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Tanner Bushnell Toxics Cleanup Program Dept. of Ecology 3190 160th Ave SE Bellevue, WA 98008-5452

RE: Final 2020 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. Bushnell:

Enclosed is the Final 2020 Site-Wide Groundwater Monitoring Report for Ecology's records.

Sincerely,

Shu C. D.L

Shane C. DeGross Manager Environmental Remediation, BNSF Railway

cc: Ms. Amy Essig Desai, Farallon Consulting



Washington Issaquah | Bellingham | Seattle

> Oregon Portland | Baker City

> > California Oakland | Irvine

### 2020 SITE-WIDE GROUNDWATER MONITORING REPORT

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

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For: BNSF Railway Company 605 Puyallup Avenue Tacoma, Washington 98421

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## **ACRONYMS AND ABBREVIATIONS**

AECOM	AECOM Environment
BNSF	BNSF Railway Company
CPOC	conditional point of compliance
CUL	the site-specific NWTPH-Dx groundwater cleanup level of 208 micrograms per liter and absence of sheen
DO	dissolved oxygen
DRO	total petroleum hydrocarbons as diesel-range organics
Ecology	Washington State Department of Ecology
Farallon	Farallon Consulting, L.L.C.
HCC	hydraulic control and containment
HWF	hot water flushing
LNAPL	light nonaqueous-phase liquid
MDL	method detection limit
mg/l	milligram per liter
NWTPH-Dx	the sum of diesel- and oil-range organics analyzed using Ecology Method NWTPH-Dx
ORP	oxidation-reduction potential
μg/l	micrograms per liter
ORO	total petroleum hydrocarbons as oil-range organics
RL	the site-specific NWTPH-Dx groundwater remediation level of 477 $\mu$ g/l and absence of sheen



# **EXECUTIVE SUMMARY**

This 2020 Site-Wide Groundwater Monitoring Report summarizes the groundwater monitoring activities conducted in 2020 at the BNSF Railway Company (BNSF) Former Maintenance and Fueling Facility in Skykomish, Washington (herein referred to as the Site). Site-wide groundwater monitoring and sampling events were conducted in March and June 2020 in accordance with the 2010 Compliance Monitoring Plan (AECOM Environment 2010). The Site transitioned to semiannual monitoring in September 2020 under the Long-Term Monitoring Plan (Farallon 2020; Washington State Department of Ecology [Ecology] 2020), which requires semiannual monitoring and sampling in March and September. 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 Ecology Method NWTPH-Dx.

Groundwater flow direction in 2020 generally was consistent with prior years. South (i.e., upgradient) 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 upgradient of and adjacent to the HCC system barrier wall, between the West Gate and Center Gate, which is consistent with prior years; measured LNAPL observations ranged from a light trace (i.e., less than 0.01 foot thick and thin coating of LNAPL and/or a sheen observed on the oil-water interface probe) to 4.35 feet thick. Over the life cycle of the data record, measured LNAPL thicknesses have exhibited an overall decreasing or stable trend, with minor variability.

The site-specific NWTPH-Dx groundwater cleanup level of 208 micrograms per liter ( $\mu$ 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. NWTPH-Dx was not detected at concentrations exceeding the method detection limit (MDL), which is less than the CUL, in the groundwater samples collected from Levee Zone monitoring wells.

The site-specific NWTPH-Dx groundwater remediation level of 477  $\mu$ g/l and absence of sheen (RL) is applicable from the BNSF railyard boundary to the groundwater conditional point of compliance, with the exception of the Skykomish School, where the RL is not required to be met (Ecology 2007). 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 the March 2020 sample collected from HCC system gate well GW-3.

NWTPH-Dx was reported at a concentration of 780  $\mu$ g/l in the March 2020 non-silica gel–prepared groundwater sample collected from gate well GW-3. Due to the observed biofouling at the location since 2014, groundwater samples from gate well GW-3 were analyzed both with and without silica gel cleanup. NWTPH-Dx concentrations in all the silica gel-prepared samples were less than the RL and less than the reported concentrations in the non-silica gel–prepared samples (Appendix D).



The biofouling observations noted proximate to gate well GW-3, and results of the analyses performed with and without silica gel cleanup, demonstrate that the results from the non-silica gel– prepared samples are biased high due to biogenic or petroleum metabolite interferences. Groundwater samples collected from gate well GW-3 will continue to be analyzed both with and without silica gel cleanup to gain additional perspective on biogenic or petroleum metabolite interference.



## **1.0 INTRODUCTION**

This 2020 Site-Wide Groundwater Monitoring Report describes the groundwater monitoring and sampling activities conducted in 2020 at the BNSF Railway Company (BNSF) Former Maintenance and Fueling Facility in Skykomish, Washington (herein referred to as the Site) (Figure 1). Site-wide groundwater monitoring and sampling events were conducted in March and June 2020 in accordance with the 2010 Compliance Monitoring Plan Update (AECOM Environment [AECOM] 2010). The Site transitioned to semiannual monitoring in September 2020 under the Long-Term Monitoring Plan (Farallon 2020; Washington State Department of Ecology [Ecology] 2020), which requires semiannual monitoring and sampling in March and September.

### **1.1 GROUNDWATER MONITORING OBJECTIVES**

The objectives of the groundwater monitoring and sampling program under the 2010 Compliance Monitoring Plan Update (AECOM 2010) were 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).

The objectives of groundwater monitoring and sampling under the Long-Term Monitoring Plan (Farallon 2020) are to confirm the long-term effectiveness of the cleanup actions by demonstrating compliance with the site-specific NWTPH-Dx groundwater cleanup level of 208 micrograms per liter ( $\mu$ g/l) and absence of sheen (CUL) at the conditional point of compliance (CPOC) monitoring wells located within the Levee Zone, and that the site-specific NWTPH-Dx groundwater remediation level of 477  $\mu$ g/l and absence of sheen (RL) is being met at monitoring wells between the BNSF railyard boundary and the CPOC wells, with the exception of the Skykomish School property (Ecology 2007).

### **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 the CUL. The CUL is applicable at the groundwater 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 (Farallon 2020).



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.

Per the Consent Decree No. 07-2-33672-9 SEA dated October 2007 entered into by Ecology and BNSF (Consent Decree), there may be isolated areas outside of the BNSF railyard boundary where the RL cannot be achieved. "Ecology will not require the remediation level 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  $\mu$ g/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, Supplemental Remedial Investigation Volume 1 (The RETEC Group, Inc. 2002), 2007 CAP, and the 2017 Hot Water Flushing Remediation Performance Report (Farallon 2018).

#### **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, References, 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 Compliance Monitoring Plan Update (AECOM 2010) (Figure 1) and 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). During this reporting period, the Site-wide monitoring wells included in the monitoring program and monitoring frequency were modified in accordance with the Long-Term Monitoring Plan (Farallon 2020). The long-term monitoring well network is presented in Appendix A. The dates of the groundwater monitoring events conducted in 2020 are presented in Table 1. Tables 2 and 3 provide additional details regarding the sampling and liquid-level gauging frequencies for the locations included in the groundwater monitoring program.

In addition to the Site-wide monitoring activities described above, locations near the West and Far West Gates included in the Site-wide monitoring were also monitored bimonthly in February, April, June, August, October, and December as part of the Passive Operation Pilot Study described in Appendix A of the 2020 HCC System Operations Report (Farallon 2021).



## **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 2020 were analyzed by TestAmerica Laboratories, Inc. of Tacoma, Washington. The groundwater analytical results were independently validated by Sayler Data Solutions, Inc. of Kirkland, Washington.

### **3.1 SAMPLING METHODS**

Liquid-level gauging and groundwater sampling were conducted in accordance with the 2010 GWMP and the Long-Term Monitoring Plan (Farallon 2020). 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 gate well GW-3 and monitoring well 2A-W-41 also were analyzed by Ecology Method NWTPH-Dx with a silica gel cleanup preparation process, if NWTPH-Dx was detected at a concentration exceeding the RL, to assess biogenic and/or petroleum metabolite interference.

#### **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 B.

Sayler 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 and the Long-Term Monitoring Plan (Farallon 2020). The data validation procedures were based on U.S. Environmental Protection Agency (2008) *Contract Laboratory Program National Functional Guidelines for Superfund 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 groundwater quality. Data validation reports are provided in Appendix C.



## 4.0 **RESULTS AND DISCUSSION**

The results from the 2020 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 5. Figures 6 through 8 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 D.

### 4.1 GROUNDWATER LEVELS AND GRADIENT DIRECTIONS

As shown on Figures 3 through 5, 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 (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 0 to 5.34 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 generally smaller in magnitude, ranging from 1.04 to 2.61 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.

Interpreted hydraulic gradients in 2020 were generally consistent with prior 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. 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. Gradient magnitudes on the northern side of the HCC system barrier wall were on the order of 0.01 to 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 2020.



Groundwater temperatures varied seasonally, ranging from 3.0 degrees Celsius (°C) in monitoring well 2A-W-10 in March 2020 to 15.8 °C in monitoring well 5-W-55 in September 2020. Groundwater pH values were generally consistent with prior years, ranging from 5.51 to 7.01 during the June 2020 event. Measured DO concentrations were also generally consistent with prior years, ranging from 0.15 milligram per liter (mg/l) in monitoring well MW-38R in March 2020 to 11.54 mg/l in monitoring well 1B-W-23 in March 2020. In general, monitoring wells with no reported detections of petroleum hydrocarbons exhibited higher DO values (average of 4.73 mg/l) than monitoring wells with reported detections (average of 1.98 mg/l), indicating that the petroleum hydrocarbons in groundwater are biodegrading aerobically.

ORP values were generally consistent with prior years, ranging from -206 millivolts in monitoring well 2A-W-9 in June 2020 to 239.5 millivolts in end well EW-2A in June 2020. Of the 82 ORP values measured in 2020, 72 were positive. The predominantly positive ORP values and DO concentrations exceeding 1.0 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 presents groundwater analytical results for the DRO and ORO fractions and calculated total NWTPH-Dx concentrations. Figures 6 through 8 illustrate the NWTPH-Dx results for each groundwater monitoring event and the estimated areal extent of LNAPL. NWTPH-Dx trend plots are provided in Appendix D.

#### 4.3.1 Levee Zone Monitoring Wells

Monitoring wells 5-W-14 and 5-W-16 through 5-W-19 were sampled in March, June, and September 2020. LNAPL or sheen was not observed in any of the Levee Zone monitoring wells. NWTPH-Dx was not detected at concentrations greater than the MDL in any groundwater samples collected from the Levee Zone monitoring wells.

#### 4.3.2 Schoolyard Monitoring Wells

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 for evaluation of post-HWF treatment groundwater quality only (former recovery well RW-10 was retained for gauging only, to monitor for the presence of LNAPL). Groundwater at the schoolyard monitoring wells is not required by Ecology to meet the RL (see discussion in Section 1.2) (Ecology 2007).



Monitoring wells 5-W-51, 5-W-55, and 5-W-56 were sampled in March, June, and September 2020. Recovery well RW-10 was gauged for the presence of LNAPL in March, June, and September 2020. NWTPH-Dx was reported at concentrations ranging from 201 to 1,530 µg/l in the groundwater sample collected from monitoring well 5-W-51 and from 665 to 1,600 µg/l in the groundwater sample collected from monitoring well 5-W-56. NWTPH-Dx was not detected in any of the groundwater samples collected from monitoring well 5-W-55 in 2020.

A heavy trace of LNAPL was observed in recovery well RW-10 during the March 2020 groundwater monitoring event and a light trace of LNAPL was observed in recovery well RW-10 during the June and September groundwater monitoring events. LNAPL or sheen was not observed in any of the Levee Zone monitoring wells situated down-gradient of recovery well RW-10 during any of the monitoring events.

### 4.3.3 Hydraulic Control and Containment System Sentry and Monitoring Wells

Per the 2010 Compliance Monitoring Plan Update (AECOM 2010), sentry wells were sampled semiannually, and for this year were sampled during the March 2020 event. The HCC system monitoring wells were gauged and sampled during the March, June, and September 2020 events. The recovery wells were gauged during the March, June, and September 2020 events for the presence or absence of LNAPL or sheen. The piezometers were gauged during the March and June 2020 events for the presence or absence of LNAPL or sheen. The barrier wall gate oil-water separator chamber vaults were gauged during the June 2020 event for the presence or absence of LNAPL or sheen.

NWTPH-Dx was not detected in any sentry well sample, with the exception of one March 2020 sample (400 ug/L) collected from up-gradient sentry well S2-BU located in the east vault of the West Gate (Table 6; Figure 6). NWTPH-Dx was not detected in its corresponding down-gradient sentry well S2-BD.

NWTPH-Dx was detected at concentrations less than RL in the groundwater samples collected from the 11 HCC system monitoring wells (GW-1 through GW-4, EW-1, EW-2A, 5-W-43, 2A-W-40, 2A-W-41, 2A-W42, and 1B-W-23) in 2020 with the exception of the March 2020 sample (780 µg/l) collected from gate well GW-3, (Table 6; Figure 6). The same sample was also analyzed following a silica gel cleanup preparation process with a reported concentration of 130  $\mu$ g/l (Table 6).

Gate well GW-3 is immediately north and down-gradient of the Center Gate, where substantial biofouling by iron bacteria slime has been observed since 2014. NWTPH-Dx in groundwater at this location has been variable since biofouling was first observed (Appendix D). Groundwater samples from gate well GW-3 were analyzed with and without silica gel cleanup to further assess sample interference. NWTPH-Dx concentrations in all the silica gel-prepared samples were less than the RL, and notably less than the NWTPH-Dx concentrations in the non-silica gel-prepared samples (Appendix D). The lower NWTPH-Dx concentrations reported in the silica gel-prepared samples from gate well GW-3 add an additional line of evidence that reported concentrations in the non-silica gel-prepared samples are biased high due to interference and that the NWTPH-Dx



concentrations reported at gate well GW-3 do not indicate that breakthrough of groundwater containing NWTPH-Dx greater than the RL is occurring.

LNAPL was observed in monitoring wells and piezometers up-gradient of and adjacent to the HCC system barrier wall, between the West Gate and Center Gate, which is consistent with prior years. LNAPL observations ranged from a light trace (i.e., less than 0.01 foot thick and thin coating of LNAPL and/or a sheen observed on the oil-water interface probe) to 4.35 feet thick. Measurable LNAPL (i.e., greater than 0.01 foot thick) was only observed at piezometers PZ-5S and PZ-6S, located on the southern (up-gradient) side of the barrier wall during both monitoring events as expected (Table 4):

- **PZ-5S**. Measurable LNAPL was recorded in March (2.27 feet) and June (4.35 feet). The measured LNAPL thicknesses in March and June 2020 were an overall slight increase in LNAPL thickness compared to 2019 and corresponded with decreases in groundwater elevation as measured with the in-well pressure transducers. LNAPL was not observed in the down-gradient piezometer (PZ-5N) paired with piezometer PZ-5S.
- **PZ-6S**. A heavy trace of LNAPL was observed in March 2020 and measurable LNAPL 0.05 feet thick was recorded in June 2020, which was a decrease in LNAPL thickness compared to 2019. LNAPL was not observed in the down-gradient piezometer (PZ-6N) paired with piezometer PZ-6S.

Over the data record, measured LNAPL thicknesses have exhibited an overall decreasing or stable trend, with minor variability (Appendix E).

As part of the Passive Operations Pilot Study, sentry wells S2-AU, S2-AD, S2-BU, and S2-BD; end well EW-1; monitoring well 5-W-43; and gate wells GW-1 and GW-2 were gauged and sampled in February, April, August, October, and December. Piezometers PZ-7S and PZ-8; recovery wells RW-05 and RW-06; and oil-water separator chamber vaults WG-WV, WG-EV, FWG-WV, and FWG-EV were also gauged in February, April, August, October, and December as part of the Passive Operations Pilot Study; these sampling and gauging results are presented in the 2020 HCC System Operations Report (Farallon 2021, see Appendix A) and are not discussed in this report.

#### 4.3.4 Former Air Sparge Area Monitoring Wells

Monitoring wells 1C-W-7 and 1C-W-8 were sampled in March, June, and September 2020 and monitoring well 1B-W-3 was sampled in March and June 2020. NWTPD-Dx was reported in the March and June groundwater samples collected from monitoring well 1C-W-7 at concentration of 220 and 109  $\mu$ g/l, respectively. NWTPH-Dx was not detected in any other groundwater samples collected from the Former Air Sparge Area in 2020. 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-4 and 2A-W-9 were sampled in March, June, and September 2020. Monitoring wells 2A-W-10 and 2B-W-4 were sampled in March and June 2020. NWTPH-Dx concentrations were less than the RL in the groundwater samples collected from these monitoring wells (Table 6; Figures 6, 7, and 8). LNAPL or sheen was not observed in any of the Former Maloney Creek Zone monitoring wells.

Monitoring well MW-3 could not be sampled during the March and June 2020 events due to damage to the well from the intrusion of roots into the well casing and it has been removed from the monitoring program under the Long-Term Monitoring Plan (Farallon 2020). During the December 2019 groundwater monitoring event, woody debris was observed on the end of the water-level indicator while liquid level gauging was being conducted in monitoring well MW-3. In addition, the total depth of the well was measured at approximately 10.5 feet below ground surface. During prior groundwater monitoring events, the total depth of well MW-3 was generally measured at approximately 20 feet below ground surface. On February 17, 2020, a down-well camera was used to evaluate the condition of monitoring well MW-3. The results of the scope confirmed that roots have damaged and infiltrated the well casing.

#### 4.3.6 Site-Wide Monitoring Wells

Monitoring wells 1A-W-4, 1B-W-2, 1C-W-3, and MW-38R were sampled in March 2020; monitoring well 1C-W-1 was sampled in March and June 2020; and monitoring well 1C-W-4 was sampled in March and September 2020. NWTPH-Dx was not detected greater than the MDL in any of the groundwater samples collected from monitoring wells north of the railyard. LNAPL or sheen was not observed in any of the Site-wide monitoring wells.



### 5.0 CONCLUSIONS

The groundwater monitoring data indicate that LNAPL thicknesses and NWTPH-Dx concentrations in groundwater remained stable or decreased in 2020. NWTPH-Dx was not detected in the groundwater samples collected from the Levee Zone monitoring wells near the Skykomish River.

LNAPL was observed in monitoring wells and piezometers up-gradient of and adjacent to the HCC system barrier wall, between the West Gate and Center Gate, which is consistent with prior years. LNAPL observations ranged from a light trace to 4.35 feet thick. LNAPL thicknesses have exhibited an overall decreasing or stable trend, with minor variability since LNAPL gauging began in 2012 (Appendix E).

NWTPH-Dx was reported at a concentration of 780  $\mu$ g/l in the March 2020 non-silica gel-prepared groundwater sample collected from gate well GW-3. Due to the observed biofouling at the location since 2014, groundwater samples from gate well GW-3 were analyzed both with and without silica gel cleanup. NWTPH-Dx concentrations in all the silica gel-prepared samples were less than the RL and less than the reported concentrations in the non-silica gel-prepared samples (Appendix D). The lower NWTPH-Dx concentrations reported in the silica gel-prepared samples from gate well GW-3 add an additional line of evidence that reported concentrations in the non-silica gel-prepared samples from gate well GW-3 add an additional line of evidence that reported concentrations in the non-silica gel-prepared samples from gate well GW-3 add an additional line of evidence that reported concentrations in the non-silica gel-prepared samples are biased high due to interference.



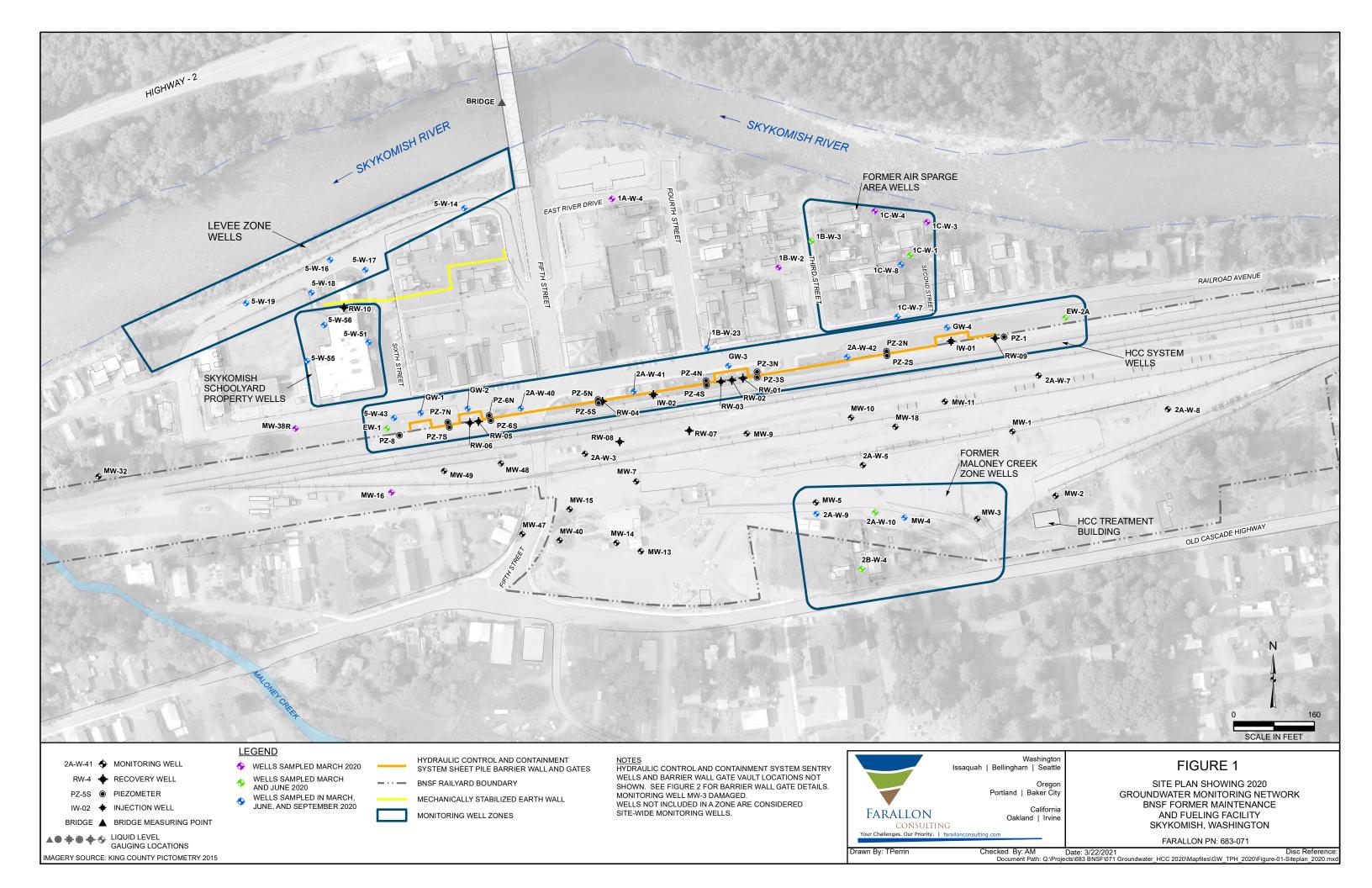
### 6.0 REFERENCES

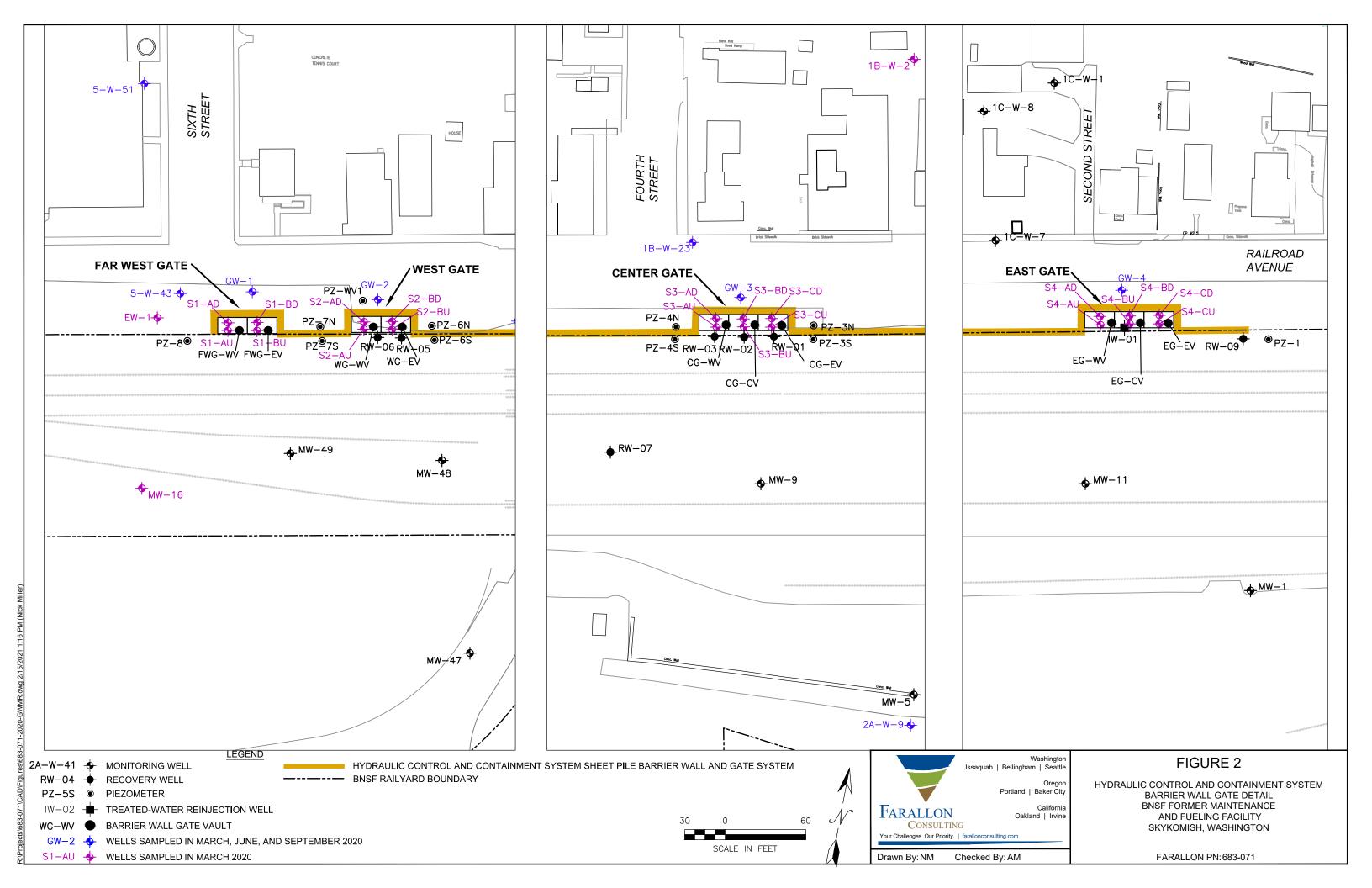
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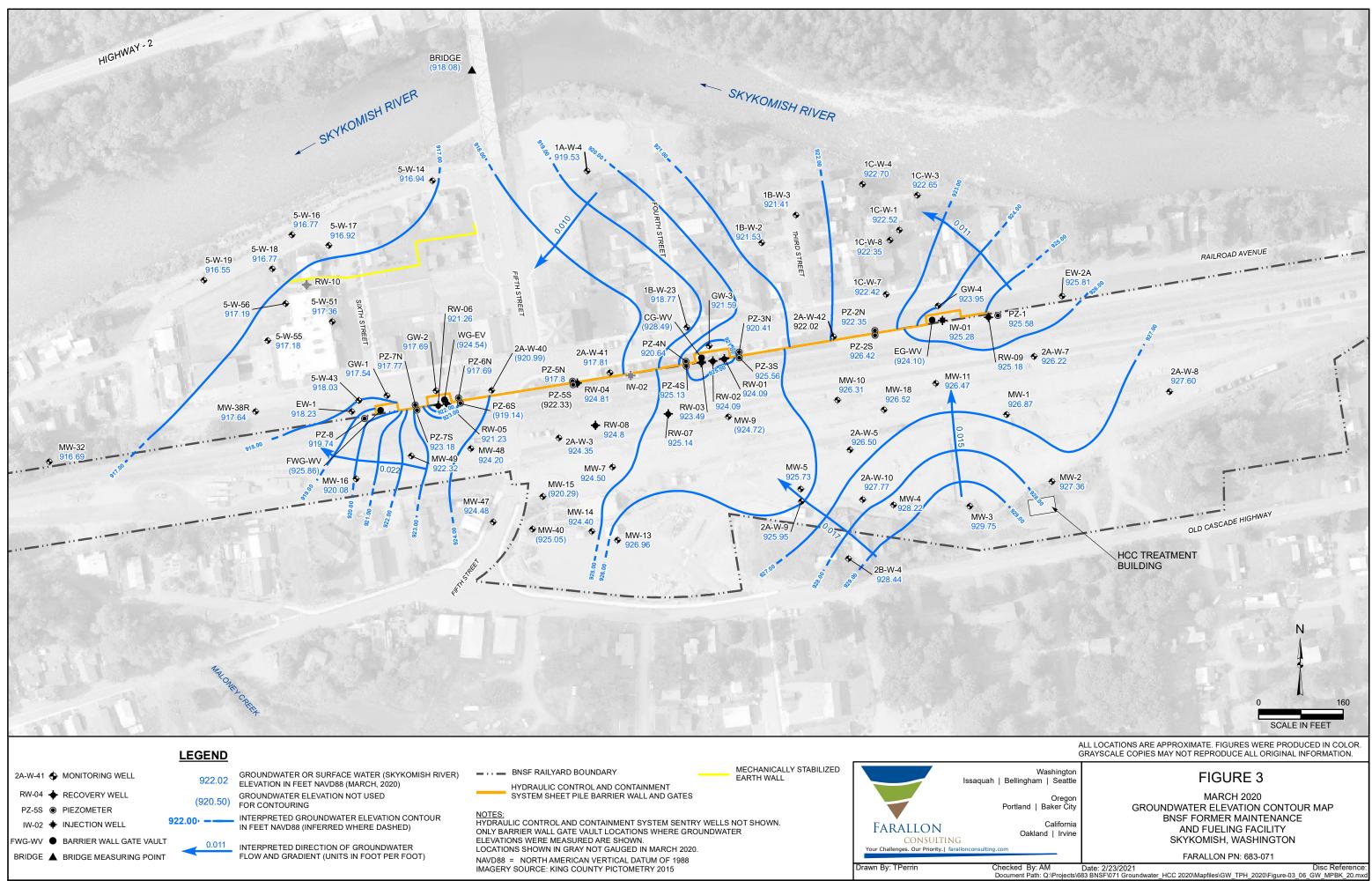
## FIGURES

# 2020 SITE-WIDE GROUNDWATER MONITORING REPORT BNSF Former Maintenance and Fueling Facility Skykomish, Washington Consent Decree No. 07-2-33672-9 SEA

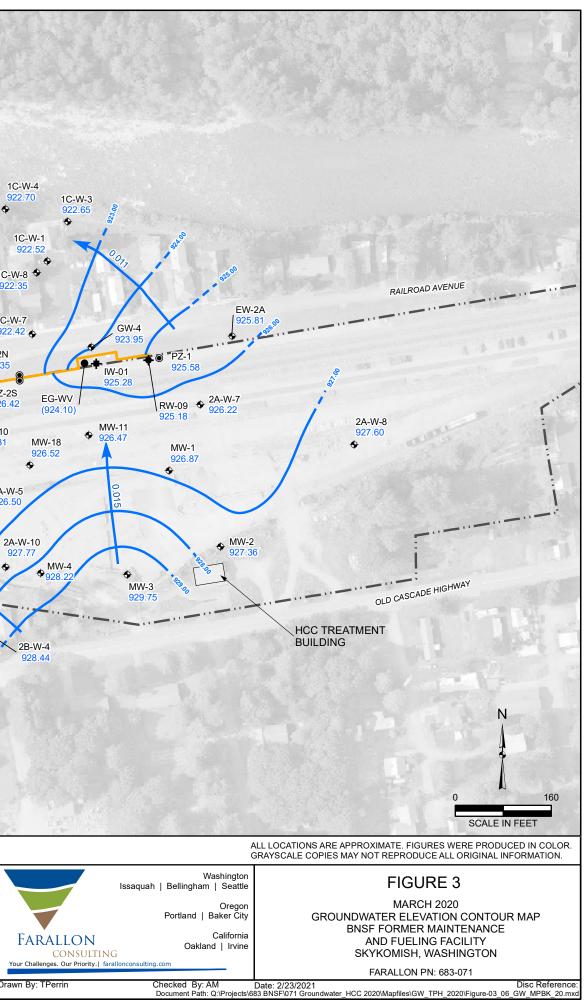
Farallon PN: 683-071

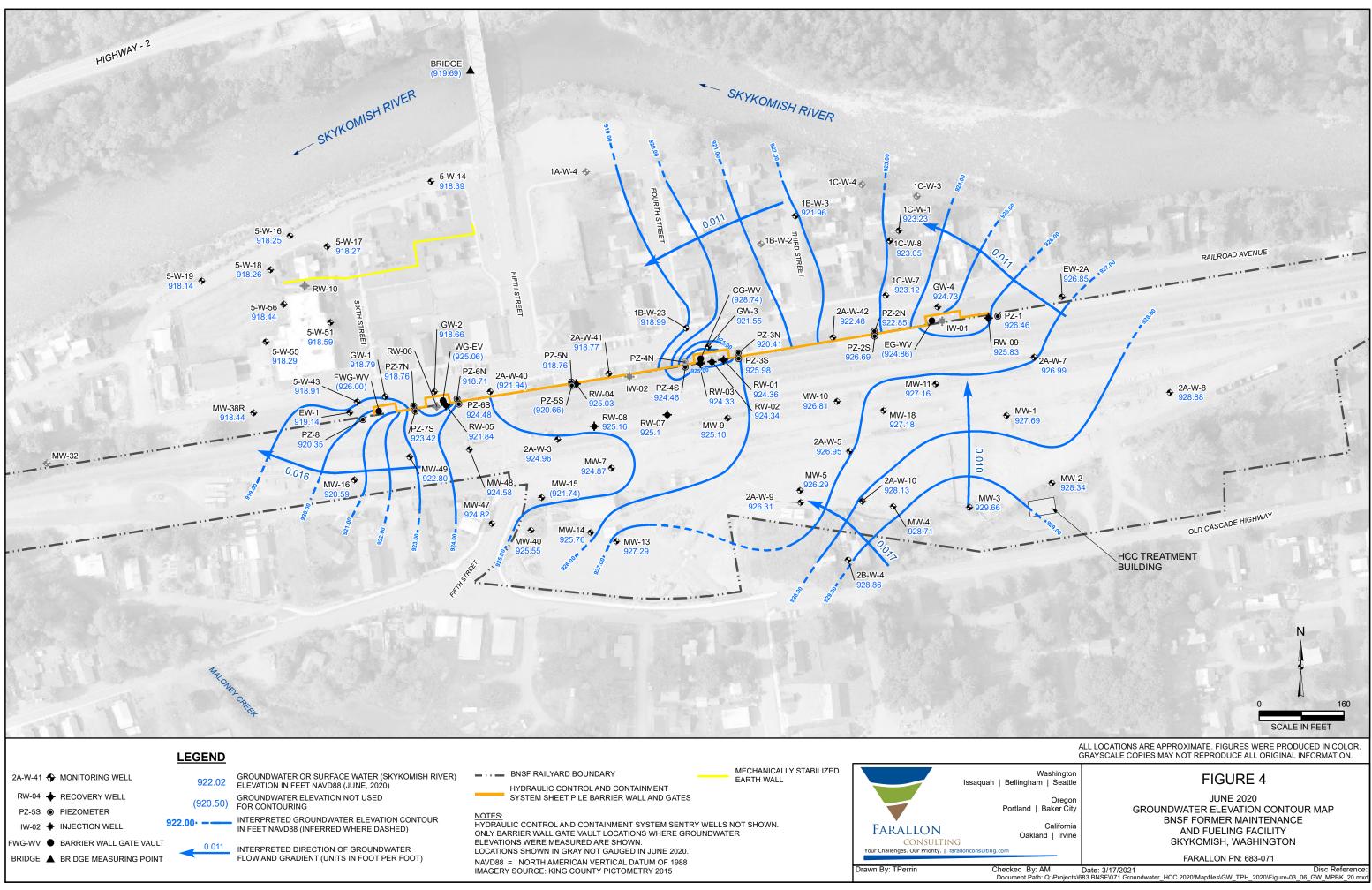


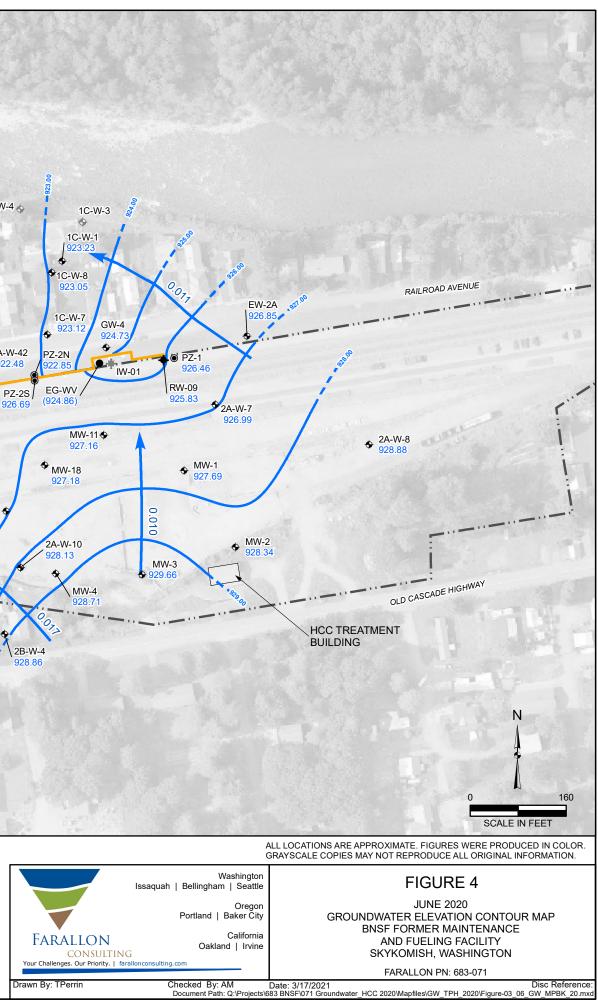


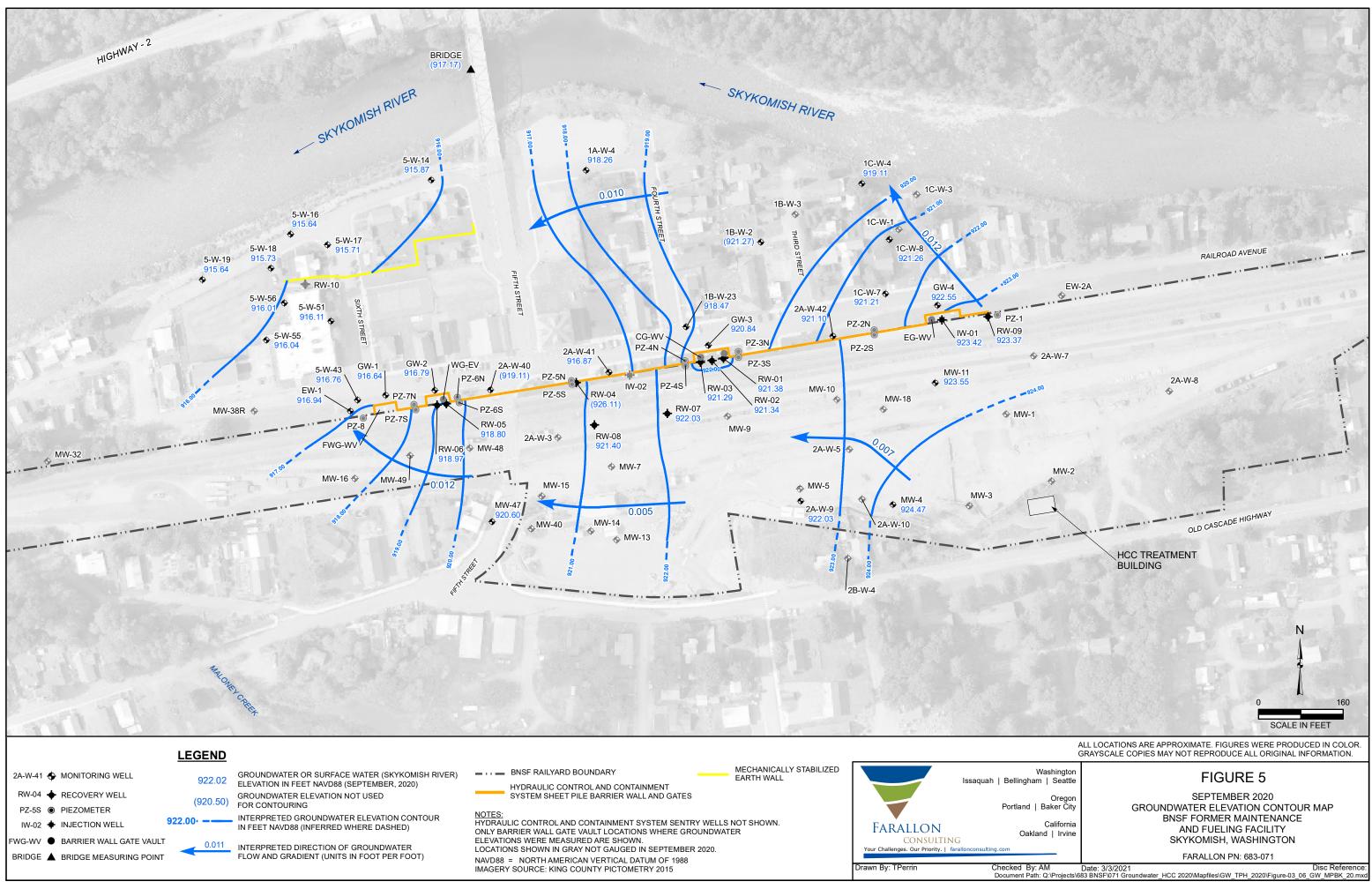


-02	÷	INJECTION WELL	

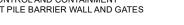




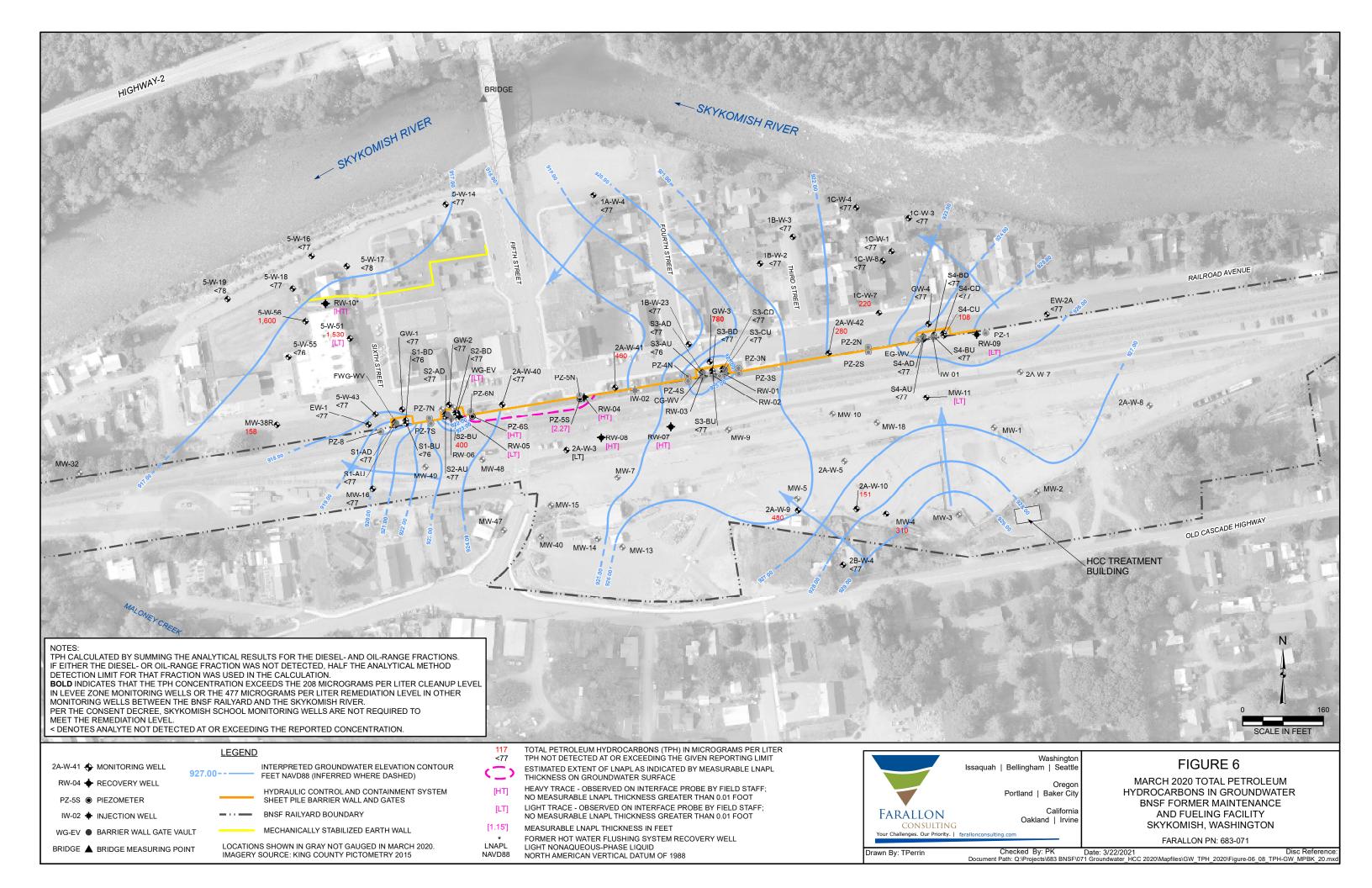


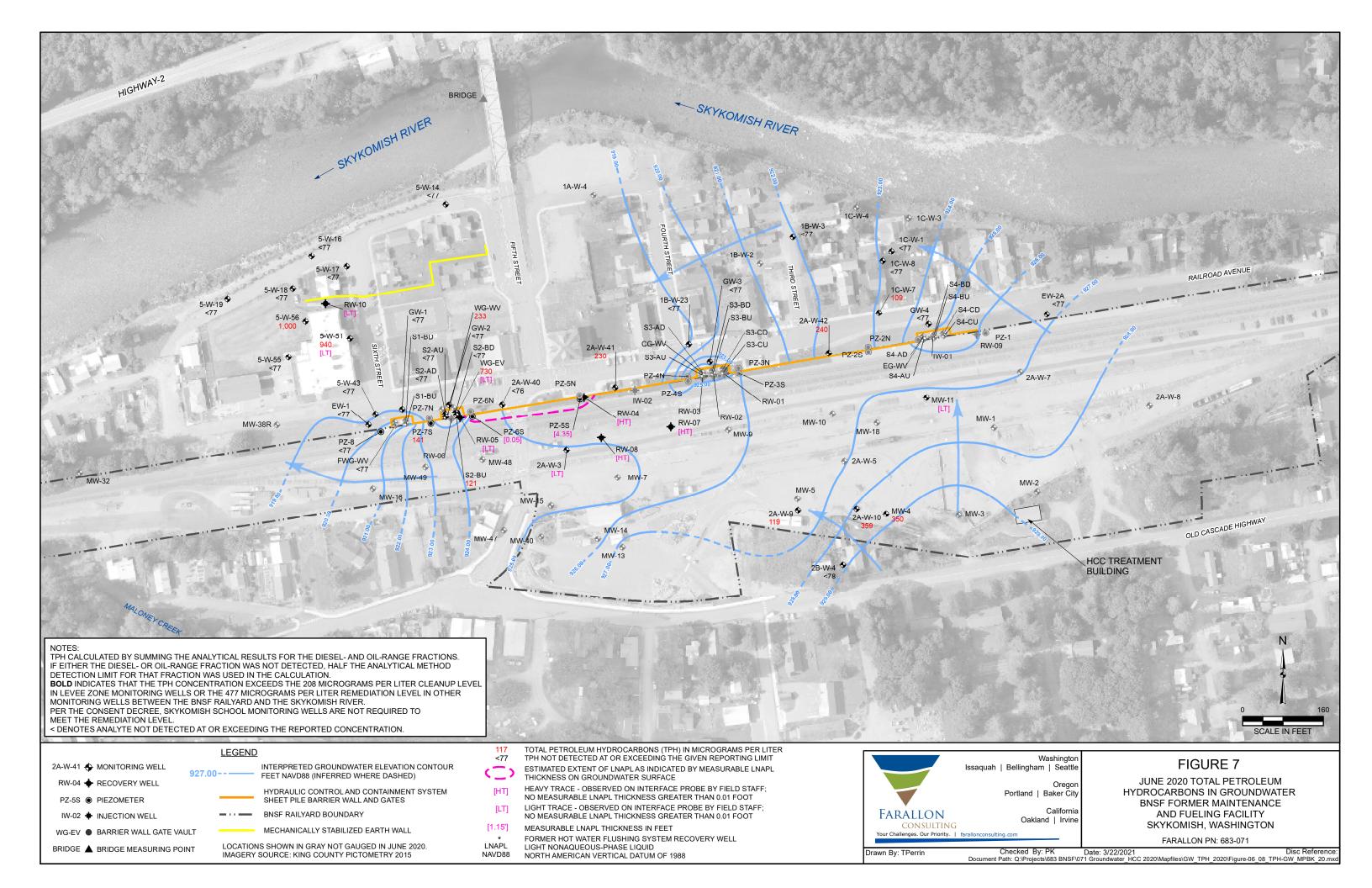


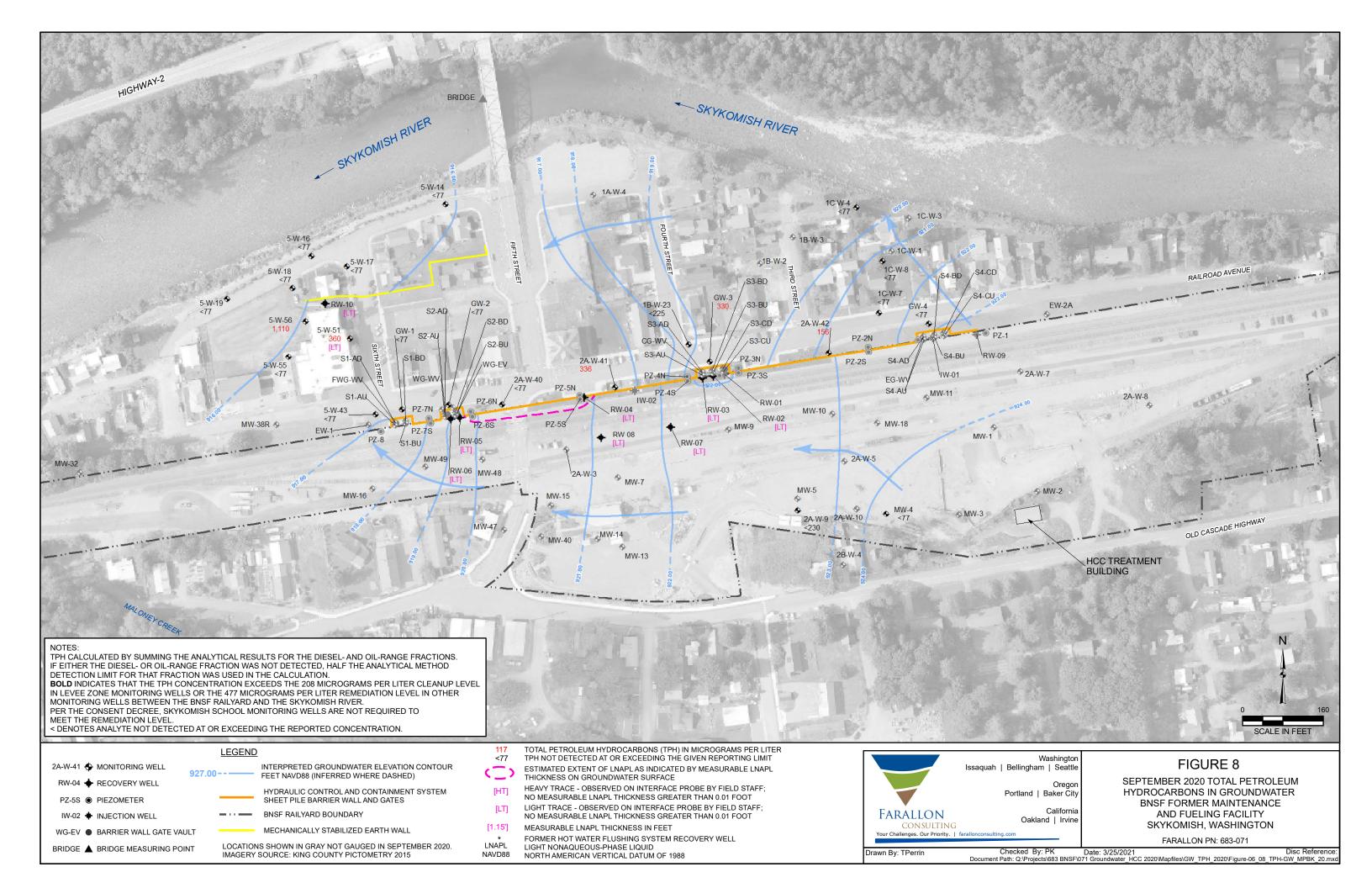
÷	INJECTION WELL	922.
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## TABLES

# 2020 SITE-WIDE GROUNDWATER MONITORING REPORT BNSF Former Maintenance and Fueling Facility Skykomish, Washington Consent Decree No. 07-2-33672-9 SEA

Farallon PN: 683-071

# Table 12020 Groundwater Monitoring Event DatesBNSF Former Maintenance and Fueling FacilitySkykomish, WashingtonFarallon PN: 683-071

Monitoring Event	Start Date	End Date
March Event <sup>1</sup>	03/16/2020	03/18/2020
June Event <sup>1</sup>	06/23/2020	06/24/2020
September Event <sup>2</sup>	09/15/2020	09/16/2020

NOTES:

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

<sup>1</sup> Conducted in accordance with the 2010 Compliance Monitoring Plan Update, BNSF Former Maintenance and Fueling Facility – Skykomish, Washington, Appendix E dated April 30, 2010, prepared by AECOM Environment.

<sup>2</sup> Conducted in accordance with the *Final Long-Term Monitoring Plan, BNSF Former Maintenance and Fueling Facility, Skykomish, Washington, Consent Decree NO. 07-2-33672-9 SEA dated November 26, 2020, prepared by Farallon.* 

# Table 22020 Groundwater Sampling LocationsBNSF Former Maintenance and Fueling FacilitySkykomish, WashingtonFarallon PN: 683-071

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

# Table 22020 Groundwater Sampling LocationsBNSF Former Maintenance and Fueling FacilitySkykomish, WashingtonFarallon PN: 683-071

Area/Well Group	Well	March Monitoring Event <sup>1</sup>	June Monitoring Event <sup>1</sup>	September Monitoring Event <sup>2</sup>	Analyte
E	1B-W-3	Х	Х	_	NWTPH-Dx
Former Air Sparge Area	1C-W-7	Х	Х	Х	NWTPH-Dx
7 ii cu	1C-W-8	Х	Х	Х	NWTPH-Dx
	MW-3	Damaged	Damaged	_	NWTPH-Dx
	MW-4	Х	Х	Х	NWTPH-Dx
Former Maloney Creek Zone	2A-W-9	Х	Х	Х	NWTPH-Dx
CICCK ZOIIC	2A-W-10	Х	Х		NWTPH-Dx
	2B-W-4	Х	Х		NWTPH-Dx
	1A-W-4	Х		_	NWTPH-Dx
	1B-W-2	Х			NWTPH-Dx
	1C-W-1	Х	Х		NWTPH-Dx
Site-Wide	1C-W-3	Х			NWTPH-Dx
	1C-W-4	Х		Х	NWTPH-Dx
	MW-16	Х			NWTPH-Dx
	MW-38R	Х		_	NWTPH-Dx

NOTES:

"-" denotes well not sampled.

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

<sup>1</sup> Conducted in accordance with the 2010 Compliance Monitoring Plan Update, BNSF Former Maintenance and Fueling Facility – Skykomish, Washington, Appendix E dated April 30, 2010, prepared by AECOM Environment.

<sup>2</sup> Conducted in accordance with the Final Long-Term Monitoring Plan BNSF Former Maintenance and Fueling Facility, Skykomish, Washington, Consent Decree NO. 07-2-33672-9 SEA dated November 26, 2020, prepared by Farallon.

