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BNSF RAILWAY		LABORATORY INFORMATION				LAB WORK ORDER:		SHIPMENT INFORMATION	
CHAIN OF CUSTODY		Laboratory:	Project Manager:		Shipment Method:		Tracking Number:		
BNSF PROJECT INFORMATION		Address:	Phone:		Project Number:		Project Manager:		
BNSF Project Number: 683-067		City/State/ZIP:	Fax:		Project Manager: Pete Kingston		Email: pkingston@farallonconsulting.com		
BNSF Project Name: BNSF - Skykomish - Jenni Amund		Project: State of Origin:	Company: Farallon Consulting		Project Number: 683-067		Phone:		
BNSF Contact:		Project City:	Address: 975 5th AVE NW		Project Manager: Pete Kingston		Fax:		
BNSF Work Order No.:		City/State/ZIP: Issaquah, WA	City/State/ZIP:		Email: pkingston@farallonconsulting.com		Phone:		
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 checked="" 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 NWTPH-Dx SGC-NWTPH-Dx					
SAMPLE INFORMATION							COMMENTS	LAB USE	
Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/ Gmb)			Matrix
1 5-W-18-032019	2	3/20/19	1104	GP	N	G	W	X	
2 5-W-19-032019			1111	AB				X	
3 5-W-17-032019			1214	CB				X	
4 5-W-170-032019			1216	CB				X	
5 1A-W-4-032019			1630	NT				X	
6 6W-3-032019			1435	NT				X	X
7 6W-30-032019			1445	NT				X	X
8 1B-W-23-032019			1430	AB				X	
9 2A-W-41-032019			1555	AB				X	X
10 2A-W-410-032019			1620	AB				X	
11 2A-W-40-032019			1755	AB				X	
12 5-W-51-032019			1854	GP				X	
13 5-W-56-032019			1509	GP				X	
14 5-W-560-032019			1520	GP				X	
15 6-W-58-032019	V	V	1521	GH	V	V	V	X	
Relinquished By: Catalina	Date/Time: 03/22/19 1453	Received By: Tim	Date/Time: 3/22/19 1453	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:	Date/Time:						
ORIGINAL - RETURN TO LABORATORY WITH SAMPLES			DUPLICATE - CONSULTANT			Lab: Custody Intact? <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No. BNSF COC No.	



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<p>BNSF RAILWAY CHAIN OF CUSTODY</p>	LABORATORY INFORMATION Laboratory: _____ Project Manager: _____ Address: _____ Phone: _____ City/State/Zip: _____ Fax: _____		LAB WORK ORDER: _____
	BNSF PROJECT INFORMATION Project State of Origin: _____		SHIPMENT INFORMATION Shipment Method: _____ Tracking Number: _____

BNSF Project Number: 683-067 BNSF Project Name: BNSF - Spokane Semi-Annual BNSF Contact: _____	Project City: _____ BNSF Work Order No.: _____	CONSULTANT INFORMATION Company: Fossilium Consulting Address: 975 5th AVE NW City/State/Zip: Issaquah, WA 9802	Project Number: 683-067 Project Manager: Letc Kingston Email: Pkingston@fossiliumconsulting.com Phone: _____ Fax: _____
--	---	---	---

TURNAROUND TIME <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 _____	DELIVERABLES <input checked="" type="checkbox"/> BNSF Standard (Level II) <input type="checkbox"/> Level III <input type="checkbox"/> Level IV <input type="checkbox"/> Other Deliverables? _____ <input type="checkbox"/> EDO Req. Format? _____
---	---

METHODS FOR ANALYSIS

SAMPLE INFORMATION


Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/Grab)	Matrix	NWTPH - O X	COMMENTS	LAB USE
		Date	Time	Sampler						
1 MW-38A-032019	2	3/20/19	1704	GP	N	W	X			
2 MW-380A-032019			1702	GP			X			
3 S-W-14-032019			1254	GP			X			
4 S-W-16-032019			1159	GP			X			
5 2A-W-10-032119		3/21/19	0954	GP			X			
6 MW-4-032119			1056	GP			X			
7 2B-W-4-032119			1704	GP			X			
8 GW-4-032119			0950	AB			X			
9 EW-2A-032119			0950	NT			X			
10 2A-W9-032119			0954	CH			X			
11 1C-W-7-032119			1045	AB			X			
12 2A-W-42-032119			1105	NT			X			
13 MW-3-032119			1121	CH			X			
14 2B-W-4-032119			1204	GP			X			
15 1C-W-1-032119			1230	AB			X			

Requisitioned By: Christal Babin Date/Time: 04/27/19 1453	Received By: Tom [Signature] Date/Time: 3/22/19 1453	Comments and Special Analytical Requirements:
Requisitioned By: _____ Date/Time: _____	Received By: _____ Date/Time: _____	Lab Remarks: _____ Letc Custody Instruct? <input type="checkbox"/> Yes <input type="checkbox"/> No

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES DUPLICATE - CONSULTANT TAL-1001 (0812)



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 <p>CHAIN OF CUSTODY</p>	LABORATORY INFORMATION Laboratory: _____ Project Manager: _____ Address: _____ Phone: _____ City/State/ZIP: _____ Fax: _____				LAB WORK ORDER: SHIPMENT INFORMATION Shipment Method: _____ Tracking Number: _____ Project Number: _____																				
	BNSF PROJECT INFORMATION BNSF Project Number: <u>683-067</u> BNSF Project Name: <u>BNSF Skykomish - Semi Annual</u> BNSF Contact: _____		Project State of Origin: <u>WA</u> Project City: <u>Skykomish</u>		CONSULTANT INFORMATION Company: <u>Farallon Consulting</u> Address: <u>975 Shaw Ave NE 0</u> <u>Issaquah, WA 98027</u> Project Manager: <u>Pete Kingston</u> Email: <u>pkinston@farallon.com</u> Phone: _____ Fax: _____																				
	TURNAROUND TIME <input type="checkbox"/> 1-day Rush <input type="checkbox"/> 5- to 8-day Rush <input type="checkbox"/> 2-day Rush <input 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 <table border="1"> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </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	METHODS FOR ANALYSIS	COMMENTS	LAB USE														
			Date	Time	Sampler																				
1 IC-W-8-032119		DD/2/19	Z	1240	61P	N	G	W	X																
2 MW-16-032119				1300																					
3 1B-W-2-032119				1418																					
4 1C-W-4-032119				1505																					
5 1C-W-3-032119				1500																					
6 1B-W-3-032119				1505																					
7 S2-BD-032119				1605																					
8 S1-AU-032119				1610																					
9 S1-BU-032119				1605																					
10 S1-AD-132119				1610																					
11 S4-CU-032219		23/2/19		1006																					
12 S4-CD-032219				1009																					
13 S4-BD-032219				0937																					
14 S4-BU-032219				0937																					
15 S3-AU-032219				0855																					
Requisitioned By: <u>Christina</u> Requisitioned By: _____ Requisitioned By: _____ Received by Laboratory: _____		Date/Time: <u>03/22/19 1453</u> Date/Time: _____ Date/Time: _____ Date/Time: _____		Received By: <u>Tom</u> Received By: _____ Received By: _____ Lab Remarks: _____		Date/Time: <u>3/22/19 1453</u> Date/Time: _____ Date/Time: _____ Date/Time: _____		Comments and Special Analytical Requirements: _____ Lab Custody Intact? <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No: _____ BNSF COC No: _____																	

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		LABORATORY INFORMATION			LAB WORK ORDER:				
		Laboratory:	Project Manager:		SHIPMENT INFORMATION				
CHAIN OF CUSTODY		Address:	Phone:		Shipment Method:				
BNSF PROJECT INFORMATION		City/State/ZIP:	Fax:		Tracking Number:				
Project State of Origin:		CONSULTANT INFORMATION			Project Number:				
Project City:		Company: Farallon Consulting			Project Manager: Pete Kingston				
BNSF Project Number: 683-067		Address: 975 5th Ave NW			Email: pkingston@farallonconsulting.com				
BNSF Project Name: BNSF Skykomish - Semi annual		City/State/ZIP: Issaquah WA 98027			Phone: _____				
BNSF Contact:		BNSF Work Order No.:			Fax: _____				
TURNAROUND TIME <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 _____		DELIVERABLES <input checked="" 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?		METHODS FOR ANALYSIS NUPH-DX					
SAMPLE INFORMATION									
Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/Grab)	Matrix	COMMENTS	LAB USE
1. S3-BU-032219	2	Date	Time	Sampler					
2. S4-AD-032219			1005		N	G	W		
3. S3-CU-032219			0930						
4. S4-AU-032219			1005						
5. S3-BD-032219			0855						
6. S3-AD-032219			0855						
7. MW-55-032219			1105						
8. S3-CD-032219			0930						
9. MW-30-032119	2	3/21/19	1128		X	X	X	X	X
10									
11									
12									
13									
14									
15									
Relinquished By: <i>Christa Balfanz</i>	Date/Time: 03/23/19 @ 1453	Received By: <i>Tom Blum</i>		Date/Time: 3/22/19 1453		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?		Custody Seal No.		BNSF COC No.	
				<input type="checkbox"/> Yes <input type="checkbox"/> No					

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4/21/2019



Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-84853-1

Login Number: 84853

List Source: TestAmerica Seattle

List Number: 1

Creator: Luna, Francisco J

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.	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	
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: 580-87060-1
Client Project/Site: BNSF Skykomish Monthly

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

Attn: Peter Kingston

Kristine D. Allen

Authorized for release by:
7/3/2019 10:21:09 AM

Kristine Allen, Manager of Project Management
(253)248-4970
kristine.allen@testamericainc.com



LINKS

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www.testamericainc.com

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 Monthly

Job ID: 580-87060-1

Job ID: 580-87060-1

Laboratory: Eurofins TestAmerica, Seattle

Narrative

Job Narrative 580-87060-1

Comments

No additional comments.

Receipt

The samples were received on 6/20/2019 2:05 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 0.2° C, 1.4° C and 3.7° C.

GC Semi VOA

Method(s) 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: S2-BU-061819 (580-87060-10), WG-WV-061819 (580-87060-12), WG-EV-061819 (580-87060-13) and FWG-EV-061819 (580-87060-14).

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 Skykomish Monthly

Job ID: 580-87060-1

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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

Job ID: 580-87060-1

Client Sample ID: GW-1-061819

Lab Sample ID: 580-87060-1

Date Collected: 06/18/19 09:51

Matrix: Water

Date Received: 06/20/19 14:05

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		07/01/19 15:37	07/02/19 16:26	1
Motor Oil (>C24-C36)	ND		0.091		mg/L		07/01/19 15:37	07/02/19 16:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	92		50 - 150				07/01/19 15:37	07/02/19 16:26	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

Job ID: 580-87060-1

Client Sample ID: PZ-7S-061819

Lab Sample ID: 580-87060-2

Date Collected: 06/18/19 10:00

Matrix: Water

Date Received: 06/20/19 14:05

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		mg/L		07/01/19 15:37	07/02/19 16:48	1
Motor Oil (>C24-C36)	ND		0.092		mg/L		07/01/19 15:37	07/02/19 16:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	100		50 - 150				07/01/19 15:37	07/02/19 16:48	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

Job ID: 580-87060-1

Client Sample ID: PZ-8-061819

Lab Sample ID: 580-87060-3

Date Collected: 06/18/19 11:15

Matrix: Water

Date Received: 06/20/19 14:05

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		07/01/19 15:37	07/02/19 17:10	1
Motor Oil (>C24-C36)	ND		0.091		mg/L		07/01/19 15:37	07/02/19 17:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	96		50 - 150				07/01/19 15:37	07/02/19 17:10	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

Job ID: 580-87060-1

Client Sample ID: S-W-43-061819

Lab Sample ID: 580-87060-4

Date Collected: 06/18/19 11:16

Matrix: Water

Date Received: 06/20/19 14:05

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		07/01/19 15:37	07/02/19 17:32	1
Motor Oil (>C24-C36)	ND		0.091		mg/L		07/01/19 15:37	07/02/19 17:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	91		50 - 150				07/01/19 15:37	07/02/19 17:32	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

Job ID: 580-87060-1

Client Sample ID: EW-1-061819

Lab Sample ID: 580-87060-5

Date Collected: 06/18/19 14:18

Matrix: Water

Date Received: 06/20/19 14:05

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		07/01/19 15:37	07/02/19 17:53	1
Motor Oil (>C24-C36)	ND		0.091		mg/L		07/01/19 15:37	07/02/19 17:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	93		50 - 150				07/01/19 15:37	07/02/19 17:53	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

Job ID: 580-87060-1

Client Sample ID: GW-2-061819

Lab Sample ID: 580-87060-6

Date Collected: 06/18/19 14:35

Matrix: Water

Date Received: 06/20/19 14:05

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		mg/L		07/01/19 15:37	07/02/19 18:15	1
Motor Oil (>C24-C36)	ND		0.093		mg/L		07/01/19 15:37	07/02/19 18:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	88		50 - 150				07/01/19 15:37	07/02/19 18:15	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

Job ID: 580-87060-1

Client Sample ID: GW-20-061819

Lab Sample ID: 580-87060-7

Date Collected: 06/18/19 14:45

Matrix: Water

Date Received: 06/20/19 14:05

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		07/01/19 15:37	07/02/19 18:37	1
Motor Oil (>C24-C36)	ND		0.092		mg/L		07/01/19 15:37	07/02/19 18:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	91		50 - 150				07/01/19 15:37	07/02/19 18:37	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

Job ID: 580-87060-1

Client Sample ID: S2-BD-061819

Lab Sample ID: 580-87060-8

Date Collected: 06/18/19 14:57

Matrix: Water

Date Received: 06/20/19 14:05

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		07/01/19 15:37	07/02/19 19:21	1
Motor Oil (>C24-C36)	ND		0.091		mg/L		07/01/19 15:37	07/02/19 19:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	94		50 - 150				07/01/19 15:37	07/02/19 19:21	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

Job ID: 580-87060-1

Client Sample ID: S2-AU-061819

Lab Sample ID: 580-87060-9

Date Collected: 06/18/19 15:12

Matrix: Water

Date Received: 06/20/19 14:05

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		0.064		mg/L		07/01/19 15:37	07/02/19 19:43	1
Motor Oil (>C24-C36)	ND		0.095		mg/L		07/01/19 15:37	07/02/19 19:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	82		50 - 150				07/01/19 15:37	07/02/19 19:43	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

Job ID: 580-87060-1

Client Sample ID: S2-BU-061819

Lab Sample ID: 580-87060-10

Date Collected: 06/18/19 15:30

Matrix: Water

Date Received: 06/20/19 14:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.19		0.062		mg/L		07/01/19 15:37	07/02/19 20:05	1
Motor Oil (>C24-C36)	0.16		0.091		mg/L		07/01/19 15:37	07/02/19 20:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	79		50 - 150				07/01/19 15:37	07/02/19 20:05	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

Job ID: 580-87060-1

Client Sample ID: S2-AD-061819

Lab Sample ID: 580-87060-11

Date Collected: 06/18/19 15:39

Matrix: Water

Date Received: 06/20/19 14:05

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		07/01/19 15:37	07/02/19 20:27	1
Motor Oil (>C24-C36)	ND		0.092		mg/L		07/01/19 15:37	07/02/19 20:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	96		50 - 150				07/01/19 15:37	07/02/19 20:27	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

Job ID: 580-87060-1

Client Sample ID: WG-WV-061819

Lab Sample ID: 580-87060-12

Date Collected: 06/18/19 16:05

Matrix: Water

Date Received: 06/20/19 14:05

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		07/01/19 15:37	07/02/19 20:49	1
Motor Oil (>C24-C36)	0.099		0.091		mg/L		07/01/19 15:37	07/02/19 20:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	83		50 - 150				07/01/19 15:37	07/02/19 20:49	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

Job ID: 580-87060-1

Client Sample ID: WG-EV-061819

Lab Sample ID: 580-87060-13

Date Collected: 06/18/19 16:10

Matrix: Water

Date Received: 06/20/19 14:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.39		0.063		mg/L		07/01/19 15:37	07/02/19 21:11	1
Motor Oil (>C24-C36)	0.34		0.092		mg/L		07/01/19 15:37	07/02/19 21:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	82		50 - 150				07/01/19 15:37	07/02/19 21:11	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

Job ID: 580-87060-1

Client Sample ID: FWG-EV-061819

Lab Sample ID: 580-87060-14

Date Collected: 06/18/19 16:48

Matrix: Water

Date Received: 06/20/19 14:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.068		0.062		mg/L		07/01/19 15:37	07/02/19 21:33	1
Motor Oil (>C24-C36)	0.20		0.092		mg/L		07/01/19 15:37	07/02/19 21:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	88		50 - 150				07/01/19 15:37	07/02/19 21:33	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

Job ID: 580-87060-1

Client Sample ID: FWG-WV-061819

Lab Sample ID: 580-87060-15

Date Collected: 06/18/19 16:52

Matrix: Water

Date Received: 06/20/19 14:05

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		07/01/19 15:37	07/02/19 21:55	1
Motor Oil (>C24-C36)	ND		0.092		mg/L		07/01/19 15:37	07/02/19 21:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	88		50 - 150				07/01/19 15:37	07/02/19 21:55	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

Job ID: 580-87060-1

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

Lab Sample ID: MB 580-304552/1-A
Matrix: Water
Analysis Batch: 304632

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 304552

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065		mg/L		07/01/19 15:37	07/02/19 15:20	1
Motor Oil (>C24-C36)	ND		0.096		mg/L		07/01/19 15:37	07/02/19 15:20	1
Surrogate	MB	MB	Limits			Prepared	Analyzed	Dil Fac	
o-Terphenyl	89		50 - 150			07/01/19 15:37	07/02/19 15:20	1	

Lab Sample ID: LCS 580-304552/2-A
Matrix: Water
Analysis Batch: 304632

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 304552

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
#2 Diesel (C10-C24)	0.500	0.408		mg/L		82	50 - 120
Motor Oil (>C24-C36)	0.500	0.483		mg/L		97	64 - 120
Surrogate	LCS	LCS	Limits				
o-Terphenyl	90		50 - 150				

Lab Sample ID: LCSD 580-304552/3-A
Matrix: Water
Analysis Batch: 304632

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 304552

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec. Limits	RPD	
		Result	Qualifier					RPD	Limit
#2 Diesel (C10-C24)	0.500	0.374		mg/L		75	50 - 120	9	26
Motor Oil (>C24-C36)	0.500	0.462		mg/L		92	64 - 120	5	24
Surrogate	LCSD	LCSD	Limits						
o-Terphenyl	104		50 - 150						

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Monthly

Job ID: 580-87060-1

Client Sample ID: GW-1-061819

Lab Sample ID: 580-87060-1

Date Collected: 06/18/19 09:51

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304552	07/01/19 15:37	N1C	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304632	07/02/19 16:26	T1W	TAL SEA

Client Sample ID: PZ-7S-061819

Lab Sample ID: 580-87060-2

Date Collected: 06/18/19 10:00

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304552	07/01/19 15:37	N1C	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304632	07/02/19 16:48	T1W	TAL SEA

Client Sample ID: PZ-8-061819

Lab Sample ID: 580-87060-3

Date Collected: 06/18/19 11:15

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304552	07/01/19 15:37	N1C	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304632	07/02/19 17:10	T1W	TAL SEA

Client Sample ID: S-W-43-061819

Lab Sample ID: 580-87060-4

Date Collected: 06/18/19 11:16

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304552	07/01/19 15:37	N1C	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304632	07/02/19 17:32	T1W	TAL SEA

Client Sample ID: EW-1-061819

Lab Sample ID: 580-87060-5

Date Collected: 06/18/19 14:18

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304552	07/01/19 15:37	N1C	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304632	07/02/19 17:53	T1W	TAL SEA

Client Sample ID: GW-2-061819

Lab Sample ID: 580-87060-6

Date Collected: 06/18/19 14:35

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304552	07/01/19 15:37	N1C	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304632	07/02/19 18:15	T1W	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

Job ID: 580-87060-1

Client Sample ID: GW-20-061819

Lab Sample ID: 580-87060-7

Date Collected: 06/18/19 14:45

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304552	07/01/19 15:37	N1C	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304632	07/02/19 18:37	T1W	TAL SEA

Client Sample ID: S2-BD-061819

Lab Sample ID: 580-87060-8

Date Collected: 06/18/19 14:57

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304552	07/01/19 15:37	N1C	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304632	07/02/19 19:21	T1W	TAL SEA

Client Sample ID: S2-AU-061819

Lab Sample ID: 580-87060-9

Date Collected: 06/18/19 15:12

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304552	07/01/19 15:37	N1C	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304632	07/02/19 19:43	T1W	TAL SEA

Client Sample ID: S2-BU-061819

Lab Sample ID: 580-87060-10

Date Collected: 06/18/19 15:30

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304552	07/01/19 15:37	N1C	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304632	07/02/19 20:05	T1W	TAL SEA

Client Sample ID: S2-AD-061819

Lab Sample ID: 580-87060-11

Date Collected: 06/18/19 15:39

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304552	07/01/19 15:37	N1C	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304632	07/02/19 20:27	T1W	TAL SEA

Client Sample ID: WG-WV-061819

Lab Sample ID: 580-87060-12

Date Collected: 06/18/19 16:05

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304552	07/01/19 15:37	N1C	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304632	07/02/19 20:49	T1W	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Monthly

Job ID: 580-87060-1

Client Sample ID: WG-EV-061819

Lab Sample ID: 580-87060-13

Date Collected: 06/18/19 16:10

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304552	07/01/19 15:37	N1C	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304632	07/02/19 21:11	T1W	TAL SEA

Client Sample ID: FWG-EV-061819

Lab Sample ID: 580-87060-14

Date Collected: 06/18/19 16:48

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304552	07/01/19 15:37	N1C	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304632	07/02/19 21:33	T1W	TAL SEA

Client Sample ID: FWG-WV-061819

Lab Sample ID: 580-87060-15

Date Collected: 06/18/19 16:52

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304552	07/01/19 15:37	N1C	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304632	07/02/19 21:55	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 Monthly

Job ID: 580-87060-1

Laboratory: Eurofins TestAmerica, Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Washington	State Program	10	C553	02-17-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
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Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Monthly

Job ID: 580-87060-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-87060-1	GW-1-061819	Water	06/18/19 09:51	06/20/19 14:05	
580-87060-2	PZ-7S-061819	Water	06/18/19 10:00	06/20/19 14:05	
580-87060-3	PZ-8-061819	Water	06/18/19 11:15	06/20/19 14:05	
580-87060-4	S-W-43-061819	Water	06/18/19 11:16	06/20/19 14:05	
580-87060-5	EW-1-061819	Water	06/18/19 14:18	06/20/19 14:05	
580-87060-6	GW-2-061819	Water	06/18/19 14:35	06/20/19 14:05	
580-87060-7	GW-20-061819	Water	06/18/19 14:45	06/20/19 14:05	
580-87060-8	S2-BD-061819	Water	06/18/19 14:57	06/20/19 14:05	
580-87060-9	S2-AU-061819	Water	06/18/19 15:12	06/20/19 14:05	
580-87060-10	S2-BU-061819	Water	06/18/19 15:30	06/20/19 14:05	
580-87060-11	S2-AD-061819	Water	06/18/19 15:39	06/20/19 14:05	
580-87060-12	WG-WV-061819	Water	06/18/19 16:05	06/20/19 14:05	
580-87060-13	WG-EV-061819	Water	06/18/19 16:10	06/20/19 14:05	
580-87060-14	FWG-EV-061819	Water	06/18/19 16:48	06/20/19 14:05	
580-87060-15	FWG-WV-061819	Water	06/18/19 16:52	06/20/19 14:05	



LABORATORY INFORMATION

Laboratory: _____ Project Manager: _____
 Address: _____ Phone: _____
 City/State/ZIP: _____ Fax: _____

LAB WORK ORDER: **87060**
 SHIPMENT INFORMATION
 Shipment Method: _____
 Tracking Number: _____

BNSF PROJECT INFORMATION
 Project State of Origin: Washington
 BNSF Project Number: 683-067 Project City: Skykomish
 BNSF Project Name: BNSF Skykomish Monthly
 BNSF Contact: _____ BNSF Work Order No.: _____

CONSULTANT INFORMATION
 Company: Favallon Consulting
 Address: 975 5th AVE NEU
 City/State/ZIP: Issaquah, WA 95027
 Project Number: _____
 Project Manager: Pete Kingston
 Email: PKingston@favallon.com
 Phone: 425-295-0800 Fax: _____

TURNAROUND TIME
 1-day Rush 5- to 8-day Rush
 2-day Rush Standard 10-Day
 3-day Rush Other _____

DELIVERABLES Other Deliverables?
 BNSF Standard (Level II)
 Level III EDD Req. Format?
 Level IV

METHODS FOR ANALYSIS

 580-87060 Chain of Custody

SAMPLE INFORMATION

Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/ Grab)	Matrix	NWTPH DX									COMMENTS	LAB USE
		Date	Time	Sampler														
1 GW-1-061819	2	6/18/19	0951	GP	N	G	Water	X										
2 PZ-7S-061819			1000	LT				X										
3 PZ-8-061819			1115	LT				X										
4 S-W-43-061819			1116	GP				X										
5 EW-1-061819			1418	GP				X										
6 GW-2-061819			1435	GT				X										
7 GW-20-061819			1445	LT				X										
8 S2-BD-061819			1457	GP				X										
9 S2-AU-061819			1512	LT				X										
10 S2-BU-061819			1530	GP				X										
11 S2-AD-061819			1539	LT				X										
12 WG-WV-061819			1605	GP				X										
13 WG-EV-061819			1610	LT				X										
14 FWG-EV-061819			1648	GP				X										
15 FWG-WV-061819			1652	LT				X										

Therm. ID: A2 Cor: 1.4 ° Unc: 1.7 °
 Cooler Dsc: 2g Blue
 Packing: Bubble FedEx: _____
 Cust. Seal: Yes X No _____ Lab Cour: ✓
 Blue Ice, Wet, Dry, None Other: _____

Therm. ID: A2 Cor: 3.7 ° Unc: 4.0 °
 Cooler Dsc: 2g Blue
 Packing: Bubble FedEx: _____
 Cust. Seal: Yes X No _____ Lab Cour: ✓
 Blue Ice, Wet, Dry, None Other: _____

Therm. ID: A2 Cor: 0.2 ° Unc: 0.5 °
 Cooler Dsc: 2g Blue
 Packing: Bubble FedEx: _____
 Cust. Seal: Yes ✓ No _____ Lab Cour: ✓
 Blue Ice, Wet, Dry, None Other: _____

Relinquished By: [Signature] Date/Time: 6/19/19 0854 Received By: [Signature] Date/Time: 6/20/19 1405
 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? Yes No
 Custody Seal No. _____ BNSF COC No. _____

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-87060-1

Login Number: 87060

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

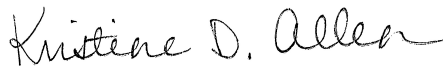
Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-87064-1

Client Project/Site: BNSF 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:
7/8/2019 12:07:24 PM

Kristine Allen, Manager of Project Management
(253)248-4970
kristine.allen@testamericainc.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 Ground Water

Job ID: 580-87064-1

Job ID: 580-87064-1

Laboratory: Eurofins TestAmerica, Seattle

Narrative

Job Narrative 580-87064-1

Comments

No additional comments.

Receipt

The samples were received on 6/20/2019 2:05 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 0.2° C, 0.7° C, 0.9° C, 1.4° C and 2.5° C.

GC Semi VOA

Method(s) NWTPH-Dx: Surrogate recovery for the following sample was outside control limits: GW-3-061819 (580-87064-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 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: 5-W-56-061919 (580-87064-11), 5-W-51-061919 (580-87064-13), 1C-W-7-061919 (580-87064-16), 2A-W-9-061919 (580-87064-21), 2A-W-10-061919 (580-87064-22) and MW-3-061919 (580-87064-24).

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 Ground Water

Job ID: 580-87064-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: 2A-W-41-061819

Lab Sample ID: 580-87064-1

Date Collected: 06/18/19 11:06

Matrix: Water

Date Received: 06/20/19 14:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.28		0.062	0.062	mg/L		06/27/19 14:05	06/29/19 00:51	1
Motor Oil (>C24-C36)	0.23		0.092	0.092	mg/L		06/27/19 14:05	06/29/19 00:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	85		50 - 150				06/27/19 14:05	06/29/19 00:51	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		0.062	0.062	mg/L		06/27/19 14:05	06/28/19 22:39	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		06/27/19 14:05	06/28/19 22:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	96		50 - 150				06/27/19 14:05	06/28/19 22:39	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: 2A-W-410-061819

Lab Sample ID: 580-87064-2

Date Collected: 06/18/19 11:07

Matrix: Water

Date Received: 06/20/19 14:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.29		0.062	0.062	mg/L		06/27/19 14:05	06/29/19 01:13	1
Motor Oil (>C24-C36)	0.23		0.092	0.092	mg/L		06/27/19 14:05	06/29/19 01:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	77		50 - 150				06/27/19 14:05	06/29/19 01:13	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: 1B-W-23-061819

Lab Sample ID: 580-87064-3

Date Collected: 06/18/19 14:35

Matrix: Water

Date Received: 06/20/19 14:05

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		06/27/19 14:05	06/29/19 01:35	1
Motor Oil (>C24-C36)	ND		0.093	0.093	mg/L		06/27/19 14:05	06/29/19 01:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	91		50 - 150				06/27/19 14:05	06/29/19 01:35	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: GW-3-061819

Lab Sample ID: 580-87064-4

Date Collected: 06/18/19 16:01

Matrix: Water

Date Received: 06/20/19 14:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.18		0.063	0.063	mg/L		06/27/19 14:05	06/29/19 01:57	1
Motor Oil (>C24-C36)	0.15		0.092	0.092	mg/L		06/27/19 14:05	06/29/19 01:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	288	X	50 - 150				06/27/19 14:05	06/29/19 01:57	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		06/27/19 14:05	06/28/19 23:01	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		06/27/19 14:05	06/28/19 23:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	99		50 - 150				06/27/19 14:05	06/28/19 23:01	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: GW-30-061819

Lab Sample ID: 580-87064-5

Date Collected: 06/18/19 16:05

Matrix: Water

Date Received: 06/20/19 14:05

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		06/27/19 14:05	06/29/19 02:19	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		06/27/19 14:05	06/29/19 02:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	92		50 - 150				06/27/19 14:05	06/29/19 02:19	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: 2A-W-42-061819

Lab Sample ID: 580-87064-6

Date Collected: 06/18/19 17:45

Matrix: Water

Date Received: 06/20/19 14:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.16		0.062	0.062	mg/L		06/27/19 14:05	06/29/19 02:41	1
Motor Oil (>C24-C36)	0.16		0.091	0.091	mg/L		06/27/19 14:05	06/29/19 02:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	82		50 - 150				06/27/19 14:05	06/29/19 02:41	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: 5-W-19-061819

Lab Sample ID: 580-87064-7

Date Collected: 06/18/19 18:52

Matrix: Water

Date Received: 06/20/19 14:05

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		06/27/19 14:05	06/29/19 03:03	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		06/27/19 14:05	06/29/19 03:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	92		50 - 150				06/27/19 14:05	06/29/19 03:03	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: 5-W-18-061919

Lab Sample ID: 580-87064-8

Date Collected: 06/19/19 08:42

Matrix: Water

Date Received: 06/20/19 14:05

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		07/02/19 10:40	07/03/19 13:27	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		07/02/19 10:40	07/03/19 13:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	89		50 - 150				07/02/19 10:40	07/03/19 13:27	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: 5-W-16-061919

Lab Sample ID: 580-87064-9

Date Collected: 06/19/19 09:40

Matrix: Water

Date Received: 06/20/19 14:05

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		07/02/19 10:40	07/03/19 13:48	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		07/02/19 10:40	07/03/19 13:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	96		50 - 150				07/02/19 10:40	07/03/19 13:48	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: 5-W-17-061919

Lab Sample ID: 580-87064-10

Date Collected: 06/19/19 10:44

Matrix: Water

Date Received: 06/20/19 14:05

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		07/02/19 10:40	07/03/19 14:10	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		07/02/19 10:40	07/03/19 14:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	91		50 - 150				07/02/19 10:40	07/03/19 14:10	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: 5-W-56-061919

Lab Sample ID: 580-87064-11

Date Collected: 06/19/19 12:16

Matrix: Water

Date Received: 06/20/19 14:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.81		0.062	0.062	mg/L		07/02/19 10:40	07/03/19 14:32	1
Motor Oil (>C24-C36)	1.5		0.092	0.092	mg/L		07/02/19 10:40	07/03/19 14:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150				07/02/19 10:40	07/03/19 14:32	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: 5-W-55-061919

Lab Sample ID: 580-87064-12

Date Collected: 06/19/19 13:11

Matrix: Water

Date Received: 06/20/19 14:05

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		07/02/19 10:40	07/03/19 14:54	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		07/02/19 10:40	07/03/19 14:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	94		50 - 150				07/02/19 10:40	07/03/19 14:54	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: 5-W-51-061919

Lab Sample ID: 580-87064-13

Date Collected: 06/19/19 14:09

Matrix: Water

Date Received: 06/20/19 14:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.39		0.062	0.062	mg/L		07/02/19 10:40	07/03/19 15:16	1
Motor Oil (>C24-C36)	0.35		0.091	0.091	mg/L		07/02/19 10:40	07/03/19 15:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	91		50 - 150				07/02/19 10:40	07/03/19 15:16	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: 5-W-14-061919

Lab Sample ID: 580-87064-14

Date Collected: 06/19/19 15:06

Matrix: Water

Date Received: 06/20/19 14:05

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		07/02/19 10:40	07/03/19 15:38	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		07/02/19 10:40	07/03/19 15:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	89		50 - 150				07/02/19 10:40	07/03/19 15:38	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: 1B-W-3-161919

Lab Sample ID: 580-87064-15

Date Collected: 06/19/19 08:48

Matrix: Water

Date Received: 06/20/19 14:05

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		07/02/19 10:40	07/03/19 16:22	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		07/02/19 10:40	07/03/19 16:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	95		50 - 150				07/02/19 10:40	07/03/19 16:22	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: 1C-W-7-061919

Lab Sample ID: 580-87064-16

Date Collected: 06/19/19 10:07

Matrix: Water

Date Received: 06/20/19 14:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.074		0.062	0.062	mg/L		07/02/19 10:40	07/03/19 16:44	1
Motor Oil (>C24-C36)	0.10		0.091	0.091	mg/L		07/02/19 10:40	07/03/19 16:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	93		50 - 150				07/02/19 10:40	07/03/19 16:44	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: GW-4-061919

Lab Sample ID: 580-87064-17

Date Collected: 06/19/19 11:35

Matrix: Water

Date Received: 06/20/19 14:05

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		07/02/19 10:40	07/03/19 17:06	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		07/02/19 10:40	07/03/19 17:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	94		50 - 150				07/02/19 10:40	07/03/19 17:06	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: EW-2A-061919

Lab Sample ID: 580-87064-18

Date Collected: 06/19/19 13:00

Matrix: Water

Date Received: 06/20/19 14:05

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		07/02/19 10:40	07/03/19 17:28	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		07/02/19 10:40	07/03/19 17:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	97		50 - 150				07/02/19 10:40	07/03/19 17:28	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: 1C-W-1-061919

Lab Sample ID: 580-87064-19

Date Collected: 06/19/19 14:07

Matrix: Water

Date Received: 06/20/19 14:05

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		07/02/19 10:40	07/03/19 17:50	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		07/02/19 10:40	07/03/19 17:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	88		50 - 150				07/02/19 10:40	07/03/19 17:50	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: 1C-W-8-061919

Lab Sample ID: 580-87064-20

Date Collected: 06/19/19 15:00

Matrix: Water

Date Received: 06/20/19 14:05

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		07/02/19 10:40	07/03/19 18:12	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		07/02/19 10:40	07/03/19 18:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	96		50 - 150				07/02/19 10:40	07/03/19 18:12	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: 2A-W-9-061919

Lab Sample ID: 580-87064-21

Date Collected: 06/19/19 16:21

Matrix: Water

Date Received: 06/20/19 14:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.10		0.062	0.062	mg/L		07/02/19 10:40	07/03/19 18:34	1
Motor Oil (>C24-C36)	0.12		0.091	0.091	mg/L		07/02/19 10:40	07/03/19 18:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	96		50 - 150				07/02/19 10:40	07/03/19 18:34	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: 2A-W-10-061919

Lab Sample ID: 580-87064-22

Date Collected: 06/19/19 16:40

Matrix: Water

Date Received: 06/20/19 14:05

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		07/02/19 10:40	07/03/19 18:56	1
Motor Oil (>C24-C36)	0.19		0.091	0.091	mg/L		07/02/19 10:40	07/03/19 18:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	95		50 - 150				07/02/19 10:40	07/03/19 18:56	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: 2B-W-4-061919

Lab Sample ID: 580-87064-23

Date Collected: 06/19/19 17:48

Matrix: Water

Date Received: 06/20/19 14:05

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		07/02/19 10:40	07/03/19 19:17	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		07/02/19 10:40	07/03/19 19:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	97		50 - 150				07/02/19 10:40	07/03/19 19:17	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: MW-3-061919

Lab Sample ID: 580-87064-24

Date Collected: 06/19/19 16:40

Matrix: Water

Date Received: 06/20/19 14:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.33		0.062	0.062	mg/L		07/02/19 10:40	07/03/19 19:39	1
Motor Oil (>C24-C36)	0.74		0.091	0.091	mg/L		07/02/19 10:40	07/03/19 19:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	85		50 - 150				07/02/19 10:40	07/03/19 19:39	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: MW-4-061919

Lab Sample ID: 580-87064-25

Date Collected: 06/19/19 17:47

Matrix: Water

Date Received: 06/20/19 14:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.063		0.062	0.062	mg/L		07/02/19 10:40	07/06/19 14:29	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		07/02/19 10:40	07/06/19 14:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	93		50 - 150				07/02/19 10:40	07/06/19 14:29	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: MW-555-061919

Lab Sample ID: 580-87064-26

Date Collected: 06/19/19 18:25

Matrix: Water

Date Received: 06/20/19 14:05

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		07/02/19 10:40	07/06/19 14:51	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		07/02/19 10:40	07/06/19 14:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	79		50 - 150				07/02/19 10:40	07/06/19 14:51	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

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

Lab Sample ID: MB 580-304216/1-A
Matrix: Water
Analysis Batch: 304316

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 304216

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		06/27/19 14:05	06/28/19 23:45	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		06/27/19 14:05	06/28/19 23:45	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	99		50 - 150				06/27/19 14:05	06/28/19 23:45	1

Lab Sample ID: LCS 580-304216/2-A
Matrix: Water
Analysis Batch: 304316

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 304216

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
#2 Diesel (C10-C24)	0.500	0.447		mg/L		89	50 - 120
Motor Oil (>C24-C36)	0.500	0.521		mg/L		104	64 - 120
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
<i>o</i> -Terphenyl	95		50 - 150				

Lab Sample ID: LCSD 580-304216/3-A
Matrix: Water
Analysis Batch: 304316

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 304216

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	0.500	0.461		mg/L		92	50 - 120	3	26
Motor Oil (>C24-C36)	0.500	0.504		mg/L		101	64 - 120	3	24
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
<i>o</i> -Terphenyl	93		50 - 150						

Lab Sample ID: MB 580-304607/1-A
Matrix: Water
Analysis Batch: 304710

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 304607

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		07/02/19 10:39	07/03/19 12:22	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		07/02/19 10:39	07/03/19 12:22	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	90		50 - 150				07/02/19 10:39	07/03/19 12:22	1

Lab Sample ID: LCS 580-304607/2-A
Matrix: Water
Analysis Batch: 304710

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 304607

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
#2 Diesel (C10-C24)	0.500	0.396		mg/L		79	50 - 120
Motor Oil (>C24-C36)	0.500	0.490		mg/L		98	64 - 120

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

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

Lab Sample ID: LCS 580-304607/2-A
Matrix: Water
Analysis Batch: 304710

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 304607

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	105		50 - 150

Lab Sample ID: LCSD 580-304607/3-A
Matrix: Water
Analysis Batch: 304710

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 304607

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec.		RPD	Limit
		Result	Qualifier				Limits	RPD		
#2 Diesel (C10-C24)	0.500	0.367		mg/L		73	50 - 120	7	26	
Motor Oil (>C24-C36)	0.500	0.470		mg/L		94	64 - 120	4	24	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	87		50 - 150

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Lab Sample ID: MB 580-304216/1-B
Matrix: Water
Analysis Batch: 304316

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 304216

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		06/27/19 14:05	06/28/19 21:32	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		06/27/19 14:05	06/28/19 21:32	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
<i>o</i> -Terphenyl	101		50 - 150	06/27/19 14:05	06/28/19 21:32	1

Lab Sample ID: LCS 580-304216/2-B
Matrix: Water
Analysis Batch: 304316

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 304216

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec.	
		Result	Qualifier				Limits	RPD
#2 Diesel (C10-C24)	0.500	0.431		mg/L		86	50 - 120	
Motor Oil (>C24-C36)	0.500	0.522		mg/L		104	64 - 120	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	111		50 - 150

Lab Sample ID: LCSD 580-304216/3-B
Matrix: Water
Analysis Batch: 304316

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 304216

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec.		RPD	Limit
		Result	Qualifier				Limits	RPD		
#2 Diesel (C10-C24)	0.500	0.472		mg/L		94	50 - 120	9	26	
Motor Oil (>C24-C36)	0.500	0.533		mg/L		107	64 - 120	2	24	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	109		50 - 150

Eurofins TestAmerica, Seattle

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: 2A-W-41-061819

Lab Sample ID: 580-87064-1

Date Collected: 06/18/19 11:06

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304216	06/27/19 14:05	DCV	TAL SEA
Total/NA	Cleanup	3630C			304260	06/27/19 18:56	DCV	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304316	06/28/19 22:39	JCM	TAL SEA
Total/NA	Prep	3510C			304216	06/27/19 14:05	DCV	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304316	06/29/19 00:51	JCM	TAL SEA

Client Sample ID: 2A-W-410-061819

Lab Sample ID: 580-87064-2

Date Collected: 06/18/19 11:07

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304216	06/27/19 14:05	DCV	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304316	06/29/19 01:13	JCM	TAL SEA

Client Sample ID: 1B-W-23-061819

Lab Sample ID: 580-87064-3

Date Collected: 06/18/19 14:35

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304216	06/27/19 14:05	DCV	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304316	06/29/19 01:35	JCM	TAL SEA

Client Sample ID: GW-3-061819

Lab Sample ID: 580-87064-4

Date Collected: 06/18/19 16:01

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304216	06/27/19 14:05	DCV	TAL SEA
Total/NA	Cleanup	3630C			304260	06/27/19 18:56	DCV	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304316	06/28/19 23:01	JCM	TAL SEA
Total/NA	Prep	3510C			304216	06/27/19 14:05	DCV	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304316	06/29/19 01:57	JCM	TAL SEA

Client Sample ID: GW-30-061819

Lab Sample ID: 580-87064-5

Date Collected: 06/18/19 16:05

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304216	06/27/19 14:05	DCV	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304316	06/29/19 02:19	JCM	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: 2A-W-42-061819

Lab Sample ID: 580-87064-6

Date Collected: 06/18/19 17:45

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304216	06/27/19 14:05	DCV	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304316	06/29/19 02:41	JCM	TAL SEA

Client Sample ID: 5-W-19-061819

Lab Sample ID: 580-87064-7

Date Collected: 06/18/19 18:52

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304216	06/27/19 14:05	DCV	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304316	06/29/19 03:03	JCM	TAL SEA

Client Sample ID: 5-W-18-061919

Lab Sample ID: 580-87064-8

Date Collected: 06/19/19 08:42

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304607	07/02/19 10:40	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304710	07/03/19 13:27	T1W	TAL SEA

Client Sample ID: 5-W-16-061919

Lab Sample ID: 580-87064-9

Date Collected: 06/19/19 09:40

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304607	07/02/19 10:40	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304710	07/03/19 13:48	T1W	TAL SEA

Client Sample ID: 5-W-17-061919

Lab Sample ID: 580-87064-10

Date Collected: 06/19/19 10:44

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304607	07/02/19 10:40	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304710	07/03/19 14:10	T1W	TAL SEA

Client Sample ID: 5-W-56-061919

Lab Sample ID: 580-87064-11

Date Collected: 06/19/19 12:16

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304607	07/02/19 10:40	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304710	07/03/19 14:32	T1W	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: 5-W-55-061919

Lab Sample ID: 580-87064-12

Date Collected: 06/19/19 13:11

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304607	07/02/19 10:40	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304710	07/03/19 14:54	T1W	TAL SEA

Client Sample ID: 5-W-51-061919

Lab Sample ID: 580-87064-13

Date Collected: 06/19/19 14:09

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304607	07/02/19 10:40	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304710	07/03/19 15:16	T1W	TAL SEA

Client Sample ID: 5-W-14-061919

Lab Sample ID: 580-87064-14

Date Collected: 06/19/19 15:06

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304607	07/02/19 10:40	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304710	07/03/19 15:38	T1W	TAL SEA

Client Sample ID: 1B-W-3-161919

Lab Sample ID: 580-87064-15

Date Collected: 06/19/19 08:48

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304607	07/02/19 10:40	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304710	07/03/19 16:22	T1W	TAL SEA

Client Sample ID: 1C-W-7-061919

Lab Sample ID: 580-87064-16

Date Collected: 06/19/19 10:07

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304607	07/02/19 10:40	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304710	07/03/19 16:44	T1W	TAL SEA

Client Sample ID: GW-4-061919

Lab Sample ID: 580-87064-17

Date Collected: 06/19/19 11:35

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304607	07/02/19 10:40	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304710	07/03/19 17:06	T1W	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: EW-2A-061919

Lab Sample ID: 580-87064-18

Date Collected: 06/19/19 13:00

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304607	07/02/19 10:40	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304710	07/03/19 17:28	T1W	TAL SEA

Client Sample ID: 1C-W-1-061919

Lab Sample ID: 580-87064-19

Date Collected: 06/19/19 14:07

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304607	07/02/19 10:40	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304710	07/03/19 17:50	T1W	TAL SEA

Client Sample ID: 1C-W-8-061919

Lab Sample ID: 580-87064-20

Date Collected: 06/19/19 15:00

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304607	07/02/19 10:40	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304710	07/03/19 18:12	T1W	TAL SEA

Client Sample ID: 2A-W-9-061919

Lab Sample ID: 580-87064-21

Date Collected: 06/19/19 16:21

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304607	07/02/19 10:40	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304710	07/03/19 18:34	T1W	TAL SEA

Client Sample ID: 2A-W-10-061919

Lab Sample ID: 580-87064-22

Date Collected: 06/19/19 16:40

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304607	07/02/19 10:40	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304710	07/03/19 18:56	T1W	TAL SEA

Client Sample ID: 2B-W-4-061919

Lab Sample ID: 580-87064-23

Date Collected: 06/19/19 17:48

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304607	07/02/19 10:40	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304710	07/03/19 19:17	T1W	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Client Sample ID: MW-3-061919

Lab Sample ID: 580-87064-24

Date Collected: 06/19/19 16:40

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304607	07/02/19 10:40	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304710	07/03/19 19:39	T1W	TAL SEA

Client Sample ID: MW-4-061919

Lab Sample ID: 580-87064-25

Date Collected: 06/19/19 17:47

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304607	07/02/19 10:40	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304875	07/06/19 14:29	W1T	TAL SEA

Client Sample ID: MW-555-061919

Lab Sample ID: 580-87064-26

Date Collected: 06/19/19 18:25

Matrix: Water

Date Received: 06/20/19 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			304607	07/02/19 10:40	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	304875	07/06/19 14:51	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: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Laboratory: Eurofins TestAmerica, Seattle

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


Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	17-024	01-19-20
ANAB	Dept. of Defense ELAP		L2236	01-19-22
ANAB	DoD		L2236	01-19-22
ANAB	ISO/IEC 17025		L2236	01-19-22
ANAB	ISO/IEC 17025		L2236	01-19-22
California	State Program	9	2901	11-05-19
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-05-19
Oregon	NELAP		WA100007	11-05-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-14-00126	02-10-20
Washington	State Program	10	C553	02-17-20

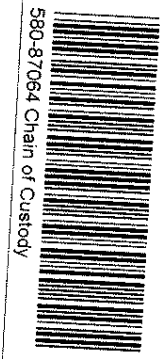
Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

Job ID: 580-87064-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-87064-1	2A-W-41-061819	Water	06/18/19 11:06	06/20/19 14:05	
580-87064-2	2A-W-410-061819	Water	06/18/19 11:07	06/20/19 14:05	
580-87064-3	1B-W-23-061819	Water	06/18/19 14:35	06/20/19 14:05	
580-87064-4	GW-3-061819	Water	06/18/19 16:01	06/20/19 14:05	
580-87064-5	GW-30-061819	Water	06/18/19 16:05	06/20/19 14:05	
580-87064-6	2A-W-42-061819	Water	06/18/19 17:45	06/20/19 14:05	
580-87064-7	5-W-19-061819	Water	06/18/19 18:52	06/20/19 14:05	
580-87064-8	5-W-18-061919	Water	06/19/19 08:42	06/20/19 14:05	
580-87064-9	5-W-16-061919	Water	06/19/19 09:40	06/20/19 14:05	
580-87064-10	5-W-17-061919	Water	06/19/19 10:44	06/20/19 14:05	
580-87064-11	5-W-56-061919	Water	06/19/19 12:16	06/20/19 14:05	
580-87064-12	5-W-55-061919	Water	06/19/19 13:11	06/20/19 14:05	
580-87064-13	5-W-51-061919	Water	06/19/19 14:09	06/20/19 14:05	
580-87064-14	5-W-14-061919	Water	06/19/19 15:06	06/20/19 14:05	
580-87064-15	1B-W-3-161919	Water	06/19/19 08:48	06/20/19 14:05	
580-87064-16	1C-W-7-061919	Water	06/19/19 10:07	06/20/19 14:05	
580-87064-17	GW-4-061919	Water	06/19/19 11:35	06/20/19 14:05	
580-87064-18	EW-2A-061919	Water	06/19/19 13:00	06/20/19 14:05	
580-87064-19	1C-W-1-061919	Water	06/19/19 14:07	06/20/19 14:05	
580-87064-20	1C-W-8-061919	Water	06/19/19 15:00	06/20/19 14:05	
580-87064-21	2A-W-9-061919	Water	06/19/19 16:21	06/20/19 14:05	
580-87064-22	2A-W-10-061919	Water	06/19/19 16:40	06/20/19 14:05	
580-87064-23	2B-W-4-061919	Water	06/19/19 17:48	06/20/19 14:05	
580-87064-24	MW-3-061919	Water	06/19/19 16:40	06/20/19 14:05	
580-87064-25	MW-4-061919	Water	06/19/19 17:47	06/20/19 14:05	
580-87064-26	MW-555-061919	Water	06/19/19 18:25	06/20/19 14:05	

	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: 683-067					
BNSF Project Number: 683-067		Project State of Origin:	Company: Farallon Consulting		Project Manager: Pete Kingston	Project State of Origin: SKYKOMISH, U.A.					
BNSF Project Name: BNSF Skykomish Quarterly		BNSF Work Order No.:	Address: 975 5th AVE NW		Email: P.kingston@farallonconsulting.com	City/State/ZIP: Issaquah, WA 98223					
BNSF Contact:		City/State/ZIP:	Phone: 875-295-0800		Fax:	City/State/ZIP: Issaquah, WA 98223					
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 checked="" type="checkbox"/> BNSF Standard (Level II) <input type="checkbox"/> Level III <input type="checkbox"/> EDD Req. Format? <input type="checkbox"/> Level IV		NUTPH OX SGC (Silica gel clean up)							
SAMPLE INFORMATION											
Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/Grab)	Matrix	NUTPH OX	SGC (Silica gel clean up)	Therm. ID: <u>A2</u> Cor: <u>0.2</u> Unc: <u>U.5</u>	
		Date	Time	Sampler						Cooler Dsc: <u>Lg Blue</u>	Packing: <u>Bubble</u>
1 2A-W-41-061819	2	6/18/19	1106	CB	N	G	Water	X	X		
2 2A-W-410-061819	2	6/18/19	1107	CB	N			X			
3 IB-W-23-061819	2	6/18/19	1435	CB	N			X			
4 GW-3-061819	2	6/18/19	1601	CB	N			X	X		
5 GW-30-061819	2	6/18/19	1605	CB	N			X			
6 2A-W-42-061819	2	6/18/19	1745	CB	N			X			
7 5-W-19-061819	2	6/18/19	1852	GP	N			X			
8 5-W-18-061919	2	6/19/19	0842	GP	N			X			
9 5-W-16-061919	2		0940	GP	N			X			
10 5-W-17-061919	2		1044	GP	N			X			
11 5-W-56-061919	2		1216	GP	N			X			
12 5-W-55-061919	2		1311	GP	N			X			
13 5-W-51-061919	2		1409	GP	N			X			
14 5-W-14-061919	2		1506	GP	N			X			
15 IB-W-3-061919	2		0848	CB	N			X			
Relinquished By: <i>[Signature]</i>		Date/Time: 6/19/19 2043		Received By: <i>[Signature]</i>		Date/Time: 6/20/19 1405		Comments and Special Analytical Requirements: Contact project manager to confirm silica gel clean up samples			
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.			



ORIGINAL - RETURN TO LABORATORY WITH SAMPLES

DUPLICATE - CONSULTANT

Therm. ID: A2 Cor: 2.5 Unc: 2.5
 Cooler Dsc: Lg Green
 Packing: Bubble FedEx: _____
 Cust. Seal: Yes X No _____ UPS: _____
 Blue Ice: Wet, Dry, None Lab Cour: 7/8/2019
 Other: _____

 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:	
BNSF Project Number: 683-067				Company: Favallon Consulting				Project Manager: Pete Kingston	
BNSF Project Name: BNSF Skykomish Quarters				Address: 975 5th AVE NW				Email: pkingston@favallonconsulting.com	
BNSF Contact:				City/State/ZIP: Skykomish WA 98027				Phone: 425-395-2520 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 checked="" 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
Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/ Grab)	Matrix		
		Date	Time	Sampler					
1 1C-W-7-061919	2	6/19/19	1007	CB	N	G	Water	X	
2 GW-4-061919	2	6/19/19	1135	CB	N	G	Water	X	
3 EW-2A-061919	2	6/19/19	1300	CB	N	G	Water	X	
4 1C-W-1-061919	2	6/19/19	1407	CB	N	G	Water	X	
5 1C-W-8-061919	2	6/19/19	1500	CB	N	G	Water	X	
6 2A-W-9-061919	2	6/19/19	1621	GP	N	G	Water	X	
7 2A-W-10-061919	2	6/19/19	1640	GP	N	G	Water	X	
8 2B-W-4-061919	2	6/19/19	1748	GP	N	G	Water	X	
9 MW-3-061919	2	6/19/19	1640	CB	N	G	Water	X	
10 MW-4-061919	2	6/19/19	1747	CB	N	G	Water	X	
11 MW-555-061919	2	6/19/19	1825	CB	N	G	Water	X	
12									
13									
14									
15									
Relinquished By:	Date/Time: 6/19/19 2043	Received By:	Date/Time: 6/20/19 1405	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)

TestAmerica Seattle
Sample Receiving Triage Guide

7/8/2010

Priority Level: RUSH

SHORT HOLD

Standard

Date/Time Received: 6/20/14 1405

Company Name & Sampling Site: Parallon - 5kg air

PH/PM/A to Complete This Section at Cooler Great:

TALS Project #: 280010391
Special Instructions: _____

Initials _____

DoD:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Sites & Events:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Sample Archive Required:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Freeze	Refrigerate	
			If YES: <input type="checkbox"/>		

Time Zone: • Guam • Hawaii • Alaska • PDT/PST • MDT/MST • CDY/CST • EDT/EST • OTHER _____ State: _____

Sample Control to Complete This Section:

1. Is an NCM required for coolers outside required limits? Yes No
 2. Were the samples sampled on the same day as receipt? Yes No
- If yes to question 1 and no to question 2 above take a confirmation temperature
- Comments: _____ (NOTE IF NOT ON ICE)

Initials EL

Items that must be checked at triage:
 If there are any VOA analysis on the COC:
 Ensure any Encores or Stir bar VOAs are placed in the freezer. Note date and time placed in freezer in logbook.
 Ensure any bulk soil jars for VOAs which will require MeOH preservation. Take ASAP to VOA extractions.

Document any problems or discrepancies and the actions taken to resolve them in an NCM

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-87064-1

Login Number: 87064

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?	False	Not requested on COC.
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	N/A	Insufficient volume received for MS/MSD.
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

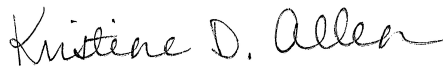
Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-89409-1

Client Project/Site: BNSF 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:
10/10/2019 1:10:35 PM

Kristine Allen, Manager of Project Management
(253)248-4970
kristine.allen@testamericainc.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 Ground Water

Job ID: 580-89409-1

Job ID: 580-89409-1

Laboratory: Eurofins TestAmerica, Seattle

Narrative

Job Narrative 580-89409-1

Comments

No additional comments.

Receipt

The samples were received on 9/20/2019 2:15 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 10 coolers at receipt time were 0.0° C, 0.3° C, 0.3° C, 0.6° C, 0.6° C, 1.0° C, 1.0° C, 1.1° C, 1.3° C and 1.6° C.

GC Semi VOA

Method(s) NWTPH-Dx: The %D of surrogate (o-Terphenyl) for CCVRT associated with batch 580-313207 was outside the lower control limits. All associated sample surrogate fell within acceptance criteria; therefore, the data have been reported. (CCV 580-313207/14), (CCV 580-313207/25), (CCV 580-313207/31) and (CCVRT 580-313207/3)

Method(s) 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: 5-W-51-091719 (580-89409-9), 5-W-55-091719 (580-89409-12) and 5-W-56-091719 (580-89409-13).

Method(s) 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: MW-38R-091719 (580-89409-15), GW-3-091819 (580-89409-32) and GW-30-091819 (580-89409-33).