# Table 32020 Liquid-Level Gauging FrequencyBNSF Former Maintenance and Fueling FacilitySkykomish, WashingtonFarallon PN: 683-071

		Gauging Frequency				
Area/Well Group	Location	Continuous <sup>1</sup>	March Monitoring Event	June Monitoirng Event	September Monitoring Event	
	5-W-14	—	Х	Х	Х	
	5-W-16	_	Х	Х	Х	
Levee Zone	5-W-17		Х	Х	Х	
	5-W-18		Х	Х	Х	
	5-W-19	_	Х	Х	Х	
	5-W-51		Х	Х	Х	
0.11	5-W-55	_	Х	Х	Х	
Schoolyard	5-W-56	_	Х	Х	Х	
	RW-10	_	Х	Х	Х	
	IW-01		Х	_	Х	
	PZ-1	Х	Х	Х	—	
	PZ-2N	Х	Х	Х		
	PZ-2S	Х	Х	Х	_	
	PZ-3N	X	Х	Х	_	
	PZ-3S	X	Х	Х	_	
	PZ-4N	X	Х	Х	—	
	PZ-4S	Х	Х	Х	_	
	PZ-5N	X	Х	Х		
	PZ-5S	X	Х	Х	_	
	PZ-6N	X	Х	Х		
Waa a	PZ-6S	X	Х	Х	_	
HCC System	PZ-7N	Х	Х	Х	_	
	PZ-7S	X	Х	Х	_	
	PZ-8	X	Х	Х	_	
	RW-01	Х	Х	Х	Х	
	RW-02	X	Х	Х	Х	
	RW-03	Х	Х	Х	Х	
	RW-04	X	Х	Х	Х	
	RW-05	X	X	Х	Х	
	RW-06	X	X	X	X	
	RW-07	X	X	X	X	
	RW-08	X	X	X	X	
	RW-09	X	X	X	X	

# Table 32020 Liquid-Level Gauging FrequencyBNSF Former Maintenance and Fueling FacilitySkykomish, WashingtonFarallon PN: 683-071

Area/Well GroupLocationContinuous1EG-EV-South Chamber—EG-EV-South Chamber—EG-CV-South Chamber—EG-CV-South Chamber—EG-CV-South Chamber—EG-W-South Chamber—EG-W-South Chamber—CG-EV-South Chamber—CG-EV-South Chamber—CG-EV-South Chamber—CG-CV-North Chamber—CG-CV-North Chamber—CG-CV-North Chamber—CG-CV-North Chamber—CG-CV-North Chamber—CG-CV-North Chamber—CG-WV-South Chamber—CG-WV-North Chamber—WG-EV-South Chamber—WG-EV-North Chamber—WG-WV-North Chamber—WG-WV-North Chamber—FWG-WV-North Chamber—FWG-WV-North Chamber—FWG-WV-North Chamber—FWG-WV-North Chamber—GW-1—GW-2—GW-3—GW-4—EW-10—EW-2A—S-W-43—2A-W-40—2A-W-40—2A-W-41—1B-W-23—	Gauging Frequency				
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	March Monito		September		
$ \begin{tabular}{ c c c c c } \hline EG-EV-North Chamber & \\ \hline EG-CV-South Chamber & \\ \hline EG-CV-North Chamber & \\ \hline EG-WV-South Chamber & \\ \hline EG-WV-North Chamber & \\ \hline CG-EV-South Chamber & \\ \hline CG-EV-South Chamber & \\ \hline CG-CV-South Chamber & \\ \hline CG-CV-South Chamber & \\ \hline CG-CV-South Chamber & \\ \hline CG-WV-South Chamber & \\ \hline WG-EV-South Chamber & \\ \hline WG-EV-South Chamber & \\ \hline WG-EV-South Chamber & \\ \hline WG-WV-South Chamber & \\ \hline WG-WV-South Chamber & \\ \hline WG-WV-South Chamber & \\ \hline FWG-EV-South Chamber & \\ \hline FWG-EV-North Chamber & \\ \hline FWG-WV-South Chamber & \\ \hline FWG-WV-South Chamber & \\ \hline FWG-WV-South Chamber & \\ \hline FWG-WV-North Chamber & \\ \hline FWG-WV-North Chamber & \\ \hline GW-1 & \\ \hline GW-2 & \\ \hline GW-3 & \\ \hline GW-4 & \\ \hline EW-1 & \\ \hline EW-1 & \\ \hline EW-2A & \\ \hline S-W-43 & \\ \hline 2A-W-40 & \\ \hline 2A-W-41 & \\ \hline HB-W-23 & \\ \hline \end{tabular}$	uous <sup>1</sup> Event	Event	<b>Monitoring Event</b>		
$\begin{array}{ c c c c c c c } EG-CV-South Chamber &\\ EG-CV-North Chamber &\\ EG-WV-South Chamber & X\\ (formerly EG-WV or EV) & X\\ \hline EG-WV-North Chamber &\\ CG-EV-South Chamber &\\ CG-EV-South Chamber &\\ CG-CV-South Chamber &\\ CG-CV-South Chamber &\\ CG-WV-South Chamber &\\ CG-WV-South Chamber &\\ (formerly CG-WV or CV) & X\\ \hline CG-WV-North Chamber &\\ WG-EV-South Chamber &\\ WG-EV-South Chamber &\\ WG-EV-South Chamber &\\ WG-EV-South Chamber &\\ FWG-EV-South Chamber &\\ FWG-EV-North Chamber &\\ FWG-EV-South Chamber &\\ FWG-EV-North Chamber &\\ FWG-EV-South Chamber &\\ FWG-EV-North Chamber &\\ GW-1 &\\ EW-1 &\\ EW-1 &\\ EW-1 &\\ EW-2A &\\ S-W-43 &\\ 2A-W-40 &\\ 2A-W-41 &\\ 1B-W-23 &\\ \end{array}$	- X <sup>4</sup>	_	_		
$\begin{array}{ c c c c c c } \hline EG-CV-North Chamber & \\ \hline EG-WV-South Chamber & X \\ \hline (formerly EG-WV or EV) & X \\ \hline EG-WV-North Chamber & \\ \hline CG-EV-South Chamber & \\ \hline CG-EV-South Chamber & \\ \hline CG-CV-South Chamber & \\ \hline CG-CV-South Chamber & \\ \hline CG-WV-South Chamber & \\ \hline CG-WV-South Chamber & \\ \hline CG-WV-South Chamber & \\ \hline CG-WV-North Chamber & \\ \hline WG-EV-South Chamber & \\ \hline WG-WV-North Chamber & \\ \hline WG-WV-South Chamber & \\ \hline FWG-EV-South Chamber & \\ \hline FWG-EV-North Chamber & \\ \hline FWG-EV-North Chamber & \\ \hline FWG-EV-South Chamber & \\ \hline FWG-EV-North Chamber & \\ \hline FWG-EV-South Chamber & \\ \hline FWG-EV-North Chamber & \\ \hline GW-2 & \\ \hline GW-1 & \\ \hline GW-2 & \\ \hline GW-3 & \\ \hline GW-4 & \\ \hline EW-1 & \\ \hline EW-1 & \\ \hline EW-1 & \\ \hline EW-2A & \\ \hline S-W-43 & \\ \hline 2A-W-40 & \\ \hline 2A-W-41 & \\ \hline IB-W-23 & \\ \hline \end{array}$	- X <sup>4</sup>		_		
$\begin{array}{ c c c c c c } EG-WV-South Chamber & X \\ \hline EG-WV-North Chamber & \\ \hline CG-EV-South Chamber & \\ \hline CG-EV-South Chamber & \\ \hline CG-CV-South Chamber & \\ \hline CG-CV-South Chamber & \\ \hline CG-WV-South Chamber & \\ \hline CG-WV-South Chamber & \\ \hline CG-WV-North Chamber & \\ \hline WG-EV-South Chamber & \\ \hline WG-EV-South Chamber & \\ \hline WG-EV-South Chamber & \\ \hline WG-WV-South Chamber & \\ \hline WG-WV-South Chamber & \\ \hline WG-WV-South Chamber & \\ \hline FWG-EV-South Chamber & \\ \hline FWG-EV-North Chamber & \\ \hline FWG-EV-South Chamber & \\ \hline FWG-WV-North Chamber & \\ \hline FWG-WV-North Chamber & \\ \hline GW-1 & \\ \hline GW-2 & \\ \hline GW-3 & \\ \hline GW-3 & \\ \hline GW-4 & \\ \hline EW-1 & \\ \hline EW-1 & \\ \hline EW-2A & \\ \hline S-W-43 & \\ \hline 2A-W-40 & \\ \hline 2A-W-41 & \\ \hline HB-W-23 & \\ \hline \end{array}$	- X <sup>4</sup>		_		
$HCC System (continued) HCC System (continued)  \begin{array}{c c} (formerly EG-WV or EV) & X \\ EG-WV-North Chamber & \\ CG-EV-South Chamber & \\ CG-EV-North Chamber & \\ CG-CV-South Chamber & \\ CG-VV-South Chamber & \\ (formerly CG-WV or CV) & X \\ CG-WV-North Chamber & \\ WG-EV-South Chamber & \\ WG-EV-South Chamber & \\ WG-WV-North Chamber & \\ WG-WV-North Chamber & \\ WG-WV-North Chamber & \\ FWG-EV-South Chamber & \\ FWG-EV-South Chamber & \\ FWG-EV-South Chamber & \\ FWG-EV-North Chamber & \\ FWG-WV-North Chamber & \\ GW-1 & \\ GW-2 & \\ GW-3 & \\ GW-4 & \\ EW-1 & \\ EW-2A & \\ S-W-43 & \\ S-W-43 & \\ S-W-40 & \\ SA-W-40 & \\ SA-W-41 & \\ HB-W-23 & \\ \end{array}$	- X <sup>4</sup>		_		
$\begin{array}{c c} (formerly EG-WV or EV) \\ \hline EG-WV-North Chamber & \\ \hline CG-EV-South Chamber & \\ \hline CG-EV-North Chamber & \\ \hline CG-CV-South Chamber & \\ \hline CG-CV-South Chamber & \\ \hline CG-WV-South Chamber & \\ \hline CG-WV-South Chamber & \\ \hline CG-WV-North Chamber & \\ \hline WG-EV-South Chamber & \\ \hline WG-EV-South Chamber & \\ \hline WG-WV-South Chamber & \\ \hline WG-WV-South Chamber & \\ \hline WG-WV-South Chamber & \\ \hline FWG-EV-South Chamber & \\ \hline FWG-EV-North Chamber & \\ \hline FWG-EV-South Chamber & \\ \hline FWG-WV-South Chamber & \\ \hline FWG-WV-North Chamber & \\ \hline FWG-WV-North Chamber & \\ \hline GW-1 & \\ \hline GW-2 & \\ \hline GW-1 & \\ \hline GW-2 & \\ \hline GW-4 & \\ \hline EW-1 & \\ \hline EW-2A & \\ \hline S-W-43 & \\ \hline 2A-W-40 & \\ \hline 2A-W-41 & \\ \hline HB-W-23 & \\ \hline \end{array}$	Z V				
$ \begin{array}{c c} CG-EV-South Chamber &\\ CG-EV-North Chamber &\\ CG-CV-South Chamber &\\ CG-CV-South Chamber &\\ CG-WV-South Chamber &\\ CG-WV-North Chamber &\\ CG-WV-North Chamber &\\ WG-EV-South Chamber &\\ WG-EV-South Chamber &\\ WG-WV-South Chamber &\\ WG-WV-South Chamber &\\ WG-WV-South Chamber &\\ FWG-EV-South Chamber &\\ FWG-EV-South Chamber &\\ FWG-EV-South Chamber &\\ FWG-EV-South Chamber &\\ FWG-EV-North Chamber &\\ FWG-WV-South Chamber &\\ FWG-WV-South Chamber &\\ FWG-WV-North Chamber &\\ FWG-WV-North Chamber &\\ FWG-WV-North Chamber &\\ FWG-WV-South Chamber &\\ FWG-WV-North Chamber &\\ FWG-WV-South Chamber &\\ FWG-WV-North Chamber &\\ GW-1 &\\ GW-1 &\\ GW-2 &\\ GW-3 &\\ GW-4 &\\ EW-1 &\\ EW-1 &\\ EW-1 &\\ EW-2A &\\ 5-W-43 &\\ 2A-W-40 &\\ 2A-W-41 &\\ 1B-W-23 &\\ \end{array}$	X X	_	_		
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$\begin{array}{c c} CG-CV-South Chamber &\\ CG-CV-North Chamber &\\ CG-WV-South Chamber & X\\ (formerly CG-WV or CV) & X\\ \hline\\ CG-WV-North Chamber &\\ WG-EV-South Chamber &\\ WG-EV-North Chamber &\\ WG-WV-South Chamber &\\ WG-WV-South Chamber &\\ FWG-EV-South Chamber &\\ FWG-EV-South Chamber &\\ FWG-EV-South Chamber &\\ FWG-WV-South Chamber &\\ FWG-WV-South Chamber &\\ FWG-WV-North Chamber &\\ GW-2 &\\ GW-1 &\\ GW-3 &\\ GW-4 &\\ EW-1 &\\ EW-1 &\\ EW-2A &\\ 5-W-43 &\\ 2A-W-40 &\\ 2A-W-41 &\\ 1B-W-23 &\\ \end{array}$	- X <sup>4</sup>	_	_		
$\begin{array}{ c c c c c c } \hline CG-CV-North Chamber & \\ \hline CG-WV-South Chamber & X \\ \hline (formerly CG-WV or CV) & X \\ \hline CG-WV-North Chamber & \\ \hline WG-EV-South Chamber & X \\ \hline (formerly WG-EV or WV) & X \\ \hline WG-EV-North Chamber & \\ \hline WG-WV-South Chamber & \\ \hline WG-WV-North Chamber & \\ \hline FWG-EV-South Chamber & \\ \hline FWG-EV-South Chamber & \\ \hline FWG-WV-South Chamber & \\ \hline GW-1 & \\ \hline GW-1 & \\ \hline GW-2 & \\ \hline GW-3 & \\ \hline GW-4 & \\ \hline EW-1 & \\ \hline EW-1 & \\ \hline EW-2A & \\ \hline S-W-43 & \\ \hline 2A-W-40 & \\ \hline 2A-W-41 & \\ \hline HB-W-23 & \\ \hline \end{array}$		_	_		
$\begin{array}{ c c c c c c }\hline CG-WV-South Chamber & X \\\hline (formerly CG-WV or CV) & X \\\hline CG-WV-North Chamber & \\\hline WG-EV-South Chamber & X \\\hline (formerly WG-EV or WV) & X \\\hline WG-EV-North Chamber & \\\hline WG-WV-South Chamber & \\\hline WG-WV-North Chamber & \\\hline FWG-EV-South Chamber & \\\hline FWG-EV-South Chamber & \\\hline FWG-WV-South Chamber & \\\hline FWG-WV-South Chamber & \\\hline FWG-WV-South Chamber & \\\hline FWG-WV-North Chamber & \\\hline GW-1 & \\\hline GW-2 & \\\hline GW-3 & \\\hline GW-3 & \\\hline GW-4 & \\\hline EW-1 & \\\hline EW-1 & \\\hline EW-2A & \\\hline S-W-43 & \\\hline 2A-W-40 & \\\hline 2A-W-41 & \\\hline\hline HB-W-23 & \\\hline \end{array}$	- X <sup>4</sup>		_		
$ \begin{array}{ c c c c c } \mbox{(formerly CG-WV or CV)} & X \\ \hline CG-WV-North Chamber & \\ \hline WG-EV-South Chamber & X \\ \hline (formerly WG-EV or WV) & X \\ \hline WG-EV-North Chamber & \\ \hline WG-WV-South Chamber & \\ \hline WG-WV-North Chamber & \\ \hline FWG-EV-South Chamber & \\ \hline FWG-EV-South Chamber & \\ \hline FWG-WV-South Chamber & \\ \hline FWG-WV-South Chamber & \\ \hline FWG-WV-South Chamber & \\ \hline FWG-WV-North Chamber & \\ \hline FWG-WV-North Chamber & \\ \hline GW-1 & \\ \hline GW-2 & \\ \hline GW-3 & \\ \hline GW-4 & \\ \hline EW-1 & \\ \hline EW-2A & \\ \hline S-W-43 & \\ \hline 2A-W-40 & \\ \hline 2A-W-41 & \\ \hline HB-W-23 & \\ \hline \end{array} $	- X <sup>4</sup>	_	_		
$ \begin{array}{ c c c c c } \mbox{(formerly CG-WV or CV)} & X \\ \hline CG-WV-North Chamber & \\ \hline WG-EV-South Chamber & X \\ \hline (formerly WG-EV or WV) & X \\ \hline WG-EV-North Chamber & \\ \hline WG-WV-South Chamber & \\ \hline WG-WV-North Chamber & \\ \hline FWG-EV-South Chamber & \\ \hline FWG-EV-South Chamber & \\ \hline FWG-WV-South Chamber & \\ \hline FWG-WV-North Chamber & \\ \hline GW-2 & \\ \hline GW-1 & \\ \hline GW-2 & \\ \hline GW-3 & \\ \hline GW-4 & \\ \hline EW-1 & \\ \hline EW-2A & \\ \hline S-W-43 & \\ \hline 2A-W-40 & \\ \hline 2A-W-41 & \\ \hline HB-W-23 & \\ \hline \end{array} $	Z NZ				
$\begin{array}{ c c c c c c } WG-EV-South Chamber & X \\ \hline WG-EV-North Chamber & \\ \hline WG-WV-South Chamber & \\ \hline WG-WV-South Chamber & \\ \hline WG-WV-North Chamber & \\ \hline FWG-EV-South Chamber & \\ \hline FWG-EV-South Chamber & \\ \hline FWG-WV-South Chamber & \\ \hline FWG-WV-South Chamber & \\ \hline FWG-WV-North Chamber & \\ \hline GW-W-WV-North Chamber & \\ \hline GW-1 & \\ \hline GW-2 & \\ \hline GW-3 & \\ \hline GW-4 & \\ \hline EW-1 & \\ \hline EW-1 & \\ \hline EW-2A & \\ \hline 5-W-43 & \\ \hline 2A-W-40 & \\ \hline 2A-W-41 & \\ \hline HB-W-23 & \\ \hline \end{array}$	X X	—	_		
$ \begin{array}{ c c c c c c c } HCC System \\ (continued) \end{array} \begin{array}{ c c c } \hline & (formerly WG-EV or WV) & X \\ \hline & WG-EV-North Chamber & \\ \hline & WG-WV-South Chamber & \\ \hline & WG-WV-North Chamber & \\ \hline & FWG-EV-South Chamber & \\ \hline & FWG-WV-South Chamber & \\ \hline & FWG-WV-South Chamber & \\ \hline & FWG-WV-North Chamber & \\ \hline & FWG-WV-North Chamber & \\ \hline & GW-1 & \\ \hline & GW-2 & \\ \hline & GW-3 & \\ \hline & GW-3 & \\ \hline & GW-4 & \\ \hline & EW-1 & \\ \hline & EW-1 & \\ \hline & EW-2A & \\ \hline & 5-W-43 & \\ \hline & 2A-W-40 & \\ \hline & 2A-W-41 & \\ \hline & 1B-W-23 & \\ \hline \end{array} $	- X		_		
$\begin{array}{c} \mbox{(formerly WG-EV or WV)} \\ \hline WG-EV-North Chamber & \\ \hline WG-WV-South Chamber & \\ \hline WG-WV-North Chamber & \\ \hline FWG-EV-South Chamber & \\ \hline FWG-EV-North Chamber & \\ \hline FWG-WV-South Chamber & \\ \hline FWG-WV-South Chamber & \\ \hline FWG-WV-North Chamber & \\ \hline GW-2 & \\ \hline GW-2 & \\ \hline GW-3 & \\ \hline GW-4 & \\ \hline EW-1 & \\ \hline EW-1 & \\ \hline EW-2A & \\ \hline S-W-43 & \\ \hline 2A-W-40 & \\ \hline 2A-W-41 & \\ \hline HB-W-23 & \\ \hline \end{array}$	7				
$\begin{array}{c} WG-EV-North Chamber &\\ WG-WV-South Chamber &\\ WG-WV-South Chamber &\\ WG-WV-North Chamber &\\ FWG-EV-South Chamber &\\ FWG-WV-South Chamber &\\ FWG-WV-South Chamber &\\ FWG-WV-South Chamber &\\ GW-V-North Chamber &\\ GW-1 &\\ GW-2 &\\ GW-3 &\\ GW-3 &\\ GW-4 &\\ GW-4 &\\ EW-1 &\\ EW-1 &\\ EW-1 &\\ EW-1 &\\ EW-2A &\\ 5-W-43 &\\ 2A-W-40 &\\ 2A-W-41 &\\ 1B-W-23 &\\ \end{array}$	X X	—	—		
(continued) $WG-WV-South Chamber$	- X	_	_		
$\begin{array}{c c} \mbox{(continued)} & \begin{tabular}{ c c c } \hline WG-WV-North Chamber & \\ \hline FWG-EV-South Chamber & \\ \hline FWG-WV-South Chamber & \\ \hline FWG-WV-South Chamber & \\ \hline (formerly FWG-WV or FWV) & X \\ \hline FWG-WV-North Chamber & \\ \hline GW-1 & \\ \hline GW-2 & \\ \hline GW-3 & \\ \hline GW-3 & \\ \hline GW-4 & \\ \hline GW-4 & \\ \hline EW-1 & \\ \hline EW-1 & \\ \hline EW-2A & \\ \hline S-W-43 & \\ \hline 2A-W-40 & \\ \hline 2A-W-41 & \\ \hline 1B-W-23 & \\ \hline \end{array}$	- X <sup>4</sup>	_	_		
FWG-EV-South ChamberFWG-EV-North ChamberFWG-WV-South ChamberX(formerly FWG-WV or FWV)XFWG-WV-North ChamberGW-1GW-2GW-3GW-3GW-4EW-1EW-1A5-W-432A-W-401B-W-23	4	_	_		
FWG-EV-North Chamber—FWG-WV-South Chamber (formerly FWG-WV or FWV)XFWG-WV-North Chamber—GW-1—GW-2—GW-3—GW-4—EW-1—EW-1A—5-W-43—2A-W-40—1B-W-23—	- X <sup>4</sup>	_	_		
(formerly FWG-WV or FWV)       X         FWG-WV-North Chamber       —         GW-1       —         GW-2       —         GW-3       —         GW-4       —         EW-1       —         EW-2A       —         5-W-43       —         2A-W-40       —         1B-W-23       —	- X <sup>4</sup>	_	_		
(formerly FWG-WV or FWV)         FWG-WV-North Chamber         GW-1         GW-2         GW-3         GW-4         GW-1         EW-1         EW-2A         5-W-43         2A-W-40         1B-W-23					
GW-1       —         GW-2       —         GW-3       —         GW-4       —         EW-1       —         EW-2A       —         5-W-43       —         2A-W-40       —         1B-W-23       —	X X	—	_		
GW-1       —         GW-2       —         GW-3       —         GW-4       —         EW-1       —         EW-2A       —         5-W-43       —         2A-W-40       —         1B-W-23       —	- X	_	Х		
GW-3       —         GW-4       —         EW-1       —         EW-2A       —         5-W-43       —         2A-W-40       —         2A-W-41       —         1B-W-23       —		X	Х		
GW-4     —       EW-1     —       EW-2A     —       5-W-43     —       2A-W-40     —       2A-W-41     —       1B-W-23     —	- X	X	Х		
EW-1     —       EW-2A     —       5-W-43     —       2A-W-40     —       2A-W-41     —       1B-W-23     —		X	Х		
EW-1     —       EW-2A     —       5-W-43     —       2A-W-40     —       2A-W-41     —       1B-W-23     —	**	Х	Х		
EW-2A     —       5-W-43     —       2A-W-40     —       2A-W-41     —       1B-W-23     —		X	Х		
5-W-43         —           2A-W-40         —           2A-W-41         —           1B-W-23         —	- X	X			
2A-W-41 — 1B-W-23 —		Х	Х		
2A-W-41 — 1B-W-23 —		X	X		
1B-W-23 —		X	X		
		X	X		
2A-W-42 —		X	X		
1D W 2		X	X		
Former Air Sparge	- X	X	X		
Area 1C-W-8 —	- X	X	X		

# Table 32020 Liquid-Level Gauging FrequencyBNSF Former Maintenance and Fueling FacilitySkykomish, WashingtonFarallon PN: 683-071

		Gauging Frequency			
Area/Well Group	Location	<b>Continuous</b> <sup>1</sup>	March Monitoring Event	June Monitoirng Event	September Monitoring Event
	MW-1		Х	Х	
	MW-2		Х	Х	
	MW-3		Х	Damaged	
	MW-4		Х	X	Х
	MW-5		Х	Х	
	MW-7		Х	Х	
	MW-9		Х	Х	
	MW-10		Х	Х	
	MW-11		X	Х	Х
Former Maloney	MW-13		X	X	
Creek Zone and	MW-14		X	X	Х
Surrounding Area	MW-15		X	X	
	MW-18		X	X	
	MW-40		X	X	_
	2A-W-3		X	X	_
	2A-W-5		X	X	
	2A-W-7		X	X	
	2A-W-9		X	X	Х
	2A-W-10		X	X	
	2B-W-4		X	X	
	1A-W-4		X	X	Х
	1B-W-2		X		X
	1C-W-1		X	Х	_
	1C-W-3		X		
	1C-W-4		X		Х
	2A-W-8		X	Х	_
Site-Wide	MW-16		X	X	
	MW-32		X		_
	MW-38R		X	Х	
	MW-47		X	X	Х
	MW-48		X	X	
	MW-49		X	X	_
Surface Water Monitoring Station	Skykomish River Bridge		X	X	Х

NOTES:

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

HCC = hydraulic control and containment

LNAPL = light nonaqueous-phase liquid

<sup>1</sup>Water-level transducers at the indicated locations provide continuous, real-time water level measurements; water levels are recorded hourly.

<sup>2</sup> Conducted in accordance with the 2010 Compliance Monitoring Plan Update, BNSF Former Maintenance and Fueling Facility – Skykomish, Washington, Appendix E dated April 30, 2010, prepared by AECOM Environment.

<sup>3</sup> Conducted in accordance with the Final Long-Term Monitoring Plan BNSF Former Maintenance and Fueling Facility, Skykomish, Washington, Consent Decree NO. 07-2-33672-9 SEA dated November 26, 2020, prepared by Farallon.

<sup>4</sup> Vault 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 42020 Water-Level Elevations and LNAPL ThicknessesBNSF Former Maintenance and Fueling FacilitySkykomish, WashingtonFarallon PN: 683-071

Location	Measuring Point Elevation <sup>1</sup> (feet NAVD88)	Date	Depth to Water <sup>2</sup> (feet)	Water Elevation <sup>1</sup> (feet NAVD88)	LNAPL Thickness (feet)				
Levee Zone Monitoring Wells									
5-W-14	926.59	3/16/2020	9.65	916.94					
		6/23/2020	8.20	918.39	—				
		9/15/2020	10.72	915.87	—				
	925.20	3/16/2020	8.43	916.77	—				
5-W-16		6/23/2020	6.95	918.25	—				
		9/15/2020	9.56	915.64	—				
5-W-17	924.60	3/16/2020	7.68	916.92	_				
		6/23/2020	6.33	918.27	_				
		9/15/2020	8.89	915.71	—				
	924.64	3/16/2020	7.87	916.77	—				
5-W-18		6/23/2020	6.38	918.26	—				
		9/15/2020	8.91	915.73	—				
	924.35	3/16/2020	7.80	916.55					
5-W-19		6/23/2020	6.21	918.14					
		9/15/2020	8.71	915.64	—				
		Schoolyard Monito	oring Locations	·					
5-W-51	925.08	3/16/2020	7.72	917.36	Light Trace				
		6/23/2020	6.49	918.59	Light Trace				
		9/15/2020	8.97	916.11	Light Trace				
	923.92	3/16/2020	6.74	917.18	—				
5-W-55		6/23/2020	5.63	918.29	—				
		9/15/2020	7.88	916.04					
	924.76	3/16/2020	7.57	917.19					
5-W-56		6/23/2020	6.32	918.44	—				
		9/15/2020	8.75	916.01	—				
RW-10	925.11	3/16/2020	7.32	917.79	Heavy Trace				
		6/23/2020	6.39	918.72	Light Trace				
		9/15/2020	8.69	916.42	Light Trace				

# Table 42020 Water-Level Elevations and LNAPL ThicknessesBNSF Former Maintenance and Fueling FacilitySkykomish, WashingtonFarallon PN: 683-071

Location	Measuring Point Elevation <sup>1</sup> (feet NAVD88)	Date	Depth to Water <sup>2</sup> (feet)	Water Elevation <sup>1</sup> (feet NAVD88)	LNAPL Thickness (feet)				
Hydraulic Control and Containment System Monitoring Locations									
IW-01	933.49	3/16/2020	8.21	925.28	—				
		9/15/2020	10.07	923.42	—				
PZ-1	935.38	3/16/2020	9.80	925.58	—				
г∠-1		6/23/2020	8.92	926.46	—				
PZ-2N	934.35	3/16/2020	12.00	922.35	—				
12-21N		6/23/2020	11.50	922.85	—				
PZ-2S	934.94	3/16/2020	8.52	926.42	—				
		6/23/2020	8.25	926.69	—				
PZ-3N	934.41	3/16/2020	14.00	920.41	—				
		6/23/2020	14.00	920.41					
PZ-3S	934.45	3/16/2020	8.89	925.56	—				
FZ-35		6/23/2020	8.47	925.98	_				
PZ-4N	935.27	3/16/2020	14.63	920.64	—				
12-41		6/23/2020	Unable to open vault						
PZ-4S	935.31	3/16/2020	10.18	925.13	—				
I Z-45		6/23/2020	10.85	924.46	—				
PZ-5N	933.15	3/16/2020	15.35	917.80	—				
rz-Jin		6/23/2020	14.39	918.76	—				
PZ-5S	933.46	3/16/2020	8.92 C	924.54 C	2.27				
		6/23/2020	8.56 C	924.90 C	4.35				
PZ-6N	931.17	3/16/2020	13.48	917.69	—				
		6/23/2020	12.46	918.71	—				
PZ-6S	931.41	3/16/2020	12.27	919.14	Heavy Trace				
12-05		6/23/2020	6.88 C	924.53 C	0.05				
PZ-7N	930.37	3/16/2020	12.60	917.77	—				
1 Z-7/1N		6/23/2020	11.61	918.76	—				
PZ-7S	930.4	3/16/2020	7.22	923.18	—				
r <i>L</i> -/3		6/23/2020	6.98	923.42					
PZ-8	929.48	3/16/2020	9.74	919.74	—				
		6/23/2020	9.13	920.35					

Location	Measuring Point Elevation <sup>1</sup> (feet NAVD88)	Date	Depth to Water <sup>2</sup> (feet)	Water Elevation <sup>1</sup> (feet NAVD88)	LNAPL Thickness (feet)		
		3/16/2020	8.75	924.09	—		
RW-01	932.84	6/23/2020	8.48	924.36	—		
		9/15/2020	11.46	921.38			
		3/16/2020	9.75	924.09	—		
RW-02	933.84	6/23/2020	9.50	924.34			
		9/15/2020	12.50	921.34	Light Trace		
		3/16/2020	10.31	923.49	—		
RW-03	933.80	6/23/2020	9.47	924.33	—		
		9/15/2020	12.51	921.29	Light Trace		
		3/16/2020	7.05	924.81	Heavy Trace		
RW-04	931.86	6/23/2020	6.83	925.03	Heavy Trace		
		9/15/2020	5.75	926.11	Light Trace		
		3/16/2020	7.30	921.23	Light Trace		
RW-05	928.53	6/23/2020	6.69	921.84	Light Trace		
		9/15/2020	9.73	918.80	Light Trace		
	928.53	3/16/2020	7.27	921.26	—		
RW-06		6/23/2020	Unable to open vault				
		9/15/2020	9.56	918.97	Light Trace		
		3/16/2020	7.92	925.14	Heavy Trace		
RW-07	933.06	6/23/2020	7.96	925.10	Heavy Trace		
		9/15/2020	11.03	922.03	Light Trace		
		3/16/2020	7.05	924.80	Heavy Trace		
RW-08	931.85	6/23/2020	6.69	925.16	Heavy Trace		
		9/15/2020	10.45	921.40	Light Trace		
		3/16/2020	8.78	925.18	Light Trace		
RW-09	933.96	6/23/2020	8.13	925.83	—		
		9/15/2020	10.59	923.37	—		
	NA –	3/16/2020	9.59	NA			
EG-EV-South Chamber <sup>3</sup>	INA	6/23/2020	8.90	NA	—		
EG-EV-North Chamber <sup>3</sup>	NA	3/16/2020	9.59	NA	_		
EG-EV-INORIN Chamber	INA	6/23/2020	8.90	NA	_		

Location	Measuring Point Elevation <sup>1</sup> (feet NAVD88)	Date	Depth to Water <sup>2</sup> (feet)	Water Elevation <sup>1</sup> (feet NAVD88)	LNAPL Thickness (feet)
EG-CV-South Chamber <sup>3</sup>	NA	3/16/2020	10.11	NA	—
EG-CV-South Chamber		6/23/2020	9.35	NA	—
EG-CV-North Chamber <sup>3</sup>	NA	3/16/2020	10.11	NA	—
EG-CV-North Chamber	1177	6/23/2020	9.35	NA	—
EG-WV-South Chamber	934.31	3/16/2020	10.21	924.10	—
(formerly EG-WV or EV)	<i>95</i> <b>-</b> .51	6/23/2020	9.45	924.86	—
EG-WV-North Chamber	934.31	3/16/2020	10.21	924.10	—
	954.51	6/23/2020	9.42	924.89	—
CG-EV-South Chamber <sup>3</sup>	NA	3/16/2020	8.60	NA	—
CG-EV-South Chamber	INA –	6/23/2020	7.32	NA	—
CG-EV-North Chamber <sup>3</sup>	NA	3/16/2020	8.60	NA	—
CG-EV-North Chamber	INA –	6/23/2020	7.32	NA	—
CG-CV-South Chamber <sup>3</sup>	NA	3/16/2020	8.60	NA	—
	INA	6/23/2020	8.37	NA	—
CG-CV-North Chamber <sup>3</sup>	NA -	3/16/2020	8.60	NA	—
CG-CV-North Chamber		6/23/2020	8.37	NA	—
CG-WV-South Chamber	937.09	3/16/2020	8.60	928.49	—
(formerly CG-WV or CV)	937.09	6/23/2020	8.35	928.74	—
CG-WV-North Chamber	937.09	3/16/2020	8.60	928.49	_
CG-wv-North Chamber	937.09	6/23/2020	8.35	928.74	
WG-EV-South Chamber	021.94	3/16/2020	7.30	924.54	Light Trace
(formerly WG-EV or WV)	931.84	6/23/2020	6.78	925.06	Light Trace
	021.04	3/16/2020	7.30	924.54	—
WG-EV-North Chamber	931.84	6/23/2020	6.78	925.06	_
	NTA	3/16/2020	7.51	NA	
WG-WV-South Chamber <sup>3</sup>	NA	6/23/2020	6.77	NA	_
	NI 4	3/16/2020	7.51	NA	
WG-WV-North Chamber <sup>3</sup>	NA –	6/23/2020	6.77	NA	—
$\mathbf{EW}(\mathbf{C},\mathbf{EV},\mathbf{C}) = (1, \mathbf{C}) = (1, \frac{3}{2})^{3}$	NA	3/16/2020	4.85	NA	—
FWG-EV-South Chamber <sup>3</sup>	INA –	6/23/2020	4.80	NA	_

Location	Measuring Point Elevation <sup>1</sup> (feet NAVD88)	Date	Depth to Water <sup>2</sup> (feet)	Water Elevation <sup>1</sup> (feet NAVD88)	LNAPL Thickness (feet)
FWG-EV-North Chamber <sup>3</sup>	NA	3/16/2020	4.85	NA	
	1424	6/23/2020	4.81	NA	—
FWG-WV-South Chamber	930.76	3/16/2020	4.90	925.86	
(formerly FWG-WV or FWV)	950.10	6/23/2020	4.76	926.00	—
FWG-WV-North Chamber	930.76	3/16/2020	4.90	925.86	
	950.70	6/23/2020	4.76	926.00	—
		3/16/2020	10.70	917.54	—
GW-1	928.24	6/23/2020	9.45	918.79	—
		9/15/2020	11.60	916.64	—
		3/16/2020	12.60	917.69	—
GW-2	930.29	6/23/2020	11.63	918.66	—
		9/15/2020	13.50	916.79	_
		3/16/2020	14.23	921.59	_
GW-3	935.82	6/23/2020	14.27	921.55	
		9/15/2020	14.98	920.84	
	934.68	3/16/2020	10.73	923.95	
GW-4		6/23/2020	9.95	924.73	
		9/15/2020	12.13	922.55	
		3/16/2020	10.49	918.23	
EW-1	928.72	6/23/2020	9.58	919.14	
		9/15/2020	11.78	916.94	
EW/ 24	02(20	3/16/2020	10.39	925.81	
EW-2A	936.20	6/23/2020	9.35	926.85	
		3/16/2020	8.15	918.03	
5-W-43	926.18	6/23/2020	7.27	918.91	
	-	9/15/2020	9.42	916.76	
		3/16/2020	12.35	920.99	
2A-W-40	933.34	6/23/2020	11.40	921.94	_
	ľ	9/15/2020	14.23	919.11	_

Location	Measuring Point Elevation <sup>1</sup> (feet NAVD88)	Date	Depth to Water <sup>2</sup> (feet)	Water Elevation <sup>1</sup> (feet NAVD88)	LNAPL Thickness (feet)
		3/16/2020	17.41	917.81	—
2A-W-41	935.22	6/23/2020	16.45	918.77	—
		9/15/2020	18.35	916.87	—
		3/16/2020	17.48	918.77	—
1B-W-23	936.25	6/23/2020	17.26	918.99	—
		9/15/2020	17.78	918.47	—
		3/16/2020	13.35	922.02	—
2A-W-42	935.37	6/23/2020	12.89	922.48	—
		9/15/2020	14.27	921.10	—
	Fo	rmer Air Sparge Are	ea Monitoring Wells		
1B-W-3	936.66	3/16/2020	15.25	921.41	—
10-11-5	950.00	6/23/2020	14.70	921.96	—
		3/16/2020	12.62	922.42	—
1C-W-7	935.04	6/23/2020	11.92	923.12	—
		9/15/2020	13.83	921.21	—
		3/16/2020	13.35	922.35	—
1C-W-8	935.70	6/23/2020	12.65	923.05	—
		9/15/2020	14.44	921.26	—
	Former Maloney	<b>Creek Zone and Su</b>	rrounding Area Monitor	ing Wells	
MW-1	939.20	3/16/2020	12.33	926.87	—
111 11 - 1	959.20	6/23/2020	11.51	927.69	—
MW-2	939.20	3/16/2020	11.84	927.36	—
111 11 -22	959.20	6/23/2020	10.86	928.34	—
MW-3	938.03	3/16/2020	8.28	929.75	—
101 00 -5	958.05	6/23/2020	8.37	929.66	—
		3/16/2020	8.73	928.22	—
MW-4	936.95	6/23/2020	8.24	928.71	
		9/15/2020	12.48	924.47	
MW-5	933.36	3/16/2020	7.63	925.73	
101 00 -5	755.50	6/23/2020	7.07	926.29	

Location	Measuring Point Elevation <sup>1</sup> (feet NAVD88)	Date	Depth to Water <sup>2</sup> (feet)	Water Elevation <sup>1</sup> (feet NAVD88)	LNAPL Thickness (feet)
MW-7	936.89	3/16/2020	12.39	924.50	—
101 00 - /	750.07	6/23/2020	12.02	924.87	—
MW-9	937.53	3/16/2020	12.81	924.72	—
101 00 - 9	757.55	6/23/2020	12.43	925.10	—
MW-10	938.34	3/16/2020	12.03	926.31	—
IVI VV - 1 U	930.34	6/23/2020	11.53	926.81	—
		3/16/2020	12.73	926.47	Light Trace
MW-11	939.20	6/23/2020	12.04	927.16	Light Trace
		9/15/2020	15.65	923.55	—
MW-13	936.49	3/16/2020	9.53	926.96	—
IVI W -1.5	930.49	6/23/2020	9.20	927.29	_
		3/16/2020	12.40	924.40	—
MW-14	936.80	6/23/2020	11.04	925.76	
		9/15/2020	Well Dry	Well Dry	
MW-15	933.32	3/16/2020	13.03	920.29	—
IVI VV - I J	955.52	6/23/2020	11.58	921.74	—
MW-18	940.68	3/16/2020	14.16	926.52	—
IVI VV - 1 8	940.08	6/23/2020	13.50	927.18	_
MW-40	936.95	3/16/2020	11.90	925.05	—
IVI VV -40	930.93	6/23/2020	11.40	925.55	
2A-W-3	934.43	3/16/2020	10.08	924.35	Light Trace
2A-w-3	934.43	6/23/2020	9.47	924.96	Light Trace
2A-W-5	020 47	3/16/2020	12.97	926.50	—
2A-W-3	939.47 –	6/23/2020	12.52	926.95	
2A-W-7	937.76 -	3/16/2020	11.54	926.22	
2 <b>A-</b> W-/	957.70	6/23/2020	10.77	926.99	
		3/16/2020	10.63	925.95	—
2A-W-9	936.58	6/23/2020	10.27	926.31	—
		9/15/2020	14.55	922.03	Light Trace

Location	Measuring Point Elevation <sup>1</sup> (feet NAVD88)	Date	Depth to Water <sup>2</sup> (feet)	Water Elevation <sup>1</sup> (feet NAVD88)	LNAPL Thickness (feet)
2A-W-10	937.93	3/16/2020	10.16	927.77	—
2A-W-10	937.93	6/23/2020	9.80	928.13	—
2B-W-4	931.03	3/16/2020	2.59	928.44	—
2 <b>D-</b> ₩-4	951.05	6/23/2020	2.17	928.86	—
		Site-Wide Mon	itoring Wells		-
		3/16/2020	9.54	919.53	—
1A-W-4	929.07	6/23/2020	NM	NM	_
		9/15/2020	10.81	918.26	
1B-W-2	025.01	3/16/2020	14.28	921.53	—
1B-W-2	935.81	9/15/2020	14.98	921.27	
1C-W-1	026.44	3/16/2020	13.92	922.52	
1C-W-1	936.44	6/23/2020	13.21	923.23	
1C-W-3	933.56	3/16/2020	10.91	922.65	
10 11 4	022.74	3/16/2020	10.04	922.70	
1C-W-4	932.74	9/15/2020	13.63	919.11	_
2 A 11/ 9	042.62	3/16/2020	15.02	927.60	—
2A-W-8	942.62	6/23/2020	13.74	928.88	_
MW 16	022.22	3/16/2020	13.24	920.08	
MW-16	933.32	6/23/2020	12.73	920.59	—
MW-32	926.06	3/16/2020	9.37	916.69	
NUN 20D	022.56	3/16/2020	4.92	917.64	—
MW-38R	922.56	6/23/2020	4.12	918.44	_
		3/16/2020	8.13	924.48	
MW-47	932.61	6/23/2020	7.79	924.82	—
		9/15/2020	12.01	920.60	_
	022.00	3/16/2020	9.70	924.20	_
MW-48	933.90	6/23/2020	9.32	924.58	— —
MW 40	022.14	3/16/2020	10.82	922.32	_
MW-49	933.14	6/23/2020	10.34	922.80	_

Location	Measuring Point Elevation <sup>1</sup> (feet NAVD88)	Date Surface Water Mor	Depth to Water <sup>2</sup> (feet) hitoring Station	Water Elevation <sup>1</sup> (feet NAVD88)	LNAPL Thickness (feet)
		3/16/2020	25.01	918.08	_
Skykomish River Bridge	943.09	6/23/2020	23.40	919.69	_
		9/15/2020	25.92	917.17	

NOTES:

- denotes LNAPL was not observed.

C = corrected depths to water and water elevations based on LNAPL thickness

LNAPL = light nonaqueous-phase liquid

NA = not applicable

NM = not measured

Light Trace = LNAPL less than 0.01 foot thick and thin coating of LNAPL and/or a sheen observed on the oil-water interface probe

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

<sup>1</sup>Elevations referenced to North American Vertical Datum of 1988 (NAVD88).

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

<sup>3</sup>Vault oil-water separator chamber is visually inspected for presence of LNAPL during

monitoring events. LNAPL thickness measured only if measurable LNAPL is present.

Well	Date	Temperature (degrees Celsius)	pH (Standard Units)	Dissolved Oxygen (milligrams per liter)	Oxidation-Reduction Potential (millivolts)	Specific Conductivity (mS/cm)	Turbidity (NTU)
			Levee Zon	e Monitoring Wells			
	3/17/2020	7.8	6.38	5.53	130.7	0.073	0.28
5-W-14	6/24/2020	10.5	6.35	6.55	231.9	0.080	134.60
	9/15/2020	10.4	6.35	5.28	73.0	0.077	5.28
	3/17/2020	4.9	6.68	9.42	143.5	0.064	2.72
5-W-16	6/24/2020	10.7	6.96	10.49	178.2	0.041	6.10
	9/15/2020	14.4	6.64	6.55	62.9	0.070	39.80
	3/17/2020	7.9	6.31	4.77	94.6	0.068	3.12
5-W-17	6/24/2020	10.4	6.40	6.45	201.8	0.076	91.47
	9/15/2020	10.5	6.31	5.40	168.0	0.071	24.50
	3/18/2020	6.9	6.23	4.76	131.0	0.072	1.85
5-W-18	6/24/2020	10.4	6.43	4.61	186.2	0.087	42.77
	9/15/2020	10.9	6.29	4.29	144.1	0.090	37.84
	3/17/2020	7.6	6.42	5.48	96.6	0.070	3.07
5-W-19	6/23/2020	10.8	6.43	7.59	198.3	0.068	480.01
	9/15/2020	13.5	6.60	5.69	59.1	0.082	23.99
			Schoolyar	d Monitoring Wells			
	3/17/2020	6.6	6.18	0.33	91.0	0.080	0.25
5-W-51	6/24/2020	12.2	6.34	2.26	157.7	0.112	24.45
	9/16/2020	11.4	6.06	0.61	9.4	0.077	88.18
	3/17/2020	7.4	6.10	4.62	171.9	0.083	1.69
5-W-55	6/24/2020	13.3	6.15	0.47	81.5	0.110	6.99
	9/15/2020	15.8	5.96	1.32	38.7	0.111	4.96
	3/17/2020	10.6	6.35	0.83	141.4	0.420	7.33
5-W-56	6/24/2020	14.6	6.39	1.29	91.2	0.177	30.19
	9/15/2020	15.6	6.51	0.42	-67.0	0.552	11.51

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											
	3/18/2020	6.4	6.13	3.41	126.9	0.092	0.44				
GW-1	6/23/2020	12.0	6.16	0.77	142.4	0.0829	1.05				
	9/15/2020	13.2	6.28	0.39	-13.5	0.107	3.68				
	3/18/2020	6.5	6.06	1.10	-80.9	0.096					
GW-2	6/23/2020	10.6	6.17	1.14	134.3	0.083	1.7				
	9/15/2020	13.2	6.07	0.81	36.3	0.093	4.45				
	3/18/2020	6.4	5.62	2.54	155.0	0.076	1.40				
GW-3	6/24/2020	11.2	3.91	2.72	157.1	0.071	1.61				
	9/16/2020	12.4	6.00	1.91	48.0	0.096	12.66				
	3/18/2020	6.0	6.49	IE	11.9	0.136					
GW-4	6/24/2020	9.4	6.45	2.35	61.4	0.119	0.7				
	9/16/2020	10.9	6.34	3.42	-26.0	0.096	30.72				
	3/18/2020	5.8	6.13	2.95	165.5	0.065	6.45				
EW-1	6/23/2020	9.8	4.35	1.67	143.2	0.070	1.6				
EW 24	3/17/2020	6.0	5.70	7.31	33.0	0.054					
EW-2A	6/24/2020	8.5	5.72	5.94	239.5	0.051	0.4				
	3/18/2020	5.5	6.15	3.40	175.4	0.064	0.10				
5-W-43	6/23/2020	8.9	6.00	1.93	200.0	0.0733	24.3				
	9/15/2020	12.3	5.89	2.13	146.1	0.075	3.83				
	3/18/2020	6.9	6.51	9.14	158.4	0.051	0.20				
2A-W-40	6/23/2020	9.8	6.34	7.90	207.9	53.8	0.87				
	9/16/2020	9.7	6.62	6.14	65.1	0.059	3.49				
	3/18/2020	7.5	6.21	5.80	7.8	0.135					
2A-W-41	6/24/2020	11.4	7.01	7.02	27.0	0.111	12.79				
	9/16/2020	10.8	6.13	2.80	6.5	0.113	167.39				
	3/18/2020	8.3	6.12	11.54	-20.1	0.070	43.2				
1B-W-23	6/24/2020	13.9	6.06	9.54	198.5	0.075	10.2				
	9/16/2020	13.1	6.15	5.70	95.7	0.112	94.7				
	3/18/2020	7.6	5.84	2.93	13.6	0.149					
2A-W-42	6/24/2020	11.6	7.00	2.97	4.4	0.098	26.51				
	9/16/2020	12.3	5.71	2.69	107.7	0.116	179.95				

Well	Date	Temperature (degrees Celsius)	pH (Standard Units)	Dissolved Oxygen (milligrams per liter)	Oxidation-Reduction Potential (millivolts)	Specific Conductivity (mS/cm)	Turbidity (NTU)
		-	Former Air Spar	ge Area Monitoring We	lls		
1B-W-3	3/17/2020	7.0	6.53	2.48	114.3	0.144	0.90
1B-w-3	6/24/2020	9.5	6.55	2.18	106.1	0.170	3.3
	3/18/2020	6.2	5.79	4.63	23.8	0.091	
1C-W-7	6/24/2020	9.5	3.91	3.89	157.3	0.065	52.1
	9/16/2020	11.5	5.80	2.35	115.5	0.088	82.92
	3/17/2020	5.7	6.08	6.79	158.6	0.061	0.89
1C-W-8	6/24/2020	9.2	3.94	5.83	130.5	0.0583	1.56
	9/16/2020	11.8	5.96	4.71	63.8	0.203	3.45
			Former Maloney C	reek Zone Monitoring V	Vells		
NANI 2	3/18/2020			Not Sampled	1 - Well Damaged		
MW-3	6/24/2020			Not Sampled	1 - Well Damaged		
	3/18/2020	3.9	5.76	0.22	132.2	0.069	3.55
MW-4	6/24/2020	13.5	5.65	0.90	-172.7	0.069	14.99
	9/16/2020	11.9	5.86	0.43	28.6	0.075	3.49
	3/18/2020	4.8	6.02	0.66	128.7	0.060	1.33
2A-W-9	6/24/2020	12.6	6.03	0.27	-206.5	0.040	9.67
	9/16/2020	13.8	6.06	0.29	-7.6	0.073	3.10
2A-W-10	3/18/2020	3.0	5.66	1.77	151.0	0.040	0.73
2A-W-10	6/24/2020	11.9	5.66	0.19	-177.8	0.063	10.35
2B-W-4	3/18/2020	3.6	6.21	6.75	154.7	0.043	0.12
∠D-W-4	6/24/2020	10.9	6.10	3.24	-67.1	0.043	11.67

Well	Date	Temperature (degrees Celsius)	pH (Standard Units)	Dissolved Oxygen (milligrams per liter)	Oxidation-Reduction Potential (millivolts)	Specific Conductivity (mS/cm)	Turbidity (NTU)				
	Site-Wide Monitoring Wells										
1A-W-4	3/18/2020	7.2	6.27	7.81	29.1	0.105					
1B-W-2	3/17/2020	7.9	6.27	8.67	167.7	0.122	0.10				
1C-W-1	3/17/2020	5.7	5.79	5.42	156.2	0.0499	IE				
1C-w-1	6/24/2020	9.0	5.67	6.58	233.8	0.054	2.6				
1C-W-3	3/17/2020	5.5	5.96	8.69	180.3	0.061	IE				
1C-W-4	3/17/2020	6.0	5.73	5.59	160.2	0.054	0.20				
1C-w-4	9/16/2020	10.1	5.51	3.99	152.3	0.062	10.83				
MW-16	3/18/2020	5.5	5.63	5.60	136.8	0.054	IE				
MW-38R	3/18/2020	7.7	6.21	0.15	145.6	0.092	10.29				

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.

				DRO $(\mu g/l)^1$			<b>ORO</b> $(\mu g/l)^1$		Calculated
Well	Date	Sample Identification	Result	MDL	MRL	Result	MDL	MRL	NWTPH-Dx <sup>2</sup> (µg/l)
		Levee Zo	one Monitoring	Wells: NWTPH	I-Dx results com	pared to the CU	$UL = 208 \ \mu g/l$		
	3/17/2020	5-W-14-031720	< 62	62	62	< 91	91	91	< 77
5-W-14	6/24/2020	5-W-14-062420	< 62 UJ	62	62	< 91 UJ	91	91	< 77 UJ
	9/15/2020	5-W-14-091520	< 62	62	62	< 92	92	92	< 77
	3/17/2020	5-W-16-031720	< 62	62	62	< 91	91	91	< 77
5-W-16	6/24/2020	5-W-16-062420	< 62 UJ	62	62	< 91 UJ	91	91	< 77 UJ
	9/15/2020	5-W-16-091520	< 62	62	62	< 91	91	91	< 77
	3/17/2020	5-W-17-031720	< 63	63	63	< 93	93	93	< 78
5-W-17	6/24/2020	5-W-17-062420	< 62 UJ	62	62	< 91 UJ	91	91	< 77 UJ
	9/15/2020	5-W-17-091520	< 62	62	62	< 91	91	91	< 77
	3/18/2020	5-W-18-031820	< 62	62	62	< 91	91	91	< 77
5-W-18	6/24/2020	5-W-18-062420	< 62 UJ	62	62	< 91 UJ	91	91	< 77 UJ
	9/15/2020	5-W-18-091520	< 62	62	62	< 91	91	91	< 77
	3/17/2020	5-W-19-031720	< 63	63	63	< 93	93	93	< 78
5-W-19	6/23/2020	5-W-19-062320	< 62 UJ	62	62	< 91 UJ	91	91	< 77 UJ
	9/15/2020	5-W-19-091520	< 62	62	62	< 91	91	91	< 77
		Schooly	ard Monitoring	Wells: NWTP	H-Dx results con	npared to the <b>R</b>	$L = 477 \ \mu g/l$		
	3/17/2020	5-W-51-031720	710	62	62	820	91	91	1,530
5-W-51	6/24/2020	5-W-51-062420	330 J	62	62	610 J	91	91	<b>940</b> J
	9/16/2020	5-W-51-091620	< 190 U	62	< 190	170	91	91	201
	3/17/2020	5-W-55-031720	< 61	61	61	< 91	91	91	< 76
5-W-55	6/24/2020	5-W-55-062420	< 62 UJ	62	62	< 91 UJ	91	91	< 77 UJ
	9/15/2020	5-W-55-091520	< 62	62	62	< 91	91	91	< 77
	3/17/2020	5-W-56-031720	650	62	62	950	92	92	1,600
5-W-56	6/24/2020	5-W-56-062420	330 J	62	62	670 J	91	91	<b>1,000</b> J
	9/15/2020	5-W-56-091520	< 540 U	190	< 540	570 J	91	91	665 J

				DRO (µg/l) <sup>1</sup>			ORO (µg/l) <sup>1</sup>		Calculated
Well	Date	Sample Identification	Result	MDL	MRL	Result	MDL	MRL	NWTPH-Dx <sup>2</sup> (µg/l)
		Hydrau	ulic Control and	l Containment S	System Sentry V	Vells and Monit	oring Wells		
	L	ocations Within and	South of the H	CC Barrier Wa	ll (within Railya	rd): No target I	NWTPH-Dx concei	ntration	
S1-AD	3/17/2020	S1-AD-031720	< 62	62	62	< 91	91	91	< 77
S1-AU	3/17/2020	S1-AU-031720	< 62	62	62	< 91	91	91	< 77
S1-BD	3/17/2020	S1-BD-031720	< 61	61	61	< 91	91	91	< 76
S1-BU	3/17/2020	S1-BU-031720	< 61	61	61	< 91	91	91	< 76
S2-AD	3/16/2020	S2-AD-031620	< 62	62	62	< 91	91	91	< 77
S2-AU	3/16/2020	S2-AU-031620	< 62	62	62	< 91	91	91	< 77
S2-BD	3/16/2020	S2-BD-031620	< 62	62	62	< 91	91	91	< 77
S2-BU	3/16/2020	S2-BU-031620	240	62	62	160	91	91	400
S3-AD	3/17/2020	S3-AD-031720	< 62	62	62	< 91	91	91	< 77
S3-AU	3/17/2020	S3-AU-031720	< 61	61	61	< 91	91	91	< 76
S3-BD	3/17/2020	S3-BD-031720	< 62	62	62	< 91	91	91	< 77
S3-BU	3/17/2020	S3-BU-031720	< 62	62	62	< 92	92	92	< 77
S3-CD	3/17/2020	S3-CD-031720	< 62	62	62	< 91	91	91	< 77
S3-CU	3/17/2020	S3-CU-031720	< 62	62	62	< 91	91	91	< 77
S4-AD	3/17/2020	S4-AD-031720	< 62	62	62	< 91	91	91	< 77
S4-AU	3/17/2020	S4-AU-031720	< 62	62	62	< 91	91	91	< 77
S4-BD	3/17/2020	S4-BD-031720	< 62	62	62	< 91	91	91	< 77
S4-BU	3/17/2020	S4-BU-031720	< 62	62	62	< 91	91	91	< 77
S4-CD	3/17/2020	S4-CD-031720	< 62	62	62	< 91	91	91	< 77
S4-CU	3/17/2020	S4-CU-031720	62	62	62	< 91	91	91	108

				DRO (µg/l) <sup>1</sup>			ORO (µg/l) <sup>1</sup>		Calculated
Well	Date	Sample Identification	Result	MDL	MRL	Result	MDL	MRL	NWTPH-Dx <sup>2</sup> (µg/l)
		Locations Nor	th of the HCC	Barrier Wall: N	WTPH-Dx resu	lts compared to	the RL = $477 \mu g/l$		
	3/18/2020	GW-1-031820	< 62	62	62	< 91	91	91	< 77
GW-1	6/23/2020	GW-1-062320	< 62 UJ	62	62	< 91 UJ	91	91	< 77 UJ
	9/15/2020	GW-1-091520	< 62	62	62	< 92	92	92	< 77
	3/18/2020	GW-2-031820	< 62	62	62	< 91	91	91	< 77
GW-2	6/23/2020	GW-2-062320	< 62 UJ	62	62	< 91 UJ	91	91	< 77 UJ
	9/15/2020	GW-2-091520	< 62	62	62	< 91	91	91	< 77
	3/18/2020	GW-3-031820	460 J 84 J <sup>3</sup>	62 62	62 62	320  J < 91 UJ <sup>3</sup>	91 91	91 91	<b>780</b> J 130 J <sup>3</sup>
GW-3	6/24/2020	GW-3-062420	< 62  UJ $< 62^{3} \text{ UJ}$	62 62	62 62	< 91 UJ < 91 <sup>3</sup> UJ	91 91	91 91	<77 UJ < 77 <sup>3</sup> UJ
	9/16/2020	GW-3-091620	< 210 U 76 <sup>3</sup>	61 61	< 210 61	$120 < 91^3$	91 91	91 91	151 122 <sup>3</sup>
	3/18/2020	GW-4-031820	< 62	62	62	< 91	91	91	< 77
GW-4	6/24/2020	GW-4-062420	< 62 UJ	62	62	< 91 UJ	91	91	< 77 UJ
	9/16/2020	GW-4-091620	< 62	62	62	< 91	91	91	< 77
FW/ 1	3/18/2020	EW-1-031820	< 62	62	62	< 91	91	91	< 77
EW-1	6/23/2020	EW-1-062320	< 62 UJ	62	62	< 91 UJ	91	91	< 77 UJ
EW 2A	3/17/2020	EW-2A-031720	< 62	62	62	< 91	91	91	< 77
EW-2A	6/24/2020	EW-2A-062420	< 62 UJ	62	62	< 91 UJ	91	91	< 77 UJ
	3/18/2020	5-W-43-031820	< 62	62	62	< 91	91	91	< 77
5-W-43	6/23/2020	5-W-43-062320	< 62 UJ	62	62	< 91 UJ	91	91	< 77 UJ
	9/15/2020	5-W-43-091520	< 62	62	62	< 91	91	91	< 77
	3/18/2020	2A-W-40-031820	< 62	62	62	< 91	91	91	< 77
2A-W-40	6/23/2020	2A-W-40-062320	< 61 UJ	61	61	< 91 UJ	91	91	< 76 UJ
	9/16/2020	2A-W-40-091620	< 62	62	62	< 91	91	91	< 77

				DRO (µg/l) <sup>1</sup>			ORO (µg/l) <sup>1</sup>		Calculated
Well	Date	Sample Identification	Result	MDL	MRL	Result	MDL	MRL	NWTPH-Dx <sup>2</sup> (µg/l)
	3/18/2020	2A-W-41-031820	290 73 <sup>3</sup>	62 62	62 62	$170 < 91^3$	91 91	91 91	460 119 <sup>3</sup>
2A-W-41	6/24/2020	2A-W-41-062420	130  J < $62^3 \text{ UJ}$	62 62	62 62	100  J < 91 <sup>3</sup> UJ	92 91	92 91	230 J < 77 <sup>3</sup> UJ
	9/16/2020	2A-W-41-091620	< 290 UJ	62	< 290	< 91 UJ	91	91	< 77 UJ
	3/18/2020	1B-W-23-031820	< 62 UJ	62	62	< 91 UJ	91	91	< 77 UJ
1B-W-23	6/24/2020	1B-W-23-062420	< 62 UJ	62	62	< 92 UJ	92	92	< 77 UJ
	9/16/2020	1B-W-23-091620	< 180	180	180	< 270	270	270	< 225
	3/18/2020	2A-W-42-031820	150	62	62	130	91	91	280
2A-W-42	6/24/2020	2A-W-42-062420	120 J	62	62	120 J	91	91	240 J
	9/16/2020	2A-W-42-091620	< 110 UJ	61	< 110	< 91 UJ	91	91	< 76 UJ
		Former Air Sp	arge Area Mon	itoring Wells: N	WTPH-Dx resu	ults compared to	the RL = $477 \ \mu g/s$	1	
1B-W-3	3/17/2020	1B-W-3-031720	< 62	62	62	< 92	92	92	< 77
1 <b>D-</b> w-3	6/24/2020	1B-W-3-062420	< 62 UJ	62	62	< 91 UJ	91	91	< 77 UJ
	3/18/2020	1C-W-7-031820	120	62	62	100	91	91	220
1C-W-7	6/24/2020	1C-W-7-062420	63 J	62	62	< 91 UJ	91	91	109 J
	9/16/2020	1C-W-7-091620	< 62	62	62	< 91	91	91	< 77
	3/17/2020	1C-W-8-031720	< 62	62	62	< 91	91	91	< 77
1C-W-8	6/24/2020	1C-W-8-062420	< 62 UJ	62	62	< 91 UJ	91	91	< 77 UJ
	9/16/2020	1C-W-8-091620	< 62	62	62	< 91	91	91	< 77

				DRO (µg/l) <sup>1</sup>			ORO (µg/l) <sup>1</sup>		Calculated				
Well	Date	Sample Identification	Result	MDL	MRL	Result	MDL	MRL	NWTPH-Dx <sup>2</sup> (µg/l)				
		Former Maloney C	reek Zone Mor	nitoring Wells (v	within Railyard)	): No target NW	TPH-Dx concentra	ation					
MW-3	3/18/2020				Not Sampled	l due to Well Dar	nage						
IVI VV-3	6/24/2020	Not Sampled due to Well Damage											
	3/18/2020	MW-4-031820	110	62	62	200	92	92	310				
MW-4	6/24/2020	MW-4-062420	110 J	63	63	240 J	93	93	350 J				
	9/16/2020	MW-4-091620	< 62	62	62	< 91	91	91	< 77				
	3/18/2020	2A-W-9-031820	330	61	61	150	91	91	480				
2A-W-9	6/24/2020	2A-W-9-062420	73 J	62	62	< 92 UJ	92	92	119 J				
	9/16/2020	2A-W-9-091620	< 190	190	190	< 270	270	270	< 230				
2A-W-10	3/18/2020	2A-W-10-031820	< 62	62	62	120	92	92	151				
2A-w-10	6/24/2020	2A-W-10-062420	79 J	62	62	280 J	92	92	359 J				
2B-W-4	3/18/2020	2B-W-4-031820	< 62	62	62	< 91	91	91	< 77				
2 <b>B-</b> W-4	6/24/2020	2B-W-4-062420	< 63 UJ	63	63	< 92 UJ	92	92	< 78 UJ				
					Ionitoring Well								
			s North of the <b>R</b>	ailyard: NWTI	PH-Dx results co	ompared to the l	RL = 477 μg/l						
1A-W-4	3/18/2020	1A-W-4-031820	< 62	62	62	< 91	91	91	< 77				
1B-W-2	3/17/2020	1B-W-2-031720	< 62	62	62	< 91	91	91	< 77				
1C-W-1	3/17/2020	1C-W-1-031720	< 62	62	62	< 92	92	92	< 77				
10-11-1	6/24/2020	1C-W-1-062420	< 62 UJ	62	62	< 91 UJ	91	91	< 77 UJ				
1C-W-3	3/17/2020	1C-W-3-031720	< 62	62	62	< 92	92	92	< 77				
1C-W-4	3/17/2020	1C-W-4031720	< 62	62	62	< 91	91	91	< 77				
10-11-4	9/16/2020	1C-W-4091620	< 62	62	62	< 91	91	91	< 77				
MW-38R	3/18/2020	MW-38R-031820	62	62	62	96	91	91	158				

				DRO $(\mu g/l)^1$				Calculated			
Well	Date	Sample Identification	Result	MDL	MRL	Result	Result MDL MRL				
	Locations Within the Railyard: No target NWTPH-Dx concentration										
MW-16	3/18/2020	MW-16-031820	< 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.

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

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

<sup>3</sup>Sample analyzed by Ecology Method NWTPH-Dx with silica gel cleanup.

<sup>4</sup>Sample 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

 $\mu g/l = micrograms per liter$ 

ORO = total petroleum hydrocarbons as oil-range organics

RL = Remediation Level

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

# Table 7Air-Phase Petroleum HydrocarbonsSkykomish School Baseline and Post-Treatment Confirmational Monitoring DataSkykomish, WashingtonFarallon PN: 683-071

Sample ID	Sample Location	Date	<b>1,3-Butadiene</b> <sup>1</sup> (µg/m <sup>3</sup> )	Methyl tert- butyl ether (µg/m <sup>3</sup> )	<b>Benzene</b> <sup>1,5</sup> $(\mu g/m^3)$	Toluene (µg/m <sup>3</sup> )	Ethylbenzene (µg/m <sup>3</sup> )	Xylene, p,m (µg/m <sup>3</sup> )	Xylene, o (µg/m <sup>3</sup> )	Naphthalene <sup>1</sup> (µg/m <sup>3</sup> )	Aliphatics, C5 to C8 (µg/m <sup>3</sup> )	Aliphatics, C9 to C12 (µg/m <sup>3</sup> )	Aromatics, C9 to C10 (µg/m <sup>3</sup> )	Total APH <sup>4</sup> (µg/m <sup>3</sup> )
			467				onitoring Data	(18)	(10)	(10)	(18)			(10)
052815-BNE	Basement - Northeast	5/28/2015	< 0.044	< 2.0	1.33	17	< 2.0	6.1	< 2.0	0.551	320	420	< 10	773.0
052815-BSW	Basement - Southwest	5/28/2015	< 0.044	< 2.0	0.447	150	< 2.0	< 4.0	< 2.0	0.267	150	92	< 10	402.7
052815-BC	Basement - Central	5/28/2015	< 0.044	< 2.0	1.04	230	2.2	6.7	2.4	0.540	250	340	< 10	838.9
052816-1NE	First Floor - Northeast	5/28/2015	< 0.044	< 2.0	0.492	12	< 2.0	5.2	2.0	0.461	120	280	< 10	427.2
052815-1SW	First Floor - Southwest	5/28/2015	< 0.044	< 2.0	0.521	12	< 2.0	4.7	< 2.0	0.094	170	250	< 10	445.3
052815-1C 052815-2NE	First Floor- Central Second Floor - Northeast	5/28/2015 5/28/2015	< 0.044 < 0.044	< 2.0 < 2.0	0.700	9.0 12	< 2.0 < 2.0	< 4.0 6.2	< 2.0 2.0	0.461 0.456	100 170	150 270	< 10 < 10	270.2 469.3
052815-2INE 052815-2SW	Second Floor - Northeast Second Floor - Southwest	5/28/2015	< 0.044	< 2.0	0.470	4.7	< 2.0	< 4.0	< 2.0	0.450	83	100	< 10	198.6
Project Action Level	3	5/20/2015	0.08 <sup>2</sup>	9.6 <sup>2</sup>	0.32 <sup>2</sup>	2,200 <sup>2</sup>	460 <sup>2</sup>	<b>46</b> <sup>2</sup>	46 <sup>2</sup>	1.4 <sup>2</sup>		TCA criteria av		1,346 <sup>3</sup>
Troject Action Ecver	(µg/m)		0.08				400 Monitoring Data		40	1.4	110 112		unuole	1,540
					ost meaning	December 2018	9							
BNE	Basement - Northeast	12/10/2018	< 0.044	< 0.70	1.61	6.2	< 0.90	2.6	< 0.90	< 0.262	340	14	< 10	370.8
BIVE	Basement - Southwest	12/10/2018	< 0.044	< 0.70	1.01	5.5	< 0.90	2.3	< 0.90	< 0.262	240	14	< 10	268.5
BSW	Basement - Central	12/10/2018	< 0.044	< 0.70	1.27	6.5	< 0.90	2.9	0.96	< 0.262	240	13	< 10	304.6
1SE	First Floor - Southeast	12/10/2018	< 0.044	< 0.70	1.34	8.5	0.90	3.8	1.3	< 0.262	370	37	< 10	428.9
13E 1C			< 0.044	< 0.70		8.5	1.3	5.1		< 0.262	940	12	< 10	978.7
	First Floor - Central	12/10/2018			2.25				1.6				-	
25E	Second Floor - Southeast	12/10/2018	< 0.044	< 0.70	2.48	12	1.4	5.7	1.7	0.278	1200	14	< 10	1,243
000440 DVD			0.050			First Quarter 20						26		100.1
032119_BNE	Basement - Northeast	3/21/2019	0.060	< 0.70	0.808	26	1.5	2.7	0.93	< 0.262	55	36	< 10	128.4
032119_BSW	Basement - Southwest	3/21/2019	0.064	< 0.70	0.808	7.1	< 0.90	2.3	< 0.90	< 0.262	24	< 10	< 10	45.6
032119_BC	Basement - Central	3/21/2019	< 0.044	< 0.70	1.69	14	1.4	5.7	1.8	< 0.262	53	< 10	< 10	88.1
032119_1SE	First Floor - Southeast	3/21/2019	< 0.044	< 0.70	1.26	11	1.1	4.0	1.3	< 0.262	35	< 10	< 10	64.1
032119_1C	First Floor - Central	3/21/2019	< 0.044	< 0.70	1.46	13	1.3	4.9	1.5	< 0.262	58	11	< 10	96.6
032119_2SE	Second Floor - Southeast	3/21/2019	< 0.044	< 0.70	1.65	95	2.4	5.9	1.9	< 0.262	71	20	< 10	203.3
					Se	econd Quarter 2	019				-			
061719_BNE	Basement - Northeast	6/17/2019	< 0.044	< 0.70	1.1	9.2	1.0	4.0	1.4	< 0.262	65	30	< 10	117.2
061719_BSW	Basement - Southwest	6/17/2019	< 0.044	< 0.70	0.68	5.6	< 0.90	2.3	< 0.90	< 0.262	44	23	< 10	82.0
061719_BC	Basement - Central	6/17/2019	< 0.044	< 0.70	0.71	4.7	< 0.90	2.2	< 0.90	< 0.262	32	< 10	< 10	51.0
061719_1SE	First Floor - Southeast	6/17/2019	< 0.044	< 0.70	< 0.6	1.6	< 0.90	0.96	< 0.90	< 0.262	19	< 10	< 10	33.3
061719_1C	First Floor - Central	6/17/2019	< 0.044	< 0.70	< 0.6	1.6	< 0.90	< 0.90	< 0.90	< 0.262	16	10	< 10	34.8
061719_2SE	Second Floor - Southeast	6/17/2019	< 0.044	< 0.70	1.7	16	1.7	6.6	2.2	< 0.262	120	45	< 10	198.7
			•		Т	hird Quarter 20	19			•				
091619_BNE	Basement - Northeast	9/16/2019	< 0.044	< 0.70	0.342	1.3	< 0.90	< 0.90	< 0.90	< 0.262	13	< 10	< 10	26.5
091619 BSW	Basement - Southwest	9/16/2019	< 0.044	< 0.70	0.818	7.0	1.0	3.7	1.2	< 0.262	54	14	< 10	87.2
091619 BC	Basement - Central	9/16/2019	< 0.044	< 0.70	0.674	5.2	< 0.90	2.8	0.92	< 0.262	45	< 10	< 10	65.5
091619 1SE	First Floor - Southeast	9/16/2019	< 0.044	< 0.70	1.00	9.1	1.2	4.4	1.5	< 0.262	66	42	< 10	130.7
091619 1C	First Floor - Central	9/16/2019	< 0.044	< 0.70	0.335	2.2	< 0.90	1.3	< 0.90	< 0.262	15	< 10	< 10	30.2
091619_1C	Second Floor - Southeast	9/16/2019	< 0.044	< 0.70	1.27	11	1.4	5.5	1.8	< 0.262	85	13	< 10	124.5
	Second Field Boutheast	,		5170		ourth Quarter 20		- 10						
121819 BNE	Basement - Northeast	12/18/2019	0.164	< 0.70	0.821	4.9	< 0.90	2.2	< 0.90	< 0.262	45	< 10	< 10	64.3
121819_BIVE	Basement - Southwest	12/18/2019	< 0.044	< 0.70	0.837	5.8	< 0.90	2.5	< 0.90	< 0.262	25	< 10	< 10	45.5
121819_BSW	Basement - Central	12/18/2019	0.044	< 0.70	0.895	6.6	< 0.90	3.0	0.96	< 0.262	23	< 10	< 10	49.4
121819_BC	First Floor - Southeast	12/18/2019	0.049	< 0.70	0.895	7.4	< 0.90	3.3	1.0	< 0.262	31	< 10	< 10	49.4 54.6
-			0.051	< 0.70		9.6	< 0.90	3.3	1.0	< 0.262	54	< 10	< 10	54.6 81.2
121819_1C	First Floor - Central	12/18/2019			1.20						-	-		
121819_2SE	Second Floor - Southeast	12/18/2019	0.060	< 0.70	1.42	12	1.5	5.8	1.8	< 0.262	60	< 10	< 10	93.0
Project Action Level	(µg/m <sup>-</sup> )		<b>0.08</b> <sup>2</sup>	<b>9.6</b> <sup>2</sup>	0.32 <sup>2</sup>	<b>2,200</b> <sup>2</sup>	<b>460</b> <sup>2</sup>	<b>46</b> <sup>2</sup>	<b>46</b> <sup>2</sup>	<b>1.4</b> <sup>2</sup>	NO M	TCA criteria av	anabie	<b>1,346</b> <sup>3</sup>

# Table 7 **Air-Phase Petroleum Hydrocarbons** Skykomish School Baseline and Post-Treatment Confirmational Monitoring Data Skykomish, Washington Farallon PN: 683-071

Sample ID	Sample Location	Date	<b>1,3-Butadiene</b> <sup>1</sup> (µg/m <sup>3</sup> )	Methyl tert- butyl ether (µg/m <sup>3</sup> )	Benzene <sup>1,5</sup> (µg/m <sup>3</sup> )	<b>Toluene</b> (μg/m <sup>3</sup> )	Ethylbenzene (µg/m <sup>3</sup> )	Xylene, p,m (µg/m <sup>3</sup> )	Xylene, o (µg/m <sup>3</sup> )	Naphthalene <sup>1</sup> (µg/m <sup>3</sup> )	Aliphatics, C5 to C8 (µg/m <sup>3</sup> )	Aliphatics, C9 to C12 (µg/m <sup>3</sup> )	Aromatics, C9 to C10 (µg/m <sup>3</sup> )	Total APH <sup>4</sup> (µg/m <sup>3</sup> )
First Quarter 2020														
031620_BNE	Basement - Northeast	3/16/2020	0.084	< 0.70	0.687	5.2	< 0.90	1.7	< 0.90	< 0.262	530	< 10	< 10	549.0
031620_BSW	Basement - Southwest	3/16/2020	< 0.044	< 0.70	0.690	4.8	< 0.90	1.8	< 0.90	< 0.262	270	< 10	< 10	288.7
031620_BC	Basement - Central	3/16/2020	< 0.044	< 0.70	0.843	8.6	< 0.90	2.8	0.91	< 0.262	850	< 10	< 10	874.1
031620_1SE	First Floor - Southeast	3/16/2020	< 0.044	< 0.70	0.719	4.9	< 0.90	2.1	< 0.90	< 0.262	74	< 10	< 10	93.1
031620_1C	First Floor - Central	3/16/2020	< 0.044	< 0.70	0.879	8.1	< 0.90	2.9	0.95	< 0.262	480	< 10	< 10	503.8
031620_2SE	Second Floor - Southeast	3/16/2020	< 0.044	< 0.70	1.11	11	1.0	4.1	1.3	< 0.262	560	< 10	< 10	589.0
					Se	econd Quarter 2	020							
062420_BNE	Basement - Northeast	6/24/2020	< 0.044	< 0.70	1.45	12	1.2	5.2	1.7	< 0.262	120	78	< 10	225.0
062420_BSW	Basement - Southwest	6/24/2020	< 0.044	< 0.70	2.04	15	1.6	7.0	2.3	0.299	130	< 10	< 10	168.6
062420_BC	Basement - Central	6/24/2020	< 0.044	< 0.70	1.79	14	1.5	6.5	2.0	< 0.262	120	12	< 10	163.3
062420_1SE	First Floor - Southeast	6/24/2020	< 0.044	< 0.70	0.875	6.0	< 0.90	2.8	0.94	< 0.262	59	< 10	< 10	80.5
062420_1C	First Floor - Central	6/24/2020	< 0.044	< 0.70	< 0.319	< 0.90	< 0.90	< 0.90	< 0.90	< 0.262	< 10	< 10	< 10	17.4
062420_2SE	Second Floor - Southeast	6/24/2020	< 0.044	< 0.70	0.866	7.3	< 0.90	3.3	1.1	0.325	59	27	< 10	104.7
					T	hird Quarter 20	20							
091620_BNE	Basement - Northeast	9/16/2020	0.044	< 0.70	2.91	19	2.1	9.5	3.0	0.262	180	30	< 10	252.1
091620_BSW	Basement - Southwest	9/16/2020	0.044	< 0.70	2.81	16	2.1	8.3	2.7	< 0.262	140	41	10	223.4
091620_BC	Basement - Central	9/16/2020	< 0.044	< 0.70	2.80	17	2.0	8.1	2.5	< 0.262	130	< 10	< 10	172.9
091620_1SE	First Floor - Southeast	9/16/2020	< 0.044	< 0.70	2.54	13	1.8	6.6	2.2	< 0.262	130	33	< 10	194.6
091620_1C	First Floor - Central	9/16/2020	< 0.044	< 0.70	2.66	16	1.9	8.0	2.5	< 0.262	130	< 10	< 10	171.5
091620_2SE	Second Floor - Southeast	9/16/2020	0.071	< 0.70	3.64	28	3.2	14	4.3	< 0.262	220	14	13	300.6
Project Action Level NOTES:	l (µg/m <sup>3</sup> )		<b>0.08</b> <sup>2</sup>	<b>9.6</b> <sup>2</sup>	<b>0.32</b> <sup>2</sup>	<b>2,200</b> <sup>2</sup>	<b>460</b> <sup>2</sup>	<b>46</b> <sup>2</sup>	<b>46</b> <sup>2</sup>	<b>1.4</b> <sup>2</sup>	No M	TCA criteria av	ailable	<b>1,346</b> <sup>3</sup>

Measured values in **bold** typeface and highlighted orange exceed project action levels.

< indicates analyte not detected at a concentration exceeding the listed laboratory reporting limit (RL).

<sup>1</sup> Laboratory RLs for these compounds were attained using TO-15 SIM analysis.

<sup>2</sup> MTCA Method B standard formula value.

<sup>3</sup> Risk-based cleanup level established for Town of Skykomish and private property during this project by the Washington State Department of Ecology.

<sup>4</sup> Total APH is the sum of the results for the listed analytes, excluding 1,3-butadiene. For analytes not detected at concentrations exceeding the laboratory RL, one half of the RL is used in the summation.

<sup>5</sup> Benzene is included as part of the analysis for total APH, although benzene is not expected as a constituent of concern.

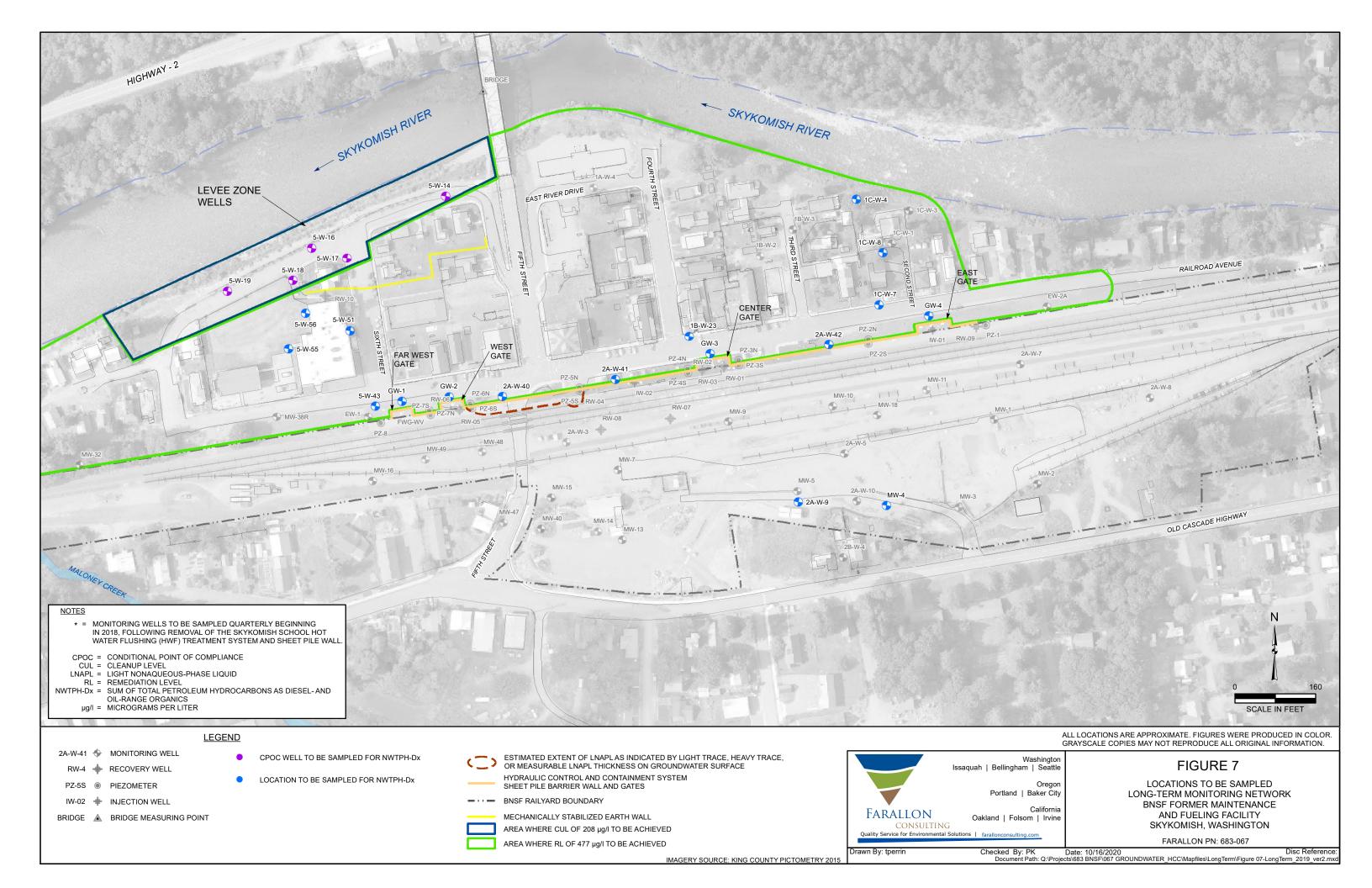
APH = air-phase petroleum hydrocarbons µg/m3 = micrograms per cubic meter MTCA = Washington State Model Toxics Control Act SIM = selective ion monitoring

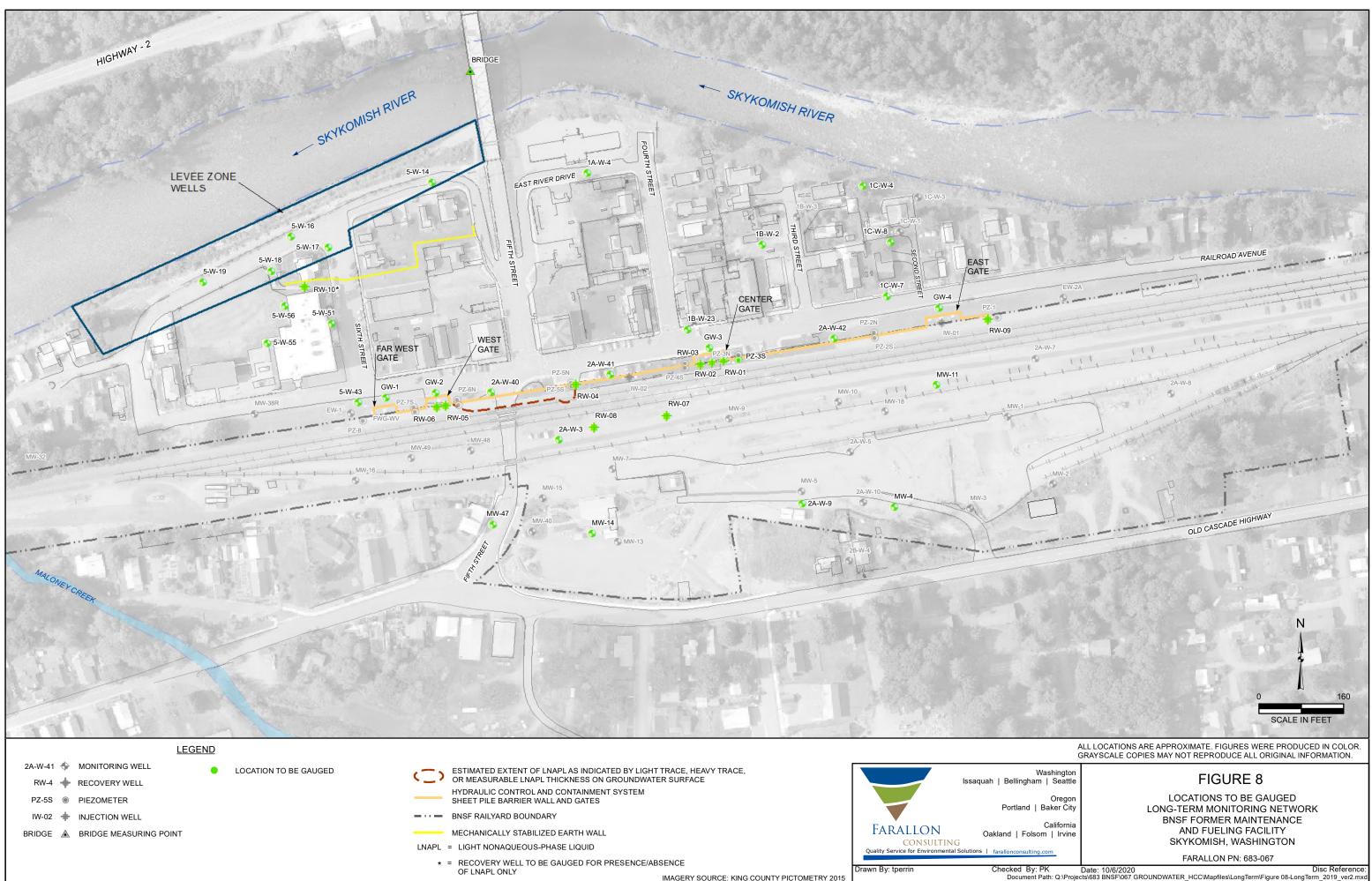
\\edgefs02\Projects 683 BNSF\683071 Skykomish FY 2021\Deliverables\2020 Annual GWM Rpt\Tables\Tb1 7 2018-2020\_Air Results Table

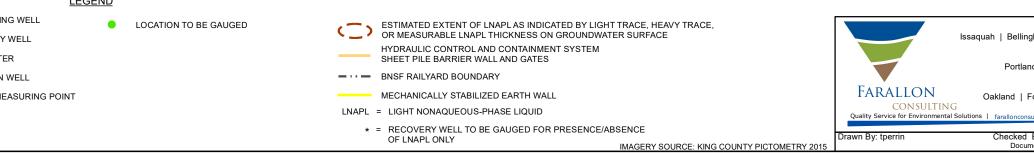
# APPENDIX A LONG-TERM MONITORING PLAN MONITORING WELL NETWORK

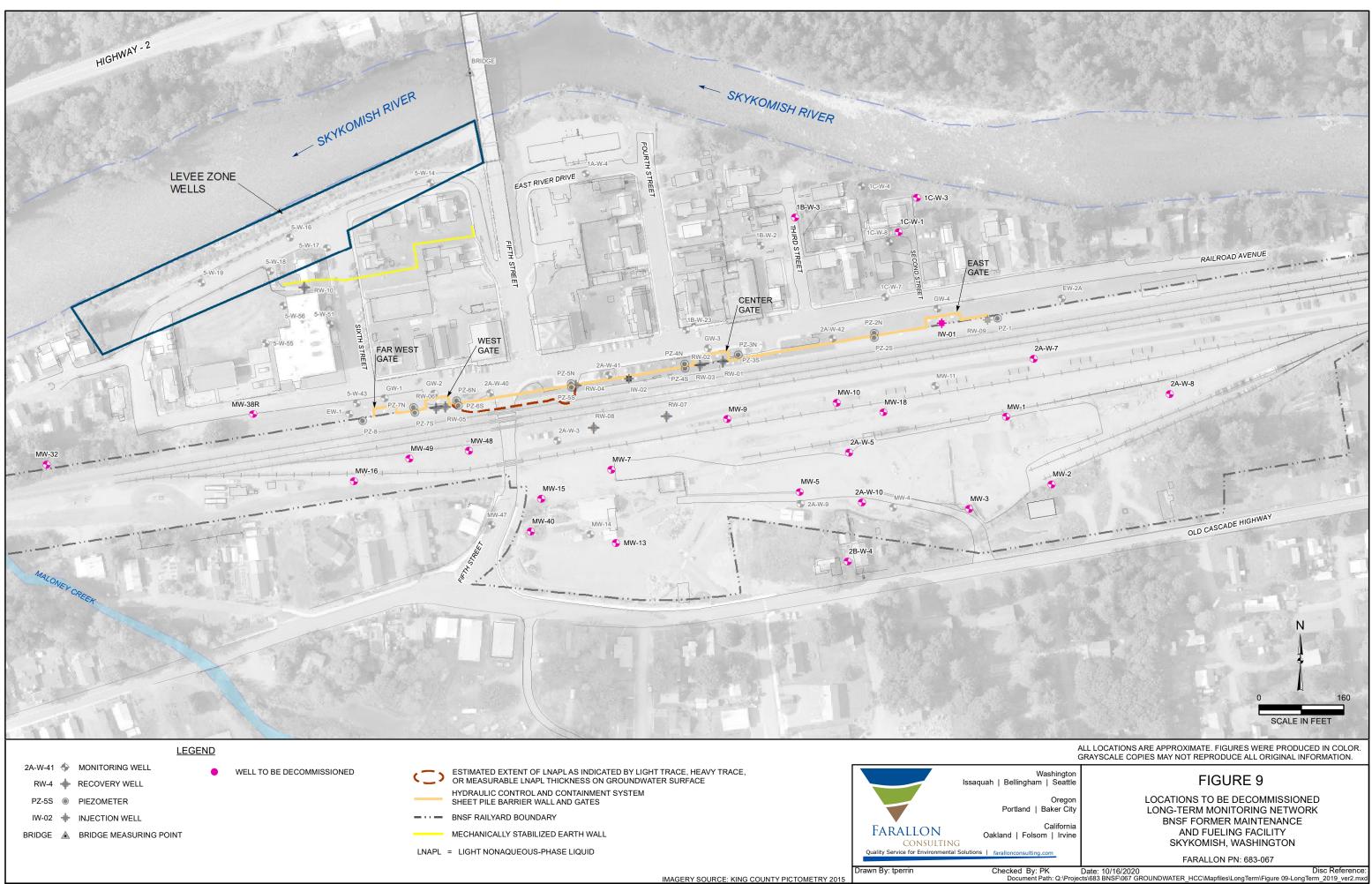
# 2020 SITE-WIDE GROUNDWATER MONITORING REPORT BNSF Former Maintenance and Fueling Facility Skykomish, Washington Consent Decree No. 07-2-33672-9 SEA

Farallon PN: 683-071









# APPENDIX B LABORATORY ANALYTICAL REPORTS (PROVIDED ON COMPACT DISC IN PRINTED REPORT)

# 2020 SITE-WIDE GROUNDWATER MONITORING REPORT BNSF Former Maintenance and Fueling Facility Skykomish, Washington Consent Decree No. 07-2-33672-9 SEA

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# 🔅 eurofins

# Environment Testing TestAmerica

# **ANALYTICAL REPORT**

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

# Laboratory Job ID: 580-93580-1

Client Project/Site: BNSF Skykomish Ground Water Sampling Event: Skykomish HCC System

# For:

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

Attn: Peter Kingston

Knistine D. allen

Authorized for release by: 4/7/2020 2:51:14 PM

Kristine Allen, Client Service Manager (253)248-4970 kristine.allen@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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# Job ID: 580-93580-1

#### Laboratory: Eurofins TestAmerica, Seattle

Narrative

Job Narrative 580-93580-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 3/19/2020 11:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 11 coolers at receipt time were 0.9° C, 1.0° C, 1.1° C, 1.4° C, 1.7° C, 2.4° C, 2.4° C, 3.0° C, 3.6° C, 3.8° C and 4.6° C.

#### Receipt Exceptions

The following samples were submitted for analysis; however, they were not listed on the Chain-of-Custody (COC): S2-BU-031620 (580-93580-59) and S4-CU-031720 (580-93580-60)

#### GC Semi VOA

Method NWTPH-Dx: Continuing calibration verification (CCV) standard associated with batch 580-326019 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 reported. (CCV 580-326019/25), (CCV 580-326019/36) and (CCV 580-326019/56)

Method NWTPH-Dx: Surrogate recovery for the following samples were outside control limits: GW-3-031820 (580-93580-52), GW-30-031820 (580-93580-53), MW-555-031820 (580-93580-57) and 1B-W-23-031820 (580-93580-58). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method NWTPH-Dx: (CCVRT 580-326022/3) recovers outside drift criteria for o-Terphenyl surrogate; all associated client sample and batch QC recover within control limits; therefore, the data is reported.

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

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

# Qualifiers

GC Sem	i VOA
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GC Semi VOA		
Qualifier	Qualifier Description	4
x	Surrogate recovery exceeds control limits	
Glossary		5
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	0
DER	Duplicate Error Ratio (normalized absolute difference)	8
Dil Fac	Dilution Factor	
DL	Detection Limit (DoD/DOE)	9
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 ID: S2-BD-031620 Date Collected: 03/16/20 16:43

Date Received: 03/19/20 11:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)
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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		03/27/20 16:10	04/01/20 23:11	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/20 16:10	04/01/20 23:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	75		50 - 150				03/27/20 16:10	04/01/20 23:11	1

Job ID: 580-93580-1

Lab Sample ID: 580-93580-1 Matrix: Water

5

4/7/2020

### Client Sample ID: S2-AU-031620 Date Collected: 03/16/20 17:20

Date Received: 03/19/20 11:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		03/27/20 16:10	04/01/20 23:31	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/20 16:10	04/01/20 23:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	71		50 - 150				03/27/20 16:10	04/01/20 23:31	1

Lab Sample ID: 580-93580-2

# Job ID: 580-93580-1

Matrix: Water

Eurofins TestAmerica, Seattle

### Client Sample ID: S2-AD-031620 Date Collected: 03/16/20 17:21

Date Received: 03/19/20 11:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		03/27/20 16:10	04/01/20 23:51	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/20 16:10	04/01/20 23:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	76		50 - 150				03/27/20 16:10	04/01/20 23:51	1

Lab Sample ID: 580-93580-3

Job ID: 580-93580-1

 B80-93580-3
 3

 Matrix: Water
 4

 ed
 Dil Fac
 5

 23:51
 1
 6

Eurofins TestAmerica, Seattle

### Client Sample ID: S1-BD-031720 Date Collected: 03/17/20 09:33

Date Received: 03/19/20 11:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.061	0.061	mg/L		03/27/20 16:10	04/02/20 00:31	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/20 16:10	04/02/20 00:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	66		50 - 150				03/27/20 16:10	04/02/20 00:31	1

Job ID: 580-93580-1

# Lab Sample ID: 580-93580-4 Matrix: Water

Eurofins TestAmerica, Seattle

5

### Client Sample ID: S1-BU-031720 Date Collected: 03/17/20 09:34

Date Received: 03/19/20 11:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.061	0.061	mg/L		03/27/20 16:10	04/02/20 00:52	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/20 16:10	04/02/20 00:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	73		50 - 150				03/27/20 16:10	04/02/20 00:52	1

Job ID: 580-93580-1

Lab Sample ID: 580-93580-5

Matrix: Water

5

# Client Sample ID: 1C-W-8-031720 Date Collected: 03/17/20 10:00

Date Received: 03/19/20 11:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		03/27/20 16:10	04/02/20 01:52	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/20 16:10	04/02/20 01:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	71		50 - 150				03/27/20 16:10	04/02/20 01:52	1

Job ID: 580-93580-1

Matrix: Water

Lab Sample ID: 580-93580-6

# 2 3 4 5 6 7

Eurofins TestAmerica, Seattle

# Client Sample ID: 1C-W-1-031720 Date Collected: 03/17/20 10:10

Date Received: 03/19/20 11:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		03/27/20 16:10	04/02/20 02:12	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		03/27/20 16:10	04/02/20 02:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	57		50 - 150				03/27/20 16:10	04/02/20 02:12	1

Lab Sample ID: 580-93580-7

Matrix: Water

Job ID: 580-93580-1

Eurofins TestAmerica, Seattle

### Client Sample ID: S1-AU-031720 Date Collected: 03/17/20 10:14

Date Received: 03/19/20 11:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		03/27/20 16:10	04/02/20 02:32	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/20 16:10	04/02/20 02:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	70		50 - 150				03/27/20 16:10	04/02/20 02:32	1

Job ID: 580-93580-1

Matrix: Water

Lab Sample ID: 580-93580-8

#### Client Sample ID: S1-AD-031720 Date Collected: 03/17/20 10:15

Date Received: 03/19/20 11:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		03/27/20 16:10	04/02/20 02:52	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/20 16:10	04/02/20 02:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	68		50 _ 150				03/27/20 16:10	04/02/20 02:52	1
Surrogate o-Terphenyl	%Recovery 68	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Job ID: 580-93580-1

Matrix: Water

Lab Sample ID: 580-93580-9

#### Client Sample ID: 1C-W-4031720 Date Collected: 03/17/20 10:51

Date Received: 03/19/20 11:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		03/27/20 16:10	04/02/20 03:13	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/20 16:10	04/02/20 03:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analvzed	Dil Fac
o-Terphenyl	68		50 - 150				03/27/20 16:10	04/02/20 03:13	1

Job ID: 580-93580-1

Matrix: Water

Lab Sample ID: 580-93580-10

#### Client Sample ID: S3-AU-031720 Date Collected: 03/17/20 11:10

Date Received: 03/19/20 11:15

Method: NWTPH-Dx - Northwest -	Semi-Volatile	Petroleum	Products (GC	C)		
Analyte	Result	Qualifier	RL	MDL	Unit	D

o-Terphenyl	72	50 - 150		03/27/20 16:10	04/02/20 03:33	1
Surrogate	%Recovery Qualifier	Limits		Prepared	Analyzed	Dil Fac
Motor Oil (>C24-C36)	ND	0.091	0.091 mg/L	03/27/20 16:10	04/02/20 03:33	1
#2 Diesel (C10-C24)	ND	0.061	0.061 mg/L	03/27/20 16:10	04/02/20 03:33	1

Matrix: Water 5

Dil Fac

Job ID: 580-93580-1

Lab Sample ID: 580-93580-11

Analyzed

Prepared

#### Client Sample ID: 1C-W-3-031720 Date Collected: 03/17/20 11:10

Date Received: 03/19/20 11:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		03/27/20 16:10	04/02/20 03:53	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		03/27/20 16:10	04/02/20 03:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	64		50 - 150				03/27/20 16:10	04/02/20 03:53	1

Job ID: 580-93580-1

Matrix: Water

Lab Sample ID: 580-93580-12

#### Client Sample ID: S3-AD-031720 Date Collected: 03/17/20 11:11

Date Received: 03/19/20 11:15

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)	
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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		03/27/20 16:10	04/02/20 04:13	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/20 16:10	04/02/20 04:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	61		50 - 150				03/27/20 16:10	04/02/20 04:13	1

Job ID: 580-93580-1

# Lab Sample ID: 580-93580-13 Matrix: Water

5

#### Client Sample ID: S3-BU-031720 Date Collected: 03/17/20 11:45

Date Received: 03/19/20 11:15

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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		03/27/20 16:10	04/02/20 13:11	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		03/27/20 16:10	04/02/20 13:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	75		50 - 150				03/27/20 16:10	04/02/20 13:11	1

Lab Sample ID: 580-93580-14 Matrix: Water

Job ID: 580-93580-1

ater 4

#### Client Sample ID: S3-BD-031720 Date Collected: 03/17/20 11:46

Date Received: 03/19/20 11:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		03/27/20 16:10	04/02/20 13:31	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/20 16:10	04/02/20 13:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	71		50 - 150				03/27/20 16:10	04/02/20 13:31	1

Lab Sample ID: 580-93580-15

Job ID: 580-93580-1

Matrix: Water

#### Client Sample ID: 1B-W-2-031720 Date Collected: 03/17/20 12:16

Date Received: 03/19/20 11:15

Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ND		0.062	0.062	mg/L		03/27/20 16:10	04/02/20 14:12	1
ND		0.091	0.091	mg/L		03/27/20 16:10	04/02/20 14:12	1
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
72		50 - 150				03/27/20 16:10	04/02/20 14:12	1
-	ND ND <b>%Recovery</b>	ND %Recovery Qualifier	ND         0.062           ND         0.091           %Recovery         Qualifier         Limits	ND         0.062         0.062           ND         0.091         0.091           %Recovery         Qualifier         Limits	ND         0.062         0.062 mg/L           ND         0.091         0.091 mg/L           %Recovery         Qualifier         Limits	ND         0.062         0.062 mg/L           ND         0.091         0.091 mg/L           %Recovery         Qualifier         Limits	ND         0.062         0.062         mg/L         03/27/20 16:10           ND         0.091         0.091         mg/L         03/27/20 16:10           %Recovery         Qualifier         Limits         Prepared	ND         0.062         0.062         mg/L         03/27/20         16:10         04/02/20         14:12           ND         0.091         0.091         mg/L         03/27/20         16:10         04/02/20         14:12           %Recovery         Qualifier         Limits         Prepared         Analyzed

Lab Sample ID: 580-93580-16

Matrix: Water

#### Client Sample ID: 1B-W-3-031720 Date Collected: 03/17/20 12:30

Date Received: 03/19/20 11:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		03/27/20 16:10	04/02/20 14:32	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		03/27/20 16:10	04/02/20 14:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	74		50 - 150				03/27/20 16:10	04/02/20 14:32	1

Lab Sample ID: 580-93580-17

Job ID: 580-93580-1

Matrix: Water

## 2 3 4 5 6 7 8

#### Client Sample ID: S3-CD-031720 Date Collected: 03/17/20 12:34

Date Received: 03/19/20 11:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		03/27/20 16:10	04/02/20 14:52	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/20 16:10	04/02/20 14:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	79		50 - 150				03/27/20 16:10	04/02/20 14:52	1

Lab Sample ID: 580-93580-18

Matrix: Water

Job ID: 580-93580-1

#### Client Sample ID: S3-CU-031720 Date Collected: 03/17/20 12:35

Date Received: 03/19/20 11:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		03/31/20 09:36	04/03/20 01:58	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/31/20 09:36	04/03/20 01:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	72		50 - 150				03/31/20 09:36	04/03/20 01:58	1

Job ID: 580-93580-1

Matrix: Water

Lab Sample ID: 580-93580-19

#### Client Sample ID: S4-AU-031720 Date Collected: 03/17/20 14:10

Date Received: 03/19/20 11:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		03/31/20 09:36	04/03/20 02:19	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/31/20 09:36	04/03/20 02:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	74		50 - 150				03/31/20 09:36	04/03/20 02:19	1

Job ID: 580-93580-1

Matrix: Water

Lab Sample ID: 580-93580-20

#### Client Sample ID: 5-W-55-031720 Date Collected: 03/17/20 14:24

Date Received: 03/19/20 11:15

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

Analyte #2 Diesel (C10-C24)	Result	Qualifier	RL	0.061		D	Prepared	Analyzed	Dil Fac
Motor Oil (>C24-C36)	ND		0.091	0.001	0		03/31/20 09:36	04/03/20 02:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	67		50 - 150				03/31/20 09:36	04/03/20 02:39	1

Lab Sample ID: 580-93580-21

Matrix: Water

Job ID: 580-93580-1

#### Client Sample ID: S4-AD-031720 Date Collected: 03/17/20 14:09

Date Received: 03/19/20 11:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		03/31/20 09:36	04/03/20 02:59	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/31/20 09:36	04/03/20 02:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	78		50 - 150				03/31/20 09:36	04/03/20 02:59	1

Job ID: 580-93580-1

Lab Sample ID: 580-93580-22

2 80-93580-22 Matrix: Water 4 ed Dil Fac 5

## Client Sample ID: 5-W-56-031720 Date Collected: 03/17/20 14:40

Date Received: 03/19/20 11:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.65		0.062	0.062	mg/L		03/31/20 09:36	04/03/20 03:19	1
Motor Oil (>C24-C36)	0.95		0.092	0.092	mg/L		03/31/20 09:36	04/03/20 03:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	76		50 - 150				03/31/20 09:36	04/03/20 03:19	1

Job ID: 580-93580-1

Matrix: Water

Lab Sample ID: 580-93580-23

## Client Sample ID: 5-W-51-031720 Date Collected: 03/17/20 15:15

Date Received: 03/19/20 11:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.71		0.062	0.062	mg/L		03/31/20 09:36	04/03/20 03:39	1
Motor Oil (>C24-C36)	0.82		0.091	0.091	mg/L		03/31/20 09:36	04/03/20 03:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	82		50 - 150				03/31/20 09:36	04/03/20 03:39	1

Job ID: 580-93580-1

Matrix: Water

Lab Sample ID: 580-93580-24

#### Client Sample ID: S4-BD-031720 Date Collected: 03/17/20 15:06

Date Received: 03/19/20 11:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		03/31/20 09:36	04/03/20 03:59	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/31/20 09:36	04/03/20 03:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	76		50 - 150				03/31/20 09:36	04/03/20 03:59	1

Job ID: 580-93580-1

Matrix: Water

Lab Sample ID: 580-93580-25

#### Client Sample ID: S4-BU-031720 Date Collected: 03/17/20 15:07

Date Received: 03/19/20 11:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		03/31/20 09:36	04/03/20 04:40	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/31/20 09:36	04/03/20 04:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	69		50 - 150				03/31/20 09:36	04/03/20 04:40	1

Lab Sample ID: 580-93580-26

Job ID: 580-93580-1

Matrix: Water

5

## Client Sample ID: 5-W-17-031720 Date Collected: 03/17/20 15:40

Date Received: 03/19/20 11:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.063	0.063	mg/L		03/31/20 09:36	04/03/20 05:00	1
Motor Oil (>C24-C36)	ND		0.093	0.093	mg/L		03/31/20 09:36	04/03/20 05:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	72		50 - 150				03/31/20 09:36	04/03/20 05:00	1

Matrix: Water

Job ID: 580-93580-1

Lab Sample ID: 580-93580-27

#### Client Sample ID: S4-CD-031720 Date Collected: 03/17/20 15:45

Date Received: 03/19/20 11:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		03/31/20 09:36	04/03/20 05:20	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/31/20 09:36	04/03/20 05:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	76		50 - 150				03/31/20 09:36	04/03/20 05:20	1

Job ID: 580-93580-1

Matrix: Water

Lab Sample ID: 580-93580-28

## Client Sample ID: 5-W-14-031720 Date Collected: 03/17/20 16:08

Date Received: 03/19/20 11:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		03/31/20 09:36	04/03/20 05:40	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/31/20 09:36	04/03/20 05:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	70		50 - 150				03/31/20 09:36	04/03/20 05:40	1

Job ID: 580-93580-1

Matrix: Water

Lab Sample ID: 580-93580-29

#### Client Sample ID: EW-2A-031720 Date Collected: 03/17/20 16:50

Date Received: 03/19/20 11:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		03/31/20 09:36	04/03/20 06:00	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/31/20 09:36	04/03/20 06:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	72		50 - 150				03/31/20 09:36	04/03/20 06:00	1

Lab Sample ID: 580-93580-30

Matrix: Water

Job ID: 580-93580-1

#### Client Sample ID: 5-W-19-031720 Date Collected: 03/17/20 17:00

Date Received: 03/19/20 11:15

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

Analyte		Qualifier	RL			D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.063	0.063	mg/L		03/31/20 09:36	04/03/20 06:21	1
Motor Oil (>C24-C36)	ND		0.093	0.093	mg/L		03/31/20 09:36	04/03/20 06:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	73		50 - 150				03/31/20 09:36	04/03/20 06:21	1

Job ID: 580-93580-1

Matrix: Water

Lab Sample ID: 580-93580-31

## 2 3 4 5 6 7

#### Client Sample ID: 5-W-16-031720 Date Collected: 03/17/20 17:06

Date Received: 03/19/20 11:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		03/31/20 09:36	04/03/20 06:41	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/31/20 09:36	04/03/20 06:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	69		50 - 150				03/31/20 09:36	04/03/20 06:41	1

Lab Sample ID: 580-93580-32

Matrix: Water

Job ID: 580-93580-1

#### Job ID: 580-93580-1

Matrix: Water

Lab Sample ID: 580-93580-33

## Client Sample ID: 2A-W-10-031820 Date Collected: 03/18/20 08:31

Date Received: 03/19/20 11:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		03/31/20 09:36	04/03/20 07:01	1
Motor Oil (>C24-C36)	0.12		0.092	0.092	mg/L		03/31/20 09:36	04/03/20 07:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	67		50 - 150				03/31/20 09:36	04/03/20 07:01	1
<u> </u>									

Eurofins TestAmerica, Seattle

#### Client Sample ID: GW-4-031820 Date Collected: 03/18/20 08:35

Date Received: 03/19/20 11:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		03/31/20 09:36	04/03/20 07:21	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/31/20 09:36	04/03/20 07:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	75		50 - 150				03/31/20 09:36	04/03/20 07:21	1

 
 Lab Sample ID: 580-93580-34 Matrix: Water
 3

 Prepared
 Analyzed
 Dil Fac
 5

Job ID: 580-93580-1

Matrix: Water

5

Lab Sample ID: 580-93580-35

## Client Sample ID: MW-4-031820 Date Collected: 03/18/20 08:40

Date Received: 03/19/20 11:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.11		0.062	0.062	mg/L		03/31/20 09:36	04/03/20 07:41	1
Motor Oil (>C24-C36)	0.20		0.092	0.092	mg/L		03/31/20 09:36	04/03/20 07:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	71		50 - 150				03/31/20 09:36	04/03/20 07:41	1

Job ID: 580-93580-1

Matrix: Water

5

Lab Sample ID: 580-93580-36

## Client Sample ID: MW-40-31820 Date Collected: 03/18/20 08:50

Date Received: 03/19/20 11:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.11		0.062	0.062	mg/L		03/31/20 09:36	04/03/20 08:22	1
Motor Oil (>C24-C36)	0.20		0.092	0.092	mg/L		03/31/20 09:36	04/03/20 08:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	79		50 - 150				03/31/20 09:36	04/03/20 08:22	1

#### Client Sample ID: 2A-W-9-031820 Date Collected: 03/18/20 09:11

Date Received: 03/19/20 11:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.33		0.061	0.061	mg/L		03/31/20 09:36	04/03/20 08:42	1
Motor Oil (>C24-C36)	0.15		0.091	0.091	mg/L		03/31/20 09:36	04/03/20 08:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	76		50 - 150				03/31/20 09:36	04/03/20 08:42	1

Job ID: 580-93580-1

Lab Sample ID: 580-93580-37

Matrix: Water

## Client Sample ID: 1C-W-7-031820 Date Collected: 03/18/20 09:37

Date Received: 03/19/20 11:15

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

Analyte		Qualifier		MDL		D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.12		0.062	0.062	mg/L		03/31/20 09:36	04/03/20 09:02	1
Motor Oil (>C24-C36)	0.10		0.091	0.091	mg/L		03/31/20 09:36	04/03/20 09:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	74		50 - 150				03/31/20 09:36	04/03/20 09:02	1

Lab Sample ID: 580-93580-38

Job ID: 580-93580-1

Matrix: Water

#### Client Sample ID: 2B-W-4-031820 Date Collected: 03/18/20 10:13

Date Received: 03/19/20 11:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/01/20 17:15	04/04/20 03:38	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		04/01/20 17:15	04/04/20 03:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	78		50 - 150				04/01/20 17:15	04/04/20 03:38	1

Job ID: 580-93580-1

Matrix: Water

Lab Sample ID: 580-93580-39

#### Client Sample ID: MW-16-031820 Date Collected: 03/18/20 10:15

Date Received: 03/19/20 11:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/01/20 17:15	04/04/20 03:58	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		04/01/20 17:15	04/04/20 03:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	80		50 - 150				04/01/20 17:15	04/04/20 03:58	1

Lab Sample ID: 580-93580-40

Matrix: Water

Job ID: 580-93580-1

## Client Sample ID: 1A-W-4-031820 Date Collected: 03/18/20 10:50

Date Received: 03/19/20 11:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/01/20 17:15	04/04/20 04:18	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		04/01/20 17:15	04/04/20 04:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	79		50 - 150				04/01/20 17:15	04/04/20 04:18	1