Method(s) NWTPH-Dx: The following samples and QC were re-analyzed due to failing CCVs in the initial analysis. 1C-W-3-091719 (580-89409-14), MW-38R-091719 (580-89409-15), 1C-W-7-091719 (580-89409-16), 2A-W-40-091719 (580-89409-17), S3-AU-091719 (580-89409-18), GW-3-091819 (580-89409-32), GW-30-091819 (580-89409-33), S3-CU-091819 (580-89409-34), S3-AD-091819 (580-89409-35), S3-CD-091819 (580-89409-36), S3-BD-091819 (580-89409-37), S3-BU-091819 (580-89409-38), S4-AD-091819 (580-89409-39), S4-CD-091819 (580-89409-40), S4-BD-091819 (580-89409-41), S4-BU-091819 (580-89409-42), S4-CU-091819 (580-89409-43), S4-AU-091819 (580-89409-44), (CCV 580-313798/14), (CCV 580-313798/25), (CCV 580-313798/35), (CCVRT 580-313798/3), (LCS 580-312933/2-A), (LCS 580-312933/2-B), (LCSD 580-312933/3-A), (LCSD 580-312933/3-B), (MB 580-312933/1-A), (MB 580-312933/1-B) and (RTC 580-313798/2)

Method(s) NWTPH-Dx: Surrogate recovery for the following samples were outside control limits: 1C-W-7-091719 (580-89409-16), GW-3-091819 (580-89409-32) and GW-30-091819 (580-89409-33). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) NWTPH-Dx: The laboratory control sample duplicate (LCSD) for preparation batch 580-312969 and 580-313085 and analytical batch 580-313202 recovered outside control limits for the following analytes: Motor Oil (>C24-C36). These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 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: 2A-W-40-091719 (580-89409-17), GW-3-091819 (580-89409-32), GW-30-091819 (580-89409-33) and S4-BU-091819 (580-89409-42).

Method(s) 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: 2A-W-42-091819 (580-89409-19), MW-4-091819 (580-89409-24), 2A-W-9-091819 (580-89409-25), 2A-W-41-091819 (580-89409-30) and 2A-W-410-091819 (580-89409-31).

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 Ground Water

Job ID: 580-89409-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
X	Surrogate is outside control limits

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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: 5-W-19-091719

Lab Sample ID: 580-89409-1

Date Collected: 09/17/19 09:25

Matrix: Water

Date Received: 09/20/19 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		0.062	0.062	mg/L		10/01/19 08:21	10/03/19 05:57	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/01/19 08:21	10/03/19 05:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	78		50 - 150				10/01/19 08:21	10/03/19 05:57	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: EW-2A-091719

Lab Sample ID: 580-89409-2

Date Collected: 09/17/19 09:25

Matrix: Water

Date Received: 09/20/19 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		0.061	0.061	mg/L		10/01/19 08:21	10/03/19 06:37	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/01/19 08:21	10/03/19 06:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	92		50 - 150				10/01/19 08:21	10/03/19 06:37	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: 5-W-18-091719

Lab Sample ID: 580-89409-3

Date Collected: 09/17/19 09:28

Matrix: Water

Date Received: 09/20/19 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		0.062	0.062	mg/L		10/01/19 08:21	10/03/19 06:57	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/01/19 08:21	10/03/19 06:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	90		50 - 150				10/01/19 08:21	10/03/19 06:57	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: 5-W-17-091719

Lab Sample ID: 580-89409-4

Date Collected: 09/17/19 10:30

Matrix: Water

Date Received: 09/20/19 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		0.062	0.062	mg/L		10/01/19 08:21	10/03/19 07:18	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/01/19 08:21	10/03/19 07:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	95		50 - 150				10/01/19 08:21	10/03/19 07:18	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: GW-4-091719

Lab Sample ID: 580-89409-5

Date Collected: 09/17/19 10:49

Matrix: Water

Date Received: 09/20/19 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		0.062	0.062	mg/L		10/01/19 08:21	10/03/19 07:38	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/01/19 08:21	10/03/19 07:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	93		50 - 150				10/01/19 08:21	10/03/19 07:38	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: 5-W-16-091719

Lab Sample ID: 580-89409-6

Date Collected: 09/17/19 10:50

Matrix: Water

Date Received: 09/20/19 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		0.062	0.062	mg/L		10/01/19 08:21	10/03/19 07:58	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		10/01/19 08:21	10/03/19 07:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	99		50 - 150				10/01/19 08:21	10/03/19 07:58	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: 5-W-14-091719

Lab Sample ID: 580-89409-7

Date Collected: 09/17/19 11:38

Matrix: Water

Date Received: 09/20/19 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		0.061	0.061	mg/L		10/01/19 08:21	10/03/19 08:18	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/01/19 08:21	10/03/19 08:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	97		50 - 150				10/01/19 08:21	10/03/19 08:18	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: 1C-W-1-091719

Lab Sample ID: 580-89409-8

Date Collected: 09/17/19 11:53

Matrix: Water

Date Received: 09/20/19 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		0.061	0.061	mg/L		10/01/19 08:21	10/03/19 08:38	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/01/19 08:21	10/03/19 08:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	97		50 - 150				10/01/19 08:21	10/03/19 08:38	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: 5-W-51-091719

Lab Sample ID: 580-89409-9

Date Collected: 09/17/19 12:05

Matrix: Water

Date Received: 09/20/19 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)	0.48		0.062	0.062	mg/L		10/01/19 08:21	10/03/19 08:58	1
Motor Oil (>C24-C36)	0.62		0.091	0.091	mg/L		10/01/19 08:21	10/03/19 08:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	83		50 - 150				10/01/19 08:21	10/03/19 08:58	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: 1C-W-8-091719

Lab Sample ID: 580-89409-10

Date Collected: 09/17/19 12:49

Matrix: Water

Date Received: 09/20/19 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		0.061	0.061	mg/L		10/01/19 08:21	10/03/19 09:19	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/01/19 08:21	10/03/19 09:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	76		50 - 150				10/01/19 08:21	10/03/19 09:19	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: 1C-W-4-091719

Lab Sample ID: 580-89409-11

Date Collected: 09/17/19 13:43

Matrix: Water

Date Received: 09/20/19 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		0.061	0.061	mg/L		10/01/19 08:21	10/03/19 09:39	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/01/19 08:21	10/03/19 09:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	94		50 - 150				10/01/19 08:21	10/03/19 09:39	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: 5-W-55-091719

Lab Sample ID: 580-89409-12

Date Collected: 09/17/19 14:23

Matrix: Water

Date Received: 09/20/19 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)	0.065		0.062	0.062	mg/L		10/01/19 08:21	10/03/19 10:19	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/01/19 08:21	10/03/19 10:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	86		50 - 150				10/01/19 08:21	10/03/19 10:19	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: 5-W-56-091719

Lab Sample ID: 580-89409-13

Date Collected: 09/17/19 14:27

Matrix: Water

Date Received: 09/20/19 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)	0.89		0.062	0.062	mg/L		10/01/19 08:21	10/03/19 10:39	1
Motor Oil (>C24-C36)	0.71		0.092	0.092	mg/L		10/01/19 08:21	10/03/19 10:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	77		50 - 150				10/01/19 08:21	10/03/19 10:39	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: 1C-W-3-091719

Lab Sample ID: 580-89409-14

Date Collected: 09/17/19 14:39

Matrix: Water

Date Received: 09/20/19 14:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/01/19 15:08	10/03/19 18:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	78		50 - 150	10/01/19 15:08	10/03/19 18:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.061	0.061	mg/L		10/01/19 15:08	10/09/19 18:54	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: MW-38R-091719

Lab Sample ID: 580-89409-15

Date Collected: 09/17/19 15:42

Matrix: Water

Date Received: 09/20/19 14:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil (>C24-C36)	0.12		0.091	0.091	mg/L		10/01/19 15:08	10/03/19 19:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	75		50 - 150	10/01/19 15:08	10/03/19 19:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.082		0.062	0.062	mg/L		10/01/19 15:08	10/09/19 19:14	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: 1C-W-7-091719

Lab Sample ID: 580-89409-16

Date Collected: 09/17/19 15:54

Matrix: Water

Date Received: 09/20/19 14:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/01/19 15:08	10/03/19 19:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	35	X	50 - 150	10/01/19 15:08	10/03/19 19:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.061	0.061	mg/L		10/01/19 15:08	10/09/19 19:34	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: 2A-W-40-091719

Lab Sample ID: 580-89409-17

Date Collected: 09/17/19 16:18

Matrix: Water

Date Received: 09/20/19 14:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil (>C24-C36)	ND		0.090	0.090	mg/L		10/01/19 15:08	10/03/19 20:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	64		50 - 150	10/01/19 15:08	10/03/19 20:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.090		0.061	0.061	mg/L		10/01/19 15:08	10/09/19 20:15	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: S3-AU-091719

Lab Sample ID: 580-89409-18

Date Collected: 09/17/19 16:37

Matrix: Water

Date Received: 09/20/19 14:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/01/19 15:08	10/03/19 20:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	83		50 - 150	10/01/19 15:08	10/03/19 20:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		10/01/19 15:08	10/09/19 20:35	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: 2A-W-42-091819

Lab Sample ID: 580-89409-19

Date Collected: 09/18/19 09:11

Matrix: Water

Date Received: 09/20/19 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)	0.099		0.062	0.062	mg/L		10/02/19 05:27	10/03/19 18:31	1
Motor Oil (>C24-C36)	0.11		0.091	0.091	mg/L		10/02/19 05:27	10/03/19 18:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	64		50 - 150				10/02/19 05:27	10/03/19 18:31	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: 1B-W-3-091819

Lab Sample ID: 580-89409-20

Date Collected: 09/18/19 09:15

Matrix: Water

Date Received: 09/20/19 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		0.062	0.062	mg/L		10/02/19 05:27	10/03/19 18:54	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/02/19 05:27	10/03/19 18:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	53		50 - 150				10/02/19 05:27	10/03/19 18:54	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: MW-16-091819

Lab Sample ID: 580-89409-21

Date Collected: 09/18/19 09:57

Matrix: Water

Date Received: 09/20/19 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		0.062	0.062	mg/L		10/02/19 05:27	10/03/19 19:16	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		10/02/19 05:27	10/03/19 19:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	69		50 - 150				10/02/19 05:27	10/03/19 19:16	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: 1B-W-2-091819

Lab Sample ID: 580-89409-22

Date Collected: 09/18/19 10:22

Matrix: Water

Date Received: 09/20/19 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		0.062	0.062	mg/L		10/02/19 05:27	10/03/19 20:02	1
Motor Oil (>C24-C36)	0.095		0.091	0.091	mg/L		10/02/19 05:27	10/03/19 20:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	71		50 - 150				10/02/19 05:27	10/03/19 20:02	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: 1B-W-23-091819

Lab Sample ID: 580-89409-23

Date Collected: 09/18/19 10:41

Matrix: Water

Date Received: 09/20/19 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		0.061	0.061	mg/L		10/02/19 05:27	10/03/19 20:24	1
Motor Oil (>C24-C36)	0.12		0.091	0.091	mg/L		10/02/19 05:27	10/03/19 20:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	73		50 - 150				10/02/19 05:27	10/03/19 20:24	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: MW-4-091819

Lab Sample ID: 580-89409-24

Date Collected: 09/18/19 11:17

Matrix: Water

Date Received: 09/20/19 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)	0.11		0.062	0.062	mg/L		10/02/19 05:27	10/03/19 20:47	1
Motor Oil (>C24-C36)	0.11		0.092	0.092	mg/L		10/02/19 05:27	10/03/19 20:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150				10/02/19 05:27	10/03/19 20:47	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: 2A-W-9-091819

Lab Sample ID: 580-89409-25

Date Collected: 09/18/19 11:57

Matrix: Water

Date Received: 09/20/19 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)	0.13		0.062	0.062	mg/L		10/02/19 05:27	10/03/19 21:10	1
Motor Oil (>C24-C36)	0.13		0.091	0.091	mg/L		10/02/19 05:27	10/03/19 21:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	65		50 - 150				10/02/19 05:27	10/03/19 21:10	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: 1A-W-4-091819

Lab Sample ID: 580-89409-26

Date Collected: 09/18/19 12:20

Matrix: Water

Date Received: 09/20/19 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		0.062	0.062	mg/L		10/02/19 05:27	10/03/19 21:32	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/02/19 05:27	10/03/19 21:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	77		50 - 150				10/02/19 05:27	10/03/19 21:32	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: 2B-W-4-091819

Lab Sample ID: 580-89409-27

Date Collected: 09/18/19 12:27

Matrix: Water

Date Received: 09/20/19 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		0.063	0.063	mg/L		10/02/19 05:27	10/03/19 21:55	1
Motor Oil (>C24-C36)	ND		0.093	0.093	mg/L		10/02/19 05:27	10/03/19 21:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	68		50 - 150				10/02/19 05:27	10/03/19 21:55	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: 2A-W-10-091819

Lab Sample ID: 580-89409-28

Date Collected: 09/18/19 13:00

Matrix: Water

Date Received: 09/20/19 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		0.061	0.061	mg/L		10/02/19 05:27	10/03/19 22:17	1
Motor Oil (>C24-C36)	0.098		0.091	0.091	mg/L		10/02/19 05:27	10/03/19 22:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	61		50 - 150				10/02/19 05:27	10/03/19 22:17	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: 2A-W-100-091819

Lab Sample ID: 580-89409-29

Date Collected: 09/18/19 13:10

Matrix: Water

Date Received: 09/20/19 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		0.062	0.062	mg/L		10/02/19 05:27	10/03/19 22:40	1
Motor Oil (>C24-C36)	0.13		0.091	0.091	mg/L		10/02/19 05:27	10/03/19 22:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	71		50 - 150				10/02/19 05:27	10/03/19 22:40	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: 2A-W-41-091819

Lab Sample ID: 580-89409-30

Date Collected: 09/18/19 13:24

Matrix: Water

Date Received: 09/20/19 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)	0.26		0.061	0.061	mg/L		10/02/19 05:27	10/03/19 23:03	1
Motor Oil (>C24-C36)	0.23		0.091	0.091	mg/L		10/02/19 05:27	10/03/19 23:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	67		50 - 150				10/02/19 05:27	10/03/19 23:03	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)	0.085		0.061	0.061	mg/L		10/02/19 05:27	10/03/19 18:08	1
Motor Oil (>C24-C36)	ND	*	0.091	0.091	mg/L		10/02/19 05:27	10/03/19 18:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	82		50 - 150				10/02/19 05:27	10/03/19 18:08	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: 2A-W-410-091819

Lab Sample ID: 580-89409-31

Date Collected: 09/18/19 13:30

Matrix: Water

Date Received: 09/20/19 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)	0.26		0.061	0.061	mg/L		10/02/19 05:27	10/03/19 23:25	1
Motor Oil (>C24-C36)	0.24		0.091	0.091	mg/L		10/02/19 05:27	10/03/19 23:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	71		50 - 150				10/02/19 05:27	10/03/19 23:25	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: GW-3-091819

Lab Sample ID: 580-89409-32

Date Collected: 09/18/19 14:41

Matrix: Water

Date Received: 09/20/19 14:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil (>C24-C36)	0.15		0.091	0.091	mg/L		10/01/19 15:08	10/03/19 21:10	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>o-Terphenyl</i>	29	X	50 - 150				10/01/19 15:08	10/03/19 21:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.12		0.062	0.062	mg/L		10/01/19 15:08	10/09/19 20:55	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
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/01/19 15:08	10/03/19 18:31	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>o-Terphenyl</i>	32	X	50 - 150				10/01/19 15:08	10/03/19 18:31	1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		10/01/19 15:08	10/09/19 18:34	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: GW-30-091819

Lab Sample ID: 580-89409-33

Date Collected: 09/18/19 15:00

Matrix: Water

Date Received: 09/20/19 14:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil (>C24-C36)	0.16		0.091	0.091	mg/L		10/01/19 15:08	10/03/19 21:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	43	X	50 - 150	10/01/19 15:08	10/03/19 21:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.10		0.062	0.062	mg/L		10/01/19 15:08	10/09/19 21:15	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: S3-CU-091819

Lab Sample ID: 580-89409-34

Date Collected: 09/18/19 14:52

Matrix: Water

Date Received: 09/20/19 14:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil (>C24-C36)	ND		0.093	0.093	mg/L		10/01/19 15:08	10/03/19 21:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	77		50 - 150	10/01/19 15:08	10/03/19 21:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.063	0.063	mg/L		10/01/19 15:08	10/09/19 21:35	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: S3-AD-091819

Lab Sample ID: 580-89409-35

Date Collected: 09/18/19 14:53

Matrix: Water

Date Received: 09/20/19 14:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		10/01/19 15:08	10/03/19 22:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	70		50 - 150	10/01/19 15:08	10/03/19 22:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		10/01/19 15:08	10/09/19 21:56	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: S3-CD-091819

Lab Sample ID: 580-89409-36

Date Collected: 09/18/19 15:02

Matrix: Water

Date Received: 09/20/19 14:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/01/19 15:08	10/03/19 22:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	75		50 - 150	10/01/19 15:08	10/03/19 22:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.061	0.061	mg/L		10/01/19 15:08	10/09/19 22:16	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: S3-BD-091819

Lab Sample ID: 580-89409-37

Date Collected: 09/18/19 15:30

Matrix: Water

Date Received: 09/20/19 14:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/01/19 15:08	10/03/19 23:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	51		50 - 150	10/01/19 15:08	10/03/19 23:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		10/01/19 15:08	10/09/19 22:36	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: S3-BU-091819

Lab Sample ID: 580-89409-38

Date Collected: 09/18/19 15:30

Matrix: Water

Date Received: 09/20/19 14:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		10/01/19 15:08	10/03/19 23:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	76		50 - 150	10/01/19 15:08	10/03/19 23:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		10/01/19 15:08	10/09/19 22:56	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: S4-AD-091819

Lab Sample ID: 580-89409-39

Date Collected: 09/18/19 16:06

Matrix: Water

Date Received: 09/20/19 14:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/01/19 15:08	10/03/19 23:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	77		50 - 150	10/01/19 15:08	10/03/19 23:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		10/01/19 15:08	10/09/19 23:16	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: S4-CD-091819

Lab Sample ID: 580-89409-40

Date Collected: 09/18/19 16:07

Matrix: Water

Date Received: 09/20/19 14:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		10/01/19 15:08	10/04/19 00:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	68		50 - 150	10/01/19 15:08	10/04/19 00:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		10/01/19 15:08	10/09/19 23:56	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: S4-BD-091819

Lab Sample ID: 580-89409-41

Date Collected: 09/18/19 16:09

Matrix: Water

Date Received: 09/20/19 14:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/01/19 15:08	10/04/19 00:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150	10/01/19 15:08	10/04/19 00:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		10/01/19 15:08	10/10/19 00:17	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: S4-BU-091819

Lab Sample ID: 580-89409-42

Date Collected: 09/18/19 16:16

Matrix: Water

Date Received: 09/20/19 14:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil (>C24-C36)	0.67		0.092	0.092	mg/L		10/01/19 15:08	10/04/19 01:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	61		50 - 150	10/01/19 15:08	10/04/19 01:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.26		0.062	0.062	mg/L		10/01/19 15:08	10/10/19 00:37	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: S4-CU-091819

Lab Sample ID: 580-89409-43

Date Collected: 09/18/19 16:29

Matrix: Water

Date Received: 09/20/19 14:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/01/19 15:08	10/04/19 01:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	76		50 - 150	10/01/19 15:08	10/04/19 01:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		10/01/19 15:08	10/10/19 00:57	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: S4-AU-091819

Lab Sample ID: 580-89409-44

Date Collected: 09/18/19 16:30

Matrix: Water

Date Received: 09/20/19 14:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/01/19 15:08	10/04/19 02:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	78		50 - 150	10/01/19 15:08	10/04/19 02:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		10/01/19 15:08	10/10/19 01:17	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: S1-AU-091919

Lab Sample ID: 580-89409-45

Date Collected: 09/19/19 09:55

Matrix: Water

Date Received: 09/20/19 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		0.062	0.062	mg/L		10/02/19 05:27	10/04/19 00:10	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/02/19 05:27	10/04/19 00:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	64		50 - 150				10/02/19 05:27	10/04/19 00:10	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: S1-AD-091919

Lab Sample ID: 580-89409-46

Date Collected: 09/19/19 09:57

Matrix: Water

Date Received: 09/20/19 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		0.062	0.062	mg/L		10/02/19 05:27	10/04/19 00:33	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/02/19 05:27	10/04/19 00:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	79		50 - 150				10/02/19 05:27	10/04/19 00:33	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: S1-BD-091919

Lab Sample ID: 580-89409-47

Date Collected: 09/19/19 10:46

Matrix: Water

Date Received: 09/20/19 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		0.062	0.062	mg/L		10/02/19 05:27	10/04/19 00:55	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/02/19 05:27	10/04/19 00:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	84		50 - 150				10/02/19 05:27	10/04/19 00:55	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: S1-BU-091919

Lab Sample ID: 580-89409-48

Date Collected: 09/19/19 11:02

Matrix: Water

Date Received: 09/20/19 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		0.061	0.061	mg/L		10/02/19 05:27	10/04/19 01:18	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/02/19 05:27	10/04/19 01:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	78		50 - 150				10/02/19 05:27	10/04/19 01:18	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: 5-W-180-091719

Lab Sample ID: 580-89409-49

Date Collected: 09/19/19 09:30

Matrix: Water

Date Received: 09/20/19 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		0.061	0.061	mg/L		10/02/19 05:27	10/04/19 01:40	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/02/19 05:27	10/04/19 01:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	76		50 - 150				10/02/19 05:27	10/04/19 01:40	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: MW-555-091919

Lab Sample ID: 580-89409-50

Date Collected: 09/19/19 12:00

Matrix: Water

Date Received: 09/20/19 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)	0.086		0.062	0.062	mg/L		10/02/19 05:27	10/04/19 02:03	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/02/19 05:27	10/04/19 02:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	72		50 - 150				10/02/19 05:27	10/04/19 02:03	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

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

Lab Sample ID: MB 580-312841/1-A
Matrix: Water
Analysis Batch: 313030

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 312841

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		10/01/19 08:21	10/03/19 04:56	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		10/01/19 08:21	10/03/19 04:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
<i>o</i> -Terphenyl	79		50 - 150			10/01/19 08:21	10/03/19 04:56	1	

Lab Sample ID: LCS 580-312841/2-A
Matrix: Water
Analysis Batch: 313030

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 312841

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
#2 Diesel (C10-C24)	0.500	0.470		mg/L		94	50 - 120
Motor Oil (>C24-C36)	0.500	0.524		mg/L		105	64 - 120
Surrogate	%Recovery	Qualifier	Limits				
<i>o</i> -Terphenyl	79		50 - 150				

Lab Sample ID: LCSD 580-312841/3-A
Matrix: Water
Analysis Batch: 313030

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 312841

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec. Limits	RPD	
		Result	Qualifier					RPD	Limit
#2 Diesel (C10-C24)	0.500	0.470		mg/L		94	50 - 120	0	26
Motor Oil (>C24-C36)	0.500	0.514		mg/L		103	64 - 120	2	24
Surrogate	%Recovery	Qualifier	Limits						
<i>o</i> -Terphenyl	76		50 - 150						

Lab Sample ID: MB 580-312933/1-A
Matrix: Water
Analysis Batch: 313207

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 312933

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		10/01/19 15:08	10/03/19 17:23	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		10/01/19 15:08	10/03/19 17:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
<i>o</i> -Terphenyl	81		50 - 150			10/01/19 15:08	10/03/19 17:23	1	

Lab Sample ID: LCS 580-312933/2-A
Matrix: Water
Analysis Batch: 313207

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 312933

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
#2 Diesel (C10-C24)	0.500	0.408		mg/L		82	50 - 120
Motor Oil (>C24-C36)	0.500	0.476		mg/L		95	64 - 120

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

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

Lab Sample ID: LCS 580-312933/2-A
Matrix: Water
Analysis Batch: 313207

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 312933

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	76		50 - 150

Lab Sample ID: LCSD 580-312933/3-A
Matrix: Water
Analysis Batch: 313207

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 312933

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec.		RPD	Limit
		Result	Qualifier				Limits	RPD		
#2 Diesel (C10-C24)	0.500	0.396		mg/L		79	50 - 120	3	26	
Motor Oil (>C24-C36)	0.500	0.464		mg/L		93	64 - 120	2	24	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	78		50 - 150

Lab Sample ID: MB 580-312969/1-A
Matrix: Water
Analysis Batch: 313202

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 312969

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		10/02/19 05:27	10/03/19 17:00	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		10/02/19 05:27	10/03/19 17:00	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
<i>o</i> -Terphenyl	64		50 - 150	10/02/19 05:27	10/03/19 17:00	1

Lab Sample ID: LCS 580-312969/2-A
Matrix: Water
Analysis Batch: 313202

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 312969

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec.	
		Result	Qualifier				Limits	
#2 Diesel (C10-C24)	0.500	0.420		mg/L		84	50 - 120	
Motor Oil (>C24-C36)	0.500	0.495		mg/L		99	64 - 120	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	84		50 - 150

Lab Sample ID: LCSD 580-312969/3-A
Matrix: Water
Analysis Batch: 313202

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 312969

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec.		RPD	Limit
		Result	Qualifier				Limits	RPD		
#2 Diesel (C10-C24)	0.500	0.468		mg/L		94	50 - 120	11	26	
Motor Oil (>C24-C36)	0.500	0.543		mg/L		109	64 - 120	9	24	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	93		50 - 150

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

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

Lab Sample ID: MB 580-312933/1-A
Matrix: Water
Analysis Batch: 313798

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 312933

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24) - RA	ND		0.065	0.065	mg/L		10/01/19 15:08	10/09/19 17:33	1

Lab Sample ID: LCS 580-312933/2-A
Matrix: Water
Analysis Batch: 313798

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 312933

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
#2 Diesel (C10-C24) - RA	0.500	0.487		mg/L		97	50 - 120

Lab Sample ID: LCSD 580-312933/3-A
Matrix: Water
Analysis Batch: 313798

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 312933

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
#2 Diesel (C10-C24) - RA	0.500	0.475		mg/L		95	50 - 120	3	26

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Lab Sample ID: MB 580-312933/1-B
Matrix: Water
Analysis Batch: 313207

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 312933

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		10/01/19 15:08	10/03/19 16:15	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		10/01/19 15:08	10/03/19 16:15	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	85		50 - 150	10/01/19 15:08	10/03/19 16:15	1

Lab Sample ID: LCS 580-312933/2-B
Matrix: Water
Analysis Batch: 313207

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 312933

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
#2 Diesel (C10-C24)	0.500	0.422		mg/L		84	50 - 120
Motor Oil (>C24-C36)	0.500	0.489		mg/L		98	64 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	81		50 - 150

Lab Sample ID: LCSD 580-312933/3-B
Matrix: Water
Analysis Batch: 313207

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 312933

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	0.500	0.411		mg/L		82	50 - 120	3	26
Motor Oil (>C24-C36)	0.500	0.486		mg/L		97	64 - 120	1	24

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup (Continued)

Lab Sample ID: LCSD 580-312933/3-B
 Matrix: Water
 Analysis Batch: 313207

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 312933

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	82		50 - 150

Lab Sample ID: MB 580-312969/1-B
 Matrix: Water
 Analysis Batch: 313202

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 312969

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		10/02/19 05:27	10/03/19 15:53	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		10/02/19 05:27	10/03/19 15:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	65		50 - 150	10/02/19 05:27	10/03/19 15:53	1

Lab Sample ID: LCS 580-312969/2-B
 Matrix: Water
 Analysis Batch: 313202

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 312969

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
#2 Diesel (C10-C24)	0.500	0.458		mg/L		92	50 - 120
Motor Oil (>C24-C36)	0.500	0.564		mg/L		113	64 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	88		50 - 150

Lab Sample ID: LCSD 580-312969/3-B
 Matrix: Water
 Analysis Batch: 313202

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 312969

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	0.500	0.512		mg/L		102	50 - 120	11	26
Motor Oil (>C24-C36)	0.500	0.620	*	mg/L		124	64 - 120	10	24

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	94		50 - 150

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup - RA

Lab Sample ID: MB 580-312933/1-B
 Matrix: Water
 Analysis Batch: 313798

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 312933

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24) - RA	ND		0.065	0.065	mg/L		10/01/19 15:08	10/09/19 16:33	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup - RA (Continued)

Lab Sample ID: LCS 580-312933/2-B
Matrix: Water
Analysis Batch: 313798

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 312933

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
#2 Diesel (C10-C24) - RA	0.500	0.494		mg/L		99	50 - 120

Lab Sample ID: LCSD 580-312933/3-B
Matrix: Water
Analysis Batch: 313798

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 312933

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
#2 Diesel (C10-C24) - RA	0.500	0.462		mg/L		92	50 - 120	7	26

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: 5-W-19-091719

Lab Sample ID: 580-89409-1

Date Collected: 09/17/19 09:25

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312841	10/01/19 08:21		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313030	10/03/19 05:57	T1W	TAL SEA

Client Sample ID: EW-2A-091719

Lab Sample ID: 580-89409-2

Date Collected: 09/17/19 09:25

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312841	10/01/19 08:21		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313030	10/03/19 06:37	T1W	TAL SEA

Client Sample ID: 5-W-18-091719

Lab Sample ID: 580-89409-3

Date Collected: 09/17/19 09:28

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312841	10/01/19 08:21		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313030	10/03/19 06:57	T1W	TAL SEA

Client Sample ID: 5-W-17-091719

Lab Sample ID: 580-89409-4

Date Collected: 09/17/19 10:30

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312841	10/01/19 08:21		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313030	10/03/19 07:18	T1W	TAL SEA

Client Sample ID: GW-4-091719

Lab Sample ID: 580-89409-5

Date Collected: 09/17/19 10:49

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312841	10/01/19 08:21		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313030	10/03/19 07:38	T1W	TAL SEA

Client Sample ID: 5-W-16-091719

Lab Sample ID: 580-89409-6

Date Collected: 09/17/19 10:50

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312841	10/01/19 08:21		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313030	10/03/19 07:58	T1W	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: 5-W-14-091719

Lab Sample ID: 580-89409-7

Date Collected: 09/17/19 11:38

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312841	10/01/19 08:21		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313030	10/03/19 08:18	T1W	TAL SEA

Client Sample ID: 1C-W-1-091719

Lab Sample ID: 580-89409-8

Date Collected: 09/17/19 11:53

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312841	10/01/19 08:21		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313030	10/03/19 08:38	T1W	TAL SEA

Client Sample ID: 5-W-51-091719

Lab Sample ID: 580-89409-9

Date Collected: 09/17/19 12:05

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312841	10/01/19 08:21		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313030	10/03/19 08:58	T1W	TAL SEA

Client Sample ID: 1C-W-8-091719

Lab Sample ID: 580-89409-10

Date Collected: 09/17/19 12:49

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312841	10/01/19 08:21		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313030	10/03/19 09:19	T1W	TAL SEA

Client Sample ID: 1C-W-4-091719

Lab Sample ID: 580-89409-11

Date Collected: 09/17/19 13:43

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312841	10/01/19 08:21		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313030	10/03/19 09:39	T1W	TAL SEA

Client Sample ID: 5-W-55-091719

Lab Sample ID: 580-89409-12

Date Collected: 09/17/19 14:23

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312841	10/01/19 08:21		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313030	10/03/19 10:19	T1W	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: 5-W-56-091719

Lab Sample ID: 580-89409-13

Date Collected: 09/17/19 14:27

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312841	10/01/19 08:21		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313030	10/03/19 10:39	T1W	TAL SEA

Client Sample ID: 1C-W-3-091719

Lab Sample ID: 580-89409-14

Date Collected: 09/17/19 14:39

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313207	10/03/19 18:54	W1T	TAL SEA
Total/NA	Prep	3510C	RA		312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RA	1	313798	10/09/19 18:54	T1W	TAL SEA

Client Sample ID: MW-38R-091719

Lab Sample ID: 580-89409-15

Date Collected: 09/17/19 15:42

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313207	10/03/19 19:16	W1T	TAL SEA
Total/NA	Prep	3510C	RA		312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RA	1	313798	10/09/19 19:14	T1W	TAL SEA

Client Sample ID: 1C-W-7-091719

Lab Sample ID: 580-89409-16

Date Collected: 09/17/19 15:54

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313207	10/03/19 19:39	W1T	TAL SEA
Total/NA	Prep	3510C	RA		312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RA	1	313798	10/09/19 19:34	T1W	TAL SEA

Client Sample ID: 2A-W-40-091719

Lab Sample ID: 580-89409-17

Date Collected: 09/17/19 16:18

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313207	10/03/19 20:24	W1T	TAL SEA
Total/NA	Prep	3510C	RA		312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RA	1	313798	10/09/19 20:15	T1W	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: S3-AU-091719

Lab Sample ID: 580-89409-18

Date Collected: 09/17/19 16:37

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313207	10/03/19 20:47	W1T	TAL SEA
Total/NA	Prep	3510C	RA		312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RA	1	313798	10/09/19 20:35	T1W	TAL SEA

Client Sample ID: 2A-W-42-091819

Lab Sample ID: 580-89409-19

Date Collected: 09/18/19 09:11

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312969	10/02/19 05:27		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313202	10/03/19 18:31	W1T	TAL SEA

Client Sample ID: 1B-W-3-091819

Lab Sample ID: 580-89409-20

Date Collected: 09/18/19 09:15

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312969	10/02/19 05:27		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313202	10/03/19 18:54	W1T	TAL SEA

Client Sample ID: MW-16-091819

Lab Sample ID: 580-89409-21

Date Collected: 09/18/19 09:57

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312969	10/02/19 05:27		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313202	10/03/19 19:16	W1T	TAL SEA

Client Sample ID: 1B-W-2-091819

Lab Sample ID: 580-89409-22

Date Collected: 09/18/19 10:22

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312969	10/02/19 05:27		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313202	10/03/19 20:02	W1T	TAL SEA

Client Sample ID: 1B-W-23-091819

Lab Sample ID: 580-89409-23

Date Collected: 09/18/19 10:41

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312969	10/02/19 05:27		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313202	10/03/19 20:24	W1T	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: MW-4-091819

Lab Sample ID: 580-89409-24

Date Collected: 09/18/19 11:17

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312969	10/02/19 05:27		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313202	10/03/19 20:47	W1T	TAL SEA

Client Sample ID: 2A-W-9-091819

Lab Sample ID: 580-89409-25

Date Collected: 09/18/19 11:57

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312969	10/02/19 05:27		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313202	10/03/19 21:10	W1T	TAL SEA

Client Sample ID: 1A-W-4-091819

Lab Sample ID: 580-89409-26

Date Collected: 09/18/19 12:20

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312969	10/02/19 05:27		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313202	10/03/19 21:32	W1T	TAL SEA

Client Sample ID: 2B-W-4-091819

Lab Sample ID: 580-89409-27

Date Collected: 09/18/19 12:27

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312969	10/02/19 05:27		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313202	10/03/19 21:55	W1T	TAL SEA

Client Sample ID: 2A-W-10-091819

Lab Sample ID: 580-89409-28

Date Collected: 09/18/19 13:00

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312969	10/02/19 05:27		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313202	10/03/19 22:17	W1T	TAL SEA

Client Sample ID: 2A-W-100-091819

Lab Sample ID: 580-89409-29

Date Collected: 09/18/19 13:10

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312969	10/02/19 05:27		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313202	10/03/19 22:40	W1T	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: 2A-W-41-091819

Lab Sample ID: 580-89409-30

Date Collected: 09/18/19 13:24

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312969	10/02/19 05:27		TAL SEA
Total/NA	Cleanup	3630C			313085	10/02/19 14:50	FCG	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313202	10/03/19 18:08	W1T	TAL SEA
Total/NA	Prep	3510C			312969	10/02/19 05:27		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313202	10/03/19 23:03	W1T	TAL SEA

Client Sample ID: 2A-W-410-091819

Lab Sample ID: 580-89409-31

Date Collected: 09/18/19 13:30

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312969	10/02/19 05:27		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313202	10/03/19 23:25	W1T	TAL SEA

Client Sample ID: GW-3-091819

Lab Sample ID: 580-89409-32

Date Collected: 09/18/19 14:41

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Cleanup	3630C			313124	10/02/19 22:36	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313207	10/03/19 18:31	W1T	TAL SEA
Total/NA	Prep	3510C			312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313207	10/03/19 21:10	W1T	TAL SEA
Total/NA	Prep	3510C	RA		312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Cleanup	3630C	RA		313124	10/02/19 22:36	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RA	1	313798	10/09/19 18:34	T1W	TAL SEA
Total/NA	Prep	3510C	RA		312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RA	1	313798	10/09/19 20:55	T1W	TAL SEA

Client Sample ID: GW-30-091819

Lab Sample ID: 580-89409-33

Date Collected: 09/18/19 15:00

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313207	10/03/19 21:32	W1T	TAL SEA
Total/NA	Prep	3510C	RA		312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RA	1	313798	10/09/19 21:15	T1W	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: S3-CU-091819

Lab Sample ID: 580-89409-34

Date Collected: 09/18/19 14:52

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313207	10/03/19 21:55	W1T	TAL SEA
Total/NA	Prep	3510C	RA		312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RA	1	313798	10/09/19 21:35	T1W	TAL SEA

Client Sample ID: S3-AD-091819

Lab Sample ID: 580-89409-35

Date Collected: 09/18/19 14:53

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313207	10/03/19 22:17	W1T	TAL SEA
Total/NA	Prep	3510C	RA		312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RA	1	313798	10/09/19 21:56	T1W	TAL SEA

Client Sample ID: S3-CD-091819

Lab Sample ID: 580-89409-36

Date Collected: 09/18/19 15:02

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313207	10/03/19 22:40	W1T	TAL SEA
Total/NA	Prep	3510C	RA		312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RA	1	313798	10/09/19 22:16	T1W	TAL SEA

Client Sample ID: S3-BD-091819

Lab Sample ID: 580-89409-37

Date Collected: 09/18/19 15:30

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313207	10/03/19 23:03	W1T	TAL SEA
Total/NA	Prep	3510C	RA		312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RA	1	313798	10/09/19 22:36	T1W	TAL SEA

Client Sample ID: S3-BU-091819

Lab Sample ID: 580-89409-38

Date Collected: 09/18/19 15:30

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313207	10/03/19 23:25	W1T	TAL SEA
Total/NA	Prep	3510C	RA		312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RA	1	313798	10/09/19 22:56	T1W	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: S4-AD-091819

Lab Sample ID: 580-89409-39

Date Collected: 09/18/19 16:06

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313207	10/03/19 23:48	W1T	TAL SEA
Total/NA	Prep	3510C	RA		312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RA	1	313798	10/09/19 23:16	T1W	TAL SEA

Client Sample ID: S4-CD-091819

Lab Sample ID: 580-89409-40

Date Collected: 09/18/19 16:07

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313207	10/04/19 00:33	W1T	TAL SEA
Total/NA	Prep	3510C	RA		312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RA	1	313798	10/09/19 23:56	T1W	TAL SEA

Client Sample ID: S4-BD-091819

Lab Sample ID: 580-89409-41

Date Collected: 09/18/19 16:09

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313207	10/04/19 00:55	W1T	TAL SEA
Total/NA	Prep	3510C	RA		312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RA	1	313798	10/10/19 00:17	T1W	TAL SEA

Client Sample ID: S4-BU-091819

Lab Sample ID: 580-89409-42

Date Collected: 09/18/19 16:16

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313207	10/04/19 01:18	W1T	TAL SEA
Total/NA	Prep	3510C	RA		312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RA	1	313798	10/10/19 00:37	T1W	TAL SEA

Client Sample ID: S4-CU-091819

Lab Sample ID: 580-89409-43

Date Collected: 09/18/19 16:29

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313207	10/04/19 01:40	W1T	TAL SEA
Total/NA	Prep	3510C	RA		312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RA	1	313798	10/10/19 00:57	T1W	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: S4-AU-091819

Lab Sample ID: 580-89409-44

Date Collected: 09/18/19 16:30

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313207	10/04/19 02:03	W1T	TAL SEA
Total/NA	Prep	3510C	RA		312933	10/01/19 15:08	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RA	1	313798	10/10/19 01:17	T1W	TAL SEA

Client Sample ID: S1-AU-091919

Lab Sample ID: 580-89409-45

Date Collected: 09/19/19 09:55

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312969	10/02/19 05:27		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313202	10/04/19 00:10	W1T	TAL SEA

Client Sample ID: S1-AD-091919

Lab Sample ID: 580-89409-46

Date Collected: 09/19/19 09:57

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312969	10/02/19 05:27		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313202	10/04/19 00:33	W1T	TAL SEA

Client Sample ID: S1-BD-091919

Lab Sample ID: 580-89409-47

Date Collected: 09/19/19 10:46

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312969	10/02/19 05:27		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313202	10/04/19 00:55	W1T	TAL SEA

Client Sample ID: S1-BU-091919

Lab Sample ID: 580-89409-48

Date Collected: 09/19/19 11:02

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312969	10/02/19 05:27		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313202	10/04/19 01:18	W1T	TAL SEA

Client Sample ID: 5-W-180-091719

Lab Sample ID: 580-89409-49

Date Collected: 09/19/19 09:30

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312969	10/02/19 05:27		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313202	10/04/19 01:40	W1T	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Client Sample ID: MW-555-091919

Lab Sample ID: 580-89409-50

Date Collected: 09/19/19 12:00

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			312969	10/02/19 05:27		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313202	10/04/19 02:03	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: BNSF Skykomish Ground Water

Job ID: 580-89409-1

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	01-19-22
ANAB	Dept. of Defense ELAP	L2236	01-19-22
ANAB	ISO/IEC 17025	L2236	01-19-22
California	State	2901	11-05-19
Montana (UST)	State	NA	04-13-21
Oregon	NELAP	WA100007	11-05-19
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-17-00039	02-10-20
Washington	State	C553	02-17-20

Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89409-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-89409-1	5-W-19-091719	Water	09/17/19 09:25	09/20/19 14:15	
580-89409-2	EW-2A-091719	Water	09/17/19 09:25	09/20/19 14:15	
580-89409-3	5-W-18-091719	Water	09/17/19 09:28	09/20/19 14:15	
580-89409-4	5-W-17-091719	Water	09/17/19 10:30	09/20/19 14:15	
580-89409-5	GW-4-091719	Water	09/17/19 10:49	09/20/19 14:15	
580-89409-6	5-W-16-091719	Water	09/17/19 10:50	09/20/19 14:15	
580-89409-7	5-W-14-091719	Water	09/17/19 11:38	09/20/19 14:15	
580-89409-8	1C-W-1-091719	Water	09/17/19 11:53	09/20/19 14:15	
580-89409-9	5-W-51-091719	Water	09/17/19 12:05	09/20/19 14:15	
580-89409-10	1C-W-8-091719	Water	09/17/19 12:49	09/20/19 14:15	
580-89409-11	1C-W-4-091719	Water	09/17/19 13:43	09/20/19 14:15	
580-89409-12	5-W-55-091719	Water	09/17/19 14:23	09/20/19 14:15	
580-89409-13	5-W-56-091719	Water	09/17/19 14:27	09/20/19 14:15	
580-89409-14	1C-W-3-091719	Water	09/17/19 14:39	09/20/19 14:15	
580-89409-15	MW-38R-091719	Water	09/17/19 15:42	09/20/19 14:15	
580-89409-16	1C-W-7-091719	Water	09/17/19 15:54	09/20/19 14:15	
580-89409-17	2A-W-40-091719	Water	09/17/19 16:18	09/20/19 14:15	
580-89409-18	S3-AU-091719	Water	09/17/19 16:37	09/20/19 14:15	
580-89409-19	2A-W-42-091819	Water	09/18/19 09:11	09/20/19 14:15	
580-89409-20	1B-W-3-091819	Water	09/18/19 09:15	09/20/19 14:15	
580-89409-21	MW-16-091819	Water	09/18/19 09:57	09/20/19 14:15	
580-89409-22	1B-W-2-091819	Water	09/18/19 10:22	09/20/19 14:15	
580-89409-23	1B-W-23-091819	Water	09/18/19 10:41	09/20/19 14:15	
580-89409-24	MW-4-091819	Water	09/18/19 11:17	09/20/19 14:15	
580-89409-25	2A-W-9-091819	Water	09/18/19 11:57	09/20/19 14:15	
580-89409-26	1A-W-4-091819	Water	09/18/19 12:20	09/20/19 14:15	
580-89409-27	2B-W-4-091819	Water	09/18/19 12:27	09/20/19 14:15	
580-89409-28	2A-W-10-091819	Water	09/18/19 13:00	09/20/19 14:15	
580-89409-29	2A-W-100-091819	Water	09/18/19 13:10	09/20/19 14:15	
580-89409-30	2A-W-41-091819	Water	09/18/19 13:24	09/20/19 14:15	
580-89409-31	2A-W-410-091819	Water	09/18/19 13:30	09/20/19 14:15	
580-89409-32	GW-3-091819	Water	09/18/19 14:41	09/20/19 14:15	
580-89409-33	GW-30-091819	Water	09/18/19 15:00	09/20/19 14:15	
580-89409-34	S3-CU-091819	Water	09/18/19 14:52	09/20/19 14:15	
580-89409-35	S3-AD-091819	Water	09/18/19 14:53	09/20/19 14:15	
580-89409-36	S3-CD-091819	Water	09/18/19 15:02	09/20/19 14:15	
580-89409-37	S3-BD-091819	Water	09/18/19 15:30	09/20/19 14:15	
580-89409-38	S3-BU-091819	Water	09/18/19 15:30	09/20/19 14:15	
580-89409-39	S4-AD-091819	Water	09/18/19 16:06	09/20/19 14:15	
580-89409-40	S4-CD-091819	Water	09/18/19 16:07	09/20/19 14:15	
580-89409-41	S4-BD-091819	Water	09/18/19 16:09	09/20/19 14:15	
580-89409-42	S4-BU-091819	Water	09/18/19 16:16	09/20/19 14:15	
580-89409-43	S4-CU-091819	Water	09/18/19 16:29	09/20/19 14:15	
580-89409-44	S4-AU-091819	Water	09/18/19 16:30	09/20/19 14:15	
580-89409-45	S1-AU-091919	Water	09/19/19 09:55	09/20/19 14:15	
580-89409-46	S1-AD-091919	Water	09/19/19 09:57	09/20/19 14:15	
580-89409-47	S1-BD-091919	Water	09/19/19 10:46	09/20/19 14:15	
580-89409-48	S1-BU-091919	Water	09/19/19 11:02	09/20/19 14:15	
580-89409-49	5-W-180-091719	Water	09/19/19 09:30	09/20/19 14:15	
580-89409-50	MW-555-091919	Water	09/19/19 12:00	09/20/19 14:15	

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: 683-067			
BNSF Project Number: 683-067			Project City: SKYKOMISH			Project Manager: Ree Kingston			
BNSF Project Name: BNSF SKYKOMISH - Semi Annual			Company: FARALLON			Email: pkington@farallonconsulting.com			
BNSF Contact:			BNSF Work Order No.:			City/State/ZIP: Issaquah, WA 98027			
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"/> Other Deliverables? <input checked="" 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			
SAMPLE INFORMATION						NUTPH - DX	COMMENTS		
Sample Identification	Containers	Sample Collection			Filtered Y/N			Type (Comp/Grab)	Matrix
		Date	Time	Sampler					LAB USE
1 5-W-19-091719	2	9/17/19	0925	MG	N			G	W
2 EW-2A-091719			0925	GP					
3 5-W-18-091719			0928	CB					
4 5-W-17-091719			1030	MG					
5 GW-4-091719			1049	GP					
6 5-W-16-091719			1050	CB					
7 5-W-14-091719			1138	MG					
8 1C-W-1-091719			1153	GP					
9 5-W-61-091719			1205	CB					
10 1C-W-8-091719			1249	GP					
11 1C-W-4-091719			1343	GP					
12 5-W-55-091719			1423	MG					
13 5-W-56-091719			1427	CB					
14 1C-W-3-091719			1439	GP					
15 MW-38R-091719	✓	✓	1542	MG	✓	✓	✓		
Relinquished By:	Date/Time: 9/20/19 7:30	Received By: B. Gall SEA 1A		Date/Time: 9-26-19 1415		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.		



 CHAIN OF CUSTODY	LABORATORY INFORMATION						LAB WORK ORDER:													
	Laboratory:			Project Manager:			SHIPMENT INFORMATION													
	Address:			Phone:																
City/State/Zip:			Fax:			Shipment Method:														
Tracking Number:																				
BNSF PROJECT INFORMATION				CONSULTANT INFORMATION				Project Number: 683-067												
BNSF Project Number: 683-067				Project City: Skykomish				Company: Farallon												
Project State of Origin:				Project Manager: Pete Kingston				Project Number: 683-067												
BNSF Project Name: BNSF Skykomish Semi Annual				Address: 975 5th AVE NW				Email: pkkingston@farallonconsulting.com												
BNSF Contact:				City/State/Zip: Issaquah				Phone: 425-295-0820 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 checked="" type="checkbox"/> BNSF Standard (Level II) <input type="checkbox"/> Level III <input type="checkbox"/> Level IV <input type="checkbox"/> EDD Req. Format?				NWTPH - DX SGC (Silica Gel Cleanup)														
SAMPLE INFORMATION																				
Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/Grab)	Matrix												COMMENTS	LAB USE
		Date	Time	Sampler																
1 IC-W-7-091719	2	9/17/19	1534	GP	N	G	W	X												
2 2A-W-40-091719	2	9/17/19	1618	CB	N	G	W	X												
3 S3-AU-091719	2	9/17/19	1637	MG	N	G	W	X												
4 2A-W-42-091819		9/18/19	0911	GP				X												
5 1B-W-3-091819			0915	MG				X												
6 MW-6-091819			0957	CB				X												
7 1B-W-2-091819			1022	MG				X												
8 1B-W-23-091819			1041	GP				X												
9 MW-4-091819			1117	CB				X												
10 2A-W-9-091819			1157	MG				X												
11 1A-W-4-091819			1220	GP				X												
12 2B-W-4-091819			1227	CB				X												
13 2A-W-10-091819			1300	MG				X												
14 2A-W-100-091819			1310	MG				X												
15 2A-W-41-091819	↓	↓	1324	GP	↓	↓	↓	X	X											
Relinquished By: SPF	Date/Time: 9/20/19 10:30	Received By: SEN TA			Date/Time: 9-20-19 1415	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.													

 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: <i>683-067</i>			
BNSF Project Number: <i>683-067</i>			Project City:			Project Manager: <i>Rek Klyshn</i>			
BNSF Project Name: <i>BNSF Skyline Semi Annual</i>			Company: <i>Favallor</i>			Email: <i>pklyshn@favallorconsulting.com</i>			
BNSF Contact:			BNSF Work Order No.:			City/State/ZIP: <i>Issaquah WA 98027</i>			
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? _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____		METHODS FOR ANALYSIS <div style="font-size: 2em; text-align: center; margin-top: 10px;"> NWTPH-DX SOCS (Silicon Oil Cleanup) </div>		COMMENTS	LAB USE
SAMPLE INFORMATION									
Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/Grab)	Matrix		
		Date	Time	Sampler					
<i>1 2A-W-40-091819</i>	<i>2</i>	<i>9/18/19</i>	<i>1330</i>	<i>GP</i>	<i>N</i>	<i>G</i>	<i>W</i>	<i>X</i>	
<i>2 GW-S-091819</i>			<i>1441</i>	<i>GP</i>				<i>X</i>	<i>X</i>
<i>3 GW-30-091819</i>			<i>1500</i>	<i>GP</i>				<i>X</i>	
<i>4 S3-CU-091819</i>			<i>1452</i>	<i>CB</i>				<i>X</i>	
<i>5 S3-AD-091819</i>			<i>1453</i>	<i>MG</i>				<i>X</i>	
<i>6 S3-CD-091819</i>			<i>1502</i>	<i>CB</i>				<i>X</i>	
<i>7 S3-BD-091819</i>			<i>1530</i>	<i>GP</i>				<i>X</i>	
<i>8 S3-BU-091819</i>			<i>1530</i>	<i>CB</i>				<i>X</i>	
<i>9 S4-AD-091819</i>			<i>1606</i>	<i>GP</i>				<i>X</i>	
<i>10 S4-CD-091819</i>			<i>1607</i>	<i>MG</i>				<i>X</i>	
<i>11 S4-BD-091819</i>			<i>1609</i>	<i>CB</i>				<i>X</i>	
<i>12 S4-BU-091819</i>			<i>1616</i>	<i>CB</i>				<i>X</i>	
<i>13 S4-CU-091819</i>			<i>1629</i>	<i>MG</i>				<i>X</i>	
<i>14 S4-AU-091819</i>			<i>1630</i>	<i>GP</i>				<i>X</i>	
<i>15 S1-AU-091919</i>	<i>↓</i>	<i>9/19/19</i>	<i>0955</i>	<i>MG</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>X</i>	
Relinquished By: <i>GPB</i>	Date/Time: <i>9/20/19 0730</i>	Received By: <i>B. Jell SEM TA</i>		Date/Time: <i>9-20-19 1415</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.			

 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					
BNSF Project Number: 683-067		Project State of Origin: WA		Company: Faxallon		Project Manager: Rele Kingston			
BNSF Project Name: BNSF Skykomish		Project City: Skykomish, WA		Address: 975 5th AVE NW		Email: pkings@faxallonconsulting.com			
BNSF Contact:		BNSF Work Order No.:		City/State/ZIP: Issaquah, WA 98027		Phone: 425-245-0500 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 NUT PH - DX			
SAMPLE INFORMATION									
Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/Grab)	Matrix	COMMENTS	LAB USE
		Date	Time	Sampler					
1 SI-AD-091919	2	9/19/19	0957	CB	N	G	W	X	
2 SI-BD-091919			1046	GP				X	
3 SI-BU-091919			1102	GP				X	
4 5-W-180-091719			0930	CB				X	
5 MW-555-091919			1200	CB				X	
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
Relinquished By:	Date/Time: 9/20/2019	Received By: B. Sell SKA TB			Date/Time: 9-20-19 1415		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 CCC No

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES

DUPLICATE - CONSULTANT

TAL-1001 (0912)

Therm. ID: A2 Cor: 0.6 ° Inc: 1.3 °
Cooler Desc: 1/3 Green FedEx: _____
Packing: B/B / EPS: _____
Cust. Seal: Yes F No _____ Lab Cour: X
Blue Ice: (A) Dry, None Other: _____

Therm. ID: A2 Cor: 0.6 ° Inc: 1.3 °
Cooler Desc: 1/3 Blue FedEx: _____
Packing: B/B / EPS: _____
Cust. Seal: Yes F No _____ Lab Cour: X
Blue Ice: (A) Dry, None Other: _____

Therm. ID: A2 Cor: 0.3 ° Inc: 1.0 °
Cooler Desc: 1/3 Green FedEx: _____
Packing: B/B / EPS: _____
Cust. Seal: Yes X No _____ Lab Cour: X
Blue Ice: (A) Dry, None Other: _____

Therm. ID: A2 Cor: 1.6 ° Inc: 2.3 °
Cooler Desc: 1/3 Green FedEx: _____
Packing: B/B / EPS: _____
Cust. Seal: Yes F No _____ Lab Cour: _____
Blue Ice: Wet, Dry, None Other: _____

Therm. ID: A2 Cor: 1.3 ° Inc: 2.0 °
Cooler Desc: 1/3 Green FedEx: _____
Packing: Bubble / EPS: _____
Cust. Seal: Yes F No _____ Lab Cour: X
Blue Ice: (A) Dry, None Other: _____

Therm. ID: A2 Cor: 0.3 ° Inc: 1.0 °
Cooler Desc: 1/3 Blue FedEx: _____
Packing: B/B / EPS: _____
Cust. Seal: Yes F No _____ Lab Cour: X
Blue Ice: (A) Dry, None Other: _____

Therm. ID: A2 Cor: 1.0 ° Inc: 1.7 °
Cooler Desc: 1/3 Blue FedEx: _____
Packing: B/B / EPS: _____
Cust. Seal: Yes X No _____ Lab Cour: X
Blue Ice: (A) Dry, None Other: _____

Therm. ID: A2 Cor: 0.0 ° Inc: 0.7 °
Cooler Desc: 1/3 Blue FedEx: _____
Packing: B/B / EPS: _____
Cust. Seal: Yes X No _____ Lab Cour: X
Blue Ice: (A) Dry, None Other: _____

Therm. ID: A2 Cor: 1.1 ° Inc: 1.8 °
Cooler Desc: 1/3 Blue FedEx: _____
Packing: B/B / EPS: _____
Cust. Seal: Yes F No _____ Lab Cour: X
Blue Ice: (A) Dry, None Other: _____

Therm. ID: A2 Cor: 1.0 ° Inc: 1.7 °
Cooler Desc: 1/3 Blue FedEx: _____
Packing: B/B / EPS: _____
Cust. Seal: Yes F No _____ Lab Cour: X
Blue Ice: (A) Dry, None Other: _____

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-89409-1

Login Number: 89409

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: 580-89413-1

Client Project/Site: BNSF Skykomish Ground Water

For:

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

Attn: Peter Kingston



Authorized for release by:
10/4/2019 4:29:57 PM

Kristine Allen, Manager of Project Management
(253)248-4970
kristine.allen@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

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	3
Definitions	4
Client Sample Results	5
QC Sample Results	21
Chronicle	22
Certification Summary	25
Sample Summary	26
Chain of Custody	27
Receipt Checklists	29

Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89413-1

Job ID: 580-89413-1

Laboratory: Eurofins TestAmerica, Seattle

Narrative

Job Narrative 580-89413-1

Comments

No additional comments.

Receipt

The samples were received on 9/20/2019 2:15 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were -0.2° C and 1.0° C.

Receipt Exceptions

The container label for Sample 580-89413-6 did not match the information listed on the Chain-of-Custody (COC): The Sample label listed EW-100-091919, while the COC listed EW-10-091919.