Lab Sample ID: 580-93580-41

Matrix: Water

Job ID: 580-93580-1

#### Job ID: 580-93580-1

Matrix: Water

Lab Sample ID: 580-93580-42

## Client Sample ID: MW-38R-031820 Date Collected: 03/18/20 11:26

Date Received: 03/19/20 11:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.062		0.062	0.062	mg/L		04/01/20 17:15	04/04/20 04:38	1
Motor Oil (>C24-C36)	0.096		0.091	0.091	mg/L		04/01/20 17:15	04/04/20 04:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	80		50 - 150				04/01/20 17:15	04/04/20 04:38	1

#### Client Sample ID: 5-W-18-031820 Date Collected: 03/18/20 11:30

Date Received: 03/19/20 11:15

Method: NWTPH-Dx - Northwest	- Semi-Volatile	Petroleum	Products (GC)		
Analyte	Result (	Qualifier	RL	MDL Unit	

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/01/20 17:15	04/04/20 04:58	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		04/01/20 17:15	04/04/20 04:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	77		50 - 150				04/01/20 17:15	04/04/20 04:58	1

Lab Sample ID: 580-93580-43

Job ID: 580-93580-1

Matrix: Water

Lab	Sample	ID:	580-93580-44

80-93580-44 Matrix: Water 4

5

Job ID: 580-93580-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.063	0.063	mg/L		04/01/20 17:15	04/04/20 05:18	1
Motor Oil (>C24-C36)	ND		0.093	0.093	mg/L		04/01/20 17:15	04/04/20 05:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	70		50 - 150				04/01/20 17:15	04/04/20 05:18	1

Limits

50 - 150

#### Job ID: 580-93580-1

Matrix: Water

#### Client Sample ID: 2A-W-42-031820 Date Collected: 03/18/20 11:45

Date Received: 03/19/20 11:15

Surrogate

o-Terphenyl

Method: NWTPH-Dx - Northwest -	Semi-Volatile	Petroleum	Products (GC)				
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared
#2 Diesel (C10-C24)	0.15		0.062	0.062	mg/L		04/01/20 17:15
Motor Oil (>C24-C36)	0.13		0.091	0.091	mg/L		04/01/20 17:15

%Recovery Qualifier

74

Prepared	Analyzed	
4/01/20 17:15	04/04/20 05:39	
4/01/20 17:15	04/04/20 05:39	

04/01/20 17:15 04/04/20 05:39

Lab Sample ID: 580-93580-45

Dil Fac Analyzed 4/04/20 05.3 Analyzed Dil Fac 5

1 1

1

#### Client Sample ID: EW-1-031820 Date Collected: 03/18/20 12:05

Date Received: 03/19/20 11:15

Method: NWTPH-Dx - North	west - Semi-Volatile	Petroleum	Products (GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/01/20 17:15	04/04/20 06:19	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		04/01/20 17:15	04/04/20 06:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	76		50 - 150				04/01/20 17:15	04/04/20 06:19	1

Lab Sample ID: 580-93580-46

Job ID: 580-93580-1

Matrix: Water

5

#### Client Sample ID: EW-10-031820 Date Collected: 03/18/20 12:15

Date Received: 03/19/20 11:15

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

Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ND		0.062	0.062	mg/L		04/01/20 17:15	04/04/20 06:39	1
ND		0.091	0.091	mg/L		04/01/20 17:15	04/04/20 06:39	1
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
69		50 - 150				04/01/20 17:15	04/04/20 06:39	1
	ND ND %Recovery	ND %Recovery Qualifier	ND         0.062           ND         0.091           %Recovery         Qualifier         Limits	ND         0.062         0.062           ND         0.091         0.091           %Recovery         Qualifier         Limits	ND         0.062         0.062 mg/L           ND         0.091         0.091 mg/L           %Recovery         Qualifier         Limits	ND         0.062         0.062         mg/L           ND         0.091         0.091         mg/L           %Recovery         Qualifier         Limits	ND         0.062         0.062         mg/L         04/01/20 17:15           ND         0.091         0.091         mg/L         04/01/20 17:15           %Recovery         Qualifier         Limits         Prepared	ND         0.062         0.062         mg/L         04/01/20 17:15         04/04/20 06:39           ND         0.091         0.091         mg/L         04/01/20 17:15         04/04/20 06:39           %Recovery         Qualifier         Limits         Prepared         Analyzed

Job ID: 580-93580-1

Matrix: Water

Lab Sample ID: 580-93580-47

### 2 3 4 5 6 7 8

#### Client Sample ID: GW-1-031820 Date Collected: 03/18/20 12:50

Date Received: 03/19/20 11:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/01/20 17:15	04/04/20 06:59	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		04/01/20 17:15	04/04/20 06:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	79		50 - 150				04/01/20 17:15	04/04/20 06:59	1

4/7/2020

Matrix: Water

Lab Sample ID: 580-93580-48

#### Client Sample ID: 5-W-43-031820 Date Collected: 03/18/20 12:51

Date Received: 03/19/20 11:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/01/20 17:15	04/04/20 07:19	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		04/01/20 17:15	04/04/20 07:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	78		50 - 150				04/01/20 17:15	04/04/20 07:19	1

Lab Sample ID: 580-93580-49

Matrix: Water

5

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

Job ID: 580-93580-1

Matrix: Water

5

Lab Sample ID: 580-93580-50

#### Client Sample ID: 2A-W-41-031820 Date Collected: 03/18/20 13:00

Date Received: 03/19/20 11:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.29		0.062	0.062	mg/L		04/01/20 17:15	04/04/20 07:40	1
Motor Oil (>C24-C36)	0.17		0.091	0.091	mg/L		04/01/20 17:15	04/04/20 07:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	73		50 - 150				04/01/20 17:15	04/04/20 07:40	
		Products by		Silica Go	l Cleanun		04/01/2011/13	0-10-120 01.40	
Method: NWTPH-Dx - Semi-	Volatile Petroleum	Products by Qualifier			I Cleanup Unit	D	Prepared	Analyzed	Dil Fa
Method: NWTPH-Dx - Semi- Analyte	Volatile Petroleum	-	y NWTPH with S		Unit				Dil Fac
Method: NWTPH-Dx - Semi- Analyte #2 Diesel (C10-C24)	Volatile Petroleum I Result	-	NWTPH with S	<b>MDL</b> 0.062	Unit mg/L		Prepared	Analyzed	Dil Fac
Method: NWTPH-Dx - Semi- Analyte #2 Diesel (C10-C24) Motor Oil (>C24-C36)	Volatile Petroleum I Result 0.073 ND	Qualifier	<b>/ NWTPH with </b> <b>RL</b> 0.062 0.091	MDL 0.062	Unit mg/L		Prepared 04/01/20 17:15 04/01/20 17:15	Analyzed 04/04/20 12:02 04/04/20 12:02	1
Method: NWTPH-Dx - Semi- Analyte #2 Diesel (C10-C24) Motor Oil (>C24-C36) Surrogate	Volatile Petroleum I Result 0.073	Qualifier	<b>NWTPH with</b> <b>RL</b> 0.062	MDL 0.062	Unit mg/L		Prepared 04/01/20 17:15	Analyzed	Dil F Dil F

Job ID: 580-93580-1

#### Client Sample ID: 2A-W-410-031820 Date Collected: 03/18/20 13:03

Date Received: 03/19/20 11:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed		
#2 Diesel (C10-C24)	0.26		0.062	0.062	mg/L		04/01/20 17:15	04/04/20 08:00		
Motor Oil (>C24-C36)	0.16		0.091	0.091	mg/L		04/01/20 17:15	04/04/20 08:00		
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed		
o-Terphenyl	68		50 - 150				04/01/20 17:15	04/04/20 08:00		

Eurofins TestAmerica, Seattle

Dil Fac

Dil Fac

1 1

1

5

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

#### Client Sample ID: GW-3-031820 Date Collected: 03/18/20 15:09

Date Received: 03/19/20 11:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.46		0.062	0.062	mg/L		04/01/20 17:15	04/04/20 08:20	1
Motor Oil (>C24-C36)	0.32		0.091	0.091	mg/L		04/01/20 17:15	04/04/20 08:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	46	X	50 - 150				04/01/20 17:15	04/04/20 08:20	1
		Products by Qualifier	/ NWTPH with \$	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte		-	·		Unit		Prepared 04/01/20 17:15	Analyzed	Dil Fa
Analyte #2 Diesel (C10-C24)	Result	-	RL	MDL	Unit		·		Dil Fa
Method: NWTPH-Dx - Semi Analyte #2 Diesel (C10-C24) Motor Oil (>C24-C36) Surrogate	Result 0.084	Qualifier	<b>RL</b> 0.062	MDL 0.062	Unit mg/L		04/01/20 17:15	04/04/20 12:22	Dil Fa

Job ID: 580-93580-1

Matrix: Water

Lab Sample ID: 580-93580-52

#### Client Sample ID: GW-30-031820 Date Collected: 03/18/20 15:15

Date Received: 03/19/20 11:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.50		0.061	0.061	mg/L		04/01/20 17:15	04/04/20 08:40	1
Motor Oil (>C24-C36)	0.26		0.091	0.091	mg/L		04/01/20 17:15	04/04/20 08:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	34	X	50 - 150				04/01/20 17:15	04/04/20 08:40	1

Job ID: 580-93580-1

Matrix: Water

Lab Sample ID: 580-93580-53

#### Client Sample ID: 2A-W-40-031820 Date Collected: 03/18/20 15:05

Date Received: 03/19/20 11:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/01/20 17:15	04/04/20 09:00	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		04/01/20 17:15	04/04/20 09:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	72		50 - 150				04/01/20 17:15	04/04/20 09:00	1

Lab Sample ID: 580-93580-54

Matrix: Water

5

4/7/2020

#### Client Sample ID: GW-2-031820 Date Collected: 03/18/20 15:05

Date Received: 03/19/20 11:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/01/20 17:15	04/04/20 09:20	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		04/01/20 17:15	04/04/20 09:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	74		50 _ 150				04/01/20 17:15	04/04/20 09:20	1

Job ID: 580-93580-1

Matrix: Water

Lab Sample ID: 580-93580-55

#### Client Sample ID: GW-20-31820 Date Collected: 03/18/20 15:05

Date Received: 03/19/20 11:15

Method: NWTPH-Dx - North			Products (GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/01/20 17:15	04/04/20 10:01	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		04/01/20 17:15	04/04/20 10:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	75		50 - 150				04/01/20 17:15	04/04/20 10:01	1

Lab Sample ID: 580-93580-56

Job ID: 580-93580-1

Matrix: Water

#### Client Sample ID: MW-555-031820 Date Collected: 03/18/20 15:50

Date Received: 03/19/20 11:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		04/01/20 17:15	04/04/20 10:21	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		04/01/20 17:15	04/04/20 10:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	21	X	50 - 150				04/01/20 17:15	04/04/20 10:21	1

5

Matrix: Water

Lab Sample ID: 580-93580-57

#### Client Sample ID: 1B-W-23-031820 Date Collected: 03/18/20 16:05

Date Received: 03/19/20 11:15

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

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac												
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac				
ND		0.062	0.062	mg/L		04/01/20 17:15	04/04/20 10:41	1				
ND		0.091	0.091	mg/L		04/01/20 17:15	04/04/20 10:41	1				
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac				
20	X	50 - 150				04/01/20 17:15	04/04/20 10:41	1				
	ND ND %Recovery		ND 0.062 ND 0.091 %Recovery Qualifier Limits	ND         0.062         0.062           ND         0.091         0.091           %Recovery         Qualifier         Limits	ND         0.062         0.062         mg/L           ND         0.091         0.091         mg/L           %Recovery         Qualifier         Limits	ND         0.062         0.062         mg/L           ND         0.091         0.091         mg/L           %Recovery         Qualifier         Limits	ND         0.062         0.062         mg/L         04/01/20 17:15           ND         0.091         0.091         mg/L         04/01/20 17:15           %Recovery         Qualifier         Limits         Prepared	ND         0.062         0.062         mg/L         04/01/20 17:15         04/04/20 10:41           ND         0.091         0.091         mg/L         04/01/20 17:15         04/04/20 10:41           %Recovery         Qualifier         Limits         Prepared         Analyzed				

Job ID: 580-93580-1

Lab Sample ID: 580-93580-58

## 0-93580-1

5

Matrix: Water

#### Client Sample ID: S2-BU-031620 Date Collected: 03/16/20 16:41

Date Received: 03/19/20 11:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.24		0.062	0.062	mg/L		03/27/20 16:10	04/02/20 00:11	1
Motor Oil (>C24-C36)	0.16		0.091	0.091	mg/L		03/27/20 16:10	04/02/20 00:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	66		50 - 150				03/27/20 16:10	04/02/20 00:11	1

Job ID: 580-93580-1

Matrix: Water

Lab Sample ID: 580-93580-59

#### Client Sample ID: S4-CU-031720 Date Collected: 03/17/20 15:46

Date Received: 03/19/20 11:15

#### Lab Sample ID: 580-93580-60 Matrix: Water

5

Job ID: 580-93580-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.062		0.062	0.062	mg/L		03/27/20 16:10	04/02/20 01:12	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		03/27/20 16:10	04/02/20 01:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	71		50 - 150				03/27/20 16:10	04/02/20 01:12	1

Lab Sample ID: MB 580-325681/1-A

Matrix: Water

#2 Diesel (C10-C24)

Analyte

Analysis Batch: 326019

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

MB MB

ND

Result Qualifier

RL

0.065

MDL Unit

0.065 mg/L

D

Prepared

03/27/20 16:10

Prep Type: Total/NA

Prep Batch: 325681

Dil Fac

1

**Client Sample ID: Method Blank** 

Analyzed

04/01/20 22:10

6

#2 Diesei (C10-C24)	IN	ID .	0.005	0.06	5 mg/L		03/2	2//20 10.10	04/01/20 22.10	1
Motor Oil (>C24-C36)	N	ID	0.096	0.09	6 mg/L		03/2	27/20 16:10	04/01/20 22:10	1
	N	IB MB								
Surrogate	%Recove		Limits				F	Prepared	Analyzed	Dil Fac
o-Terphenyl		77	50 - 150					27/20 16:10	04/01/20 22:10	1
-										
Lab Sample ID: LCS 580-325	681/2-A						Client	t Sample	ID: Lab Control	
Matrix: Water									Prep Type: 1	fotal/NA
Analysis Batch: 326019									Prep Batch	: 325681
			Spike	LCS LC					%Rec.	
Analyte			Added	Result Qu	alifier	Unit	D	%Rec	Limits	
#2 Diesel (C10-C24)			0.500	0.398		mg/L		80	50 - 120	
Motor Oil (>C24-C36)			0.500	0.461		mg/L		92	64 - 120	
	LCS L	cs								
Surrogate	%Recovery Q	ualifier	Limits							
o-Terphenyl	73		50 - 150							
-										
Lab Sample ID: LCSD 580-32	25681/3-A					Clie	nt San	nple ID: L	ab Control Sam	
Matrix: Water									Prep Type: 1	fotal/NA
Analysis Batch: 326019									Prep Batch	
			Spike	LCSD LC					%Rec.	RPD
Analyte			Added	Result Qu	alifier	Unit	D	%Rec	Limits RPI	
#2 Diesel (C10-C24)			0.500	0.394		mg/L		79		1 26
Motor Oil (>C24-C36)			0.500	0.450		mg/L		90	64 - 120	2 24
	LCSD L	CSD								
Surrogate	%Recovery Q	ualifier	Limits							
o-Terphenyl	72		50 - 150							
Lab Sample ID: MB 580-3258	353/1-A							Client Sa	ample ID: Metho	
Matrix: Water									Prep Type: 1	
Analysis Batch: 326022	_								Prep Batch:	: 325853
Analysis		IB MB	ы	MD	11			henened	Analyzad	
Analyte #2 Diesel (C10-C24)		ult Qualifier	RL 0.065		L Unit 5 mg/L			Prepared 31/20 09:36	Analyzed 04/03/20 00:58	Dil Fac
					•					
Motor Oil (>C24-C36)	IN	ID	0.096	0.090	6 mg/L		03/3	31/20 09:36	04/03/20 00:58	1
	N	IB MB								
Surrogate	%Recove	ry Qualifier	Limits				F	Prepared	Analyzed	Dil Fac
o-Terphenyl		74	50 - 150				03/3	31/20 09:36	04/03/20 00:58	1
Lab Sample ID: LCS 580-325	0053/2-A						Client	Sample	ID: Lab Control	
Matrix: Water									Prep Type: 1	
Analysis Batch: 326022									Prep Batch:	: 325853

Analysis Batch: 326022							Prep	Batch: 325853
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
#2 Diesel (C10-C24)	0.500	0.335		mg/L		67	50 - 120	
Motor Oil (>C24-C36)	0.500	0.393		mg/L		79	64 - 120	

Lab Sample ID: LCS 580-325	5853/2-A								(	Clien	t Sample	ID: Lab C	ontrol S	ample
Matrix: Water												Prep T	ype: To	otal/NA
Analysis Batch: 326022												Prep	Batch: 3	325853
	LCS	LCS												
Surrogate	%Recovery	Qual	lifier	Limits										
o-Terphenyl	65			50 - 150										
Lab Sample ID: LCSD 580-32	25853/3-4								Clien	t Sar	nnle ID <sup>.</sup> I	_ab Contro	ol Samn	le Dur
Matrix: Water									Glion	l Our			ype: To	
Analysis Batch: 326022													Batch: 3	
				Spike		LCSD	LCSD					%Rec.		RPD
Analyte				Added		Result	Qualifie	r Un	it	D	%Rec	Limits	RPD	Limi
#2 Diesel (C10-C24)				0.500		0.338		mg	/L		68	50 - 120	1	26
Motor Oil (>C24-C36)				0.500		0.390		mg	/L		78	64 <sub>-</sub> 120	1	24
	LCSD	LCSI	D											
Surrogate	%Recovery			Limits										
o-Terphenyl	61			50 - 150										
Lab Sample ID: MB 580-3260	006/1-A										Client S	ample ID:		
Matrix: Water													ype: To	
Analysis Batch: 326143		мв	MB									Prep	Batch: 3	326006
Analyte	R		Qualifier		RL		MDL Un	nit	D	F	Prepared	Analyz	hov	Dil Fac
#2 Diesel (C10-C24)		ND	quamor	(	0.065		0.065 mg				01/20 17:15			21114
Motor Oil (>C24-C36)		ND			0.096		.096 mg	-			01/20 17:15			1
		мв	МВ											
Surrogate	%Reco		wь Qualifier	Limi	te						Prepared	Analyz	zod	Dil Fac
o-Terphenyl		83	quamer	50 - 1							01/20 17:15			2
Lab Sample ID: LCS 580-326	6006/2-A								(	Clien	t Sample	ID: Lab C		-
Matrix: Water													ype: To	
Analysis Batch: 326143				0									Batch: 3	326006
Analyta				Spike Added		LCS	Qualifie	r Un		D	%Rec	%Rec. Limits		
Analyte #2 Diesel (C10-C24)				0.500		0.480	Quaime	mg			96	50 - 120		
Motor Oil (>C24-C36)				0.500		0.564		mg			113	64 <sub>-</sub> 120		
				0.000		0.001		9	-			01-120		
		LCS												
Surrogate	%Recovery	Qual	lifier	Limits										
o-Terphenyl	80			50 _ 150										
Lab Sample ID: LCSD 580-3	26006/3-A								Clien	t San	nple ID: I	_ab Contro	ol Samo	le Dur
Matrix: Water													ype: To	
Analysis Batch: 326143													Batch: 3	
,				Spike		LCSD	LCSD					%Rec.		RPD
Analyte				Added		Result	Qualifie	r Un	it	D	%Rec	Limits	RPD	Limi
#2 Diesel (C10-C24)				0.500		0.469		mg	/L		94	50 - 120	2	26
Motor Oil (>C24-C36)				0.500		0.561		mg	/L		112	64 - 120	1	24
	LCSD	LCSI	D											
Surrogate	LCSD %Recovery			Limits										

o-Terphenyl 83 50 - 150

RL

0.065

0.096

Limits

50 - 150

MDL Unit

0.065 mg/L

0.096 mg/L

D

Prepared

04/01/20 17:15

04/01/20 17:15

Prepared

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

MB MB

MB MB Qualifier

ND

ND

78

%Recovery

Result Qualifier

Lab Sample ID: MB 580-326006/1-B

Lab Sample ID: LCS 580-326006/2-B

Matrix: Water

#2 Diesel (C10-C24)

Motor Oil (>C24-C36)

Analyte

Surrogate

o-Terphenyl

Matrix: Water

Analysis Batch: 326143

Prep Type: Total/NA

Prep Batch: 326006

# 6

Dil Fac

Dil Fac

1

1

	•	
04/01/20 17:15	04/04/20 11:01	1
lient Sample I	D: Lab Control	

**Client Sample ID: Method Blank** 

Analyzed

04/04/20 11:01

04/04/20 11:01

Analyzed

#### С Prep Type: Total/NA

Analysis Batch: 326143							Prep E	Batch: 326006	
	Spike	LCS	LCS				%Rec.		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
#2 Diesel (C10-C24)	0.500	0.455		mg/L		91	50 - 120		
Motor Oil (>C24-C36)	0.500	0.524		mg/L		105	64 - 120		

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
o-Terphenyl	74		50 - 150

Lab Sample ID: LCSD 580-32 Matrix: Water Analysis Batch: 326143	26006/3-B				Clie	ent Sam	iple ID: I		ol Sample ype: Tot Batch: 3	tal/NA
		Spike	LCSD	LCSD				%Rec.		RPD
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)		0.500	0.467		mg/L		93	50 - 120	3	26
Motor Oil (>C24-C36)		0.500	0.556		mg/L		111	64 - 120	6	24
	LCSD LCSD									
Surrogate	%Recovery Qualifier	Limits								

Surrogate	%Recovery	Qualifier	Limits
o-Terphenyl	81		50 _ 150

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Lab Sample ID: 580-93580-1

Client Sample ID: S2-BD-031620 Date Collected: 03/16/20 16:43 Date Received: 03/19/20 11:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			325681	03/27/20 16:10	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326019	04/01/20 23:11	T1W	TAL SEA

#### Date Collected: 03/16/20 17:20 Date Received: 03/19/20 11:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			325681	03/27/20 16:10	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326019	04/01/20 23:31	T1W	TAL SEA

#### Client Sample ID: S2-AD-031620

Lab Sample ID: 580-93580-3 Matrix: Water

Lab Sample ID: 580-93580-4

Lab Sample ID: 580-93580-5

Lab Sample ID: 580-93580-6

#### Date Collected: 03/16/20 17:21 Date Received: 03/19/20 11:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			325681	03/27/20 16:10	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326019	04/01/20 23:51	T1W	TAL SEA

#### Client Sample ID: S1-BD-031720

Date Collected: 03/17/20 09:33 Date Received: 03/19/20 11:15

Γ	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			325681	03/27/20 16:10	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326019	04/02/20 00:31	T1W	TAL SEA

#### Client Sample ID: S1-BU-031720

Date Collected: 03/17/20 09:34 Date Received: 03/19/20 11:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			325681	03/27/20 16:10	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326019	04/02/20 00:52	T1W	TAL SEA

#### Client Sample ID: 1C-W-8-031720 Date Collected: 03/17/20 10:00 Date Received: 03/19/20 11:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			325681	03/27/20 16:10	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326019	04/02/20 01:52	T1W	TAL SEA

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Lab Sample ID: 580-93580-7

Lab Sample ID: 580-93580-8

#### Client Sample ID: 1C-W-1-031720 Date Collected: 03/17/20 10:10 Date Received: 03/19/20 11:15

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			325681	03/27/20 16:10	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326019	04/02/20 02:12	T1W	TAL SEA

#### Client Sample ID: S1-AU-031720 Date Collected: 03/17/20 10:14 Date Received: 03/19/20 11:15

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			325681	03/27/20 16:10	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326019	04/02/20 02:32	T1W	TAL SEA

#### Client Sample ID: S1-AD-031720

Lab Sample ID: 580-93580-9 Matrix: Water

Lab Sample ID: 580-93580-10

Lab Sample ID: 580-93580-11

Lab Sample ID: 580-93580-12

#### Date Collected: 03/17/20 10:15 Date Received: 03/19/20 11:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			325681	03/27/20 16:10	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326019	04/02/20 02:52	T1W	TAL SEA

#### Client Sample ID: 1C-W-4031720

Date Collected: 03/17/20 10:51

Date Received: 03/19/20 11:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			325681	03/27/20 16:10	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326019	04/02/20 03:13	T1W	TAL SEA

#### Client Sample ID: S3-AU-031720

Date Collected: 03/17/20 11:10 Date Received: 03/19/20 11:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			325681	03/27/20 16:10	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326019	04/02/20 03:33	T1W	TAL SEA

#### Client Sample ID: 1C-W-3-031720 Date Collected: 03/17/20 11:10 Date Received: 03/19/20 11:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			325681	03/27/20 16:10	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326019	04/02/20 03:53	T1W	TAL SEA

Prep

Analysis

3510C

NWTPH-Dx

Total/NA

Total/NA

Client Sample ID: S3-AD-031720

Date Collected: 03/17/20 11:11

Date Received: 03/19/20 11:15

Lab Sample ID: 580-93580-13 Matrix: Water Lab Sample ID: 580-93580-14 Matrix: Water Lab Sample ID: 580-93580-15 Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

#### Batch Batch Dilution Batch Prepared Prep Type Туре Method Run Factor or Analyzed Number Analyst Lab Total/NA Prep 3510C 325681 03/27/20 16:10 RJL TAL SEA Total/NA Analysis NWTPH-Dx 326019 04/02/20 04:13 T1W TAL SEA 1 Client Sample ID: S3-BU-031720 Date Collected: 03/17/20 11:45 Date Received: 03/19/20 11:15 Batch Batch Dilution Batch Prepared Method Number Prep Type Туре Run Factor or Analyzed Analyst Lab Total/NA RJL TAL SEA Prep 3510C 325681 03/27/20 16:10 Total/NA Analysis NWTPH-Dx 326019 04/02/20 13:11 T1W TAL SEA 1 Client Sample ID: S3-BD-031720 Date Collected: 03/17/20 11:46 Date Received: 03/19/20 11:15 Batch Batch Dilution Batch Prepared Method or Analyzed Prep Type Туре Run Factor Number Lab Analyst 325681 RJL TAL SEA Total/NA Prep 3510C 03/27/20 16:10 Total/NA Analysis NWTPH-Dx 326019 04/02/20 13:31 T1W TAL SEA 1 Client Sample ID: 1B-W-2-031720 Lab Sample ID: 580-93580-16 Date Collected: 03/17/20 12:16 Date Received: 03/19/20 11:15 Batch Batch Dilution Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst Lab Prep Total/NA 3510C RJL TAL SEA 325681 03/27/20 16:10 TAL SEA Total/NA Analysis NWTPH-Dx 1 326019 04/02/20 14:12 T1W Client Sample ID: 1B-W-3-031720 Lab Sample ID: 580-93580-17 Date Collected: 03/17/20 12:30 Date Received: 03/19/20 11:15 Batch Batch Dilution Batch Prepared Prep Type Type Method Run Factor Number or Analyzed Analyst Lab 3510C 325681 03/27/20 16:10 R.II TAL SEA Total/NA Prep Total/NA Analysis NWTPH-Dx 326019 04/02/20 14:32 T1W TAL SEA 1 Client Sample ID: S3-CD-031720 Lab Sample ID: 580-93580-18 Date Collected: 03/17/20 12:34 Date Received: 03/19/20 11:15 Batch Batch Dilution Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst Lab

Eurofins TestAmerica, Seattle

1

325681

326019

03/27/20 16:10

04/02/20 14:52

RJL

T1W

TAL SEA

TAL SEA

#### Lab Sample ID: 580-93580-19 Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Lab Sample ID: 580-93580-20

Lab Sample ID: 580-93580-22

Lab Sample ID: 580-93580-23

Lab Sample ID: 580-93580-24

#### Date Collected: 03/17/20 12:35 Date Received: 03/19/20 11:15

Client Sample ID: S3-CU-031720

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			325853	03/31/20 09:36	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326022	04/03/20 01:58	JCM	TAL SEA

#### Client Sample ID: S4-AU-031720 Date Collected: 03/17/20 14:10 Date Received: 03/19/20 11:15

_	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			325853	03/31/20 09:36	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326022	04/03/20 02:19	JCM	TAL SEA

#### Client Sample ID: 5-W-55-031720

Lab Sample ID: 580-93580-21 Matrix: Water

#### Date Collected: 03/17/20 14:24 Date Received: 03/19/20 11:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			325853	03/31/20 09:36	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326022	04/03/20 02:39	JCM	TAL SEA

#### Client Sample ID: S4-AD-031720

#### Date Collected: 03/17/20 14:09

Date Received: 03/19/20 11:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			325853	03/31/20 09:36	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326022	04/03/20 02:59	JCM	TAL SEA

#### Client Sample ID: 5-W-56-031720

#### Date Collected: 03/17/20 14:40 Date Received: 03/19/20 11:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			325853	03/31/20 09:36	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326022	04/03/20 03:19	JCM	TAL SEA

#### Client Sample ID: 5-W-51-031720 Date Collected: 03/17/20 15:15 Date Received: 03/19/20 11:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			325853	03/31/20 09:36	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326022	04/03/20 03:39	JCM	TAL SEA

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Lab Sample ID: 580-93580-25

Lab Sample ID: 580-93580-26

Lab Sample ID: 580-93580-28

Lab Sample ID: 580-93580-29

Lab Sample ID: 580-93580-30

Lab TAL SEA

TAL SEA

#### Client Sample ID: S4-BD-031720 Date Collected: 03/17/20 15:06 Date Received: 03/19/20 11:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			325853	03/31/20 09:36	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326022	04/03/20 03:59	JCM	TAL SEA

#### Client Sample ID: S4-BU-031720 Date Collected: 03/17/20 15:07 Date Received: 03/19/20 11:15

_	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			325853	03/31/20 09:36	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326022	04/03/20 04:40	JCM	TAL SEA

#### Client Sample ID: 5-W-17-031720

Lab Sample ID: 580-93580-27 Matrix: Water

#### Date Collected: 03/17/20 15:40 Date Received: 03/19/20 11:15

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			325853	03/31/20 09:36	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326022	04/03/20 05:00	JCM	TAL SEA

#### Client Sample ID: S4-CD-031720

#### Date Collected: 03/17/20 15:45

Date Received: 03/19/20 11:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			325853	03/31/20 09:36	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326022	04/03/20 05:20	JCM	TAL SEA

#### Client Sample ID: 5-W-14-031720

#### Date Collected: 03/17/20 16:08

Date Received:	03/19/20 11:1	5						
	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	L
Total/NA	Prep	3510C			325853	03/31/20 09:36	S1S	- ī
Total/NA	Analysis	NWTPH-Dx		1	326022	04/03/20 05:40	JCM	٦

#### Client Sample ID: EW-2A-031720 Date Collected: 03/17/20 16:50 Date Received: 03/19/20 11:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			325853	03/31/20 09:36	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326022	04/03/20 06:00	JCM	TAL SEA

Batch

Туре

Prep

Analysis

Batch

Method

3510C

NWTPH-Dx

Client Sample ID: 5-W-19-031720

Date Collected: 03/17/20 17:00

Date Received: 03/19/20 11:15

Prep Type

Total/NA

Total/NA

Lab Sample ID: 580-93580-31

Lab Sample ID: 580-93580-32

## \_\_\_\_\_

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

#### Client Sample ID: 5-W-16-031720 Date Collected: 03/17/20 17:06 Date Received: 03/19/20 11:15

		Batch	Batch		Dilution	Batch	Prepared		
Prep T	уре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/N	NA	Prep	3510C			325853	03/31/20 09:36	S1S	TAL SEA
Total/N	NA	Analysis	NWTPH-Dx		1	326022	04/03/20 06:41	JCM	TAL SEA

Dilution

Factor

1

Run

Batch

Number

325853

Prepared

or Analyzed

03/31/20 09:36

326022 04/03/20 06:21

Analyst

S1S

JCM

Lab

TAL SEA

TAL SEA

#### Client Sample ID: 2A-W-10-031820

Lab Sample ID: 580-93580-33 Matrix: Water

Lab Sample ID: 580-93580-34

Lab Sample ID: 580-93580-35

Lab Sample ID: 580-93580-36

Date Collected: 03/18/20 08:31 Date Received: 03/19/20 11:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			325853	03/31/20 09:36	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326022	04/03/20 07:01	JCM	TAL SEA

#### Client Sample ID: GW-4-031820

Date Collected: 03/18/20 08:35

Date Received: 03/19/20 11:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			325853	03/31/20 09:36	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326022	04/03/20 07:21	JCM	TAL SEA

#### Client Sample ID: MW-4-031820 Date Collected: 03/18/20 08:40

Date Received: 03/19/20 11:15

Γ	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			325853	03/31/20 09:36	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326022	04/03/20 07:41	JCM	TAL SEA

#### Client Sample ID: MW-40-31820 Date Collected: 03/18/20 08:50 Date Received: 03/19/20 11:15

ſ	_	Batch	Batch		Dilution	Batch	Prepared		
	Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
	Total/NA	Prep	3510C			325853	03/31/20 09:36	S1S	TAL SEA
	Total/NA	Analysis	NWTPH-Dx		1	326022	04/03/20 08:22	JCM	TAL SEA

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Lab Sample ID: 580-93580-37

Lab Sample ID: 580-93580-38

Lab Sample ID: 580-93580-40

Lab Sample ID: 580-93580-41

Lab Sample ID: 580-93580-42

#### Client Sample ID: 2A-W-9-031820 Date Collected: 03/18/20 09:11 Date Received: 03/19/20 11:15

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			325853	03/31/20 09:36	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326022	04/03/20 08:42	JCM	TAL SEA

#### Client Sample ID: 1C-W-7-031820 Date Collected: 03/18/20 09:37 Date Received: 03/19/20 11:15

Γ		Batch	Batch		Dilution	Batch	Prepared		
P	rep Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
T	otal/NA	Prep	3510C			325853	03/31/20 09:36	S1S	TAL SEA
Т	otal/NA	Analysis	NWTPH-Dx		1	326022	04/03/20 09:02	JCM	TAL SEA

#### Client Sample ID: 2B-W-4-031820

Lab Sample ID: 580-93580-39 Matrix: Water

#### Date Collected: 03/18/20 10:13 Date Received: 03/19/20 11:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			326006	04/01/20 17:15	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326143	04/04/20 03:38	W1T	TAL SEA

#### Client Sample ID: MW-16-031820

#### Date Collected: 03/18/20 10:15 Date Received: 03/19/20 11:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			326006	04/01/20 17:15	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326143	04/04/20 03:58	W1T	TAL SEA

#### Client Sample ID: 1A-W-4-031820

#### Date Collected: 03/18/20 10:50 Date Received: 03/19/20 11:15

ſ	-	Batch	Batch		Dilution	Batch	Prepared		
	Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
	Total/NA	Prep	3510C			326006	04/01/20 17:15	RJL	TAL SEA
	Total/NA	Analysis	NWTPH-Dx		1	326143	04/04/20 04:18	W1T	TAL SEA

#### Client Sample ID: MW-38R-031820 Date Collected: 03/18/20 11:26 Date Received: 03/19/20 11:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			326006	04/01/20 17:15	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326143	04/04/20 04:38	W1T	TAL SEA

Batch

Number

326006

Batch

Number

326006

326143

Prepared

or Analyzed

04/01/20 17:15

Prepared

or Analyzed

04/01/20 17:15

04/04/20 05:18

326143 04/04/20 04:58

Analyst

Analyst

RJL

W1T

RJL

W1T

Lab

Lab

TAL SEA

TAL SEA

TAL SEA

TAL SEA

# Lab Sample ID: 580-93580-43 Matrix: Water Lab Sample ID: 580-93580-44 Matrix: Water Matrix: Water

ate Collected	le ID: 5-W-18 : 03/18/20 11:3 : 03/19/20 11:1	0		
Prep Type	Batch Type	Batch Method	Run	Dilution Factor
Total/NA	Prep	3510C		
Total/NA	Analysis	NWTPH-Dx		1
Total/NA	•	NWTPH-Dx 80-031820		1
ate Received	03/19/20 11:1	5		
-	Batch	Batch		Dilution
Prep Type	Type	Method	Run	Factor

Total/NA	Analysis	NWTPH-Dx	1
Client Sampl	e ID: 2A-W-4	2-031820	

3510C

Lab Sample ID: 580-93580-45

Lab Sample ID: 580-93580-46

Lab Sample ID: 580-93580-47

Lab Sample ID: 580-93580-48

Matrix: Water

Matrix: Water

Matrix: Water

Date Collected: 03/18/20 11:45 Date Received: 03/19/20 11:15

Prep

Total/NA

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			326006	04/01/20 17:15	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326143	04/04/20 05:39	W1T	TAL SEA

#### Client Sample ID: EW-1-031820

Date Collected: 03/18/20 12:05

Date Received: 03/19/20 11:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analvst	Lab
Total/NA	Prep		Kuii		326006		RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326143	04/04/20 06:19	W1T	TAL SEA

#### Client Sample ID: EW-10-031820

Date Collected: 03/18/20 12:15 Date Received: 03/19/20 11:15

_	Datah	Datab		Dilution	Detah	Drawarad		
	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			326006	04/01/20 17:15	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326143	04/04/20 06:39	W1T	TAL SEA

#### Client Sample ID: GW-1-031820 Date Collected: 03/18/20 12:50 Date Received: 03/19/20 11:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			326006	04/01/20 17:15	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326143	04/04/20 06:59	W1T	TAL SEA

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			326006	04/01/20 17:15	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326143	04/04/20 07:19	W1T	TAL SEA

#### Client Sample ID: 2A-W-41-031820 Date Collected: 03/18/20 13:00 Date Received: 03/19/20 11:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			326006	04/01/20 17:15	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326143	04/04/20 07:40	W1T	TAL SEA
Total/NA	Prep	3510C			326006	04/01/20 17:15	RJL	TAL SEA
Total/NA	Cleanup	3630C			326017	04/01/20 19:48	JCM	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326143	04/04/20 12:02	W1T	TAL SEA

#### Client Sample ID: 2A-W-410-031820 Date Collected: 03/18/20 13:03 Date Received: 03/19/20 11:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			326006	04/01/20 17:15	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326143	04/04/20 08:00	W1T	TAL SEA

#### Client Sample ID: GW-3-031820 Date Collected: 03/18/20 15:09 Date Received: 03/19/20 11:15

Batch Batch Dilution Batch Prepared Method Prep Type Туре Run Factor Number or Analyzed Analyst Lab Total/NA Prep 3510C 326006 04/01/20 17:15 RJL TAL SEA Total/NA NWTPH-Dx Analysis 326143 04/04/20 08:20 W1T TAL SEA 1 Total/NA 3510C 326006 04/01/20 17:15 RJL TAL SEA Prep JCM Total/NA Cleanup 3630C 326017 04/01/20 19:48 TAL SEA Total/NA Analysis NWTPH-Dx 1 326143 04/04/20 12:22 W1T TAL SEA

#### Client Sample ID: GW-30-031820 Date Collected: 03/18/20 15:15 Date Received: 03/19/20 11:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			326006	04/01/20 17:15	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326143	04/04/20 08:40	W1T	TAL SEA

Lab Sample ID: 580-93580-49

Lab Sample ID: 580-93580-50

Matrix: Water

Matrix: Water

#### Lab Sample ID: 580-93580-51

Lab Sample ID: 580-93580-52

Lab Sample ID: 580-93580-53

Matrix: Water

Matrix: Water

Matrix: Water

Batch

Number

326006

Batch

Number

326006

326143

Prepared

or Analyzed

04/01/20 17:15

Prepared

or Analyzed

04/01/20 17:15

04/04/20 09:20

326143 04/04/20 09:00

Analyst

Analyst

RJL

W1T

RJL

W1T

Lab

Lab TAL SEA

TAL SEA

Lab Sample ID: 580-93580-57

Lab Sample ID: 580-93580-58

Lab Sample ID: 580-93580-59

Matrix: Water

Matrix: Water

Matrix: Water

TAL SEA

TAL SEA

Lab Sample ID: 580-93580-54 Matrix: Water Lab Sample ID: 580-93580-55 Matrix: Water Lab Sample ID: 580-93580-56 Matrix: Water

	Batch	Batch		Dilution
Prep Type	Туре	Method	Run	Factor
Total/NA	Prep	3510C		
Total/NA	Analysis	NWTPH-Dx		1
lient Samp	le ID: GW-2-	031820		
ate Collected	le ID: GW-2- : 03/18/20 15:0 : 03/19/20 11:1 Batch	5		Dilutior
ate Collected	: 03/18/20 15:0 : 03/19/20 11:1	5	Run	2
ate Collected	: 03/18/20 15:0 : 03/19/20 11:1 Batch	5 5 Batch	Run	Dilution Factor

#### Client Sample ID: GW-20-31820

Date Collected: 03/18/20 15:05 Date Received: 03/19/20 11:15

Date	Received:	03/19/20	11:15	

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			326006	04/01/20 17:15	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326143	04/04/20 10:01	W1T	TAL SEA

#### Client Sample ID: MW-555-031820

Date Collected: 03/18/20 15:50

Date Received: 03/19/20 11:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			326006	04/01/20 17:15	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326143	04/04/20 10:21	W1T	TAL SEA

#### Client Sample ID: 1B-W-23-031820

Date Collected: 03/18/20 16:05 Date Received: 03/19/20 11:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			326006	04/01/20 17:15	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326143	04/04/20 10:41	W1T	TAL SEA

#### Client Sample ID: S2-BU-031620 Date Collected: 03/16/20 16:41 Date Received: 03/19/20 11:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			325681	03/27/20 16:10	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	326019	04/02/20 00:11	T1W	TAL SEA

#### Client Sample ID: S4-CU-031720 Date Collected: 03/17/20 15:46 Date Received: 03/19/20 11:15

<b>[</b>	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Prep	3510C			325681	03/27/20 16:10	RJL	TAL SEA	
Total/NA	Analysis	NWTPH-Dx		1	326019	04/02/20 01:12	T1W	TAL SEA	

#### Laboratory References:

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

Lab Sample ID: 580-93580-60 Matrix: Water

#### Accreditation/Certification Summary

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

#### Job ID: 580-93580-1

#### 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	01-14-22
ANAB	Dept. of Defense ELAP	L2236	01-19-22
ANAB	ISO/IEC 17025	L2236	01-20-23
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	P330-20-00031	02-10-23
Washington	State	C553	02-18-21

#### Sample Summary

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

ab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
80-93580-1	S2-BD-031620	Water	03/16/20 16:43	03/19/20 11:15	
80-93580-2	S2-AU-031620	Water	03/16/20 17:20	03/19/20 11:15	
80-93580-3	S2-AD-031620	Water	03/16/20 17:21	03/19/20 11:15	
80-93580-4	S1-BD-031720	Water	03/17/20 09:33	03/19/20 11:15	
30-93580-5	S1-BU-031720	Water	03/17/20 09:34	03/19/20 11:15	
80-93580-6	1C-W-8-031720	Water	03/17/20 10:00	03/19/20 11:15	
30-93580-7	1C-W-1-031720	Water	03/17/20 10:10	03/19/20 11:15	
30-93580-8	S1-AU-031720	Water	03/17/20 10:14	03/19/20 11:15	
30-93580-9	S1-AD-031720	Water	03/17/20 10:15	03/19/20 11:15	
80-93580-10	1C-W-4031720	Water	03/17/20 10:51	03/19/20 11:15	
30-93580-11	S3-AU-031720	Water	03/17/20 11:10	03/19/20 11:15	
80-93580-12	1C-W-3-031720	Water	03/17/20 11:10	03/19/20 11:15	
80-93580-13	S3-AD-031720	Water	03/17/20 11:11	03/19/20 11:15	
30-93580-14	S3-BU-031720	Water	03/17/20 11:45	03/19/20 11:15	
80-93580-15	S3-BD-031720	Water	03/17/20 11:46	03/19/20 11:15	
30-93580-16	1B-W-2-031720	Water	03/17/20 12:16	03/19/20 11:15	
30-93580-17	1B-W-3-031720	Water	03/17/20 12:30	03/19/20 11:15	
80-93580-18	S3-CD-031720	Water	03/17/20 12:34	03/19/20 11:15	
30-93580-19	S3-CU-031720	Water	03/17/20 12:35	03/19/20 11:15	
30-93580-20	S4-AU-031720	Water	03/17/20 14:10	03/19/20 11:15	
80-93580-21	5-W-55-031720	Water	03/17/20 14:24	03/19/20 11:15	
80-93580-22	S4-AD-031720	Water	03/17/20 14:09	03/19/20 11:15	
80-93580-23	5-W-56-031720	Water	03/17/20 14:40	03/19/20 11:15	
0-93580-24	5-W-51-031720	Water	03/17/20 15:15	03/19/20 11:15	
30-93580-25	S4-BD-031720	Water	03/17/20 15:06	03/19/20 11:15	
30-93580-26	S4-BU-031720	Water	03/17/20 15:07	03/19/20 11:15	
30-93580-27	5-W-17-031720	Water	03/17/20 15:40	03/19/20 11:15	
30-93580-28	S4-CD-031720	Water	03/17/20 15:45	03/19/20 11:15	
30-93580-29	5-W-14-031720	Water	03/17/20 16:08	03/19/20 11:15	
30-93580-30	EW-2A-031720	Water	03/17/20 16:50	03/19/20 11:15	
30-93580-31	5-W-19-031720	Water	03/17/20 17:00	03/19/20 11:15	
0-93580-32	5-W-16-031720	Water	03/17/20 17:06	03/19/20 11:15	
80-93580-33	2A-W-10-031820	Water	03/18/20 08:31	03/19/20 11:15	
30-93580-34	GW-4-031820	Water	03/18/20 08:35	03/19/20 11:15	
80-93580-35	MW-4-031820	Water	03/18/20 08:40	03/19/20 11:15	
30-93580-36	MW-40-31820	Water	03/18/20 08:50	03/19/20 11:15	
30-93580-37	2A-W-9-031820	Water	03/18/20 09:11	03/19/20 11:15	
80-93580-38	1C-W-7-031820	Water	03/18/20 09:37	03/19/20 11:15	
30-93580-39	2B-W-4-031820	Water	03/18/20 10:13	03/19/20 11:15	
30-93580-40	MW-16-031820	Water	03/18/20 10:15	03/19/20 11:15	
30-93580-41	1A-W-4-031820	Water	03/18/20 10:50	03/19/20 11:15	
80-93580-42	MW-38R-031820	Water	03/18/20 11:26	03/19/20 11:15	
80-93580-43	5-W-18-031820	Water	03/18/20 11:30	03/19/20 11:15	
30-93580-44	5-W-180-031820	Water	03/18/20 11:40	03/19/20 11:15	
0-93580-45	2A-W-42-031820	Water	03/18/20 11:45	03/19/20 11:15	
0-93580-46	EW-1-031820	Water	03/18/20 12:05	03/19/20 11:15	
30-93580-47	EW-10-031820	Water	03/18/20 12:15	03/19/20 11:15	
30-93580-48	GW-1-031820	Water	03/18/20 12:50	03/19/20 11:15	
80-93580-49	5-W-43-031820	Water	03/18/20 12:51	03/19/20 11:15	
80-93580-50	2A-W-41-031820	Water	03/18/20 13:00	03/19/20 11:15	
80-93580-51	2A-W-410-031820	Water	03/18/20 13:03	03/19/20 11:15	
80-93580-52	GW-3-031820	Water	03/18/20 15:09	03/19/20 11:15	
80-93580-53	GW-30-031820	Water	03/18/20 15:15	03/19/20 11:15	

#### Sample Summary

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-93580-54	2A-W-40-031820	Water	03/18/20 15:05	03/19/20 11:15
580-93580-55	GW-2-031820	Water	03/18/20 15:05	03/19/20 11:15
580-93580-56	GW-20-31820	Water	03/18/20 15:05	03/19/20 11:15
580-93580-57	MW-555-031820	Water	03/18/20 15:50	03/19/20 11:15
580-93580-58	1B-W-23-031820	Water	03/18/20 16:05	03/19/20 11:15
580-93580-59	S2-BU-031620	Water	03/16/20 16:41	03/19/20 11:15
580-93580-60	S4-CU-031720	Water	03/17/20 15:46	03/19/20 11:15

#### **Eurofins TestAmerica, Seattle**

5755 8th Street East Tacoma, WA 98424 Phone: 253-922-2310 Fax: 253-922-5047

Client Information

Farallon Consulting LLC

975 5th Avenue NW Suite 100

pkingston@farailonconsulting.com

52-BD-03620

-3 52 - AD-031620

-5 51-80-031720

52-00-031620

SI-BD-031720

10-2-031720

10-1-031720

51-AU-031720

10-W-4-031720

53- AU-031720

Possible Hazard Identification

Empty Kit Relinguished by:

∆ Yes ∆ No

Relinguished by:

Relinguished by:

-9 SI-AD-031720

BNSF Skykomish Ground Water

Client Contact:

Company:

Address:

Issaguah

WA, 98027

Project Name:

Washington

Sample Identification

State, Zip:

Phone:

Email:

-1

-7

-11

City:

Peter Kingston

Page 1 of 12

Analysis Requested

Carrier Tracking No(s):

Chain of Custody Record

Jetus

Gue

425-677-9521

Standard

Sample

Time

1643

1720

1721

6933

0934

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1010

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1015

1051

1110

Date:

2/09/20 1900

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ΡΩ #:

WO #:

Project #:

SSOW#

58006391

Sample Date

3/16/20

3/06/20

3/16/20

3/7/20

₹ F

Date/Time:

Date/Time:

Date/Time:

Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological

TT0100-Q12

Due Date Requested:

TAT Requested (days):

Tax Code 8800 BF10007215

ah PM

F-Mail

Allen, Kristine D

ampie (Yet 10 80

Field Fil

Matrix

W=water.

S=salid.

Onwaste/oil

Water

Company

Company

Company

Finallin

G=grab) BT=Tissue, A=Aic

Preservation Code:

Sample

Type

(C=comp,

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G

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S COROS

NWTPH-Dx

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Hdim

1A

K

kristine.alten@testamericainc.com

#### eurofins. **Environment Testing** TestAmerica

93580

M - Hexane

O - AsNaO2

P - Na204S

Q - Na2SO3

S - H2SO4

U - Acetone

V - MCAA

W - pH 4-5

Special Instructions/Note:

Z - other (specify)

R - Na2S2O3

T - TSP Dodecahydrate

N - None

COC No:

Page 6 of 7

Page:

Job #:

A - HCL

8 - NaOH

C - Zn Acetate

D - Nitric Acid

E - NaHSO4

F - MeOH

G - Amebior

J - DI Water

1 - Ice

K - EDTA

B Other:

580-93580 Chain of Custody

Archive For

3-13-20 11:15

Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)
Return To Client Disposal By Lab Archive For Mont

Method of Shipment:

Date/Time

Date/Time:

H - Ascorbic Acid

580-37926-12129.6

Preservation Codes:

10

Received by:

Received by:

Special Instructions/QC Requirements:

Cooler Temperature(s) °C and Other Remarks:

Relinguished by: Custody Seal No.: Custody Seals Intact:

Deliverable Requested: I. II, III, IV, Other (specify)

	_		
Page	82	of 96	

Time:

TIA

Months

Company

... .

#### **Eurofins TestAmerica, Seattle**

Chain of Custody Record

Page 2 of b

eurofins Environment Testing TestAmerica

5755 8th Street East Tacoma, WA 98424 Phone: 253-922-2310 Fax: 253-922-5047

Client Information	Sampler:	*****			PM: en, Kris	stine D				*******	*****	Carr	er Tra	cking h	No(s):			COC No: 580-37926-1212	29.7
Client Contact:	Phone:			E-M								1						Page: Page 7 of 7	
Peter Kingston Company:	1			KIIS	une.an	enwa	estam	ienca										Job # 935	<b>18</b> 0
Farallon Consulting LLC Address:	Due Date Reques	sted					<del>, , ,</del>	, <b>1</b>	An	alysi	s Re	que	sted	1	1			7.3.0 Preservation Cod	
975 5th Avenue NW Suite 100																ĺ		A - HCL	M - Hexane
City: Issaquah	TAT Requested (a	days):																B - NaOH C - Zn Acetate	N - None O - AsNaO2
State, Zip:	1																	D - Nitric Acid E - NaHSO4	P - Na2O4S Q - Na2SO3
WA, 98027 Phone:	PO #:				- 1													F - MeOH G - Amchlor	R - Na2S2O3 S - H2SO4
	TT0100-Q12				- 2													H - Ascerbic Acid	T - TSP Dodecahydrate U - Acetone
Email: pkingston@farallonconsulting.com	wo#: Tax Code 8800	0 BF1000721	15		( Joint													J - DI Water	V - MCAA
Project Name: BNSF Skykomish Ground Water	Project #: 58006391				18	×											aine	K - EDTA L - EDA	W - pH 4-5 Z - other (specify)
Site:	SSOW#:				Sample (Yes or No SD (Yes or No)	имтрн-Dх											cont	Other:	
Washington		·	<del></del>			T N											<b>10</b>		
			Sample	Matrix (w=water.	Conternation of the second sec	Ň											umb		
		Sample	Type (C≠comp,	S≃solid.	E DI	NWTPH_0x -											N IB		
Sample Identification	Sample Date	Time		BT=Tissue, A=Air		of , 160000000											Ê	Special In	nstructions/Note:
		$\sim$		ration Code:	¥						-			1			4		
10-W-3-031720	3/17/20	1110	G	Water	M_	X					_							ļ	
3 <u>- 33 - AD - 031720</u>		ini		Water	Ш														
53- BU-031720		1145		Water															
16-W-3-031720 3 53-AD-031720 53-BU-031720 53-BD-031720		1146		Water		$\Pi$													
1B-W-2-031720		1216		Water															
13-W-3-031720 53-CD-031720 953-CU-031720 54-AU-031720		1230		Water	Ш														
53-07-031720		1234		Water		Ш													
9 53-00-031720		1235		Water	ΠL	Ш													
54 - AU - 031720		1910		Water															
1 5-W-55-031720		1424																	
54-40-031720		1409			M	V													
Possible Hazard Identification										e may	/ be a	sses	sed i	f sam	ples a			d longer than 1	
Non-Hazard Flammable Skin Irritant Pois Deliverable Requested: I, II, III, IV, Other (specify)	on B Unkr	nown F	Radiologica	<u>əl</u>		Re Recial I							sal By	/ Lab			Archi	ive For	Months
		1-								rtoqui				1. 1.01					
Empty Kit Relinquished by:	IDate/Time)	Date:		ICompany	Time:		$\int$	<u>/</u>		2	_		wetho		ipment:				
Relinquished by:	Date/Time:	12001	720	Company Ferred	U-	1 8	veg by:	Z		Ó,	T	2-			3-	19	· 21	0 11:15	EFITA
Relinquished by:	Date/Time:			Company		Neceiv	ved oy.			_	-			D	ate/Tim	e:		_	Company
Relinquished by:	Date/Time:			Company		Receiv	ived by:							D	ate/Tim	e:		<u> </u>	Company
Custody Seals Intact: Custody Seal No.:	<u></u>	14 g 1 *				Cooler	r Temp	eratur	re(s) °C	and Ot	her Re	marks:						an de politie	
Δ Yes Δ No						Ļ													· · · · · · · · · · · · · · · · · · ·

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#### **Eurofins TestAmerica, Seattle**

Chain of Custody Record

Page 3 of 6

🔅 eurofins Environment Testing TestAmerica

5755 8th Street East Tacoma, WA 98424 Phone: 253-922-2310 Fax: 253-922-5047

Client Information	Sampler: Lab PM Allen,								M: n, Kristine D							s):			COC No: 580-37926-12129.1			
Client Contact:					Mail: istine.allen@testamericainc.com													Page: Page 1 of 7				
Company: Farailon Consulting LLC							Analysis Reg							ha					<sup>Job#:</sup> 93580			
Address:	Address: Due Date Requested:										9313				1		Pr	Preservation Codes:				
City: Issaquah	Issaquah		TAT Requested (days):						Salari de La S									B C	- HCL - NaOH - Zn Acetate - Nitric Acid	M - Hexan N - None O - AsNaC P - Na2O4	)2	
WA, 98027																		Ξ	- NaHSO4 - MeOH	0 - Na2S0 R - Na2S2	03 03	
Phone:	TT0100-Q12																	н	- Amchlor - Ascorbic Acid		odecahydrate	
Email: pkingston@farallonconsulting.c	mail: W0 #: kingston@farallonconsulting.com Tax Code 8800 BF10007215																	j.	- Ice - DI Water	U - Aceton V - MCAA		
Project Name: BNSF Skykomish Ground Wate		Project #: 58006391					NWTPH-Dx												- EDTA - EDA	W - pH 4-8 Z - other (s		
Site: Washington	dito.			SSOW#:														응 (Ott ) (Ott	her:			
				Sample Type Sample (C=comp,		Field Filtered	трн_рх -	-		~~~~		*********						Total Number				
Sample Identification		Sample Date	Time		BT=Tissue, A=Air ation Code:		<u>≩</u> A											<u>×</u> –	Special Ir	nstruction	s/Note:	
23 5-W-56-03	1720	5/17/20	1440	G	Water	N	X							420972 340878								
5-W-51-031		1	1515	1	Water		1															
25 54-30-03172	٥		1506		Water																	
-27 5-W-17-0317-	20		1507		Water																	
27 5-W-17-0317-	20		1540		Water	Ш																
-29 5-W-14-0317	0		1545		Water		Ш													1010071-1		
29 5-W-14-0317	20		1608		Water																	
EW-24-0317	20		1650		Water																	
-31 5-W-19-03177	lo I		400		Water																	
5-W-16-0317	20		1706	1	Water																	
-33 2A-W-10-0318		3/18/20	0831	マ	Water	V	V															
Possible Hazard Identification           Non-Hazard         Flammable         Skin Irritant         Poison B         Unknown         Radiological           Deliverable         Requested: I, II, III, IV, Other (specify)							Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)           Return To Client         Disposal By Lab         Archive For         Months           Special Instructions/QC Requirements:															
• • • •							I Time: 1							thod of	Shipm	ent:						
Relinquished by:	Relinquished by: 697 Date/Time: 2118/2001902				Company Favalle	Received by:							Date/Time: 3-19-2					¢	1175	Company FV	ITA:	
Relinquished by:				Company			Celeceiven by:						Date/Time:						Company			
Relinquished by:				Company				Received by:						Date/Time:					Company			
Custody Seals Intact: Custo	dy Seal No.:	ggi in de se		a na se			Coole	er Tempe	rature(	s) °C an	d Other	Rema	ırks:			1997						

Chain of Custody Record

Page 4 of 6

Environment Testing TestAmerica

Tacoma, WA 98424 Phone: 253-922-2310 Fax: 253-922-5047

5755 8th Street East

		Consistent			L	Eth A.						10		·····				1000.0	
	Client Information	Sampler:			Lab Alle	em: en, Kris	tine D					Carne	r Hack	ing No	(S):			COC No: 580-37926-1212	29.3
	Client Contact: Peter Kingston	Phone:			E-M		an@tac	tamori	icainc.c	~~	*****	1						Page: Page 3 of 7	
	Company:	1			NI FO		enQies	amen	icanic.c	Jfil							*****		
	Farallon Consulting LLC								An	alysis	s Rec	quest	ed					<sup>Job #:</sup> 9358	10
	Address: 975 5th Avenue NW Suite 100	Due Date Reque	sted:															Preservation Coo	
	City: Issaguah	TAT Requested (	days):			11												A - HCL B - NaOH	M - Hexane N - None
	State, Zip:	-																C - Zn Acetate D - Nitric Acid E - NaHSO4	0 - AsNaO2 P - Na2O4S Q - Na2SO3
	WA, 98027 Phone:	P0 #:				-												F - MeOH G - Amobior	G - Na2SO3 R - Na2S2O3 S - H2SO4
	Email:	TT0100-Q12 W0 #:				- ĵ												H - Ascorbic Acid	T - TSP Dodecahydrate U - Acetone
	pkingston@farallonconsulting.com	Tax Code 880	0 BF1000721	15		5 3												J - DI Water	V - MCAA
	Project Name: BNSF Skykomish Ground Water	Project #: 58006391				Ves or	×										alner	K - EDTA L - EDA	W - pH 4-5 Z - other (specify)
	Site:	SSOW#:				Field Filtered Sample (Yes or Perform WSANSD (Yes or No)	NWTPH-Dx										cont	Other:	
	Washington		1	1	1		N I										at of		
				Sample	Matrix (wewster,	a litera	NWTPH_Dx -										Numb		
			Sample	Type (C≠comp,	e candlet	ld Fi	H										N IR		
	Sample Identification	Sample Date		G=grab)	BT=Tissue, A=Air	8	Construction of the owner										Total	Special In	structions/Note:
		$\sim$	$\geq$	Preserv	ation Code:	XX	A									<u> </u>	X		
_	GW-4-031820	3/15/20	0835	6	Water	$\mathbb{N}$	X												
- 35	GW-4-03820 MW-4-03820 MW-40-03820 24-W-9-03820		0540		Water	Ш_													
	MW-40-03820		0850		Water														
- 37	24-W-9-031820		0911		Water														
	10-W-7-031820		Q37		Water														
- 39	2B-W-4-031320		1013		Water														
	MW-16-031820		1015		Water														
-41	1A-W-4-031820		1050		Water														
	MW-38R-631520 5-W-18-031520		1126		Water														
-43	5-W-18-031820		1130		Water														
	5-W-150-031820	V	1140	V	Water	V													· · · ·
	Possible Hazard Identification					Sar	nple Di	sposa	l ( A fe	e may	be as	sesse	d il s	ampl	es ar	e ret	aine	d longer than 1 r	month)
	Non-Hazard Flammable Skin Irritant Poise Deliverable Requested: I, II, III, IV, Other (specify)	on B 🛄 Unkr	nown 🖵 F	Radiologica	l		Retu			ا کی میں او	' Di	sposa	l By L	ab	L		rchi	ve For	Months
	Denverable Requested. 1, n. m. rv, Other (specify)					Spe	ciai ins	trucao	ns/QC I	Require	ement	IS:							
	Empty Kit Relinquished by:		Date:			Time:	/	2		2	- 7	Me	ethod o	f Shipn					
	Relinquished by:	Date/Time:	2001	900	Company Farall	~	Received	oy:	$\geq$		3777			2	/Time:	3-	2.c	20 18:15	Company 17A
	Relinquished by:	Date/Time:	<u> </u>		Company		Receive	rby:	2		4		•	Date	/Time:			<u> </u>	Company
	Relinquished by:	Date/Time:			Company		Received	l by:						Date	/Time:				Company
ł	Custody Seals Intact: Custody Seal No.:				a kata a	Katisa	Cooler Te	emperat	ure(s) °C	and Oth	er Rem	arks:		. <u> </u>	A to the			<b>.</b>	
	Δ Yes Δ No	i da Alexandre			AL TANK			1903 V		(41A) -	an shi		- 14 A.	5 de 13	is di A				an an an Arrent an Arr

5755 8th Street East Tacoma, WA 98424 Phone: 253-922-2310 Fax: 253-922-5047

## Chain of Custody Record

Page 5 of

🔅 eurofins Environment Testing TestAmerica

Client Information	Sampler:	ens to	der		ь РМ: Ien, K	ristine	e D					Carr	ier Tra	acking	No(s	):			COC No: 580-37926-121	29.4
Client Contact: Peter Kingston	Phone: 425	-677-	-952	<b>)</b>	Mail: istine.	allen@	©testar	nerica	ainc.co	m		1							Page: Page 4 of 7	
Company: Farallon Consulting LLC					Τ				Ana	lysis	Re	aues	sted	·····					<sup>Job #:</sup> 935	80
Address: 975 5th Avenue NW Suite 100	Due Date Reques	sted:								Ť	1	Ī							Preservation Co	
City: Issaquah	TAT Requested (	days}:																	A - HCL B - NaOH	M - Hexane N - None
State, Zip: WA, 98027							3												C - Zn Acetate D - Nitric Acid E - NaHSO4	0 - AsNaO2 P - Na2O4S Q - Na2SO3
Phone:	PO #:				- 1		3												F - MeOH G - Amchlor	R - Na2S2O3 S - H2SO4
Email:	TT0100-Q12 W0#:				- 9		3												H - Ascorbic Acid 1 - Ice	T - TSP Dodecahydrat U - Acetone
pkingston@farallonconsulting.com Project Name:	Tax Code 8800 Project #:	0 BF1000721	15		- 8	(LNO)	Clacm											ers	J - DI Water K - EDTA	V - MCAA W - pH 4-5
BNSF Skykomish Ground Water Site:	58006391 ssow#:		·															ntain	L - EDA	Z - other (specify)
Washington	55077#;				Sam	MSD (Yes	لالعلام											of cont	Other:	
			Sample		1976						ĺ							nbar		
		Sample	Type (C=comp	(₩=water, S=solid, 0=waste/oil,	id Fil	Portorn MS	Silic											nn Is		
Sample Identification	Sample Date	Time	G≃grab	) BT=Tissue, A=AI vation Code:		wie', exa				SC 283-520		1251023552	51/2014	N RESULTING	642	MAGNER	1001000	101	Special Ir	structions/Note:
2A-W-42-031820	3/18/20	1145	G	Water	B	XA												X		
EW-1-031820		1	\ \	Water		+	<u>`</u>							-		+				
EW-10-031820		1205		Water		+				+										
GW-1-031820		1215		Water	╢	-++													···· \	
5-W-43-031520		1250		Water	╂╫	+									_					
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2A-W-41-03/820		1300		Water	┼╢	+	<u>×</u>			-	L			-						
24-1-410-031820		1305		Water	┦╢															
GW-3-031820		1509		Water	┦╢		X						$ \rightarrow $							
64-30-031820		1513		Water	111-		4			ļ										
24-W-40-031820		1505		Water	Щ.					ļ										
GW-2-031820		1505	$\underline{V}$	Water	И	<u>V</u>	<u>   </u>													
Possible Hazard Identification	Poison B Unkn		adiologia	al.	s		<b>e Disp</b> e Return			may I [						s are	7		d longer than 1	
Deliverable Requested: I, II, III, IV, Other (specify)	T OISON D ONKI		autologica	<i>a)</i>	s		l Instru			equire		ispos ls:	ai By	Lap			A	rcniv	ve For	Months
Empty Kit Relinquished by:		Date:			Time	e:	,					In	fethod	t of St	ipme	nt:				······
Relinquished by:	Date/Time: 3(5)		~~^	Company	1	Rec	eived by:		$ \rightarrow$	/				C	ate/T	ime: C	2.2	2~		Company FFF/TA
Relinquished by:	Date/Time:			Company	<u>~</u>	Rec	eived by:	-1_	- 7	4	2	$\sim$		Sector Sector	3 ate/T	-	1-2	0	2011!13	Company
Relinquished by:	Date/Time:			Company		Rec	eived by:								ate/T	me:				Company
Custody Seals Intact: Custody Seal No.:									/ 0 <del>~</del>										····	
$\Delta$ Yes $\Delta$ No	the second s				al Ara Na	000	ier Temp	erature	(s) °C ar	nd Othe	r Rem	arks;	- 114		N.			1		

Chain of Custody Record

Page 6 of 6

Environment Testing TestAmerica

5755 8th Street East Tacoma, WA 98424 Phone: 253-922-2310 Fax: 253-922-5047

Client Information	Sampler:				PM: en, Kris	stine I	n					Carrie	er Trac	king t	Vo(s)	:			COC No: 580-37926-1212		
Client Contact: Peter Kingston	Phone:			E-N	1ail:		testam	orioni		 ^								Ē	Page:		
Company:	1	·		KI1	sune.ai	liente	lesiam	CIICAI			_								Page 5 of 7	<u><u> </u></u>	*****
Farallon Consulting LLC Address:	Due Date Reques	ted:						1	Anal	ysis	Req	ues	ted				<b>M</b>	F	7 J. Preservation Cod	580	
975 5th Avenue NW Suite 100 City:					_					ĺ									A - HCL	M - Hexane	
Issaquah	TAT Requested (c	ays):																<b>(</b>	B - NaOH C - Zn Acetale	N - None O - AsNaO2	
State, Zip: WA, 98027								İ										<b>1</b>	D - Nitric Acid E - NaHSO4	P - Na2O4S Q - Na2SO3	
Phone:	P0 #: TT0100-Q12																	() ()	F - MeOH G - Amchlor H - Ascorbic Acid	R - Na2S2O3 S - H2SO4 T - TSP Dodecahi	wdrate
Email: pkingston@farallonconsulting.com	WO #: Tax Code 8800	BE1000721	5		10									1				1	I - Ice J - DI Water	U - Acetone V - MCAA	,
Project Name: BNSF Skykomish Ground Water	Project #: 58006391	DI 1000721	0		nple (Yes	×												-	K - EDTA L - EDA	W - pH 4-5 Z - other (specify)	•
Site: Washington	SSOW#:				ald mole	NWTPH-Dx												and a	Other:		
			Sample	Matrix (w=water,	Field Filtered Sample (Yes or Perform MSRMSD (Yes or Ma)	Dx NV													<u></u>		
Sample Identification	Sample Date	Sample Time	Type (C≖comp, G≃grab)	S=solid, O≈wastatoil,	ield Fi	NWTPH_Dx -											Total Number	N IBIO	Special In	structions/Note	<b>.</b> .
		$>\!\!\!\!>$		ation Code:	۲×	(A											X		Special III	snachonshold	5.
GW-20-031820 MW-655-031820 1B-W-23-031820	3/18/20	1505	6	Water	Μ	X															
mw-555-031820	3/15/20	1550	-	Water		X															
1B-W-23 -031820	<u>_</u>	1605	1	Water	1	X															
				Water																	
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				Water											Τ						
Possible Hazard Identification					Sa	mple	<b>Dispo</b> eturn 1	sal ( .	A fee i	may t					ples	arei	•		longer than 1		
Deliverable Requested: I, II, III, IV, Other (specify)	Poison B Unkn	own r	adiologica	1	Sp	ecial	eturn 1 Instruc	tions/	ent QC Re		DR	sposa s:	il By	Lab			Arci	hive	e For	Months	
Empty Kit Relinquished by:		Date:			Time:		1			1		м	ethod	of Shi	ipmer	nt:					
Relinquished by:	Date/Time: 3)(	z/n(0)	1900	Company Fourill		Recei	ived by.	a/		. E	//			D	ate/⊺i 3	<sup>me</sup> 15	· 2	20	20 11:15	EF/14	
Relinquished by:	Date/Time:			Company		Recei	wed by	( <b>1</b>						Da	ate/Ti	me:			W-976	Company	**********
Relinguished by:	Date/Time:			Company		Recei	ived by:							Da	ate/Ti	me:				Company	
Custody Seals Intact: Custody Seal No.:							er Tempe	rature(	s) °C an	d Othe	Rema	arks:								en de Nader na	

Blue Ice, Wei, Dry, None       Other:         Therm. ID:       Cor:       1.4 ° time:       2.0 °         Cooler Dsc:       FedEx:       UPS:       1.4 b Cour:       1.4 b Cour:         Blue Ice, Vet, Dry, None       Other:       0.1 °       1.1 °       1.1 °         Cooler Dsc:       Lab Cour:       1.4 b Cour:       1.1 °       1.1 °       1.1 °         Cooler Dsc:       Lab Cour:       1.1 ° <td< th=""><th>- Lab Cour: - Lab Cour: - Cother: - Other: - FedEx: - FedEx: - Lab Cour: - L</th><th><math display="block">\frac{7}{2} \circ U</math> <math display="block">\frac{7}{2} \operatorname{FedEx}</math> <math display="block">\frac{1}{2} \operatorname{Cher}</math> <math display="block">\frac{7}{2} Che</math></th><th><math display="block">1 \ 2 \ 3 \ 4 \ 5 \ 6 \ 7 \ 8 \ 9 \ 1 \ 1 \ 1 \ 1 \ 1 \ 1 \ 1 \ 1 \ 1</math></th></td<>	- Lab Cour: - Lab Cour: - Cother: - Other: - FedEx: - FedEx: - Lab Cour: - L	$\frac{7}{2} \circ U$ $\frac{7}{2} \operatorname{FedEx}$ $\frac{1}{2} \operatorname{Cher}$ $\frac{7}{2} Che$	$1 \ 2 \ 3 \ 4 \ 5 \ 6 \ 7 \ 8 \ 9 \ 1 \ 1 \ 1 \ 1 \ 1 \ 1 \ 1 \ 1 \ 1$

Page 1 of 6 Chain of Custody Record

#### 🔅 eurofins Environment Testing TestAmerica

Tacoma, WA 98424 Phone: 253-922-2310 Fax: 253-922-5047

Client Information	Sampler: 6	er P	okes		РМ: ən, Kris	tine	D					Carri	er Track	ing No(	s):			C No: 0-37926-1	2129.6		*
Client Contact: Peter Kingston	Phone: 425	- 677 - 4	9521	E-M kris		en@	testam	erica	ainc.co	m							Pag				
Company: Faralion Consulting LLC					Τ	- 0				alysi	c Ro		tod		·		Job		936	580	۱
Address: 975 5th Avenue NW Suite 100	Due Date Reque	sted: •						T				ques		1	1		Pre	servation			<u>/</u>
City:	TAT Requested (	days):			-													HCL NaOH		- Hexane None	
Issaquah State, Zip:		tander	d										L L				C	Zn Acetate Nitric Acid	0-	AsNaO2 Na2O4S	
WA, 98027 Phone:	P0 #:	( Carlon Carlow	~								.	L	ef	2	Jr.		1000	NaHSO4 MeOH	Q -	Na2SO3 Na2S2O3	
	TT0100-Q12				-				0		( \	P			N.	<u>م</u> او	) G+, H-,	Amchlor Ascorbic Ac		H2SO4 TSP Dode	cahydrate
Email: pkingston@farallonconsulting.com	WO #: Tax Code 880	BF1000721	5		Or N				K	Y	ړ [	$\mathbf{k}$			3		🏹 J-D	01 Water	۷-	Acetone MCAA	
Project Name: BNSF Skykomish Ground Water	Project #: 58006391									r			$\forall$				Lei K-E E	EDTA EDA		- pH 4-5 other (spec	cify)
Site: Washington	ISSOW#:					NWTPH-Dx				K	1	ΤI				659	01he	H.			
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Wewatar, Secolid, Oewastefoil, BT=Tissue, AnAir	Field Filtered Sample (Ye Perform MS/MSD (Yes or	NW - XQ_H4TWN											fotal Number o	Specia	l Instru	ctions/N	ote:
	$\geq$	X		ation Code:	¥¥	A											$\langle \_$				
52-BD-031620	316/20	iby3	<u> </u>	Water	14	X				_											
52-AU-031620 52-AU-031620	3/16/20	1720	Ġ	Water																	
52-79-031620	3/4/20	1721	6	Water																	
51-BD-031720	3/17/20	6933	6	Water																	
51-80-031720	1	0934	6	Water										<b>,</b> ,	<u>, ,</u> [	. 10	Щ <u>,</u> ,	· • • • •	- 'e <b>r</b>	• •	101 ×
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10-W-1 - 031720		1010	l	Water		Π															_
SI-AU-031720		[ાવ		Water																	-
SI-AD-031720		1015		Water						1					580-9	3580	Chain	of Custo	dy		
1C-W-4-03720		1051		Water										1						··· · •	1 THE AMOUNT
53- AU-031720	4	110	7	Water	V	$\overline{\mathbf{v}}$				-				1							
Possible Hazard Identification					Sar	nple	Dispo	sal (	A fee	may	be as	sess	ed if s	ample	s are	retain	ned lon	ger than	1 mon	th)	
Non-Hazard Flammable Skin Irritant Pois Deliverable Requested: I, II, III, IV, Other (specify)	on B 🛄 Unkn	own R	adiological				e <i>turn T</i> Instruct			L	D	isposa	al By L	ab		- <sup>1</sup> Arci	hive Fo	or	M	lonths	
Empty Kit Relinquished by:		Date:			Time:								ethod of	Chiam	opt						
Relinquished by:	Date/Time:		T	Company		Recei	ved by:	~				IV.						فسرونانا	lCom	nony I	
Relinquished by:	Date/Time:	1/20 19		Company	<u> </u>	1	ver by.		A	4	2	<u> </u>		3- Date/		-2	o [	1:15			A
Relinguished by:					<u> </u>							-							Com	pany	
	Date/Time:			Company		Receiv	ved by:							Date/	lime:				Com	pany	
Custody Seals Intact: Custody Seal No.: Δ Yes Δ No	h n	· · · · · ·	1		NA ST	Cooler	r Temper	rature	(s) °C a	ind Oth	er Rem	arks:		N N N. N N N	( N. Å)			40. A)			
	······································			Page 8	9 of 9	96													Ver:	01/16/201	19 4/7

5755 8th Street East

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Chain of Custody Record

Page 2 of b

eurofins Environment Testing TestAmerica

5755 8th Street East Tacoma, WA 98424

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Phone: 253-922-2310 Fax: 253-922-5047	Sampler:				PM: en. Kris	tian F					C	arrier Tr	acking	No(s)	:			No:	0400	-	
Client Information	Phone:				en, Kns lail:		,				-						Page	-37926-1. .:	2129.	,	
Peter Kingston Company:	<u> </u>			kri	stine.all	en@t	estame	ricaind	c.com								Pag Job #	e 7 of 7		<u> </u>	
Faralion Consulting LLC								ŀ	Analy	vsis f	Requ	ested	1				100 *	* 9 <b>3</b> .	58	50	
Address: 975 5th Avenue NW Suite 100	Due Date Request	ted:															8634	servation (			
City:	TAT Requested (d	lays):																NaOH		I - Hexane - None	
Issaquah State, Zip:	1							ĺ										Zn Acetate Nitric Acid		- AsNaO2 - Na2O4S	
WA, 98027																		laHSO4 leOH		- Na2SO3 - Na2S2O3	
Phone:	PO #: TT0100-Q12																	Amchlor Ascorbic Aci		- H2SO4 - TSP Dodec	ahydrate
Email: pkingston@farallonconsulting.com	W0 #: Tax Code 8800	BF1000721	15		N KO												i - Ici J - D	e II Water		- Acetone - MCAA	
Project Name:	Project #:				- <u>5</u> - <u>5</u>						ĺ					inari	К~Е Ļ-Е	DTA		' - pH 4-5 - other (speci	ify)
BNSF Skykomish Ground Water Site:	58006391 ssow#:				- de	NWTPH-Dx								-		conta	2 Othe	r:			
Washington		·····		1		1 I M										5	5				
			Sample	Matrix (w=water,	<b>XSI</b>											Number					
		Sample	Type (C=comp,	(₩≖wäter, S≖solid, O≈waste/oil,	ld Fil	NWTPH_Dx -										NI IS					
Sample Identification	Sample Date	Time	G=grab)	8T=Tissue, A=Ail	the wood American	1000 CT 43 4	NAMA AND ADDRESS			2003/02/02 02	560.00		1.2340	1		Total		Special	Instr	uctions/No	ote:
		$\sim$	124664667658085868	ation Code:		A		-							_	_X	¥—		28,285-884		
10-W-3-031720	3/17/20	1110	G	Water	<u>M</u> _	X										_		<u></u>			
53-AD-031720	<b> </b>	ini	]]	Water	<u> ] </u>																
53- 30-031720		1145		Water																	
53-BD-031720		1146		Water																	
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1B-W-2-031720 1B-W-3-031720		1230		Water																	
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54 - 20-031720		1410		Water	***																
5-W-55-031720		1424						1												******	
SU-AD-031720 Possible Hazard Identification		1409	$\nabla$		M	V	1														
Possible Hazard Identification		<u></u>			Sar					ay be	asse	ssed	if sar	nple	s are r	retain	ed lon	ger than	1 mo	nth)	
Non-Hazard Flammable Kin Irritant Poiso     Deliverable Requested: I, II, III, IV, Other (specify)	son B 💭 Unknown 🦳 Radiological						eturn To			L	] Disp	osal B	y Lat	>	L	I Arch	hive Fc	ж		Months	
						eciari	nstructi	ons/Q	CRec	Juiren	ents:										
Empty Kit Relinquished by:		Date:		<u>^</u>	Time:		$\square$		-7		ć	Metho	od of S							<i>f</i>	
Relinquished by:	Date/Time:	12001	700	Company Format	ll	Recei	leg by:		-0	a	72-		ľ	3	-"" - 19	1.2	10	11:15	Ē	PP/1	A
Relinquished by: t	Date/Time: Company					Receiv	led by:							Date/T					Cor	mpany	p
Relinquished by:	Date/Time: Company					Receiv	/ed by:							Date/T	ime:				Cor	npany	
Custody Seals Intact: Custody Seal No.:	v		Cooler	Tempera	ature(s)	°C and	Other I	Remark	s:				<u>.</u>					(			

5755 8th Street East Tacoma, WA 98424 Phone: 253-922-2310 Fax: 253-922-5047

## **Chain of Custody Record**

Page 3 of 6

eurofins Environment Testing TestAmerica

	Client Information	Sampler					A	ib PM: lien, Kr	istine	D						Carr	ier Tra	acking	NO(S	.):			COC No: 580-37926-1212	29.1	
	Client Contact: Peter Kingston	Phone:					-	Mail: ristine.a	llení	.) testa	meri	cainc	com			1							Page: Page 1 of 7		
	Company:							T		910010						1							<u></u>		
	Farallon Consulting LLC Address:	Due Date	e Reques	ted:				iena e			1	A	naly	/Sis	Rec	que	sted	1	<del>.</del>				Job #: 935{ Preservation Coo	<u> 20</u>	
	975 5th Avenue NW Suite 100		-								1					1		1					A - HCL	M - Hexane	
	City: Issaquah	TAT Req	uested (d	lays):									1						ļ		1		B - NaOH C - Zn Acetate	N - None O - AsNaO2	
	State, Zip:																						D - Nitric Acid	P - Na204S	
	WA, 98027 Phone:	PO #:																ļ					E - NaHSO4 F - MeOH	Q - Na2SO3 R - Na2S2O3	
		TT0100	)-Q12					6															G - Amchlor H - Ascorbic Acid	S - H2SO4 T - TSP Dode	cahydrate
	Email: pkingston@farallonconsulting.com	WO#: Tax Co	de 8800	BF1000721	15			٦ž	6			ĺ											I - Ice J - DI Water	U - Acetone V - MCAA	,
	Project Name:	Project #:						- ș														200	K - EDTA ኒ - EDA	W - pH 4-5 Z - other (spec	nifu)
	BNSF Skykomish Ground Water Site	580063 SSOW#:																]	ļ	ĺ					
	Washington							Sam	NWTPH-DV													of ci	Other:		
					Sa	mple	Matrix	pered														legi			
						ype	(Wawater, Sesolid,	FIR														Nur			
	Sample Identification	Sampl	e Date	Sample Time		≈comp, ≅grab)	O=waste/cil, ST=Tissue, A=/		WWTPH DV.													Total Number	Special In	structions/N	lote:
		$\sum$	<	$\times$	P	reserva	tion Code:	$\mathbb{X}$	< A													X			
-23	5-W-56-031720	51.7	20	1440	4	3	Water	Ν	Y																
	5-W-51-031720	(	1	1515		1	Water																		
- 2,5	54-30-031720			1506		<u> </u>	Water																		
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- 27	54-BU-031722 5-W-17-031720		ļ	1540			Water																		
	5-W-14-031720			1545			Water																		
-29	5-W-14-031720			1608			Water																		
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	5-W-16-031720	ال.	-	1706	(		Water																		
-33	2A-W-10-031820	3)18	120	0831	5	V	Water	₩	V	4															
	Possible Hazard Identification		7	[]				S						nay b	e as	sess	ied i	f sar	nple				d longer than 1 i	month)	
ŀ	Non-Hazard Flammable Skin Irritant Poise Deliverable Requested: I, II, III, IV, Other (specify)	on B	<sup></sup> Unkn	own 🖵 F	Radio	logical				Return I Instru							al Bj	y Lab	,	<u>ل</u> ـــ	A/	rchiv	ve For	Months	
									Jecia	nisot	CUDF	ns/QC	- Rec	Juitei	ment										
L	Empty Kit Relinquished by:			Date:				Time		//	1				<i>.</i>	ţ	vietho	d of S	•						
F	Relinquished by:	Date/Time:	insla	19100	2	ľ	Company Forull		Rec	eived by					~	_		10	Date/	Fime:	3.9	2	11.15	Company Company	íA.
Ĩ	Relinquished by:	Date/Time:			~		Company	<	-	eivecto					5,	<u> </u>	<u></u>		Date/1	lime:		<u> </u>		Company	$\mu x$
F	Relinquished by:	Date/Time:					Company		Rec	eived by									Date/1	îme;				Company	
ŀ	Custody Seals Intact: Custody Seal No.: Δ Yes Δ No		N. A. A.		i kiy				C00	er Tem	peratu	ure(s) °	C and	Other	Rem	arks:									
L									1								1.1					944 B		1111 - 1111 - 1	rede a com

Eurofins TestAmerica, Seattle 5755 8th Street East

## Chain of Custody Record

Page 4 of 6

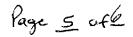
Environment Testing TestAmerica

Tacoma, WA 98424 Phone: 253-922-2310 Fax: 253-922-5047

Client Information	Sampler:				PM: en, Kris	tine D					Carr	er Tra	king N	o(s):	*****	********	COC No: 580-37926-121	129 3	
Client Contact: Peter Kingston	Phone:			E-M							1						Page:		
Company:	1			Kris	tine.au	en@tes	stamer	icainc.c	om						—		Page 3 of 7		
Faraflon Consulting LLC								An	alysi	is Re	ques	sted					Job #: 9358	80	
Address: 975 5th Avenue NW Suite 100	Due Date Reques														Τ		Preservation Co	odes:	
City: Issaquah	TAT Requested (c	Jays):			11												B - NaOH C - Zn Acelate	M - Hexane N - None O - AsNaO2	
State, Zip: WA, 98027								\$	Ī								D - Nitric Acid E - NaHSO4	P - Na2O4S Q - Na2SO3	
Phone:	P0 #:																F - MeOH G - Amchlor	R - Na2S2O3 S - H2SO4	
Email:	TT0100-Q12 W0#:				- Q												H - Ascorbic Acid	T - TSP Dodec: U - Acetone	ahydrate:
pkingston@farallonconsulting.com	Tax Code 8800	) BF1000721	15		5 2											2	J - DI Water K - EDTA	V - MCAA	
Project Name: BNSF Skykomish Ground Water	Project #: 58006391				e (Ye se or	ă										taine	L - EDA	W - pH 4-5 Z - other (speci	ify)
Site: Washington	SSOW#:				Field Filtered Sample (Yes or Perform MSMISD (Yes or No)	NWTPH-Dx										Total Number of conta	Other:		
		1	Sample	Matrix	8	Ň										iber c			
			Туре	(₩×water, S≠solid,	Filte	NWTPH_Dx -			Ì	ĺ						Num			
Sample Identification	Sample Date	Sample Time	(C≕comp, G≕grab)	Onwaste/oil, BT=Tissue, A#Air	P E	MM										letal	Special Ir	nstructions/No	ote:
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1C-W-7-031820		CG 3M		Water											1				, <del>16,1_1</del>
19 2B-W-4-031320 MW-16-031820		1013		Water											1				
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5-W-180-031820	$\vee$	1140	$\vee$	Water	V	V													
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Δ Yes Δ No												N. 19					24.2.2.2.44	a da NAN	

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:	24	-3 4	der		o PM: en, Kris	tine	D					Carrie	r Traci	king No	o(s):			COC No: 580-37926-121	29.4	·
	Client Contact: Peter Kingston	Phone:	425	-677-	-952	) E-M		en@	)testam	ericai	nc.com	n								Page: Page 4 of 7		
	Company: Farallon Consulting LLC										Anal	ysis	Req	ues	ted					Job #: 935	80	
	Address: 1975 5th Avenue NW Suite 100	Due Date	Request	ted:						1		1				T				Preservation Co		
	City: Issaquah	TAT Requ	uested (d	lays):																A ~ HCL B - NaOH	M - Hexane N - None	
	State, Ztp: WA, 98027	1							9	-				-						C - Zn Acetate D - Nitric Acid E - NaHSO4	0 - AsNaO2 P - Na2O4S Q - Na2SO3	
	Phone:	PO #:							1											F - MeOH G - Amchlor	G - Na2S2O3 R - Na2S2O3 S - H2SO4	
	Email:	TT0100 W0 #:					- 2		Clean											H - Ascorbic Acid I - Ice	T - TSP Dodecahyo U - Acetone	drate
	pkingston@farallonconsulting.com Project Name:	Tax Coc Project #:	fe 8800	BF1000721	15				Q										S10	J - DI Water K - EDTA	V - MCAA W - pH 4-5	
	BNSF Skykomish Ground Water	5800639 ssow#:	91					×0-	2					ĺ					ntain	L - EDA	Z - other (specify)	
	Washington	550VV#:					ered Sample (Yes or MS/NSD (Yes or No	МТРН	J.S.										of cont	Other:		
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	Sample Remarkadon	Sample		Time	The second s	BT=Tissue, A= Air ation Code;	A Ser Street	A											X	Special In	structions/Note:	
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F	Relinquished by:	Date/Time:	····· ··· ··· ···			Company		Recei	ved by:							Date	/Time:				Company	
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#### **Eurofins TestAmerica, Seattle** 5755 8th Street East

Chain of Custody Record

Page 6 of 6

🔅 eurofins Environment Testing TestAmerica

Tacoma, WA 98424 Phone: 253-922-2310 Fax: 253-922-5047

-13

Client Information	Sampler:			Aile	PM: en, Kris	stine D						Carrie	er Tra	acking	No(s	):			COC No: 580-37926-121	129.5	
Client Conlact: Peter Kingston	Phone:			E-M	lail:	ien@tes	tamer	ricainc.	com										Page: Page 5 of 7		
Company: Farallon Consulting LLC	<b>4</b>			i	Τ					/sis F	 Rea		ted	•••••••••			*******			580	
Address: 975 5th Avenue NW Suite 100	Due Date Request	ited:							1,				100		<b></b>	Γ	<u> </u>		Preservation Co		
City: Issaquah	TAT Requested (d	days):		AND AND A	<b>1</b>														A - HCL B - NaOH	M - Hexane N - None	
State, Zip:																			C - Zn Acetate D - Nitric Acid	O - AsNaO2 P - Na2O4S	
WA, 98027 Phone:	PO #:				$\left\{ \right\}$														E - NaHSO4 F - MeOH G - Amchlor	Q - Na2SO3 R - Na2S2O3	
Email:	TT0100-Q12 W0 #:				-9										i I				G - Amonior H - Ascorbic Acid I - Ice	S - H2SO4 T - TSP Dodecahydra U - Acetone	ate
pkingston@farallonconsulting.com Project Name:	Tax Code 8800	) BF1000721	15		(Yes or ) or Not													2	J - Di Water K - EDTA	U - Acetone V - MCAA W - pH 4-5	
BNSF Skykomish Ground Water	Project #: 58006391					ğ												containe		Z - other (specify)	
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		Sample	Type (C=comp,	(₩∞water, S≈solid,	Field Fills	NWTPH_Dx -												I Nun			
Sample Identification	Sample Date		G=grab)	BT=Tissue, A=Air)		Contraction of the												104	Special II	nstructions/Note:	
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13-12-03020		1605	L	Water	4	X					$\square$										
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Possible Hazard Identification					Sar	nple Di	sposa	ıl ( A fi	ee m	ay be	ass	sesse	ed if	sam	ples	s are	reta	inec	<b>d longer than 1</b> ve For	month)	
Non-Hazard Flammable Skin Irritant Pois Deliverable Requested: I, II, III, IV, Other (specify)	son B 🛄 Unkne	<u>wn R</u>	adiological	r		Retu	rn To I	Client	Pen		Dis	posa	l By	Lab				rchiv	ve For	Months	
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elinguished by:	Date/Time:		10	Company	T	Received	by:								ate/Ti	me:				Company	

. 6	Therm. ID: <u>(Cor: L.)</u> Unc: <u>0,7</u> ° Cooler Dsc: <u>FedEx:</u> Packing: <u>5,4</u> <u>FedEx:</u> Cust. Seal-Yes No <u>Lab Cour:</u> Blue Ice, Wet Dry, None Other:	Therm. ID: Cor: 2.4 ° Unc: 2.0 ° Cooler Dsc: 2.4 ° Unc: 2.0 ° Packing: Coult Seal: Ver No UPS: Cust. Seal: Yer No Lab Cour: More Other:	Therm. ID: <b>b</b> <u>Cor:</u> <u>L.4</u> <u>o</u> Unc: <u>L.4</u> <u>o</u> Cooler Dsc: <u>L.4</u> <u>FedEx:</u> Packing: <u>J.V</u> <u>FedEx:</u> Cust. Seal: <u>Yes</u> <u>Nof</u> <u>UPS:</u> Blue Ice, Wet; Dry, None <u>Other:</u>	Therm. ID:       7       Cor:       7.6       •       Unc:       9.7         Cooler Dsc:       9.7       FedEx:       • <th>Therm. ID: <u>IAC Corr. D. Y. *</u> Unc: <u>0, 2 *</u> Cooler Dsc: Packing: FedEx: Cust. Seal: <u>Ver.</u> No UPS: Elue Ice Wet. Dry, None Other:</th> <th>y • tine: J.⊈ • FedEx: UPS: Lab Cour:</th> <th>Therm. ID: The Cor: 1.7 ° Unc: 1.9 ° Cooler Dsc: 1.9 ° Cooler Dsc: 1.9 ° Cooler Dsc: 1.9 ° Cooler Dsc: 1.9 ° Cooler Cooler ° Cool</th> <th>Therm. ID: 7 Cor: 4.6 tine: 4.9 ° Cooler Dsc: 4.6 ° tine: 4.9 ° Packing: 7 FedEx: Cust. Seal: Yes Not Lab Cour: 7 Blue ice, 6. Dry, None Other:</th> <th>1 2 3 4 4 5 6 7 8</th>	Therm. ID: <u>IAC Corr. D. Y. *</u> Unc: <u>0, 2 *</u> Cooler Dsc: Packing: FedEx: Cust. Seal: <u>Ver.</u> No UPS: Elue Ice Wet. Dry, None Other:	y • tine: J.⊈ • FedEx: UPS: Lab Cour:	Therm. ID: The Cor: 1.7 ° Unc: 1.9 ° Cooler Dsc: 1.9 ° Cooler Dsc: 1.9 ° Cooler Dsc: 1.9 ° Cooler Dsc: 1.9 ° Cooler Cooler ° Cool	Therm. ID: 7 Cor: 4.6 tine: 4.9 ° Cooler Dsc: 4.6 ° tine: 4.9 ° Packing: 7 FedEx: Cust. Seal: Yes Not Lab Cour: 7 Blue ice, 6. Dry, None Other:	1 2 3 4 4 5 6 7 8
						Therm. ID: <u>Cor:</u> <b>3.%</b> Unc: <b>3.Y</b> ° Cooler Dsc: <u>L</u> <b>B</b> Packing: <u>Bub</u> FedEx: Cust. Seal: Yes No Lab Cour: Blue Ice Wet, Dry. None Other:	Therm. ID: <u>6</u> Cor: <u>3.0</u> Unc: <u>2.6</u> Cooler Dsc: <u>FedEx:</u> Packing: <u>5.00</u> UPS: Cust. Seal: Yes No Lab Cour: <u>1</u> Blue Ice, Wet, Dry, None Other:	Therm. ID: <u>(</u> Cor: <u>24</u> ° Unc: <u>2.1</u> ° Cooler Dsc: <u>Fab</u> FedEx: Packing: <u>Fab</u> FedEx: Cust. Seal: <u>Nos</u> No UPS: Elue Ice Wet, Dry, None Uther:	
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Client: Farallon Consulting LLC

#### Login Number: 93580 List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Received extra samples not listed on 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	

List Source: Eurofins TestAmerica, Seattle

Environment Testing America

# **ANALYTICAL REPORT**

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

#### Laboratory Job ID: 580-95611-1

Client Project/Site: BNSF Skykomish Ground Water Sampling Event: Skykomish HCC System Revision: 1

#### For:

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

Attn: Peter Kingston

Authorized for release by: 7/22/2020 5:08:13 PM

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

LINKS Review your project results through TOTOL ACCESS

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

# **Table of Contents**

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Sample Summary	44
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#### Job ID: 580-95611-1

#### Laboratory: Eurofins TestAmerica, Seattle

Narrative

Job Narrative 580-95611-1

#### Comments

This report has been revised to include NWTPH-Dx analysis without silica gel cleanup for samples GW-3-062420 (580-95611-18) and 2A-W-41-062420 (580-95611-22).

#### Receipt

The samples were received on 6/25/2020 1:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 7.9° C. 8.9° C. 9.8° C. 10.4° C and 10.4° C.

#### **Receipt Exceptions**

The sample Id on the container label for the following sample did not match the information listed on the Chain-of-Custody (COC): 2B-W-4-062420 (580-95611-17). The container labels list 2B-W-4-062420, while the COC lists 2A-W-4-062420. The container ID matches previous sample ID's therefore was used for the login pending client verification.

The following sample were received at the laboratory outside the required temperature criteria: 5-W-19-062320 (580-95611-1), 2A-W-40-062320 (580-95611-2), 5-W-18-062420 (580-95611-3), 1C-W-1-062420 (580-95611-4), 1C-W-8-062420 (580-95611-5), MW-4-062420 (580-95611-6), MW-40-062420 (580-95611-7), 5-W-16-062420 (580-95611-8), EW-2A-062420 (580-95611-9), 2A-W-10-062420 (580-95611-10), 5-W-17-062420 (580-95611-11), 1C-W-7-062420 (580-95611-12), GW-4-062420 (580-95611-13), 2A-W-9-062420 (580-95611-14), 5-W-56-062420 (580-95611-15), 1B-W-3-062420 (580-95611-16), 2B-W-4-062420 (580-95611-17), GW-3-062420 (580-95611-18), GW-30-062420 (580-95611-19), 5-W-55-062420 (580-95611-20), 1B-W-23-062420 (580-95611-21), 2A-W-41-062420 (580-95611-22), 2A-W-410-062420 (580-95611-23), 5-W-51-062420 (580-95611-24), 5-W-14-062420 (580-95611-25), MW-555-062420 (580-95611-26), 2A-W-42-062420 (580-95611-27) and 5-W-180-062420 (580-95611-28). All coolers had melted ice and several of the sample containers in each cooler had their temperatures taken. The client was contacted regarding this issue, and the laboratory was instructed to <CHOOSE ONE> proceed with/cancel analysis.

#### GC Semi VOA

Method NWTPH-Dx: The laboratory control sample duplicate (LCSD) for preparation batch 580-331672 and analytical batch 580-331729 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 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: 5-W-51-062420 (580-95611-24).

Method NWTPH-Dx: 2A-W-42-062420 (580-95611-27), (LCS 580-332875/2-A) and (LCSD 580-332875/3-A) was re-extracted outside of holding time and re-analyzed due to high LCS failure in the initial extraction. Data from re-analysis concurs: therefore, both sets of data are reported.

Method NWTPH-Dx: GW-3-062420 (580-95611-18), 2A-W-41-062420 (580-95611-22), 2A-W-42-062420 (580-95611-27), 5-W-180-062420 (580-95611-28), (LCS 580-331753/2-A), (LCS 580-331753/2-B), (LCSD 580-331753/3-A) and (LCSD 580-331753/3-B) are associated with an LCS/LCSD pair which recovers outside control limits, high-biased, for Motor Oil. Associated samples which are non-detect for Motor Oil are reported; samples which present hits above the reporting limit for Motor Oil were re-extracted outside of holding time, with two sets of data reported.

Method NWTPH-Dx: Precision for (LCS 580-333595/2-A) and (LCSD 580-333595/3-A) exceeded control limits for C10-C24. Individual recoveries for this range were within control limits; therefore, the data are gualified and reported.

Method NWTPH-Dx: GW-3-062420 (580-95611-18) and 2A-W-41-062420 (580-95611-22) was prepared outside of preparation holding time due to activation after holding time expiration.

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

#### **Organic Prep**

Method 3510C: Sample was labeled as preserved however in doing a pH test the sample was shown to be a pH of 7 instead of pH of 2.

Page 3 of 49

7/22/2020 (Rev. 1)

#### Job ID: 580-95611-1 (Continued)

#### Laboratory: Eurofins TestAmerica, Seattle (Continued)

The sample was then acidified according to the method.

Method 3510C: The emulsions were broken up using sodium sulfate and then rinsed with the DCM solution.

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with all samples in this batch so LCS and LCSD were used instead.

Method 3510C: The following samples were prepared outside of preparation holding time due to being activated for NWTPH\_Dx out of hold : GW-3-062420 (580-95611-18) and 2A-W-41-062420 (580-95611-22).

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: 580-95611-1

#### Qualifiers

QC

RER

RPD

TEF

TEQ TNTC

RL

**Quality Control** 

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin) Toxicity Equivalent Quotient (Dioxin)

Too Numerous To Count

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

Qualifiers		3
GC Semi VO	٨	
Qualifier	Qualifier Description	4
*	LCS or LCSD is outside acceptance limits.	
*1	LCS/LCSD RPD exceeds control limits.	5
н	Sample was prepped or analyzed beyond the specified holding time	<b>J</b>
Glossary		6
Abbreviation	These commonly used abbreviations may or may not be present in this report.	7
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis	
%R	Percent Recovery	
CFL	Contains Free Liquid	ŏ
CFU	Colony Forming Unit	
CNF	Contains No Free Liquid	9
DER	Duplicate Error Ratio (normalized absolute difference)	
Dil Fac	Dilution Factor	
DL	Detection Limit (DoD/DOE)	
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample	
DLC	Decision Level Concentration (Radiochemistry)	
EDL	Estimated Detection Limit (Dioxin)	
LOD	Limit of Detection (DoD/DOE)	
LOQ	Limit of Quantitation (DoD/DOE)	
MCL	EPA recommended "Maximum Contaminant Level"	
MDA	Minimum Detectable Activity (Radiochemistry)	
MDC	Minimum Detectable Concentration (Radiochemistry)	
MDL	Method Detection Limit	
ML	Minimum Level (Dioxin)	
MPN	Most Probable Number	
MQL	Method Quantitation Limit	
NC	Not Calculated	
ND	Not Detected at the reporting limit (or MDL or EDL if shown)	
NEG	Negative / Absent	
POS	Positive / Present	
PQL	Practical Quantitation Limit	
PRES	Presumptive	

#### Client Sample ID: 5-W-19-062320 Date Collected: 06/23/20 15:50 Date Received: 06/25/20 13:00

#### 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 ND	0.062	0.062	mg/L		06/26/20 09:46	06/27/20 07:20	1
Motor Oil (>C24-C36)	ND	0.091	0.091	mg/L		06/26/20 09:46	06/27/20 07:20	1
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	60	50 - 150				06/26/20 09:46	06/27/20 07:20	1

Job ID: 580-95611-1

Matrix: Water

Lab Sample ID: 580-95611-1

# 2 3 4 5 6 7 8

Job ID: 580-95611-1

#### Client Sample ID: 2A-W-40-062320 Date Collected: 06/23/20 16:19 Date Received: 06/25/20 13:00

## Lab Sample ID: 580-95611-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.061	0.061	mg/L		06/26/20 09:46	06/27/20 07:40	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		06/26/20 09:46	06/27/20 07:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	68		50 - 150				06/26/20 09:46	06/27/20 07:40	1

#### Client Sample ID: 5-W-18-062420 Date Collected: 06/24/20 08:30 Date Received: 06/25/20 13:00

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND	0.062	0.062	mg/L		06/26/20 09:46	06/27/20 08:00	1
Motor Oil (>C24-C36)	ND	0.091	0.091	mg/L		06/26/20 09:46	06/27/20 08:00	1
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	68	50 - 150				06/26/20 09:46	06/27/20 08:00	1

Job ID: 580-95611-1

Matrix: Water

Lab Sample ID: 580-95611-3

# 2 3 4 5 6 7 8

#### Client Sample ID: 1C-W-1-062420 Date Collected: 06/24/20 08:38 Date Received: 06/25/20 13:00

#### 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		06/26/20 09:46	06/27/20 08:20	1
Motor Oil (>C24-C36)	ND	0.091	0.091	mg/L		06/26/20 09:46	06/27/20 08:20	1
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	74	50 - 150				06/26/20 09:46	06/27/20 08:20	1

Job ID: 580-95611-1

## Lab Sample ID: 580-95611-4 Matrix: Water

5

#### Client Sample ID: 1C-W-8-062420 Date Collected: 06/24/20 08:39 Date Received: 06/25/20 13:00

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

Analyte	Result Qualifier	RL	MDL	Únit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND	0.062	0.062	mg/L		06/26/20 14:00	06/28/20 00:12	1
Motor Oil (>C24-C36)	ND	0.091	0.091	mg/L		06/26/20 14:00	06/28/20 00:12	1
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	67	50 - 150				06/26/20 14:00	06/28/20 00:12	1

Job ID: 580-95611-1

# 2 Lab Sample ID: 580-95611-5 Matrix: Water 4 D Prepared Analyzed Dil Fac 5

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

#### Client Sample ID: MW-4-062420 Date Collected: 06/24/20 09:09 Date Received: 06/25/20 13:00

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

Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
0.11		0.063	0.063	mg/L		06/26/20 14:00	06/28/20 00:32	1
0.24		0.093	0.093	mg/L		06/26/20 14:00	06/28/20 00:32	1
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
71		50 - 150				06/26/20 14:00	06/28/20 00:32	1
	0.11 0.24		0.11 0.063 0.24 0.093 %Recovery Qualifier Limits	0.11         0.063         0.063           0.24         0.093         0.093           %Recovery         Qualifier         Limits	0.11         0.063         0.063         mg/L           0.24         0.093         0.093         mg/L           %Recovery         Qualifier         Limits	0.11         0.063         0.063         mg/L           0.24         0.093         0.093         mg/L           %Recovery Qualifier         Limits	0.11         0.063         0.063         mg/L         06/26/20         14:00           0.24         0.093         0.093         mg/L         06/26/20         14:00           %Recovery         Qualifier         Limits         Prepared	0.11         0.063         0.063         mg/L         06/26/20         14:00         06/28/20         00:32           0.24         0.093         0.093         mg/L         06/26/20         14:00         06/28/20         00:32           %Recovery         Qualifier         Limits         Prepared         Analyzed

Job ID: 580-95611-1

Matrix: Water

Lab Sample ID: 580-95611-6

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

#### Client Sample ID: MW-40-062420 Date Collected: 06/24/20 09:15 Date Received: 06/25/20 13:00

Method: NWTPH-Dx - Northwe	est - Semi-Vola	tile Petroleum Pro	ducts (GC	C)			
Analyte	Result Qu	ualifier RL	MDL	Unit	D	Prepared	Analyzed
#2 Diesel (C10-C24)	0.11	0.062	0.062	mg/L	_	06/26/20 14:00	06/28/20 00:52
Motor Oil (>C24-C36)	0.23	0.091	0.091	mg/L		06/26/20 14:00	06/28/20 00:52

Surrogate	%Recovery	Qualifier	Limits
o-Terphenyl	68		50 - 150

Job ID: 580-95611-1

## Lab Sample ID: 580-95611-7

Prepared

Analyzed

06/26/20 14:00 06/28/20 00:52

Matrix: Water

Dil Fac

Dil Fac

1

1

1

5

#### Client Sample ID: 5-W-16-062420 Date Collected: 06/24/20 09:35 Date Received: 06/25/20 13:00

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d: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)
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Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND	0.062	0.062	mg/L		06/26/20 14:00	06/28/20 01:12	1
Motor Oil (>C24-C36)	ND	0.091	0.091	mg/L		06/26/20 14:00	06/28/20 01:12	1
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	75	50 - 150				06/26/20 14:00	06/28/20 01:12	1

Job ID: 580-95611-1

Matrix: Water

Lab Sample ID: 580-95611-8

# 2 3 4 5 6 7 8

#### Client Sample ID: EW-2A-062420 Date Collected: 06/24/20 09:39 Date Received: 06/25/20 13:00

Analyte	Result Qualifier	RL	MDL	Únit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND	0.062	0.062	mg/L		06/26/20 14:00	06/28/20 01:32	1
Motor Oil (>C24-C36)	ND	0.091	0.091	mg/L		06/26/20 14:00	06/28/20 01:32	1
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	72	50 - 150				06/26/20 14:00	06/28/20 01:32	1

Job ID: 580-95611-1

Matrix: Water

Lab Sample ID: 580-95611-9

# 2 3 4 5 6 7 8

Eurofins TestAmerica, Seattle

7/22/2020 (Rev. 1)

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

#### Client Sample ID: 2A-W-10-062420 Date Collected: 06/24/20 10:26 Date Received: 06/25/20 13:00

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

				Unit	D	Prepared	Analyzed	Dil Fac
0.079		0.062	0.062	mg/L		06/26/20 14:00	06/28/20 01:52	1
0.28		0.092	0.092	mg/L		06/26/20 14:00	06/28/20 01:52	1
Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
69		50 - 150				06/26/20 14:00	06/28/20 01:52	1
	0.28 Recovery	0.28 Recovery Qualifier	0.28 0.092 Recovery Qualifier Limits	0.28 0.092 0.092 Recovery Qualifier Limits	0.28 0.092 0.092 mg/L Recovery Qualifier Limits	0.28 0.092 0.092 mg/L Recovery Qualifier Limits	0.28         0.092         0.092 mg/L         06/26/20 14:00           Recovery Qualifier         Limits         Prepared	0.28         0.092         0.092 mg/L         06/26/20 14:00         06/28/20 01:52           Recovery         Qualifier         Limits         Prepared         Analyzed

Job ID: 580-95611-1

Lab Sample ID: 580-95611-10

## 580-95611-1

5

Matrix: Water

#### Client Sample ID: 5-W-17-062420 Date Collected: 06/24/20 10:30 Date Received: 06/25/20 13:00

#### 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		06/26/20 14:00	06/28/20 02:13	1
Motor Oil (>C24-C36)	ND	0.091	0.091	mg/L		06/26/20 14:00	06/28/20 02:13	1
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	73	50 - 150				06/26/20 14:00	06/28/20 02:13	1

Job ID: 580-95611-1

Matrix: Water

Lab Sample ID: 580-95611-11

## 2 3 4 5 6 7 8 9

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

#### Client Sample ID: 1C-W-7-062420 Date Collected: 06/24/20 10:50 Date Received: 06/25/20 13:00

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

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.063	0.062	0.062	mg/L		06/26/20 14:00	06/28/20 02:53	1
Motor Oil (>C24-C36)	ND	0.091	0.091	mg/L		06/26/20 14:00	06/28/20 02:53	1
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	72	50 - 150				06/26/20 14:00	06/28/20 02:53	1

Job ID: 580-95611-1

Matrix: Water

5

#### JOD ID. 560-95011-1

Lab Sample ID: 580-95611-12

#### Client Sample ID: GW-4-062420 Date Collected: 06/24/20 10:51 Date Received: 06/25/20 13:00

#### 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		06/26/20 14:00	06/28/20 03:13	1
Motor Oil (>C24-C36)	ND	0.091	0.091	mg/L		06/26/20 14:00	06/28/20 03:13	1
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	68	50 - 150				06/26/20 14:00	06/28/20 03:13	1

Job ID: 580-95611-1

## Lab Sample ID: 580-95611-13

Matrix: Water

5

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

#### Client Sample ID: 2A-W-9-062420 Date Collected: 06/24/20 11:27 Date Received: 06/25/20 13:00

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

Analyte	Result Qualifier	RL	MDL	Únit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.073	0.062	0.062	mg/L		06/26/20 14:00	06/28/20 03:33	1
Motor Oil (>C24-C36)	ND	0.092	0.092	mg/L		06/26/20 14:00	06/28/20 03:33	1
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	72	50 - 150				06/26/20 14:00	06/28/20 03:33	1

Job ID: 580-95611-1

Matrix: Water

Lab Sample ID: 580-95611-14

# 2 3 4 5 6 7 8

#### Client Sample ID: 5-W-56-062420 Date Collected: 06/24/20 11:40 Date Received: 06/25/20 13:00

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

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.33	0.062	0.062	mg/L		06/26/20 14:00	06/28/20 03:53	1
Motor Oil (>C24-C36)	0.67	0.091	0.091	mg/L		06/26/20 14:00	06/28/20 03:53	1
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	70	50 - 150				06/26/20 14:00	06/28/20 03:53	1

Job ID: 580-95611-1

Matrix: Water

Lab Sample ID: 580-95611-15

# 2 3 4 5 6 7 8

#### Client Sample ID: 1B-W-3-062420 Date Collected: 06/24/20 12:03 Date Received: 06/25/20 13:00

#### 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		06/26/20 14:00	06/28/20 04:13	1
Motor Oil (>C24-C36)	ND	0.091	0.091	mg/L		06/26/20 14:00	06/28/20 04:13	1
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	67	50 - 150				06/26/20 14:00	06/28/20 04:13	1

Job ID: 580-95611-1

Matrix: Water

Lab Sample ID: 580-95611-16

## 1 2 3 4 5 6 7 8

#### Client Sample ID: 2B-W-4-062420 Date Collected: 06/24/20 12:45 Date Received: 06/25/20 13:00

#### 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		06/26/20 14:00	06/28/20 04:33	1
Motor Oil (>C24-C36)	ND	0.092	0.092	mg/L		06/26/20 14:00	06/28/20 04:33	1
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	68	50 - 150				06/26/20 14:00	06/28/20 04:33	1

Job ID: 580-95611-1

## Lab Sample ID: 580-95611-17

Matrix: Water

5

#### Client Sample ID: GW-3-062420 Date Collected: 06/24/20 14:29 Date Received: 06/25/20 13:00

Job	ID:	580-	-956	11-1
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#### Lab Sample ID: 580-95611-18 Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
#2 Diesel (C10-C24)	ND	H *1	0.062	0.062	mg/L		07/21/20 16:34	07/22/20 13:58	1	- 7
Motor Oil (>C24-C36)	ND	Н	0.091	0.091	mg/L		07/21/20 16:34	07/22/20 13:58	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
Surroyale	<i>Juncecovery</i>	Quanner								
0	88		50 - 150				07/21/20 16:34	07/22/20 13:58	1	
o-Terphenyl	88		50 - 150	PH with	ı Silica G	Sel Cle		07/22/20 13:58	1	1
o-Terphenyl Method: NWTPH-Dx - Se	emi-Volatile Petro		50 - 150	PH with		Gel Cle		07/22/20 13:58 Analyzed	1 Dil Fac	ļ
o-Terphenyl Method: NWTPH-Dx - Se Analyte	emi-Volatile Petro	leum Prod	50 - 150		Unit		anup		1 Dil Fac	
o-Terphenyl Method: NWTPH-Dx - Se Analyte #2 Diesel (C10-C24)	emi-Volatile Petro Result	leum Prod Qualifier	50 - 150	MDL	Unit mg/L		eanup Prepared	Analyzed	1 Dil Fac 1 1	
o-Terphenyl Method: NWTPH-Dx - Se Analyte #2 Diesel (C10-C24) Motor Oil (>C24-C36) Surrogate	emi-Volatile Petro Result	leum Prod Qualifier *	50 - 150 UCTS by NW1 RL 0.062	MDL 0.062	Unit mg/L		eanup Prepared 06/27/20 16:01	Analyzed 07/10/20 12:41	Dil Fac	