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 Ground Water

Job ID: 580-89413-1

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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89413-1

Client Sample ID: GW-1-091919

Lab Sample ID: 580-89413-1

Date Collected: 09/19/19 08:20

Matrix: Water

Date Received: 09/20/19 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		0.062	0.062	mg/L		10/02/19 12:48	10/03/19 15:37	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/02/19 12:48	10/03/19 15:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	84		50 - 150				10/02/19 12:48	10/03/19 15:37	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89413-1

Client Sample ID: 5-W-43-091919

Lab Sample ID: 580-89413-2

Date Collected: 09/19/19 08:22

Matrix: Water

Date Received: 09/20/19 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		0.062	0.062	mg/L		10/02/19 12:48	10/03/19 15:57	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		10/02/19 12:48	10/03/19 15:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	83		50 - 150				10/02/19 12:48	10/03/19 15:57	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89413-1

Client Sample ID: PZ-75-091919

Lab Sample ID: 580-89413-3

Date Collected: 09/19/19 08:24

Matrix: Water

Date Received: 09/20/19 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		0.062	0.062	mg/L		10/02/19 12:48	10/03/19 16:17	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/02/19 12:48	10/03/19 16:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	59		50 - 150				10/02/19 12:48	10/03/19 16:17	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89413-1

Client Sample ID: PZ-8-091919

Lab Sample ID: 580-89413-4

Date Collected: 09/19/19 09:20

Matrix: Water

Date Received: 09/20/19 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		0.062	0.062	mg/L		10/02/19 12:48	10/03/19 16:37	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/02/19 12:48	10/03/19 16:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	73		50 - 150				10/02/19 12:48	10/03/19 16:37	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89413-1

Client Sample ID: EW-1-091919

Lab Sample ID: 580-89413-5

Date Collected: 09/19/19 09:21

Matrix: Water

Date Received: 09/20/19 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		0.062	0.062	mg/L		10/02/19 12:48	10/03/19 16:58	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/02/19 12:48	10/03/19 16:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	84		50 - 150				10/02/19 12:48	10/03/19 16:58	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89413-1

Client Sample ID: EW-10-091919

Lab Sample ID: 580-89413-6

Date Collected: 09/19/19 09:25

Matrix: Water

Date Received: 09/20/19 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		0.062	0.062	mg/L		10/02/19 12:48	10/03/19 17:18	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/02/19 12:48	10/03/19 17:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	68		50 - 150				10/02/19 12:48	10/03/19 17:18	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89413-1

Client Sample ID: GW-2-091919

Lab Sample ID: 580-89413-7

Date Collected: 09/19/19 09:21

Matrix: Water

Date Received: 09/20/19 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		0.062	0.062	mg/L		10/02/19 12:48	10/03/19 17:38	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/02/19 12:48	10/03/19 17:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	71		50 - 150				10/02/19 12:48	10/03/19 17:38	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89413-1

Client Sample ID: WG-WV-091919

Lab Sample ID: 580-89413-8

Date Collected: 09/19/19 10:09

Matrix: Water

Date Received: 09/20/19 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)	0.24		0.062	0.062	mg/L		10/02/19 12:48	10/03/19 18:18	1
Motor Oil (>C24-C36)	0.14		0.091	0.091	mg/L		10/02/19 12:48	10/03/19 18:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	57		50 - 150				10/02/19 12:48	10/03/19 18:18	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89413-1

Client Sample ID: FWG-WV-091919

Lab Sample ID: 580-89413-9

Date Collected: 09/19/19 10:25

Matrix: Water

Date Received: 09/20/19 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		0.062	0.062	mg/L		10/02/19 12:48	10/03/19 18:38	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/02/19 12:48	10/03/19 18:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150				10/02/19 12:48	10/03/19 18:38	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89413-1

Client Sample ID: WG-EV-091919

Lab Sample ID: 580-89413-10

Date Collected: 09/19/19 10:25

Matrix: Water

Date Received: 09/20/19 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)	0.47		0.062	0.062	mg/L		10/02/19 12:48	10/03/19 18:59	1
Motor Oil (>C24-C36)	0.23		0.091	0.091	mg/L		10/02/19 12:48	10/03/19 18:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	84		50 - 150				10/02/19 12:48	10/03/19 18:59	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89413-1

Client Sample ID: FWG-EV-091919

Lab Sample ID: 580-89413-11

Date Collected: 09/19/19 10:47

Matrix: Water

Date Received: 09/20/19 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		0.062	0.062	mg/L		10/02/19 12:48	10/03/19 19:19	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/02/19 12:48	10/03/19 19:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	84		50 - 150				10/02/19 12:48	10/03/19 19:19	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89413-1

Client Sample ID: S2-AU-091919

Lab Sample ID: 580-89413-12

Date Collected: 09/19/19 11:15

Matrix: Water

Date Received: 09/20/19 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		0.062	0.062	mg/L		10/02/19 12:48	10/03/19 19:39	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/02/19 12:48	10/03/19 19:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	58		50 - 150				10/02/19 12:48	10/03/19 19:39	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89413-1

Client Sample ID: S2-AD-091919

Lab Sample ID: 580-89413-13

Date Collected: 09/19/19 11:22

Matrix: Water

Date Received: 09/20/19 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		0.062	0.062	mg/L		10/02/19 12:48	10/03/19 19:59	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/02/19 12:48	10/03/19 19:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	88		50 - 150				10/02/19 12:48	10/03/19 19:59	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89413-1

Client Sample ID: S2-BD-091919

Lab Sample ID: 580-89413-14

Date Collected: 09/19/19 11:28

Matrix: Water

Date Received: 09/20/19 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		0.061	0.061	mg/L		10/02/19 12:48	10/03/19 20:19	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/02/19 12:48	10/03/19 20:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	85		50 - 150				10/02/19 12:48	10/03/19 20:19	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89413-1

Client Sample ID: S2-BU-091919

Lab Sample ID: 580-89413-15

Date Collected: 09/19/19 11:30

Matrix: Water

Date Received: 09/20/19 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)	0.42		0.062	0.062	mg/L		10/02/19 12:48	10/03/19 20:39	1
Motor Oil (>C24-C36)	0.20		0.091	0.091	mg/L		10/02/19 12:48	10/03/19 20:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	87		50 - 150				10/02/19 12:48	10/03/19 20:39	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89413-1

Client Sample ID: GW-20-091919

Lab Sample ID: 580-89413-16

Date Collected: 09/19/19 16:30

Matrix: Water

Date Received: 09/20/19 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		0.062	0.062	mg/L		10/02/19 12:48	10/03/19 21:00	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		10/02/19 12:48	10/03/19 21:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	84		50 - 150				10/02/19 12:48	10/03/19 21:00	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89413-1

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

Lab Sample ID: MB 580-313064/1-A

Matrix: Water

Analysis Batch: 313198

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 313064

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		10/02/19 12:47	10/03/19 14:36	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		10/02/19 12:47	10/03/19 14:36	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	85		50 - 150				10/02/19 12:47	10/03/19 14:36	1

Lab Sample ID: LCS 580-313064/2-A

Matrix: Water

Analysis Batch: 313198

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 313064

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
#2 Diesel (C10-C24)	0.500	0.378		mg/L		76	50 - 120
Motor Oil (>C24-C36)	0.500	0.506		mg/L		101	64 - 120
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
<i>o</i> -Terphenyl	74		50 - 150				

Lab Sample ID: LCSD 580-313064/3-A

Matrix: Water

Analysis Batch: 313198

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 313064

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	0.500	0.381		mg/L		76	50 - 120	1	26
Motor Oil (>C24-C36)	0.500	0.503		mg/L		101	64 - 120	1	24
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
<i>o</i> -Terphenyl	73		50 - 150						

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89413-1

Client Sample ID: GW-1-091919

Lab Sample ID: 580-89413-1

Date Collected: 09/19/19 08:20

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			313064	10/02/19 12:48	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313198	10/03/19 15:37	ERZ	TAL SEA

Client Sample ID: 5-W-43-091919

Lab Sample ID: 580-89413-2

Date Collected: 09/19/19 08:22

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			313064	10/02/19 12:48	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313198	10/03/19 15:57	ERZ	TAL SEA

Client Sample ID: PZ-75-091919

Lab Sample ID: 580-89413-3

Date Collected: 09/19/19 08:24

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			313064	10/02/19 12:48	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313198	10/03/19 16:17	ERZ	TAL SEA

Client Sample ID: PZ-8-091919

Lab Sample ID: 580-89413-4

Date Collected: 09/19/19 09:20

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			313064	10/02/19 12:48	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313198	10/03/19 16:37	ERZ	TAL SEA

Client Sample ID: EW-1-091919

Lab Sample ID: 580-89413-5

Date Collected: 09/19/19 09:21

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			313064	10/02/19 12:48	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313198	10/03/19 16:58	ERZ	TAL SEA

Client Sample ID: EW-10-091919

Lab Sample ID: 580-89413-6

Date Collected: 09/19/19 09:25

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			313064	10/02/19 12:48	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313198	10/03/19 17:18	ERZ	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89413-1

Client Sample ID: GW-2-091919

Lab Sample ID: 580-89413-7

Date Collected: 09/19/19 09:21

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			313064	10/02/19 12:48	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313198	10/03/19 17:38	ERZ	TAL SEA

Client Sample ID: WG-WV-091919

Lab Sample ID: 580-89413-8

Date Collected: 09/19/19 10:09

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			313064	10/02/19 12:48	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313198	10/03/19 18:18	ERZ	TAL SEA

Client Sample ID: FWG-WV-091919

Lab Sample ID: 580-89413-9

Date Collected: 09/19/19 10:25

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			313064	10/02/19 12:48	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313198	10/03/19 18:38	ERZ	TAL SEA

Client Sample ID: WG-EV-091919

Lab Sample ID: 580-89413-10

Date Collected: 09/19/19 10:25

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			313064	10/02/19 12:48	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313198	10/03/19 18:59	ERZ	TAL SEA

Client Sample ID: FWG-EV-091919

Lab Sample ID: 580-89413-11

Date Collected: 09/19/19 10:47

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			313064	10/02/19 12:48	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313198	10/03/19 19:19	ERZ	TAL SEA

Client Sample ID: S2-AU-091919

Lab Sample ID: 580-89413-12

Date Collected: 09/19/19 11:15

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			313064	10/02/19 12:48	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313198	10/03/19 19:39	ERZ	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89413-1

Client Sample ID: S2-AD-091919

Lab Sample ID: 580-89413-13

Date Collected: 09/19/19 11:22

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			313064	10/02/19 12:48	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313198	10/03/19 19:59	ERZ	TAL SEA

Client Sample ID: S2-BD-091919

Lab Sample ID: 580-89413-14

Date Collected: 09/19/19 11:28

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			313064	10/02/19 12:48	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313198	10/03/19 20:19	ERZ	TAL SEA

Client Sample ID: S2-BU-091919

Lab Sample ID: 580-89413-15

Date Collected: 09/19/19 11:30

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			313064	10/02/19 12:48	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313198	10/03/19 20:39	ERZ	TAL SEA

Client Sample ID: GW-20-091919

Lab Sample ID: 580-89413-16

Date Collected: 09/19/19 16:30

Matrix: Water

Date Received: 09/20/19 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			313064	10/02/19 12:48	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	313198	10/03/19 21:00	ERZ	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 Ground Water

Job ID: 580-89413-1

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	01-19-22
ANAB	Dept. of Defense ELAP	L2236	01-19-22
ANAB	ISO/IEC 17025	L2236	01-19-22
California	State	2901	11-05-19
Montana (UST)	State	NA	04-13-21
Oregon	NELAP	WA100007	11-05-19
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-17-00039	02-10-20
Washington	State	C553	02-17-20



Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

Job ID: 580-89413-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-89413-1	GW-1-091919	Water	09/19/19 08:20	09/20/19 14:15	
580-89413-2	5-W-43-091919	Water	09/19/19 08:22	09/20/19 14:15	
580-89413-3	PZ-75-091919	Water	09/19/19 08:24	09/20/19 14:15	
580-89413-4	PZ-8-091919	Water	09/19/19 09:20	09/20/19 14:15	
580-89413-5	EW-1-091919	Water	09/19/19 09:21	09/20/19 14:15	
580-89413-6	EW-10-091919	Water	09/19/19 09:25	09/20/19 14:15	
580-89413-7	GW-2-091919	Water	09/19/19 09:21	09/20/19 14:15	
580-89413-8	WG-WV-091919	Water	09/19/19 10:09	09/20/19 14:15	
580-89413-9	FWG-WV-091919	Water	09/19/19 10:25	09/20/19 14:15	
580-89413-10	WG-EV-091919	Water	09/19/19 10:25	09/20/19 14:15	
580-89413-11	FWG-EV-091919	Water	09/19/19 10:47	09/20/19 14:15	
580-89413-12	S2-AU-091919	Water	09/19/19 11:15	09/20/19 14:15	
580-89413-13	S2-AD-091919	Water	09/19/19 11:22	09/20/19 14:15	
580-89413-14	S2-BD-091919	Water	09/19/19 11:28	09/20/19 14:15	
580-89413-15	S2-BU-091919	Water	09/19/19 11:30	09/20/19 14:15	
580-89413-16	GW-20-091919	Water	09/19/19 16:30	09/20/19 14:15	



CHAIN OF CUSTODY

LABORATORY INFORMATION

Laboratory: _____ Project Manager: _____
 Address: _____ Phone: _____
 City/State/ZIP: _____ Fax: _____

Loc: 580
89413

WORK ORDER:

Page 4 of 2

SHIPMENT INFORMATION

Shipment Method: _____

Shipment Number: _____

Project Number: 683-067

Project Manager: Pete Kingston

Email: pkingston@favalloconsulting.com

Phone: 425-295-0800 Fax: _____

BNSF PROJECT INFORMATION

Project State of Origin: WA

CONSULTANT INFORMATION

BNSF Project Number: 683-067 Project City: Skykomish, WA

Company: Favallo

BNSF Project Name: BNSF Skykomish - Monthly

Address: 975 5th AVE NW

BNSF Contact: _____ BNSF Work Order No.: _____

City/State/ZIP: Issaquah WA 98027

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

NUTPH-DX

SAMPLE INFORMATION

Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/Grab)	Matrix												COMMENTS	LAB USE
		Date	Time	Sampler																
1 GW-4-091919	2	9/19/19	0820	MG	N	G	W	X												
2 5-W-43-091919			0822	CB				X												
3 PZ-7S-091919			0824	GP				X												
4 PZ-8-091919			0920	MG				X												
5 EW-1-091919			0921	CB				X												
6 EW-10-091919			0925	CB				X												
7 GW-2-091919			0929	GP				X												
8 W5-WV-091919			1009	GP				X												
9 FW6-WV-091919			1025	MG				X												
10 WG-EV-091919			1025	GP				X												
11 FW6-EV-091919			1047	CB				X												
12 S2-AU-091919			1115	MG				X												
13 S2-AD-091919			1122	CB				X												
14 S2-BD-091919			1128	GP				X												
15 S2-BU-091919			1130	MG				X												



580-89413 Chain of Custody

Therm. ID: M2 Cor: 1.0 ° Unc: 1.7 °
 Cooler Dsc: Ins Green FedEx: _____
 Packing: B-b UPS: _____
 Cust. Seal: Yes X No _____ Lab Cour: X
 Blue Ice: Yes Dry, None Other: _____

Therm. ID: M2 Cor: -0.2 ° Unc: 0.5 °
 Cooler Dsc: Ins Blue FedEx: _____
 Packing: B-b UPS: _____
 Cust. Seal: Yes X No _____ Lab Cour: X
 Blue Ice: Yes Dry, None Other: _____

Relinquished By: <u>[Signature]</u>	Date/Time: 9/20/19 0730	Received By: <u>B. Gall</u>	Date/Time: 9/20/19 1415	Comm
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	

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: 683-067			
BNSF Project Number: 683-067			Project City: Slykomish			Project Manager: Pete Kingston			
BNSF Project Name: BNSF Slykomish - Monthly			Company: Farallon			Email: pkingston@farallonconsulting.com			
BNSF Contact:			BNSF Work Order No.:			City/State/ZIP: Issaquah, WA 98027			
TURNAROUND TIME <input type="checkbox"/> 1-day Rush <input type="checkbox"/> 5- to 8-day Rush <input type="checkbox"/> 2-day Rush <input type="checkbox"/> Standard 10-Day <input checked="" 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"/> Level IV <input type="checkbox"/> Other Deliverables? _____ <input type="checkbox"/> EDD Req. Format? _____			METHODS FOR ANALYSIS <div style="border: 1px solid black; padding: 5px; width: fit-content;"> AWTPH-DX </div>			
SAMPLE INFORMATION									
Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/Grab)	Matrix	COMMENTS	LAB USE
		Date	Time	Sampler					
GW-20-091919	2	9/19/19	0430	GP	N	G	W	X	
Relinquished By:	Date/Time: 9/21/19 0730	Received By:	SEA TA		Date/Time: 9-20-19 1415	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.

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES

DUPLICATE - CONSULTANT

TAL-1001 (0912)



Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-89413-1

Login Number: 89413

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: McMorris, Regan

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.	False	IDs on containers do not match the COC. Logged in per COC.
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: 580-91663-1

Client Project/Site: BNSF 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:
1/7/2020 4:08:17 PM

Kristine Allen, Manager of Project Management
(253)248-4970
kristine.allen@testamericainc.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 Ground Water

Job ID: 580-91663-1

Job ID: 580-91663-1

Laboratory: Eurofins TestAmerica, Seattle

Narrative

Job Narrative 580-91663-1

Comments

No additional comments.

Receipt

The samples were received on 12/20/2019 4:51 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 10 coolers at receipt time were 0.6° C, 0.6° C, 0.8° C, 1.3° C, 1.3° C, 2.0° C, 2.2° C, 2.2° C, 2.3° C and 3.5° C.

Receipt Exceptions

Insufficient sample volume was provided for MS/ MSD or Duplicates.

The Chain of Custody (COC) shows the following samples crossed out however we received containers for these three samples and have logged them for NWTPH-Dx analysis pending client notification. 5-W-180-121719 (580-91663-27), GW-30-121919 (580-91663-28) and GW-3-121919 (580-91663-29) The client requested we analyze these three samples.

GC Semi VOA

Method NWTPH-Dx: Continuing calibration verification (CCV) standard associated with batch 580-319961 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. (CCV 580-319961/14) and (CCV 580-319961/36)

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 Skykomish Ground Water

Job ID: 580-91663-1

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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: 5-W-19-121719

Lab Sample ID: 580-91663-1

Date Collected: 12/17/19 11:57

Matrix: Water

Date Received: 12/20/19 16:51

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	0.062	mg/L		12/30/19 09:37	01/03/20 14:34	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		12/30/19 09:37	01/03/20 14:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	60		50 - 150				12/30/19 09:37	01/03/20 14:34	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: 2A-W-41-121719

Lab Sample ID: 580-91663-2

Date Collected: 12/17/19 11:10

Matrix: Water

Date Received: 12/20/19 16:51

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.31		0.062	0.062	mg/L		12/30/19 09:37	01/03/20 14:56	1
Motor Oil (>C24-C36)	0.28		0.092	0.092	mg/L		12/30/19 09:37	01/03/20 14:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	85		50 - 150				12/30/19 09:37	01/03/20 14:56	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: 2A-W-410-121719

Lab Sample ID: 580-91663-3

Date Collected: 12/17/19 11:05

Matrix: Water

Date Received: 12/20/19 16:51

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.49		0.064	0.064	mg/L		12/30/19 09:37	01/03/20 15:18	1
Motor Oil (>C24-C36)	0.39		0.094	0.094	mg/L		12/30/19 09:37	01/03/20 15:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	96		50 - 150				12/30/19 09:37	01/03/20 15:18	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: EW-2A-121719

Lab Sample ID: 580-91663-4

Date Collected: 12/17/19 15:55

Matrix: Water

Date Received: 12/20/19 16:51

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		0.063	0.063	mg/L		12/30/19 09:37	01/03/20 15:40	1
Motor Oil (>C24-C36)	ND		0.094	0.094	mg/L		12/30/19 09:37	01/03/20 15:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	76		50 - 150				12/30/19 09:37	01/03/20 15:40	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: 5-W-56-121719

Lab Sample ID: 580-91663-5

Date Collected: 12/17/19 17:08

Matrix: Water

Date Received: 12/20/19 16:51

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.45		0.062	0.062	mg/L		12/30/19 09:37	01/03/20 16:01	1
Motor Oil (>C24-C36)	1.3		0.091	0.091	mg/L		12/30/19 09:37	01/03/20 16:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	91		50 - 150				12/30/19 09:37	01/03/20 16:01	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: 1B-W-23-121719

Lab Sample ID: 580-91663-6

Date Collected: 12/17/19 14:35

Matrix: Water

Date Received: 12/20/19 16:51

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		0.064	0.064	mg/L		12/31/19 09:35	01/02/20 15:12	1
Motor Oil (>C24-C36)	ND		0.095	0.095	mg/L		12/31/19 09:35	01/02/20 15:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	71		50 - 150				12/31/19 09:35	01/02/20 15:12	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: 5-W-55-121719

Lab Sample ID: 580-91663-7

Date Collected: 12/17/19 16:18

Matrix: Water

Date Received: 12/20/19 16:51

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.10		0.062	0.062	mg/L		12/31/19 09:35	01/02/20 15:34	1
Motor Oil (>C24-C36)	0.13		0.091	0.091	mg/L		12/31/19 09:35	01/02/20 15:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	71		50 - 150				12/31/19 09:35	01/02/20 15:34	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: 5-W-14-121719

Lab Sample ID: 580-91663-8

Date Collected: 12/17/19 15:33

Matrix: Water

Date Received: 12/20/19 16:51

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	0.062	mg/L		12/31/19 09:35	01/02/20 15:56	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		12/31/19 09:35	01/02/20 15:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	65		50 - 150				12/31/19 09:35	01/02/20 15:56	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: 5-W-17-121719

Lab Sample ID: 580-91663-9

Date Collected: 12/17/19 10:46

Matrix: Water

Date Received: 12/20/19 16:51

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	0.062	mg/L		12/31/19 09:35	01/02/20 16:18	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		12/31/19 09:35	01/02/20 16:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	68		50 - 150				12/31/19 09:35	01/02/20 16:18	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: 5-W-16-121719

Lab Sample ID: 580-91663-10

Date Collected: 12/17/19 12:00

Matrix: Water

Date Received: 12/20/19 16:51

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	0.062	mg/L		12/31/19 09:35	01/02/20 16:39	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		12/31/19 09:35	01/02/20 16:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	77		50 - 150				12/31/19 09:35	01/02/20 16:39	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: 2A-W-40-121719

Lab Sample ID: 580-91663-11

Date Collected: 12/17/19 09:50

Matrix: Water

Date Received: 12/20/19 16:51

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		0.063	0.063	mg/L		12/31/19 09:35	01/02/20 17:01	1
Motor Oil (>C24-C36)	ND		0.094	0.094	mg/L		12/31/19 09:35	01/02/20 17:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	65		50 - 150				12/31/19 09:35	01/02/20 17:01	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: 5-W-18-121719

Lab Sample ID: 580-91663-12

Date Collected: 12/17/19 14:31

Matrix: Water

Date Received: 12/20/19 16:51

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	0.062	mg/L		12/31/19 09:35	01/02/20 17:23	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		12/31/19 09:35	01/02/20 17:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	68		50 - 150				12/31/19 09:35	01/02/20 17:23	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: 2A-W-42-121819

Lab Sample ID: 580-91663-13

Date Collected: 12/18/19 14:23

Matrix: Water

Date Received: 12/20/19 16:51

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.15		0.062	0.062	mg/L		12/31/19 09:35	01/02/20 18:06	1
Motor Oil (>C24-C36)	0.13		0.091	0.091	mg/L		12/31/19 09:35	01/02/20 18:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	75		50 - 150				12/31/19 09:35	01/02/20 18:06	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: 1C-W-8-121819

Lab Sample ID: 580-91663-14

Date Collected: 12/18/19 09:43

Matrix: Water

Date Received: 12/20/19 16:51

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	0.062	mg/L		12/31/19 09:35	01/02/20 18:28	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		12/31/19 09:35	01/02/20 18:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	73		50 - 150				12/31/19 09:35	01/02/20 18:28	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: GW-4-121819

Lab Sample ID: 580-91663-15

Date Collected: 12/18/19 13:20

Matrix: Water

Date Received: 12/20/19 16:51

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	0.062	mg/L		12/31/19 09:35	01/02/20 18:50	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		12/31/19 09:35	01/02/20 18:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	69		50 - 150				12/31/19 09:35	01/02/20 18:50	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: 2A-W-9-121819

Lab Sample ID: 580-91663-16

Date Collected: 12/18/19 17:00

Matrix: Water

Date Received: 12/20/19 16:51

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.18		0.061	0.061	mg/L		12/31/19 09:35	01/02/20 19:11	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		12/31/19 09:35	01/02/20 19:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	76		50 - 150				12/31/19 09:35	01/02/20 19:11	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: 2A-W-10-121819

Lab Sample ID: 580-91663-17

Date Collected: 12/18/19 15:55

Matrix: Water

Date Received: 12/20/19 16:51

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.14		0.062	0.062	mg/L		12/31/19 09:35	01/02/20 19:33	1
Motor Oil (>C24-C36)	0.41		0.091	0.091	mg/L		12/31/19 09:35	01/02/20 19:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	76		50 - 150				12/31/19 09:35	01/02/20 19:33	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: 2A-W-100-121819

Lab Sample ID: 580-91663-18

Date Collected: 12/18/19 16:05

Matrix: Water

Date Received: 12/20/19 16:51

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.13		0.062	0.062	mg/L		12/31/19 09:35	01/02/20 19:55	1
Motor Oil (>C24-C36)	0.36		0.092	0.092	mg/L		12/31/19 09:35	01/02/20 19:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	74		50 - 150				12/31/19 09:35	01/02/20 19:55	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: 1C-W-7-121819

Lab Sample ID: 580-91663-19

Date Collected: 12/18/19 12:12

Matrix: Water

Date Received: 12/20/19 16:51

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.12		0.061	0.061	mg/L		12/31/19 09:35	01/02/20 20:17	1
Motor Oil (>C24-C36)	0.14		0.091	0.091	mg/L		12/31/19 09:35	01/02/20 20:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	78		50 - 150				12/31/19 09:35	01/02/20 20:17	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: 1C-W-1-121819

Lab Sample ID: 580-91663-20

Date Collected: 12/18/19 10:47

Matrix: Water

Date Received: 12/20/19 16:51

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		0.063	0.063	mg/L		12/31/19 09:35	01/02/20 20:38	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		12/31/19 09:35	01/02/20 20:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	76		50 - 150				12/31/19 09:35	01/02/20 20:38	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: 1B-W-3-121819

Lab Sample ID: 580-91663-21

Date Collected: 12/18/19 11:50

Matrix: Water

Date Received: 12/20/19 16:51

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		0.061	0.061	mg/L		12/31/19 09:35	01/02/20 21:00	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		12/31/19 09:35	01/02/20 21:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	74		50 - 150				12/31/19 09:35	01/02/20 21:00	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: 5-W-51-121819

Lab Sample ID: 580-91663-22

Date Collected: 12/18/19 10:42

Matrix: Water

Date Received: 12/20/19 16:51

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.42		0.062	0.062	mg/L		12/31/19 09:35	01/02/20 21:22	1
Motor Oil (>C24-C36)	0.33		0.091	0.091	mg/L		12/31/19 09:35	01/02/20 21:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	82		50 - 150				12/31/19 09:35	01/02/20 21:22	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: MW-3-121919

Lab Sample ID: 580-91663-23

Date Collected: 12/19/19 10:45

Matrix: Water

Date Received: 12/20/19 16:51

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.77		0.062	0.062	mg/L		12/31/19 09:35	01/02/20 22:05	1
Motor Oil (>C24-C36)	1.8		0.092	0.092	mg/L		12/31/19 09:35	01/02/20 22:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	69		50 - 150				12/31/19 09:35	01/02/20 22:05	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: MW-4-121919

Lab Sample ID: 580-91663-24

Date Collected: 12/19/19 11:50

Matrix: Water

Date Received: 12/20/19 16:51

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.16		0.062	0.062	mg/L		12/31/19 09:35	01/02/20 22:27	1
Motor Oil (>C24-C36)	0.44		0.091	0.091	mg/L		12/31/19 09:35	01/02/20 22:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	72		50 - 150				12/31/19 09:35	01/02/20 22:27	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: 2B-W-4-121919

Lab Sample ID: 580-91663-25

Date Collected: 12/19/19 09:38

Matrix: Water

Date Received: 12/20/19 16:51

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	0.062	mg/L		12/31/19 09:53	01/02/20 14:51	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		12/31/19 09:53	01/02/20 14:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	74		50 - 150				12/31/19 09:53	01/02/20 14:51	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: MW-555

Lab Sample ID: 580-91663-26

Date Collected: 12/19/19 11:25

Matrix: Water

Date Received: 12/20/19 16:51

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	0.062	mg/L		12/31/19 09:53	01/02/20 15:12	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		12/31/19 09:53	01/02/20 15:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	62		50 - 150				12/31/19 09:53	01/02/20 15:12	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: 5-W-180-121719

Lab Sample ID: 580-91663-27

Date Collected: 12/17/19 14:41

Matrix: Water

Date Received: 12/20/19 16:51

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	0.062	mg/L		12/31/19 09:35	01/02/20 22:49	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		12/31/19 09:35	01/02/20 22:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	76		50 - 150				12/31/19 09:35	01/02/20 22:49	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: GW-30-121919

Lab Sample ID: 580-91663-28

Date Collected: 12/19/19 13:00

Matrix: Water

Date Received: 12/20/19 16:51

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.10		0.062	0.062	mg/L		12/31/19 09:53	01/02/20 15:34	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		12/31/19 09:53	01/02/20 15:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	85		50 - 150				12/31/19 09:53	01/02/20 15:34	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: GW-3-121919

Lab Sample ID: 580-91663-29

Date Collected: 12/19/19 12:50

Matrix: Water

Date Received: 12/20/19 16:51

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.091		0.062	0.062	mg/L		12/31/19 09:53	01/02/20 15:56	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		12/31/19 09:53	01/02/20 15:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	76		50 - 150				12/31/19 09:53	01/02/20 15:56	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

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

Lab Sample ID: MB 580-319807/1-A

Matrix: Water

Analysis Batch: 319981

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 319807

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		12/30/19 09:37	01/03/20 13:07	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		12/30/19 09:37	01/03/20 13:07	1
Surrogate	MB	MB	Limits			Prepared	Analyzed	Dil Fac	
o-Terphenyl	91		50 - 150			12/30/19 09:37	01/03/20 13:07	1	

Lab Sample ID: LCS 580-319807/2-A

Matrix: Water

Analysis Batch: 319981

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 319807

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
#2 Diesel (C10-C24)	0.500	0.490		mg/L		98	50 - 120
Motor Oil (>C24-C36)	0.500	0.499		mg/L		100	64 - 120
Surrogate	LCS	LCS	Limits				
o-Terphenyl	115		50 - 150				

Lab Sample ID: LCSD 580-319807/3-A

Matrix: Water

Analysis Batch: 319981

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 319807

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	9	26
Motor Oil (>C24-C36)	0.500	0.463		mg/L		93	64 - 120	8	24
Surrogate	LCSD	LCSD	Limits						
o-Terphenyl	106		50 - 150						

Lab Sample ID: MB 580-319907/1-A

Matrix: Water

Analysis Batch: 319961

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 319907

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		12/31/19 09:35	01/02/20 14:07	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		12/31/19 09:35	01/02/20 14:07	1
Surrogate	MB	MB	Limits			Prepared	Analyzed	Dil Fac	
o-Terphenyl	79		50 - 150			12/31/19 09:35	01/02/20 14:07	1	

Lab Sample ID: LCS 580-319907/2-A

Matrix: Water

Analysis Batch: 319961

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 319907

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
#2 Diesel (C10-C24)	0.500	0.442		mg/L		88	50 - 120
Motor Oil (>C24-C36)	0.500	0.478		mg/L		96	64 - 120

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

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

Lab Sample ID: LCS 580-319907/2-A

Matrix: Water

Analysis Batch: 319961

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 319907

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	80		50 - 150

Lab Sample ID: LCSD 580-319907/3-A

Matrix: Water

Analysis Batch: 319961

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 319907

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	0.500	0.428		mg/L		86	50 - 120	3	26
Motor Oil (>C24-C36)	0.500	0.480		mg/L		96	64 - 120	0	24

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	79		50 - 150

Lab Sample ID: MB 580-319908/1-A

Matrix: Water

Analysis Batch: 319958

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 319908

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		12/31/19 09:53	01/02/20 13:45	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		12/31/19 09:53	01/02/20 13:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	81		50 - 150	12/31/19 09:53	01/02/20 13:45	1

Lab Sample ID: LCS 580-319908/2-A

Matrix: Water

Analysis Batch: 319958

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 319908

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
#2 Diesel (C10-C24)	0.500	0.448		mg/L		90	50 - 120
Motor Oil (>C24-C36)	0.500	0.493		mg/L		99	64 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	107		50 - 150

Lab Sample ID: LCSD 580-319908/3-A

Matrix: Water

Analysis Batch: 319958

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 319908

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	0.500	0.456		mg/L		91	50 - 120	2	26
Motor Oil (>C24-C36)	0.500	0.483		mg/L		97	64 - 120	2	24

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	108		50 - 150

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: 5-W-19-121719

Lab Sample ID: 580-91663-1

Date Collected: 12/17/19 11:57

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319807	12/30/19 09:37	NRF	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319981	01/03/20 14:34	T1W	TAL SEA

Client Sample ID: 2A-W-41-121719

Lab Sample ID: 580-91663-2

Date Collected: 12/17/19 11:10

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319807	12/30/19 09:37	NRF	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319981	01/03/20 14:56	T1W	TAL SEA

Client Sample ID: 2A-W-410-121719

Lab Sample ID: 580-91663-3

Date Collected: 12/17/19 11:05

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319807	12/30/19 09:37	NRF	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319981	01/03/20 15:18	T1W	TAL SEA

Client Sample ID: EW-2A-121719

Lab Sample ID: 580-91663-4

Date Collected: 12/17/19 15:55

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319807	12/30/19 09:37	NRF	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319981	01/03/20 15:40	T1W	TAL SEA

Client Sample ID: 5-W-56-121719

Lab Sample ID: 580-91663-5

Date Collected: 12/17/19 17:08

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319807	12/30/19 09:37	NRF	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319981	01/03/20 16:01	T1W	TAL SEA

Client Sample ID: 1B-W-23-121719

Lab Sample ID: 580-91663-6

Date Collected: 12/17/19 14:35

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319907	12/31/19 09:35	NRF	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319961	01/02/20 15:12	T1W	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: 5-W-55-121719

Lab Sample ID: 580-91663-7

Date Collected: 12/17/19 16:18

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319907	12/31/19 09:35	NRF	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319961	01/02/20 15:34	T1W	TAL SEA

Client Sample ID: 5-W-14-121719

Lab Sample ID: 580-91663-8

Date Collected: 12/17/19 15:33

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319907	12/31/19 09:35	NRF	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319961	01/02/20 15:56	T1W	TAL SEA

Client Sample ID: 5-W-17-121719

Lab Sample ID: 580-91663-9

Date Collected: 12/17/19 10:46

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319907	12/31/19 09:35	NRF	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319961	01/02/20 16:18	T1W	TAL SEA

Client Sample ID: 5-W-16-121719

Lab Sample ID: 580-91663-10

Date Collected: 12/17/19 12:00

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319907	12/31/19 09:35	NRF	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319961	01/02/20 16:39	T1W	TAL SEA

Client Sample ID: 2A-W-40-121719

Lab Sample ID: 580-91663-11

Date Collected: 12/17/19 09:50

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319907	12/31/19 09:35	NRF	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319961	01/02/20 17:01	T1W	TAL SEA

Client Sample ID: 5-W-18-121719

Lab Sample ID: 580-91663-12

Date Collected: 12/17/19 14:31

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319907	12/31/19 09:35	NRF	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319961	01/02/20 17:23	T1W	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: 2A-W-42-121819

Lab Sample ID: 580-91663-13

Date Collected: 12/18/19 14:23

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319907	12/31/19 09:35	NRF	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319961	01/02/20 18:06	T1W	TAL SEA

Client Sample ID: 1C-W-8-121819

Lab Sample ID: 580-91663-14

Date Collected: 12/18/19 09:43

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319907	12/31/19 09:35	NRF	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319961	01/02/20 18:28	T1W	TAL SEA

Client Sample ID: GW-4-121819

Lab Sample ID: 580-91663-15

Date Collected: 12/18/19 13:20

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319907	12/31/19 09:35	NRF	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319961	01/02/20 18:50	T1W	TAL SEA

Client Sample ID: 2A-W-9-121819

Lab Sample ID: 580-91663-16

Date Collected: 12/18/19 17:00

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319907	12/31/19 09:35	NRF	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319961	01/02/20 19:11	T1W	TAL SEA

Client Sample ID: 2A-W-10-121819

Lab Sample ID: 580-91663-17

Date Collected: 12/18/19 15:55

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319907	12/31/19 09:35	NRF	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319961	01/02/20 19:33	T1W	TAL SEA

Client Sample ID: 2A-W-100-121819

Lab Sample ID: 580-91663-18

Date Collected: 12/18/19 16:05

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319907	12/31/19 09:35	NRF	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319961	01/02/20 19:55	T1W	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: 1C-W-7-121819

Lab Sample ID: 580-91663-19

Date Collected: 12/18/19 12:12

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319907	12/31/19 09:35	NRF	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319961	01/02/20 20:17	T1W	TAL SEA

Client Sample ID: 1C-W-1-121819

Lab Sample ID: 580-91663-20

Date Collected: 12/18/19 10:47

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319907	12/31/19 09:35	NRF	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319961	01/02/20 20:38	T1W	TAL SEA

Client Sample ID: 1B-W-3-121819

Lab Sample ID: 580-91663-21

Date Collected: 12/18/19 11:50

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319907	12/31/19 09:35	NRF	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319961	01/02/20 21:00	T1W	TAL SEA

Client Sample ID: 5-W-51-121819

Lab Sample ID: 580-91663-22

Date Collected: 12/18/19 10:42

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319907	12/31/19 09:35	NRF	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319961	01/02/20 21:22	T1W	TAL SEA

Client Sample ID: MW-3-121919

Lab Sample ID: 580-91663-23

Date Collected: 12/19/19 10:45

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319907	12/31/19 09:35	NRF	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319961	01/02/20 22:05	T1W	TAL SEA

Client Sample ID: MW-4-121919

Lab Sample ID: 580-91663-24

Date Collected: 12/19/19 11:50

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319907	12/31/19 09:35	NRF	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319961	01/02/20 22:27	T1W	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Client Sample ID: 2B-W-4-121919

Lab Sample ID: 580-91663-25

Date Collected: 12/19/19 09:38

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319908	12/31/19 09:53	JCM	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319958	01/02/20 14:51	T1W	TAL SEA

Client Sample ID: MW-555

Lab Sample ID: 580-91663-26

Date Collected: 12/19/19 11:25

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319908	12/31/19 09:53	JCM	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319958	01/02/20 15:12	T1W	TAL SEA

Client Sample ID: 5-W-180-121719

Lab Sample ID: 580-91663-27

Date Collected: 12/17/19 14:41

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319907	12/31/19 09:35	NRF	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319961	01/02/20 22:49	T1W	TAL SEA

Client Sample ID: GW-30-121919

Lab Sample ID: 580-91663-28

Date Collected: 12/19/19 13:00

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319908	12/31/19 09:53	JCM	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319958	01/02/20 15:34	T1W	TAL SEA

Client Sample ID: GW-3-121919

Lab Sample ID: 580-91663-29

Date Collected: 12/19/19 12:50

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319908	12/31/19 09:53	JCM	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319958	01/02/20 15:56	T1W	TAL SEA

Laboratory References:

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

Accreditation/Certification Summary

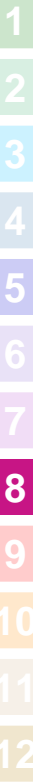
Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

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	01-19-22
ANAB	Dept. of Defense ELAP	L2236	01-19-22
ANAB	ISO/IEC 17025	L2236	01-19-22
California	State	2901	11-05-20
Montana (UST)	State	NA	04-13-21
Oregon	NELAP	WA100007	11-06-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-17-00039	02-10-20
Washington	State	C553	02-17-20



Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-91663-1	5-W-19-121719	Water	12/17/19 11:57	12/20/19 16:51	
580-91663-2	2A-W-41-121719	Water	12/17/19 11:10	12/20/19 16:51	
580-91663-3	2A-W-410-121719	Water	12/17/19 11:05	12/20/19 16:51	
580-91663-4	EW-2A-121719	Water	12/17/19 15:55	12/20/19 16:51	
580-91663-5	5-W-56-121719	Water	12/17/19 17:08	12/20/19 16:51	
580-91663-6	1B-W-23-121719	Water	12/17/19 14:35	12/20/19 16:51	
580-91663-7	5-W-55-121719	Water	12/17/19 16:18	12/20/19 16:51	
580-91663-8	5-W-14-121719	Water	12/17/19 15:33	12/20/19 16:51	
580-91663-9	5-W-17-121719	Water	12/17/19 10:46	12/20/19 16:51	
580-91663-10	5-W-16-121719	Water	12/17/19 12:00	12/20/19 16:51	
580-91663-11	2A-W-40-121719	Water	12/17/19 09:50	12/20/19 16:51	
580-91663-12	5-W-18-121719	Water	12/17/19 14:31	12/20/19 16:51	
580-91663-13	2A-W-42-121819	Water	12/18/19 14:23	12/20/19 16:51	
580-91663-14	1C-W-8-121819	Water	12/18/19 09:43	12/20/19 16:51	
580-91663-15	GW-4-121819	Water	12/18/19 13:20	12/20/19 16:51	
580-91663-16	2A-W-9-121819	Water	12/18/19 17:00	12/20/19 16:51	
580-91663-17	2A-W-10-121819	Water	12/18/19 15:55	12/20/19 16:51	
580-91663-18	2A-W-100-121819	Water	12/18/19 16:05	12/20/19 16:51	
580-91663-19	1C-W-7-121819	Water	12/18/19 12:12	12/20/19 16:51	
580-91663-20	1C-W-1-121819	Water	12/18/19 10:47	12/20/19 16:51	
580-91663-21	1B-W-3-121819	Water	12/18/19 11:50	12/20/19 16:51	
580-91663-22	5-W-51-121819	Water	12/18/19 10:42	12/20/19 16:51	
580-91663-23	MW-3-121919	Water	12/19/19 10:45	12/20/19 16:51	
580-91663-24	MW-4-121919	Water	12/19/19 11:50	12/20/19 16:51	
580-91663-25	2B-W-4-121919	Water	12/19/19 09:38	12/20/19 16:51	
580-91663-26	MW-555	Water	12/19/19 11:25	12/20/19 16:51	
580-91663-27	5-W-180-121719	Water	12/17/19 14:41	12/20/19 16:51	
580-91663-28	GW-30-121919	Water	12/19/19 13:00	12/20/19 16:51	
580-91663-29	GW-3-121919	Water	12/19/19 12:50	12/20/19 16:51	

Eurofins TestAmerica, Seattle

5755 8th Street East
Tacoma, WA 98424
Phone: 253-922-2310 Fax: 253-922-5047

Chain of Custody Record

eurofins Environment Testing
TestAmerica

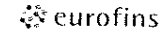
Client Information		Sampler: <u>C. Barfield</u>		Lab PM: Allen, Kristine D		Carrier Tracking No(s):		COC No: 580-36968-11852.1	
Client Contact: Peter Kingston		Phone: <u>425 394 4146</u>		E-Mail: kristine.allen@testamericainc.com				Page: Page 1 of 3	
Company: Farallon Consulting LLC		Due Date Requested:		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) NWRPH_Dx - Standard reporting list for NWRPH-Dx		Analysis Requested		Job #: Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify)	
Address: 975 5th Avenue NW Suite 100		TAT Requested (days): <u>STANDARD</u>							
City: Issaquah		PO #: TT0100-Q11							
State, Zip: WA, 98027		WO #:							
Phone: <u>425 295-0800</u>		Tax Code 8800 BF10007215							
Email: pkingston@farallonconsulting.com		Project #: 58005923						Other:	
Project Name: BNSF Skykomish NPDES		SSOW#:							
Site: Washington									
Sample Identification		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil)	Field Filtered Sample (Yes or No)		Total Number of Containers	
						Preservation Code:		Special Instructions/Note:	
<u>5-W-19-121719</u>		<u>12/17/19</u>	<u>1157</u>	<u>G</u>	<u>Water</u>	<u>X</u>			
<u>2A-W-41-121719</u>			<u>1110</u>		<u>Water</u>	<u>X</u>			
<u>2A-W-410-121719</u>			<u>1105</u>		<u>Water</u>	<u>X</u>			
<u>EW-2A-121719</u>			<u>1555</u>		<u>Water</u>	<u>X</u>			
<u>5-W-56-121719</u>			<u>1708</u>		<u>Water</u>	<u>X</u>			
<u>1B-W-23-121719</u>			<u>1435</u>		<u>Water</u>	<u>X</u>			
<u>5-W-55-121719</u>			<u>1618</u>		<u>Water</u>	<u>X</u>			
<u>5-W-14-121719</u>			<u>1533</u>		<u>Water</u>	<u>X</u>			
<u>5-W-17-121719</u>			<u>1046</u>		<u>Water</u>	<u>X</u>			
<u>5-W-16-121719</u>			<u>1200</u>		<u>Water</u>	<u>X</u>			
<u>2A-W-40-121719</u>			<u>0950</u>		<u>Water</u>	<u>X</u>			
Possible Hazard Identification					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"/> Radiological					<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months				
Deliverable Requested: I, II, III, IV, Other (specify)					Special Instructions/QC Requirements:				
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:			
Relinquished by: <u>Christina [Signature]</u>		Date/Time: <u>12/20/19</u>		Company: <u>[Signature]</u>		Received by: <u>[Signature]</u>		Date/Time: <u>12-20-19 10:20</u>	
Relinquished by: <u>[Signature]</u>		Date/Time: <u>12/20/19 10:51</u>		Company: <u>DLX</u>		Received by: <u>[Signature]</u>		Date/Time: <u>12-20-19 10:51</u>	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:					



Eurofins TestAmerica, Seattle

5755 8th Street East
Tacoma, WA 98424
Phone: 253-922-2310 Fax: 253-922-5047

Chain of Custody Record



Environment Testing
TestAmerica

Client Information		Sampler: <i>C. Buntfeld</i>		Lab PM: Allen, Kristine D		Carrier Tracking No(s):		COC No: 580-36968-11852.2		
Client Contact: Peter Kingston		Phone: <i>425 394 4146</i>		E-Mail: kristine.allen@testamericainc.com				Page: Page 2 of 3		
Company: Farallon Consulting LLC		Due Date Requested:		Analysis Requested Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) NWTPH_Dx - Standard reporting list for NWTPH-Dx		Total Number of Containers		Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify)		
Address: 975 5th Avenue NW Suite 100		TAT Requested (days): <i>STANDARD</i>								
City: Issaquah		PO #: TT0100-Q11								
State, Zip: WA, 98027		WO #: Tax Code 8800 BF10007215								
Phone: <i>425-295-0800</i>		Project #: 58005923								
Email: pkingston@farallonconsulting.com		SSOW#:						Other:		
Project Name: BNSF Skykomish NPDES										
Site: Washington										
Sample Identification		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)		
								Preservation Code:		
<i>5-W-18-121719</i>		<i>12/17/19</i>		<i>1431</i>		<i>G</i>		<i>Water</i>		
<i>2A-W-42-121819</i>		<i>12/18/19</i>		<i>1423</i>				<i>Water</i>		
<i>1C-W-8-121819</i>				<i>0943</i>				<i>Water</i>		
<i>AW-3-121819</i>				<i>1530</i>				<i>Water</i>		
<i>GW-4-121819</i>				<i>1320</i>				<i>Water</i>		
<i>2A-W-9-121819</i>				<i>1700</i>				<i>Water</i>		
<i>2A-W-10-121819</i>				<i>1855</i>				<i>Water</i>		
<i>2A-W-100-121819</i>				<i>1605</i>				<i>Water</i>		
<i>1C-W-7-121819</i>				<i>1212</i>				<i>Water</i>		
<i>1C-W-1-121819</i>				<i>1047</i>				<i>Water</i>		
<i>1B-W-3-121819</i>		<i>12/18/19</i>		<i>1150</i>		<i>Y</i>		<i>Water</i>		
Possible Hazard Identification					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"/> Radiological					<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
Deliverable Requested: I, II, III, IV, Other (specify)					Special Instructions/QC Requirements:					
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:				
Relinquished by: <i>C. Buntfeld</i>		Date/Time: <i>12/20/19</i>		Company: <i>F</i>		Received by: <i>R. Panch</i>		Date/Time: <i>12-20-19 10:20</i>		Company: <i>PLA</i>
Relinquished by: <i>R. Panch</i>		Date/Time: <i>12/20/19 16:57</i>		Company: <i>Dx</i>		Received by: <i>Emily White</i>		Date/Time: <i>12-20-19 16:57</i>		Company: <i>1651</i>
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:						

Eurofins TestAmerica, Seattle

5755 8th Street East
Tacoma, WA 98424
Phone: 253-922-2310 Fax: 253-922-5047

Chain of Custody Record



Environment Testing
TestAmerica

Client Information		Sampler: <u>C. Banfield</u>		Lab PM: Allen, Kristine D		Carrier Tracking No(s):		COC No: 580-36968-11852.3	
Client Contact: Peter Kingston		Phone: <u>425 394 4146</u>		E-Mail: kristine.allen@testamericainc.com				Page: Page 3 of 3	
Company: Farallon Consulting LLC								Job #:	
Address: 975 5th Avenue NW Suite 100		Due Date Requested:		Analysis Requested Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) NWTPH_Dx - Standard reporting list for NWTPH-Dx		Total Number of Containers		Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify)	
City: Issaquah		TAT Requested (days): <u>STANDARD</u>							
State, Zip: WA, 98027		PO #: TT0100-Q11							
Phone: <u>425-295-0800</u>		WO #:							
Email: pkingston@farallonconsulting.com		Tax Code 8800 BF10007215							
Project Name: BNSF Skykomish NPDES		Project #: 58005923							
Site: Washington		SSOW#:							
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	
								Preservation Code:	
<u>5-w-51-121819</u>		<u>12/18/19</u>		<u>1042</u>		<u>G</u>		<u>Water</u>	
<u>mw-3-121919</u>		<u>12/19/19</u>		<u>1045</u>		<u>↓</u>		<u>Water</u>	
<u>mw-4-121919</u>		<u>↓</u>		<u>1150</u>		<u>↓</u>		<u>Water</u>	
<u>2B-w-4-121919</u>		<u>↓</u>		<u>0938</u>		<u>↓</u>		<u>Water</u>	
<u>mw-555</u>		<u>↓</u>		<u>1125</u>		<u>↓</u>		<u>Water</u>	
<u>5-w-480-121719</u>		<u>12/17/19</u>		<u>1441</u>		<u>↓</u>		<u>Water</u>	
<u>gw-30-121919</u>		<u>12/19/19</u>		<u>1300</u>		<u>↓</u>		<u>Water</u>	
<u>gw-3-121919</u>		<u>12/19/19</u>		<u>1250</u>		<u>↓</u>		<u>Water</u>	
Possible Hazard Identification		<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"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
Deliverable Requested: I, II, III, IV, Other (specify)				<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
Special Instructions/QC Requirements:									
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:			
Relinquished by: <u>[Signature]</u>		Date/Time: <u>1/20/19</u>		Company: <u>F</u>		Received by: <u>[Signature]</u>		Date/Time: <u>12-20-19 10:20</u>	
Relinquished by: <u>Q. Powell</u>		Date/Time: <u>12/20/19 16:51</u>		Company: <u>DLX</u>		Received by: <u>[Signature]</u>		Date/Time: <u>12-20-19 1651</u>	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:					

91662

Therm. ID: A1 Cor: 3.5 Unc: 3.6
Cooler Dsc: LP FedEx: BB
Packing: 306 UPS:
Cust. Seal: Yes No Lab Cour: X
Blue Ice, Wet, Dry, None Other:

Therm. ID: A1 Cor: 2.0 Unc: 2.3
Cooler Dsc: 2.2 FedEx:
Packing: 12-20-19 DW UPS:
Cust. Seal: Yes No Lab Cour: _____
Blue Ice, Wet, Dry, None Other:

Therm. ID: A1 Cor: 0.9 Unc: 0.9
Cooler Dsc: _____ FedEx:
Packing: _____ UPS:
Cust. Seal: Yes No Lab Cour: X
Blue Ice, Wet, Dry, None Other:

Therm. ID: A1 Cor: 0.6 Unc: 0.7
Cooler Dsc: _____ FedEx:
Packing: _____ UPS:
Cust. Seal: Yes No Lab Cour: _____
Blue Ice, Wet, Dry, None Other:

Therm. ID: A1 Cor: 1.3 Unc: 1.4
Cooler Dsc: _____ FedEx:
Packing: _____ UPS:
Cust. Seal: Yes No Lab Cour: _____
Blue Ice, Wet, Dry, None Other:

Therm. ID: A1 Cor: 2.2 Unc: 2.3
Cooler Dsc: _____ FedEx:
Packing: _____ UPS:
Cust. Seal: Yes No Lab Cour: _____
Blue Ice, Wet, Dry, None Other: BNSF 91664
FORMER
← MAINTENANCE

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Therm. ID: A1 Cor: 2.4 Unc: 2.4
Cooler Dsc: 2.3 FedEx: 12-20-19 DW
Packing: _____ UPS:
Cust. Seal: Yes No Lab Cour: _____
Blue Ice, Wet, Dry, None Other:

Therm. ID: A1 Cor: 1.2 Unc: 2.1
Cooler Dsc: 12-20-19 DW FedEx:
Packing: _____ UPS: ←
Cust. Seal: Yes No Lab Cour: _____
Blue Ice, Wet, Dry, None Other:

Therm. ID: A1 Cor: 0.7 Unc: 0.7
Cooler Dsc: 12-20-19 DW FedEx:
Packing: _____ UPS: ←
Cust. Seal: Yes No Lab Cour: _____
Blue Ice, Wet, Dry, None Other:

Therm. ID: A1 Cor: 1.3 Unc: 1.4
Cooler Dsc: 12-20-19 DW FedEx:
Packing: _____ UPS:
Cust. Seal: Yes No Lab Cour: _____
Blue Ice, Wet, Dry, None Other:



Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-91663-1

Login Number: 91663

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.	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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Presley, Kim

From: Peter Kingston <pkingston@farallonconsulting.com>
Sent: Monday, December 23, 2019 6:22 PM
To: Presley, Kim
Cc: Jeanette Mullin; Allen, Kristine; Matthew Bowser
Subject: Re: REPLY REQUESTED**Eurofins TestAmerica Sample Login Confirmation files from 580-91663 BNSF Skykomish Ground Water

-External Email-

- 1) We want the last three samples analyzed
- 2) the sample ID should not include the date.

Thanks Kim!

On Dec 23, 2019 5:20 PM, Kim Presley <kim.presley@testamericainc.com> wrote:

Please confirm the following:

- 1.) The last three samples were crossed off the COC however containers were provided for analysis. Do you want these analyzed?
- 2.) The sample ID for one sample does not include the sample date as it does on the rest of the samples. It has been logged per the COC for now. Is this sample ID correct?

Attached, please find the Sample Confirmation files for job 580-91663; BNSF Skykomish Ground Water

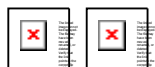
Please feel free to contact me or your PM, Kristine Allen, if you have any questions.

Thank you.

Kim A Presley
Project Manager Assistant

Eurofins TestAmerica, Seattle
Phone: 253-922-2310

E-mail: kim.presley@testamericainc.com
www.eurofinsus.com | www.testamericainc.com



Reference: [580-317175]
Attachments: 2

Please let us know if we met your expectations by rating the service you received from Eurofins TestAmerica on this project by visiting our website at: [Project Feedback](#)

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ANALYTICAL REPORT

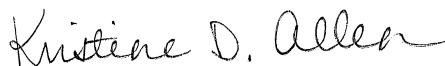
Eurofins TestAmerica, Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-91663-2

Client Project/Site: BNSF 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:
1/17/2020 1:55:02 PM

Kristine Allen, Manager of Project Management
(253)248-4970
kristine.allen@testamericainc.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 Ground Water

Job ID: 580-91663-2

Job ID: 580-91663-2

Laboratory: Eurofins TestAmerica, Seattle

Narrative

Job Narrative 580-91663-2

Comments

No additional comments.

Receipt

The samples were received on 12/20/2019 4:51 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 10 coolers at receipt time were 0.6° C, 0.6° C, 0.8° C, 1.3° C, 1.3° C, 2.0° C, 2.2° C, 2.2° C, 2.3° C and 3.5° C.

Receipt Exceptions

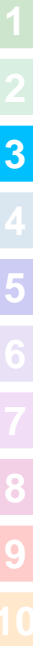
The following samples were activated for Silica Gell Clean up by the client on 1-8-20: 2A-W-41-121719 (580-91663-2) and GW-3-121919 (580-91663-29). This analysis was not originally requested on the chain-of-custody (COC).

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 Ground Water

Job ID: 580-91663-2

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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-2

Client Sample ID: 2A-W-41-121719

Lab Sample ID: 580-91663-2

Date Collected: 12/17/19 11:10

Matrix: Water

Date Received: 12/20/19 16:51

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)	0.098		0.062	0.062	mg/L		12/30/19 09:37	01/15/20 21:40	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		12/30/19 09:37	01/15/20 21:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	86		50 - 150				12/30/19 09:37	01/15/20 21:40	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-2

Client Sample ID: GW-3-121919

Lab Sample ID: 580-91663-29

Date Collected: 12/19/19 12:50

Matrix: Water

Date Received: 12/20/19 16:51

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		12/31/19 09:53	01/15/20 21:18	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		12/31/19 09:53	01/15/20 21:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	69		50 - 150				12/31/19 09:53	01/15/20 21:18	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-2

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Lab Sample ID: MB 580-319908/1-B

Matrix: Water

Analysis Batch: 320760

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 319908

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		12/31/19 09:53	01/15/20 20:13	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		12/31/19 09:53	01/15/20 20:13	1
Surrogate	MB	MB	Limits			Prepared	Analyzed	Dil Fac	
	%Recovery	Qualifier							
<i>o</i> -Terphenyl	84		50 - 150			12/31/19 09:53	01/15/20 20:13	1	

Lab Sample ID: LCS 580-319908/2-B

Matrix: Water

Analysis Batch: 320760

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 319908

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
#2 Diesel (C10-C24)	0.500	0.462		mg/L		92	50 - 120
Motor Oil (>C24-C36)	0.500	0.516		mg/L		103	64 - 120
Surrogate	LCS	LCS	Limits			%Rec	Limits
	%Recovery	Qualifier					
<i>o</i> -Terphenyl	113		50 - 150				

Lab Sample ID: LCSD 580-319908/3-B

Matrix: Water

Analysis Batch: 320760

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 319908

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec. Limits	RPD	
		Result	Qualifier					RPD	Limit
#2 Diesel (C10-C24)	0.500	0.479		mg/L		96	50 - 120	4	26
Motor Oil (>C24-C36)	0.500	0.511		mg/L		102	64 - 120	1	24
Surrogate	LCSD	LCSD	Limits			%Rec	Limits		
	%Recovery	Qualifier							
<i>o</i> -Terphenyl	108		50 - 150						

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-2

Client Sample ID: 2A-W-41-121719

Lab Sample ID: 580-91663-2

Date Collected: 12/17/19 11:10

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319807	12/30/19 09:37	NRF	TAL SEA
Total/NA	Cleanup	3630C			319866	01/14/20 18:19	NRF	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	320760	01/15/20 21:40	JCM	TAL SEA

Client Sample ID: GW-3-121919

Lab Sample ID: 580-91663-29

Date Collected: 12/19/19 12:50

Matrix: Water

Date Received: 12/20/19 16:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319908	12/31/19 09:53	JCM	TAL SEA
Total/NA	Cleanup	3630C			320652	01/14/20 18:18	PRO	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	320760	01/15/20 21:18	JCM	TAL SEA

Laboratory References:

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

Accreditation/Certification Summary

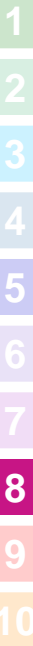
Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-2

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	01-19-22
ANAB	Dept. of Defense ELAP	L2236	01-19-22
ANAB	ISO/IEC 17025	L2236	01-19-22
California	State	2901	11-05-20
Montana (UST)	State	NA	04-13-21
Oregon	NELAP	WA100007	11-06-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-17-00039	02-10-20
Washington	State	C553	02-17-20



Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Ground Water

Job ID: 580-91663-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-91663-2	2A-W-41-121719	Water	12/17/19 11:10	12/20/19 16:51	
580-91663-29	GW-3-121919	Water	12/19/19 12:50	12/20/19 16:51	

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Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-91663-2

Login Number: 91663

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.	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 <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: 580-91664-1

Client Project/Site: BNSF Skykomish Former Maintenance
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:
1/6/2020 1:39:51 PM

Kristine Allen, Manager of Project Management
(253)248-4970
kristine.allen@testamericainc.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 Former Maintenance

Job ID: 580-91664-1

Job ID: 580-91664-1

Laboratory: Eurofins TestAmerica, Seattle

Narrative

**Job Narrative
580-91664-1**

Comments

No additional comments.