#### Client Sample ID: GW-30-062420 Date Collected: 06/24/20 14:40 Date Received: 06/25/20 13:00

#### 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		06/26/20 14:00	06/28/20 04:53	1
Motor Oil (>C24-C36)	ND	0.091	0.091	mg/L		06/26/20 14:00	06/28/20 04:53	1
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	67	50 - 150				06/26/20 14:00	06/28/20 04:53	1

Job ID: 580-95611-1

Matrix: Water

Lab Sample ID: 580-95611-19

## 1 2 3 4 5 6 7 8 9

#### Client Sample ID: 5-W-55-062420 Date Collected: 06/24/20 14:25 Date Received: 06/25/20 13:00

#### 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		06/26/20 14:00	06/28/20 05:13	1
Motor Oil (>C24-C36)	ND	0.091	0.091	mg/L		06/26/20 14:00	06/28/20 05:13	1
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	66	50 - 150				06/26/20 14:00	06/28/20 05:13	1

Matrix: Water

Lab Sample ID: 580-95611-20

Job ID: 580-95611-1

#### Client Sample ID: 1B-W-23-062420 Date Collected: 06/24/20 14:51 Date Received: 06/25/20 13:00

# Lab Sample ID: 580-95611-21

Matrix: Water

5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		06/26/20 14:00	06/28/20 05:33	1
Motor Oil (>C24-C36)	ND		0.092	0.092	mg/L		06/26/20 14:00	06/28/20 05:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	71		50 - 150				06/26/20 14:00	06/28/20 05:33	1

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

#### Job ID: 580-95611-1

5

#### Lab Sample ID: 580-95611-22 Matrix: Water

Date Collected: 06/24/20 15:09 Date Received: 06/25/20 13:00

Client Sample ID: 2A-W-41-062420

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2 Diesel (C10-C24)	0.13	H *1	0.062	0.062	mg/L		07/21/20 16:34	07/22/20 13:38	1
Motor Oil (>C24-C36)	0.10	н	0.092	0.092	mg/L		07/21/20 16:34	07/22/20 13:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	85		50 - 150				07/21/20 16:34	07/22/20 13:38	1
, ,		leum Prod	lucts by NWI	CPH with	n Silica G	el Cle	anun		
Method: NWTPH-Dx - Se	mi-Volatile Petro	leum Prod Qualifier	lucts by NWT RL		n <mark>Silica G</mark> Unit	Gel Cle	anup Prepared	Analyzed	Dil Fac
Method: NWTPH-Dx - Se Analyte	mi-Volatile Petro		-		Unit			Analyzed 07/10/20 13:01	Dil Fac
Method: NWTPH-Dx - Se Analyte #2 Diesel (C10-C24)	emi-Volatile Petro Result	Qualifier	RL	MDL	Unit mg/L		Prepared 06/27/20 16:01		Dil Fac
Method: NWTPH-Dx - Se Analyte #2 Diesel (C10-C24) Motor Oil (>C24-C36) Surrogate	emi-Volatile Petro Result	Qualifier *	<b>RL</b> 0.062	MDL 0.062	Unit mg/L		Prepared 06/27/20 16:01	07/10/20 13:01	Dil Fac

Job ID: 580-95611-1

#### Client Sample ID: 2A-W-410-062420 Date Collected: 06/24/20 15:15 Date Received: 06/25/20 13:00

# Lab Sample ID: 580-95611-23

Matrix: Water

5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.11		0.062	0.062	mg/L		06/26/20 14:00	06/28/20 05:53	1
Motor Oil (>C24-C36)	0.092		0.092	0.092	mg/L		06/26/20 14:00	06/28/20 05:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	68		50 - 150				06/26/20 14:00	06/28/20 05:53	1

#### Client Sample ID: 5-W-51-062420 Date Collected: 06/24/20 15:30 Date Received: 06/25/20 13:00

Method: NWTPH-Dx - Northwe	est - Semi-Volatile Petrol	leum Prod	ucts (GC)	
Analyte	Result Qualifier	RI	MDI Unit	п

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.33	0.062	0.062	mg/L		06/26/20 14:00	06/28/20 06:33	1
Motor Oil (>C24-C36)	0.61	0.091	0.091	mg/L		06/26/20 14:00	06/28/20 06:33	1
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	67	50 - 150				06/26/20 14:00	06/28/20 06:33	1

Job ID: 580-95611-1

Matrix: Water

Lab Sample ID: 580-95611-24

5

#### Client Sample ID: 5-W-14-062420 Date Collected: 06/24/20 16:30 Date Received: 06/25/20 13:00

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

Analyte						Dueuened	A seals and a	
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND ND	0.062	0.062	mg/L		06/26/20 14:00	06/28/20 06:53	1
Motor Oil (>C24-C36)	ND	0.091	0.091	mg/L		06/26/20 14:00	06/28/20 06:53	1
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	72	50 - 150				06/26/20 14:00	06/28/20 06:53	1

Job ID: 580-95611-1

Matrix: Water

Lab Sample ID: 580-95611-25

# 1 2 3 4 5 6

Job ID: 580-95611-1

#### Client Sample ID: MW-555-062420 Date Collected: 06/24/20 16:45 Date Received: 06/25/20 13:00

# Lab Sample ID: 580-95611-26

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.063	0.063	mg/L		06/26/20 14:00	06/28/20 07:13	1
Motor Oil (>C24-C36)	ND		0.093	0.093	mg/L		06/26/20 14:00	06/28/20 07:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	73		50 - 150				06/26/20 14:00	06/28/20 07:13	1

## **Client Sample Results**

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

#### Client Sample ID: 2A-W-42-062420 Date Collected: 06/24/20 16:16 Date Received: 06/25/20 13:00

Lab Sample ID	: 580-95611-27
	Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.12		0.062	0.062	mg/L		06/27/20 16:01	07/10/20 13:21	1
Motor Oil (>C24-C36)	0.12	*	0.091	0.091	mg/L		06/27/20 16:01	07/10/20 13:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	98		50 - 150				06/27/20 16:01	07/10/20 13:21	1
-	orthwest - Semi-V	olatile Pet	roleum Prod	ucts (G(	C) - RE				
Method: NWTPH-Dx - No Analyte		Olatile Pet Qualifier	roleum Prod <sub>RL</sub>	ucts (G( MDL		D	Prepared	Analyzed	Dil Fac
Method: NWTPH-Dx - No Analyte		Qualifier			Únit	D	Prepared 07/13/20 13:57		Dil Fac
 Method: NWTPH-Dx - No	Result	Qualifier H	RL	MDL	Únit mg/L	D	07/13/20 13:57		Dil Fac
Method: NWTPH-Dx - No Analyte #2 Diesel (C10-C24)	Result 0.095	Qualifier H H *	RL 0.062	MDL 0.062	Únit mg/L	D	07/13/20 13:57	07/14/20 14:58	Dil Fac 1 1 Dil Fac

Job ID: 580-95611-1

## Job ID: 580-95611-1

#### Client Sample ID: 5-W-180-062420 Date Collected: 06/24/20 08:35 Date Received: 06/25/20 13:00

#### Lab Sample ID: 580-95611-28 Matrix: Water

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		06/27/20 16:01	07/10/20 13:41	1
Motor Oil (>C24-C36)	ND	*	0.091	0.091	mg/L		06/27/20 16:01	07/10/20 13:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	94		50 - 150				06/27/20 16:01	07/10/20 13:41	1

### QC Sample Results

Job ID: 580-95611-1

6

#### Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) Lab Sample ID: MB 580-331672/1-A Client Sample ID: Method Blank Matrix: Water Prep Type: Total/NA Analysis Batch: 331729 Prep Batch: 331672 MB MB Qualifier RL MDL Unit Prepared Analyzed Dil Fac Analyte Result D #2 Diesel (C10-C24) 0.065 0.065 mg/L 06/26/20 09:46 06/27/20 00:19 ND 1 Motor Oil (>C24-C36) ND 0.096 0.096 mg/L 06/26/20 09:46 06/27/20 00:19 1 MB MB Qualifier Surrogate %Recovery Limits Prepared Analyzed Dil Fac 50 - 150 06/26/20 09:46 06/27/20 00:19 o-Terphenyl 77 1 Lab Sample ID: LCS 580-331672/2-A **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA Analysis Batch: 331729 **Prep Batch: 331672** LCS LCS Spike %Rec. Analyte Added **Result Qualifier** Unit D %Rec Limits 50 - 120 #2 Diesel (C10-C24) 0.500 0.450 mg/L 90 Motor Oil (>C24-C36) 0.500 0.556 mg/L 111 64 - 120 LCS LCS Limits Surrogate %Recovery Qualifier 50 - 150 o-Terphenyl 83 Lab Sample ID: LCSD 580-331672/3-A **Client Sample ID: Lab Control Sample Dup Matrix: Water** Prep Type: Total/NA Analysis Batch: 331741 **Prep Batch: 331672** LCSD LCSD %Rec. RPD Spike Added **Result Qualifier** Unit l imits RPD Limit Analyte D %Rec #2 Diesel (C10-C24) 0.500 0.502 mg/L 100 50 - 120 11 26 Motor Oil (>C24-C36) 0.500 0.538 108 64 - 120 mg/L 3 24 LCSD LCSD %Recovery Qualifier Surrogate I imits o-Terphenyl 78 50 - 150 Lab Sample ID: MB 580-331713/1-A **Client Sample ID: Method Blank Matrix: Water** Prep Type: Total/NA Analysis Batch: 331747 **Prep Batch: 331713** MB MB Analyte **Result Qualifier** RL MDL Unit D Prepared Analyzed Dil Fac #2 Diesel (C10-C24) ND 0.065 06/26/20 14:00 06/27/20 23:12 0.065 mg/L 1 Motor Oil (>C24-C36) ND 0.096 0.096 mg/L 06/26/20 14:00 06/27/20 23:12 1 MB MB Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 06/26/20 14:00 06/27/20 23:12 o-Terphenyl 67 50 - 150 1 Lab Sample ID: LCS 580-331713/2-A **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA Analysis Batch: 331747 **Prep Batch: 331713** LCS LCS Spike %Rec. Added **Result Qualifier** Unit %Rec Analyte D Limits #2 Diesel (C10-C24) 0.500 0.413 83 50 - 120 mg/L Motor Oil (>C24-C36) 0.500 0.583 mg/L 117 64 - 120

## **QC Sample Results**

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

					Clien		Lab Control	
							Prep Type: To Prep Batch:	
	~~						riep batch.	551715
LCS L		1						
%Recovery	Jualifier	Limits						
86		50 - 150						
-331713/3-A				C	lient Sar			
		Spike	LCSD LCS	SD				331713 RPD
		•			Unit	D %Rec		
						$-\frac{2}{-74}$		
					-	95		
1000 /	000				0			
		Limite						
70		50 - 750						
1753/1-A								
N	IB MB						Trop Batom	001700
Res	ult Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N	ID	0.065	0.065	mg/L		06/27/20 16:01	07/10/20 10:41	1
١	ID	0.096	0.096	mg/L		06/27/20 16:01	07/10/20 10:41	1
٨	IB MB							
%Recove	ry Qualifier	Limits				Prepared	Analyzed	Dil Fac
	-	50 - 150				06/27/20 16:01	07/10/20 10:41	1
1753/1-В								
N	В МВ						Ртер Басси.	331753
		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N	ID	0.065	0.065	mg/L		•		1
Ν	ID	0.096		-		06/27/20 16:01	07/10/20 11:41	1
л	18 MB							
		l imits				Prenared	Analyzed	Dil Fac
	82 <b>Quanner</b>					•	07/10/20 11:41	1
	LCSD L %Recovery G 70 1753/1-A M Resu N %Recove 1753/1-B M Resu N M %Recove	331713/3-A LCSD LCSD %Recovery Qualifier 70 1753/1-A MB MB Result Qualifier ND ND MB MB Qualifier ND ND MB MB Qualifier 29 20 20 20 20 20 20 20 20 20 20	331713/3-A         Spike           Added         0.500           0.500         0.500           LCSD         LCSD           %Recovery         Qualifier         Limits           70         50 - 150           1753/1-A         MB         MB           MB         MB         0.065           ND         0.096           MB         MB           %Recovery         Qualifier         Limits           79         50 - 150           1753/1-B         MB         MB           MB         MB         MB           MB         MB         0.065           ND         0.096         0.096           MB         MB         MB           MB         MB         0.065           ND         0.096         0.096           MB         MB         0.096           MB         MB         0.096	Spike         LCSD         LCSD <t< td=""><td>331713/3-A         C           Added         Result         Qualifier           0.500         0.372         Qualifier           LCSD         LCSD         Qualifier         Limits           70         50-150         1753/1-A           MB         MB         MB         MD         0.065         0.065         mg/L           ND         0.096         0.096         mg/L         1000000000000000000000000000000000000</td><td>Sainting         Spike         LCSD         LCSD         Unit          </td><td>331713/3-A         Client Sample ID: Lab           Added         Result Qualifier         Unit         D         %Rec           MB         0.500         0.372         mg/L         D         %Rec           %Recovery         Qualifier         Limits         95         95         95           LCSD         LCSD         Sold         0.474         mg/L         95         95           MB         MB         Client Sample ID: Lab         95         95         95         95           MB         LCSD         LCSD         CSD         95         95         95           MB         MB         Client Sample ID: Lab         95         95         95         95           LCSD         LCSD         Sold         0.474         mg/L         95         95           LCSD         LCSD         Limits         0.065         0.065         97         06/27/20 16:01           MB         MB         MB         95         96         97         96         97           1753/1-B         MB         MB         0.065         0.065         97/L         9         96/27/20 16:01           MB         MB         0.096         0.</td><td>331713/3-A         Client Sample ID: Lab Control Samp Prep Type: Ti Prep Batch: %Rec.           Added         Result         Qualifier         Unit         D         %Rec         Limits         RPL           0.500         0.372         mg/L         0         %Rec.         11         %Rec.           LCSD         LCSD         0.500         0.474         mg/L         95         64.120         2           LCSD         LCSD         Mail         Client Sample ID: Method         Mail         Rec.         Rec.           %Recovery         Qualifier         Limits         50-150         50         10         11         10         10         11         10         11         10         11         10         11         10         11         10         11         10         11         10         11         10         11         10         11         10         11         10         11         10</td></t<>	331713/3-A         C           Added         Result         Qualifier           0.500         0.372         Qualifier           LCSD         LCSD         Qualifier         Limits           70         50-150         1753/1-A           MB         MB         MB         MD         0.065         0.065         mg/L           ND         0.096         0.096         mg/L         1000000000000000000000000000000000000	Sainting         Spike         LCSD         LCSD         Unit	331713/3-A         Client Sample ID: Lab           Added         Result Qualifier         Unit         D         %Rec           MB         0.500         0.372         mg/L         D         %Rec           %Recovery         Qualifier         Limits         95         95         95           LCSD         LCSD         Sold         0.474         mg/L         95         95           MB         MB         Client Sample ID: Lab         95         95         95         95           MB         LCSD         LCSD         CSD         95         95         95           MB         MB         Client Sample ID: Lab         95         95         95         95           LCSD         LCSD         Sold         0.474         mg/L         95         95           LCSD         LCSD         Limits         0.065         0.065         97         06/27/20 16:01           MB         MB         MB         95         96         97         96         97           1753/1-B         MB         MB         0.065         0.065         97/L         9         96/27/20 16:01           MB         MB         0.096         0.	331713/3-A         Client Sample ID: Lab Control Samp Prep Type: Ti Prep Batch: %Rec.           Added         Result         Qualifier         Unit         D         %Rec         Limits         RPL           0.500         0.372         mg/L         0         %Rec.         11         %Rec.           LCSD         LCSD         0.500         0.474         mg/L         95         64.120         2           LCSD         LCSD         Mail         Client Sample ID: Method         Mail         Rec.         Rec.           %Recovery         Qualifier         Limits         50-150         50         10         11         10         10         11         10         11         10         11         10         11         10         11         10         11         10         11         10         11         10         11         10         11         10         11         10         11         10

o-Terphenyl 101 50 - 150

26

24

1

1

1

Dil Fac

6

#### Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued) Lab Sample ID: LCSD 580-331753/3-B **Client Sample ID: Lab Control Sample Dup Matrix: Water** Prep Type: Total/NA Analysis Batch: 332717 Prep Batch: 331753 LCSD LCSD Spike RPD %Rec. Analyte Added Result Qualifier D %Rec Limits RPD Limit Unit #2 Diesel (C10-C24) 0.500 88 50 - 120 4 0.441 mg/L Motor Oil (>C24-C36) 0.500 0.673 \* mg/L 135 64 - 120 11 LCSD LCSD %Recovery Qualifier Surrogate Limits 50 - 150 o-Terphenyl 116 Lab Sample ID: MB 580-332875/1-A **Client Sample ID: Method Blank Matrix: Water** Prep Type: Total/NA Analysis Batch: 332940 Prep Batch: 332875 MB MB Analyte **Result Qualifier** RL MDL Unit D Prepared Analyzed Dil Fac 0.065 mg/L #2 Diesel (C10-C24) ND 0.065 07/13/20 13:57 07/14/20 13:56 Motor Oil (>C24-C36) ND 0.096 07/13/20 13:57 07/14/20 13:56 0.096 mg/L MB MB

Surrogate	%Recovery	Qualifier Limits	Prepared	Analyzed
o-Terphenyl	96	50 - 150	07/13/20 13:57	07/14/20 13:56
Lab Sample ID: LCS 580-33287	75/2-A		Client Sample ID:	Lab Control S

Lab Sample ID: LCS 580-332875/2-A Matrix: Water Analysis Batch: 332940				Clie	ent Sai	nple ID	: Lab Control Sample Prep Type: Total/NA Prep Batch: 332875
	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	0.500	0.466		mg/L		93	50 - 120
Motor Oil (>C24-C36)	0.500	0.634	*	mg/L		127	64 - 120

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
o-Terphenyl	92		50 - 150

#### Lab Sample ID: LCSD 580-332875/3-A **Matrix: Water** aliasta Databa 000040

Analysis Batch: 332940						Ргер Ва	itch: 33	52875
-	Spike	LCSD	LCSD			%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	0.500	0.486		mg/L	97	50 - 120	4	26
Motor Oil (>C24-C36)	0.500	0.631	*	mg/L	126	64 - 120	0	24

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
o-Terphenyl	90		50 - 150

## Lab Sample ID: MB 580-333595/1-A **Matrix: Water**

#### **Prep Batch: 333595** Analysis Batch: 333686 MB MB Analyte RL MDL Unit **Result Qualifier** D Prepared Analyzed Dil Fac #2 Diesel (C10-C24) 0.065 0.065 mg/L 07/21/20 16:34 07/22/20 12:17 ND 1 Motor Oil (>C24-C36) ND 0.096 0.096 mg/L 07/21/20 16:34 07/22/20 12:17 1

Eurofins TestAmerica, Seattle

**Client Sample ID: Method Blank** 

**Client Sample ID: Lab Control Sample Dup** 

Prep Type: Total/NA

Prep Type: Total/NA

4-1- 0000

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

#### QC Sample Results

Job ID: 580-95611-1

6

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued) Lab Sample ID: MB 580-333595/1-A **Client Sample ID: Method Blank** Prep Type: Total/NA Matrix: Water Analysis Batch: 333686 **Prep Batch: 333595** MB MB Limits Surrogate %Recovery Qualifier Prepared Analyzed Dil Fac 85 50 - 150 07/21/20 16:34 07/22/20 12:17 o-Terphenyl 1 Lab Sample ID: LCS 580-333595/2-A **Client Sample ID: Lab Control Sample** Matrix: Water Prep Type: Total/NA Analysis Batch: 333686 **Prep Batch: 333595** LCS LCS Spike %Rec. Added **Result Qualifier** Unit D %Rec Limits Analyte #2 Diesel (C10-C24) 0.500 0.378 76 50 - 120 mg/L Motor Oil (>C24-C36) 0.500 0.463 93 64 - 120 mg/L LCS LCS Limits Surrogate %Recovery Qualifier o-Terphenyl 97 50 - 150 Lab Sample ID: LCSD 580-333595/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Water** Prep Type: Total/NA Analysis Batch: 333686 **Prep Batch: 333595** Spike LCSD LCSD %Rec. RPD Added Result Qualifier Analyte Unit р %Rec l imits RPD Limit 0.257 \*1 #2 Diesel (C10-C24) 0.500 mg/L 51 50 - 120 38 26 Motor Oil (>C24-C36) 0.500 0.399 mg/L 80 64 - 120 15 24 LCSD LCSD Surrogate %Recovery Qualifier Limits o-Terphenyl 77 50 - 150 Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup Lab Sample ID: LCS 580-331753/2-A **Client Sample ID: Lab Control Sample** Prep Type: Total/NA Matrix: Water Analysis Batch: 332717 **Prep Batch: 331753** Spike LCS LCS %Rec. Added %Rec Limits Analyte **Result Qualifier** Unit D #2 Diesel (C10-C24) 0.500 0.451 mg/L 90 50 - 120 Motor Oil (>C24-C36) 0.500 0.586 mg/L 117 64 - 120 LCS LCS Surrogate %Recovery Qualifier Limits o-Terphenyl 100 50 - 150

## Lab Sample ID: LCSD 580-331753/3-A Matrix: Water Analysis Batch: 332717

Analyte			Added	Result	Qualifier	Unit
#2 Diesel (C10-C24)			0.500	0.438		mg/L
Motor Oil (>C24-C36)			0.500	0.633	*	mg/L
	LCSD	LCSD				
Surrogate	%Recovery	Qualifier	Limits			
o-Terphenyl	114		50 - 150			

Eurofins TestAmerica, Seattle

**Client Sample ID: Lab Control Sample Dup** 

88

127

D %Rec

%Rec.

Limits

50 - 120

64 - 120

Spike

LCSD LCSD

Prep Type: Total/NA

**Prep Batch: 331753** 

RPD

3

8

RPD

Limit

26

Dilution

Factor

Dilution

Factor

1

1

Run

Run

Batch

331672

Batch

Number

Number

Prepared

or Analyzed

06/26/20 09:46

Prepared

or Analyzed

331729 06/27/20 07:40 W1T

331672 06/26/20 09:46

331729 06/27/20 07:20 W1T

Analyst

Analyst

RJL

RJL

Lab

Lab

TAL SEA

TAL SEA

TAL SEA

TAL SEA

Client Sample ID: 5-W-19-062320

Batch

Туре

Prep

Analysis

Client Sample ID: 2A-W-40-062320

Batch

Туре

Prep

Analysis

Batch

Method

3510C

Batch

Method

3510C

NWTPH-Dx

NWTPH-Dx

Date Collected: 06/23/20 15:50

Date Received: 06/25/20 13:00

Date Collected: 06/23/20 16:19

Date Received: 06/25/20 13:00

Prep Type

Total/NA

Total/NA

Prep Type

Total/NA

Total/NA

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Lab Sample ID: 580-95611-1

Lab Sample ID: 580-95611-2

Lab Sample ID: 580-95611-3

Lab Sample ID: 580-95611-4

Lab Sample ID: 580-95611-5

Lab Sample ID: 580-95611-6

#### Client Sample ID: 5-W-18-062420 Date Collected: 06/24/20 08:30 Date Received: 06/25/20 13:00

Γ		Batch	Batch		Dilution	Batch	Prepared		
	Prep Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
:	Total/NA	Prep	3510C			331672	06/26/20 09:46	RJL	TAL SEA
	Total/NA	Analysis	NWTPH-Dx		1	331729	06/27/20 08:00	W1T	TAL SEA

#### Client Sample ID: 1C-W-1-062420

#### Date Collected: 06/24/20 08:38

Date Received: 06/25/20 13:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			331672	06/26/20 09:46	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	331729	06/27/20 08:20	W1T	TAL SEA

#### Client Sample ID: 1C-W-8-062420 Date Collected: 06/24/20 08:39 Date Received: 06/25/20 13:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analvzed	Analvst	Lab
Total/NA	Prep	3510C			331713	06/26/20 14:00	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	331747	06/28/20 00:12	T1W	TAL SEA

#### Client Sample ID: MW-4-062420 Date Collected: 06/24/20 09:09 Date Received: 06/25/20 13:00

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			331713	06/26/20 14:00	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	331747	06/28/20 00:32	T1W	TAL SEA

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

**Matrix: Water** 

Matrix: Water

**Matrix: Water** 

**Matrix: Water** 

Matrix: Water

**Matrix: Water** 

Lab Sample ID: 580-95611-7

Lab Sample ID: 580-95611-8

Lab Sample ID: 580-95611-9

Lab Sample ID: 580-95611-10

Lab Sample ID: 580-95611-11

Lab Sample ID: 580-95611-12

5
7
8

#### Client Sample ID: MW-40-062420 Date Collected: 06/24/20 09:15 Date Received: 06/25/20 13:00

Ргер Туре	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			331713	06/26/20 14:00	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	331747	06/28/20 00:52	T1W	TAL SEA

#### Client Sample ID: 5-W-16-062420 Date Collected: 06/24/20 09:35 Date Received: 06/25/20 13:00

	E	Batch	Batch		Dilution	Batch	Prepared		
Prep Typ	e T	Гуре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	F	Prep	3510C			331713	06/26/20 14:00	S1S	TAL SEA
Total/NA	A	Analysis	NWTPH-Dx		1	331747	06/28/20 01:12	T1W	TAL SEA

#### Client Sample ID: EW-2A-062420 Date Collected: 06/24/20 09:39

#### Date Received: 06/25/20 13:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			331713	06/26/20 14:00	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	331747	06/28/20 01:32	T1W	TAL SEA

## Client Sample ID: 2A-W-10-062420

#### Date Collected: 06/24/20 10:26

Date Received: 06/25/20 13:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			331713	06/26/20 14:00	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	331747	06/28/20 01:52	T1W	TAL SEA

#### Client Sample ID: 5-W-17-062420 Date Collected: 06/24/20 10:30 Date Received: 06/25/20 13:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			331713	06/26/20 14:00	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	331747	06/28/20 02:13	T1W	TAL SEA

#### Client Sample ID: 1C-W-7-062420 Date Collected: 06/24/20 10:50 Date Received: 06/25/20 13:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			331713	06/26/20 14:00	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	331747	06/28/20 02:53	T1W	TAL SEA

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

Client Sample ID: GW-4-062420

Date Collected: 06/24/20 10:51

Date Received: 06/25/20 13:00

Total/NA

Total/NA

Total/NA

**Matrix: Water** 

Lab Sample ID: 580-95611-13

_									
	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	_
Total/NA	Prep	3510C			331713	06/26/20 14:00	S1S	TAL SEA	
Total/NA	Analysis	NWTPH-Dx		1	331747	06/28/20 03:13	T1W	TAL SEA	
Client Sam	ple ID: 2A-	W-9-062420					Lab Sa	ample ID:	: 580-95611-14
Date Collecte									Matrix: Water
Date Receive	a: 06/25/20 1	3:00							
	Batch	Batch		Dilution	Batch	Prepared			
Prep Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Prep	3510C			331713	06/26/20 14:00	S1S	TAL SEA	-
Total/NA	Analysis	NWTPH-Dx		1	331747	06/28/20 03:33	T1W	TAL SEA	
Client Sam	ple ID: 5-W	/-56-062420					Lab Sa	ample ID:	: 580-95611-15
Date Collecte	d: 06/24/20 1	1:40						-	Matrix: Water
Date Receive									
-	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Prep	3510C			331713	06/26/20 14:00	-	TAL SEA	-
Total/NA	Analysis	NWTPH-Dx		1	331747			TAL SEA	
_									
Date Receive				Dilution	Patak	Drenered			
Bron Tuno	Batch	Batch Method	Run	Dilution Factor	Batch Number	Prepared	Analyst	Lab	
Prep Type Total/NA	Type Prep	3510C			331713	or Analyzed	Analyst S1S	TAL SEA	-
		NWTPH-Dx		1		06/28/20 04:13		TAL SEA	
Total/NA	Analysis			I	331747	00/20/20 04.13			
	•	W-4-062420					Lab Sa	ample ID:	: 580-95611-17
Date Collecte									Matrix: Water
Date Receive	d: 06/25/20 1	3:00							
-	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Prep	3510C			331713	06/26/20 14:00	S1S	TAL SEA	-
Total/NA	Analysis	NWTPH-Dx		1	331747	06/28/20 04:33	T1W	TAL SEA	
Client Sam	ple ID: GW	-3-062420					Lab Sa	ample ID:	: 580-95611-18
Date Collecte	•								Matrix: Water
Date Receive	d: 06/25/20 1	3:00							
-	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Number	•	Analyst	Lab	
Total/NA	Prep	3510C				06/27/20 16:01	-	TAL SEA	-
Total/NA	Cleanup	3630C				06/27/20 16:01		TAL SEA	
T - 1 - 1 / 1 / 1	A			,	000747				

TAL SEA

TAL SEA

TAL SEA

332717 07/10/20 12:41 JCM

333595 07/21/20 16:34 APR

333686 07/22/20 13:58 JCM

Eurofins TestAmerica, Seattle

1

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NWTPH-Dx

NWTPH-Dx

3510C

Analysis

Analysis

Prep

Batch

Method

3510C

Batch

Method

3510C

NWTPH-Dx

NWTPH-Dx

Client Sample ID: GW-30-062420

Batch

Туре

Prep

Client Sample ID: 5-W-55-062420

Batch

Туре

Prep

Analysis

Date Collected: 06/24/20 14:40

Date Received: 06/25/20 13:00

Date Collected: 06/24/20 14:25

Date Received: 06/25/20 13:00

Prep Type

Total/NA

Total/NA

Prep Type

Total/NA

Total/NA

Lab Sample ID: 580-95611-19

Lab Sample ID: 580-95611-20

Lab Sample ID: 580-95611-21

Lab Sample ID: 580-95611-22

Lab Sample ID: 580-95611-23

Lab Sample ID: 580-95611-24

TAL SEA TAL SEA

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

#### Client Sample ID: 1B-W-23-062420 Date Collected: 06/24/20 14:51

Analysis

#### Date Received: 06/25/20 13:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			331713	06/26/20 14:00	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	331747	06/28/20 05:33	T1W	TAL SEA

Lab Chronicle

Dilution

Factor

Dilution

Factor

1

1

Run

Run

Batch

Batch

Number

Number

Prepared

331713 06/26/20 14:00 S1S

331747 06/28/20 04:53 T1W

Prepared or Analyzed

331747 06/28/20 05:13 T1W

331713 06/26/20 14:00

or Analyzed

Analyst

Analyst

S1S

Lab TAL SEA

Lab

TAL SEA

#### Client Sample ID: 2A-W-41-062420 Date Collected: 06/24/20 15:09

Date Received: 06/25/20 13:00

-	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Prep	3510C			331753	06/27/20 16:01	RJL	TAL SEA	
Total/NA	Cleanup	3630C			331754	06/27/20 16:01	RJL	TAL SEA	
Total/NA	Analysis	NWTPH-Dx		1	332717	07/10/20 13:01	JCM	TAL SEA	
Total/NA	Prep	3510C			333595	07/21/20 16:34	APR	TAL SEA	
Total/NA	Analysis	NWTPH-Dx		1	333686	07/22/20 13:38	JCM	TAL SEA	

#### Client Sample ID: 2A-W-410-062420

Date Collected: 06/24/20 15:15 Date Received: 06/25/20 13:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			331713	06/26/20 14:00	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	331747	06/28/20 05:53	T1W	TAL SEA

#### Client Sample ID: 5-W-51-062420 Date Collected: 06/24/20 15:30 Date Received: 06/25/20 13:00

	Batch	Batch Method	Bun	Dilution	Batch Number	Prepared or Analvzed	Analvst	Lab
Prep Type Total/NA	Type Prep	- 3510C	Run	Factor		06/26/20 14:00		TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	331747	06/28/20 06:33	T1W	TAL SEA

#### Client Sample ID: 5-W-14-062420 Date Collected: 06/24/20 16:30 Date Received: 06/25/20 13:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			331713	06/26/20 14:00	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	331747	06/28/20 06:53	T1W	TAL SEA

#### Client Sample ID: MW-555-062420 Date Collected: 06/24/20 16:45 Date Received: 06/25/20 13:00

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			331713	06/26/20 14:00	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	331747	06/28/20 07:13	T1W	TAL SEA

#### Client Sample ID: 2A-W-42-062420 Date Collected: 06/24/20 16:16 Date Received: 06/25/20 13:00

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			331753	06/27/20 16:01	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	332717	07/10/20 13:21	JCM	TAL SEA
Total/NA	Prep	3510C	RE		332875	07/13/20 13:57	S1S	TAL SEA
Total/NA	Analysis	NWTPH-Dx	RE	1	332940	07/14/20 14:58	JCM	TAL SEA

#### Client Sample ID: 5-W-180-062420 Date Collected: 06/24/20 08:35 Date Received: 06/25/20 13:00

#### Lab Sample ID: 580-95611-28 Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			331753	06/27/20 16:01	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	332717	07/10/20 13:41	JCM	TAL SEA

#### Laboratory References:

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

**Matrix: Water** 

Matrix: Water

**Matrix: Water** 

Lab Sample ID: 580-95611-25

Lab Sample ID: 580-95611-26

Lab Sample ID: 580-95611-27

	Accreditation/C	ertification Summary	
Client: Farallon Consultin Project/Site: BNSF Skyko			Job ID: 580-95611-1
	s listed below are applicable to this report.		
Authority Washington	Program State	Identification Number           C553	Expiration Date 02-18-21

7/22/2020 (Rev. 1)

## Sample Summary

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset
580-95611-1	5-W-19-062320	Water	06/23/20 15:50	06/25/20 13:00	
580-95611-2	2A-W-40-062320	Water	06/23/20 16:19	06/25/20 13:00	
580-95611-3	5-W-18-062420	Water	06/24/20 08:30	06/25/20 13:00	
580-95611-4	1C-W-1-062420	Water	06/24/20 08:38	06/25/20 13:00	
580-95611-5	1C-W-8-062420	Water	06/24/20 08:39	06/25/20 13:00	
80-95611-6	MW-4-062420	Water	06/24/20 09:09	06/25/20 13:00	
580-95611-7	MW-40-062420	Water	06/24/20 09:15	06/25/20 13:00	
580-95611-8	5-W-16-062420	Water	06/24/20 09:35	06/25/20 13:00	
580-95611-9	EW-2A-062420	Water	06/24/20 09:39	06/25/20 13:00	
580-95611-10	2A-W-10-062420	Water	06/24/20 10:26	06/25/20 13:00	
580-95611-11	5-W-17-062420	Water	06/24/20 10:30	06/25/20 13:00	
580-95611-12	1C-W-7-062420	Water	06/24/20 10:50	06/25/20 13:00	
580-95611-13	GW-4-062420	Water	06/24/20 10:51	06/25/20 13:00	
580-95611-14	2A-W-9-062420	Water	06/24/20 11:27	06/25/20 13:00	
580-95611-15	5-W-56-062420	Water	06/24/20 11:40	06/25/20 13:00	
580-95611-16	1B-W-3-062420	Water	06/24/20 12:03	06/25/20 13:00	
580-95611-17	2B-W-4-062420	Water	06/24/20 12:45	06/25/20 13:00	
580-95611-18	GW-3-062420	Water	06/24/20 14:29	06/25/20 13:00	
580-95611-19	GW-30-062420	Water	06/24/20 14:40	06/25/20 13:00	
580-95611-20	5-W-55-062420	Water	06/24/20 14:25	06/25/20 13:00	
580-95611-21	1B-W-23-062420	Water	06/24/20 14:51	06/25/20 13:00	
580-95611-22	2A-W-41-062420	Water	06/24/20 15:09	06/25/20 13:00	
580-95611-23	2A-W-410-062420	Water	06/24/20 15:15	06/25/20 13:00	
580-95611-24	5-W-51-062420	Water	06/24/20 15:30	06/25/20 13:00	
580-95611-25	5-W-14-062420	Water	06/24/20 16:30	06/25/20 13:00	
580-95611-26	MW-555-062420	Water	06/24/20 16:45	06/25/20 13:00	
580-95611-27	2A-W-42-062420	Water	06/24/20 16:16	06/25/20 13:00	
580-95611-28	5-W-180-062420	Water	06/24/20 08:35	06/25/20 13:00	



THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Seattle 5755 8th Street E. Tacoma, WA 98424 Tel. 253-922-2310 Fax 253-922-5047 www.testamericainc.com



## Chain of Custody Record

580-95611 Chain of Custody

Client Farallou		Client		Ì	Ble	k	dig	Ao	n				6/24/20	Chai	n of Custody I	<sup>wmber</sup> 39067
Address 975 5th AVE NW				umber	(Area Ci	ode)/Fi	ax Nun	nber					Lab Number		,	_ of <u>3</u>
	Coda				1-41	11	ab Col	ntact				1	Analysis (Attach list if	Pag	<u>e</u> (	
City State Zip Ksaquah WA C	Code	Sampl	er CR	Pa	der.	s l'	.au uu	nau					more space is needed)			
Project Name and Location (State)		Billina				l						*				
BNSF SkykorMeh Questely Skift Contract/Purchase Order/Quote No.	omsh WA					·····										Instructions/
Contract/Purchase Order/Quote No.	7			Ма	trix				ntaine serva			Ho			Conditio	ons of Receipt
683-06	1	T		8			vi 1.44		· · · · · ·	<del>.</del>		NWTPH				
Sample I.D. and Location/Description (Containers for each sample may be combined on one line)	Date	Time	Air		Soil	,	Unpres. H2S04	HN03	HCI	NaOH	ZnAc/ NaOH					
5-W-19-062320	6/23/20	1550		K					X			X				
2A-W-40-062320	6/23/20			×								X				
5-W-18-062420	6/24/20	0830		1					<u> </u>			X				
1C-W-1-062420		0838										X				
1C-W-8-062420		0839										X				
MW-4-062420		909										X				
mw-40-062420		0915										X				
5-14-16-062470		0935			_			ļ				X				
EW-2A-062420		0939										X				
2A-W-10-062420		1026										X				
5-11-062420		1030										X				
1C-W-7-062420	₩.	1050		¥					¥			X				
Cooler Possible H	azard Identification										1	nple Disposal				assessed if samples
X Yes No Cooler Temp: Non-Ha	izard 🗌 Fla	<i>mmable</i> [	Sk	in Irrita	nt C	] Poi						Return To Clie	ent 🔲 Archive For N	onths ai	re retained loi	nger than 1 month)
Turn Around Time Required (business days)	ys 🗌 15 Day	s 🔯 Oth		tand	and		QC	: Heqi	uirem	ents	Specify)					
24 Hours     48 Hours     5 Days     10 Da       1. Relinquished By Sign/Print     1	ys L robay	, Date			Time		1.	Recei	ived E		gn/Prin	1		, Da		Time
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3. Relinquished By Sign/Print	······································	Date	s c		100 Time		3.	Rece	ved E	$\frac{<}{SV}$ Si	gn/Prin			Da		Time
a. neunquianeu by Sign/rrini		Date								, ,,						
Comments				d												

DISTRIBUTION: WHITE - Stays with the Samples; CANARY - Returned to Client with Report; PINK - Field Coppage 45 of 49

TestAmerica The leader in environmental testing	51 Ti Te Fi	TestAmerica Seattle 5755 8th Street E. Tacoma, WA 98424 Tel. 253-922-2310 Fax 253-922-5047 www.testamericainc.com										Rush Short Hold							Chain of Custody Record Chain of Custody Number 39063				
Client Farry llu		Client	Contac	t De	k	Kin	es A	<i>⊋</i> √	<u> </u>						Date	ul-	~~~		Chain of Cus	tody NL	<sup>mber</sup> 3 0	063	3
Address 975 5th AVE NW		-	4) 6	mber (/	Area Cod	le)/Fax	Number								6/3 Lab Num	iber			Page _2	2	of 2	>	4
City State Zi, TJ Suguah WA	98027	Sample Billing		eq.	Petu	Lab と	Contac	t					<u>9</u> 7		sis (Attai space is			, 	_				5
City TJBuguch Project Name and Location (State) BWSF SleyKowsh Questerl Contract/Purchase Order/Quote No.	Skifante i	Billing	Contac								2	۶X X	deen						Spe	ecial I	nstructio	ons/	6
Contract/Purchase Ord&r/Quote No.	/			Matr					iners & rvative		8		e ci						Con	dition	s of Rec	eipt	
Sample I.D. and Location/Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous Sed.	Soil	Unpres.	H2S04 HN03	IJЛ	NaOH	ZnAc/ NaOH		3 Z	<u>1.</u> <u>1.</u>										8
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1B-W-3-062420	1	203									X	$\langle  $											11
2A-W-4-062420		45									X	X											
GW-3-062420		129									X		ĸ										
GW-30-062480	14	140									X												
5-W-55-062420	10	125									X												
13-W-23-62420	14	<i>i</i> 51									X	$\langle  $											
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TestAmerica THE LEADER IN ENVIRONMENTAL TESTING	57: Ta Tel Fa	stAmerica Seattle 55 8th Street E. Icoma, WA 98424 I. 253-922-2310 Ix 253-922-5047 ww.testamericainc.com										Rush Short Hold							Chain of Custody Record						
Client Farallen		Client Cor	tact											Date	6]	24]	10		Chain o	f Custody	Number	39064			
Address 975 5th AVE NIN		Telephone 42-5	Numbe	r (Area	Code)	VFax N 46								Lab	Numbei	r						3			
City 1580gush State Zip Code	21	Sampjer	, Pe	fi		Lab	Contac	:t							Attach i se is nei		<u> </u>	T							
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683-067			mharaina sa	atrix		 		ontaine reserva			F									Conaitii	ons or	Receipt			
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Turn Around Time Required (business days)		🗶 Other _	A			(	QC Req	uirem	ents	Specify	)														
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Comments																									

Facallos

Therm ID: INLECON: I.S. tine: I.G. Cooler Dsc. Cooler Dsc. Cooler Dsc. Cooler Dsc. Cooler Dsc. Cooler Dsc. Cost Seat: Yes Now UPS: Cust Seat: Yes Now UPS: Packing: But lee, (Tech Dry, None Other: Packing: Cooler Dsc. Co	Therm. ID: E. Cor. A. Cor. A. Con. A. Cooler Dsc. Cooler Dsc. A. Cor. A. Cor. A. Cour. A. Cooler Dsc. Packing: A. Cor. A. Cour. I. PS. Blue Ice, We, Dry, None Other: A. Cour. Predam. ID: I. Cor. A. Cor. A. Cour. Predam. Dsc. A. Cor. A. Cour. A. Cour. Predam. Seai: Yes. None Other: A. Cour. A.	Therm D: A. Corloy & Un: De Cooler Dsc. A. Corloy & Un: De Packing: A. D. Lab Cour. D. Blue Ice Wet, Dry, None Other: A. Mark Therm D: Recor. 89 & Unc. 89 & Cooler Dsc. 2 Blue FedEx. Packing: Coup. None UPS: Blue Ice Methy, None UPS: Blue Ice Methy, None Other: Packing.	Therm. ID: JPC Corr. 9.2 ° Unc: 9.3 ° Cooler Dsc: 2.5 Al + FedEx: Packing: 6.5 Al + FedEx: Cust. Seat: Yes No 2 UPS: Cust. Seat: Yes No 2 Lab Courr. 2 Blue Ice, (Get Dry, None Other: 2)
	Page 48 of 49		7/22/2

#### Client: Farallon Consulting LLC

#### Login Number: 95611 List Number: 1 Creator: Presley, Kim A

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	Cooler temperature outside required temperature criteria.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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List Source: Eurofins TestAmerica, Seattle

# 🔅 eurofins

# Environment Testing America

# **ANALYTICAL REPORT**

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

### Laboratory Job ID: 580-97522-1

Client Project/Site: BNSF Skykomish Semi-Annual Sampling Event: Skykomish HCC System

## For:

.....Links

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Expert

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

Attn: Peter Kingston

Authorized for release by: 10/2/2020 9:50:13 AM Nathan Lewis, Project Manager I (253)922-2310 Nathan.Lewis@Eurofinset.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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#### Job ID: 580-97522-1

#### Laboratory: Eurofins TestAmerica, Seattle

Narrative

Job Narrative 580-97522-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 9/17/2020 12:50 PM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.2° C, 0.2° C, 1.0° C and 2.0° C.

#### GC Semi VOA

Method NWTPH-Dx: Surrogate recovery for the following samples were outside control limits: 2A-W-42-091620 (580-97522-21) and 2A-W-41-091620 (580-97522-22). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method NWTPH-Dx: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 580-338798 and analytical batch 580-339017 recovered outside control limits for the following analytes: Motor Oil (>C24-C36). These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method NWTPH-Dx: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 580-338798 and analytical batch 580-339711 recovered outside control limits for the following analytes: Motor Oil. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method NWTPH-Dx: The following samples were diluted due to the nature of the sample matrix: 5-W-56-091520 (580-97522-7), 1B-W-23-091620 (580-97522-16) and 2A-W-9-091620 (580-97522-18). Elevated reporting limits (RLs) are provided.

Method NWTPH-Dx: The following samples contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel fuel pattern used by the laboratory for quantitative purposes: 5-W-56-091520 (580-97522-7), GW-3-091620 (580-97522-14), 2A-W-41-091620 (580-97522-22), 2A-W-410-091620 (580-97522-23) and 5-W-51-091620 (580-97522-25).

Method NWTPH-Dx: The continuing calibration verification (CCV) check recovered high biased for surrogate, Terphenyl. All the samples associated with this surrogate recovered within control limits except where matrix does not interfere, therefore data have been qualified and reported.

Method NWTPH-Dx: The continuing calibration verification (CCV) associated with batch 580-339017 recovered above the upper control limit for Motor Oil (>C24-C36). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: 5-W-55-091520 (580-97522-1), 5-W-18-091520 (580-97522-2), 5-W-180-091520 (580-97522-3), 5-W-17-091520 (580-97522-4), 5-W-43-091520 (580-97522-5), GW-2-091520 (580-97522-6), 5-W-19-091520 (580-97522-8), 5-W-16-091520 (580-97522-9), 5-W-14-091520 (580-97522-10), GW-1-091520 (580-97522-11), 1C-W-8-091620 (580-97522-12), MW-4-091620 (580-97522-13), GW-30-091620 (580-97522-15), 1B-W-23-091620 (580-97522-16), 2A-W-40-091620 (580-97522-17), 2A-W-9-091620 (580-97522-18), 1C-W-7-091620 (580-97522-19), GW-4-091620 (580-97522-20), 2A-W-42-091620 (580-97522-21), 1C-W-4091620 (580-97522-24), MW-555-091620 (580-97522-26), (CCV 580-339017/46), (CCV 580-339017/67) and (CCV 580-339017/78).

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

#### Organic Prep

Method 3510C: A deviation from the Standard Operating Procedure (SOP) occurred. Details are as follows: Water got into the KD tubes for multiple samples. Water was extracted by using sodium sulfate and a solvent rinse into a new KD tube.

Method 3510C: The following samples formed emulsions during the extraction procedure: 5-W-55-091520 (580-97522-1) and 5-W-19-091520 (580-97522-8). The emulsions were broken up using sodium sulfate and a solvent rinse.

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with all samples in this batch so LCS and LCSD were used instead.

#### Job ID: 580-97522-1 (Continued)

Laboratory: Eurofins TestAmerica, Seattle (Continued)

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

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## Qualifiers

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
х	Surrogate recovery exceeds control limits

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

#### Client Sample ID: 5-W-55-091520 Date Collected: 09/15/20 13:00 Date Received: 09/17/20 12:50

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		09/22/20 11:43	09/24/20 22:01	1
Motor Oil (>C24-C36)	ND	*	0.091	0.091	mg/L		09/22/20 11:43	09/24/20 22:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	73		50 - 150				09/22/20 11:43	09/24/20 22:01	1

# Lab Sample ID: 580-97522-1

Matrix: Water

#### Client Sample ID: 5-W-18-091520 Date Collected: 09/15/20 14:25 Date Received: 09/17/20 12:50

Method: NWTPH-Dx - Northwest	t - Semi-Volatile Petrol	eum Produ	icts (GC)	
Analyte	Result Qualifier	RL	MDL Unit	1

Analyte	Result C	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		09/22/20 11:43	09/24/20 22:21	1
Motor Oil (>C24-C36)	ND *	r	0.091	0.091	mg/L		09/22/20 11:43	09/24/20 22:21	1
Surrogate	%Recovery G	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	75		50 - 150				09/22/20 11:43	09/24/20 22:21	1

Job ID: 580-97522-1

Matrix: Water

Lab Sample ID: 580-97522-2

# 2 3 4 5 6 7 8 9

Matrix: Water

Lab Sample ID: 580-97522-3

#### Client Sample ID: 5-W-180-091520 Date Collected: 09/15/20 14:30

Date Collected: 09/15/20 14:30 Date Received: 09/17/20 12:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		09/22/20 11:43	09/24/20 22:41	1
Motor Oil (>C24-C36)	ND	*	0.091	0.091	mg/L		09/22/20 11:43	09/24/20 22:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	67		50 - 150				09/22/20 11:43	09/24/20 22:41	1

#### Client Sample ID: 5-W-17-091520 Date Collected: 09/15/20 15:30 Date Received: 09/17/20 12:50

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

Analyte #2 Diesel (C10-C24) Motor Oil (>C24-C36)	Result ND ND	Qualifier	RL 0.062 0.091	MDL 0.062 0.091	mg/L	<u> </u>		Analyzed 09/24/20 23:21 09/24/20 23:21	Dil Fac 1 1
Surrogate o-Terphenyl	%Recovery 62	Qualifier	Limits 50 - 150				<b>Prepared</b> 09/22/20 11:43	Analyzed 09/24/20 23:21	Dil Fac

Job ID: 580-97522-1

Matrix: Water

Lab Sample ID: 580-97522-4

# 1 2 3 4 5 6 7

#### Client Sample ID: 5-W-43-091520 Date Collected: 09/15/20 16:25 Date Received: 09/17/20 12:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		09/22/20 11:43	09/24/20 23:41	1
Motor Oil (>C24-C36)	ND	*	0.091	0.091	mg/L		09/22/20 11:43	09/24/20 23:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	70		50 - 150				09/22/20 11:43	09/24/20 23:41	1

Job ID: 580-97522-1

Matrix: Water

Lab Sample ID: 580-97522-5

# 5

#### Client Sample ID: GW-2-091520 Date Collected: 09/15/20 17:20 Date Received: 09/17/20 12:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		09/22/20 11:43	09/25/20 00:01	1
Motor Oil (>C24-C36)	ND	*	0.091	0.091	mg/L		09/22/20 11:43	09/25/20 00:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	88		50 - 150				09/22/20 11:43	09/25/20 00:01	1

Job ID: 580-97522-1

Matrix: Water

Lab Sample ID: 580-97522-6

Eurofins TestAmerica, Seattle

### Client Sample ID: 5-W-56-091520 Date Collected: 09/15/20 13:20 Date Received: 09/17/20 12:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.54		0.19	0.19	mg/L		09/22/20 11:43	09/25/20 00:21	3
Motor Oil (>C24-C36)	0.57	*	0.091	0.091	mg/L		09/22/20 11:43	10/01/20 15:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analvzed	Dil Fac
<b>_</b> _ <b>_</b> _ <b>_</b> _ <b>_ _</b>	,	Quanner	Linits				ricpurcu	Analyzeu	Dirruc
o-Terphenyl	81	quamer	50 - 150					09/25/20 00:21	3

Job ID: 580-97522-1

Matrix: Water

Lab Sample ID: 580-97522-7

# 2 3 4 5 6 7 8

### Client Sample ID: 5-W-19-091520 Date Collected: 09/15/20 14:19 Date Received: 09/17/20 12:50

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

Analyte #2 Diesel (C10-C24) Motor Oil (>C24-C36)	Result ND ND	Qualifier	RL 0.062 0.091	MDL 0.062 0.091	mg/L	<u> </u>	Prepared 09/22/20 11:43 09/22/20 11:43		Dil Fac 1 1
Surrogate o-Terphenyl	%Recovery 89	Qualifier	Limits 50 - 150				<b>Prepared</b> 09/22/20 11:43	Analyzed 09/25/20 00:41	Dil Fac

Job ID: 580-97522-1

# Lab Sample ID: 580-97522-8

Matrix: Water

5

### Client Sample ID: 5-W-16-091520 Date Collected: 09/15/20 15:12 Date Received: 09/17/20 12:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		09/22/20 11:43	09/25/20 01:01	1
Motor Oil (>C24-C36)	ND	*	0.091	0.091	mg/L		09/22/20 11:43	09/25/20 01:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	92		50 - 150				09/22/20 11:43	09/25/20 01:01	1

Matrix: Water

Lab Sample ID: 580-97522-9

# 2 3 4 5 6 7 8 9

10/2/2020

### Client Sample ID: 5-W-14-091520 Date Collected: 09/15/20 16:11 Date Received: 09/17/20 12:50

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

Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ND		0.062	0.062	mg/L		09/22/20 11:43	09/25/20 01:21	1
ND	*	0.092	0.092	mg/L		09/22/20 11:43	09/25/20 01:21	1
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
84		50 - 150				09/22/20 11:43	09/25/20 01:21	1
	ND ND <b>%Recovery</b>	ND *  %Recovery Qualifier	ND         0.062           ND *         0.092           %Recovery         Qualifier         Limits	ND         0.062         0.062           ND *         0.092         0.092           %Recovery         Qualifier         Limits	ND         0.062         0.062         mg/L           ND *         0.092         0.092         mg/L           %Recovery         Qualifier         Limits	ND         0.062         0.062 mg/L           ND *         0.092         0.092 mg/L           %Recovery         Qualifier         Limits	ND         0.062         0.062         mg/L         09/22/20 11:43           ND *         0.092         0.092         mg/L         09/22/20 11:43           %Recovery         Qualifier         Limits         Prepared	ND         0.062         0.062         mg/L         09/22/20         09/25/20         01:21           ND *         0.092         0.092         mg/L         09/22/20         11:43         09/25/20         01:21           %Recovery         Qualifier         Limits         Prepared         Analyzed

10/2/2020

Job ID: 580-97522-1

Matrix: Water

Lab Sample ID: 580-97522-10

### Client Sample ID: GW-1-091520 Date Collected: 09/15/20 17:05 Date Received: 09/17/20 12:50

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

Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ND		0.062	0.062	mg/L		09/22/20 11:43	09/25/20 01:41	1
ND	*	0.092	0.092	mg/L		09/22/20 11:43	09/25/20 01:41	1
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
94		50 - 150				09/22/20 11:43	09/25/20 01:41	1
	ND ND <b>%Recovery</b>	ND *	ND         0.062           ND *         0.092           %Recovery         Qualifier         Limits	ND         0.062         0.062           ND *         0.092         0.092           %Recovery         Qualifier         Limits	ND         0.062         0.062 mg/L           ND *         0.092         0.092 mg/L           %Recovery         Qualifier         Limits	ND         0.062         0.062         mg/L           ND *         0.092         0.092         mg/L           %Recovery         Qualifier         Limits	ND         0.062         0.062         mg/L         09/22/20 11:43           ND *         0.092         0.092         mg/L         09/22/20 11:43           %Recovery         Qualifier         Limits         Prepared	ND         0.062         0.062         mg/L         09/22/20         09/25/20         01:41           ND *         0.092         0.092         mg/L         09/22/20         11:43         09/25/20         01:41           %Recovery         Qualifier         Limits         Prepared         Analyzed

Job ID: 580-97522-1

Matrix: Water

Lab Sample ID: 580-97522-11

# 2 3 4 5 6 7 8

### Client Sample ID: 1C-W-8-091620 Date Collected: 09/16/20 12:15 Date Received: 09/17/20 12:50

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

Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ND		0.062	0.062	mg/L		09/22/20 11:43	09/25/20 02:01	1
ND	*	0.091	0.091	mg/L		09/22/20 11:43	09/25/20 02:01	1
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
84		50 - 150				09/22/20 11:43	09/25/20 02:01	1
	ND ND <b>%Recovery</b>	ND * %Recovery Qualifier	ND         0.062           ND *         0.091           %Recovery         Qualifier         Limits	ND         0.062         0.062           ND *         0.091         0.091           %Recovery         Qualifier         Limits	ND         0.062         0.062 mg/L           ND *         0.091         0.091 mg/L           %Recovery         Qualifier         Limits	ND         0.062         0.062 mg/L           ND *         0.091         0.091 mg/L           %Recovery         Qualifier         Limits	ND         0.062         0.062         mg/L         09/22/20 11:43           ND *         0.091         0.091         mg/L         09/22/20 11:43           %Recovery         Qualifier         Limits         Prepared	ND         0.062         0.062         mg/L         09/22/20         09/25/20         02:01           ND *         0.091         0.091         mg/L         09/22/20         11:43         09/25/20         02:01           %Recovery         Qualifier         Limits         Prepared         Analyzed

Job ID: 580-97522-1

Matrix: Water

Lab Sample ID: 580-97522-12

### Client Sample ID: MW-4-091620 Date Collected: 09/16/20 13:38 Date Received: 09/17/20 12:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		09/22/20 11:43	09/25/20 02:21	1
Motor Oil (>C24-C36)	ND	*	0.091	0.091	mg/L		09/22/20 11:43	09/25/20 02:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	61		50 - 150				09/22/20 11:43	09/25/20 02:21	1