Receipt

The samples were received on 12/20/2019 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 0.6° C, 2.0° C and 2.2° C.

GC Semi VOA

Method NWTPH-Dx: The following samples contained a hydrocarbon pattern in the diesel range; however, the elution pattern were later than the typical diesel fuel pattern used by the laboratory for quantitative purposes: WG-WV-121819 (580-91664-8) and PZ-7S-121819 (580-91664-13).

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 Skykomish Former Maintenance

Job ID: 580-91664-1

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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Former Maintenance

Job ID: 580-91664-1

Client Sample ID: PZ-80-121819

Lab Sample ID: 580-91664-1

Date Collected: 12/18/19 11:25

Matrix: Water

Date Received: 12/20/19 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		0.063	0.063	mg/L		12/31/19 09:53	01/02/20 16:18	1
Motor Oil (>C24-C36)	ND		0.093	0.093	mg/L		12/31/19 09:53	01/02/20 16:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	71		50 - 150				12/31/19 09:53	01/02/20 16:18	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Former Maintenance

Job ID: 580-91664-1

Client Sample ID: S2-AU-121819

Lab Sample ID: 580-91664-2

Date Collected: 12/18/19 13:32

Matrix: Water

Date Received: 12/20/19 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		0.062	0.062	mg/L		12/31/19 09:53	01/02/20 16:39	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		12/31/19 09:53	01/02/20 16:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	70		50 - 150				12/31/19 09:53	01/02/20 16:39	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Former Maintenance

Job ID: 580-91664-1

Client Sample ID: GW-1-121819

Lab Sample ID: 580-91664-3

Date Collected: 12/18/19 13:55

Matrix: Water

Date Received: 12/20/19 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		0.062	0.062	mg/L		12/31/19 09:53	01/02/20 17:01	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		12/31/19 09:53	01/02/20 17:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	85		50 - 150				12/31/19 09:53	01/02/20 17:01	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Former Maintenance

Job ID: 580-91664-1

Client Sample ID: S2-AD-121819

Lab Sample ID: 580-91664-4

Date Collected: 12/18/19 11:38

Matrix: Water

Date Received: 12/20/19 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		0.062	0.062	mg/L		12/31/19 09:53	01/02/20 17:44	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		12/31/19 09:53	01/02/20 17:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	81		50 - 150				12/31/19 09:53	01/02/20 17:44	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Former Maintenance

Job ID: 580-91664-1

Client Sample ID: EW-1-121819

Lab Sample ID: 580-91664-5

Date Collected: 12/18/19 10:30

Matrix: Water

Date Received: 12/20/19 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		0.063	0.063	mg/L		12/31/19 09:53	01/02/20 18:06	1
Motor Oil (>C24-C36)	ND		0.093	0.093	mg/L		12/31/19 09:53	01/02/20 18:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	78		50 - 150				12/31/19 09:53	01/02/20 18:06	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Former Maintenance

Job ID: 580-91664-1

Client Sample ID: S2-BD-121819

Lab Sample ID: 580-91664-6

Date Collected: 12/18/19 09:47

Matrix: Water

Date Received: 12/20/19 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		0.062	0.062	mg/L		12/31/19 09:53	01/02/20 18:28	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		12/31/19 09:53	01/02/20 18:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	80		50 - 150				12/31/19 09:53	01/02/20 18:28	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Former Maintenance

Job ID: 580-91664-1

Client Sample ID: 5-W-43-121819

Lab Sample ID: 580-91664-7

Date Collected: 12/18/19 09:28

Matrix: Water

Date Received: 12/20/19 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		0.062	0.062	mg/L		12/31/19 09:53	01/02/20 18:50	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		12/31/19 09:53	01/02/20 18:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	82		50 - 150				12/31/19 09:53	01/02/20 18:50	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Former Maintenance

Job ID: 580-91664-1

Client Sample ID: WG-WV-121819

Lab Sample ID: 580-91664-8

Date Collected: 12/18/19 13:54

Matrix: Water

Date Received: 12/20/19 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		0.061	0.061	mg/L		12/31/19 09:53	01/02/20 19:11	1
Motor Oil (>C24-C36)	0.17		0.091	0.091	mg/L		12/31/19 09:53	01/02/20 19:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	93		50 - 150				12/31/19 09:53	01/02/20 19:11	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Former Maintenance

Job ID: 580-91664-1

Client Sample ID: FWG-EV-121819

Lab Sample ID: 580-91664-9

Date Collected: 12/18/19 14:35

Matrix: Water

Date Received: 12/20/19 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		0.062	0.062	mg/L		12/31/19 09:53	01/02/20 19:33	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		12/31/19 09:53	01/02/20 19:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	84		50 - 150				12/31/19 09:53	01/02/20 19:33	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Former Maintenance

Job ID: 580-91664-1

Client Sample ID: S2-BU-121819

Lab Sample ID: 580-91664-10

Date Collected: 12/18/19 10:18

Matrix: Water

Date Received: 12/20/19 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		0.062	0.062	mg/L		12/31/19 09:53	01/02/20 19:55	1
Motor Oil (>C24-C36)	0.10		0.091	0.091	mg/L		12/31/19 09:53	01/02/20 19:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	84		50 - 150				12/31/19 09:53	01/02/20 19:55	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Former Maintenance

Job ID: 580-91664-1

Client Sample ID: FWG-WV-121819

Lab Sample ID: 580-91664-11

Date Collected: 12/18/19 15:00

Matrix: Water

Date Received: 12/20/19 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		0.062	0.062	mg/L		12/31/19 09:53	01/02/20 20:17	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		12/31/19 09:53	01/02/20 20:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	76		50 - 150				12/31/19 09:53	01/02/20 20:17	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Former Maintenance

Job ID: 580-91664-1

Client Sample ID: WG-EV-121819

Lab Sample ID: 580-91664-12

Date Collected: 12/18/19 10:49

Matrix: Water

Date Received: 12/20/19 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)	0.45		0.061	0.061	mg/L		12/31/19 09:53	01/02/20 20:38	1
Motor Oil (>C24-C36)	0.45		0.091	0.091	mg/L		12/31/19 09:53	01/02/20 20:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	97		50 - 150				12/31/19 09:53	01/02/20 20:38	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Former Maintenance

Job ID: 580-91664-1

Client Sample ID: PZ-7S-121819

Lab Sample ID: 580-91664-13

Date Collected: 12/18/19 14:52

Matrix: Water

Date Received: 12/20/19 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		0.063	0.063	mg/L		12/31/19 09:53	01/02/20 21:00	1
Motor Oil (>C24-C36)	0.11		0.092	0.092	mg/L		12/31/19 09:53	01/02/20 21:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	83		50 - 150				12/31/19 09:53	01/02/20 21:00	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Former Maintenance

Job ID: 580-91664-1

Client Sample ID: GW-2-121819

Lab Sample ID: 580-91664-14

Date Collected: 12/18/19 15:48

Matrix: Water

Date Received: 12/20/19 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		0.062	0.062	mg/L		12/31/19 09:53	01/02/20 21:43	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		12/31/19 09:53	01/02/20 21:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	79		50 - 150				12/31/19 09:53	01/02/20 21:43	1



Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Former Maintenance

Job ID: 580-91664-1

Client Sample ID: GW-20-121819

Lab Sample ID: 580-91664-15

Date Collected: 12/18/19 15:55

Matrix: Water

Date Received: 12/20/19 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		0.062	0.062	mg/L		12/31/19 09:53	01/02/20 22:05	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		12/31/19 09:53	01/02/20 22:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	87		50 - 150				12/31/19 09:53	01/02/20 22:05	1

QC Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Former Maintenance

Job ID: 580-91664-1

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

Lab Sample ID: MB 580-319908/1-A

Matrix: Water

Analysis Batch: 319958

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 319908

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		12/31/19 09:53	01/02/20 13:45	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		12/31/19 09:53	01/02/20 13:45	1
Surrogate	MB	MB	Limits			Prepared	Analyzed	Dil Fac	
	%Recovery	Qualifier							
<i>o</i> -Terphenyl	81		50 - 150			12/31/19 09:53	01/02/20 13:45	1	

Lab Sample ID: LCS 580-319908/2-A

Matrix: Water

Analysis Batch: 319958

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 319908

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
#2 Diesel (C10-C24)	0.500	0.448		mg/L		90	50 - 120
Motor Oil (>C24-C36)	0.500	0.493		mg/L		99	64 - 120
Surrogate	LCS	LCS	Limits			%Rec	
	%Recovery	Qualifier					
<i>o</i> -Terphenyl	107		50 - 150				

Lab Sample ID: LCSD 580-319908/3-A

Matrix: Water

Analysis Batch: 319958

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 319908

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec. Limits	RPD	
		Result	Qualifier					RPD	Limit
#2 Diesel (C10-C24)	0.500	0.456		mg/L		91	50 - 120	2	26
Motor Oil (>C24-C36)	0.500	0.483		mg/L		97	64 - 120	2	24
Surrogate	LCSD	LCSD	Limits			%Rec			
	%Recovery	Qualifier							
<i>o</i> -Terphenyl	108		50 - 150						

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Former Maintenance

Job ID: 580-91664-1

Client Sample ID: PZ-80-121819

Lab Sample ID: 580-91664-1

Date Collected: 12/18/19 11:25

Matrix: Water

Date Received: 12/20/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319908	12/31/19 09:53	JCM	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319958	01/02/20 16:18	T1W	TAL SEA

Client Sample ID: S2-AU-121819

Lab Sample ID: 580-91664-2

Date Collected: 12/18/19 13:32

Matrix: Water

Date Received: 12/20/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319908	12/31/19 09:53	JCM	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319958	01/02/20 16:39	T1W	TAL SEA

Client Sample ID: GW-1-121819

Lab Sample ID: 580-91664-3

Date Collected: 12/18/19 13:55

Matrix: Water

Date Received: 12/20/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319908	12/31/19 09:53	JCM	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319958	01/02/20 17:01	T1W	TAL SEA

Client Sample ID: S2-AD-121819

Lab Sample ID: 580-91664-4

Date Collected: 12/18/19 11:38

Matrix: Water

Date Received: 12/20/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319908	12/31/19 09:53	JCM	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319958	01/02/20 17:44	T1W	TAL SEA

Client Sample ID: EW-1-121819

Lab Sample ID: 580-91664-5

Date Collected: 12/18/19 10:30

Matrix: Water

Date Received: 12/20/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319908	12/31/19 09:53	JCM	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319958	01/02/20 18:06	T1W	TAL SEA

Client Sample ID: S2-BD-121819

Lab Sample ID: 580-91664-6

Date Collected: 12/18/19 09:47

Matrix: Water

Date Received: 12/20/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319908	12/31/19 09:53	JCM	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319958	01/02/20 18:28	T1W	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish Former Maintenance

Job ID: 580-91664-1

Client Sample ID: 5-W-43-121819

Lab Sample ID: 580-91664-7

Date Collected: 12/18/19 09:28

Matrix: Water

Date Received: 12/20/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319908	12/31/19 09:53	JCM	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319958	01/02/20 18:50	T1W	TAL SEA

Client Sample ID: WG-WV-121819

Lab Sample ID: 580-91664-8

Date Collected: 12/18/19 13:54

Matrix: Water

Date Received: 12/20/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319908	12/31/19 09:53	JCM	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319958	01/02/20 19:11	T1W	TAL SEA

Client Sample ID: FWG-EV-121819

Lab Sample ID: 580-91664-9

Date Collected: 12/18/19 14:35

Matrix: Water

Date Received: 12/20/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319908	12/31/19 09:53	JCM	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319958	01/02/20 19:33	T1W	TAL SEA

Client Sample ID: S2-BU-121819

Lab Sample ID: 580-91664-10

Date Collected: 12/18/19 10:18

Matrix: Water

Date Received: 12/20/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319908	12/31/19 09:53	JCM	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319958	01/02/20 19:55	T1W	TAL SEA

Client Sample ID: FWG-WV-121819

Lab Sample ID: 580-91664-11

Date Collected: 12/18/19 15:00

Matrix: Water

Date Received: 12/20/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319908	12/31/19 09:53	JCM	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319958	01/02/20 20:17	T1W	TAL SEA

Client Sample ID: WG-EV-121819

Lab Sample ID: 580-91664-12

Date Collected: 12/18/19 10:49

Matrix: Water

Date Received: 12/20/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319908	12/31/19 09:53	JCM	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319958	01/02/20 20:38	T1W	TAL SEA

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Former Maintenance

Job ID: 580-91664-1

Client Sample ID: PZ-7S-121819

Lab Sample ID: 580-91664-13

Date Collected: 12/18/19 14:52

Matrix: Water

Date Received: 12/20/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319908	12/31/19 09:53	JCM	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319958	01/02/20 21:00	T1W	TAL SEA

Client Sample ID: GW-2-121819

Lab Sample ID: 580-91664-14

Date Collected: 12/18/19 15:48

Matrix: Water

Date Received: 12/20/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319908	12/31/19 09:53	JCM	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319958	01/02/20 21:43	T1W	TAL SEA

Client Sample ID: GW-20-121819

Lab Sample ID: 580-91664-15

Date Collected: 12/18/19 15:55

Matrix: Water

Date Received: 12/20/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			319908	12/31/19 09:53	JCM	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	319958	01/02/20 22:05	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 Former Maintenance

Job ID: 580-91664-1

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	01-19-22
ANAB	Dept. of Defense ELAP	L2236	01-19-22
ANAB	ISO/IEC 17025	L2236	01-19-22
California	State	2901	11-05-20
Montana (UST)	State	NA	04-13-21
Oregon	NELAP	WA100007	11-06-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-17-00039	02-10-20
Washington	State	C553	02-17-20

Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish Former Maintenance

Job ID: 580-91664-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
580-91664-1	PZ-80-121819	Water	12/18/19 11:25	12/20/19 10:00	
580-91664-2	S2-AU-121819	Water	12/18/19 13:32	12/20/19 10:00	
580-91664-3	GW-1-121819	Water	12/18/19 13:55	12/20/19 10:00	
580-91664-4	S2-AD-121819	Water	12/18/19 11:38	12/20/19 10:00	
580-91664-5	EW-1-121819	Water	12/18/19 10:30	12/20/19 10:00	
580-91664-6	S2-BD-121819	Water	12/18/19 09:47	12/20/19 10:00	
580-91664-7	5-W-43-121819	Water	12/18/19 09:28	12/20/19 10:00	
580-91664-8	WG-WV-121819	Water	12/18/19 13:54	12/20/19 10:00	
580-91664-9	FWG-EV-121819	Water	12/18/19 14:35	12/20/19 10:00	
580-91664-10	S2-BU-121819	Water	12/18/19 10:18	12/20/19 10:00	
580-91664-11	FWG-WV-121819	Water	12/18/19 15:00	12/20/19 10:00	
580-91664-12	WG-EV-121819	Water	12/18/19 10:49	12/20/19 10:00	
580-91664-13	PZ-7S-121819	Water	12/18/19 14:52	12/20/19 10:00	
580-91664-14	GW-2-121819	Water	12/18/19 15:48	12/20/19 10:00	
580-91664-15	GW-20-121819	Water	12/18/19 15:55	12/20/19 10:00	



CHAIN OF CUSTODY

LABORATORY INFORMATION

Laboratory: Eurofins, West America Project Manager: Kristine Allen
 Address: 5755 9th St E Phone: 253-922-2310
 City/State/ZIP: Tacoma, WA 98424 Fax:

LAB WORK ORDER:

SHIPMENT INFORMATION

Shipment Method: CARRIER
 Tracking Number:

BNSF PROJECT INFORMATION

BNSF Project Number: 683-067 Project State of Origin: WA
 BNSF Project Name: BNSF FORMER MAINTENANCE Project City: Skykomish
 BNSF Contact: BNSF Work Order No.:

CONSULTANT INFORMATION

Company: Farallon Consulting Project Number: 683-067
 Address: 475 5th Ave NW Project Manager: PETE KINGSTON
 City/State/ZIP: Ksagauch, WA 98023 Email: pkinston@farallonconsulting.com
 Phone: 4252950800 Fax:

TURNAROUND TIME

1-day Rush 5- to 8-day Rush
 2-day Rush Standard 10-Day
 3-day Rush Other _____

DELIVERABLES

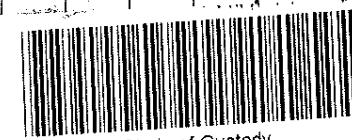
BNSF Standard (Level II) Other Deliverables?
 Level III EDD Req. Format?
 Level IV

METHODS FOR ANALYSIS

NUTPH-DX

SAMPLE INFORMATION

Sample Identification	Containers	Sample Collection			Filtered Y/N	Type (Comp/Grab)	Matrix	METHODS FOR ANALYSIS	COMMENTS	LAB USE
		Date	Time	Sampler						
1 PE-8-12-1819	1	12/18/19	1125	CB	N	G	W			
2 S2-AD-121819			1332							
3 GW-1-121819			1355							
4 S2-AD-121819			1138							
5 EW-1-121819			1030							
6 S2-BD-121819			0947							
7 S-W-43-121819			0928							
8 WG-WV-121819			1354							
9 FWG-EV			1435							
10 S2-BD-121819			1018							
11 FWG-WV-121819			1500							
12 WG-EV-121819			1049							
13 PE-7S-121819			1452							
14 GW-2-121819			1548							
15 GW-20-121819			1555							



530-91664 Chain of Custody

Relinquished By: <u>Catalisa</u>	Date/Time: <u>12/20/19</u>	Received By: <u>Q. Powell</u>	Date/Time: <u>12-20-19 18:20</u>	Comments and Special Analytical Requirements:	
Relinquished By: <u>Q. Powell</u>	Date/Time: <u>12/20/19 18:11</u>	Received By: <u>Kenny</u>	Date/Time: <u>12-20-19 10:00</u>		
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)

Therm. ID: A1 Cor: 3.5 ° Inc: 3.6 °
Cooler Desc: LB FedEx: AB
Packing: B26 UPS: _____
Cust. Seal: Yes ___ No X Lab Cour: X
Blue Ice, Wet, Dry, None Other: _____

Therm. ID: A1 Cor: 2.0 ° Inc: 2.3 °
Cooler Desc: _____ FedEx: _____
Packing: _____ UPS: _____
Cust. Seal: Yes ___ No ___ Lab Cour: _____
Blue Ice, Wet, Dry, None Other: _____

← 91VV -

Therm. ID: A1 Cor: 0.4 ° Inc: 0.4 °
Cooler Desc: _____ FedEx: _____
Packing: _____ UPS: _____
Cust. Seal: Yes ___ No ___ Lab Cour: X
Blue Ice, Wet, Dry, None Other: _____

Therm. ID: A1 Cor: 0.6 ° Inc: 0.7 °
Cooler Desc: _____ FedEx: _____
Packing: _____ UPS: _____
Cust. Seal: Yes ___ No ___ Lab Cour: _____
Blue Ice, Wet, Dry, None Other: _____

Therm. ID: A1 Cor: 1.3 ° Inc: 1.4 °
Cooler Desc: _____ FedEx: _____
Packing: _____ UPS: _____
Cust. Seal: Yes ___ No ___ Lab Cour: _____
Blue Ice, Wet, Dry, None Other: _____

Therm. ID: A1 Cor: 2.2 ° Inc: 2.3 °
Cooler Desc: _____ FedEx: _____
Packing: _____ UPS: _____
Cust. Seal: Yes ___ No ___ Lab Cour: _____
Blue Ice, Wet, Dry, None Other: _____

BNSF 91VV4
← FORMER MAINTENANCE

Therm. ID: A1 Cor: 2.4 ° Inc: 2.4 °
Cooler Desc: _____ FedEx: _____
Packing: _____ UPS: _____
Cust. Seal: Yes ___ No ___ Lab Cour: _____
Blue Ice, Wet, Dry, None Other: _____

Therm. ID: A1 Cor: 1.5 ° Inc: 2.1 °
Cooler Desc: _____ FedEx: _____
Packing: _____ UPS: _____
Cust. Seal: Yes ___ No ___ Lab Cour: _____
Blue Ice, Wet, Dry, None Other: _____

Therm. ID: A1 Cor: 2.4 ° Inc: 0.7 °
Cooler Desc: _____ FedEx: _____
Packing: _____ UPS: _____
Cust. Seal: Yes ___ No ___ Lab Cour: _____
Blue Ice, Wet, Dry, None Other: _____

Therm. ID: A1 Cor: 1.3 ° Inc: 1.4 °
Cooler Desc: _____ FedEx: _____
Packing: _____ UPS: _____
Cust. Seal: Yes ___ No ___ Lab Cour: _____
Blue Ice, Wet, Dry, None Other: _____



CHAIN OF CUSTODY

BNSF PROJECT INFORMATION

BNSF Project Number: 683-067
 BNSF Project Name: BNSF FORMER MAINTENANCE
 BNSF Contact: [Handwritten]

TURNAROUND TIME
 1-day Rush
 5- to 8-day Rush
 Standard 10-Day
 3-day Rush
 Other

DELIVERABLES
 BNSF Standard (Level II)
 Level III
 Level IV

Other Deliverables?
 EDD Req, Format?

SAMPLE INFORMATION

Sample Identification	Containers	Sample Collection		Type (Comp/Grab)	Matrix
		Date	Time		
PZ-8-12-1819	1	12/18/19	1125	CG	N G W
SA-AU-12/1819			1332		
GW-1-12-1819			1355		
SA-AD-12-1819			1138		
EW-1-12-1819			1030		
SA-BD-12-1819			0947		
S-W-43-12-1819			0928		
WG-WV-12-1819			1354		
FWG-EV			1435		
SA-BU-12-1819			1018		
FWG-WV-12-1819			1500		
WG-EV-12-1819			1049		
PZ-7S-12-1819			1452		
GW-2-12-1819			1548		
GW-20-12-1819			1555		

Relinquished By: [Handwritten]
 Date/Time: 12/20/19 10:30
 Relinquished By: [Handwritten]
 Date/Time: 12/20/19 10:30
 Relinquished By: [Handwritten]
 Date/Time: 12/20/19 10:30

Received by Laboratory: [Handwritten]
 Date/Time: [Handwritten]

LABORATORY INFORMATION

Laboratory: Eurofins, Test America
 Address: 5755 9th St S
 City/State/ZIP: Tacoma, WA 98424

Project Manager: Kristine Allen
 Phone: 253-922-2310
 Fax: [Handwritten]

SHIPMENT INFORMATION

Shipment Method: Courier
 Tracking Number: [Handwritten]
 Project Number: 683-067

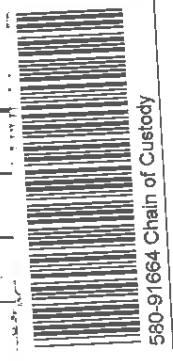
Project Manager: PETE KINASTON
 Email: pkinaston@eurofins.com
 Phone: 425-215-0820

CONSULTANT INFORMATION

Company: Farellon Consulting
 Address: 475 5th Ave NW
 City/State/ZIP: Issaquah, WA 98027

METHODS FOR ANALYSIS

MURPH-DX					
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Comments and Special Analytical Requirements:
 Date/Time: 12-20-19 10:30
 Digitally Signed: [Handwritten]
 Date/Time: 12-20-19 10:30

Lab: Custody Initialed? Yes No
 Custody Seal No. [Handwritten]
 BNSF COC No. [Handwritten]

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES

DUPLICATE - CONSULTANT



1
2
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10
11

Therm. ID: A1 Cor: 1.3 Unc: 1.4
Cooler Desc: 12-20-19 MW
Packing: _____
Cust. Seal: Yes No
Blue Ice, Wet, Dry, None
Lab Cour: _____
Other: _____

Therm. ID: A1 Cor: 0.7 Unc: 0.7
Cooler Desc: 12-20-19 MW
Packing: _____
Cust. Seal: Yes No
Blue Ice, Wet, Dry, None
Lab Cour: _____
Other: _____

Therm. ID: A1 Cor: 2.1 Unc: 2.1
Cooler Desc: 12-20-19 MW
Packing: _____
Cust. Seal: Yes No
Blue Ice, Wet, Dry, None
Lab Cour: _____
Other: _____

Therm. ID: A1 Cor: 2.4 Unc: 2.4
Cooler Desc: 12-20-19 MW
Packing: _____
Cust. Seal: Yes No
Blue Ice, Wet, Dry, None
Lab Cour: _____
Other: _____

Therm. ID: A1 Cor: 2.2 Unc: 2.3
Cooler Desc: _____
Packing: _____
Cust. Seal: Yes No
Blue Ice, Wet, Dry, None
Lab Cour: _____
Other: _____

Therm. ID: A1 Cor: 1.3 Unc: 1.4
Cooler Desc: _____
Packing: _____
Cust. Seal: Yes No
Blue Ice, Wet, Dry, None
Lab Cour: _____
Other: _____

Therm. ID: A1 Cor: 0.6 Unc: 0.7
Cooler Desc: _____
Packing: _____
Cust. Seal: Yes No
Blue Ice, Wet, Dry, None
Lab Cour: _____
Other: _____

Therm. ID: A1 Cor: 0.9 Unc: 0.9
Cooler Desc: _____
Packing: _____
Cust. Seal: Yes No
Blue Ice, Wet, Dry, None
Lab Cour: _____
Other: _____

Therm. ID: A1 Cor: 2.0 Unc: 2.3
Cooler Desc: 12-20-19 MW
Packing: _____
Cust. Seal: Yes No
Blue Ice, Wet, Dry, None
Lab Cour: _____
Other: _____

Therm. ID: A1 Cor: 3.5 Unc: 3.6
Cooler Desc: _____
Packing: _____
Cust. Seal: Yes No
Blue Ice, Wet, Dry, None
Lab Cour: _____
Other: _____

BNSF
FORMER 91664
← FORWARD
← MAINTENANCE

← 91664

← 91664

← 91664

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-91664-1

Login Number: 91664

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

APPENDIX B
DATA VALIDATION REPORTS

2019 SITE-WIDE GROUNDWATER MONITORING REPORT
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Consent Decree No. 07-2-33672-9 SEA

Farallon PN: 683-067



DATA VALIDATION REPORT

Skykomish Groundwater Monitoring March 2019 Data

Prepared for:

Farallon Consulting, LLC

975 5th Avenue NW

Issaquah, Washington 98027

April 23, 2019

1.0 Introduction

Data validation was performed on the following water samples:

Sample ID	Sample Date/Time	Lab ID	Analyses
1A-W-4-032019	03/20/2019 16:30	580-84853-5	TPH-Dx
1B-W-2-032119	03/21/2019 14:18	580-84853-32	TPH-Dx
1B-W-23-032019	03/20/2019 14:30	580-84853-8	TPH-Dx
1B-W-3-032119	03/21/2019 15:05	580-84853-35	TPH-Dx
1C-W-1-032119	03/21/2019 12:30	580-84853-29	TPH-Dx
1C-W-3-032119	03/21/2019 15:00	580-84853-34	TPH-Dx
1C-W-4-032119	03/21/2019 15:05	580-84853-33	TPH-Dx
1C-W-7-032119	03/21/2019 10:45	580-84853-26	TPH-Dx
1C-W-8-032119	03/21/2019 12:40	580-84853-30	TPH-Dx
2A-W-10-032119	03/21/2019 09:54	580-84853-20	TPH-Dx
2A-W-40-032019	03/20/2019 17:55	580-84853-11	TPH-Dx
2A-W-410-032019	03/20/2019 16:20	580-84853-10	TPH-Dx
2A-W-41-032019	03/20/2019 15:55	580-84853-9	TPH-Dx, TPHSG
2A-W-42-032119	03/21/2019 11:05	580-84853-27	TPH-Dx
2A-W-9-032119	03/21/2019 09:54	580-84853-25	TPH-Dx
2B-W-4-032119	03/21/2019 12:04	580-84853-22	TPH-Dx
5-W-14-032019	03/20/2019 12:54	580-84853-18	TPH-Dx
5-W-16-032019	03/20/2019 11:59	580-84853-19	TPH-Dx
5-W-170-032019	03/20/2019 12:16	580-84853-4	TPH-Dx
5-W-17-032019	03/20/2019 12:14	580-84853-3	TPH-Dx
5-W-18-032019	03/20/2019 11:04	580-84853-1	TPH-Dx
5-W-19-032019	03/20/2019 11:11	580-84853-2	TPH-Dx
5-W-51-032019	03/20/2019 13:54	580-84853-12	TPH-Dx
5-W-55-032019	03/20/2019 15:21	580-84853-15	TPH-Dx
5-W-560-032019	03/20/2019 15:20	580-84853-14	TPH-Dx
5-W-56-032019	03/20/2019 15:09	580-84853-13	TPH-Dx
EW-2A-032119	03/21/2019 09:50	580-84853-24	TPH-Dx
GW-30-032019	03/20/2019 14:45	580-84853-7	TPH-Dx
GW-3-032019	03/20/2019 14:35	580-84853-6	TPH-Dx, TPHSG
GW-4-032119	03/21/2019 09:50	580-84853-23	TPH-Dx

Sample ID	Sample Date/Time	Lab ID	Analyses
MW-16-032119	03/21/2019 13:00	580-84853-31	TPH-Dx
MW-30-032119	03/21/2019 11:28	580-84853-53	TPH-Dx
MW-3-032119	03/21/2019 11:21	580-84853-28	TPH-Dx
MW-380R-032019	03/20/2019 17:02	580-84853-17	TPH-Dx
MW-38R-032019	03/20/2019 17:04	580-84853-16	TPH-Dx
MW-4-032119	03/21/2019 10:56	580-84853-21	TPH-Dx
MW-555-032219	03/22/2019 11:05	580-84853-51	TPH-Dx
S1-AD-032119	03/21/2019 16:10	580-84853-39	TPH-Dx
S1-AU-032119	03/21/2019 16:10	580-84853-37	TPH-Dx
S1-BD-032119	03/21/2019 16:05	580-84853-36	TPH-Dx
S1-BU-032119	03/21/2019 16:05	580-84853-38	TPH-Dx
S3-AD-032219	03/22/2019 08:55	580-84853-50	TPH-Dx
S3-AU-032219	03/22/2019 08:55	580-84853-44	TPH-Dx
S3-BD-032219	03/22/2019 08:55	580-84853-49	TPH-Dx
S3-BU-032219	03/22/2019 08:58	580-84853-45	TPH-Dx
S3-CD-0322219	03/22/2019 09:30	580-84853-52	TPH-Dx
S3-CU-032219	03/22/2019 09:30	580-84853-47	TPH-Dx
S4-AD-032219	03/22/2019 10:05	580-84853-46	TPH-Dx
S4-AU-032219	03/22/2019 10:05	580-84853-48	TPH-Dx
S4-BD-032219	03/22/2019 09:37	580-84853-42	TPH-Dx
S4-BU-032219	03/22/2019 09:37	580-84853-43	TPH-Dx
S4-CD-032219	03/22/2019 10:09	580-84853-41	TPH-Dx
S4-CU-032219	03/22/2019 10:06	580-84853-40	TPH-Dx

Samples were analyzed by Test America, Tacoma, Washington.

A stage 2A summary validation was performed on the analytical results including both the hardcopy (portable document format) and electronic data deliverable, earning EPA OSWER validation label code S2AVEM. Validation was performed by Cari Saylor.

Data qualifiers are assigned based only on the criteria reviewed and do not include calibration or instrument performance issues unless noted in the laboratory narrative.

No qualifiers were assigned during this review.

2.0 Precision, Accuracy, Representativeness, Comparability, and Completeness

Sample analysis frequencies: Quarterly sampling includes 25 water sample locations, and semi-annual sampling includes an additional 29 water sample locations. Additionally, 20 of the 29 semi-annual locations are sentry wells which must be sampled if the HCC system has been down for more than 48 hours in the previous quarter. Finally, 4 of the quarterly locations and 4 of the semi-annual locations are undergoing monthly sampling as part of a pilot study. For this round of sampling, quarterly locations were required. Samples were collected from all required locations and the required analysis was completed by the laboratory for each collected sample.

Analysis methods: Each sample was analyzed by method NWTPH-Dx and prepared by method SW3510C. These methods are approved EPA methods and therefore meet comparability requirements. Additionally, samples 2A-W-41-032019 and GW-3-032019 were prepared with method SW3510C a second time, cleaned up with method SW3630C (silica gel) and analyzed by NWTPH-Dx.

Precision, accuracy and completeness: Accuracy and precision measurements were within control limits. A data completeness of 100% was calculated based on 54 of 54 intended sample analyses completed. Please note that this data completeness percentage includes the samples for the 8 locations included the pilot study which were validated separately. The project goal of 90% was met.

3.0 Diesel Range Petroleum Hydrocarbon Analysis

Quality control analysis frequencies: The method specifies that a method blank must be analyzed one per analytical batch or one per twenty samples, whichever is more frequent, and a laboratory duplicate must be analyzed one per ten samples. In addition, surrogate compounds must be measured in each field and quality control sample.

Each batch included a method blank, laboratory control sample (LCS), and LCS duplicate (LCSD), as well as appropriate surrogates. Data qualifiers are not required due to a lack of laboratory duplicate results.

Holding times: Unpreserved water samples must be extracted within 7 days of collection. Preserved water samples must be extracted within 14 days of collection. Extracts must be analyzed within 40 days of extraction. These criteria were met.

Laboratory and field blank results: Criteria for blanks are that analyte concentrations must be below the PQL, or below 5% of the lowest associated sample concentration. No target compounds were detected in the method or field blanks.

Surrogate recoveries: Laboratory control limits were 50-150%. Surrogate recoveries were within limits.

LCS recoveries: Laboratory control limits were 50-120% and 64-120%. LCS recoveries were within limits.

LCS/LCSD RPDs: The laboratory control limit ranged from <24 to <26%. LCS/LCSD RPD values were within limits.

Field duplicate RPDs: For concentrations above five times the reporting limit, RPDs were below 50%. For concentrations below five times the reporting limits, concentrations were within +/- two times the reporting limit.

Reporting limits: The reporting limit goals are 0.1 mg/L for both diesel range hydrocarbons and oil range hydrocarbons. These goals were met.

Laboratory narrative and flags: No qualifiers were added based on a review of the laboratory narrative.

Diesel and oil range petroleum hydrocarbon data are acceptable for use as reported.

4.0 Abbreviations and Definitions

<u>DV Qualifier</u>	<u>Definition</u>
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample reporting limit or the amount of contaminant detected in the sample.
J	The analyte was positively identified. The associated numerical value is the approximate concentration of the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
UJ	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The sample result is rejected. The presence or absence of the analyte cannot be verified and data are not usable.
R1	The sample result has been replaced by a more reliable or more conservative result.
R2	The sample result has been replaced by a result from a different analysis method.

<u>Abbreviation</u>	<u>Definition</u>
DV	Data Validation
LCS	Laboratory control sample
LCSD	Laboratory control sample duplicate
MS	Matrix spike
MSD	Matrix spike duplicate
RL	Reporting limit
RPD	Relative percent difference
RSD	Relative standard deviation

5.0 References

USEPA National Functional Guidelines for Organic Superfund Methods Data Review, Office of Superfund Remediation and Technology Innovation, U.S. Environmental Protection Agency. January 2017, EPA-540-R-2017-002.

USEPA Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use, Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, January 2009, EPA 540-R-08-005.



DATA VALIDATION REPORT

Skykomish Groundwater Monitoring June 2019 Data

Prepared for:
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, Washington 98027

September 20, 2019

1.0 Introduction

Data validation was performed on the following water samples:

Sample ID	Sample Date/Time	Lab ID	Analyses
2A-W-41-061819	06/18/2019 11:06	580-87064-1	TPH-Dx, TPHSG
5-W-17-061919	06/19/2019 10:44	580-87064-10	TPH-Dx
5-W-56-061919	06/19/2019 12:16	580-87064-11	TPH-Dx
5-W-55-061919	06/19/2019 13:11	580-87064-12	TPH-Dx
5-W-51-061919	06/19/2019 14:09	580-87064-13	TPH-Dx
5-W-14-061919	06/19/2019 15:06	580-87064-14	TPH-Dx
1B-W-3-161919	06/19/2019 08:48	580-87064-15	TPH-Dx
1C-W-7-061919	06/19/2019 10:07	580-87064-16	TPH-Dx
GW-4-061919	06/19/2019 11:35	580-87064-17	TPH-Dx
EW-2A-061919	06/19/2019 13:00	580-87064-18	TPH-Dx
1C-W-1-061919	06/19/2019 14:07	580-87064-19	TPH-Dx
2A-W-410-061819	06/18/2019 11:07	580-87064-2	TPH-Dx
1C-W-8-061919	06/19/2019 15:00	580-87064-20	TPH-Dx
2A-W-9-061919	06/19/2019 16:21	580-87064-21	TPH-Dx
2A-W-10-061919	06/19/2019 16:40	580-87064-22	TPH-Dx
2B-W-4-061919	06/19/2019 17:48	580-87064-23	TPH-Dx
MW-3-061919	06/19/2019 16:40	580-87064-24	TPH-Dx
MW-4-061919	06/19/2019 17:47	580-87064-25	TPH-Dx
MW-555-061919	06/19/2019 18:25	580-87064-26	TPH-Dx
1B-W-23-061819	06/18/2019 14:35	580-87064-3	TPH-Dx
GW-3-061819	06/18/2019 16:01	580-87064-4	TPH-Dx, TPHSG
GW-30-061819	06/18/2019 16:05	580-87064-5	TPH-Dx
2A-W-42-061819	06/18/2019 17:45	580-87064-6	TPH-Dx
5-W-19-061819	06/18/2019 18:52	580-87064-7	TPH-Dx
5-W-18-061919	06/19/2019 08:42	580-87064-8	TPH-Dx
5-W-16-061919	06/19/2019 09:40	580-87064-9	TPH-Dx

Samples were analyzed by Test America, Tacoma, Washington.

A stage 2A summary validation was performed on the analytical results including both the hardcopy (portable document format) and electronic data deliverable, earning EPA OSWER validation label code S2AVEM. Validation was performed by Cari Saylor.

Data qualifiers are assigned based only on the criteria reviewed and do not include calibration or instrument performance issues unless noted in the laboratory narrative.

No qualifiers were assigned during this review.

2.0 Precision, Accuracy, Representativeness, Comparability, and Completeness

Sample analysis frequencies: Quarterly sampling includes 25 water sample locations, and semi-annual sampling includes an additional 29 water sample locations. Additionally, 20 of the 29 semi-annual locations are sentry wells which must be sampled if the HCC system has been down for more than 48 hours in the previous quarter. Finally, 4 of the quarterly locations and 4 of the semi-annual locations are undergoing monthly sampling as part of a pilot study. For this round of sampling, quarterly locations were required. Samples were collected from all required locations except 2A-W-40. The required analysis was completed by the laboratory for each collected sample.

Analysis methods: Each sample was analyzed by method NWTPH-Dx and prepared by method SW3510C. These methods are approved EPA methods and therefore meet comparability requirements. Additionally, samples 2A-W-41-061819 and GW-3-061819 were prepared with method SW3510C a second time, cleaned up with method SW3630C (silica gel) and analyzed by NWTPH-Dx.

Precision, accuracy and completeness: Accuracy and precision measurements were within control limits. A data completeness of 96% was calculated based on 24 of 25 intended sample analyses completed. Please note that this data completeness percentage includes the samples for the 4 locations included the pilot study, which were validated separately. The project goal of 90% was met.

3.0 Diesel Range Petroleum Hydrocarbon Analysis

Quality control analysis frequencies: The method specifies that a method blank must be analyzed one per analytical batch or one per twenty samples, whichever is more frequent, and a laboratory duplicate must be analyzed one per ten samples. In addition, surrogate compounds must be measured in each field and quality control sample.

Each batch included a method blank, laboratory control sample (LCS), and LCS duplicate (LCSD), as well as appropriate surrogates. Data qualifiers are not required due to a lack of laboratory duplicate results.

Holding times: Unpreserved water samples must be extracted within 7 days of collection. Preserved water samples must be extracted within 14 days of collection. Extracts must be analyzed within 40 days of extraction. These criteria were met.

Laboratory and field blank results: Criteria for blanks are that analyte concentrations must be below the PQL, or below 5% of the lowest associated sample concentration. No target compounds were detected in the method or field blanks.

Surrogate recoveries: Laboratory control limits were 50-150%. Surrogate recoveries were within limits with one exception:

Sample ID	Surrogate	% Recovery	Lab Control Limit
GW-3-061819	o-Terphenyl	288	50 - 150

The laboratory noted matrix interference, and no qualifiers are assigned.

LCS recoveries: Laboratory control limits were 50-120% and 64-120%. LCS recoveries were within limits.

LCS/LCSD RPDs: The laboratory control limit ranged from <24 to <26%. LCS/LCSD RPD values were within limits.

Field duplicate RPDs: For concentrations above five times the reporting limit, RPDs were below 50%. For concentrations below five times the reporting limits, concentrations were within +/- two times the reporting limit.

Reporting limits: The reporting limit goals are 0.1 mg/L for both diesel range hydrocarbons and oil range hydrocarbons. These goals were met.

Laboratory narrative and flags: No qualifiers were added based on a review of the laboratory narrative.

Diesel and oil range petroleum hydrocarbon data are acceptable for use as reported.

4.0 Abbreviations and Definitions

<u>DV Qualifier</u>	<u>Definition</u>
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample reporting limit or the amount of contaminant detected in the sample.
J	The analyte was positively identified. The associated numerical value is the approximate concentration of the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
UJ	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The sample result is rejected. The presence or absence of the analyte cannot be verified and data are not usable.
R1	The sample result has been replaced by a more reliable or more conservative result.
R2	The sample result has been replaced by a result from a different analysis method.

<u>Abbreviation</u>	<u>Definition</u>
DV	Data Validation
LCS	Laboratory control sample
LCSD	Laboratory control sample duplicate
MS	Matrix spike
MSD	Matrix spike duplicate

<u>Abbreviation</u>	<u>Definition</u>
RL	Reporting limit
RPD	Relative percent difference
RSD	Relative standard deviation

5.0 References

USEPA National Functional Guidelines for Organic Superfund Methods Data Review, Office of Superfund Remediation and Technology Innovation, U.S. Environmental Protection Agency. January 2017, EPA-540-R-2017-002.

USEPA Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use, Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, January 2009, EPA 540-R-08-005.



DATA VALIDATION REPORT

Skykomish Groundwater Monitoring September 2019 Data

Prepared for:

Farallon Consulting, LLC

975 5th Avenue NW

Issaquah, Washington 98027

October 16, 2019

1.0 Introduction

Data validation was performed on the following water samples:

Sample ID	Sample Date/Time	Lab ID	Analyses
5-W-19-091719	09/17/2019 09:25	580-89409-1	TPH-Dx
EW-2A-091719	09/17/2019 09:25	580-89409-2	TPH-Dx
5-W-18-091719	09/17/2019 09:28	580-89409-3	TPH-Dx
5-W-17-091719	09/17/2019 10:30	580-89409-4	TPH-Dx
GW-4-091719	09/17/2019 10:49	580-89409-5	TPH-Dx
5-W-16-091719	09/17/2019 10:50	580-89409-6	TPH-Dx
5-W-14-091719	09/17/2019 11:38	580-89409-7	TPH-Dx
1C-W-1-091719	09/17/2019 11:53	580-89409-8	TPH-Dx
5-W-51-091719	09/17/2019 12:05	580-89409-9	TPH-Dx
1C-W-8-091719	09/17/2019 12:49	580-89409-10	TPH-Dx
1C-W-4-091719	09/17/2019 13:43	580-89409-11	TPH-Dx
5-W-55-091719	09/17/2019 14:23	580-89409-12	TPH-Dx
5-W-56-091719	09/17/2019 14:27	580-89409-13	TPH-Dx
1C-W-3-091719	09/17/2019 14:39	580-89409-14	TPH-Dx
MW-38R-091719	09/17/2019 15:42	580-89409-15	TPH-Dx
1C-W-7-091719	09/17/2019 15:54	580-89409-16	TPH-Dx
2A-W-40-091719	09/17/2019 16:18	580-89409-17	TPH-Dx
S3-AU-091719	09/17/2019 16:37	580-89409-18	TPH-Dx
2A-W-42-091819	09/18/2019 09:11	580-89409-19	TPH-Dx
1B-W-3-091819	09/18/2019 09:15	580-89409-20	TPH-Dx
MW-16-091819	09/18/2019 09:57	580-89409-21	TPH-Dx
1B-W-2-091819	09/18/2019 10:22	580-89409-22	TPH-Dx
1B-W-23-091819	09/18/2019 10:41	580-89409-23	TPH-Dx
MW-4-091819	09/18/2019 11:17	580-89409-24	TPH-Dx
2A-W-9-091819	09/18/2019 11:57	580-89409-25	TPH-Dx
1A-W-4-091819	09/18/2019 12:20	580-89409-26	TPH-Dx
2B-W-4-091819	09/18/2019 12:27	580-89409-27	TPH-Dx
2A-W-10-091819	09/18/2019 13:00	580-89409-28	TPH-Dx
2A-W-100-091819	09/18/2019 13:10	580-89409-29	TPH-Dx
2A-W-41-091819	09/18/2019 13:24	580-89409-30	TPH-Dx, TPHSG

Sample ID	Sample Date/Time	Lab ID	Analyses
2A-W-410-091819	09/18/2019 13:30	580-89409-31	TPH-Dx
GW-3-091819	09/18/2019 14:41	580-89409-32	TPH-Dx, TPHSG
GW-30-091819	09/18/2019 15:00	580-89409-33	TPH-Dx
S3-CU-091819	09/18/2019 14:52	580-89409-34	TPH-Dx
S3-AD-091819	09/18/2019 14:53	580-89409-35	TPH-Dx
S3-CD-091819	09/18/2019 15:02	580-89409-36	TPH-Dx
S3-BD-091819	09/18/2019 15:30	580-89409-37	TPH-Dx
S3-BU-091819	09/18/2019 15:30	580-89409-38	TPH-Dx
S4-AD-091819	09/18/2019 16:06	580-89409-39	TPH-Dx
S4-CD-091819	09/18/2019 16:07	580-89409-40	TPH-Dx
S4-BD-091819	09/18/2019 16:09	580-89409-41	TPH-Dx
S4-BU-091819	09/18/2019 16:16	580-89409-42	TPH-Dx
S4-CU-091819	09/18/2019 16:29	580-89409-43	TPH-Dx
S4-AU-091819	09/18/2019 16:30	580-89409-44	TPH-Dx
S1-AU-091919	09/19/2019 09:55	580-89409-45	TPH-Dx
S1-AD-091919	09/19/2019 09:57	580-89409-46	TPH-Dx
S1-BD-091919	09/19/2019 10:46	580-89409-47	TPH-Dx
S1-BU-091919	09/19/2019 11:02	580-89409-48	TPH-Dx
5-W-180-091719	09/19/2019 09:30	580-89409-49	TPH-Dx
MW-555-091919	09/19/2019 12:00	580-89409-50	TPH-Dx

Samples were analyzed by Test America, Tacoma, Washington.

A stage 2A summary validation was performed on the analytical results including both the hardcopy (portable document format) and electronic data deliverable, earning EPA OSWER validation label code S2AVEM. Validation was performed by Cari Saylor.

Data qualifiers are assigned based only on the criteria reviewed and do not include calibration or instrument performance issues unless noted in the laboratory narrative.

Data qualifiers are summarized in section 4.0 below.

2.0 Precision, Accuracy, Representativeness, Comparability, and Completeness

Sample analysis frequencies: Quarterly sampling includes 25 water sample locations, and semi-annual sampling includes an additional 29 water sample locations. Additionally, 20 of the 29 semi-annual locations are sentry wells which must be sampled if the HCC system has been down for more than 48 hours in the previous quarter. Finally, 4 of the quarterly locations and 4 of the semi-annual locations are undergoing monthly sampling as part of a pilot study. For this round of sampling, quarterly and semi-annual locations were required. Samples were collected from all required locations except MW-3. The required analysis was completed by the laboratory for each collected sample.

Analysis methods: Each sample was extracted by method SW2510C and analyzed by method NWTPH-Dx. These methods are approved EPA methods and therefore meet comparability requirements. Additionally, sample extracts 2A-W-41-091819 and GW-3-091819 were split and the second portion was with cleaned up with method SW3630C (silica gel) and analyzed by NWTPH-Dx.

Precision, accuracy and completeness: Accuracy and precision measurements were within control limits. A data completeness of 98% was calculated based on 53 of 54 intended sample

analyses completed. Please note that this data completeness percentage includes the samples for the 8 locations included the pilot study, which were validated separately. The project goal of 90% was met.

3.0 Diesel Range Petroleum Hydrocarbon Analysis

Quality control analysis frequencies: The method specifies that a method blank must be analyzed one per analytical batch or one per twenty samples, whichever is more frequent, and a laboratory duplicate must be analyzed one per ten samples. In addition, surrogate compounds must be measured in each field and quality control sample.

Each batch included a method blank, laboratory control sample (LCS), and LCS duplicate (LCSD), as well as appropriate surrogates. Data qualifiers are not required due to a lack of laboratory duplicate results.

Holding times: Unpreserved water samples must be extracted within 7 days of collection. Preserved water samples must be extracted within 14 days of collection. Extracts must be analyzed within 40 days of extraction. These criteria were met.

Laboratory and field blank results: Criteria for blanks are that analyte concentrations must be below the PQL, or below 5% of the lowest associated sample concentration. No target compounds were detected in the method blanks. The field blank contained #2 Diesel as follows:

Blank ID	Analyte	Concentration (mg/L)	RL (mg/L)
MW-555-091919	#2 Diesel (C10-C24)	0.086	0.062

Sample results in associated samples below five times this level are qualified 'U' and should be considered not detected at the reported concentration. Sample results in associated samples between five and ten times this level are qualified as estimated. Sample results above ten times this level are considered unaffected.

Surrogate recoveries: Laboratory control limits were 50-150%. Surrogate recoveries were within limits with one exception:

Sample ID	Surrogate	% Recovery	Lab Control Limit
1C-W-7-091719	o-Terphenyl	35	50 - 150
GW-30-091819	o-Terphenyl	43	50 - 150
GW-3-091819	o-Terphenyl	29	50 - 150
GW-3-091819	o-Terphenyl (TPHSG)	32	50 - 150

The laboratory noted matrix interference, and no qualifiers are assigned.

LCS recoveries: Laboratory control limits were 50-120% and 64-120%. LCS recoveries were within limits with the following exception:

QC ID	Analyte	% Recovery	Lab Control Limit
LCSD 580-312969/3-B	Motor Oil (>C24-C36)	124	64 - 120

Motor Oil was not detected in the associated samples, and no qualifiers are required.

LCS/LCSD RPDs: The laboratory control limit ranged from <24 to <26%. LCS/LCSD RPD values were within limits.

Field duplicate RPDs: For concentrations above five times the reporting limit, RPDs were below 50%. For concentrations below five times the reporting limits, concentrations were within +/- two times the reporting limit.

Reporting limits: The reporting limit goals are 0.1 mg/L for both diesel range hydrocarbons and oil range hydrocarbons. These goals were met by the laboratory. However, field blank qualification resulted in elevated reporting limits in the following samples:

Sample ID	Analyte	Value (mg/L)	Validation Qualifier
2A-W-410-091819	#2 Diesel (C10-C24)	0.26	U
2A-W-41-091819	#2 Diesel (C10-C24)	0.26	U
2A-W-9-091819	#2 Diesel (C10-C24)	0.13	U
GW-3-091819	#2 Diesel (C10-C24)	0.12	U
MW-4-091819	#2 Diesel (C10-C24)	0.11	U
S4-BU-091819	#2 Diesel (C10-C24)	0.26	U

No additional qualifiers are assigned to elevated reporting limit results.

Laboratory narrative and flags: No qualifiers were added based on a review of the laboratory narrative.

Diesel and oil range petroleum hydrocarbon data are acceptable for use as qualified.

4.0 Validation Qualifiers

Client ID	Analyte(s)	Qualifier	Reason
2A-W-40-091719	#2 Diesel (C10-C24)	U	Field blank contamination
2A-W-410-091819	#2 Diesel (C10-C24)	U	Field blank contamination
2A-W-41-091819	#2 Diesel (C10-C24)	U	Field blank contamination
2A-W-42-091819	#2 Diesel (C10-C24)	U	Field blank contamination
2A-W-9-091819	#2 Diesel (C10-C24)	U	Field blank contamination
5-W-51-091719	#2 Diesel (C10-C24)	J	Field blank contamination
5-W-55-091719	#2 Diesel (C10-C24)	U	Field blank contamination
GW-30-091819	#2 Diesel (C10-C24)	U	Field blank contamination
GW-3-091819	#2 Diesel (C10-C24)	U	Field blank contamination
MW-38R-091719	#2 Diesel (C10-C24)	U	Field blank contamination
MW-4-091819	#2 Diesel (C10-C24)	U	Field blank contamination
S4-BU-091819	#2 Diesel (C10-C24)	U	Field blank contamination

5.0 Abbreviations and Definitions

<u>DV Qualifier</u>	<u>Definition</u>
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample reporting limit or the amount of contaminant detected in the sample.
J	The analyte was positively identified. The associated numerical value is the approximate concentration of the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
UJ	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

<u>DV Qualifier</u>	<u>Definition</u>
R	The sample result is rejected. The presence or absence of the analyte cannot be verified and data are not usable.
R1	The sample result has been replaced by a more reliable or more conservative result.
R2	The sample result has been replaced by a result from a different analysis method.

<u>Abbreviation</u>	<u>Definition</u>
DV	Data Validation
LCS	Laboratory control sample
LCS D	Laboratory control sample duplicate
MS	Matrix spike
MS D	Matrix spike duplicate
RL	Reporting limit
RPD	Relative percent difference
RSD	Relative standard deviation

6.0 References

USEPA National Functional Guidelines for Organic Superfund Methods Data Review, Office of Superfund Remediation and Technology Innovation, U.S. Environmental Protection Agency. January 2017, EPA-540-R-2017-002.

USEPA Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use, Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, January 2009, EPA 540-R-08-005.



DATA VALIDATION REPORT

Skykomish Groundwater Monitoring, December 2019 Data

Prepared for:
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, Washington 98027

January 13, 2020

1.0 Introduction

Data validation was performed on the following water samples:

Sample ID	Sample Date/Time	Lab ID	Analyses
5-W-19-121719	12/17/2019 11:57	580-91663-1	TPH-Dx
2A-W-41-121719	12/17/2019 11:10	580-91663-2	TPH-Dx
2A-W-410-121719	12/17/2019 11:05	580-91663-3	TPH-Dx
EW-2A-121719	12/17/2019 15:55	580-91663-4	TPH-Dx
5-W-56-121719	12/17/2019 17:08	580-91663-5	TPH-Dx
1B-W-23-121719	12/17/2019 14:35	580-91663-6	TPH-Dx
5-W-55-121719	12/17/2019 16:18	580-91663-7	TPH-Dx
5-W-14-121719	12/17/2019 15:33	580-91663-8	TPH-Dx
5-W-17-121719	12/17/2019 10:46	580-91663-9	TPH-Dx
5-W-16-121719	12/17/2019 12:00	580-91663-10	TPH-Dx
2A-W-40-121719	12/17/2019 09:50	580-91663-11	TPH-Dx
5-W-18-121719	12/17/2019 14:31	580-91663-12	TPH-Dx
2A-W-42-121819	12/18/2019 14:23	580-91663-13	TPH-Dx
1C-W-8-121819	12/18/2019 09:43	580-91663-14	TPH-Dx
GW-4-121819	12/18/2019 13:20	580-91663-15	TPH-Dx
2A-W-9-121819	12/18/2019 17:00	580-91663-16	TPH-Dx
2A-W-10-121819	12/18/2019 15:55	580-91663-17	TPH-Dx
2A-W-100-121819	12/18/2019 16:05	580-91663-18	TPH-Dx
1C-W-7-121819	12/18/2019 12:12	580-91663-19	TPH-Dx
1C-W-1-121819	12/18/2019 10:47	580-91663-20	TPH-Dx
1B-W-3-121819	12/18/2019 11:50	580-91663-21	TPH-Dx
5-W-51-121819	12/18/2019 10:42	580-91663-22	TPH-Dx
MW-3-121919	12/19/2019 10:45	580-91663-23	TPH-Dx
MW-4-121919	12/19/2019 11:50	580-91663-24	TPH-Dx
2B-W-4-121919	12/19/2019 09:38	580-91663-25	TPH-Dx
MW-555	12/19/2019 11:25	580-91663-26	TPH-Dx
5-W-180-121719	12/17/2019 14:41	580-91663-27	TPH-Dx
GW-30-121919	12/19/2019 13:00	580-91663-28	TPH-Dx
GW-3-121919	12/19/2019 12:50	580-91663-29	TPH-Dx

Samples were analyzed by Test America, Tacoma, Washington.

A stage 2A summary validation was performed on the analytical results including both the hardcopy (portable document format) and electronic data deliverable, earning EPA OSWER validation label code S2AVEM. Validation was performed by Cari Saylor.

Data qualifiers are assigned based only on the criteria reviewed and do not include calibration or instrument performance issues unless noted in the laboratory narrative.

Data qualifiers are summarized in section 4.0 below.

2.0 Precision, Accuracy, Representativeness, Comparability, and Completeness

Sample analysis frequencies: Quarterly sampling includes 25 water sample locations, and semi-annual sampling includes an additional 29 water sample locations. Additionally, 20 of the 29 semi-annual locations are sentry wells which must be sampled if the HCC system has been down for more than 48 hours in the previous quarter. Finally, 4 of the quarterly locations and 4 of the semi-annual locations are undergoing monthly sampling as part of a pilot study. For this round of sampling, quarterly locations were required. Samples were collected from all required locations. The required analysis was completed by the laboratory for each collected sample.

Analysis methods: Each sample was extracted by method SW2510C and analyzed by method NWTPH-Dx. These methods are approved EPA methods and therefore meet comparability requirements.

Precision, accuracy and completeness: Accuracy and precision measurements were within control limits. A data completeness of 100% was calculated based on 25 of 25 intended sample analyses completed. Please note that this data completeness percentage includes the samples for the 4 locations included the pilot study, which were validated separately. The project goal of 90% was met.

3.0 Diesel Range Petroleum Hydrocarbon Analysis

Quality control analysis frequencies: The method specifies that a method blank must be analyzed one per analytical batch or one per twenty samples, whichever is more frequent, and a laboratory duplicate must be analyzed one per ten samples. In addition, surrogate compounds must be measured in each field and quality control sample.

Each batch included a method blank, laboratory control sample (LCS), and LCS duplicate (LCSD), as well as appropriate surrogates. Data qualifiers are not required due to a lack of laboratory duplicate results.

Holding times: Unpreserved water samples must be extracted within 7 days of collection. Preserved water samples must be extracted within 14 days of collection. Extracts must be analyzed within 40 days of extraction. These criteria were met.

Laboratory and field blank results: Criteria for blanks are that analyte concentrations must be below the PQL, or below 5% of the lowest associated sample concentration. No target compounds were detected in the method or field blanks.

Surrogate recoveries: Laboratory control limits were 50-150%. Surrogate recoveries were within limits.

LCS recoveries: Laboratory control limits were 50-120% and 64-120%. LCS recoveries were within limits.

LCS/LCSD RPDs: The laboratory control limit ranged from <24 to <26%. LCS/LCSD RPD values were within limits.

Field duplicate RPDs: For concentrations above five times the reporting limit, RPDs were below 50%. For concentrations below five times the reporting limits, concentrations were within +/- two times the reporting limit, with the following exception:

FD ID	Analyte	FD Result (mg/L)	Sample Result (mg/L)	RL (mg/L)
2A-W-410-121719 / 2A-W-41-121719	#2 Diesel (C10-C24)	0.49	0.31	0.064

The diesel result is qualified as estimated in the sample and field duplicate.

Reporting limits: The reporting limit goals are 0.1 mg/L for both diesel range hydrocarbons and oil range hydrocarbons. These goals were met.

Laboratory narrative and flags: No qualifiers were added based on a review of the laboratory narrative.

Diesel and oil range petroleum hydrocarbon data are acceptable for use as qualified.

4.0 Validation Qualifiers

Client ID	Analyte(s)	Qualifier	Reason
2A-W-410-121719	#2 Diesel (C10-C24)	J	High FD Difference
2A-W-41-121719	#2 Diesel (C10-C24)	J	High FD Difference

5.0 Abbreviations and Definitions

<u>DV Qualifier</u>	<u>Definition</u>
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample reporting limit or the amount of contaminant detected in the sample.
J	The analyte was positively identified. The associated numerical value is the approximate concentration of the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
UJ	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The sample result is rejected. The presence or absence of the analyte cannot be verified and data are not usable.
R1	The sample result has been replaced by a more reliable or more conservative result.

<u>DV Qualifier</u>	<u>Definition</u>
R2	The sample result has been replaced by a result from a different analysis method.

<u>Abbreviation</u>	<u>Definition</u>
DV	Data Validation
LCS	Laboratory control sample
LCSD	Laboratory control sample duplicate
MS	Matrix spike
MSD	Matrix spike duplicate
RL	Reporting limit
RPD	Relative percent difference
RSD	Relative standard deviation

6.0 References

USEPA National Functional Guidelines for Organic Superfund Methods Data Review, Office of Superfund Remediation and Technology Innovation, U.S. Environmental Protection Agency. January 2017, EPA-540-R-2017-002.

USEPA Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use, Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, January 2009, EPA 540-R-08-005.



DATA VALIDATION REPORT

Skykomish Hydraulic Control and Containment Pilot Study March 2019 Data

Prepared for:
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, Washington 98027

April 22, 2019

1.0 Introduction

Data validation was performed on the following water samples:

Sample ID*	Sample Date/Time	Lab ID	Analyses
5-W-43-031919	03/19/2019 17:07	580-84844-1	TPH-Dx
EW-1-031919	03/19/2019 16:36	580-84844-2	TPH-Dx
FGW-WV-031919	03/19/2019 15:00	580-84844-4	TPH-Dx
FWG-EV-031919	03/19/2019 14:38	580-84844-11	TPH-Dx
GW-1-031919	03/19/2019 17:20	580-84844-9	TPH-Dx
GW-2-031919	03/19/2019 17:54	580-84844-14	TPH-Dx
PZ-7S-031919	03/19/2019 16:11	580-84844-10	TPH-Dx
PZ-8-031919	03/19/2019 15:45	580-84844-3	TPH-Dx
S2-AD-031919	03/19/2019 11:40	580-84844-7	TPH-Dx
S2-AU-031919	03/19/2019 11:18	580-84844-8	TPH-Dx
S2-BD-031919	03/19/2019 12:18	580-84844-13	TPH-Dx
S2-BU-031919	03/19/2019 11:55	580-84844-6	TPH-Dx
WG-EV-031919	03/19/2019 14:25	580-84844-12	TPH-Dx
WG-WV-031919	03/19/2019 14:20	580-84844-5	TPH-Dx

* Sample PZ-7S-031919 was reported by the laboratory as PZ-75-031919. The correct sample ID is used in the above table.

Samples were analyzed by Test America, Tacoma, Washington.

A stage 2A summary validation was performed on the analytical results including both the hardcopy (portable document format) and electronic data deliverable, earning EPA OSWER validation label code S2AVEM. Validation was performed by Cari Sayer.

Data qualifiers are assigned based only on the criteria reviewed and do not include calibration or instrument performance issues unless noted in the laboratory narrative. No qualifiers were assigned based on this review.

2.0 Precision, Accuracy, Representativeness, Comparability, and Completeness

Sample analysis frequencies: 14 locations are sampled monthly. Samples were collected from required locations and the required analysis was completed by the laboratory for each collected sample.

Analysis methods: Each sample was analyzed by method NWTPH-Dx and prepared by method SW3510C. These methods are approved EPA methods and therefore meet comparability requirements.

Precision, accuracy and completeness: Accuracy and precision measurements were within control limits. A data completeness of 100% was calculated based on 14 of 14 intended sample analyses completed. This meets the project goal of 90%.

3.0 Diesel Range Petroleum Hydrocarbon Analysis

Quality control analysis frequencies: The method specifies that a method blank must be analyzed one per analytical batch or one per twenty samples, whichever is more frequent, and a laboratory duplicate must be analyzed one per ten samples. In addition, surrogate compounds must be measured in each field and quality control sample.

Each batch included a method blank, laboratory control sample (LCS), and LCS duplicate (LCSD), as well as appropriate surrogates. Data qualifiers are not required due to a lack of laboratory duplicate results.

Holding times: Unpreserved water samples must be extracted within 7 days of collection. Preserved water samples must be extracted within 14 days of collection. Extracts must be analyzed within 40 days of extraction. Samples were extracted and analyzed within holding times.

Laboratory and field blank results: Criteria for blanks are that analyte concentrations must be below the PQL, or below 5% of the lowest associated sample concentration. No target compounds were detected in the method or field blanks.

Surrogate recoveries: Laboratory control limits were 50-150%. Surrogate recoveries were within limits.

LCS recoveries: Laboratory control limits were 50-120% and 64-120%. LCS recoveries were within limits.

LCS/LCSD RPDs: The laboratory control limits were <24 and <26%. LCS/LCSD RPD values were within limits.

Reporting limits: The reporting limit goals are 0.1 mg/L for both diesel range hydrocarbons and oil range hydrocarbons. These goals were met.

Laboratory narrative and flags: No qualifiers were added based on a review of the laboratory narrative.

Diesel and oil range petroleum hydrocarbon data are acceptable for use as reported.

4.0 Abbreviations and Definitions

<u>DV Qualifier</u>	<u>Definition</u>
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample reporting limit or the amount of contaminant detected in the sample.
J	The analyte was positively identified. The associated numerical value is the approximate concentration of the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
UJ	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The sample result is rejected. The presence or absence of the analyte cannot be verified and data are not usable.
R1	The sample result has been replaced by a more reliable or more conservative result.
R2	The sample result has been replaced by a result from a different analysis method.

<u>Abbreviation</u>	<u>Definition</u>
DV	Data Validation
LCS	Laboratory control sample
LCSD	Laboratory control sample duplicate
MS	Matrix spike
MSD	Matrix spike duplicate
RL	Reporting limit
RPD	Relative percent difference
RSD	Relative standard deviation

5.0 References

USEPA National Functional Guidelines for Organic Superfund Methods Data Review, Office of Superfund Remediation and Technology Innovation, U.S. Environmental Protection Agency. January 2017, EPA-540-R-2017-002.

USEPA Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use, Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, January 2009, EPA 540-R-08-005.



DATA VALIDATION REPORT

Skykomish Hydraulic Control and Containment Pilot Study June 2019 Data

Prepared for:
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, Washington 98027

July 19, 2019

1.0 Introduction

Data validation was performed on the following water samples:

Sample ID	Sample Date/Time	Lab ID	Analyses
GW-1-061819	06/18/2019 09:51	580-87060-1	TPH-Dx
S2-BU-061819	06/18/2019 15:30	580-87060-10	TPH-Dx
S2-AD-061819	06/18/2019 15:39	580-87060-11	TPH-Dx
WG-WV-061819	06/18/2019 16:05	580-87060-12	TPH-Dx
WG-EV-061819	06/18/2019 16:10	580-87060-13	TPH-Dx
FWG-EV-061819	06/18/2019 16:48	580-87060-14	TPH-Dx
FWG-WV-061819	06/18/2019 16:52	580-87060-15	TPH-Dx
PZ-7S-061819	06/18/2019 10:00	580-87060-2	TPH-Dx
PZ-8-061819	06/18/2019 11:15	580-87060-3	TPH-Dx
5-W-43-061819	06/18/2019 11:16	580-87060-4	TPH-Dx
EW-1-061819	06/18/2019 14:18	580-87060-5	TPH-Dx
GW-2-061819	06/18/2019 14:35	580-87060-6	TPH-Dx
GW-20-061819	06/18/2019 14:45	580-87060-7	TPH-Dx
S2-BD-061819	06/18/2019 14:57	580-87060-8	TPH-Dx
S2-AU-061819	06/18/2019 15:12	580-87060-9	TPH-Dx

Samples were analyzed by Test America, Tacoma, Washington. A stage 2A summary validation was performed on the analytical results including both the hardcopy (portable document format) and electronic data deliverable, earning EPA OSWER validation label code S2AVEM. Validation was performed by Cari Saylor.

Data qualifiers are assigned based only on the criteria reviewed and do not include calibration or instrument performance issues unless noted in the laboratory narrative. No qualifiers were assigned based on this review.

2.0 Precision, Accuracy, Representativeness, Comparability, and Completeness

Sample analysis frequencies: 14 locations are sampled monthly. Samples were collected from required locations and the required analysis was completed by the laboratory for each collected sample. Sample identifiers matched the chain of custody with one exception: Sample 5-W-43-061819 was listed as S-W-43-061819. The corrected sample ID has been used in the above table.

Analysis methods: Each sample was analyzed by method NWTPH-Dx and prepared by method SW3510C. These methods are approved EPA methods and therefore meet comparability requirements.

Precision, accuracy and completeness: Accuracy and precision measurements were within control limits. A data completeness of 100% was calculated based on 14 of 14 intended sample analyses completed. This meets the project goal of 90%.

3.0 Diesel Range Petroleum Hydrocarbon Analysis

Quality control analysis frequencies: The method specifies that a method blank must be analyzed one per analytical batch or one per twenty samples, whichever is more frequent, and a laboratory duplicate must be analyzed one per ten samples. In addition, surrogate compounds must be measured in each field and quality control sample.

This batch included a method blank, laboratory control sample (LCS), and LCS duplicate (LCSD), as well as appropriate surrogates. Data qualifiers are not required due to a lack of laboratory duplicate results.

Holding times: Unpreserved water samples must be extracted within 7 days of collection. Preserved water samples must be extracted within 14 days of collection. Extracts must be analyzed within 40 days of extraction. Samples were extracted and analyzed within holding times.

Laboratory blank results: Criteria for blanks are that analyte concentrations must be below the PQL, or below 5% of the lowest associated sample concentration. No target compounds were detected in the method blanks.

Surrogate recoveries: Laboratory control limits were 50-150%. Surrogate recoveries were within limits.

LCS recoveries: Laboratory control limits were 50-120% and 64-120%. LCS recoveries were within limits.

LCS/LCSD RPDs: The laboratory control limits were <24 and <26%. LCS/LCSD RPD values were within limits.

Field duplicate variability: Target analytes were not detected in the sample or field duplicate, showing good agreement.

Reporting limits: The reporting limit goals are 0.1 mg/L for both diesel range hydrocarbons and oil range hydrocarbons. These goals were met.

Laboratory narrative and flags: No qualifiers were added based on a review of the laboratory narrative.

Diesel and oil range petroleum hydrocarbon data are acceptable for use as reported.

4.0 Abbreviations and Definitions

<u>DV Qualifier</u>	<u>Definition</u>
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample reporting limit or the amount of contaminant detected in the sample.
J	The analyte was positively identified. The associated numerical value is the approximate concentration of the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
UJ	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The sample result is rejected. The presence or absence of the analyte cannot be verified and data are not usable.
R1	The sample result has been replaced by a more reliable or more conservative result.
R2	The sample result has been replaced by a result from a different analysis method.

<u>Abbreviation</u>	<u>Definition</u>
DV	Data Validation
LCS	Laboratory control sample
LCSD	Laboratory control sample duplicate
MS	Matrix spike
MSD	Matrix spike duplicate
RL	Reporting limit
RPD	Relative percent difference
RSD	Relative standard deviation

5.0 References

USEPA National Functional Guidelines for Organic Superfund Methods Data Review, Office of Superfund Remediation and Technology Innovation, U.S. Environmental Protection Agency. January 2017, EPA-540-R-2017-002.

USEPA Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use, Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, January 2009, EPA 540-R-08-005.



DATA VALIDATION REPORT

Skykomish Hydraulic Control and Containment Pilot Study September 2019 Data

Prepared for:
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, Washington 98027

October 14, 2019

1.0 Introduction

Data validation was performed on the following water samples:

Sample ID	Sample Date/Time	Lab ID	Analyses
GW-1-091919	09/19/2019 08:20	580-89413-1	TPH-Dx
WG-EV-091919	09/19/2019 10:25	580-89413-10	TPH-Dx
FWG-EV-091919	09/19/2019 10:47	580-89413-11	TPH-Dx
S2-AU-091919	09/19/2019 11:15	580-89413-12	TPH-Dx
S2-AD-091919	09/19/2019 11:22	580-89413-13	TPH-Dx
S2-BD-091919	09/19/2019 11:28	580-89413-14	TPH-Dx
S2-BU-091919	09/19/2019 11:30	580-89413-15	TPH-Dx
GW-20-091919	09/19/2019 16:30	580-89413-16	TPH-Dx
5-W-43-091919	09/19/2019 08:22	580-89413-2	TPH-Dx
PZ-7S-091919	09/19/2019 08:24	580-89413-3	TPH-Dx
PZ-8-091919	09/19/2019 09:20	580-89413-4	TPH-Dx
EW-1-091919	09/19/2019 09:21	580-89413-5	TPH-Dx
EW-10-091919	09/19/2019 09:25	580-89413-6	TPH-Dx
GW-2-091919	09/19/2019 09:21	580-89413-7	TPH-Dx
WG-WV-091919	09/19/2019 10:09	580-89413-8	TPH-Dx
FWG-WV-091919	09/19/2019 10:25	580-89413-9	TPH-Dx

*Please note that sample PZ-7S-091919 was reported by the laboratory as PZ-75-091919. The correct sample ID is used above.

Samples were analyzed by Test America, Tacoma, Washington.

A stage 2A summary validation was performed on the analytical results including both the hardcopy (portable document format) and electronic data deliverable, earning EPA OSWER validation label code S2AVEM. Validation was performed by Cari Sayer.

Data qualifiers are assigned based only on the criteria reviewed and do not include calibration or instrument performance issues unless noted in the laboratory narrative. No qualifiers were assigned based on this review.

2.0 Precision, Accuracy, Representativeness, Comparability, and Completeness

Sample analysis frequencies: 14 locations are sampled monthly. Samples were collected from required locations and the required analysis was completed by the laboratory for each collected sample.

Analysis methods: Each sample was analyzed by method NWTPH-Dx and prepared by method SW3510C. These methods are approved EPA methods and therefore meet comparability requirements.

Precision, accuracy and completeness: Accuracy and precision measurements were within control limits. A data completeness of 100% was calculated based on 14 of 14 intended sample analyses completed. This meets the project goal of 90%.

3.0 Diesel Range Petroleum Hydrocarbon Analysis

Quality control analysis frequencies: The method specifies that a method blank must be analyzed one per analytical batch or one per twenty samples, whichever is more frequent, and a laboratory duplicate must be analyzed one per ten samples. In addition, surrogate compounds must be measured in each field and quality control sample.

Each batch included a method blank, laboratory control sample (LCS), and LCS duplicate (LCSD), as well as appropriate surrogates. Data qualifiers are not required due to a lack of laboratory duplicate results.

Holding times: Unpreserved water samples must be extracted within 7 days of collection. Preserved water samples must be extracted within 14 days of collection. Extracts must be analyzed within 40 days of extraction. Samples were extracted and analyzed within holding times.

Laboratory blank results: Criteria for blanks are that analyte concentrations must be below the PQL, or below 5% of the lowest associated sample concentration. No target compounds were detected in the method blanks.

Surrogate recoveries: Laboratory control limits were 50-150%. Surrogate recoveries were within limits.

LCS recoveries: Laboratory control limits were 50-120% and 64-120%. LCS recoveries were within limits.

LCS/LCSD RPDs: The laboratory control limits were <24 and <26%. LCS/LCSD RPD values were within limits.

Field duplicate RPDs: For concentrations above five times the reporting limit, RPDs were below 50%. For concentrations below five times the reporting limits, concentrations were within +/- two times the reporting limit.

Reporting limits: The reporting limit goals are 0.1 mg/L for both diesel range hydrocarbons and oil range hydrocarbons. These goals were met.

Laboratory narrative and flags: No qualifiers were added based on a review of the laboratory narrative.

Diesel and oil range petroleum hydrocarbon data are acceptable for use as reported.

4.0 Abbreviations and Definitions

<u>DV Qualifier</u>	<u>Definition</u>
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample reporting limit or the amount of contaminant detected in the sample.
J	The analyte was positively identified. The associated numerical value is the approximate concentration of the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
UJ	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The sample result is rejected. The presence or absence of the analyte cannot be verified and data are not usable.
R1	The sample result has been replaced by a more reliable or more conservative result.
R2	The sample result has been replaced by a result from a different analysis method.

<u>Abbreviation</u>	<u>Definition</u>
DV	Data Validation
LCS	Laboratory control sample
LCSD	Laboratory control sample duplicate
MS	Matrix spike
MSD	Matrix spike duplicate
RL	Reporting limit
RPD	Relative percent difference
RSD	Relative standard deviation

5.0 References

USEPA National Functional Guidelines for Organic Superfund Methods Data Review, Office of Superfund Remediation and Technology Innovation, U.S. Environmental Protection Agency. January 2017, EPA-540-R-2017-002.

USEPA Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use, Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, January 2009, EPA 540-R-08-005.



DATA VALIDATION REPORT

Skykomish Hydraulic Control and Containment Pilot Study December 2019 Data

Prepared for:

Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, Washington 98027

January 13, 2020

1.0 Introduction

Data validation was performed on the following water samples:

Sample ID	Sample Date/Time	Lab ID	Analyses
PZ-80-121819	12/18/2019 11:25	580-91664-1	TPH-Dx
S2-AU-121819	12/18/2019 13:32	580-91664-2	TPH-Dx
GW-1-121819	12/18/2019 13:55	580-91664-3	TPH-Dx
S2-AD-121819	12/18/2019 11:38	580-91664-4	TPH-Dx
EW-1-121819	12/18/2019 10:30	580-91664-5	TPH-Dx
S2-BD-121819	12/18/2019 09:47	580-91664-6	TPH-Dx
5-W-43-121819	12/18/2019 09:28	580-91664-7	TPH-Dx
WG-WV-121819	12/18/2019 13:54	580-91664-8	TPH-Dx
FWG-EV-121819	12/18/2019 14:35	580-91664-9	TPH-Dx
S2-BU-121819	12/18/2019 10:18	580-91664-10	TPH-Dx
FWG-WV-121819	12/18/2019 15:00	580-91664-11	TPH-Dx
WG-EV-121819	12/18/2019 10:49	580-91664-12	TPH-Dx
PZ-7S-121819	12/18/2019 14:52	580-91664-13	TPH-Dx
GW-2-121819	12/18/2019 15:48	580-91664-14	TPH-Dx
GW-20-121819	12/18/2019 15:55	580-91664-15	TPH-Dx

Samples were analyzed by Test America, Tacoma, Washington.

Please note: Sample PZ-80-121819 was listed on the chain of custody as PZ-8-12-1819.
Sample FWG-EV-121819 was listed on the chain of custody AS FWG-EV.

A stage 2A summary validation was performed on the analytical results including both the hardcopy (portable document format) and electronic data deliverable, earning EPA OSWER validation label code S2AVEM. Validation was performed by Cari Sayer.

Data qualifiers are assigned based only on the criteria reviewed and do not include calibration or instrument performance issues unless noted in the laboratory narrative. No qualifiers were assigned based on this review.

2.0 Precision, Accuracy, Representativeness, Comparability, and Completeness

Sample analysis frequencies: 14 locations are sampled monthly. Samples were collected from required locations and the required analysis was completed by the laboratory for each collected sample.

Analysis methods: Each sample was analyzed by method NWTPH-Dx and prepared by method SW3510C. These methods are approved EPA methods and therefore meet comparability requirements.

Precision, accuracy and completeness: Accuracy and precision measurements were within control limits. A data completeness of 100% was calculated based on 14 of 14 intended sample analyses completed. This meets the project goal of 90%.

3.0 Diesel Range Petroleum Hydrocarbon Analysis

Quality control analysis frequencies: The method specifies that a method blank must be analyzed one per analytical batch or one per twenty samples, whichever is more frequent, and a laboratory duplicate must be analyzed one per ten samples. In addition, surrogate compounds must be measured in each field and quality control sample.

This batch included a method blank, laboratory control sample (LCS), and LCS duplicate (LCSD), as well as appropriate surrogates. Data qualifiers are not required due to a lack of laboratory duplicate results.

Holding times: Unpreserved water samples must be extracted within 7 days of collection. Preserved water samples must be extracted within 14 days of collection. Extracts must be analyzed within 40 days of extraction. Samples were extracted and analyzed within holding times.

Laboratory blank results: Criteria for blanks are that analyte concentrations must be below the PQL, or below 5% of the lowest associated sample concentration. No target compounds were detected in the method blanks.

Surrogate recoveries: Laboratory control limits were 50-150%. Surrogate recoveries were within limits.

LCS recoveries: Laboratory control limits were 50-120% and 64-120%. LCS recoveries were within limits.

LCS/LCSD RPDs: The laboratory control limits were <24 and <26%. LCS/LCSD RPD values were within limits.

Reporting limits: The reporting limit goals are 0.1 mg/L for both diesel range hydrocarbons and oil range hydrocarbons. These goals were met.

Laboratory narrative and flags: No qualifiers were added based on a review of the laboratory narrative or data flags.

Diesel and oil range petroleum hydrocarbon data are acceptable for use as reported.

4.0 Abbreviations and Definitions

<u>DV Qualifier</u>	<u>Definition</u>
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample reporting limit or the amount of contaminant detected in the sample.
J	The analyte was positively identified. The associated numerical value is the approximate concentration of the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
UJ	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The sample result is rejected. The presence or absence of the analyte cannot be verified and data are not usable.
R1	The sample result has been replaced by a more reliable or more conservative result.
R2	The sample result has been replaced by a result from a different analysis method.

<u>Abbreviation</u>	<u>Definition</u>
DV	Data Validation
LCS	Laboratory control sample
LCSD	Laboratory control sample duplicate
MS	Matrix spike
MSD	Matrix spike duplicate
RL	Reporting limit
RPD	Relative percent difference
RSD	Relative standard deviation

5.0 References

USEPA National Functional Guidelines for Organic Superfund Methods Data Review, Office of Superfund Remediation and Technology Innovation, U.S. Environmental Protection Agency. January 2017, EPA-540-R-2017-002.

USEPA Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use, Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, January 2009, EPA 540-R-08-005.

APPENDIX C
NWTPH-Dx TREND PLOTS

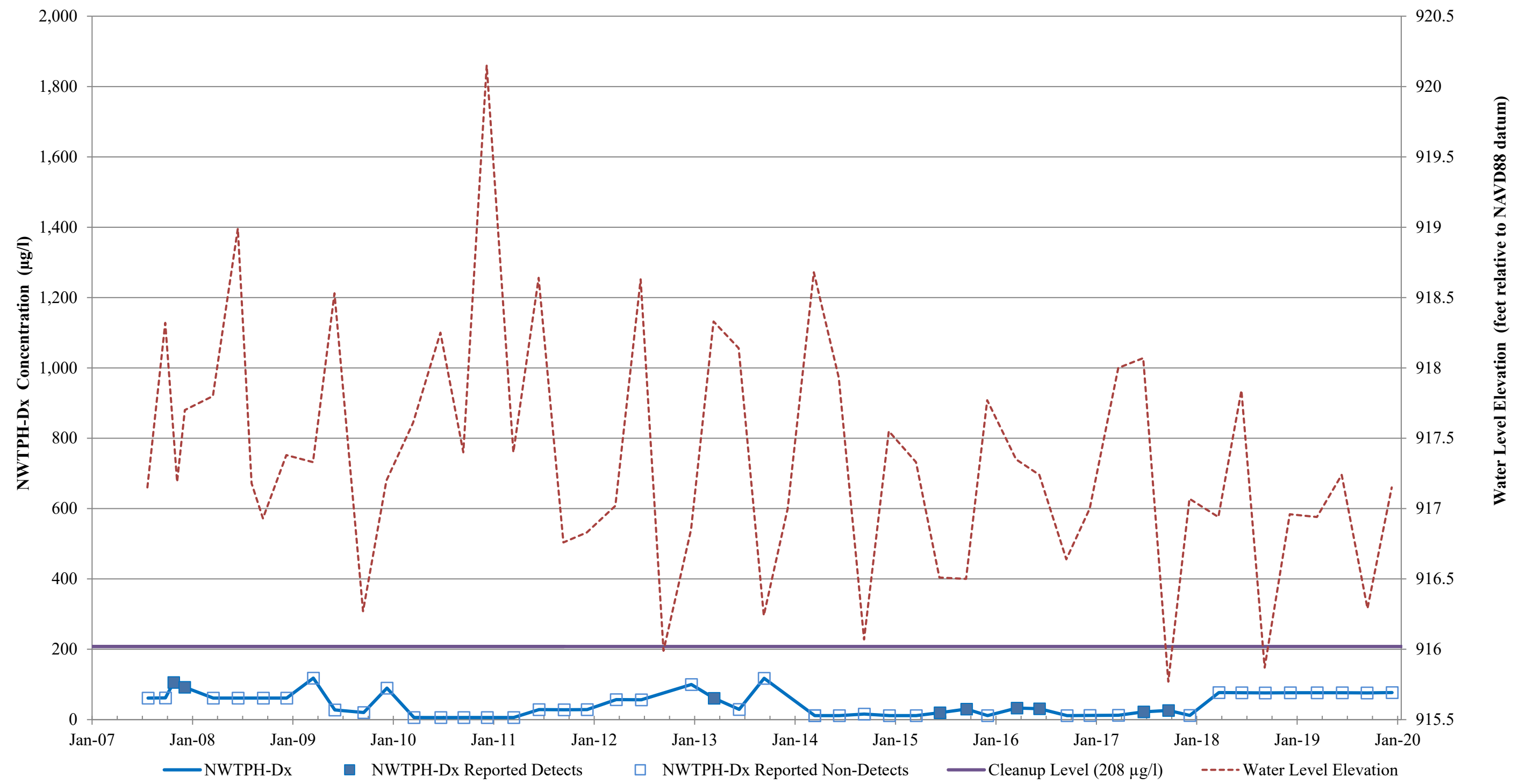
2019 SITE-WIDE GROUNDWATER MONITORING REPORT
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Consent Decree No. 07-2-33672-9 SEA

Farallon PN: 683-067

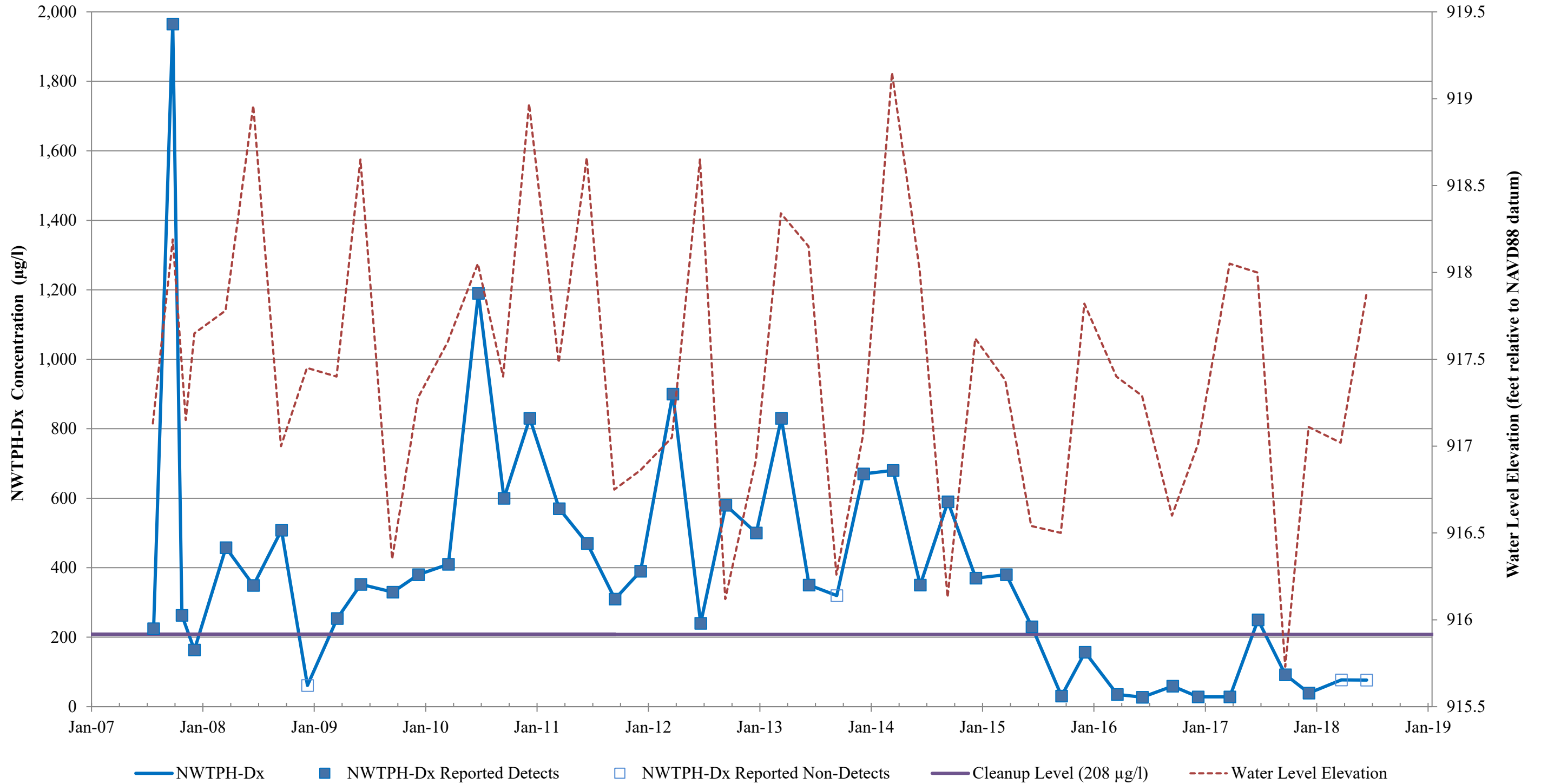
Levee Zone Monitoring Wells

Note: Levee Zone monitoring well NWTPH-Dx groundwater results are compared to the Cleanup Level (CUL) of 208 micrograms per liter.

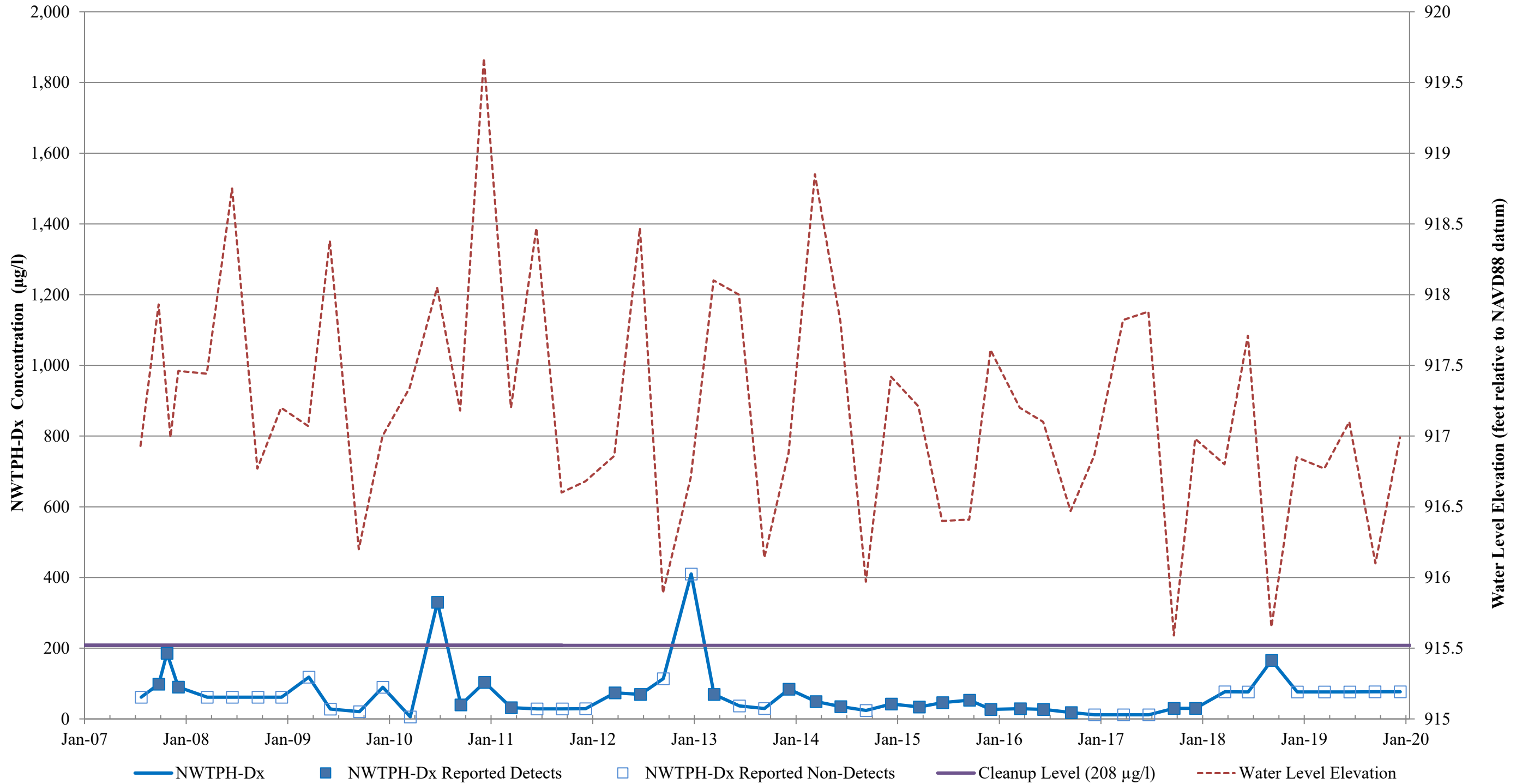
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well 5-W-14



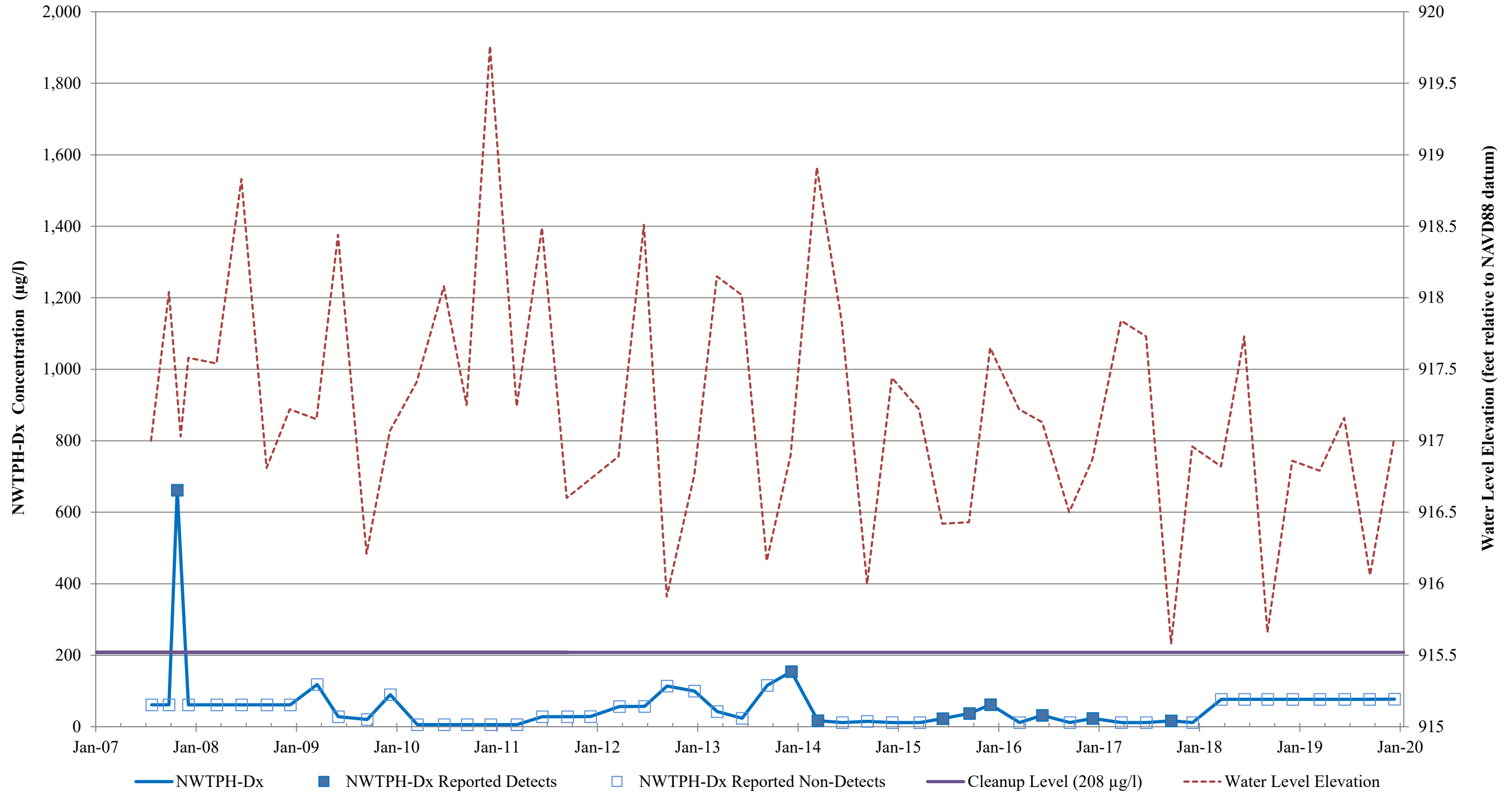
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well 5-W-15



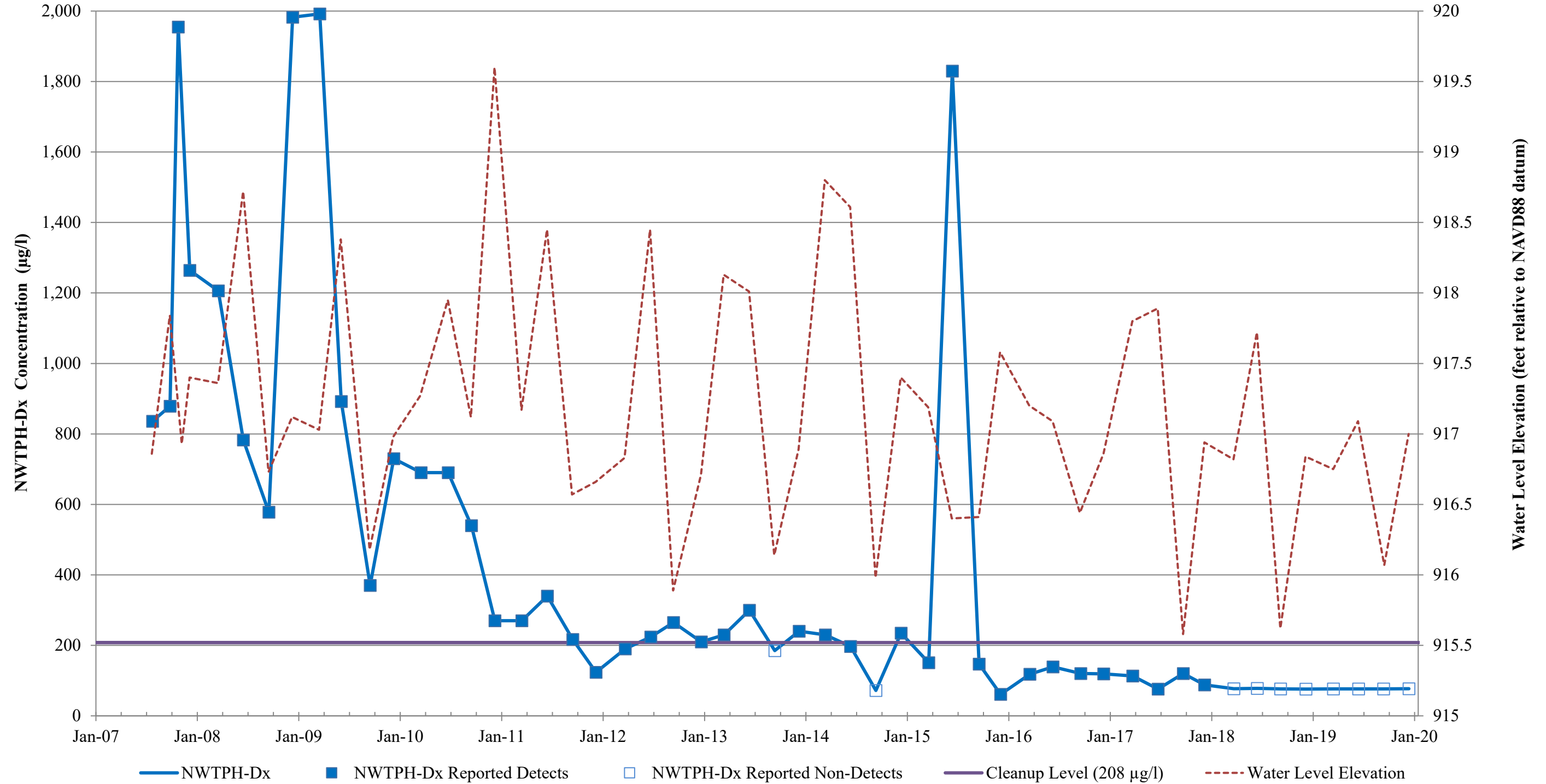
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well 5-W-16



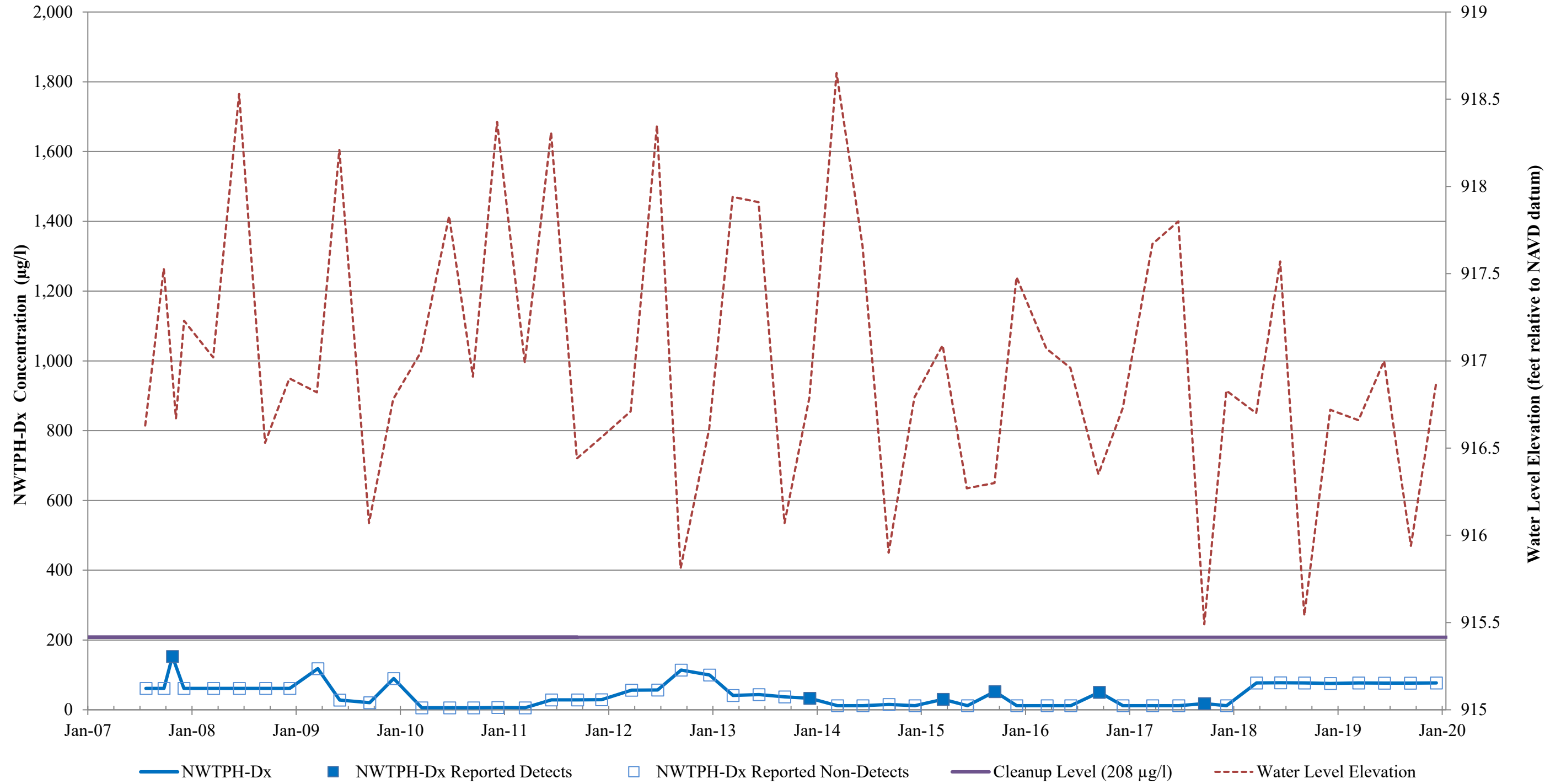
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well 5-W-17



NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well 5-W-18



NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well 5-W-19

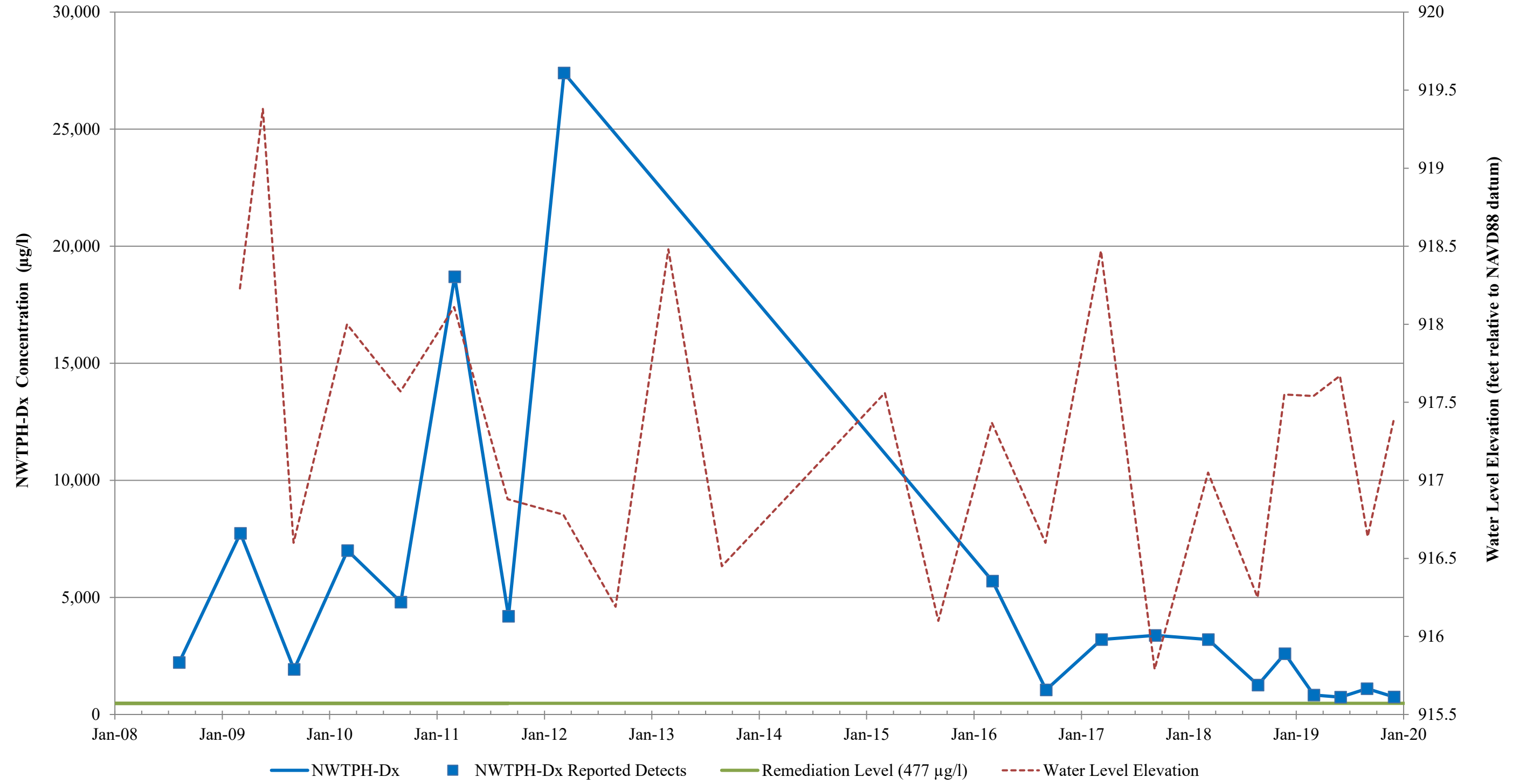


Schoolyard Monitoring Wells

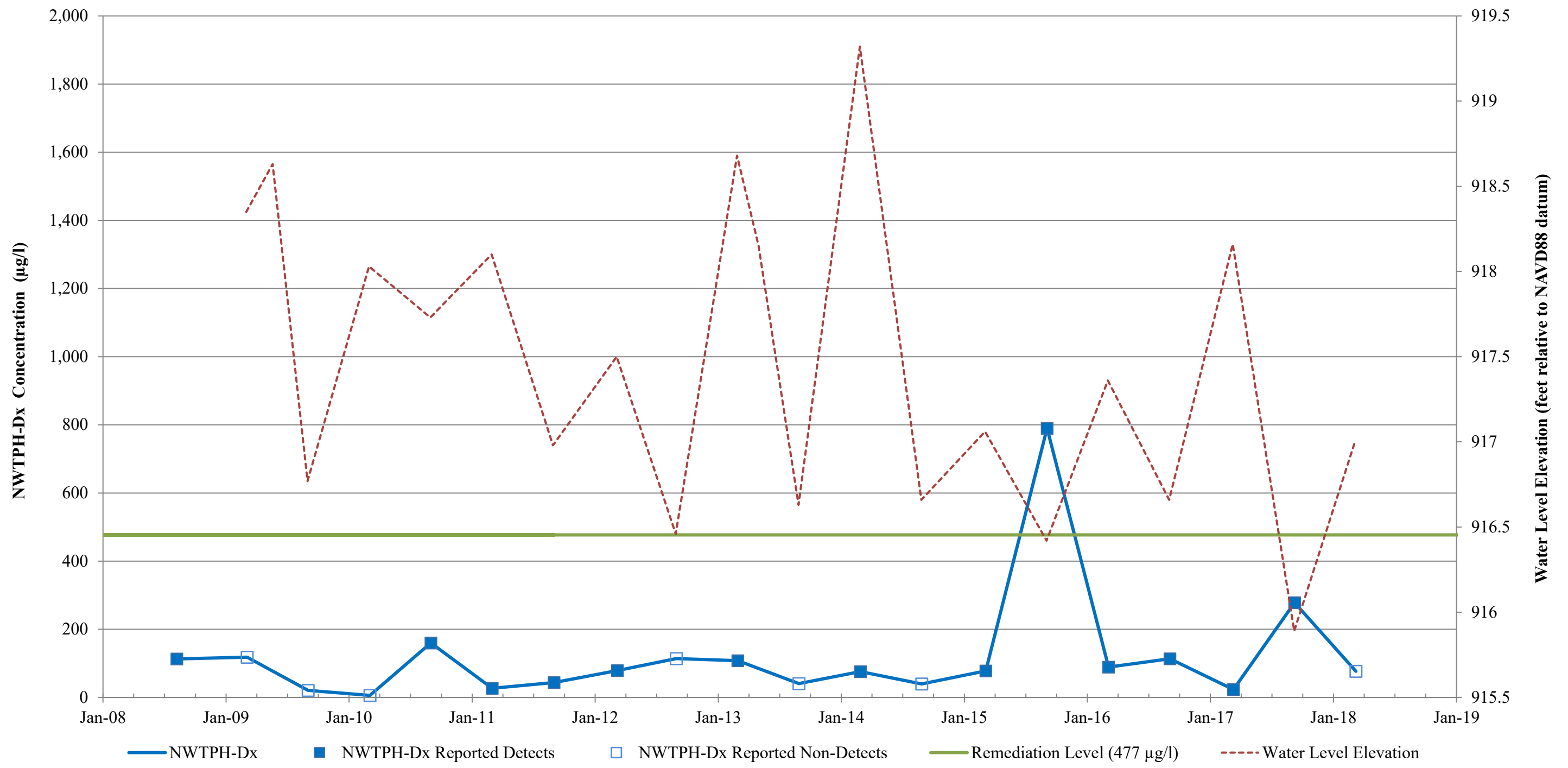
Note: Schoolyard monitoring well NWTPH-Dx groundwater results are compared to the Remediation Level (RL) of 477 micrograms per liter.

Note: Vertical scale is different from other plots; scale increased from 2,000 µg/l to 30,000 µg/l to show all data points.