Matrix: Water

Lab Sample ID: 580-97522-13

# 2 3 4 5 6 7 8 9

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

### Client Sample ID: GW-3-091620 Date Collected: 09/16/20 09:36 Date Received: 09/17/20 12:50

Job	ID:	580-97522-1

### Lab Sample ID: 580-97522-14 Matrix: Water

Watrix: water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
#2 Diesel (C10-C24)	0.21		0.061	0.061	mg/L		09/23/20 12:00	10/01/20 18:51	1	
Motor Oil (>C24-C36)	0.12		0.091	0.091	mg/L		09/23/20 12:00	10/01/20 18:51	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
o-Terphenyl	61		50 - 150				09/23/20 12:00	10/01/20 18:51	1	
Method: NWTPH-Dx - Ser	mi-Volatile Petro	leum Prod Qualifier				iel Cle		10/01/20 18:51 Analyzed	1 Dil Fac	
Method: NWTPH-Dx - Sei Analyte	mi-Volatile Petro		ucts by NWT	MDL			anup		1 1	
o-Terphenyl Method: NWTPH-Dx - Ser Analyte #2 Diesel (C10-C24) Motor Oil (>C24-C36)	mi-Volatile Petro Result		ucts by NWT	MDL	Unit mg/L		eanup Prepared	Analyzed	1 Dil Fac 1 1	
Method: NWTPH-Dx - Sei Analyte #2 Diesel (C10-C24)	mi-Volatile Petro Result 0.076	Qualifier	ucts by NWT 	<b>MDL</b> 0.061	Unit mg/L		eanup Prepared 09/23/20 12:00	Analyzed	1 Dil Fac 1 1 Dil Fac	

### Client Sample ID: GW-30-091620 Date Collected: 09/16/20 09:40 Date Received: 09/17/20 12:50

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

Analyte #2 Diesel (C10-C24) Motor Oil (>C24-C36)	Result 0.16 ND	Qualifier *	RL 0.062 0.091	MDL 0.062 0.091	mg/L	<u> </u>		Analyzed 09/25/20 03:01 09/25/20 03:01	Dil Fac 1 1
Surrogate o-Terphenyl	%Recovery 65	Qualifier	Limits				<b>Prepared</b> 09/22/20 11:43	Analyzed 09/25/20 03:01	Dil Fac

Matrix: Water

Lab Sample ID: 580-97522-15

### 10/2/2020

### Client Sample ID: 1B-W-23-091620 Date Collected: 09/16/20 10:59 Date Received: 09/17/20 12:50

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

Analyte	Result Qualit	fier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND	0.18	0.18	mg/L		09/22/20 11:43	09/25/20 03:21	3
Motor Oil (>C24-C36)	ND *	0.27	0.27	mg/L		09/22/20 11:43	09/25/20 03:21	3
Surrogate	%Recovery Quality	fier Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	75	50 - 150				09/22/20 11:43	09/25/20 03:21	3

Job ID: 580-97522-1

Matrix: Water

Lab Sample ID: 580-97522-16

Eurofins TestAmerica, Seattle

# Lab Sample ID: 580-97522-17

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		09/22/20 11:43	09/25/20 03:41	1
Motor Oil (>C24-C36)	ND	*	0.091	0.091	mg/L		09/22/20 11:43	09/25/20 03:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	62		50 - 150				09/22/20 11:43	09/25/20 03:41	1

### Client Sample ID: 2A-W-9-091620 Date Collected: 09/16/20 14:39 Date Received: 09/17/20 12:50

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

Analyte #2 Diesel (C10-C24) Motor Oil (>C24-C36)	Result ND ND	Qualifier *	<b>RL</b> 0.19 0.27	Unit mg/L mg/L	<u> </u>	Prepared 09/22/20 11:43 09/22/20 11:43		Dil Fac 3 3
Surrogate o-Terphenyl	66 %Recovery	Qualifier	Limits 50 - 150			<b>Prepared</b> 09/22/20 11:43	Analyzed 09/25/20 04:01	Dil Fac

Job ID: 580-97522-1

# Lab Sample ID: 580-97522-18

Matrix: Water

### Client Sample ID: 1C-W-7-091620 Date Collected: 09/16/20 10:45 Date Received: 09/17/20 12:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.062	0.062	mg/L		09/22/20 11:43	09/25/20 04:21	1
Motor Oil (>C24-C36)	ND	*	0.091	0.091	mg/L		09/22/20 11:43	09/25/20 04:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	68		50 - 150				09/22/20 11:43	09/25/20 04:21	1

Job ID: 580-97522-1

Lab Sample ID: 580-97522-19

Matrix: Water

5

### Client Sample ID: GW-4-091620 Date Collected: 09/16/20 13:40 Date Received: 09/17/20 12:50

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

Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ND		0.062	0.062	mg/L		09/22/20 11:43	09/25/20 04:42	1
ND	*	0.091	0.091	mg/L		09/22/20 11:43	09/25/20 04:42	1
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
69		50 - 150				09/22/20 11:43	09/25/20 04:42	1
	ND ND <b>%Recovery</b>	ND * %Recovery Qualifier	ND         0.062           ND *         0.091           %Recovery         Qualifier         Limits	ND         0.062         0.062           ND *         0.091         0.091           %Recovery         Qualifier         Limits	ND         0.062         0.062 mg/L           ND *         0.091         0.091 mg/L           %Recovery         Qualifier         Limits	ND         0.062         0.062         mg/L           ND *         0.091         0.091         mg/L           %Recovery         Qualifier         Limits	ND         0.062         0.062         mg/L         09/22/20 11:43           ND *         0.091         0.091         mg/L         09/22/20 11:43           %Recovery         Qualifier         Limits         Prepared	ND         0.062         0.062         mg/L         09/22/20         09/25/20         04:42           ND *         0.091         0.091         mg/L         09/22/20         11:43         09/25/20         04:42           %Recovery         Qualifier         Limits         Prepared         Analyzed

Job ID: 580-97522-1

Matrix: Water

5

Lab Sample ID: 580-97522-20

### Client Sample ID: 2A-W-42-091620 Date Collected: 09/16/20 09:45 Date Received: 09/17/20 12:50

### Lab Sample ID: 580-97522-21 Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.11		0.061	0.061	mg/L		09/23/20 12:00	09/24/20 17:21	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		09/23/20 12:00	09/24/20 17:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	43	X	50 - 150				09/23/20 12:00	09/24/20 17:21	1

5

### Client Sample ID: 2A-W-41-091620 Date Collected: 09/16/20 08:30 Date Received: 09/17/20 12:50

### Lab Sample ID: 580-97522-22 Matrix: Water

Wallix. Waler

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.29		0.062	0.062	mg/L		09/23/20 14:03	09/24/20 17:41	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		09/23/20 14:03	10/01/20 14:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	45	x	50 - 150				09/23/20 14:03	09/24/20 17:41	1
o-Terphenyl	10	Х	50 - 150				09/23/20 14:03	10/01/20 14:16	1

### Client Sample ID: 2A-W-410-091620 Date Collected: 09/16/20 08:35 Date Received: 09/17/20 12:50

### Lab Sample ID: 580-97522-23 Matrix: Water

Wallix. Waler

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.35		0.062	0.062	mg/L		09/23/20 14:03	09/24/20 18:01	1
Motor Oil (>C24-C36)	0.21		0.091	0.091	mg/L		09/23/20 14:03	10/01/20 14:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	84		50 - 150				09/23/20 14:03	09/24/20 18:01	1
o-Terphenyl	80		50 - 150				09/23/20 14:03	10/01/20 14:36	1

### Client Sample ID: 1C-W-4091620 Date Collected: 09/16/20 12:15 Date Received: 09/17/20 12:50

Analyte #2 Diesel (C10-C24)	Result	Qualifier	RL	<b>MDL</b> 0.062		<u>D</u>	Prepared 09/23/20 14:03	Analyzed 09/24/20 18:21	Dil Fac
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		09/23/20 14:03	09/24/20 18:21	1
Surrogate o-Terphenyl	%Recovery 76	Qualifier	Limits				<b>Prepared</b> 09/23/20 14:03	Analyzed	Dil Fac

Job ID: 580-97522-1

Lab Sample ID: 580-97522-24

Matrix: Water

5

### Client Sample ID: 5-W-51-091620 Date Collected: 09/16/20 14:40 Date Received: 09/17/20 12:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.19		0.062	0.062	mg/L		09/23/20 14:03	09/24/20 18:41	1
Motor Oil (>C24-C36)	0.17		0.091	0.091	mg/L		09/23/20 14:03	10/01/20 14:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	78		50 - 150				09/23/20 14:03	09/24/20 18:41	1
o-Terphenyl	76		50 - 150				09/23/20 14:03	10/01/20 14:56	1

Job ID: 580-97522-1

Matrix: Water

# Lab Sample ID: 580-97522-25

5

### Client Sample ID: MW-555-091620 Date Collected: 09/16/20 16:00 Date Received: 09/17/20 12:50

### Lab Sample ID: 580-97522-26 Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.090		0.062	0.062	mg/L		09/23/20 14:03	09/24/20 19:01	1
Motor Oil (>C24-C36)	ND		0.091	0.091	mg/L		09/23/20 14:03	09/24/20 19:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	77		50 - 150				09/23/20 14:03	09/24/20 19:01	1

Dil Fac

1

1

6

### Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) Lab Sample ID: MB 580-338798/1-A **Client Sample ID: Method Blank Matrix: Water** Prep Type: Total/NA Analysis Batch: 339017 Prep Batch: 338798 MB MB Analyte **Result Qualifier** RL MDL Unit D Prepared Analyzed 09/22/20 11:43 09/24/20 21:01 #2 Diesel (C10-C24) ND 0.065 0.065 mg/L Motor Oil (>C24-C36) ND 0.096 0.096 mg/L 09/22/20 11:43 09/24/20 21:01 MR MR

		IVIB IVIB								
Surrogate	%Recov	ery Qualifier	Limits				P	repared	Analyzed Dil	l Fac
o-Terphenyl		92	50 - 150	-			09/2	22/20 11:4	3 09/24/20 21:01	1
Lab Sample ID: LCS 580	-338798/2-A					Clier	nt Sa	mple ID	: Lab Control Sam	nple
Matrix: Water								- C.	Prep Type: Total	
Analysis Batch: 339017									Prep Batch: 338	<b>798</b>
-			Spike	LCS	LCS				%Rec.	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
#2 Diesel (C10-C24)			0.500	0.591		mg/L		118	50 - 120	
Motor Oil (>C24-C36)			0.500	0.853	*	mg/L		171	64 - 120	
	LCS	LCS								
Surrogate	%Recovery	Qualifier	Limits							
o-Terphenyl	108		50 - 150							
Lab Sample ID: LCSD 58 Matrix: Water	0-338798/3-A				C	Client Sa	mple	ID: Lab	Control Sample I Prep Type: Total	

								$\mathbf{v}$ . $\mathbf{v}$	
Analysis Batch: 339017							Prep Ba	tch: 33	88798
	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	0.500	0.540		mg/L		108	50 - 120	9	26
Motor Oil (>C24-C36)	0.500	0.905	*	mg/L		181	64 - 120	6	24

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
o-Terphenyl	113		50 - 150

### Lab Sample ID: MB 580-338918/1-A **Matrix: Water** Analysis Batch: 339017

Analysis Batch: 339017								Prep Batch:	338918
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.065	0.065	mg/L		09/23/20 12:00	09/24/20 16:10	1
Motor Oil (>C24-C36)	ND		0.096	0.096	mg/L		09/23/20 12:00	09/24/20 16:10	1

	MB MB				
Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	69	50 - 150	09/23/20 12:00	09/24/20 16:10	1
_					

### Lab Sample ID: LCS 580-338918/2-A **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA Analysis Batch: 339017 Prep Batch: 338918 LCS LCS Spike %Rec. Added **Result Qualifier** Unit Limits Analyte D %Rec #2 Diesel (C10-C24) 0.500 0.357 mg/L 71 50 - 120 Motor Oil (>C24-C36) 0.500 0.597 mg/L 119 64 - 120

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**Client Sample ID: Method Blank** 

Prep Type: Total/NA

o-Terphenyl

Lab Sample ID: LCS 580-	338918/2-A					Clien	t Sai	mple ID:	Lab Con		
Matrix: Water Analysis Batch: 339017									Prep Typ Prep Ba		
Analysis Datch. 555017									гтер Ба		30310
	LCS										
Surrogate	%Recovery	Qualifier	Limits								
o-Terphenyl	90		50 - 150								
Lab Sample ID: LCSD 580	0-338918/3-A				C	lient San	nple	ID: Lab	Control S	Sample	e Dup
Matrix: Water									Prep Typ	be: Tot	tal/N/
Analysis Batch: 339017									Prep Ba	tch: 3	
			Spike		LCSD				%Rec.		RPE
Analyte			Added		Qualifier	Unit	D	%Rec	Limits	RPD	Limi
#2 Diesel (C10-C24)			0.500	0.293		mg/L		59	50 - 120	20	26
Motor Oil (>C24-C36)			0.500	0.494		mg/L		99	64 - 120	19	24
	LCSD	LCSD									
Surrogate	%Recovery	Qualifier	Limits								
o-Terphenyl	78		50 - 150								
lethod: NWTPH-Dx -	Semi-Volat	ile Petro	leum Produ	ucts b	y NWTI	PH with	Sili	ca Gel	Cleanu	р	
Leh Semale ID: MR 590.2	20040/4 D				-		Clie				Diami
Lab Sample ID: MB 580-3 Matrix: Water	30310/1-D						Cile	ant Samp	ole ID: Me Prep Typ		
Analysis Batch: 339213									Prep Ba		
Analysis Batch. 559215		МВ МВ							гтер Ба	ICH. 3	30910
Analyte		sult Qualifie	r RL		MDL Unit	D	Р	repared	Analyz	ed	Dil Fac
#2 Diesel (C10-C24)		ND	0.065		0.065 mg/L			3/20 12:00			1
Motor Oil (>C24-C36)		ND	0.096		).096 mg/L		09/2	23/20 12:00	09/26/20	14:08	1
Surrogate		MB MB very Qualifie	er Limits				D	repared	Analyz	od	Dil Fac
o-Terphenyl		65 <b>Quanne</b>	<u> </u>					•	09/26/20		1
-											
Lab Sample ID: LCS 580-	338918/2-В					Clien	t Sai	mple ID:	Lab Con		
Matrix: Water									Prep Typ		
Analysis Batch: 339213			Omilia	1.00	1.00				Prep Ba	tch: 3	38918
Analysia			Spike Added		LCS	11	<b>_</b>	9/ <b>D</b> = =	%Rec.		
Analyte			0.500	0.330	Qualifier	Unit	_ D	<u>%Rec</u>	Limits 50 - 120		
#2 Diesel (C10-C24) Motor Oil (>C24-C36)			0.500	0.530		mg/L mg/L		108	50 - 120 64 - 120		
			0.000	0.042		ing/L		100	04-120		
	LCS										
Surrogate	%Recovery	Qualifier	Limits								
o-Terphenyl	91		50 - 150								
Lab Sample ID: LCSD 58	0-338918/3-B				C	lient San	nple	ID: Lab	Control S	Sample	e Dur
Matrix: Water						un our			Prep Typ		
Analysis Batch: 339213									Prep Ba		
- maryone Batom 000210			Spike	LCSD	LCSD				%Rec.		RPE
Analyte			Added		Qualifier	Unit	D	%Rec	Limits	RPD	Limi
#2 Diesel (C10-C24)			0.500	0.270		mg/L		54	50 - 120	20	26
Motor Oil (>C24-C36)			0.500	0.450		mg/L		90	64 - 120	19	24
	1000	1000									
	LCSD										
Surrogate	%Recovery		Limits								

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50 - 150

Dilution

Run

Factor

1

Batch

Number

Prepared

339017 09/24/20 22:01 ADB

338798 09/22/20 11:43

or Analyzed

Analyst

JBT

Lab

TAL SEA

TAL SEA

Client Sample ID: 5-W-55-091520

Batch

Туре

Prep

Analysis

Batch

Method

3510C

NWTPH-Dx

Date Collected: 09/15/20 13:00

Date Received: 09/17/20 12:50

Prep Type

Total/NA

Total/NA

**Matrix: Water** 

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Lab Sample ID: 580-97522-1

Lab Sample ID: 580-97522-2

Lab Sample ID: 580-97522-3

Lab Sample ID: 580-97522-4

Lab Sample ID: 580-97522-5

Lab Sample ID: 580-97522-6

# 2 3 4 5 6 7 8

### Client Sample ID: 5-W-18-091520 Date Collected: 09/15/20 14:25 Date Received: 09/17/20 12:50

		Batch	Batch		Dilution	Batch	Prepared		
Pre	ер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Tota	al/NA	Prep	3510C			338798	09/22/20 11:43	JBT	TAL SEA
Tota	al/NA	Analysis	NWTPH-Dx		1	339017	09/24/20 22:21	ADB	TAL SEA

### Client Sample ID: 5-W-180-091520 Date Collected: 09/15/20 14:30

### Date Received: 09/17/20 12:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			338798	09/22/20 11:43	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	339017	09/24/20 22:41	ADB	TAL SEA

### Client Sample ID: 5-W-17-091520

### Date Collected: 09/15/20 15:30

Date Received: 09/17/20 12:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			338798	09/22/20 11:43	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	339017	09/24/20 23:21	ADB	TAL SEA

### Client Sample ID: 5-W-43-091520 Date Collected: 09/15/20 16:25

Date Received: 09/17/20 12:50

	Batch	Batch Method	Bun	Dilution	Batch	Prepared or Analvzed	Analvst	Leh
Prep Type	Туре	methoa	Run	Factor	Number	or Analyzeu	Analyst	Lab
Total/NA	Prep	3510C			338798	09/22/20 11:43	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	339017	09/24/20 23:41	ADB	TAL SEA

### Client Sample ID: GW-2-091520 Date Collected: 09/15/20 17:20 Date Received: 09/17/20 12:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			338798	09/22/20 11:43	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	339017	09/25/20 00:01	ADB	TAL SEA

**Matrix: Water** 

Lab Sample ID: 580-97522-7

### Lab Sample ID: 580-97522-9

Lab Sample ID: 580-97522-10

Lab Sample ID: 580-97522-11

Lab Sample ID: 580-97522-12

Lab Sample ID: 580-97522-8

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

### Client Sample ID: 5-W-56-091520 Date Collected: 09/15/20 13:20 Date Received: 09/17/20 12:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			338798	09/22/20 11:43	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		3	339017	09/25/20 00:21	ADB	TAL SEA
Total/NA	Prep	3510C			338798	09/22/20 11:43	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	339711	10/01/20 15:16	JKM	TAL SEA

### Client Sample ID: 5-W-19-091520 Date Collected: 09/15/20 14:19 Date Received: 09/17/20 12:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			338798	09/22/20 11:43	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	339017	09/25/20 00:41	ADB	TAL SEA

### Client Sample ID: 5-W-16-091520 Date Collected: 09/15/20 15:12 Date Received: 09/17/20 12:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			338798	09/22/20 11:43	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	339017	09/25/20 01:01	ADB	TAL SEA

### Client Sample ID: 5-W-14-091520 Date Collected: 09/15/20 16:11 Date Received: 09/17/20 12:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			338798	09/22/20 11:43	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	339017	09/25/20 01:21	ADB	TAL SEA

### Client Sample ID: GW-1-091520

### Date Collected: 09/15/20 17:05

Date Received: 09/17/20 12:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			338798	09/22/20 11:43	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	339017	09/25/20 01:41	ADB	TAL SEA

### Client Sample ID: 1C-W-8-091620 Date Collected: 09/16/20 12:15 Date Received: 09/17/20 12:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			338798	09/22/20 11:43	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	339017	09/25/20 02:01	ADB	TAL SEA

### Client Sample ID: MW-4-091620 Date Collected: 09/16/20 13:38 Date Received: 09/17/20 12:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			338798	09/22/20 11:43	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	339017	09/25/20 02:21	ADB	TAL SEA

### Client Sample ID: GW-3-091620 Date Collected: 09/16/20 09:36 Date Received: 09/17/20 12:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			338918	09/23/20 12:00	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	339711	10/01/20 18:51	JKM	TAL SEA
Total/NA	Prep	3510C			338918	09/23/20 12:00	JBT	TAL SEA
Total/NA	Cleanup	3630C			338989	09/23/20 18:36	RJL	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	339213	09/26/20 17:49	TL1	TAL SEA

### Client Sample ID: GW-30-091620 Date Collected: 09/16/20 09:40 Date Received: 09/17/20 12:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			338798	09/22/20 11:43	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	339017	09/25/20 03:01	ADB	TAL SEA

### Client Sample ID: 1B-W-23-091620 Date Collected: 09/16/20 10:59 Date Received: 09/17/20 12:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			338798	09/22/20 11:43	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		3	339017	09/25/20 03:21	ADB	TAL SEA

### Client Sample ID: 2A-W-40-091620 Date Collected: 09/16/20 08:24

Date Received: 09/17/20 12:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			338798	09/22/20 11:43	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	339017	09/25/20 03:41	ADB	TAL SEA

### Client Sample ID: 2A-W-9-091620 Date Collected: 09/16/20 14:39 Date Received: 09/17/20 12:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			338798	09/22/20 11:43	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		3	339017	09/25/20 04:01	ADB	TAL SEA

### Eurofins TestAmerica, Seattle

## Lab Sample ID: 580-97522-15

Lab Sample ID: 580-97522-16

**Matrix: Water** 

Matrix: Water

Job ID: 580-97522-1

**Matrix: Water** 

Matrix: Water

Lab Sample ID: 580-97522-13

Lab Sample ID: 580-97522-14

Lab Sample ID: 580-97522-17 Matrix: Water

Lab Sample ID: 580-97522-18

Matrix: Water

### 10/2/2020

### Client Sample ID: 1C-W-7-091620 Date Collected: 09/16/20 10:45 Date Received: 09/17/20 12:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			338798	09/22/20 11:43	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	339017	09/25/20 04:21	ADB	TAL SEA

### Client Sample ID: GW-4-091620 Date Collected: 09/16/20 13:40 Date Received: 09/17/20 12:50

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			338798	09/22/20 11:43	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	339017	09/25/20 04:42	ADB	TAL SEA

### Client Sample ID: 2A-W-42-091620 Date Collected: 09/16/20 09:45

### Date Received: 09/17/20 12:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			338918	09/23/20 12:00	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	339017	09/24/20 17:21	ADB	TAL SEA

### Client Sample ID: 2A-W-41-091620 Date Collected: 09/16/20 08:30

Date Received: 09/17/20 12:50

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			338918	09/23/20 14:03	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	339017	09/24/20 17:41	ADB	TAL SEA
Total/NA	Prep	3510C			338918	09/23/20 14:03	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	339711	10/01/20 14:16	JKM	TAL SEA

### Client Sample ID: 2A-W-410-091620 Date Collected: 09/16/20 08:35 Date Received: 09/17/20 12:50

-	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			338918	09/23/20 14:03	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	339017	09/24/20 18:01	ADB	TAL SEA
Total/NA	Prep	3510C			338918	09/23/20 14:03	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	339711	10/01/20 14:36	JKM	TAL SEA

### Client Sample ID: 1C-W-4091620 Date Collected: 09/16/20 12:15 Date Received: 09/17/20 12:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			338918	09/23/20 14:03	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	339017	09/24/20 18:21	ADB	TAL SEA

Eurofins TestAmerica, Seattle

Lab Sample ID: 580-97522-20

Lab Sample ID: 580-97522-21

Lab Sample ID: 580-97522-22

Lab Sample ID: 580-97522-23

Lab Sample ID: 580-97522-24

Matrix: Water

**Matrix: Water** 

Matrix: Water

Matrix: Water

Matrix: Water

Client Sample ID: 5-W-51-091620

# Lab Sample ID: 580-97522-25

Date Collected: 09/16/20 14:40 Date Received: 09/17/20 12:50

	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Prep	3510C			338918	09/23/20 14:03	JBT	TAL SEA	
Total/NA	Analysis	NWTPH-Dx		1	339017	09/24/20 18:41	ADB	TAL SEA	
Total/NA	Prep	3510C			338918	09/23/20 14:03	JBT	TAL SEA	
Total/NA	Analysis	NWTPH-Dx		1	339711	10/01/20 14:56	JKM	TAL SEA	
	ple ID: MW d: 09/16/20 1	- <b>555-091620</b> 6:00					Lab Sa	mple ID: 580-97522-26 Matrix: Wate	
ate Receive	d: 09/17/20 1	2:50							

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			338918	09/23/20 14:03	JBT	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	339017	09/24/20 19:01	ADB	TAL SEA

### Laboratory References:

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

Eurofins TestAmerica, Seattle

		Certification Summary		
Client: Farallon Consulting Project/Site: BNSF Skyko	Job ID: 580-97522-1			
· · · · · · · · · · · · · · · · · · ·	s TestAmerica, Seattle listed below are applicable to this report.			
- Authority	Program	Identification Number	Expiration Date	
Washington	State	C553	02-18-21	

### Sample Summary

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Ass
580-97522-1	5-W-55-091520	Water	09/15/20 13:00	09/17/20 12:50	
580-97522-2	5-W-18-091520	Water	09/15/20 14:25	09/17/20 12:50	
580-97522-3	5-W-180-091520	Water	09/15/20 14:30	09/17/20 12:50	
580-97522-4	5-W-17-091520	Water	09/15/20 15:30	09/17/20 12:50	
580-97522-5	5-W-43-091520	Water	09/15/20 16:25	09/17/20 12:50	
580-97522-6	GW-2-091520	Water	09/15/20 17:20	09/17/20 12:50	
80-97522-7	5-W-56-091520	Water	09/15/20 13:20	09/17/20 12:50	
580-97522-8	5-W-19-091520	Water	09/15/20 14:19	09/17/20 12:50	
80-97522-9	5-W-16-091520	Water	09/15/20 15:12	09/17/20 12:50	
80-97522-10	5-W-14-091520	Water	09/15/20 16:11	09/17/20 12:50	
80-97522-11	GW-1-091520	Water	09/15/20 17:05	09/17/20 12:50	
80-97522-12	1C-W-8-091620	Water	09/16/20 12:15	09/17/20 12:50	
80-97522-13	MW-4-091620	Water	09/16/20 13:38	09/17/20 12:50	
80-97522-14	GW-3-091620	Water	09/16/20 09:36	09/17/20 12:50	
30-97522-15	GW-30-091620	Water	09/16/20 09:40	09/17/20 12:50	
80-97522-16	1B-W-23-091620	Water	09/16/20 10:59	09/17/20 12:50	
80-97522-17	2A-W-40-091620	Water	09/16/20 08:24	09/17/20 12:50	
80-97522-18	2A-W-9-091620	Water	09/16/20 14:39	09/17/20 12:50	
80-97522-19	1C-W-7-091620	Water	09/16/20 10:45	09/17/20 12:50	
80-97522-20	GW-4-091620	Water	09/16/20 13:40	09/17/20 12:50	
580-97522-21	2A-W-42-091620	Water	09/16/20 09:45	09/17/20 12:50	
580-97522-22	2A-W-41-091620	Water	09/16/20 08:30	09/17/20 12:50	
80-97522-23	2A-W-410-091620	Water	09/16/20 08:35	09/17/20 12:50	
580-97522-24	1C-W-4091620	Water	09/16/20 12:15	09/17/20 12:50	
580-97522-25	5-W-51-091620	Water	09/16/20 14:40	09/17/20 12:50	
80-97522-26	MW-555-091620	Water	09/16/20 16:00	09/17/20 12:50	

					Page 10F2
		L	ABORATORY INFORMAT	ION	LAB WORK ORDER: 97522
BRISF	Leboratory:			Project Manager:	SHIPMENT INFORMATION
RAILWAY	Address:	· · · · · · · · · · · · · · · · · · ·		Phone:	Shipment Method:
CHAIN OF CUSTODY	City/State/ZIP:	· · _ · · · · · · · · · · · · · ·		Fax:	Tracking Number:
BNSF PROJECT INFORMATION	Project State of Origin:	IA-	C	ONSULTANT INFORMATION	Project Number: 683-071
NSF Project Number: 683-071 NSF Project Name: BNSF Skykomista - 3 NSF Contact:	Project City: Stuff	mit	Company: Faval	la	Project Manager: Amunda Meignoit
NSF Project Name: BNSF Skykmish - 3	Semi Annuel			STA AVE NW	Email: aneugrait ostandu consulting. con
NSF Contact:	BNSF Work Order No.:		City/State/ZIP: 1500	juah WA,	
TURNAROUND TIME	DELIVERABL	.ES Other De	liverables?		s for analysis
1-day Rush 5- to 8-day Rush	BNSF Standard (Level I	H)			
2-day Rush 🛛 🎽 Standard 10-Day	Level III	EDD Red	q. Format?		nerm. ID: <u>AZ.</u> Cor: 1.0 . Unc: 1.1 .
	Level IV			1 J S CO	oler Usc: 1 ky
	MPLE INFORMATION				cking: <u>NOX</u> FedEx: ist. Seal: Yes UPS:
	s	Sample Collection	Туре	1 匚 凶 Blu	Ist. Seal: Yes         VPS:           Lab Cour:            Le Ice, (Wei) Dry, None         Other:
Sample Identification	Containers Date	Time Sampler	V/N (Comp/ Matrix	M N Blu	
3-W-55-091520	2 9/15/		NGW	V Then	m. ID: $\frac{O}{2}$ Cor: $\frac{O}{2}$ ° Unc: $\frac{O}{2}$ °
5-W-18-091520		1425 MB	1 ) 1		er Dsc:FedEx:
5-W-180-091520		1430 MB			Seal: YesNo_X         UPS:           Lab Cour:X
5-W-17-091520		1530 mB		X Blue I	Ice, Wet Dry, None Other:
5-W-43-091520		1625 MB		x' 1	
GW-2-091520		1720 100		Therm.	ID: $4 \approx 2$ Cor: $0 \cdot 2 \approx$ Unc: $0 \cdot 3 \approx$
5-W-56-091520		1320 GP			Dsc:
5-W-19-091500		1419 GP		Mr Cust. Se	
5-11-16-091520		1512-68		X Blue Ice	A Vet Dry, None Other:
5-w-14-0915W		1611 GP		1/	5
GW-1-091520	+ + + = ==	1705 GP		I nerm.	ID: <u>198</u> Cor: <u>2.0</u> • Unc: <u>2.5</u> • • • • • • • • • • • • • • • • • • •
1C-w-8-091620	916/20				: <u>N(W)</u> FedEx:
mw-4-091620	1	1215 GP 1338 GP		Cust. Ser	al: Yes No X UPS:
GW-3-091620		1710 0		X X Blue Ice,	Wet, Dry, None Lab Cour: Other:
(11-40-04/10x)	* *	940 60	我我我	$\hat{\chi}$	1250
hquished By:	Date/Time: 9/16/200150	PO Received B July S	Y I	Date/Time: 9.[17]20.	Comments and Special Analytical Requirements:
inquished By:	Date/Time:	Received By:		Date/Time:	Restrict at las
nquished By:	Date/Time:	Received By:		Date/Time:	JUS 9/17/10
eived by Laboratory:	Date/Time:	Lab Remarks:	·····	Lab: Custody Intac	

ORIGINAL - RETURN TO LABORATORY WITH SAMPLES

															-	Pag	r 20fz
				LAE	ORAT	ORY IN	FORMAT						LAB W	ORK OR		75 L	2
BNSF								Project Mana	iger:				SHIPMENT INFORMATION				
RAILWAY	Address:							Phone:					Shipment Method:				
CHAIN OF CUSTODY	City/State/ZIP:							Fax:					Trackir	ng Numbe	r:		
BNSF PROJECT INFORMATION	Project State of	CONSULIANT INFORMATION							Project		683	-07/					
BNSF Project Number: 683-071 BNSF Project Name: BNSA Stykunish	Project City:	Skykon	nsh	Ċ	ompany	Te	anaz	el					Project	Manager:	Anau	ter Me	uquoit
BNSF Project Name: BNFA Stikunish	Servi Au	mal		A	ddress:			5th	AVE	= N	w		Email:	Ame	consta	Standing	usully or
BNSF Contact:	BNSF Work Ord	ler No.:		c	ity/State	/Z(P:	380	grad		<i>SA</i>	980	21	Phone:	12	3-200.	\$0°	aquest assetty or
TURNAROUND TIME	ום	ELIVERABLES	[	Other Deliv	erables			1 <sup>1</sup> /			DDS FOR A			****	7		
1-day Rush 5- to 8-day Rush	BNSF Sta	andard (Level II)													-		
2-day Rush Kandard 10-Day	Level II			EDD Req. I	Format	>		$\left  X \right $									
3-day Rush Other	Level IV							9									
	SAMPLE INFORMA	TION						۲.									
***		Sampl	e Collection			Туре		HJT							1		
Sample Identification	Containers	Date	Time		iltered Y/N	(Comp/ Grab)	Matrix	-MN							сом	MENTS	LAB USE
13-W-23-091620	2	gian	1059	GP.	N	6	W	X									
2A-W-40-091620		I	824	GP	{	1	1	X									
2A-W-9-0916-20			1439	13P				X									
10-10-7-091620			1045	MB				K									
6W-4-091620			1340	mB				X									
2A-W-42-091620			945	MB				X									
2A-W-41-091620				MB				X									
2A-W-410-91620			835	MB				X									
1 C-W-4- 91620			1215	mB		1		X									1
10 5-W-51-0916 20			1440	mb		1	5	x						1			
1-555-591620			1600	GP-		1		X						1		······································	
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Relinquished By: V			-												~* <b>~</b>	- 1	$\cdots \omega$
Relinguished By:	Date/Time:		Received By							ate/Time:							
Received by Laboratory:	Date/Time:		Lab Remarks:							b: Custody	intact?	Custody	Seal No.			BNSF COC No	

10/2/2020

### Client: Farallon Consulting LLC

### Login Number: 97522 List Number: 1 Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	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	

Job Number: 580-97522-1

List Source: Eurofins TestAmerica, Seattle

### APPENDIX C DATA VALIDATION REPORTS

### 2020 SITE-WIDE GROUNDWATER MONITORING REPORT BNSF Former Maintenance and Fueling Facility Skykomish, Washington Consent Decree No. 07-2-33672-9 SEA

Farallon PN: 683-071



cari.say@saylerdata.com

# DATA VALIDATION REPORT

Skykomish Groundwater Monitoring, March 2020 Data

Prepared for: Farallon Consulting, LLC 975 5<sup>th</sup> Avenue NW Issaquah, Washington 98027

May 6, 2020

### 1.0 Introduction

Data validation was performed on the following water samples:

Sample ID	Sample Date/Time	Lab ID	Analyses
S2-BD-031620	03/16/2020 16:43	580-93580-1	TPH-Dx
S2-AU-031620	03/16/2020 17:20	580-93580-2	TPH-Dx
S2-AD-031620	03/16/2020 17:21	580-93580-3	TPH-Dx
S1-BD-031720	03/17/2020 09:33	580-93580-4	TPH-Dx
S1-BU-031720	03/17/2020 09:34	580-93580-5	TPH-Dx
1C-W-8-031720	03/17/2020 10:00	580-93580-6	TPH-Dx
1C-W-1-031720	03/17/2020 10:10	580-93580-7	TPH-Dx
S1-AU-031720	03/17/2020 10:14	580-93580-8	TPH-Dx
S1-AD-031720	03/17/2020 10:15	580-93580-9	TPH-Dx
1C-W-4031720	03/17/2020 10:51	580-93580-10	TPH-Dx
S3-AU-031720	03/17/2020 11:10	580-93580-11	TPH-Dx
1C-W-3-031720	03/17/2020 11:10	580-93580-12	TPH-Dx
S3-AD-031720	03/17/2020 11:11	580-93580-13	TPH-Dx
S3-BU-031720	03/17/2020 11:45	580-93580-14	TPH-Dx
S3-BD-031720	03/17/2020 11:46	580-93580-15	TPH-Dx
1B-W-2-031720	03/17/2020 12:16	580-93580-16	TPH-Dx
1B-W-3-031720	03/17/2020 12:30	580-93580-17	TPH-Dx
S3-CD-031720	03/17/2020 12:34	580-93580-18	TPH-Dx
S3-CU-031720	03/17/2020 12:35	580-93580-19	TPH-Dx
S4-AU-031720	03/17/2020 14:10	580-93580-20	TPH-Dx
5-W-55-031720	03/17/2020 14:24	580-93580-21	TPH-Dx
S4-AD-031720	03/17/2020 14:09	580-93580-22	TPH-Dx
5-W-56-031720	03/17/2020 14:40	580-93580-23	TPH-Dx
5-W-51-031720	03/17/2020 15:15	580-93580-24	TPH-Dx
S4-BD-031720	03/17/2020 15:06	580-93580-25	TPH-Dx
S4-BU-031720	03/17/2020 15:07	580-93580-26	TPH-Dx
5-W-17-031720	03/17/2020 15:40	580-93580-27	TPH-Dx
S4-CD-031720	03/17/2020 15:45	580-93580-28	TPH-Dx
5-W-14-031720	03/17/2020 16:08	580-93580-29	TPH-Dx
EW-2A-031720	03/17/2020 16:50	580-93580-30	TPH-Dx

Sample ID	Sample Date/Time	Lab ID	Analyses
5-W-19-031720	03/17/2020 17:00	580-93580-31	TPH-Dx
5-W-16-031720	03/17/2020 17:06	580-93580-32	TPH-Dx
2A-W-10-031820	03/18/2020 08:31	580-93580-33	TPH-Dx
GW-4-031820	03/18/2020 08:35	580-93580-34	TPH-Dx
MW-4-031820	03/18/2020 08:40	580-93580-35	TPH-Dx
MW-40-31820	03/18/2020 08:50	580-93580-36	TPH-Dx
2A-W-9-031820	03/18/2020 09:11	580-93580-37	TPH-Dx
1C-W-7-031820	03/18/2020 09:37	580-93580-38	TPH-Dx
2B-W-4-031820	03/18/2020 10:13	580-93580-39	TPH-Dx
MW-16-031820	03/18/2020 10:15	580-93580-40	TPH-Dx
1A-W-4-031820	03/18/2020 10:50	580-93580-41	TPH-Dx
MW-38R-031820	03/18/2020 11:26	580-93580-42	TPH-Dx
5-W-18-031820	03/18/2020 11:30	580-93580-43	TPH-Dx
5-W-180-031820	03/18/2020 11:40	580-93580-44	TPH-Dx
2A-W-42-031820	03/18/2020 11:45	580-93580-45	TPH-Dx
EW-1-031820	03/18/2020 12:05	580-93580-46	TPH-Dx
EW-10-031820	03/18/2020 12:15	580-93580-47	TPH-Dx
GW-1-031820	03/18/2020 12:50	580-93580-48	TPH-Dx
5-W-43-031820	03/18/2020 12:51	580-93580-49	TPH-Dx
2A-W-41-031820	03/18/2020 13:00	580-93580-50	TPH-Dx, TPH-DxSG
2A-W-410-031820	03/18/2020 13:03	580-93580-51	TPH-Dx
GW-3-031820	03/18/2020 15:09	580-93580-52	TPH-Dx, TPH-DxSG
GW-30-031820	03/18/2020 15:15	580-93580-53	TPH-Dx
2A-W-40-031820	03/18/2020 15:05	580-93580-54	TPH-Dx
GW-2-031820	03/18/2020 15:05	580-93580-55	TPH-Dx
GW-20-31820	03/18/2020 15:05	580-93580-56	TPH-Dx
MW-555-031820	03/18/2020 15:50	580-93580-57	TPH-Dx
1B-W-23-031820	03/18/2020 16:05	580-93580-58	TPH-Dx
S2-BU-031620	03/16/2020 16:41	580-93580-59	TPH-Dx
S4-CU-031720	03/17/2020 15:46	580-93580-60	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 Sayler.

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

<u>Sample analysis frequencies:</u> Quarterly sampling includes 25 water sample locations, and semiannual 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, both quarterly and semiannual locations were required. Samples were collected from all required locations except MW-3, which was unable to be sampled due to damage. The required analysis was completed by the laboratory for each collected sample.

<u>Analysis methods</u>: Each sample was extracted by method SW3510C and analyzed by method NWTPH-Dx. Additionally, two of the sample extracts were cleaned with silica gel by method SW3630C and analyzed a second time. These methods are approved EPA methods and therefore meet comparability requirements.

<u>Precision, accuracy and completeness:</u> Accuracy and precision measurements were within control limits. A data completeness of 98.1% was calculated based on 53 of 54 intended sample analyses completed. The project goal of 90% was met.

### 3.0 Diesel Range Petroleum Hydrocarbon Analysis

<u>Quality control analysis frequencies:</u> 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.

<u>Holding times:</u> 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.

<u>Laboratory and field blank results</u>: 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.

<u>Surrogate recoveries:</u> Laboratory control limits were 50-150%. Surrogate recoveries were within limits with the following exceptions.

Sample ID	Surrogate	% Recovery	Lab Control Limit
Without silica gel (TPH-Dx)			
1B-W-23-031820	o-Terphenyl	20	50 - 150
GW-30-031820	o-Terphenyl	34	50 - 150
GW-3-031820	o-Terphenyl	46	50 - 150
MW-555-031820	o-Terphenyl	21	50 - 150
With Silica Gel (TPH-DxSG)			
GW-3-031820	o-Terphenyl	48	50 - 150

Diesel and motor oil results in these samples are qualified as estimated.

<u>LCS recoveries:</u> Laboratory control limits were 50-120% and 64-120%. LCS recoveries were within limits.

<u>LCS/LCSD RPDs:</u> The laboratory control limit ranged from <24 to <26%. LCS/LCSD RPD values were within limits.

<u>Field duplicate RPDs:</u> 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:

Field Duplicate ID / Sample ID	Analyte	FD Result (mg/L)	Sample Result (mg/L)	RL (mg/L)
Without Silica Gel (TPH-Dx)				
2A-W-410-031820 / 2A-W-41-031820	#2 Diesel (C10-C24)	0.26	0.073	0.062
GW-30-031820 / GW-3-031820	#2 Diesel (C10-C24)	0.5	0.084	0.061

The diesel result is qualified as estimated in theses samples and field duplicates.

<u>Reporting limits</u>: The reporting limit goals are 0.1 mg/L for both diesel range hydrocarbons and oil range hydrocarbons. These goals were met.

<u>Laboratory narrative and flags:</u> 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
1B-W-23-031820	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Low surrogate recovery
GW-30-031820	Motor Oil (>C24-C36)	J	Low surrogate recovery
GW-30-031820	#2 Diesel (C10-C24)	J	Low surrogate recovery, High FD difference
GW-3-031820	Motor Oil (>C24-C36)	J	Low surrogate recovery
GW-3-031820	#2 Diesel (C10-C24)	J	Low surrogate recovery, High FD difference
MW-555-031820	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	Low surrogate recovery
GW-3-031820	#2 Diesel (C10-C24)	J	Low surrogate recovery
GW-3-031820	Motor Oil (>C24-C36)	UJ	Low surrogate recovery

#### 5.0 Abbreviations and Definitions

<u>DV Qualifier</u> U	<u>Definition</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.
Ν	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.

<u>DV Qualifier</u> R1	<u>Definition</u> 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.
Abbreviation	Definition
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 Groundwater Monitoring, June 2020 Data

Prepared for: Farallon Consulting, LLC 975 5<sup>th</sup> Avenue NW Issaquah, Washington 98027

July 27, 2020

#### 1.0 Introduction

Data validation was performed on the following water samples:

Sample ID	Sample Date/Time	Lab ID	Analyses
5-W-19-062320	06/23/2020 15:50	580-95611-1	TPH-Dx
2A-W-40-062320	06/23/2020 16:19	580-95611-2	TPH-Dx
5-W-18-062420	06/24/2020 08:30	580-95611-3	TPH-Dx
1C-W-1-062420	06/24/2020 08:38	580-95611-4	TPH-Dx
1C-W-8-062420	06/24/2020 08:39	580-95611-5	TPH-Dx
MW-4-062420	06/24/2020 09:09	580-95611-6	TPH-Dx
MW-40-062420	06/24/2020 09:15	580-95611-7	TPH-Dx
5-W-16-062420	06/24/2020 09:35	580-95611-8	TPH-Dx
EW-2A-062420	06/24/2020 09:39	580-95611-9	TPH-Dx
2A-W-10-062420	06/24/2020 10:26	580-95611-10	TPH-Dx
5-W-17-062420	06/24/2020 10:30	580-95611-11	TPH-Dx
1C-W-7-062420	06/24/2020 10:50	580-95611-12	TPH-Dx
GW-4-062420	06/24/2020 10:51	580-95611-13	TPH-Dx
2A-W-9-062420	06/24/2020 11:27	580-95611-14	TPH-Dx
5-W-56-062420	06/24/2020 11:40	580-95611-15	TPH-Dx
1B-W-3-062420	06/24/2020 12:03	580-95611-16	TPH-Dx
2B-W-4-062420	06/24/2020 12:45	580-95611-17	TPH-Dx
GW-3-062420	06/24/2020 14:29	580-95611-18	TPH-Dx, TPH-Dx w/SG
GW-30-062420	06/24/2020 14:40	580-95611-19	TPH-Dx
5-W-55-062420	06/24/2020 14:25	580-95611-20	TPH-Dx
1B-W-23-062420	06/24/2020 14:51	580-95611-21	TPH-Dx
2A-W-41-062420	06/24/2020 15:09	580-95611-22	TPH-Dx, TPH-Dx w/SG
2A-W-410-062420	06/24/2020 15:15	580-95611-23	TPH-Dx
5-W-51-062420	06/24/2020 15:30	580-95611-24	TPH-Dx
5-W-14-062420	06/24/2020 16:30	580-95611-25	TPH-Dx
MW-555-062420	06/24/2020 16:45	580-95611-26	TPH-Dx
2A-W-42-062420	06/24/2020 16:16	580-95611-27	TPH-Dx
5-W-180-062420	06/24/2020 08:35	580-95611-28	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 Sayler.

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

<u>Sample analysis frequencies:</u> Quarterly sampling includes 25 water sample locations, and semiannual 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 MW-3, which was unable to be sampled due to damage. The required analysis was completed by the laboratory for each collected sample.

<u>Analysis methods</u>: Each sample was extracted by method SW2510C and analyzed by method NWTPH-Dx. Samples GW-3-062420 and 2A-W-41-062420 were also extracted by method SW2510C, cleaned with silica gel by method SW3630C and analyzed by method NWTPH-Dx. These methods are approved EPA methods and therefore meet comparability requirements.

<u>Precision, accuracy and completeness:</u> Accuracy and precision measurements were within control limits with minor exceptions, however, high cooler receipt temperatures resulted in usable but estimated qualifiers applied to all samples. A data completeness of 96% was calculated based on 24 of 25 intended sample analyses completed. Please note that these data completeness percentages include the samples for the 4 locations included the pilot study, which were validated separately. The project goal of for completeness of 90% was met.

#### 3.0 Diesel Range Petroleum Hydrocarbon Analysis

<u>Quality control analysis frequencies:</u> 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.

<u>Holding times:</u> 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 with the following exceptions:

Sample ID	Days, Sample to Extraction	Days, Extraction to Analysis	Days, Sample to Analysis
TPH-Dx			
GW-3-062420	27	1	28
2A-W-42-062420 RE	19	1	20
2A-W-41-062420	27	1	28

Positive and non-detect results in these samples are qualified as estimated.

Additionally, all sample coolers were received with temperatures above the recommended range of 0-6°C. Positive and non-detect results for all samples are qualified as estimated.

<u>Laboratory and field blank results</u>: 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.

<u>Surrogate recoveries:</u> Laboratory control limits were 50-150%. Surrogate recoveries were within limits.

<u>LCS recoveries:</u> Laboratory control limits were 50-120% and 64-120%. LCS recoveries were within limits with the following exceptions:

QC ID	Analyte	% Recovery	Lab Control Limit
TPH-Dx			
LCS 580-332875/2-A	Motor Oil (>C24-C36)	127	64 - 120
LCSD 580-331753/3-A	Motor Oil (>C24-C36)	127	64 - 120
LCSD 580-332875/3-A	Motor Oil (>C24-C36)	126	64 - 120
TPH-Dx w/ SG			
LCS 580-331753/2-B	Motor Oil (>C24-C36)	121	64 - 120
LCSD 580-331753/3-B	Motor Oil (>C24-C36)	135	64 - 120

Associated detected motor oil results are qualified as estimated. Non-detect results are considered unaffected.

<u>LCS/LCSD RPDs:</u> The laboratory control limit ranged from <24 to <26%. LCS/LCSD RPD values were within limits.

QC ID Analyte		RPD	Lab Control Limit
TPH-Dx			
LCSD 580-333595/3-A	#2 Diesel (C10-C24)	38	26

Associated detected diesel results are qualified as estimated. Non-detect results are considered unaffected.

<u>Field duplicate results:</u> Field duplicates met the following criteria: 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.

<u>Multiple reported results:</u> Sample 2A-W-42-062420 was re-extracted and reanalyzed due to high motor oil recoveries in the associated LCSD. Unless quality control results warrant the

rejection of one result, multiple reported results are evaluated according to the following guidelines:

- (1) If both results are non-detects, the lower reporting limit was selected.
- (2) If one result was not detected and the other detected, the detection was selected.
- (3) If both results were detections, the following additional criteria were applied:
  - (a) If one result was off-scale and one was on-scale, the on-scale result was selected.
  - (b) If associated QC results indicated high bias, the lower concentration result was selected.
  - (c) If associated QC results indicated no, low, or mixed biases, the higher concentration result was selected.

This approach is conservative, and is considered most protective of the environment. The results not selected as the best result to report are qualified R1, rejected due to the availability of better results.

<u>Reporting limits</u>: The reporting limit goals are 0.1 mg/L for both diesel range hydrocarbons and oil range hydrocarbons. These goals were met.

<u>Laboratory narrative and flags:</u> No qualifiers were added based on a review of the laboratory narrative.

Except for results replaced by reanalysis results, diesel and oil range petroleum hydrocarbon data are acceptable for use as qualified.

Client ID	Analyte(s)	Qualifier	Reason
Diesel Range Petroleum Hydrocarbons (without cleanup)			
1B-W-23-062420	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	High cooler receipt temperature
1B-W-3-062420	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	High cooler receipt temperature
1C-W-1-062420	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	High cooler receipt temperature
1C-W-7-062420	#2 Diesel (C10-C24)	J	High cooler receipt temperature
1C-W-7-062420	Motor Oil (>C24-C36)	UJ	High cooler receipt temperature
1C-W-8-062420	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	High cooler receipt temperature
2A-W-10-062420	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	J	High cooler receipt temperature
2A-W-40-062320	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	High cooler receipt temperature
2A-W-410-062420	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	J	High cooler receipt temperature
2A-W-41-062420	Motor Oil (>C24-C36)	J	High cooler receipt temperature, Extraction hold time exceeded
2A-W-41-062420	#2 Diesel (C10-C24)	J	High cooler receipt temperature, High LCS/LCSD RPD, Extraction hold time exceeded
2A-W-42-062420	#2 Diesel (C10-C24)	J	High cooler receipt temperature
2A-W-42-062420	Motor Oil (>C24-C36)	J	High cooler receipt temperature, High LCSD recovery
2A-W-42-062420 RE	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	R1	Another result available
2A-W-9-062420	#2 Diesel (C10-C24)	J	High cooler receipt temperature

#### 4.0 Validation Qualifiers

Client ID	Analyte(s)	Qualifier	Reason
2A-W-9-062420	Motor Oil (>C24-C36)	UJ	High cooler receipt temperature
2B-W-4-062420	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	High cooler receipt temperature
5-W-14-062420	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	High cooler receipt temperature
5-W-16-062420	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	High cooler receipt temperature
5-W-17-062420	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	High cooler receipt temperature
5-W-180-062420	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	High cooler receipt temperature
5-W-18-062420	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	High cooler receipt temperature
5-W-19-062320	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	High cooler receipt temperature
5-W-51-062420	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	J	High cooler receipt temperature
5-W-55-062420	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	High cooler receipt temperature
5-W-56-062420	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	J	High cooler receipt temperature
EW-2A-062420	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	High cooler receipt temperature
GW-30-062420	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	High cooler receipt temperature
GW-3-062420	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	High cooler receipt temperature, Extraction hold time exceeded
GW-4-062420	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	High cooler receipt temperature
MW-40-062420	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	J	High cooler receipt temperature
MW-4-062420	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	J	High cooler receipt temperature
Diesel Range Petroleum Hydrocarbons With		Silica Gel	Cleanup.
2A-W-41-062420	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	High cooler receipt temperature
GW-3-062420	#2 Diesel (C10-C24), Motor Oil (>C24-C36)	UJ	High cooler receipt temperature

### 5.0 Abbreviations and Definitions

<u>DV Qualifier</u> U	<u>Definition</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.
Ν	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.

AbbreviationDefinitionDVData ValidationLCSLaboratory control sampleLCSDLaboratory control sample duplicateMSMatrix spikeMSDMatrix spike duplicateRLReporting limitRPDRelative percent differenceDDData value deviction	<u>DV Qualifier</u> R2	<u>Definition</u> The sample result has been replaced by a result from a different analysis method.
KSD Relative standard deviation	DV LCS LCSD MS MSD RL	Data Validation Laboratory control sample Laboratory control sample duplicate Matrix spike Matrix spike duplicate Reporting limit

#### 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.



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## DATA VALIDATION REPORT

Skykomish Groundwater Monitoring, September 2020 Data

Prepared for: Farallon Consulting, LLC 975 5<sup>th</sup> Avenue NW Issaquah, Washington 98027

January 8, 2021

#### 1.0 Introduction

Data validation was performed on the following water samples:

Sample ID	Sample Date/Time	Lab ID	Analyses
1B-W-23-091620	09/16/2020 10:59	580-97522-16	TPH-Dx
1C-W-4091620	09/16/2020 12:15	580-97522-24	TPH-Dx
1C-W-7-091620	09/16/2020 10:45	580-97522-19	TPH-Dx
1C-W-8-091620	09/16/2020 12:15	580-97522-12	TPH-Dx
2A-W-40-091620	09/16/2020 08:24	580-97522-17	TPH-Dx
2A-W-410-091620	09/16/2020 08:35	580-97522-23	TPH-Dx
2A-W-41-091620	09/16/2020 08:30	580-97522-22	TPH-Dx
2A-W-42-091620	09/16/2020 09:45	580-97522-21	TPH-Dx
2A-W-9-091620	09/16/2020 14:39	580-97522-18	TPH-Dx
5-W-14-091520	09/15/2020 16:11	580-97522-10	TPH-Dx
5-W-16-091520	09/15/2020 15:12	580-97522-9	TPH-Dx
5-W-17-091520	09/15/2020 15:30	580-97522-4	TPH-Dx
5-W-180-091520	09/15/2020 14:30	580-97522-3	TPH-Dx
5-W-18-091520	09/15/2020 14:25	580-97522-2	TPH-Dx
5-W-19-091520	09/15/2020 14:19	580-97522-8	TPH-Dx
5-W-43-091520	09/15/2020 16:25	580-97522-5	TPH-Dx
5-W-51-091620	09/16/2020 14:40	580-97522-25	TPH-Dx
5-W-55-091520	09/15/2020 13:00	580-97522-1	TPH-Dx
5-W-56-091520	09/15/2020 13:20	580-97522-7	TPH-Dx
GW-1-091520	09/15/2020 17:05	580-97522-11	TPH-Dx
GW-2-091520	09/15/2020 17:20	580-97522-6	TPH-Dx
GW-30-091620	09/16/2020 09:40	580-97522-15	TPH-Dx
GW-3-091620	09/16/2020 09:36	580-97522-14	TPH-Dx, TPHSG
GW-4-091620	09/16/2020 13:40	580-97522-20	TPH-Dx
MW-4-091620	09/16/2020 13:38	580-97522-13	TPH-Dx
MW-555-091620	09/16/2020 16:00	580-97522-26	TPH-Dx

Samples were analyzed by Eurofins Test America, in 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 Sayler.

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

<u>Sample analysis frequencies:</u> Table 3 of the monitoring plan specifies 21 sampling locations for TPH analysis. Samples were collected from all 21 locations. Additionally, a sample was collection from location 2A-W-9. The required analysis was completed by the laboratory for each collected sample. Sample GW-3-091620 was analyzed both with and without silica gel cleanup.

<u>Analysis methods</u>: The monitoring plan specifies analytical method NWTPH-Dx. Each sample was extracted by method SW3510C and analyzed by method NWTPH-Dx. Silica gel cleanup was performed using method SW3630C on the extra analysis of sample GW-3-091620. These methods are approved EPA methods and therefore meet comparability requirements.

<u>Precision, accuracy and completeness:</u> Accuracy and precision measurements were within control limits with some exceptions. Usable but estimated qualifiers were applied to some samples. A data completeness of 100% was calculated based on 21 of 21 intended sample analyses completed. The project goal of for completeness of 90% was met.

#### 3.0 Diesel Range Petroleum Hydrocarbon Analysis

<u>Quality control analysis frequencies:</u> 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. The monitoring plan specifies a laboratory control sample (LCS), LCS duplicate (LCSD), matrix spike (MS), MS duplicate (MSD) and method blank are analyzed 1 per 20 samples.

Each batch included a method blank, LCS, and LCSD, as well as appropriate surrogates. The laboratory noted insufficient sample volume to perform MS/MSD analysis. Data qualifiers are not assigned based on the absence of MS, MSD or laboratory duplicate results.