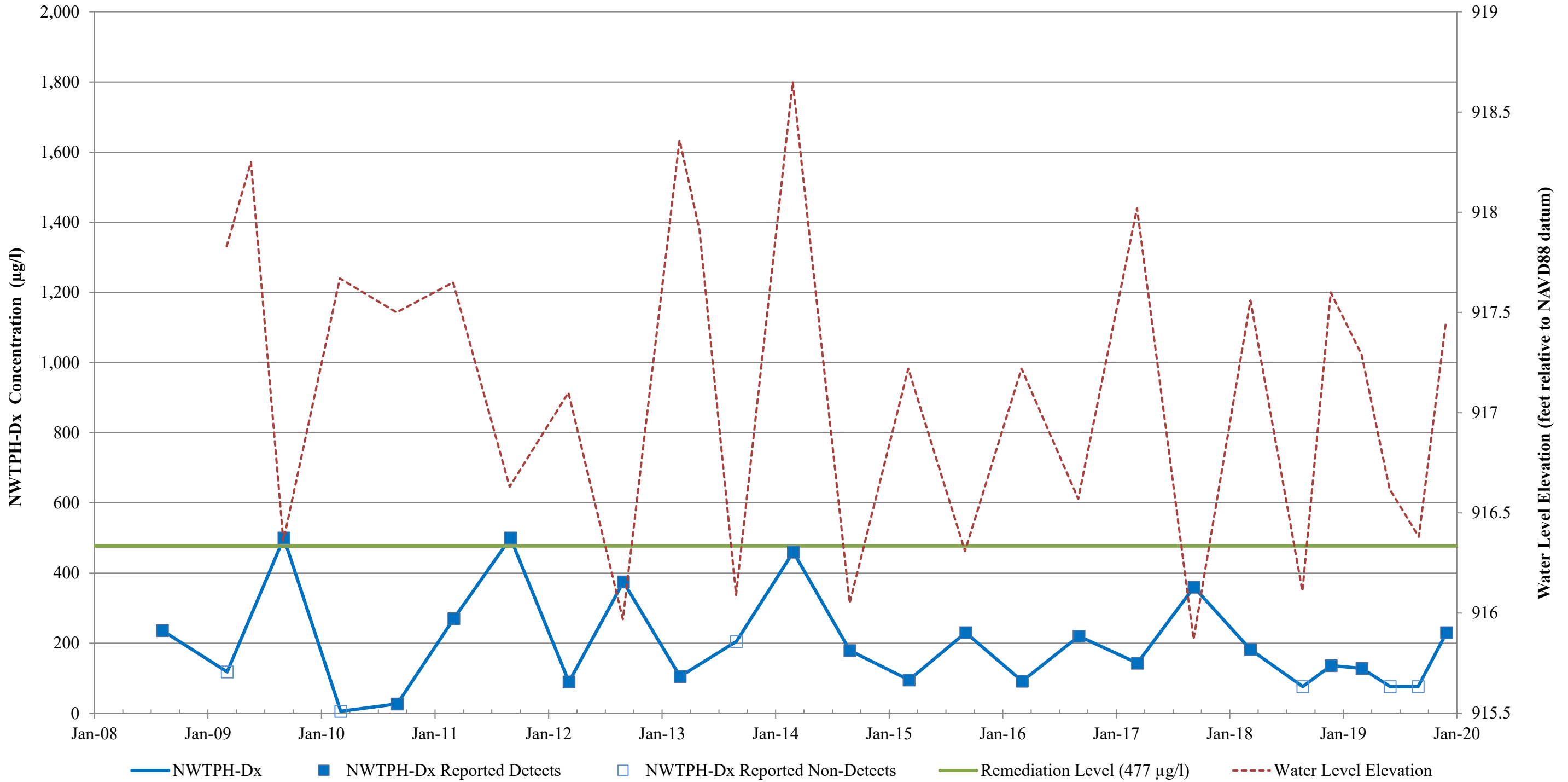
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well 5-W-51



NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well 5-W-54

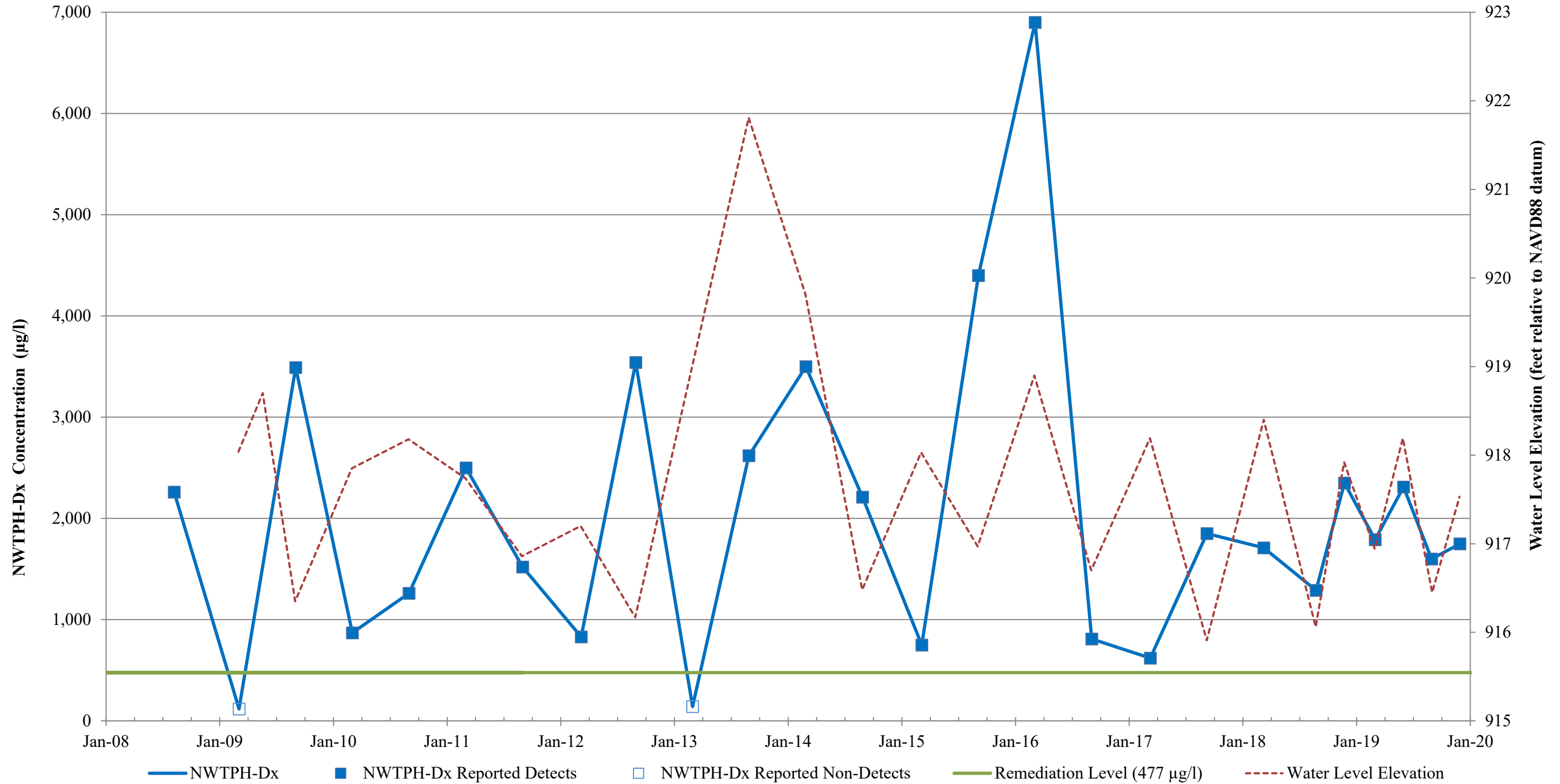


NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well 5-W-55



NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well 5-W-56

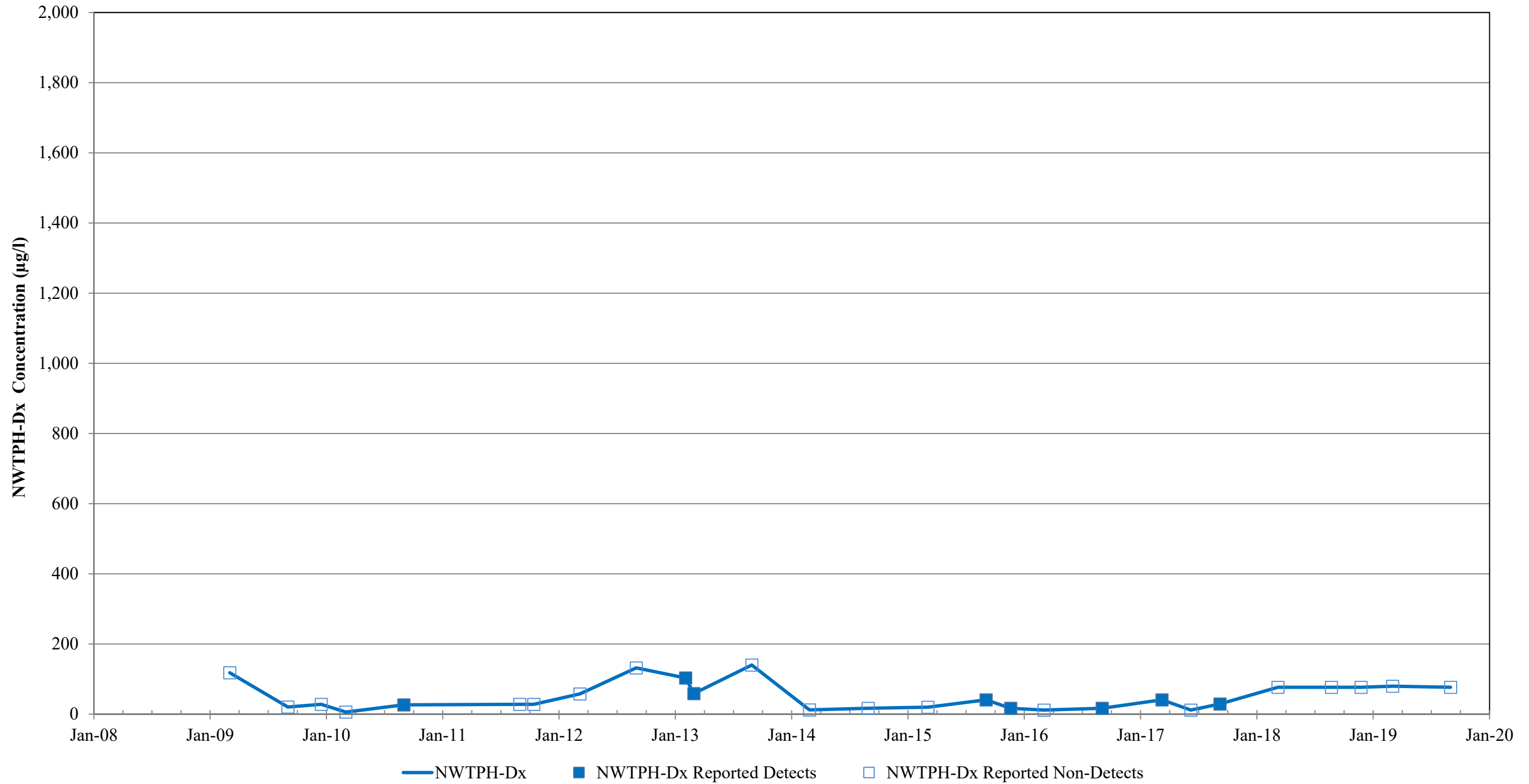
Note: Vertical scale is different from other plots; scale increased from 2,000 µg/l to 7,000 µg/l to show all data points.



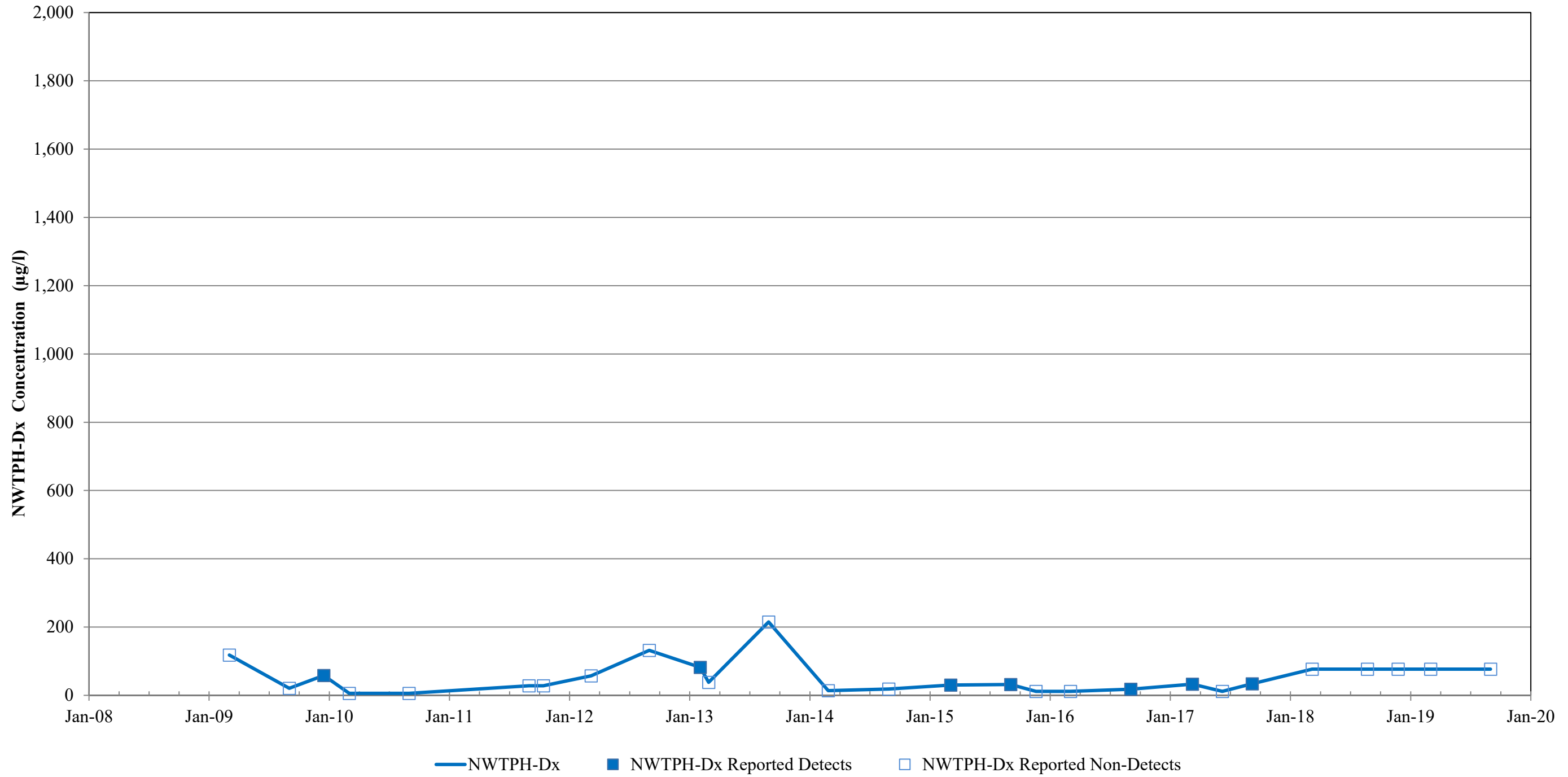
Hydraulic Control and Containment System Sentry Wells and Monitoring Wells

Note: Monitoring well NWTPH-Dx groundwater results from wells located north of the HCC barrier wall (i.e., downgradient of railyard) are compared to the RL of 477 micrograms per liter; NWTPH-Dx groundwater results from monitoring locations within and south of the HCC barrier wall (i.e., within the railyard) have no NWTPH-Dx target.

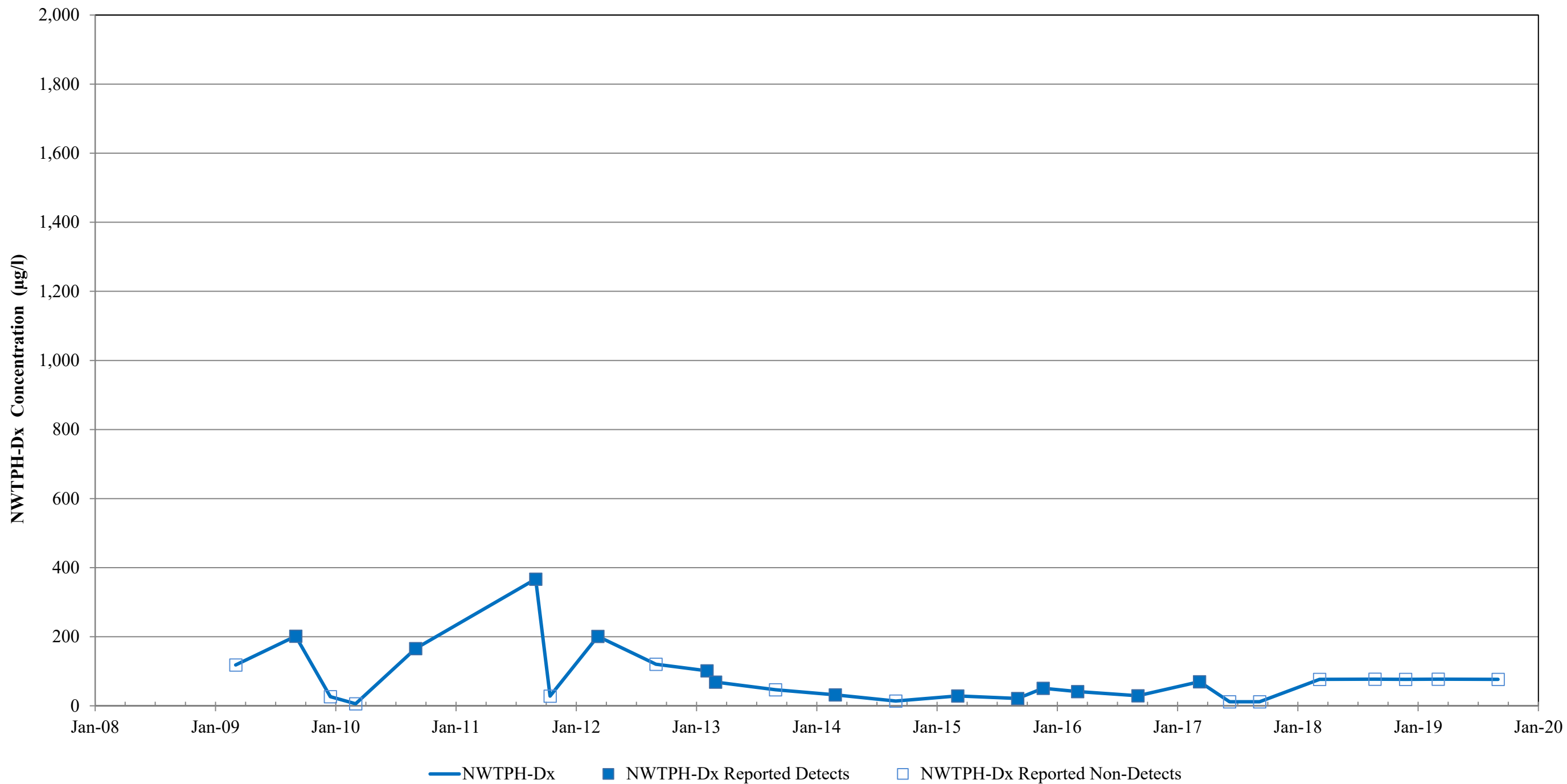
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well S1-AD



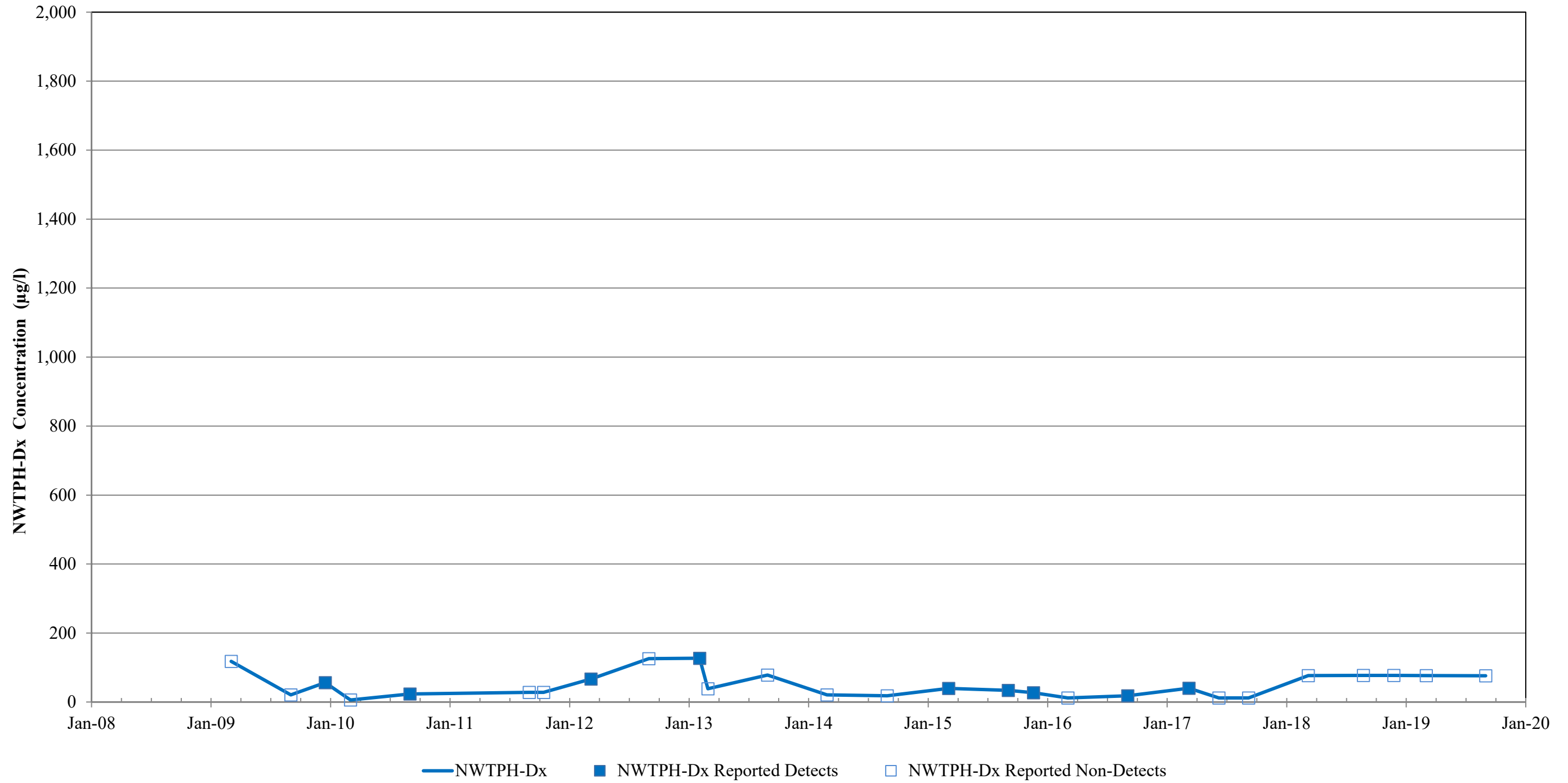
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well S1-AU



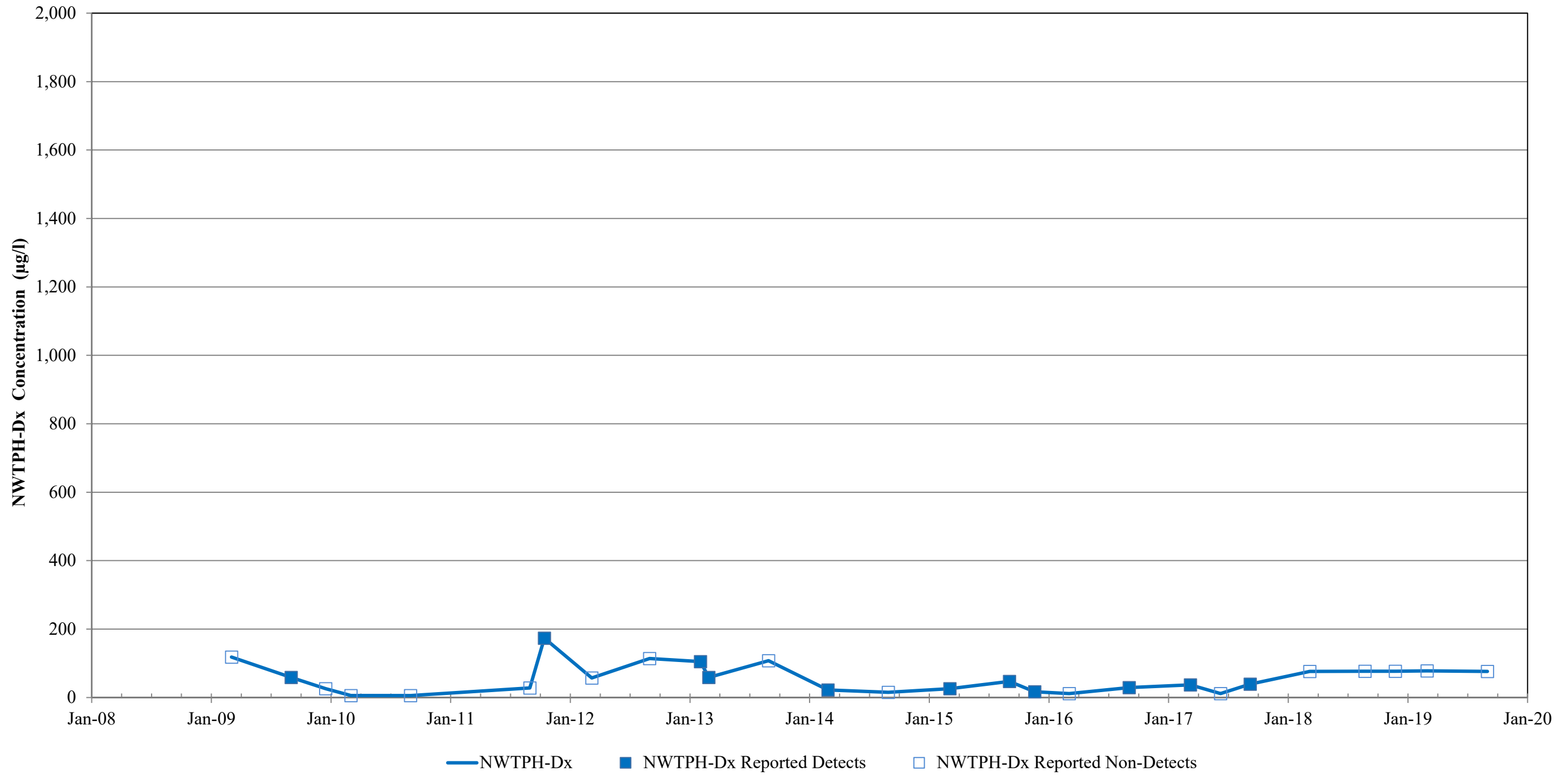
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well S1-BD



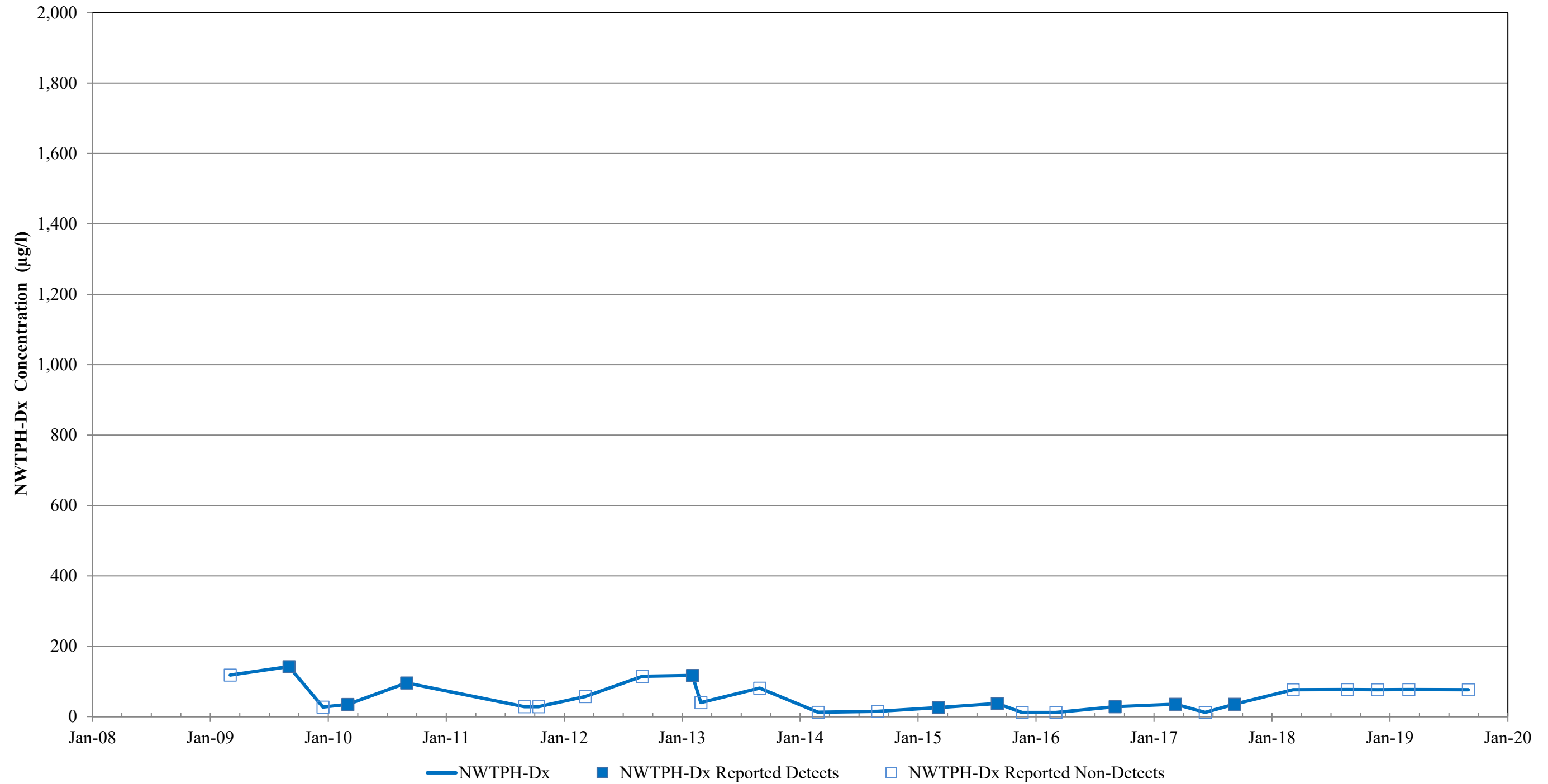
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well S1-BU



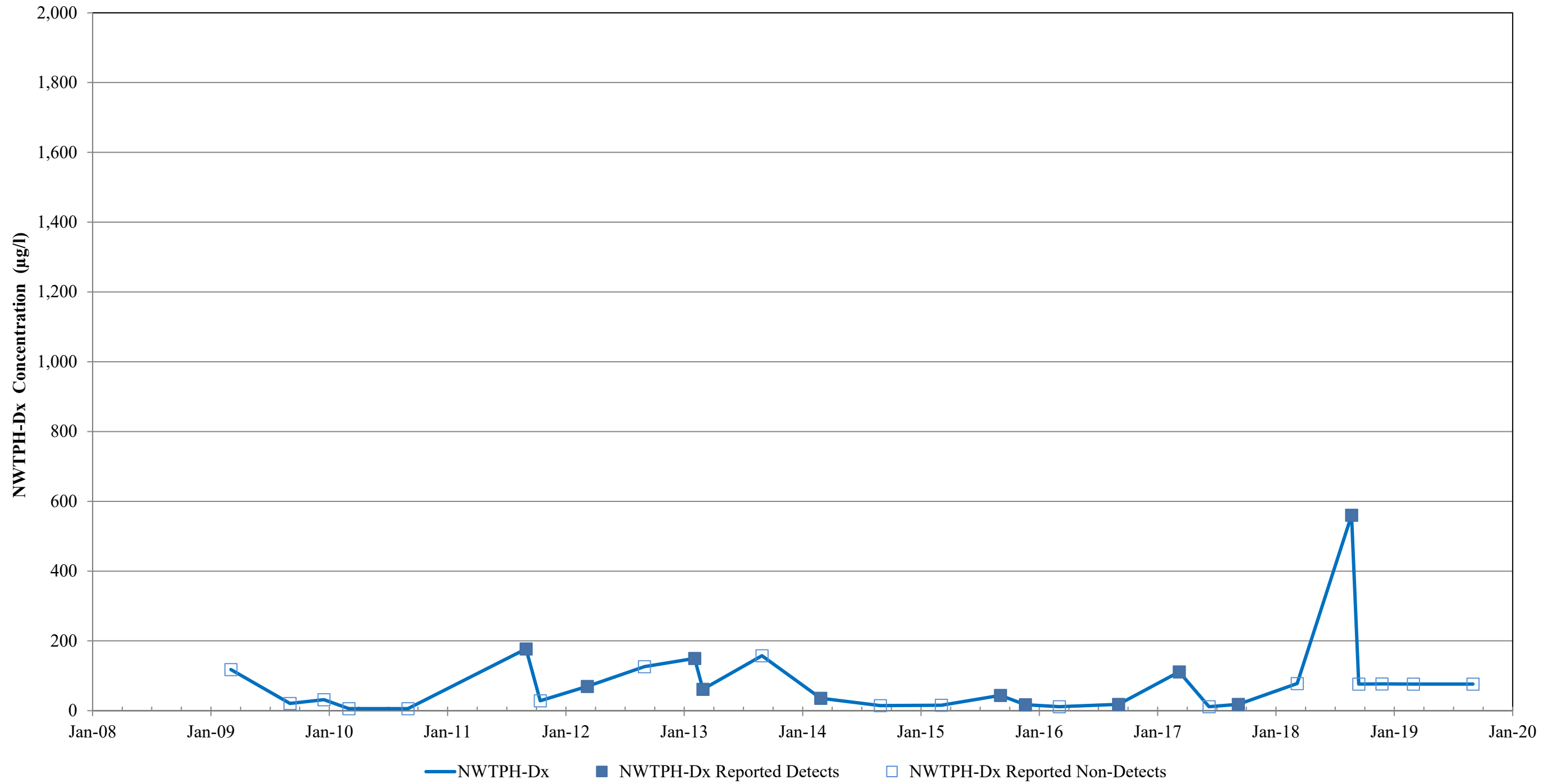
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well S2-AD



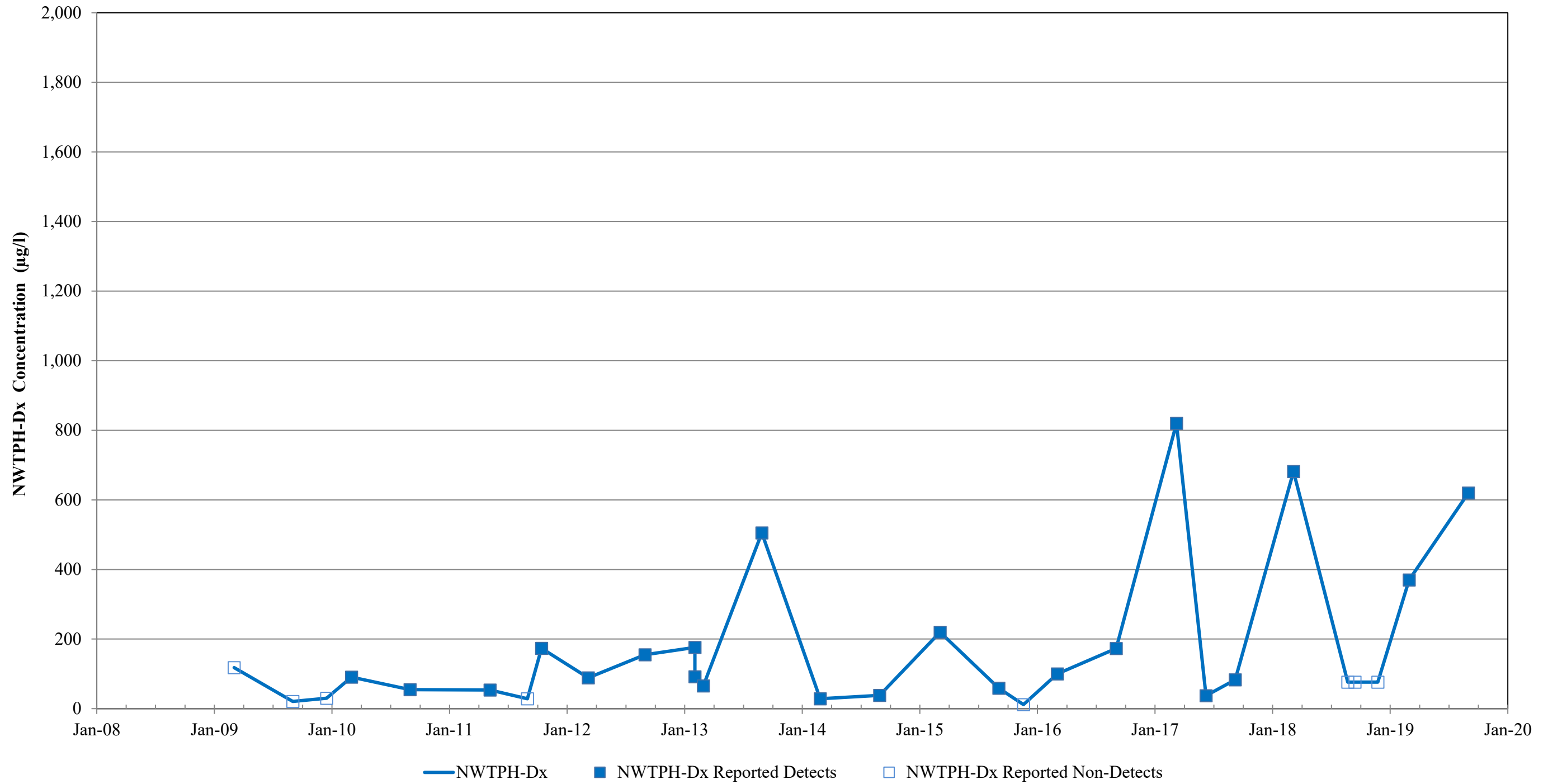
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well S2-AU



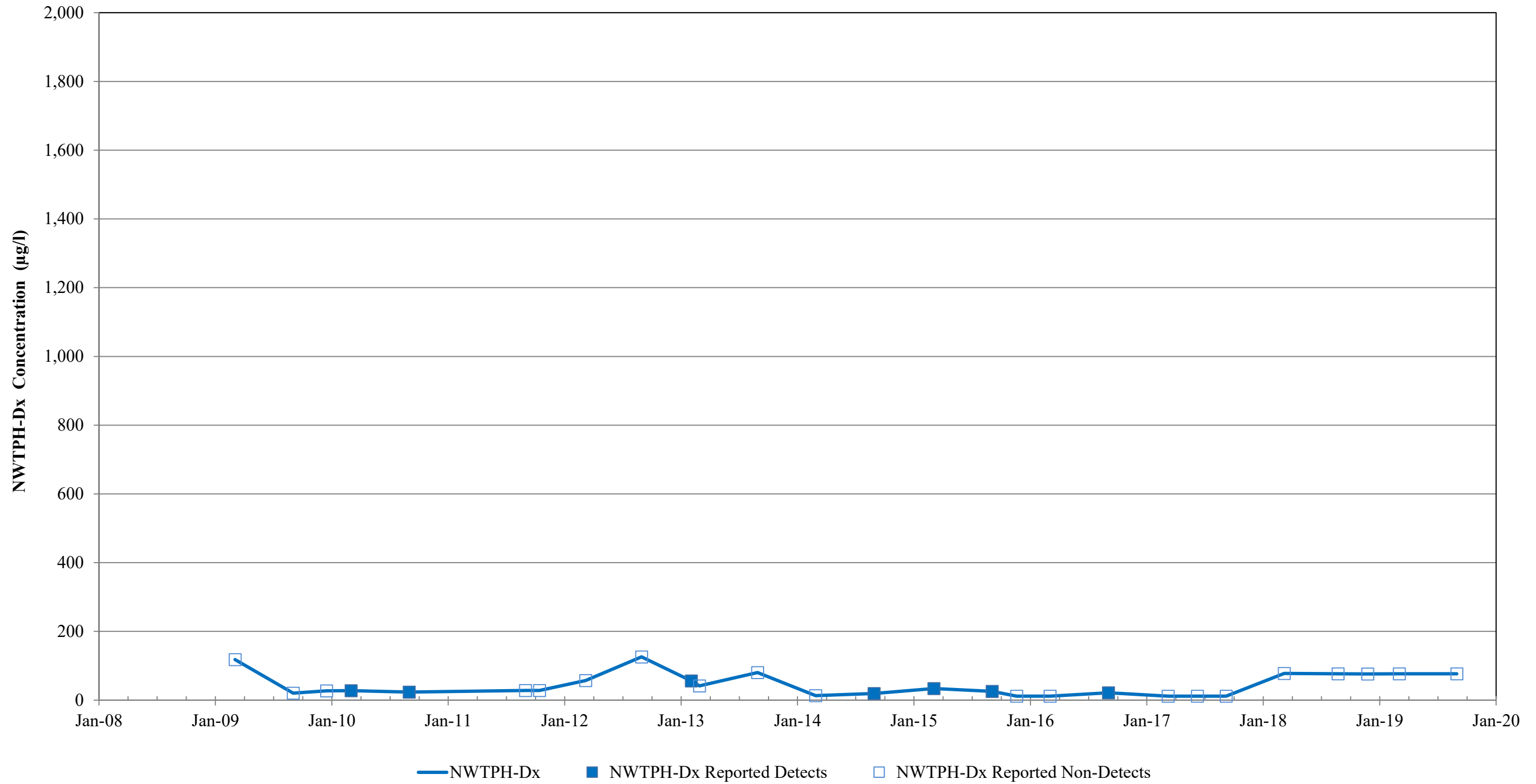
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well S2-BD



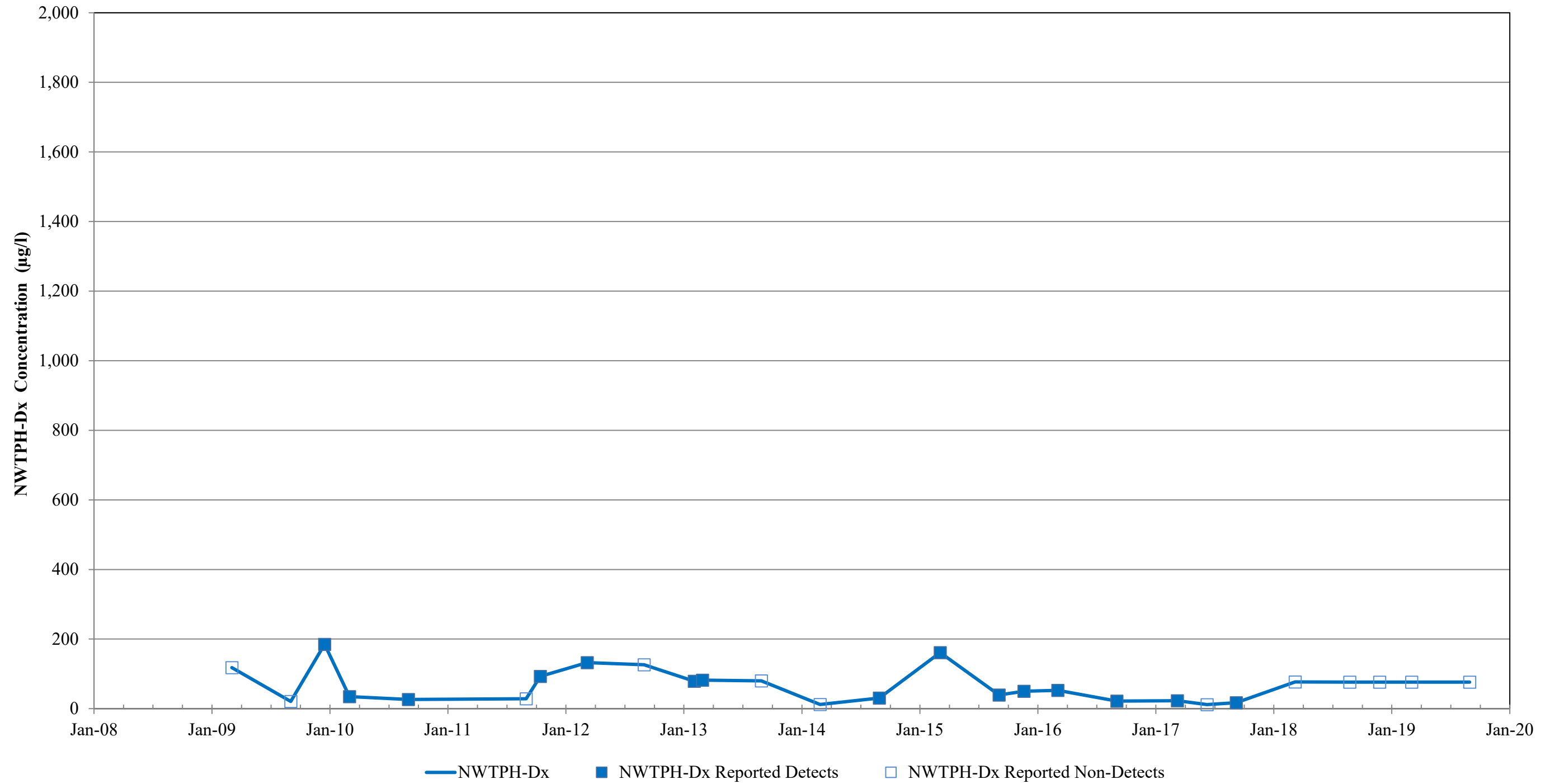
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well S2-BU



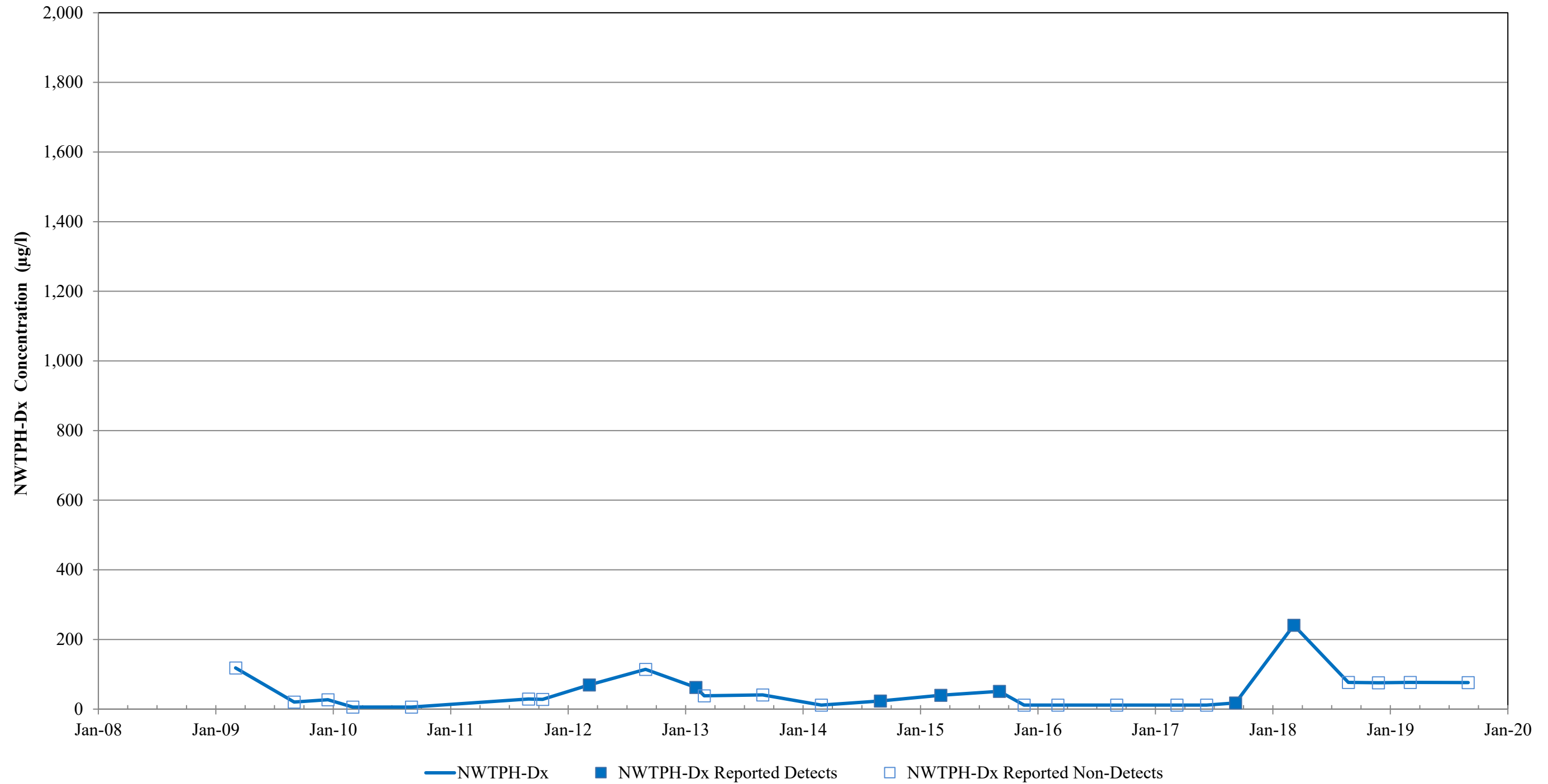
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well S3-AD



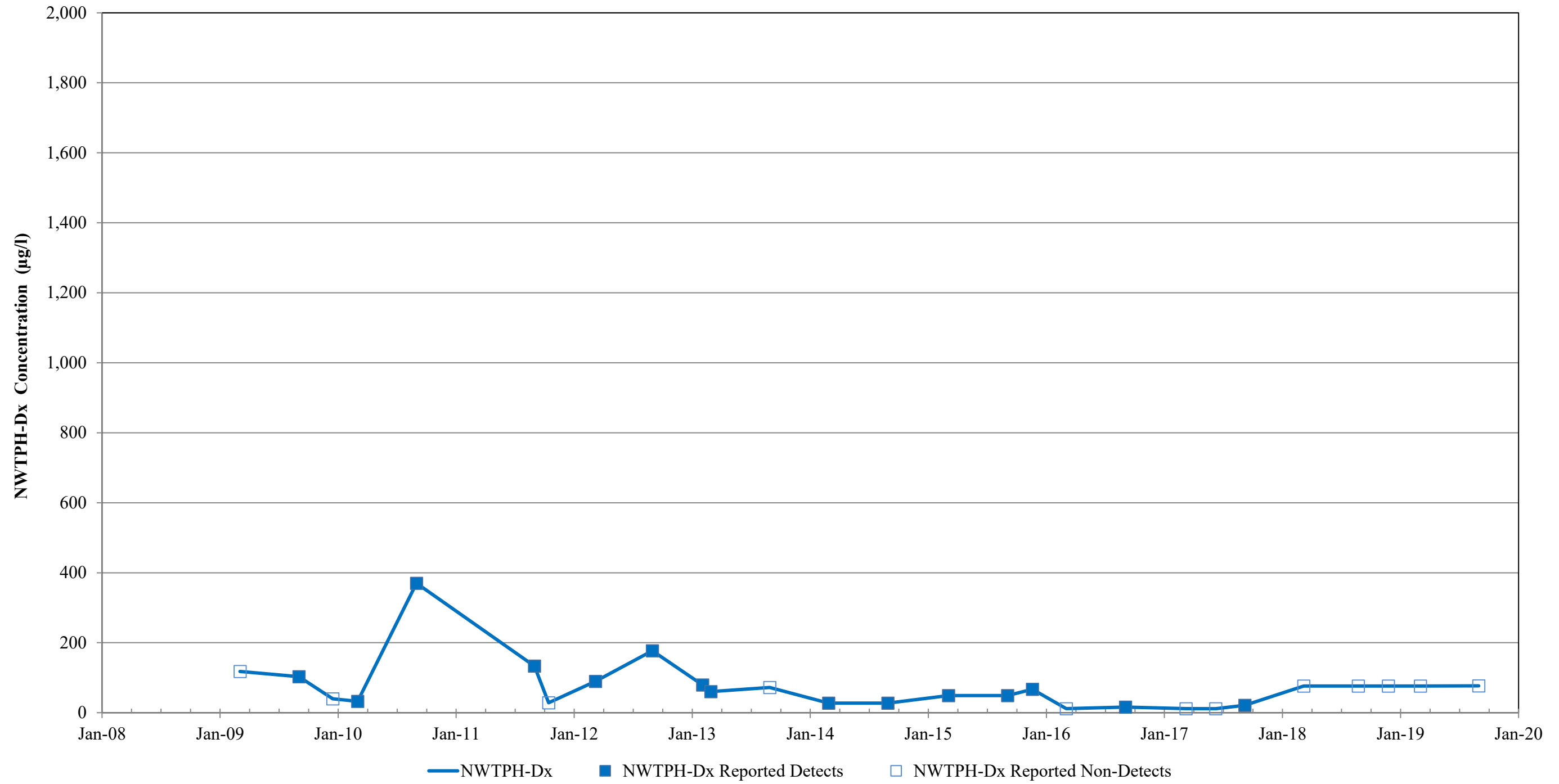
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well S3-AU



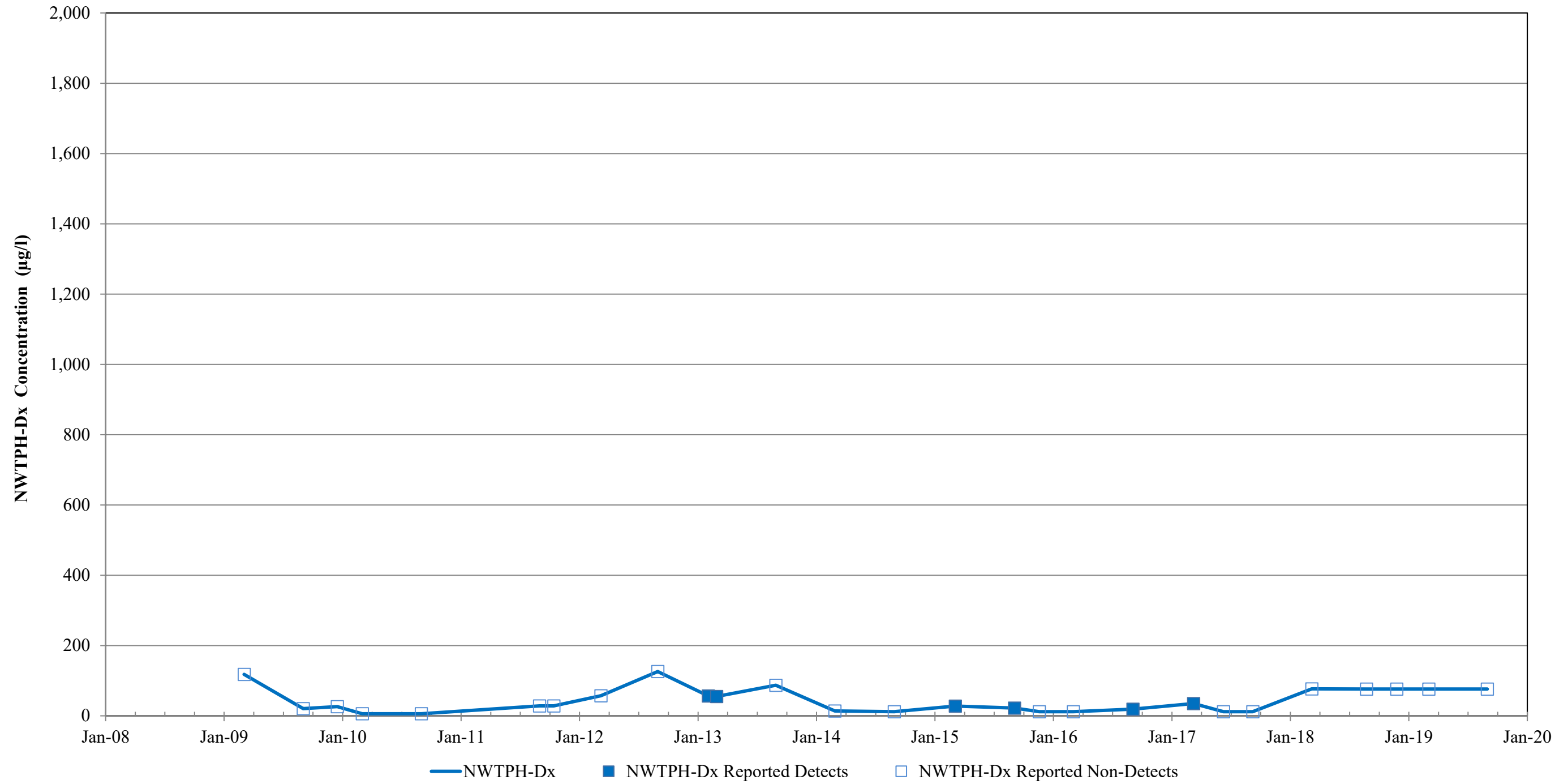
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well S3-BD



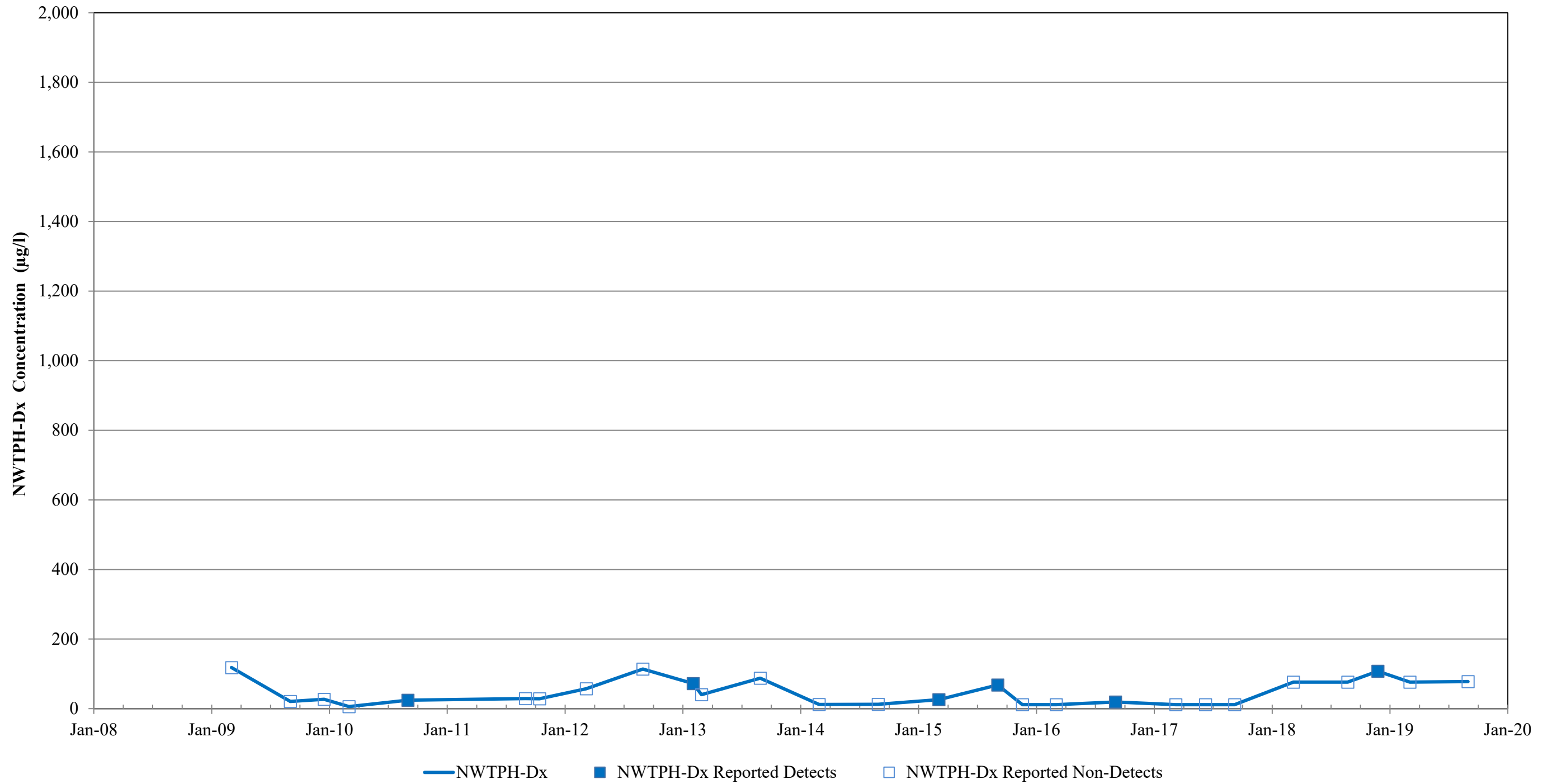
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well S3-BU



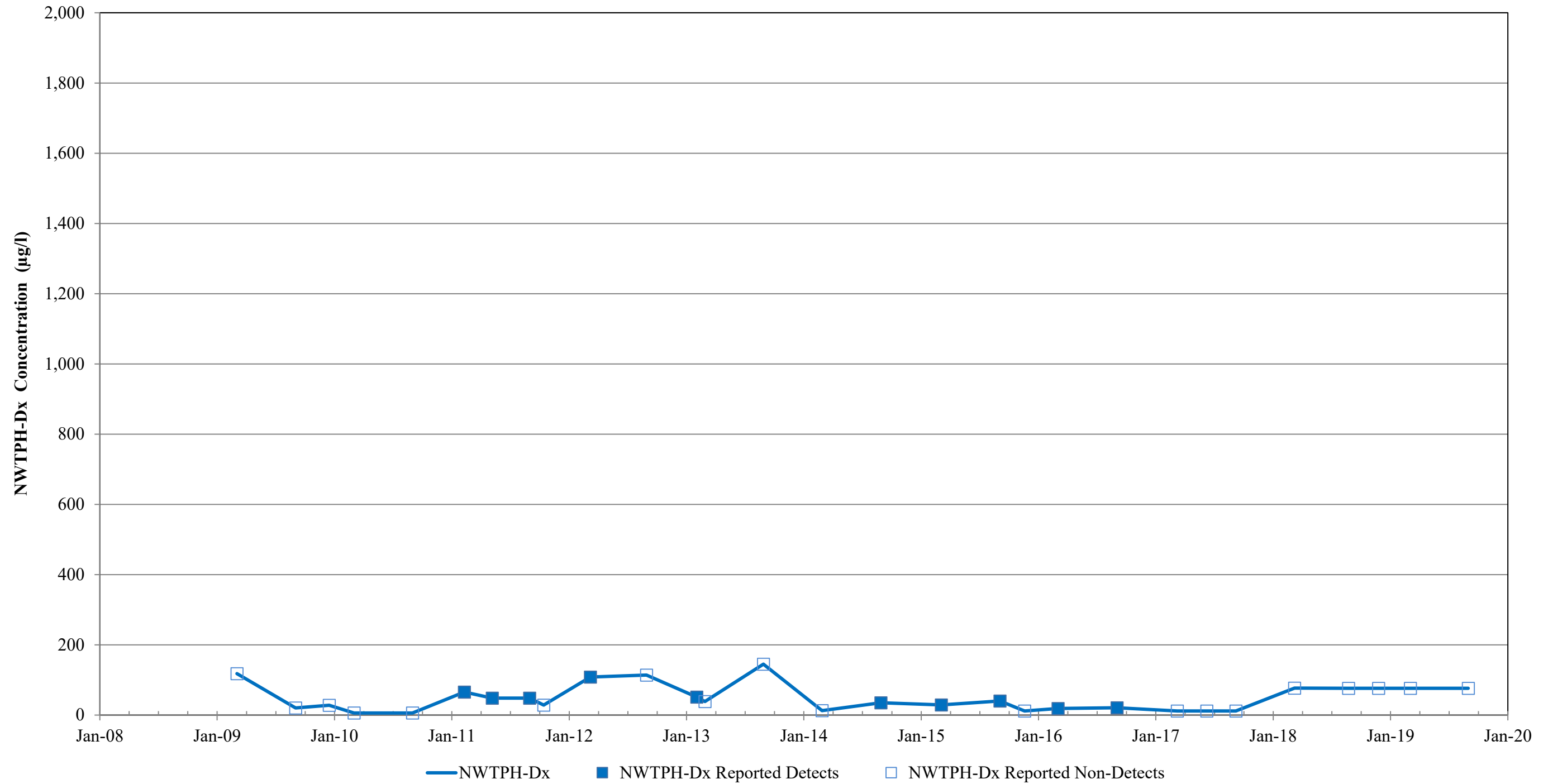
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well S3-CD



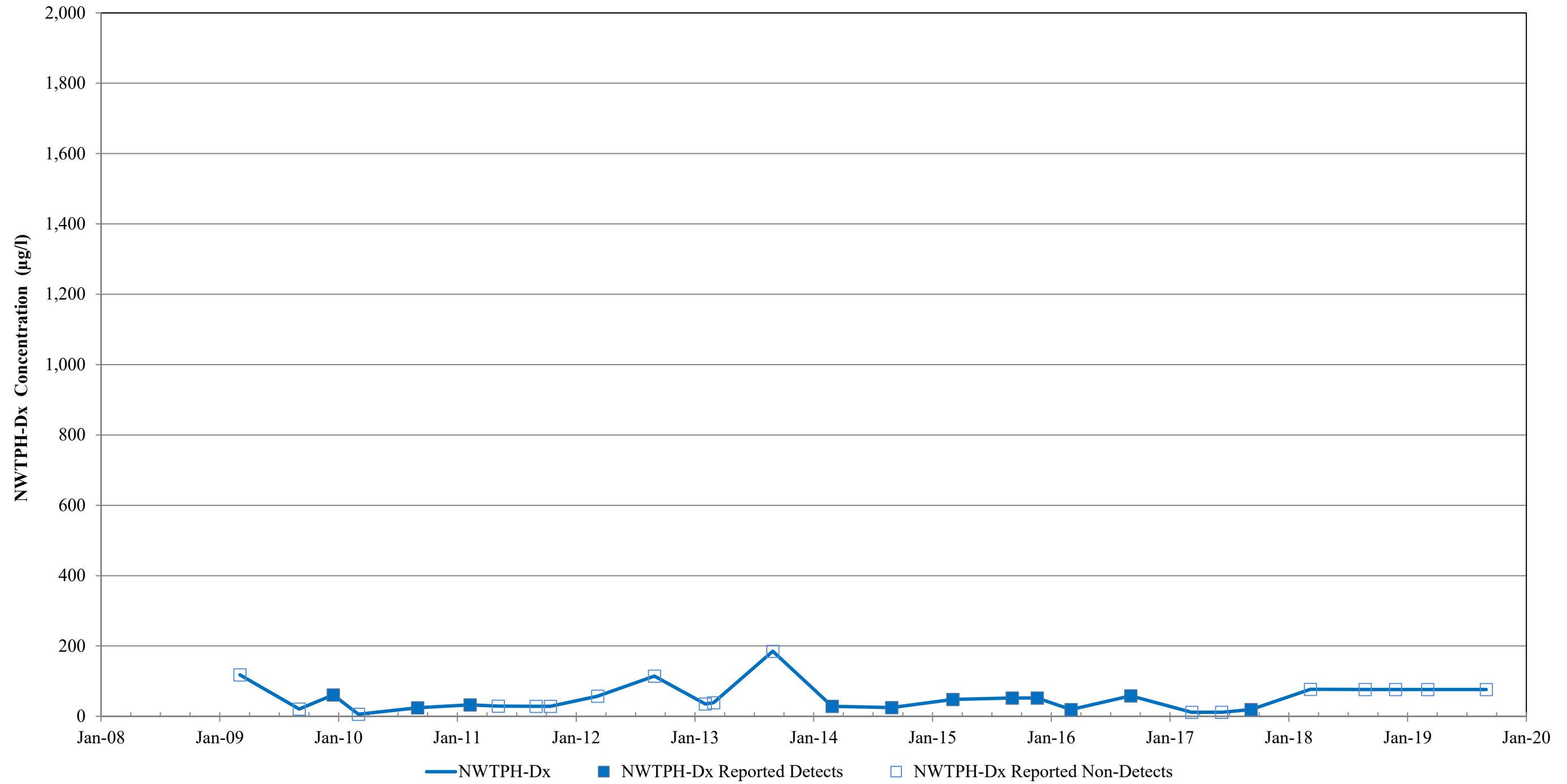
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well S3-CU



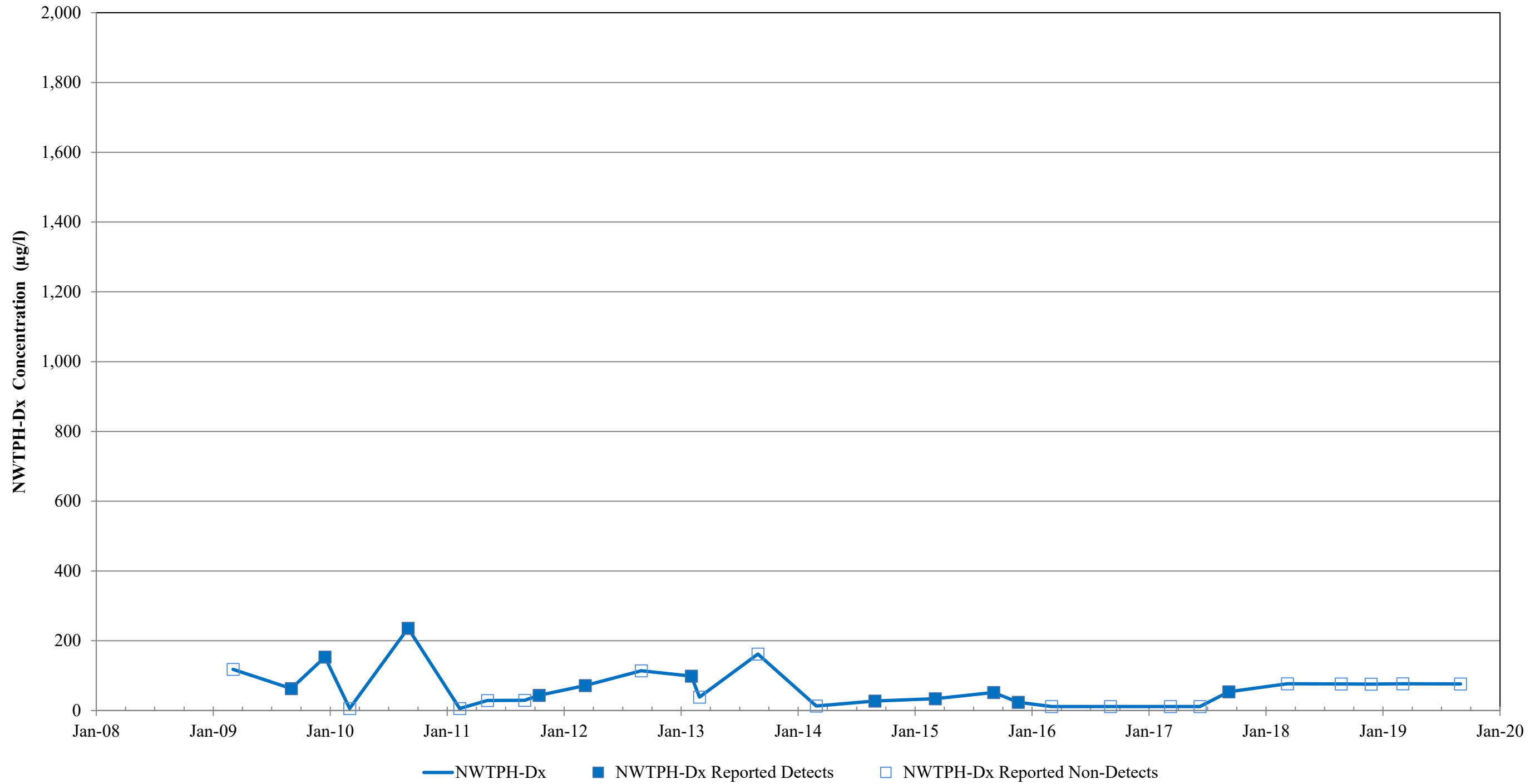
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well S4-AD



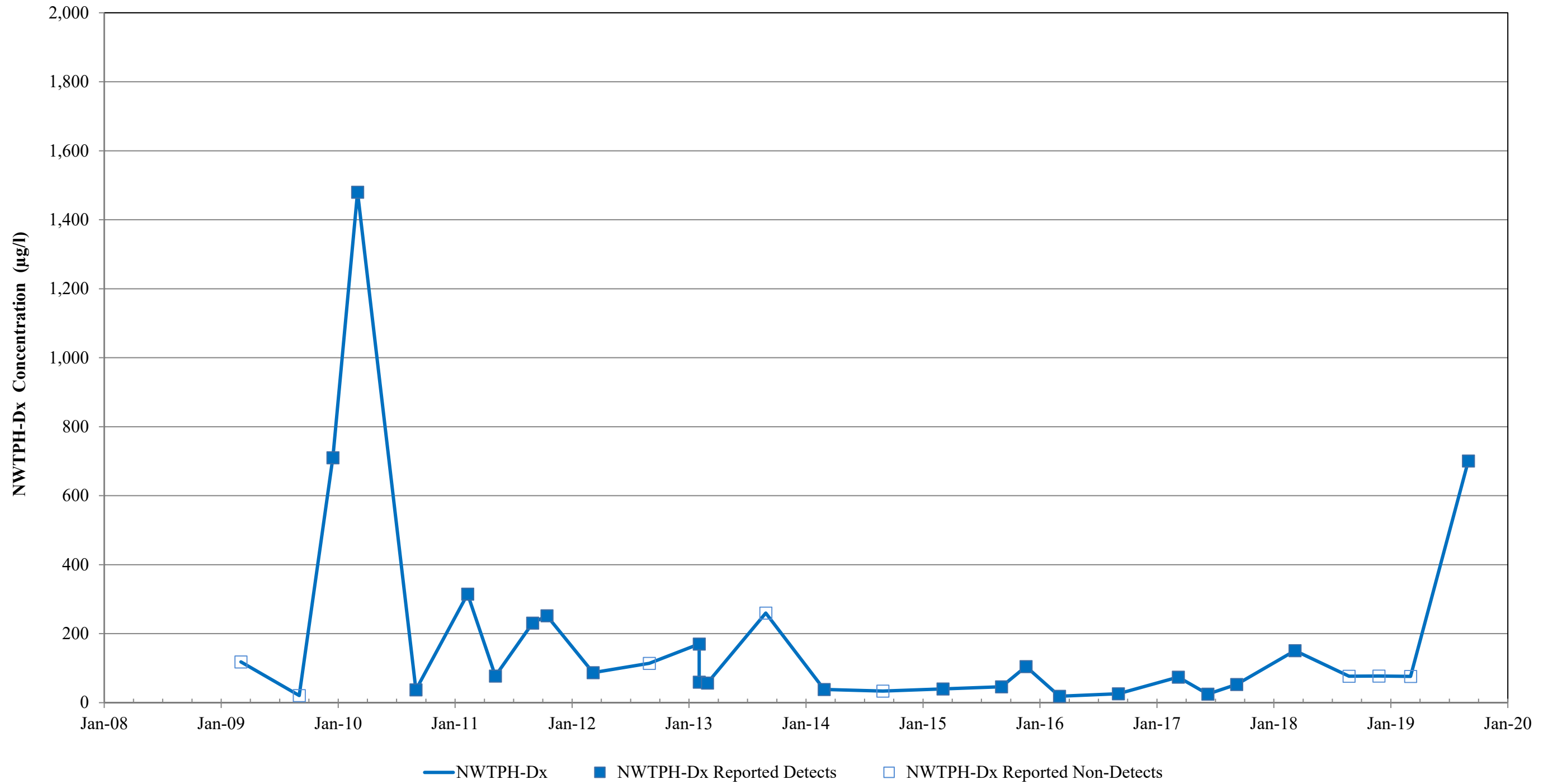
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well S4-AU



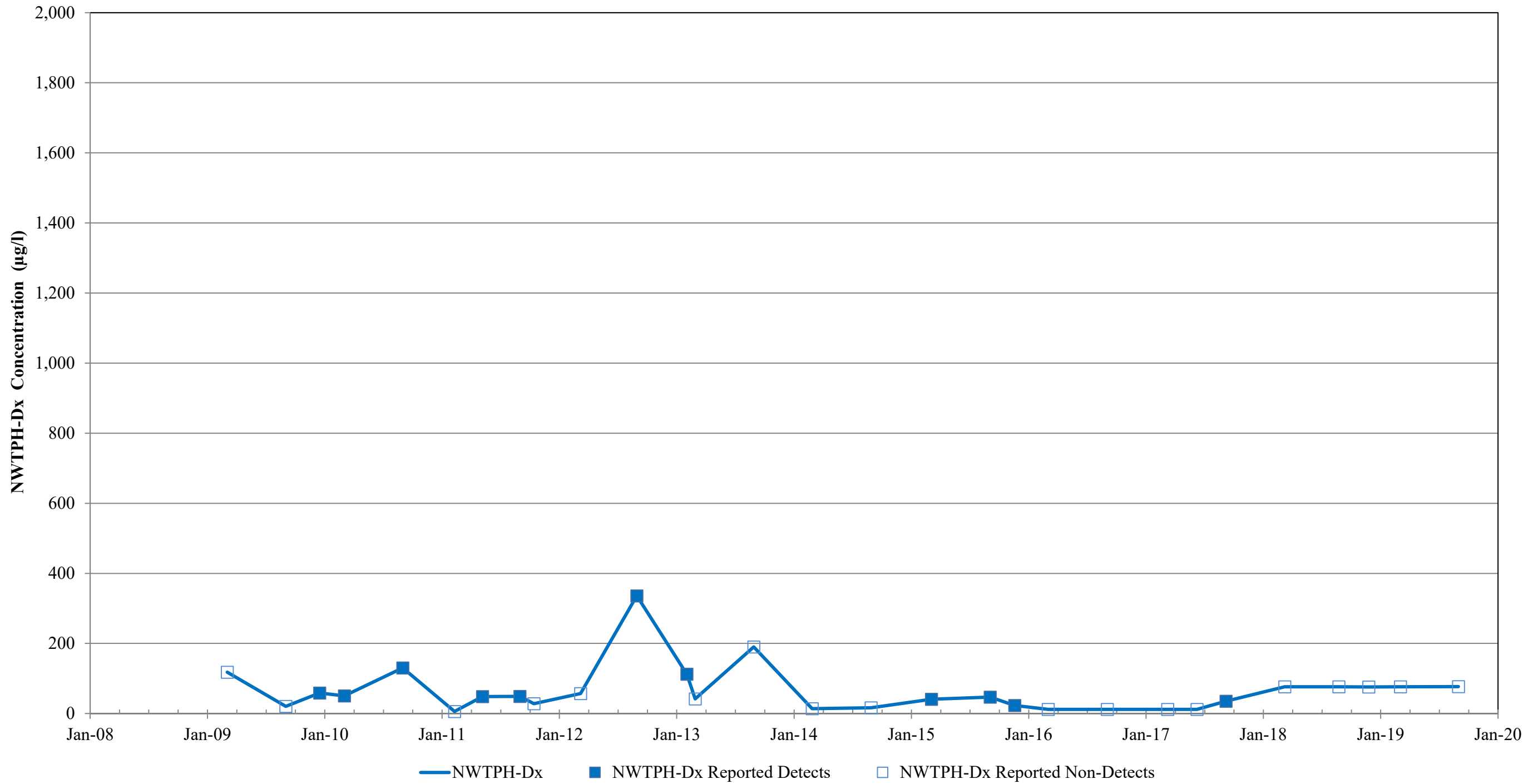
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well S4-BD



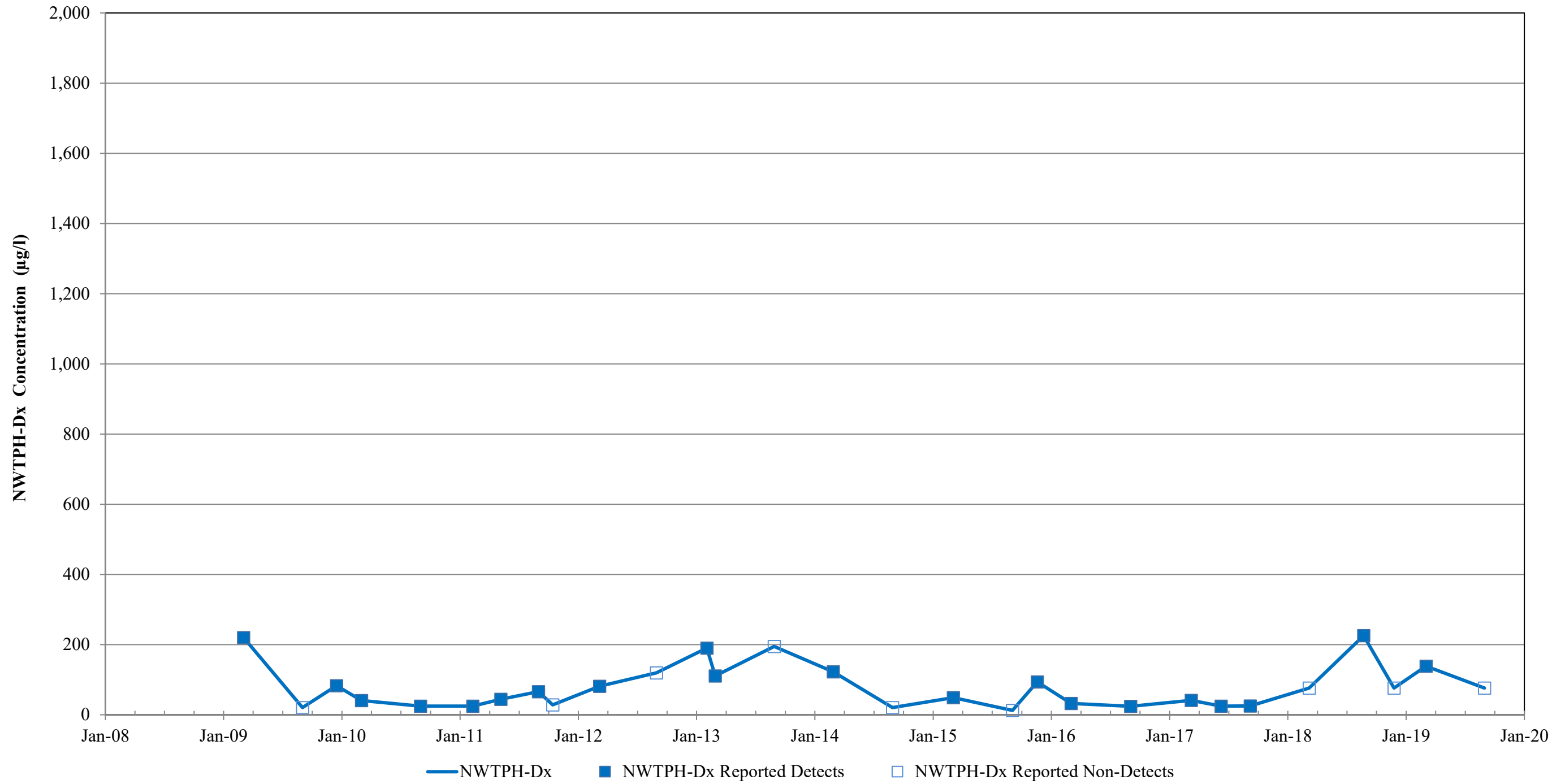
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well S4-BU



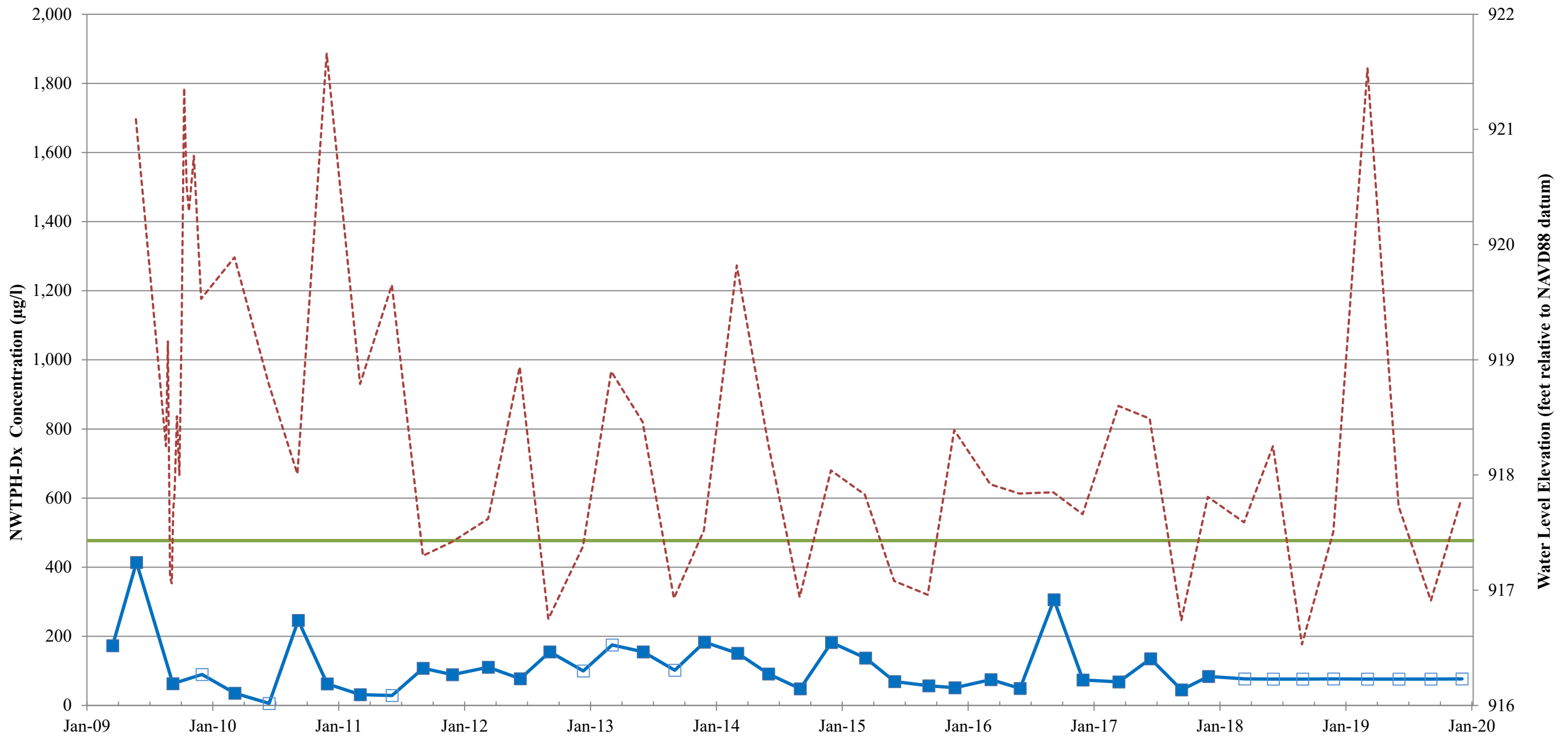
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well S4-CD



NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well S4-CU

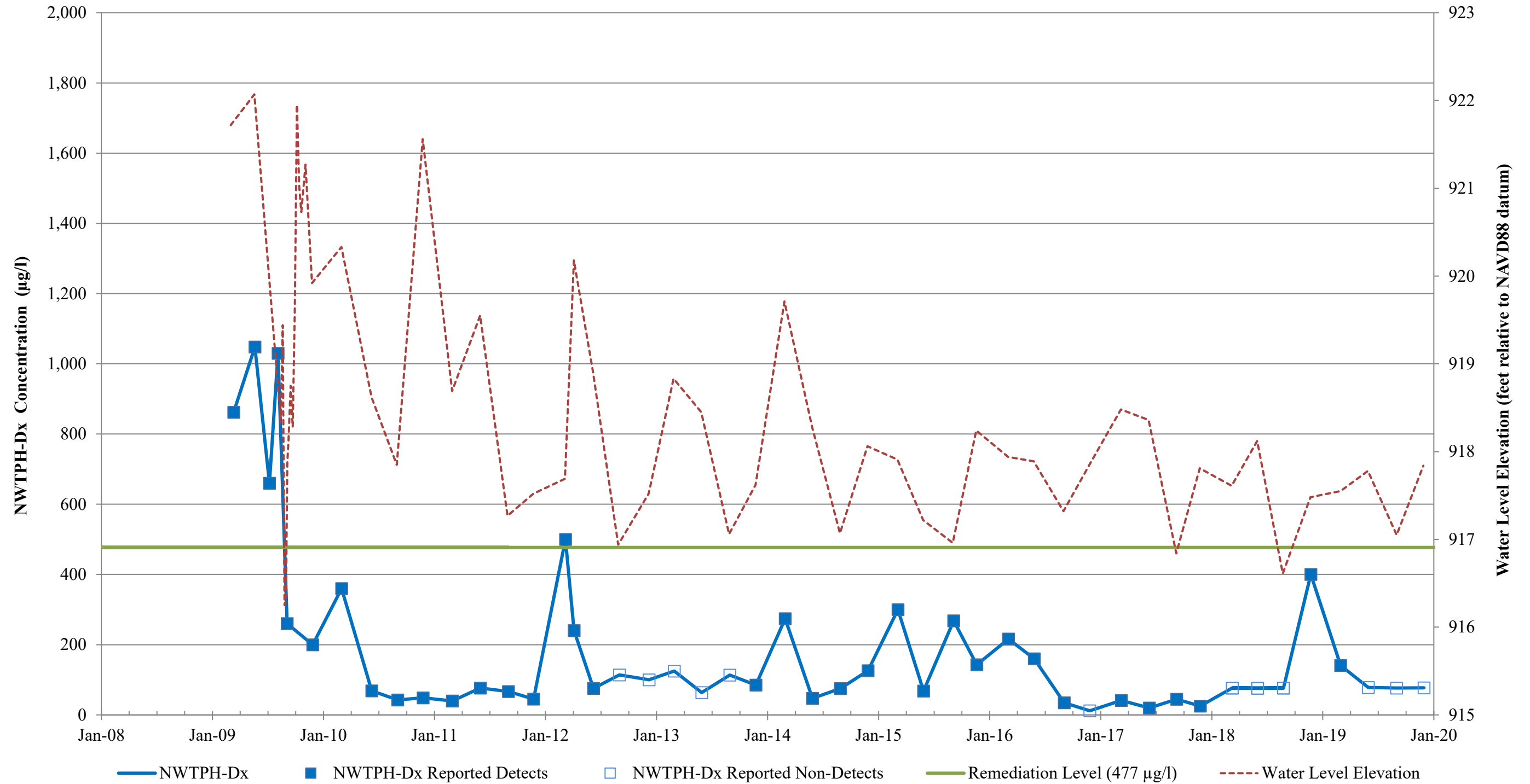


NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well GW-1

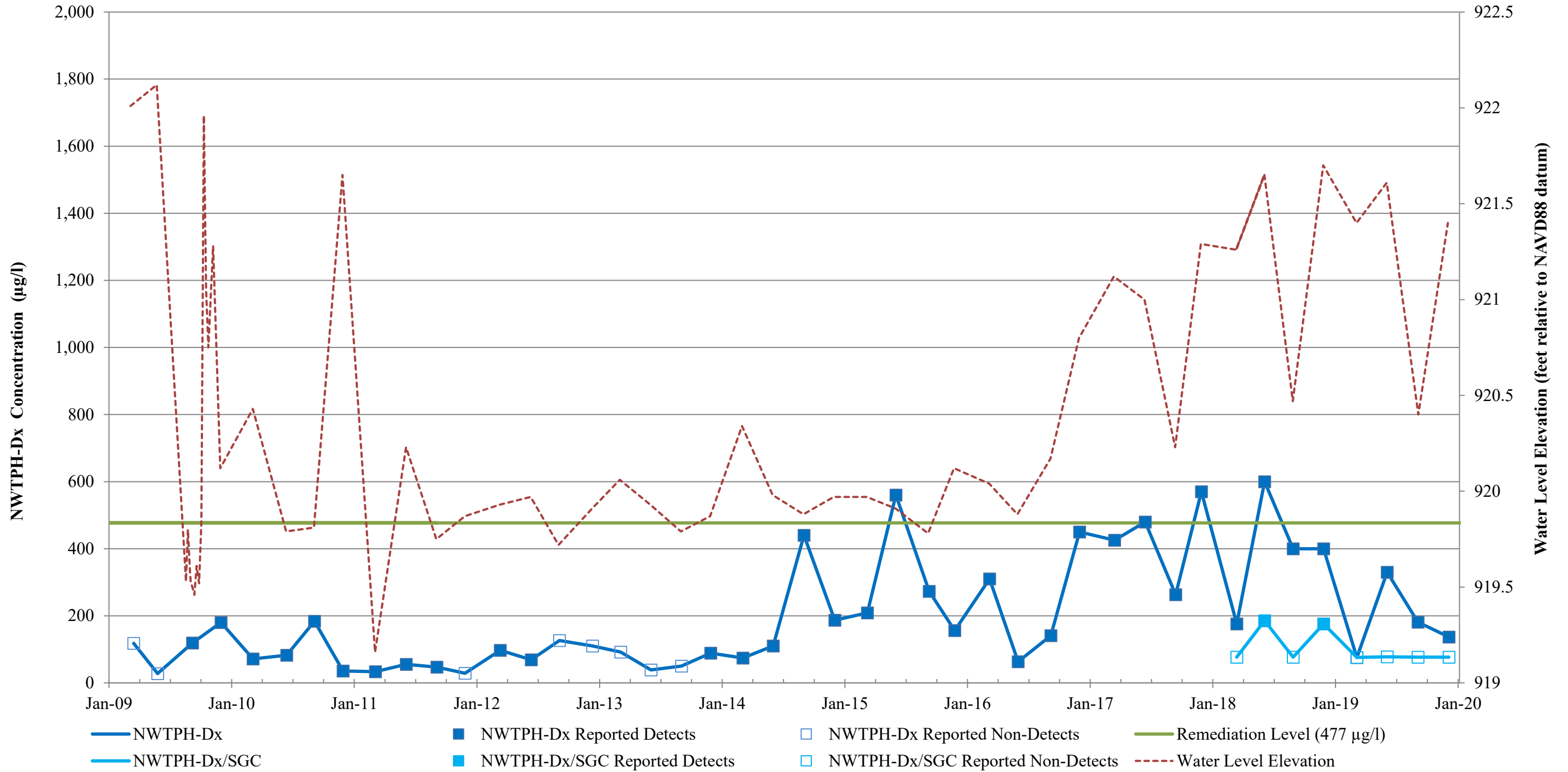


—■ NWTPH-Dx
 ■ NWTPH-Dx Reported Detects
 □ NWTPH-Dx Reported Non-Detects
 — Remediation Level (477 µg/l)
 - - - Water Level Elevation

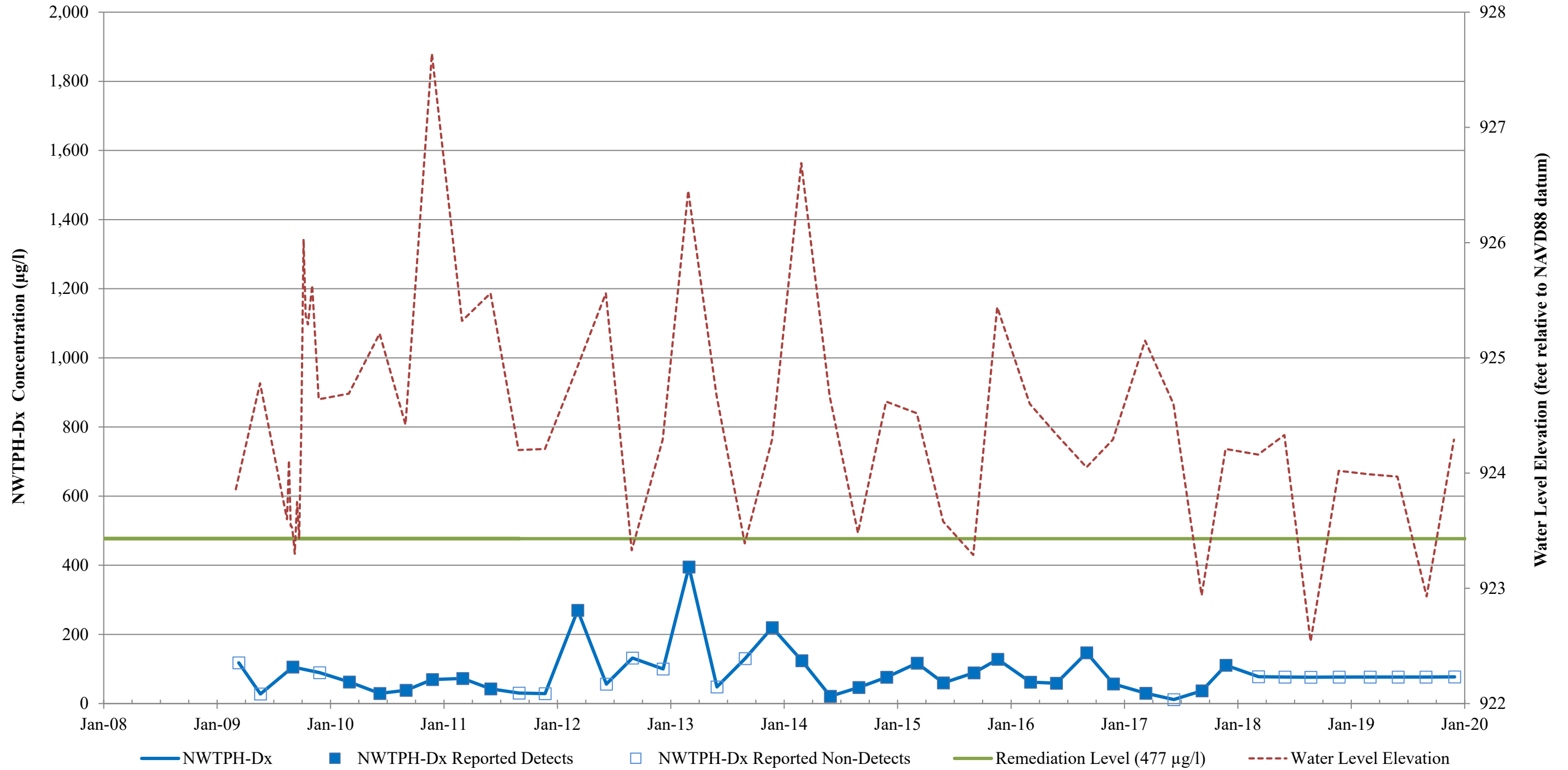
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well GW-2



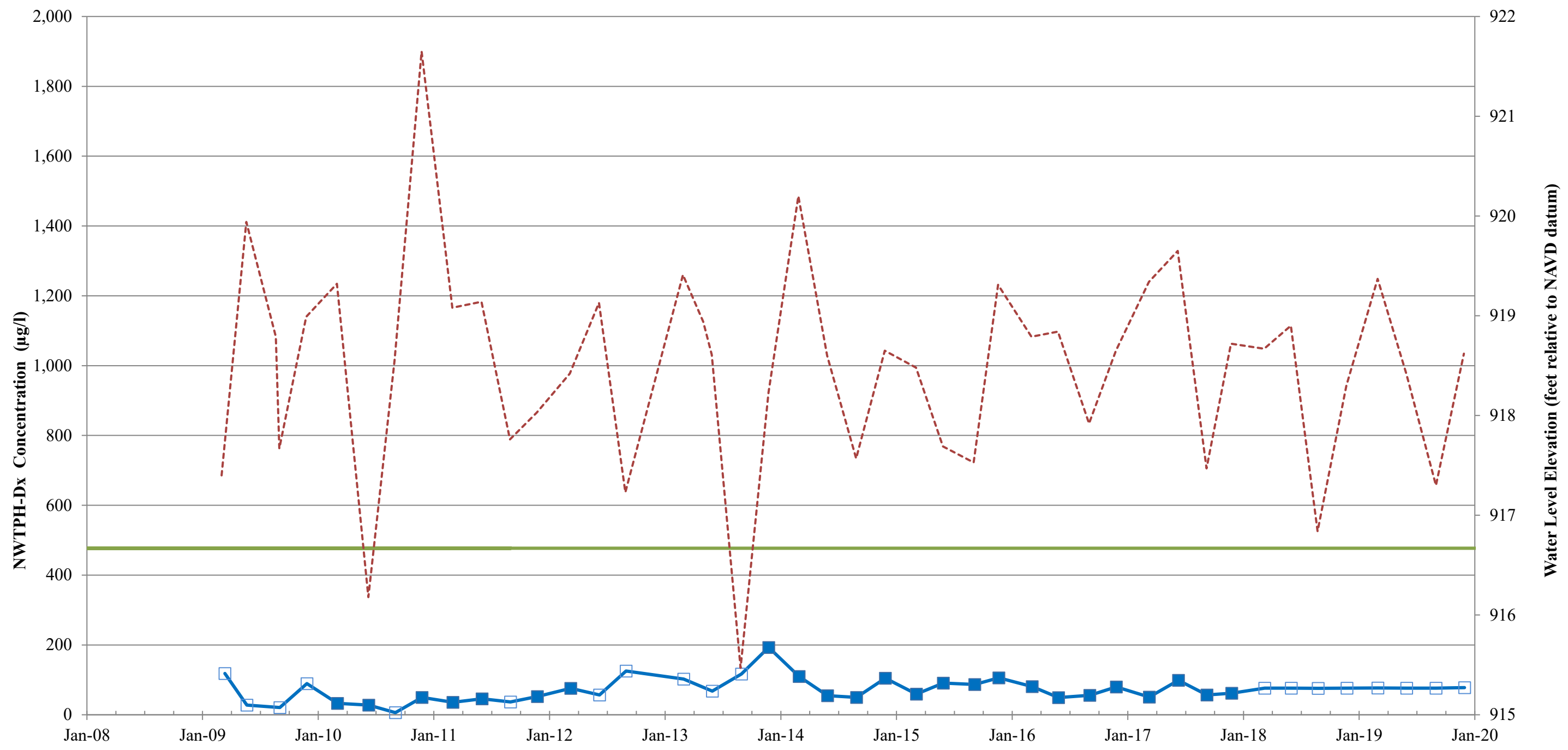
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well GW-3



NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well GW-4

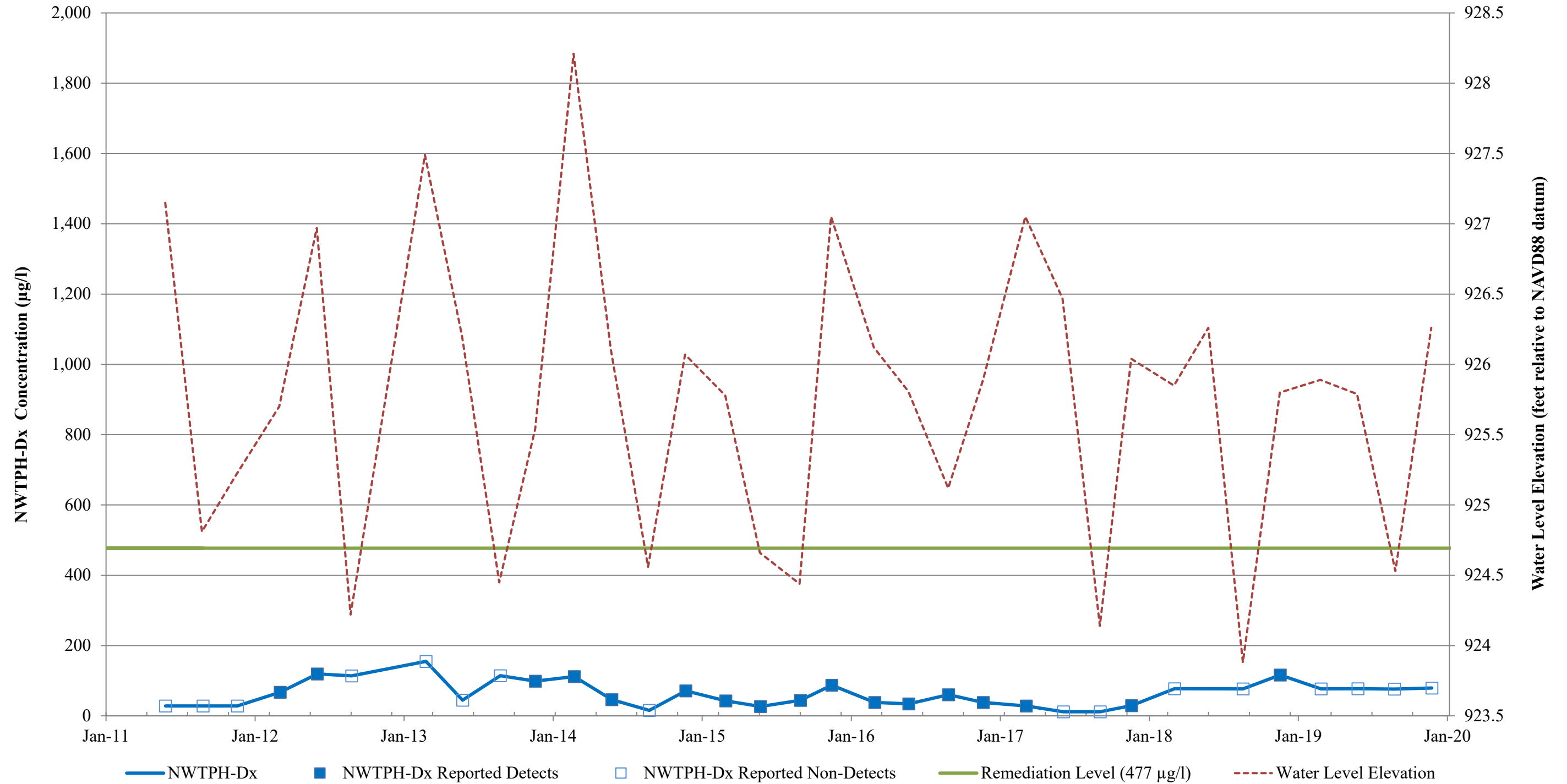


NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well EW-1

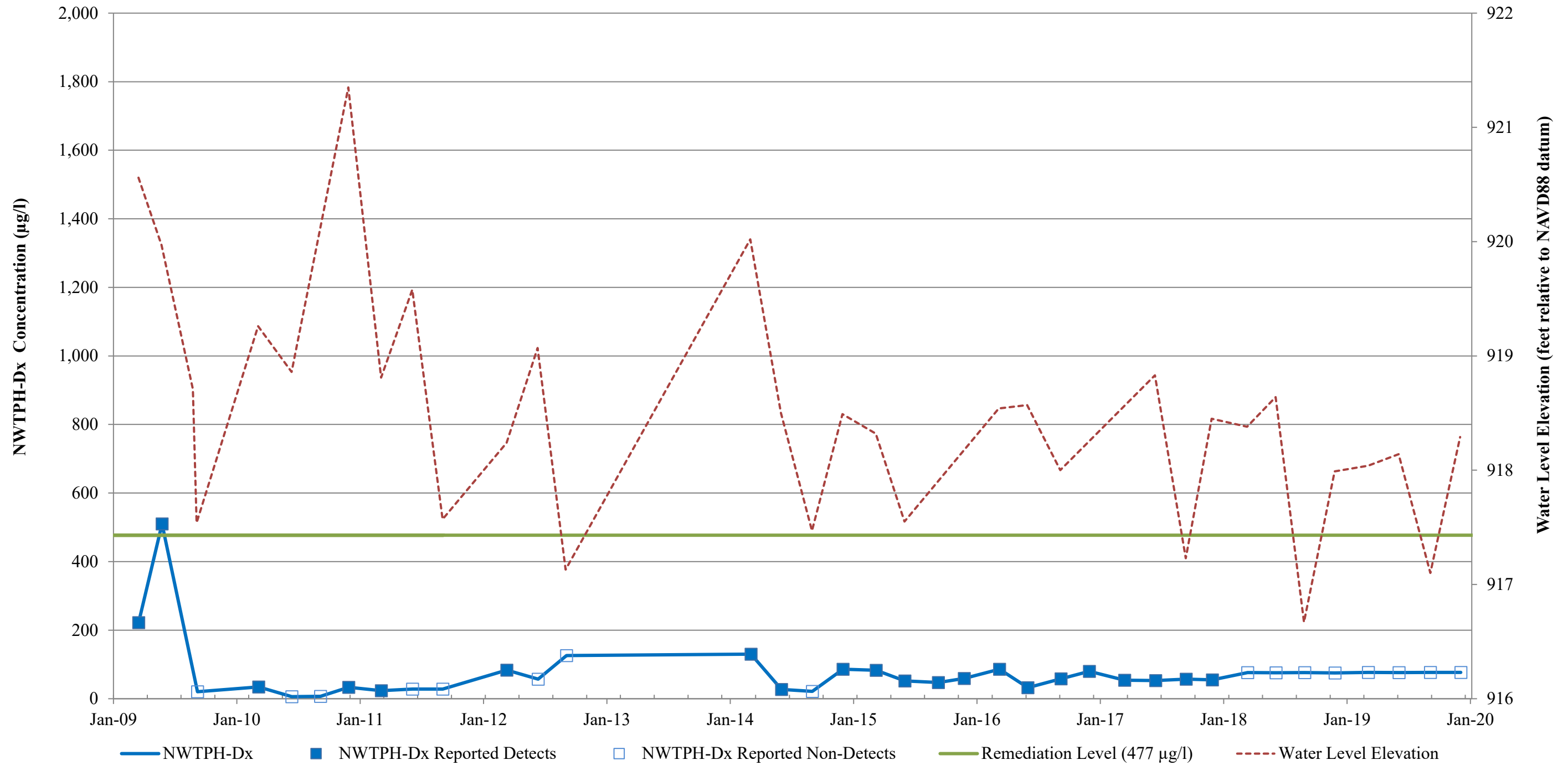


— NWTPH-Dx
 ■ NWTPH-Dx Reported Detects
 NWTPH-Dx Reported Non-Detects
 — Remediation Level (477 µg/l)
 - - - Water Level Elevation

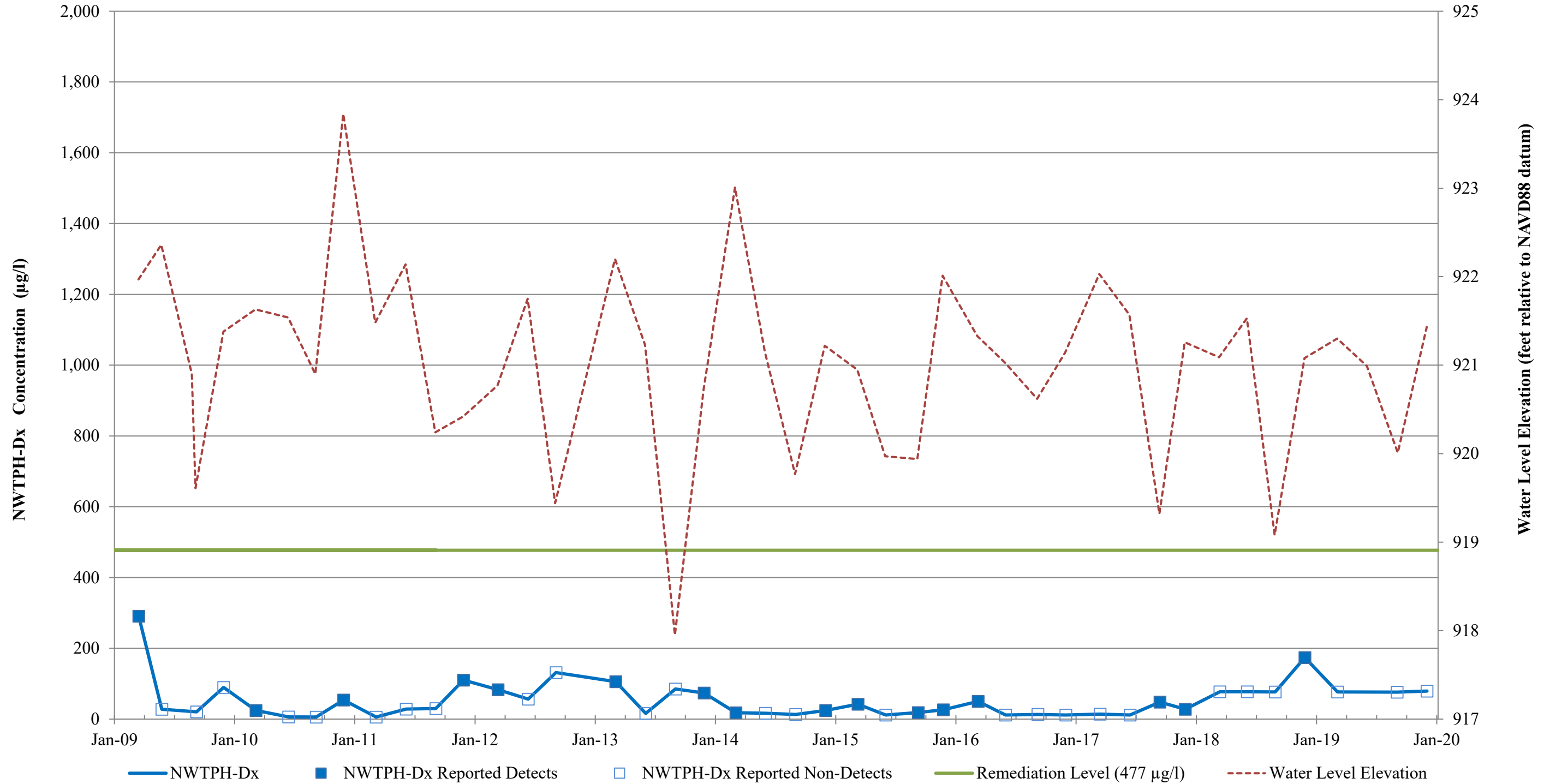
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well EW-2A



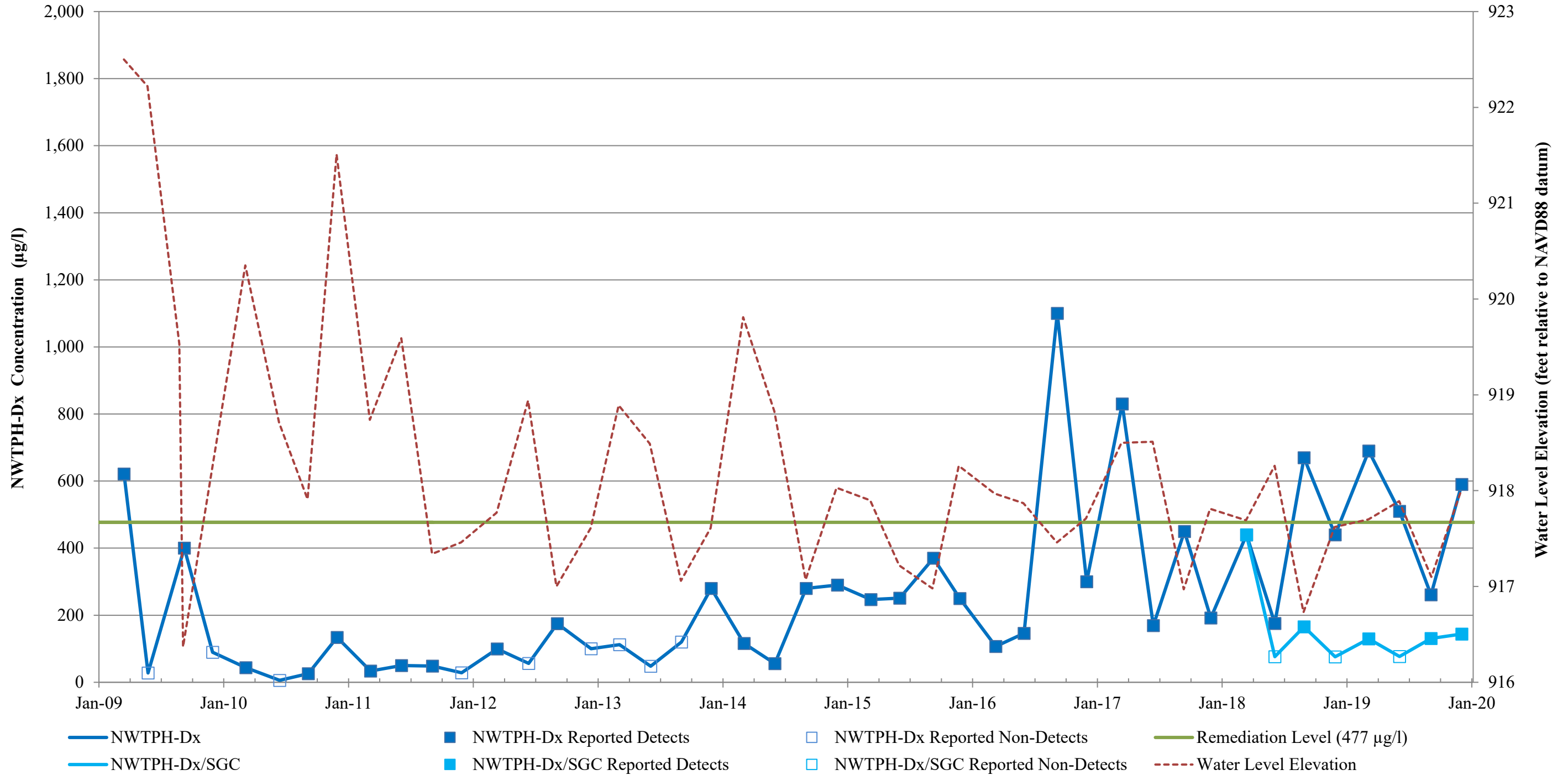
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well 5-W-43



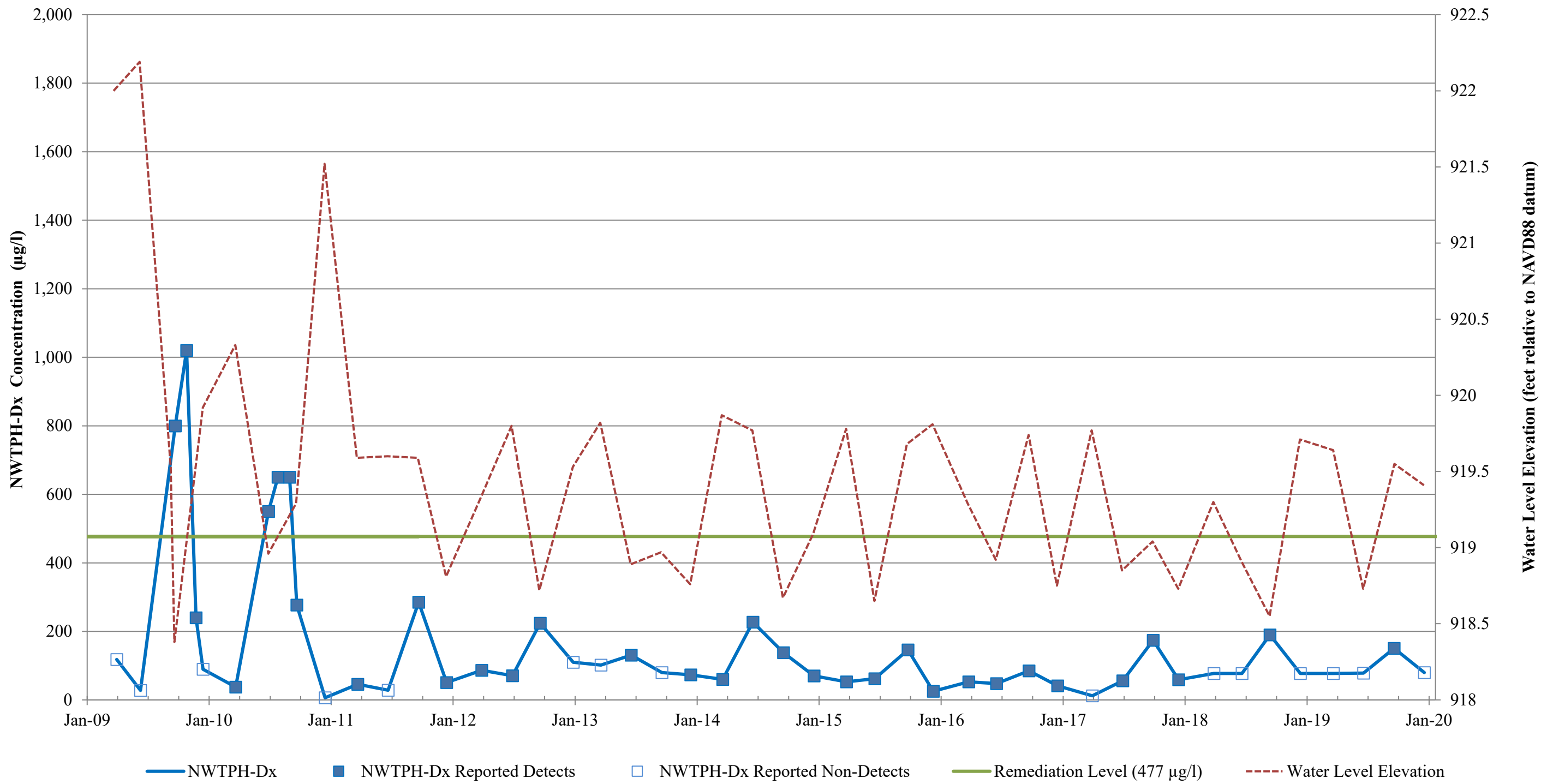
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well 2A-W-40



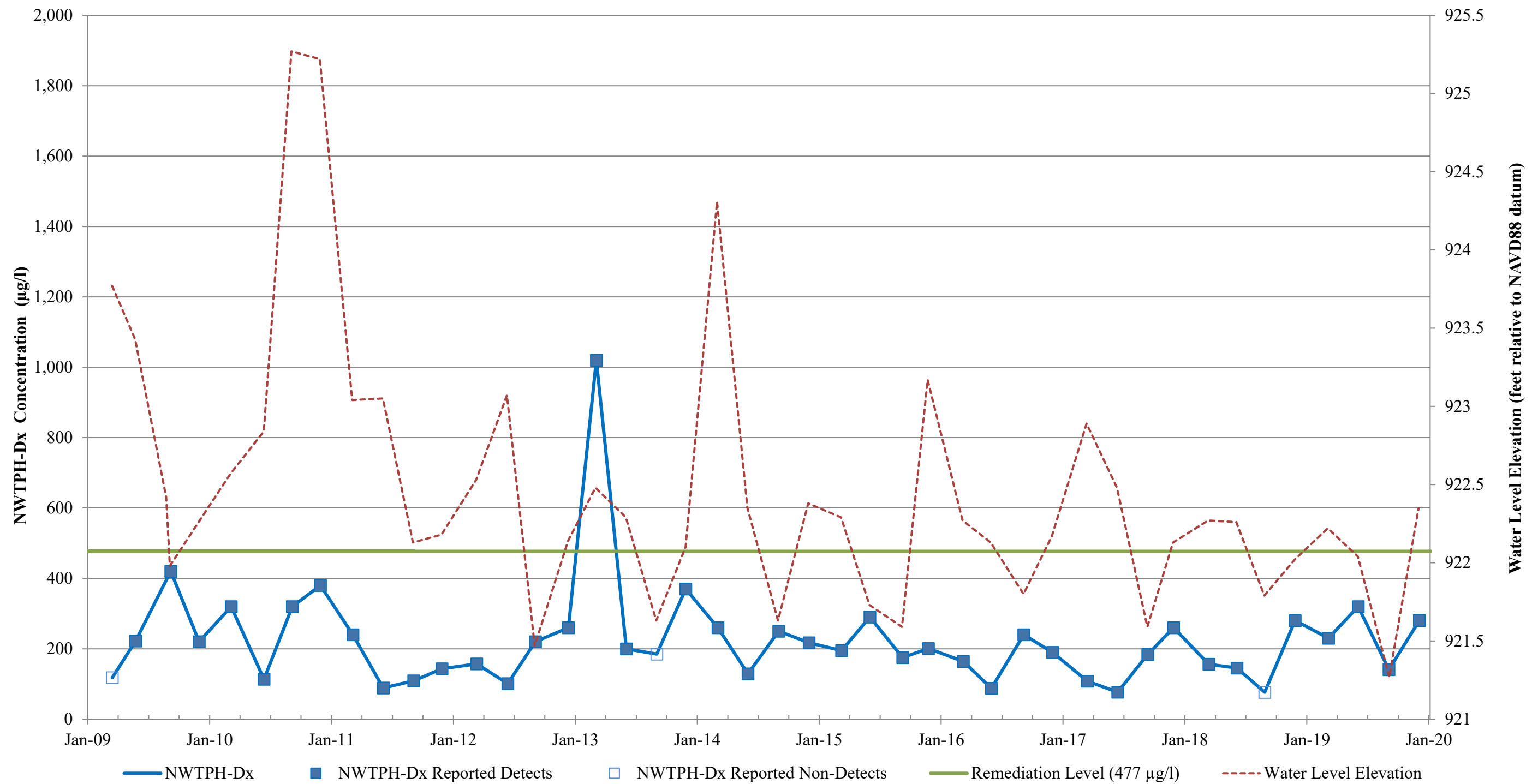
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well 2A-W-41



NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well 1B-W-23



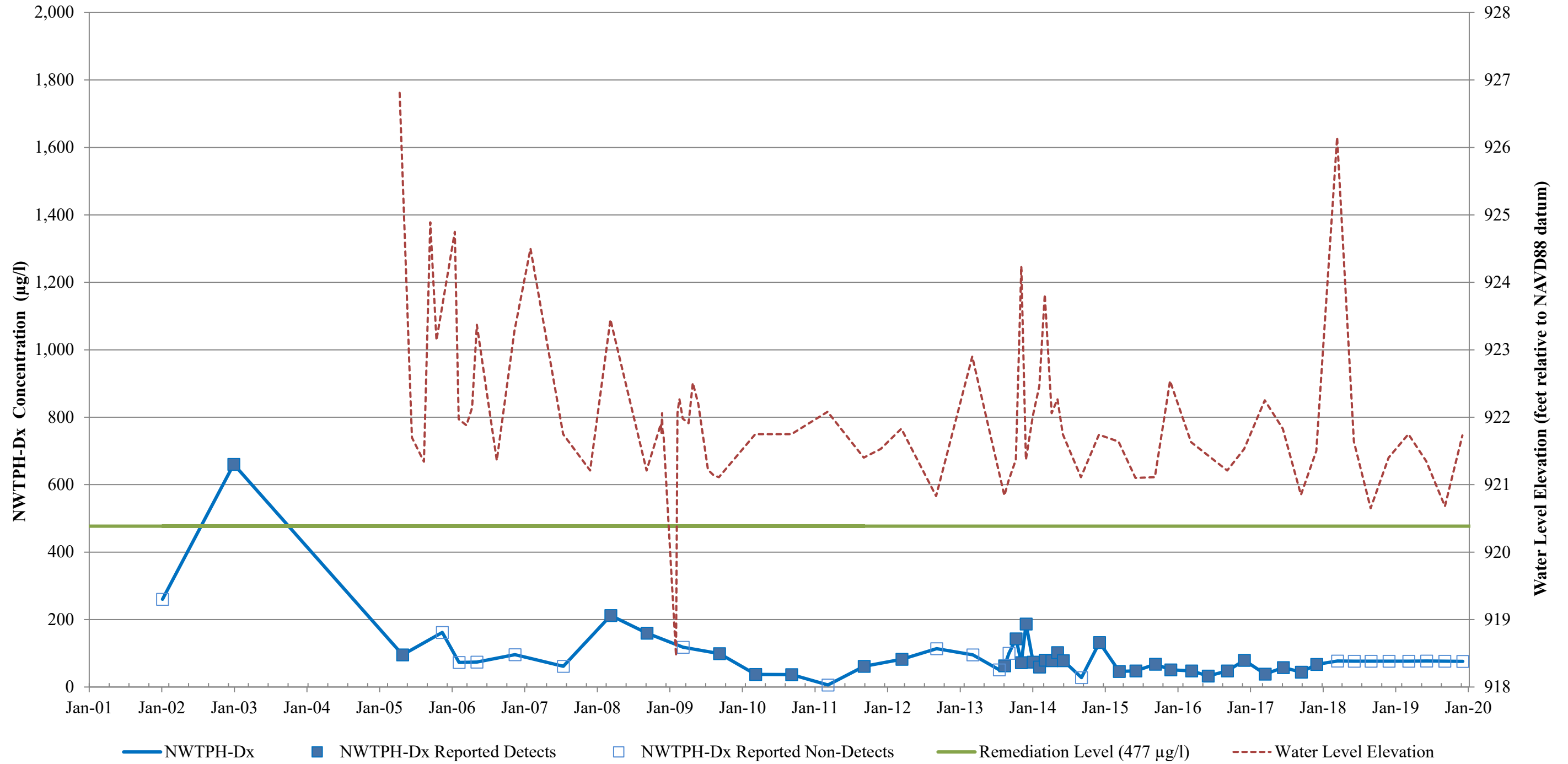
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well 2A-W-42



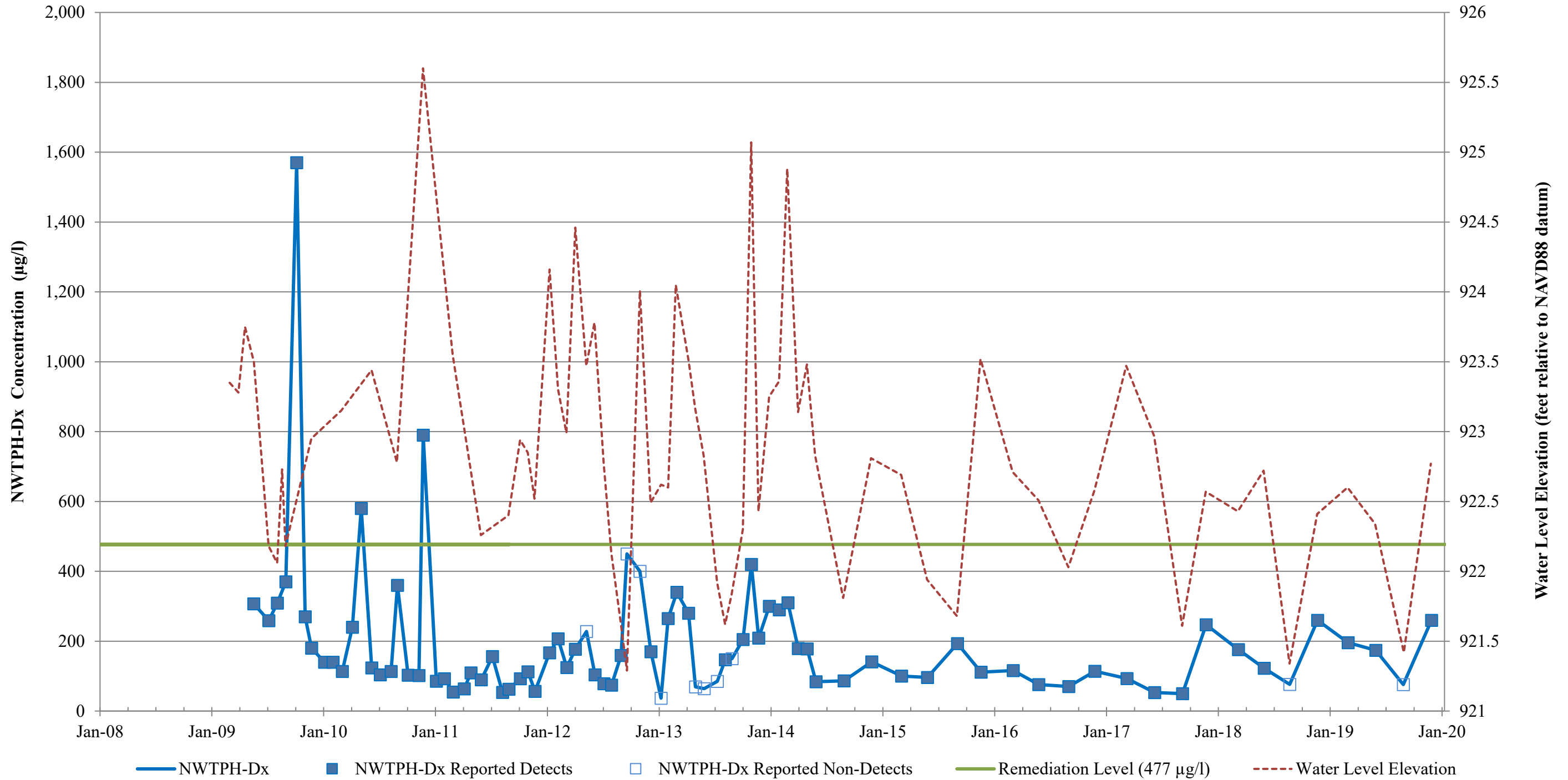
Former Air Sparge Area Monitoring Wells

Note: Former Air Sparge Area monitoring well NWTPH-Dx groundwater results are compared to the RL of 477 micrograms per liter.

NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well 1B-W-3

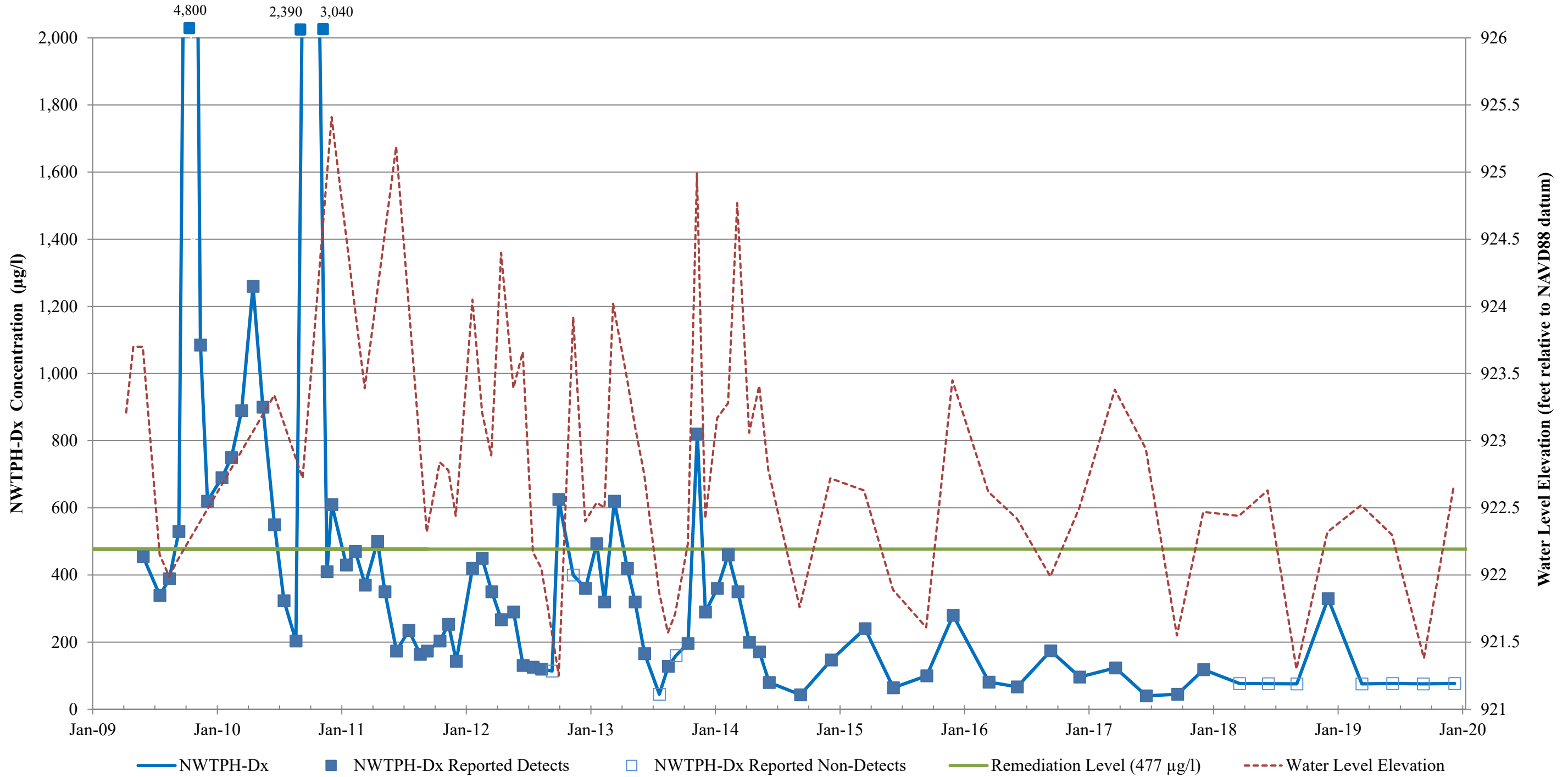


NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well 1C-W-7



NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well 1C-W-8

NWTPH-Dx concentrations exceeding the plot scale are shown above the plot area with the associated reported concentration value.

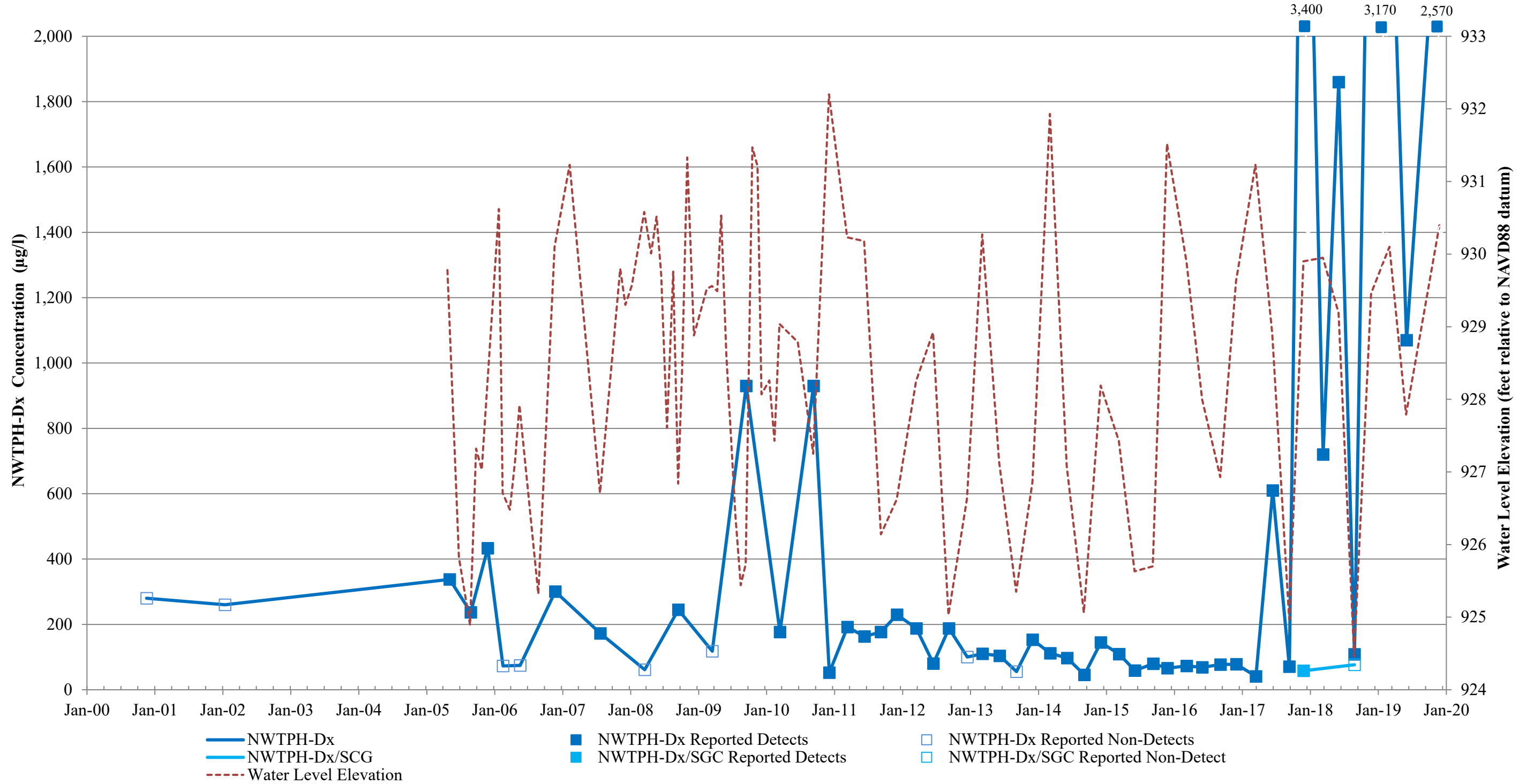


Former Maloney Creek Zone Monitoring Wells

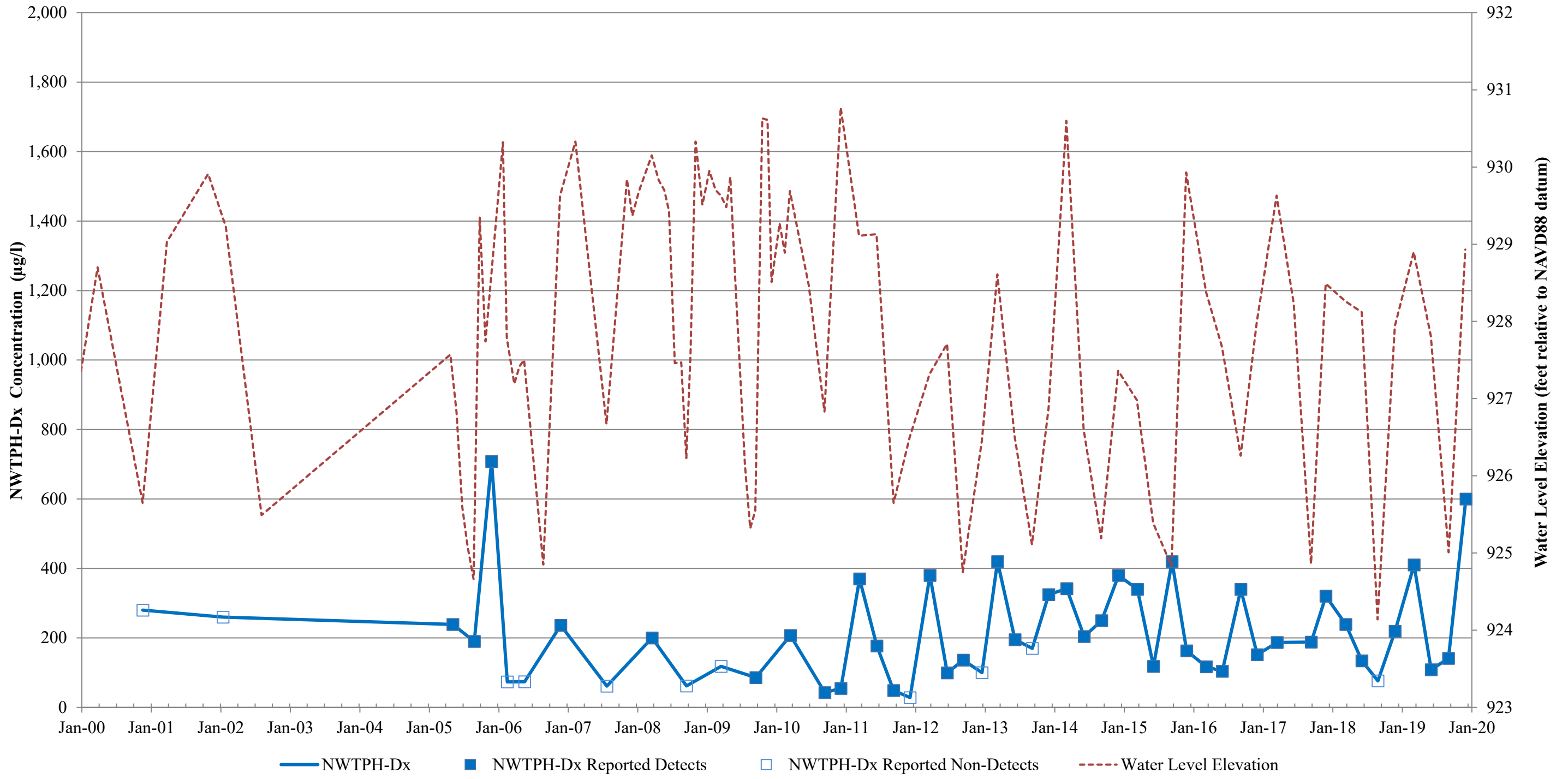
Note: Former Maloney Creek Zone monitoring wells are located within the railyard and NWTPH-Dx groundwater results from these wells have no NWTPH-Dx target.

NWTPH-Dx concentrations exceeding the plot scale are shown above the plot area with the associated reported concentration value.

**NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well MW-3**

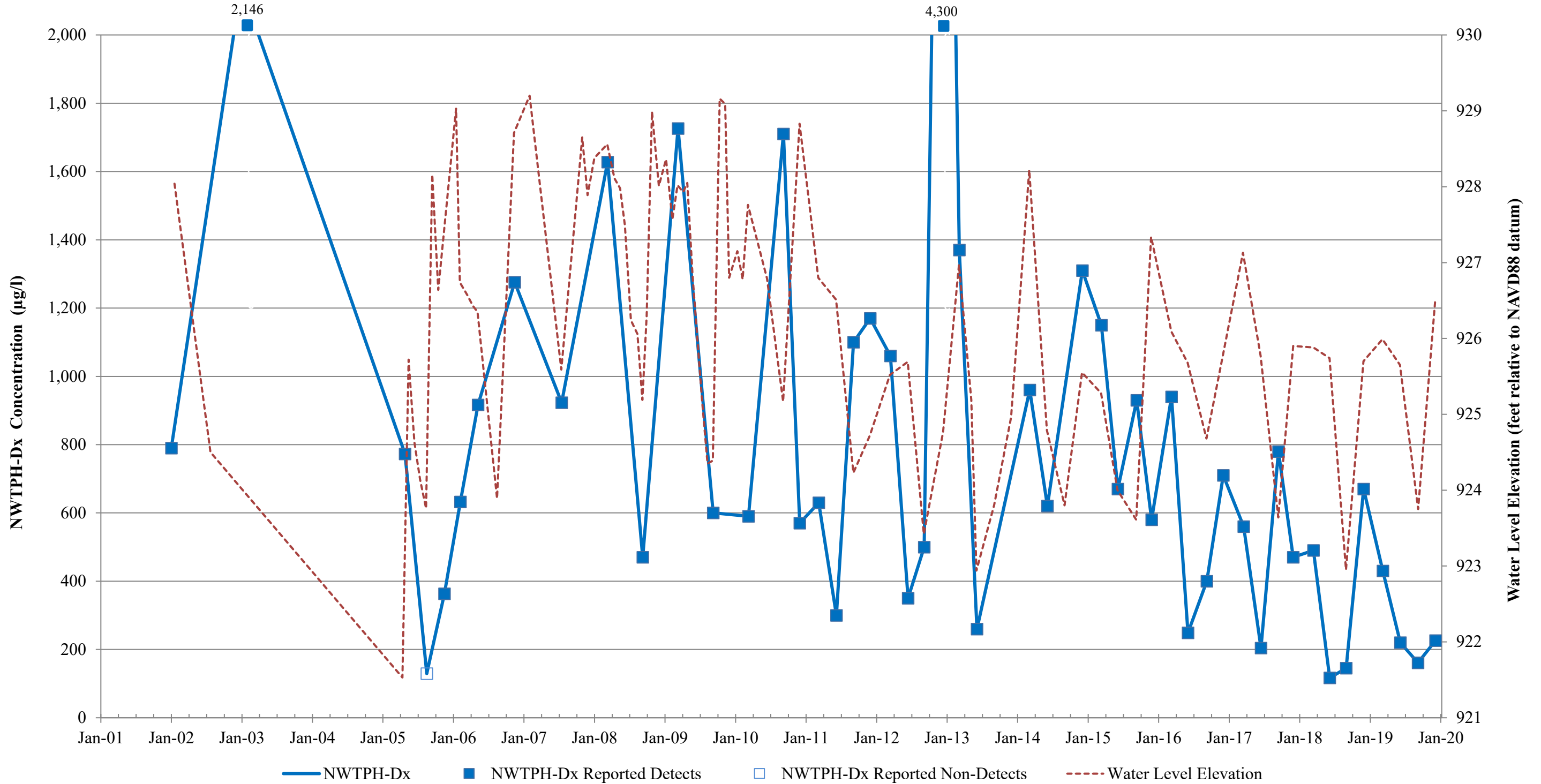


NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well MW-4

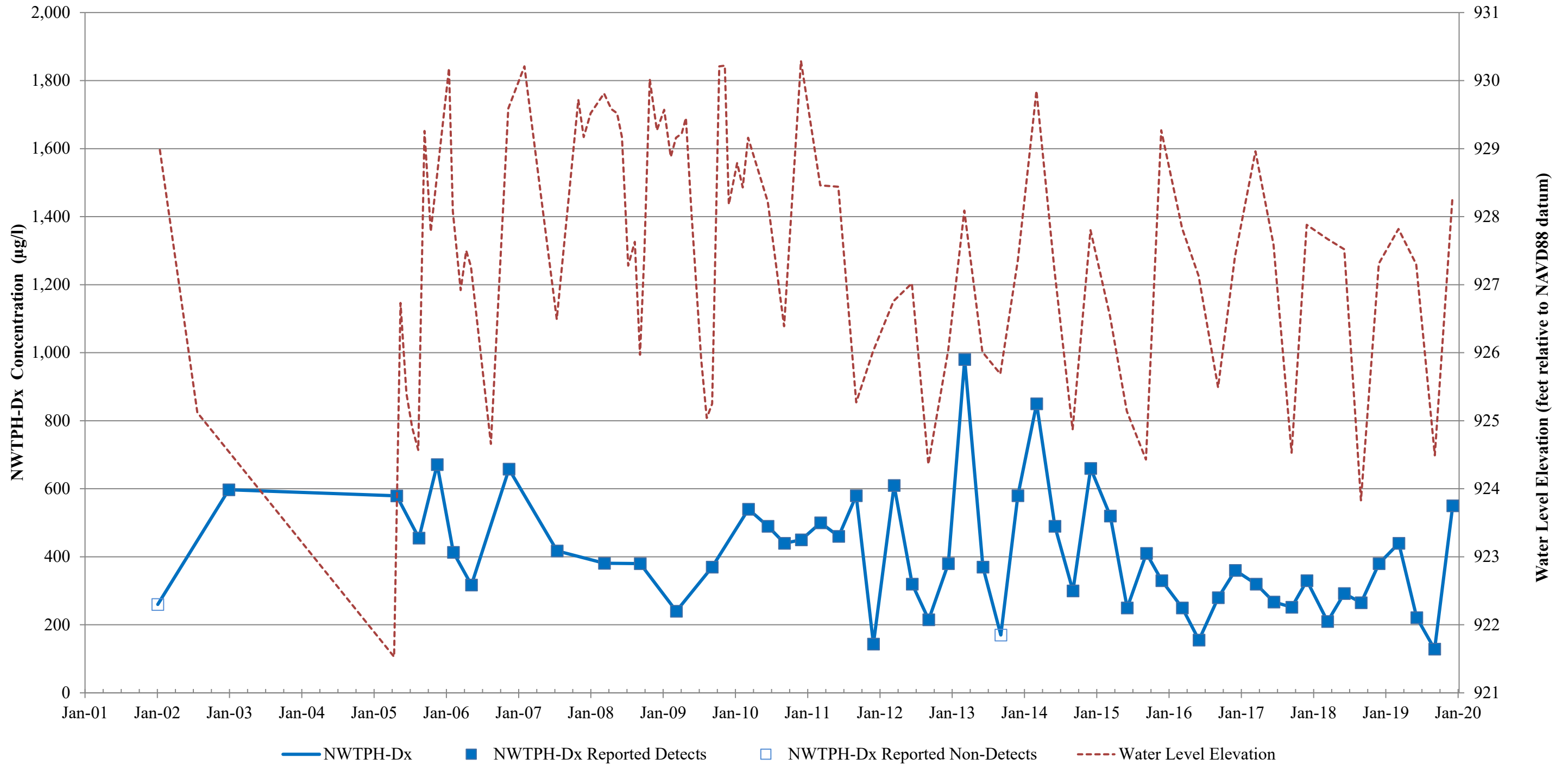


NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well 2A-W-9

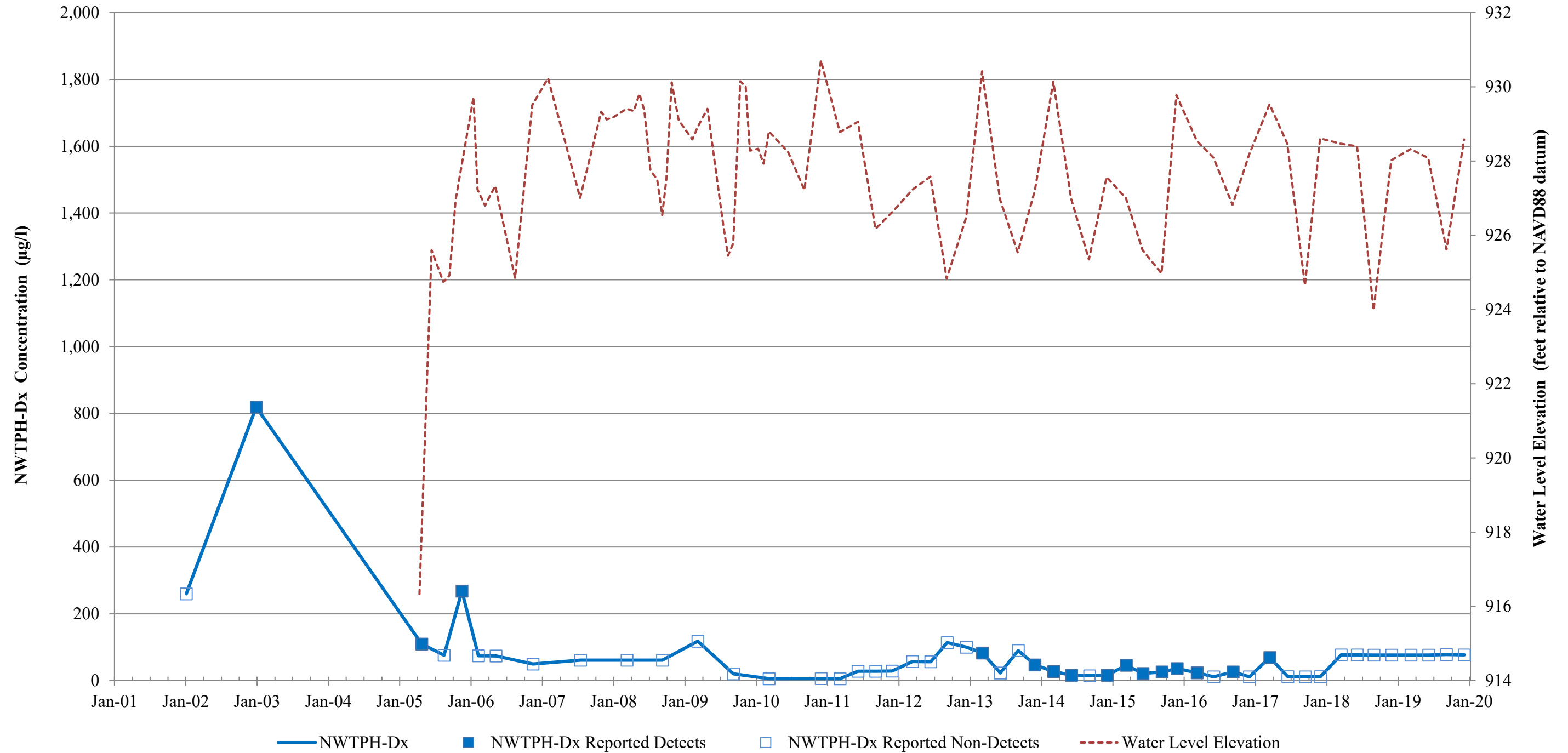
NWTPH-Dx concentrations exceeding the plot scale are shown above the plot area with the associated reported concentration value.



NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well 2A-W-10



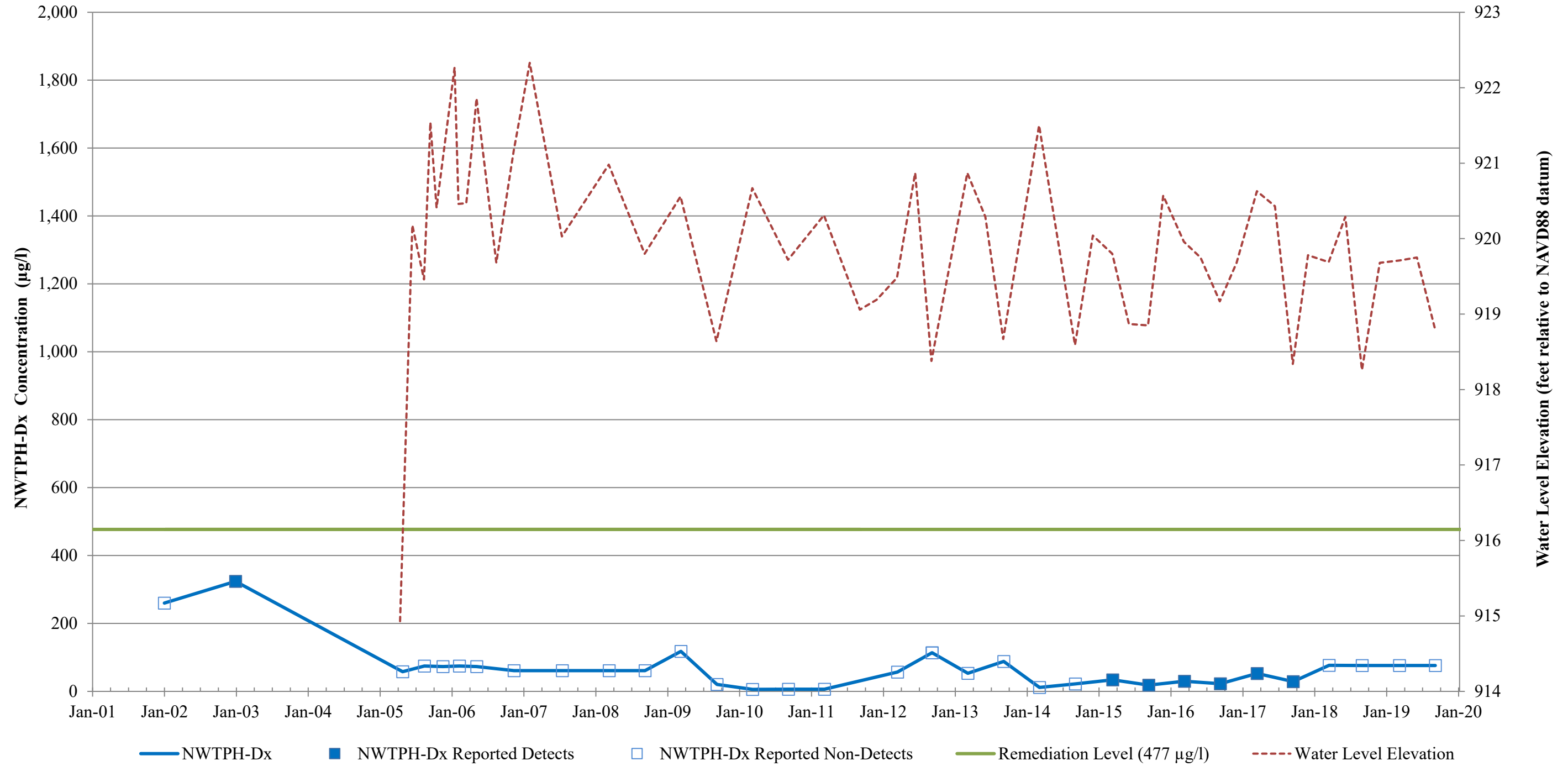
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well 2B-W-4



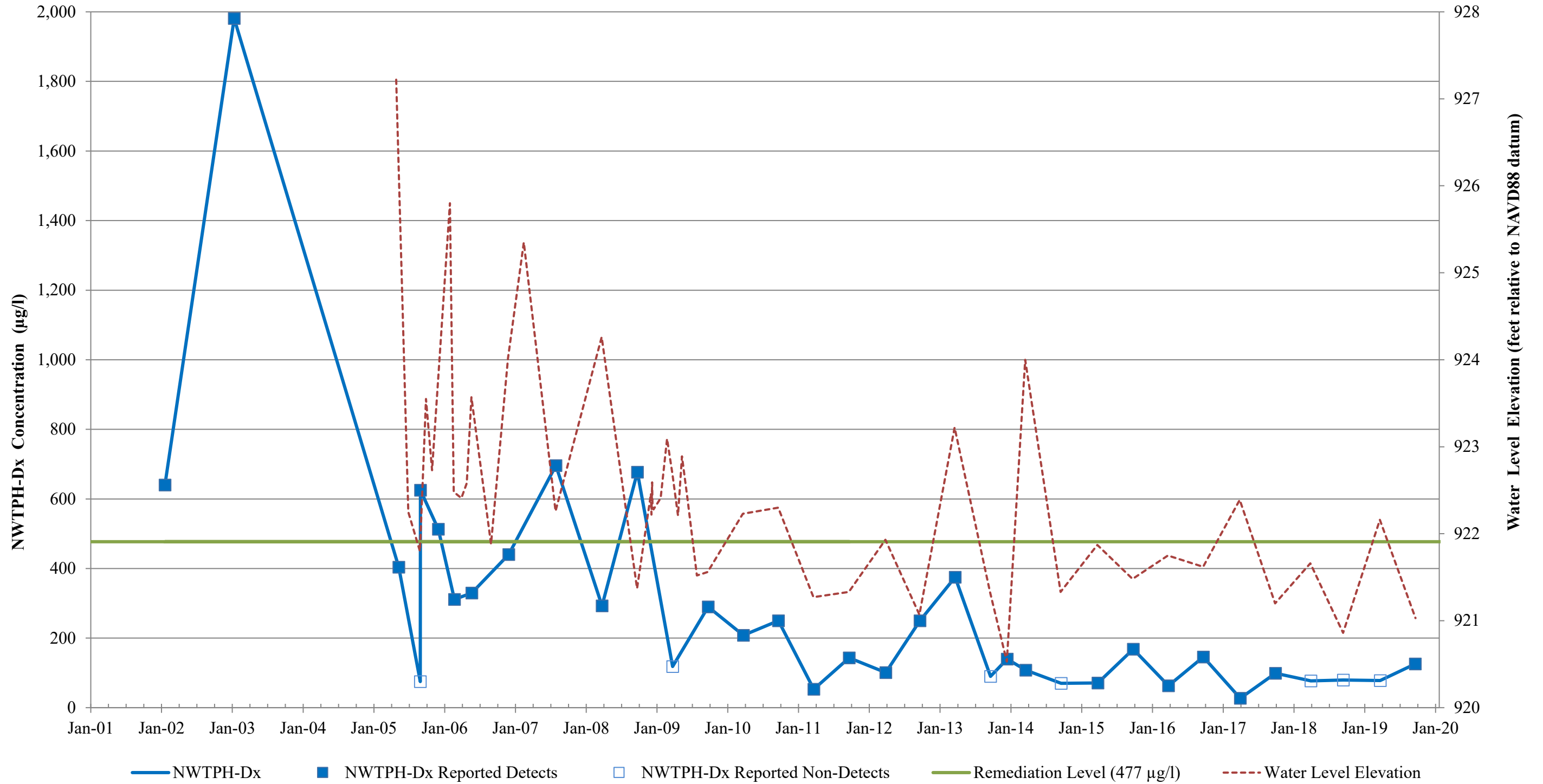
Site-Wide Monitoring Wells

Note: Groundwater NWTPH-Dx results from site-wide monitoring wells located north of the railyard (downgradient) are compared to the RL of 477 micrograms per liter; groundwater NWTPH-Dx results from monitoring wells located within the railyard have no NWTPH-Dx target.

NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well 1A-W-4

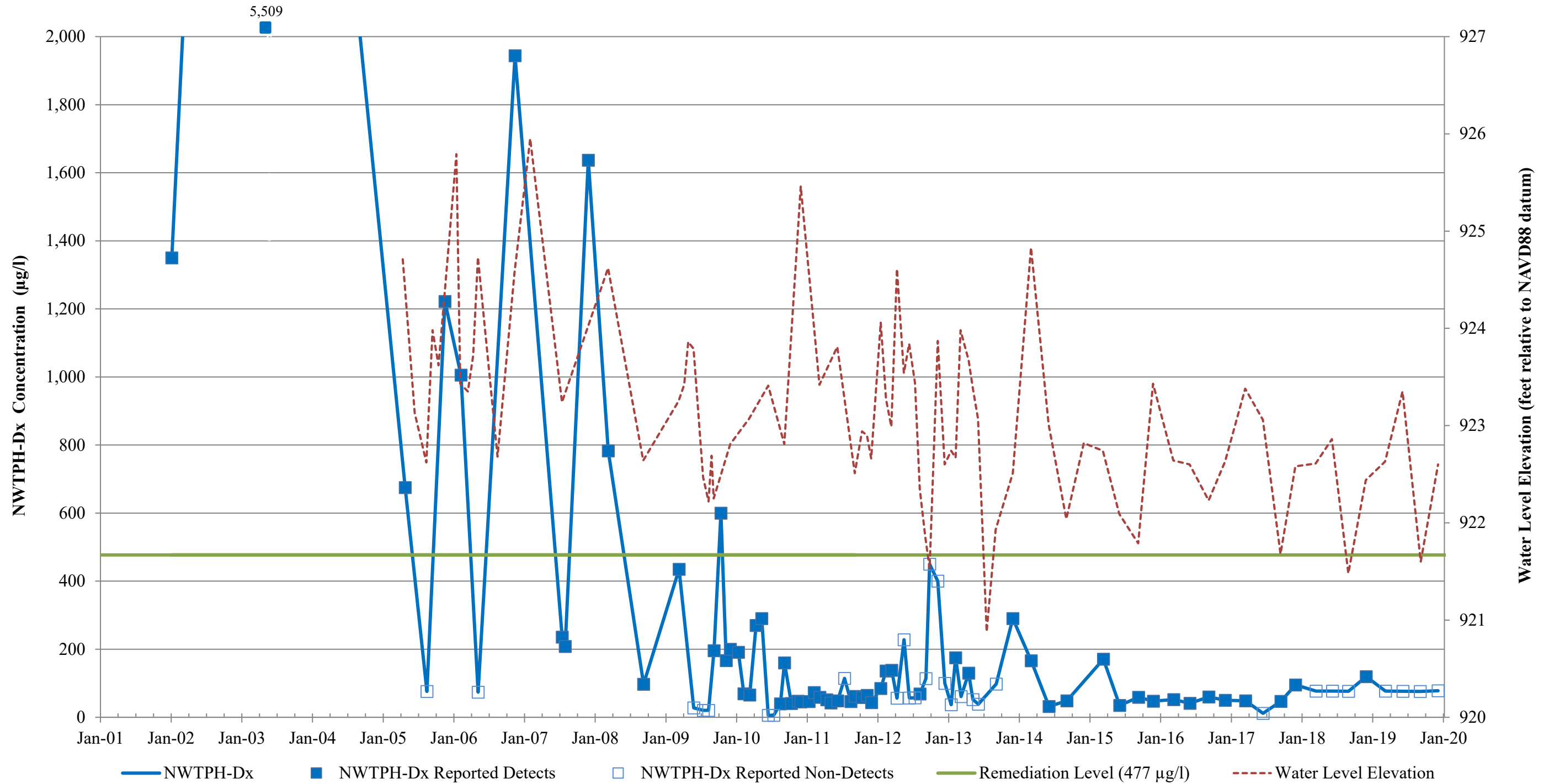


NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well 1B-W-2

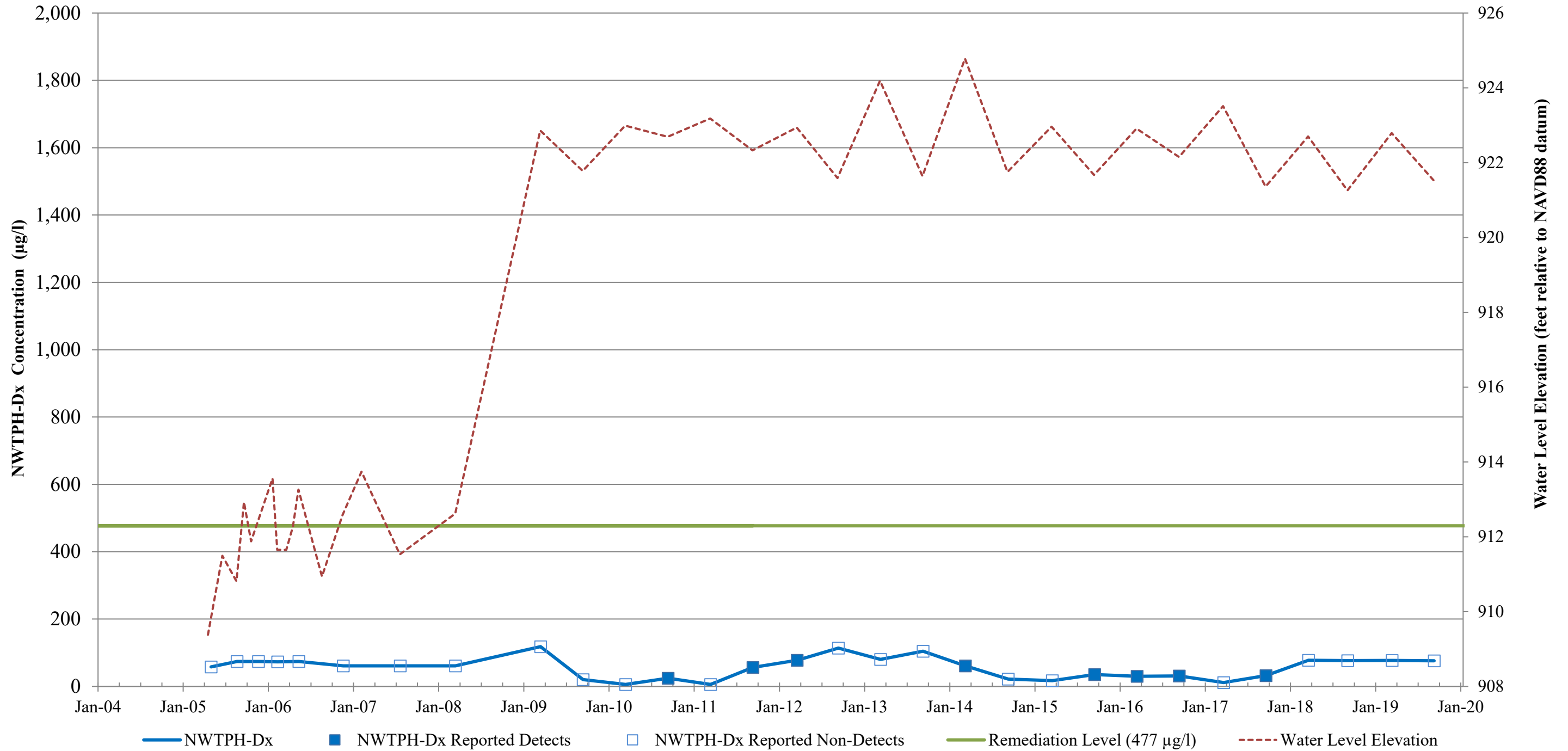


NWTPH-Dx concentrations exceeding the plot scale are shown above the plot area with the associated reported concentration value.

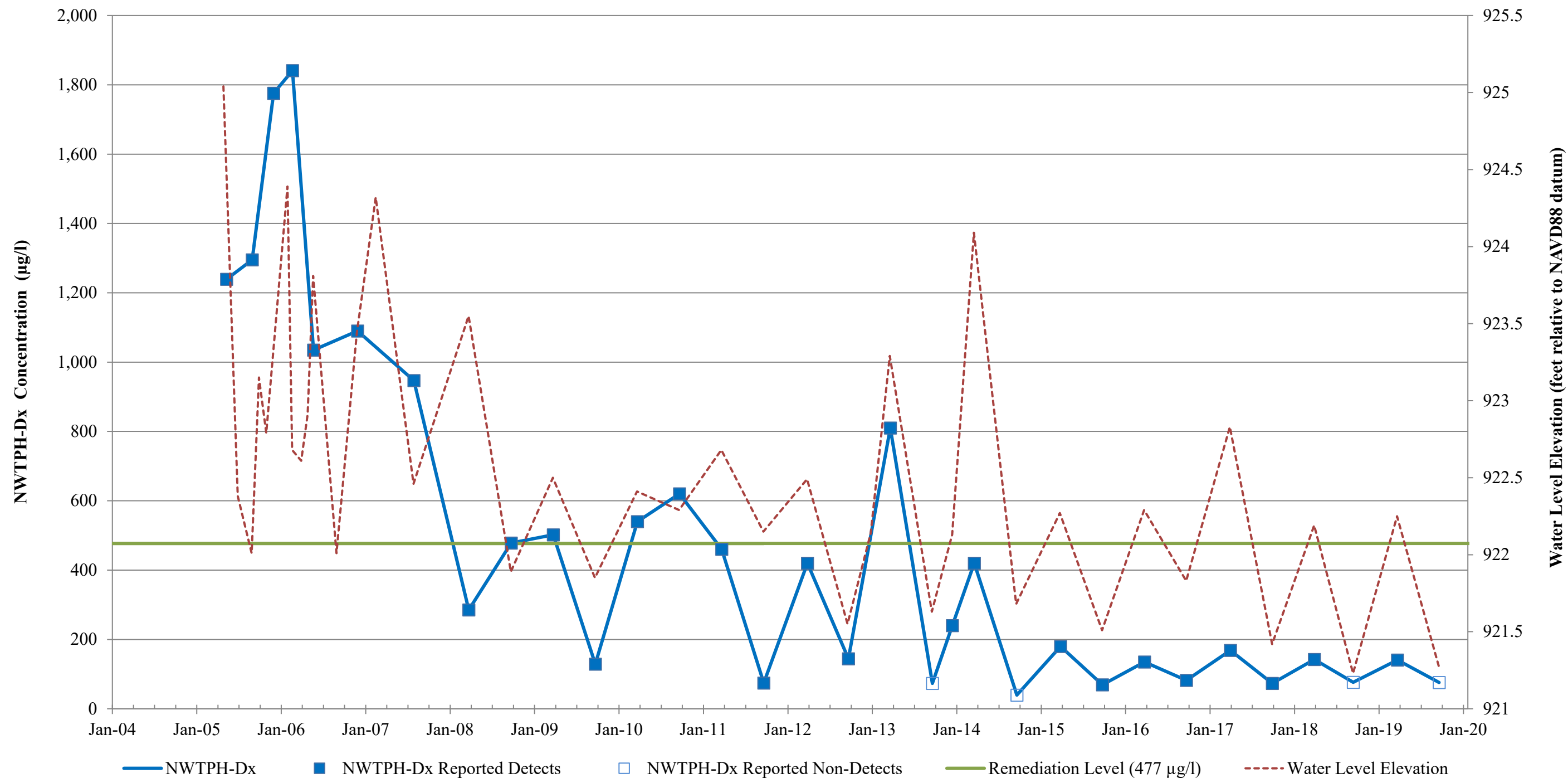
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well 1C-W-1



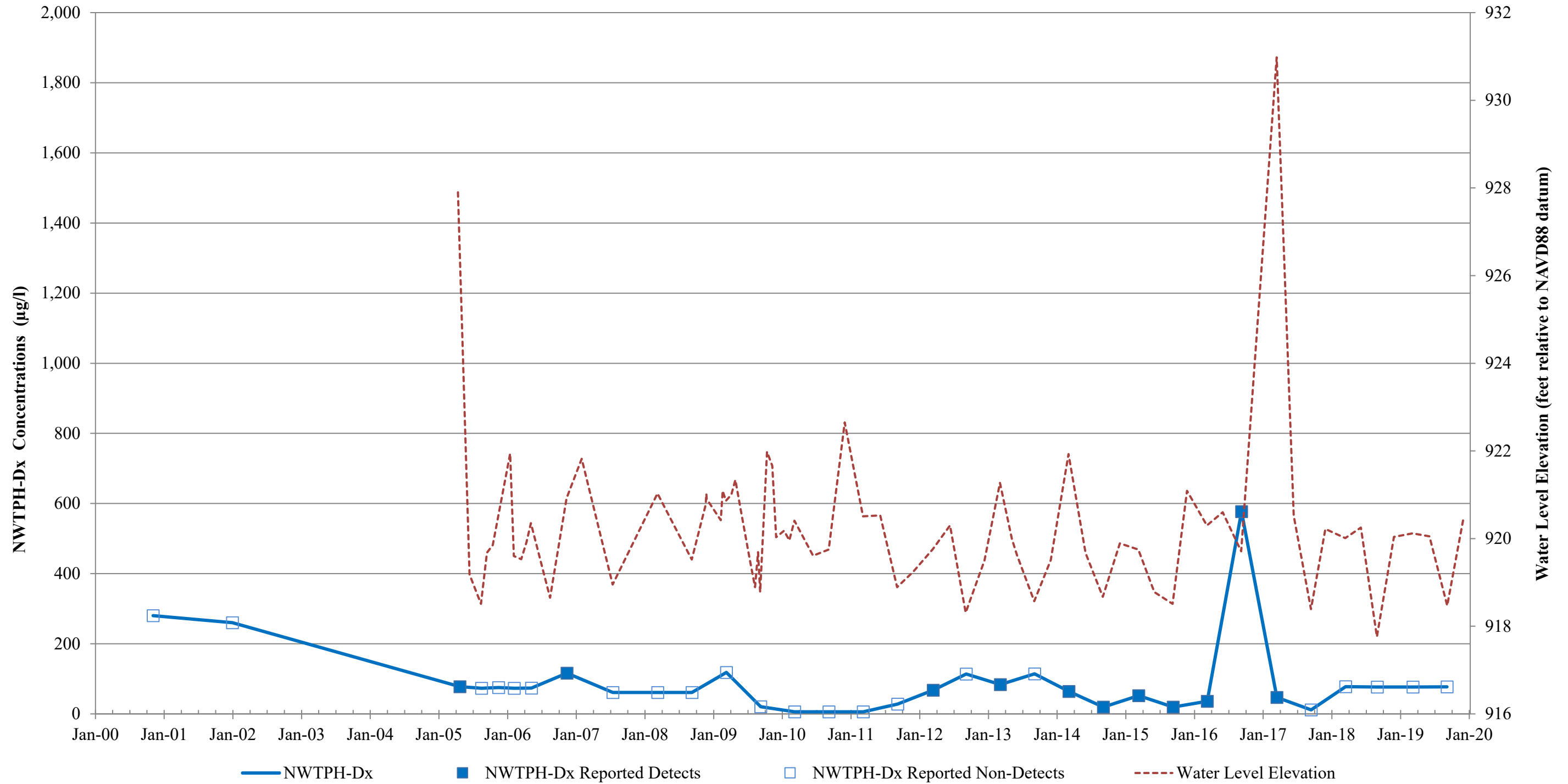
NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well 1C-W-3



NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well 1C-W-4



NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well MW-16



NWTPH-Dx Trend Plot
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-067
Well MW-38R