<u>Holding times:</u> 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

<u>Laboratory and field blank results</u>: 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 diesel as follows:

Blank ID	Analyte	Concentration	RL
NWTPH-Dx Analyses			
MW-555-091620	#2 Diesel (C10-C24)	0.09	0.062

Sample results below 5 times this level should be considered not detected and are qualified "U".

<u>Surrogate recoveries</u>: Monitoring plan and laboratory control limits were 50-150%. Surrogate recoveries were within limits with the following exceptions:

Sample ID	Surrogate	% Recovery	Lab Control Limit
NWTPH-Dx Analyses			
2A-W-41-091620 (diesel analysis)	o-Terphenyl	45	50 - 150
2A-W-41-091620 (motor oil analysis)	o-Terphenyl	10	50 - 150
2A-W-42-091620	o-Terphenyl	43	50 - 150

Sample results in these two samples are qualified as estimated.

<u>LCS recoveries:</u> Monitoring plan and laboratory control limits were 50-120% for diesel and 64-120% for motor oil. LCS recoveries were within limits with the following exceptions:

QC ID	Analyte	% Recovery	Lab Control Limit
NWTPH-Dx Analyses			
LCS 580-338798/2-A	Motor Oil (>C24-C36)	171	64 - 120
LCSD 580-338798/3-A	Motor Oil (>C24-C36)	181	64 - 120

Associated detected motor oil results are qualified as estimated. Non-detect results are considered unaffected.

<u>LCS/LCSD RPDs:</u> Monitoring plan and laboratory control limits were <26% for diesel and to <24% for motor oil. RPDs were within limits.

<u>MS recoveries:</u> Monitoring plan control limits were 50-120% for diesel and 64-120% for motor oil. MS and MSDs were not analyzed with this batch of samples.

<u>MS/MSD RPDs:</u> Monitoring plan control limits were <26% for diesel and to <24% for motor oil. MS and MSDs were not analyzed with this batch of samples.

<u>Field duplicate results</u>: Field duplicates met the following criteria: 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.

<u>Reporting limits</u>: The monitoring plan specifies reporting limits of 0.065 mg/L for diesel and 0.096 mg/L for motor oil. These reporting limits were exceeded due to dilution or field blank contamination as follows:

Client ID	Analyte	RL Achieved (mg/L)	Target RL (mg/L)
NWTPH-Dx Analyses			
1B-W-23-091620	#2 Diesel (C10-C24)	0.18	0.065
1B-W-23-091620	Motor Oil (>C24-C36)	0.27	0.096
2A-W-410-091620	#2 Diesel (C10-C24)	0.35	0.065
2A-W-41-091620	#2 Diesel (C10-C24)	0.29	0.065
2A-W-42-091620	#2 Diesel (C10-C24)	0.11	0.065
2A-W-9-091620	#2 Diesel (C10-C24)	0.19	0.065
2A-W-9-091620	Motor Oil (>C24-C36)	0.27	0.096

Client ID	Analyte	RL Achieved (mg/L)	Target RL (mg/L)
5-W-51-091620	#2 Diesel (C10-C24)	0.19	0.065
5-W-56-091520	#2 Diesel (C10-C24)	0.54	0.065
GW-30-091620	#2 Diesel (C10-C24)	0.16	0.065
GW-3-091620	#2 Diesel (C10-C24)	0.21	0.065

No qualifiers are assigned on the basis of elevated RLs.

<u>Laboratory narrative and flags:</u> 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
NWTPH-Dx Analyses	6		
2A-W-410-091620	#2 Diesel (C10-C24)	U	Field blank contamination
2A-W-41-091620	#2 Diesel (C10-C24)	UJ	Field blank contamination, Low surrogate recovery
2A-W-41-091620	Motor Oil (>C24-C36)	UJ	Low surrogate recovery
2A-W-42-091620	#2 Diesel (C10-C24)	UJ	Field blank contamination, Low surrogate recovery
2A-W-42-091620	Motor Oil (>C24-C36)	UJ	Low surrogate recovery
5-W-51-091620	#2 Diesel (C10-C24)	U	Field blank contamination
5-W-56-091520	Motor Oil (>C24-C36)	J	High LCS recovery, High LCSD recovery
5-W-56-091520	#2 Diesel (C10-C24)	U	Field blank contamination
GW-30-091620	#2 Diesel (C10-C24)	U	Field blank contamination
GW-3-091620	#2 Diesel (C10-C24)	U	Field blank contamination

#### 5.0 Abbreviations and Definitions

<u>DV Qualifier</u> U	<u>Definition</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.
Ν	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.
Abbreviation DV LCS LCSD MS	Definition Data Validation Laboratory control sample Laboratory control sample duplicate Matrix spike

<b>Abbreviation</b>	<u>Definition</u>
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.
- Final Long-Term Monitoring Plan, BNSF Former Maintenance and Fueling Facility, Skykomish, Washington, Consent Decree No. 07-2-336752-9 SEA. Submitted by: Farallon Consulting LLC. For: BNSF Railway Company, November 9, 2020

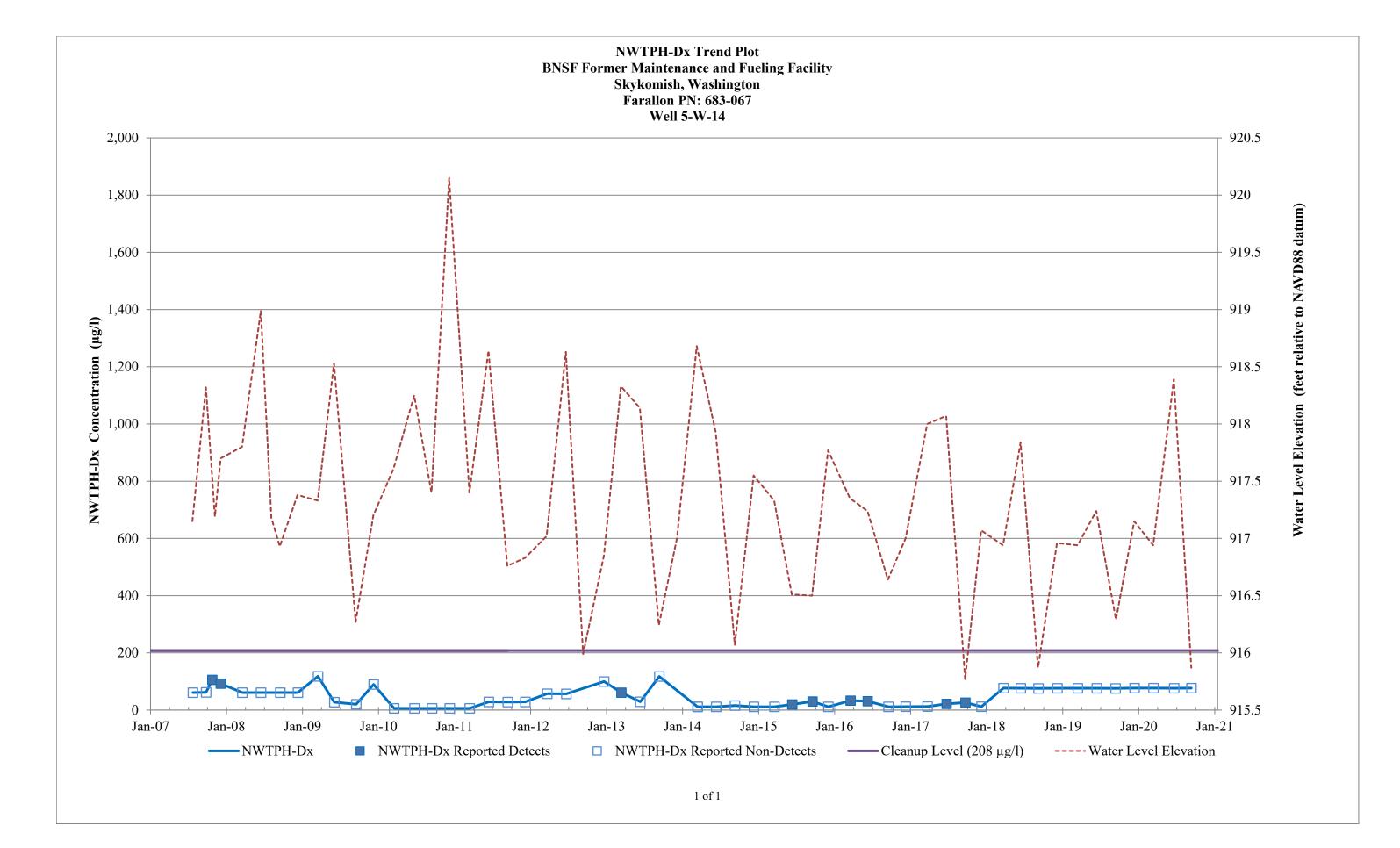
### APPENDIX D NWTPH-Dx TREND PLOTS

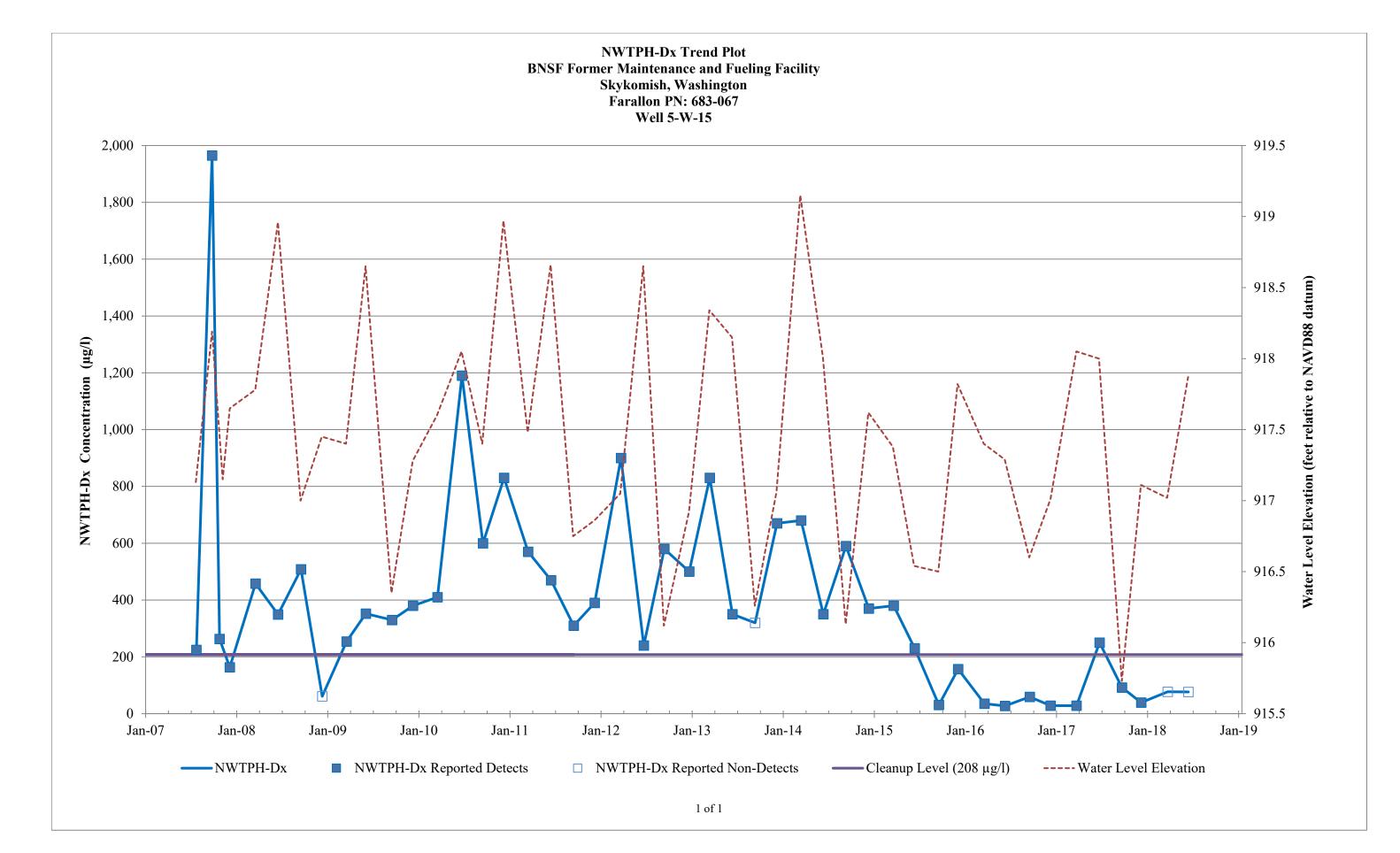
### 2020 SITE-WIDE GROUNDWATER MONITORING REPORT BNSF Former Maintenance and Fueling Facility Skykomish, Washington Consent Decree No. 07-2-33672-9 SEA

Farallon PN: 683-071

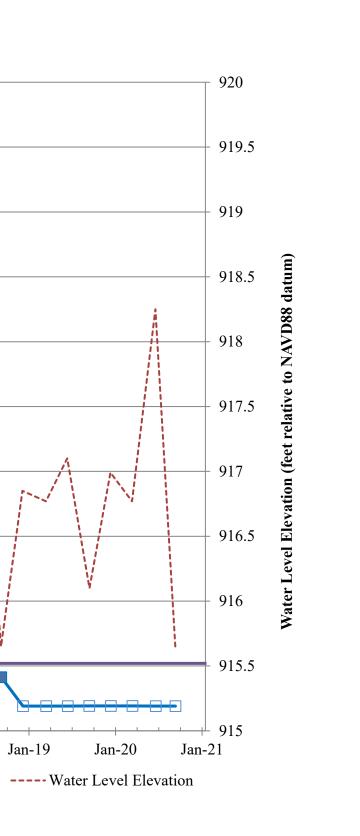
# Levee Zone Monitoring Wells

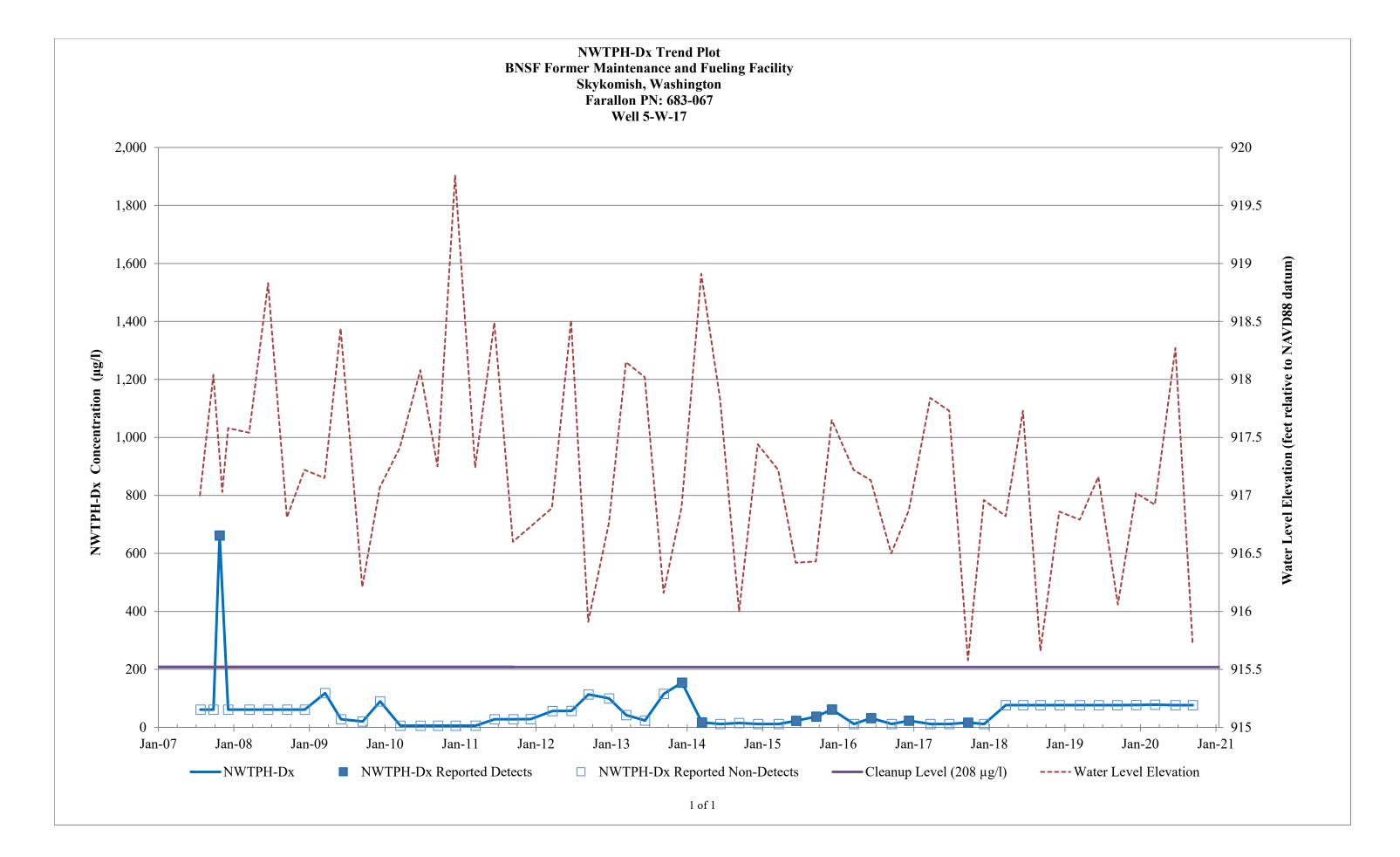
Note: Levee Zone monitoring well NWTPH-Dx groundwater results are compared to the Cleanup Level (CUL) of 208 micrograms per liter.

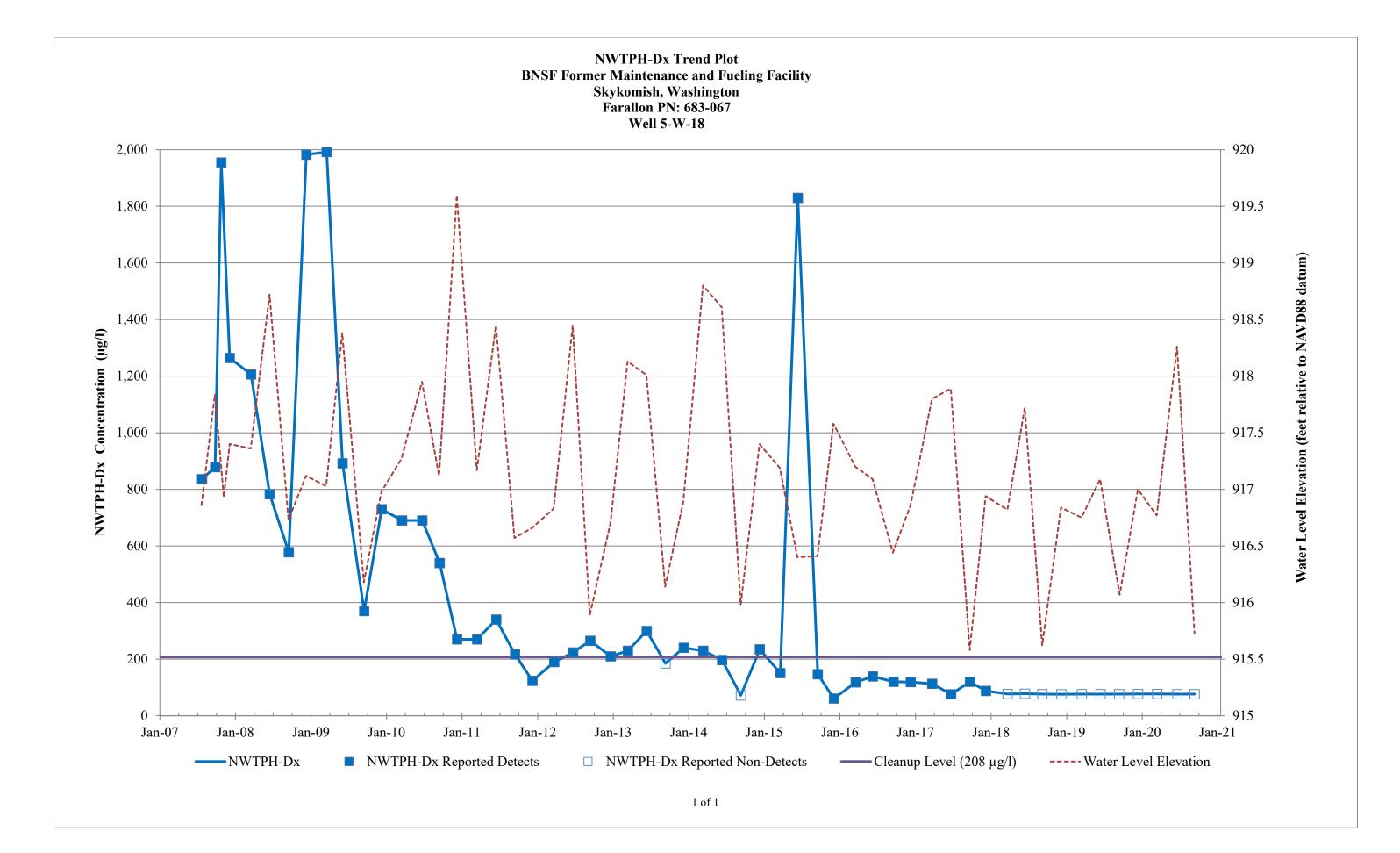




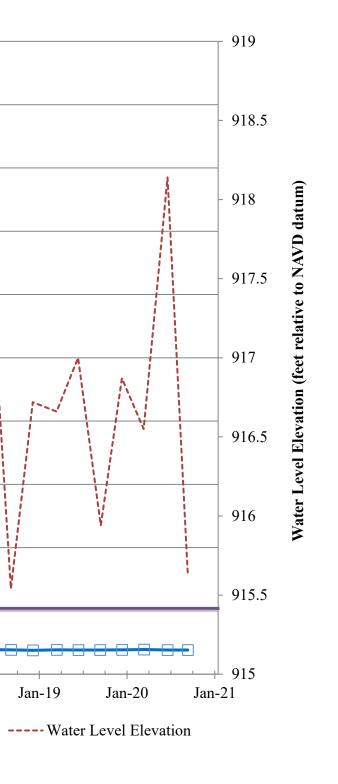
**NWTPH-Dx Trend Plot BNSF Former Maintenance and Fueling Facility** Skykomish, Washington Farallon PN: 683-067 Well 5-W-16 2,000 1,800 1,600 1,400 Concentration (µg/l) 1'000 1'000 NWTPH-Dx 800 600 V 400 200 0 Jan-07 Jan-08 Jan-09 Jan-10 Jan-11 Jan-12 Jan-13 Jan-14 Jan-15 Jan-16 Jan-17 Jan-18 ■ NWTPH-Dx Reported Detects □ NWTPH-Dx Reported Non-Detects Cleanup Level (208 µg/l) 1 of 1





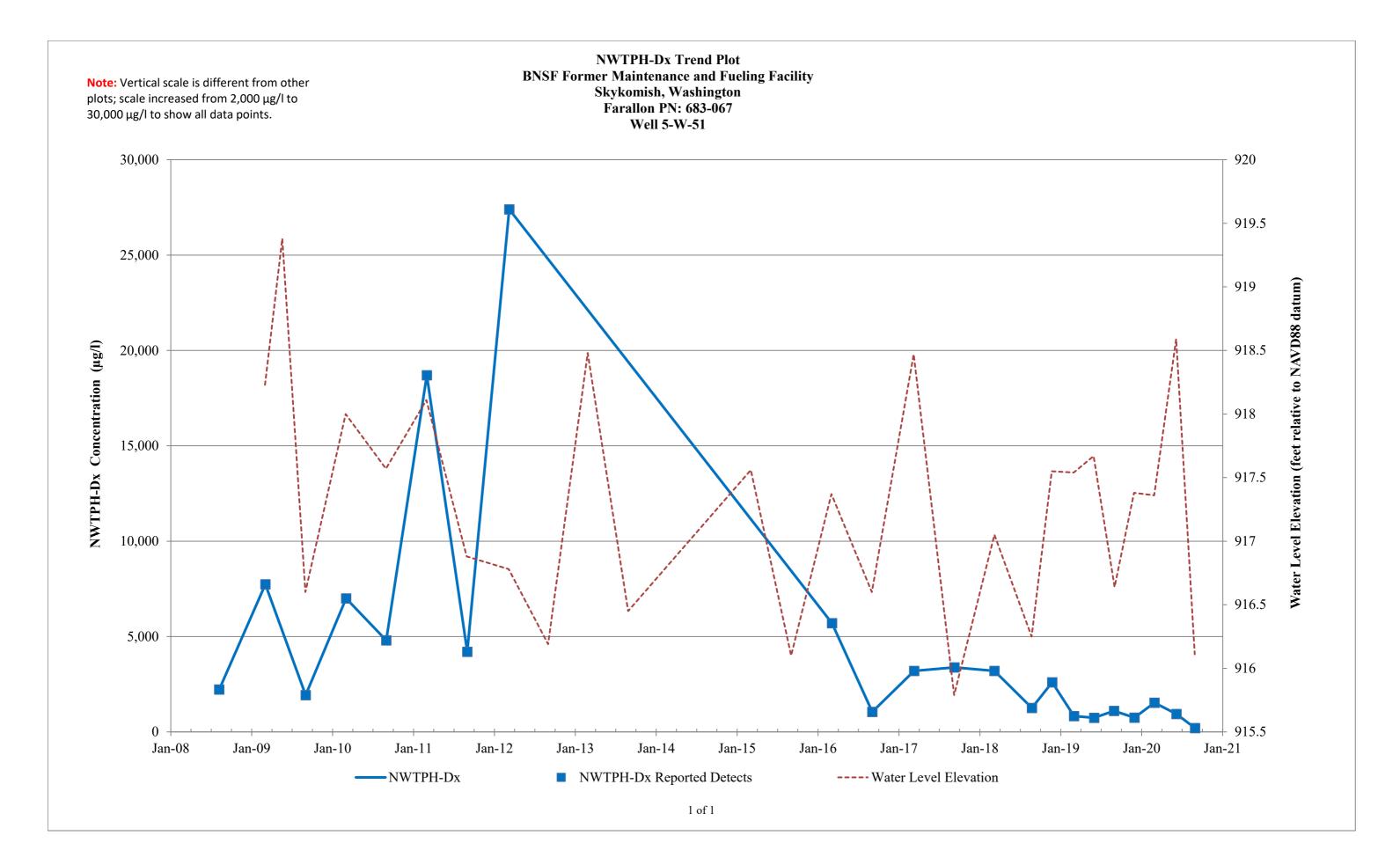


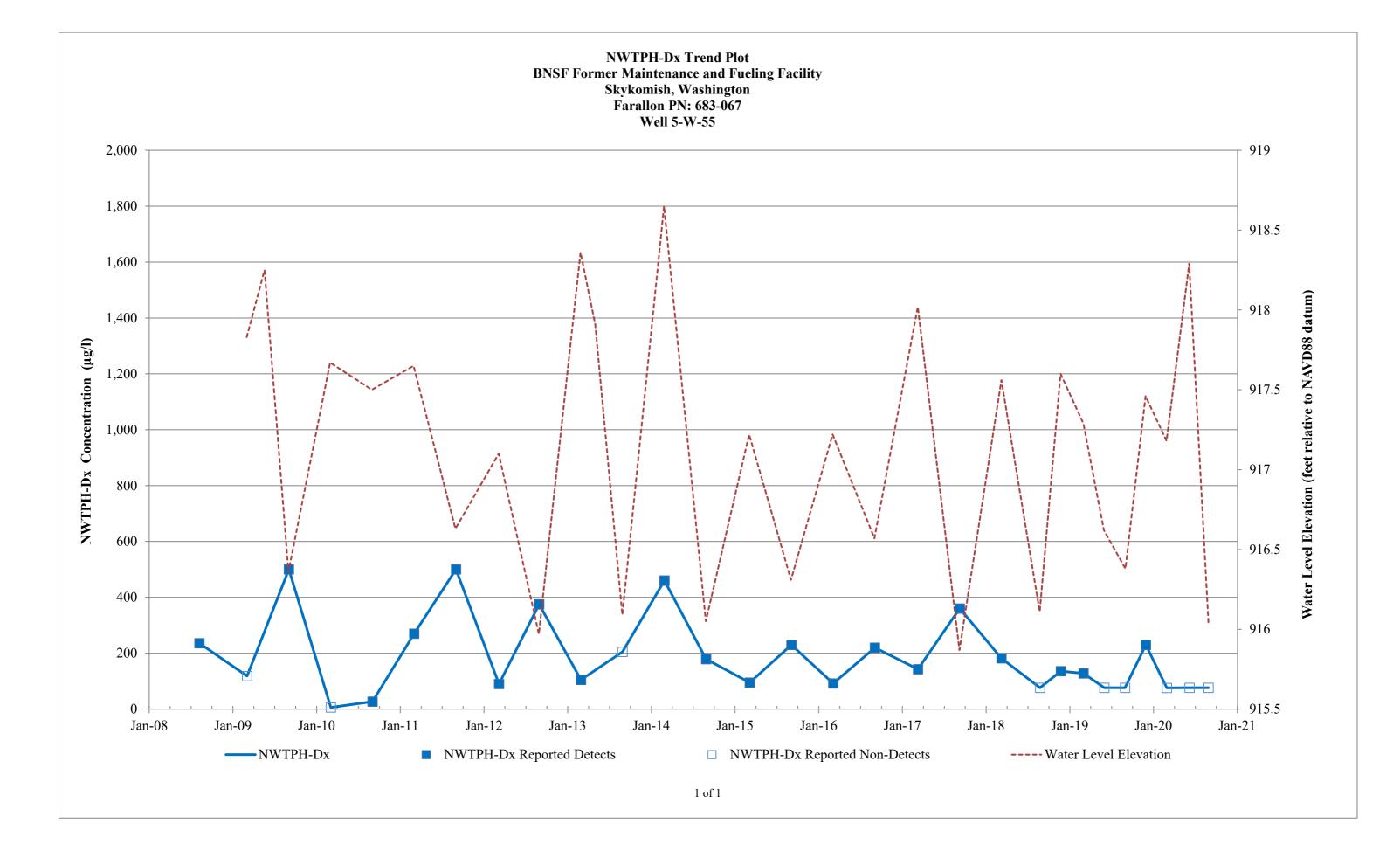
**NWTPH-Dx Trend Plot BNSF Former Maintenance and Fueling Facility** Skykomish, Washington Farallon PN: 683-067 Well 5-W-19 2,000 1,800 1,600 1,400 NWTPH-Dx Concentration (µg/l) 1'500 800 800 800 Ų is. 400 200 0 Jan-10 Jan-12 Jan-13 Jan-15 Jan-16 Jan-17 Jan-18 Jan-07 Jan-08 Jan-09 Jan-11 Jan-14 ■ NWTPH-Dx Reported Detects □ NWTPH-Dx Reported Non-Detects Cleanup Level (208 µg/l) 1 of 1

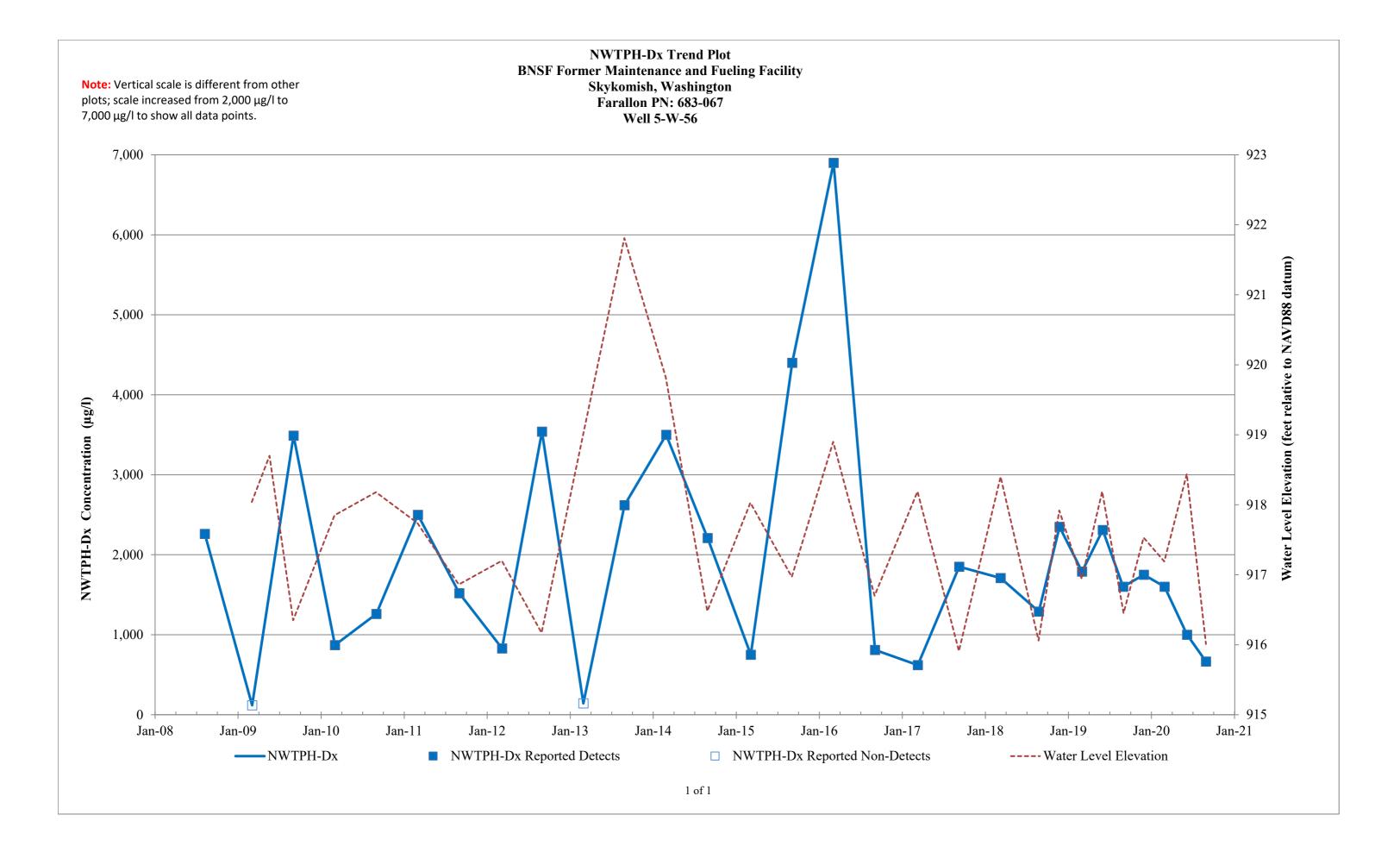


# Schoolyard Monitoring Wells

Note: Schoolyard monitoring well NWTPH-Dx groundwater results are compared to the Remediation Level (RL) of 477 micrograms per liter.

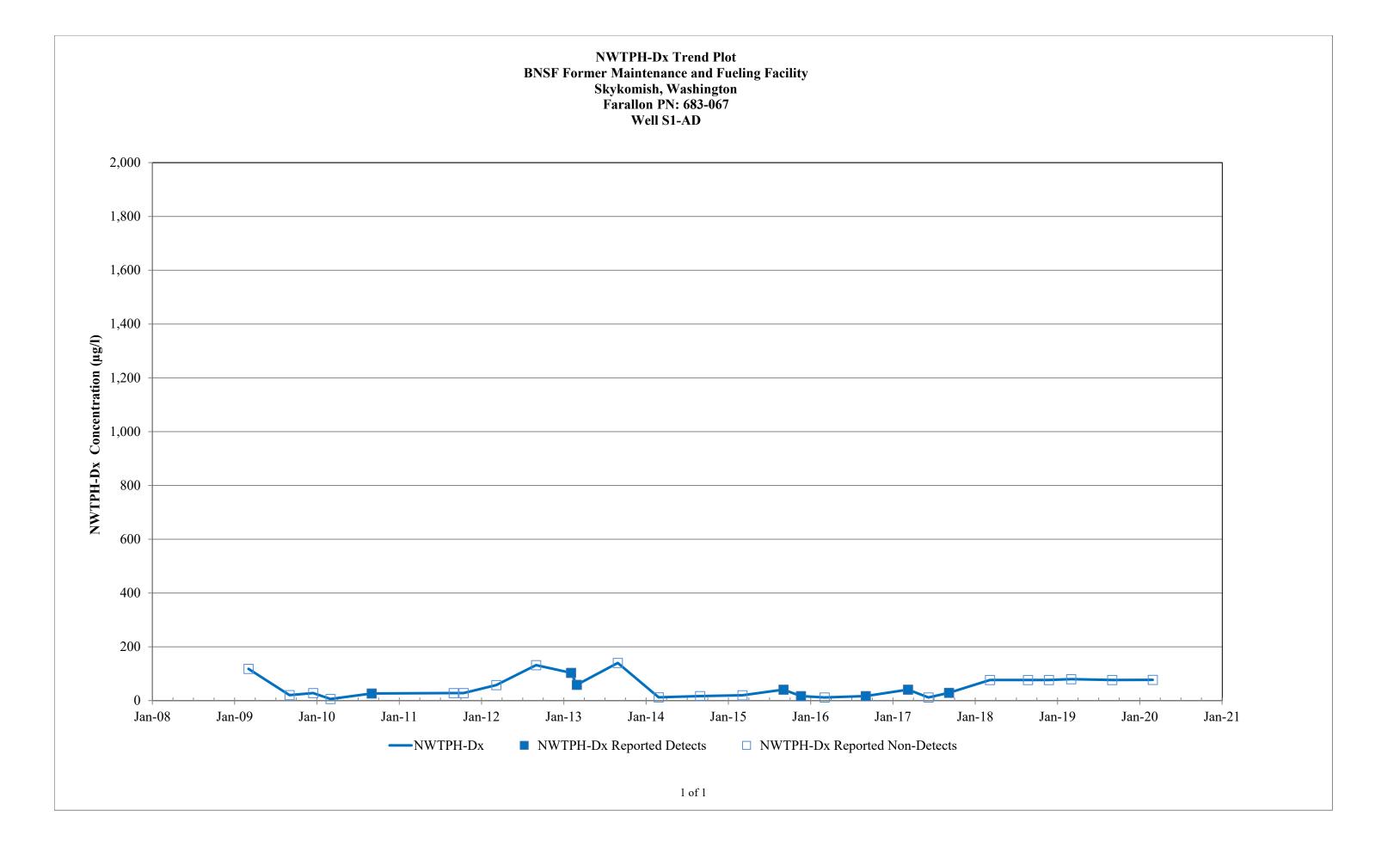


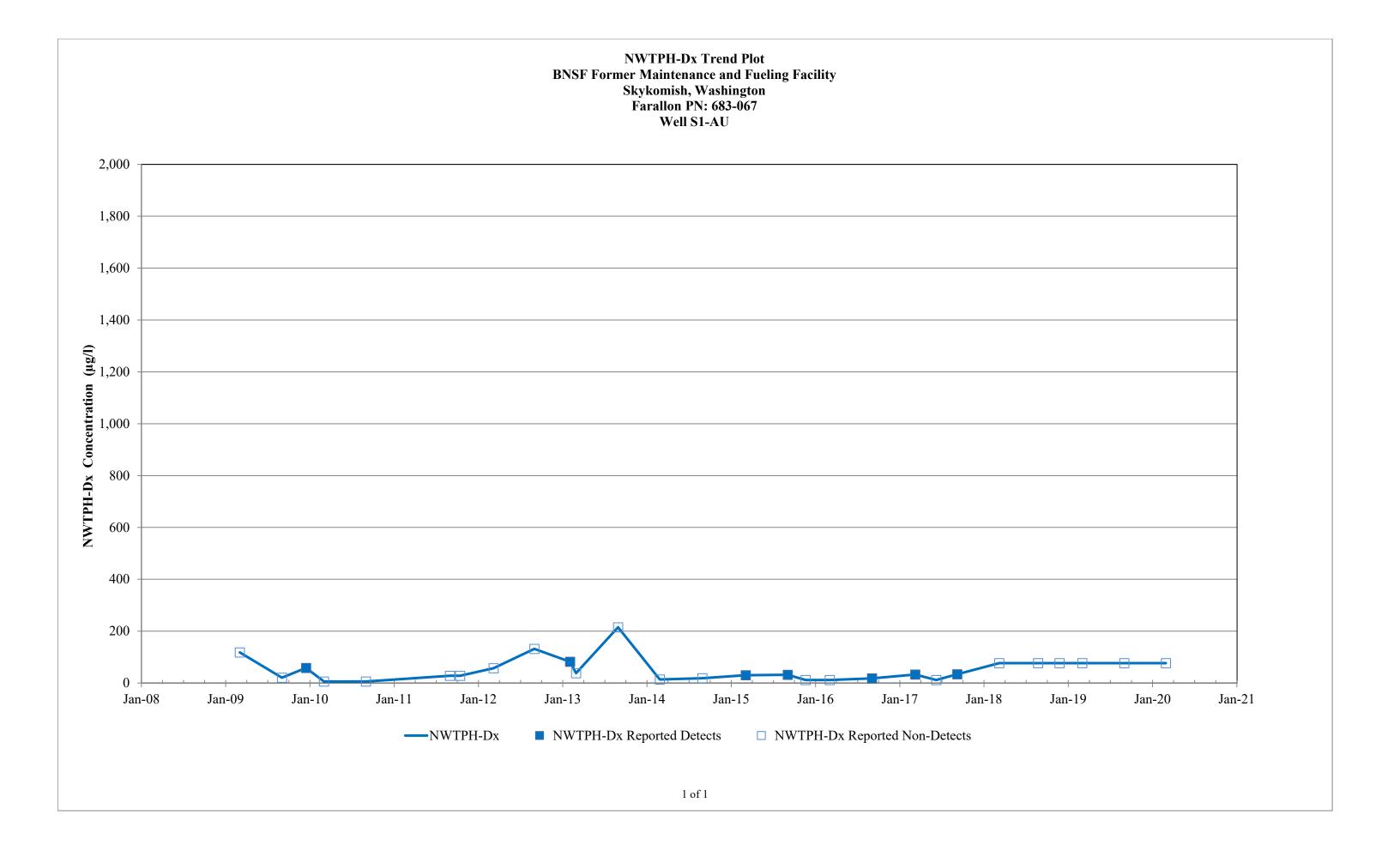


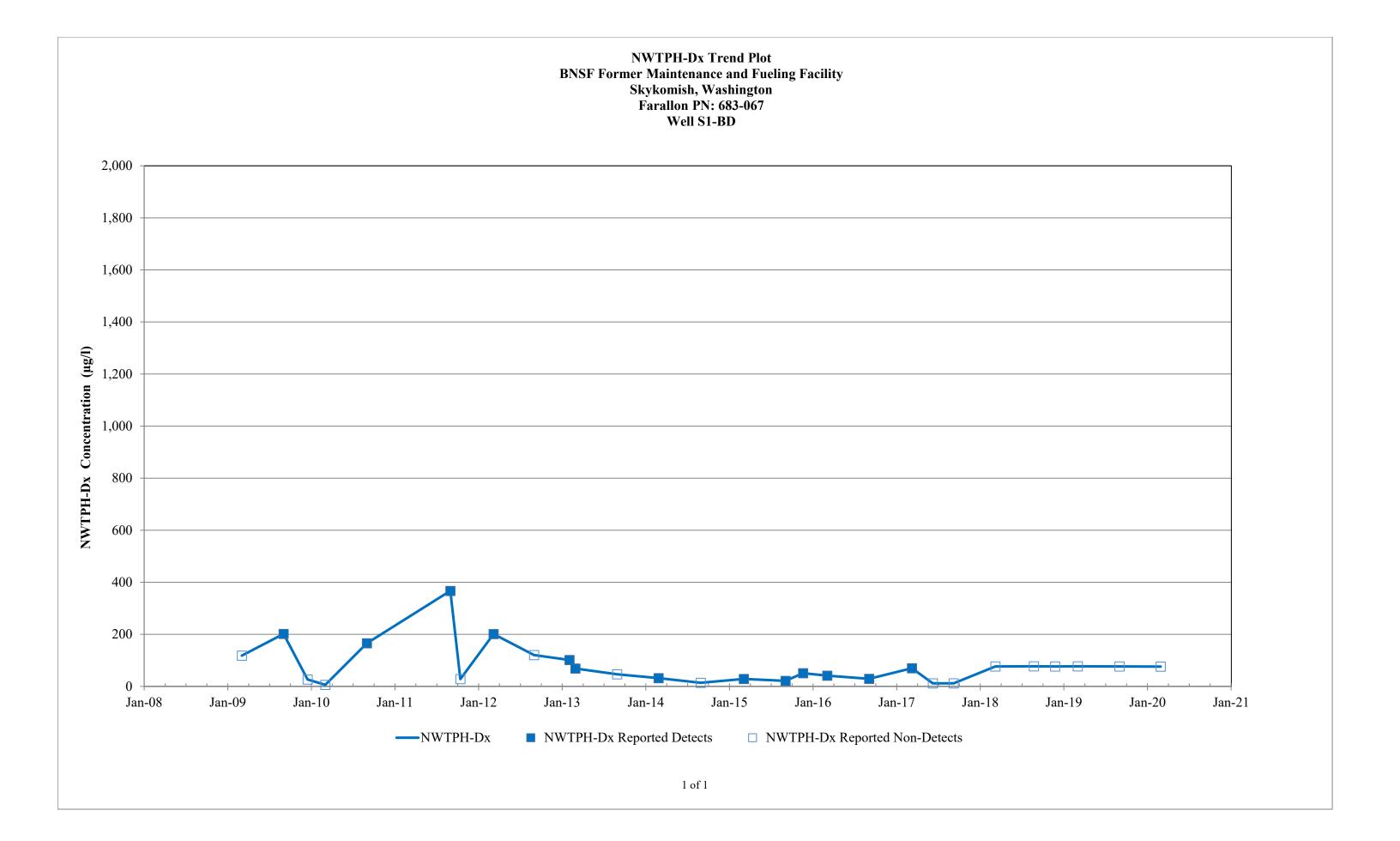


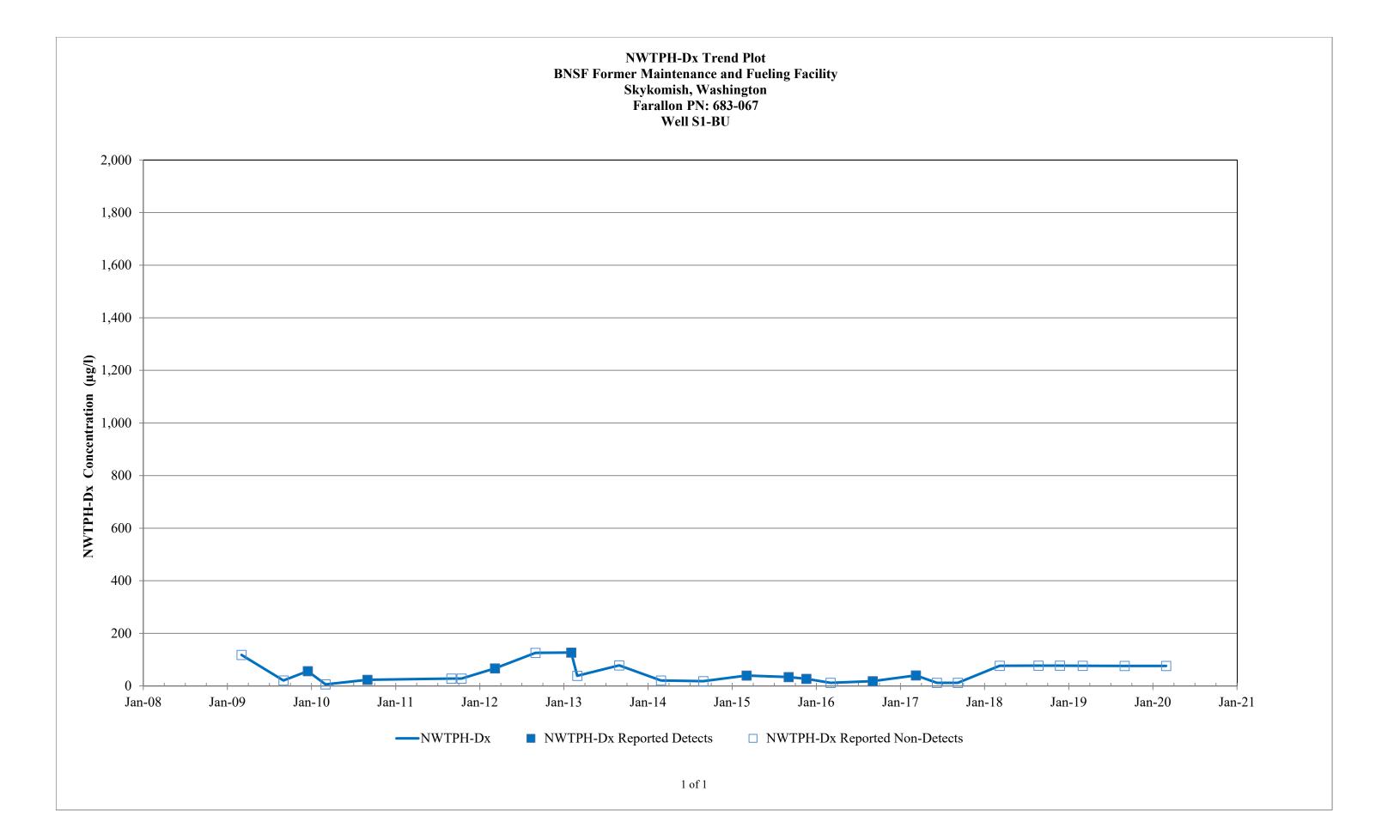
# Hydraulic Control and Containment System Sentry Wells and Monitoring Wells

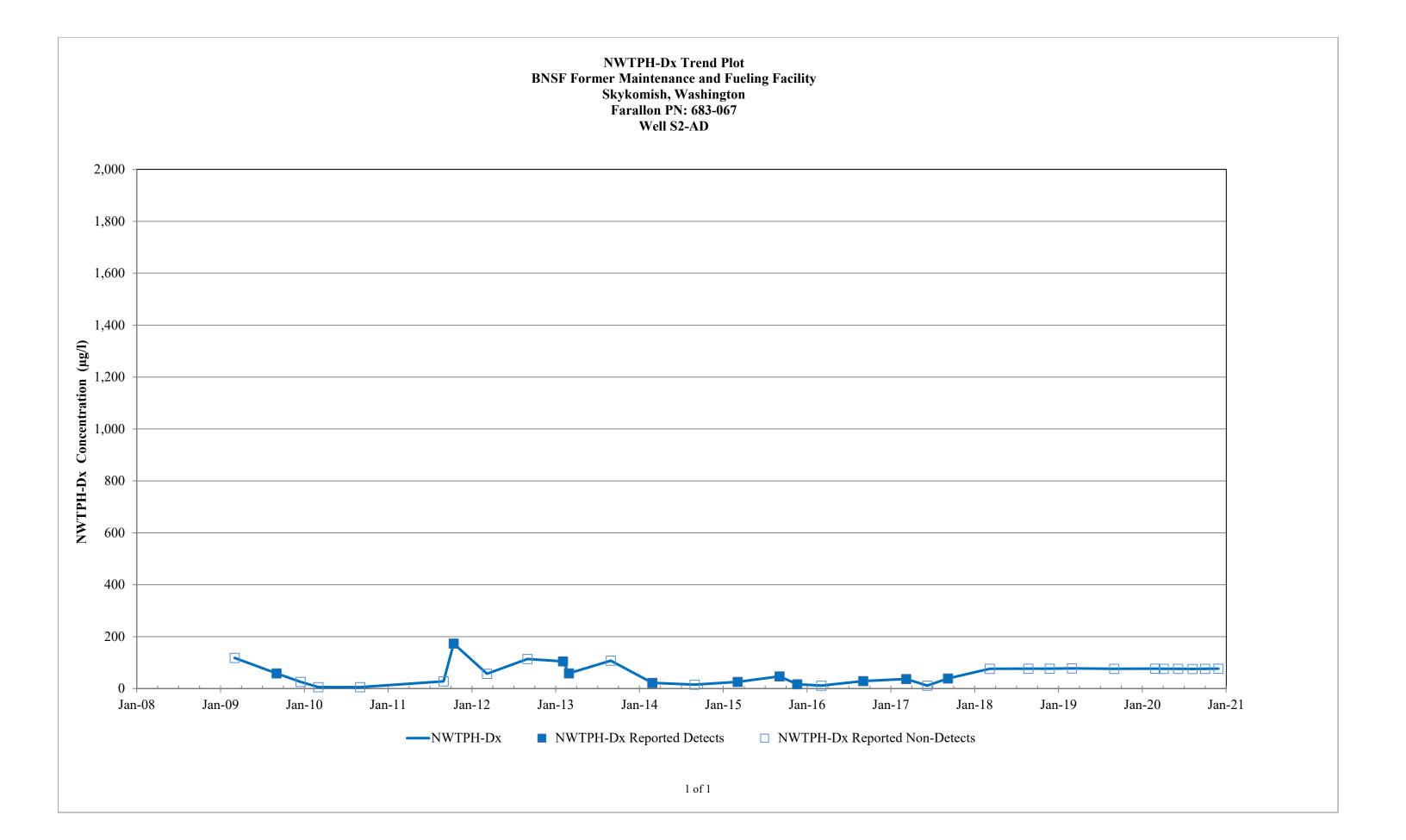
Note: Monitoring well NWTPH-Dx groundwater results from wells located north of the HCC barrier wall (i.e., downgradient of railyard) are compared to the RL of 477 micrograms per liter; NWTPH-Dx groundwater results from monitoring locations within and south of the HCC barrier wall (i.e., within the railyard) have no NWTPH-Dx target.

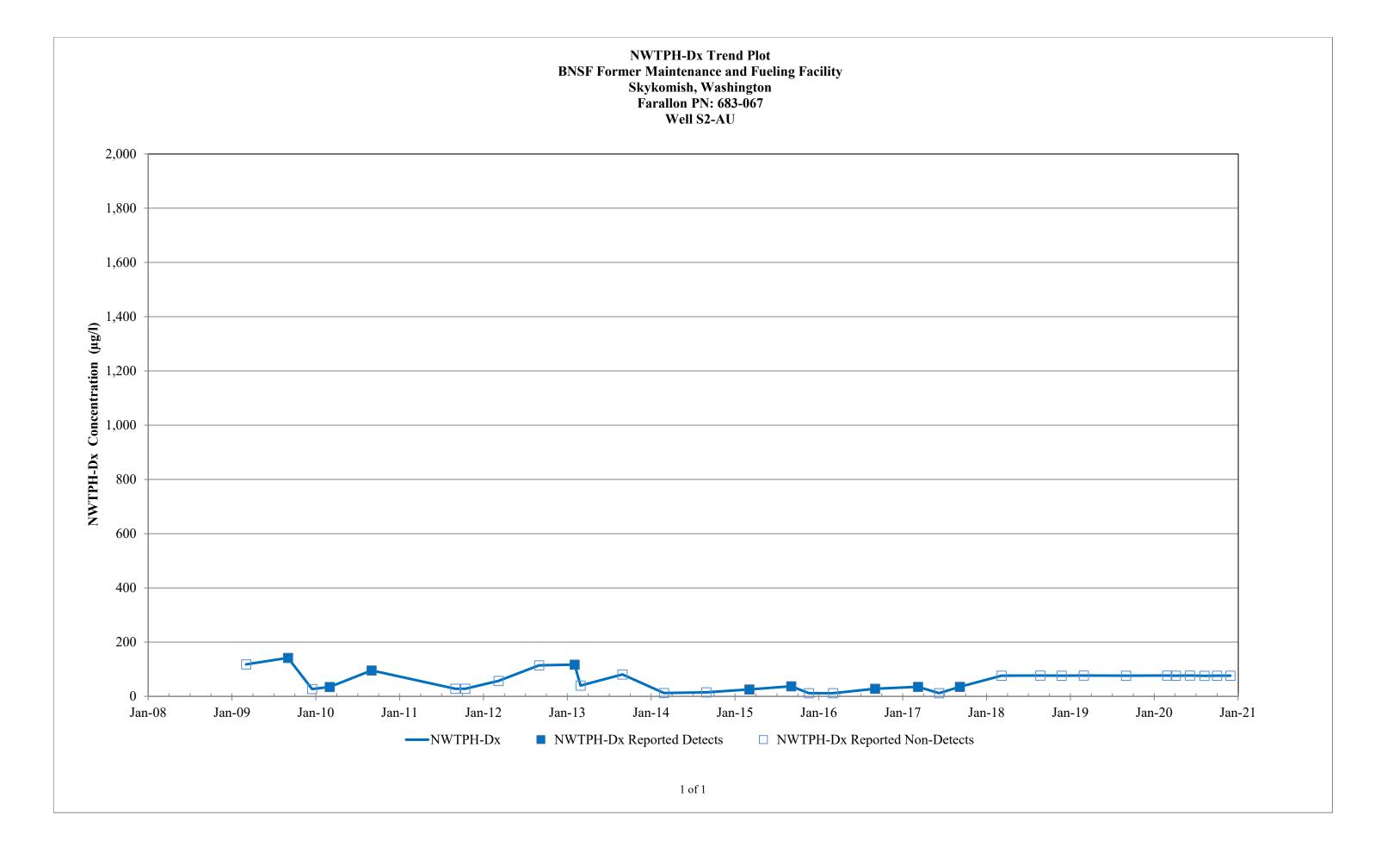


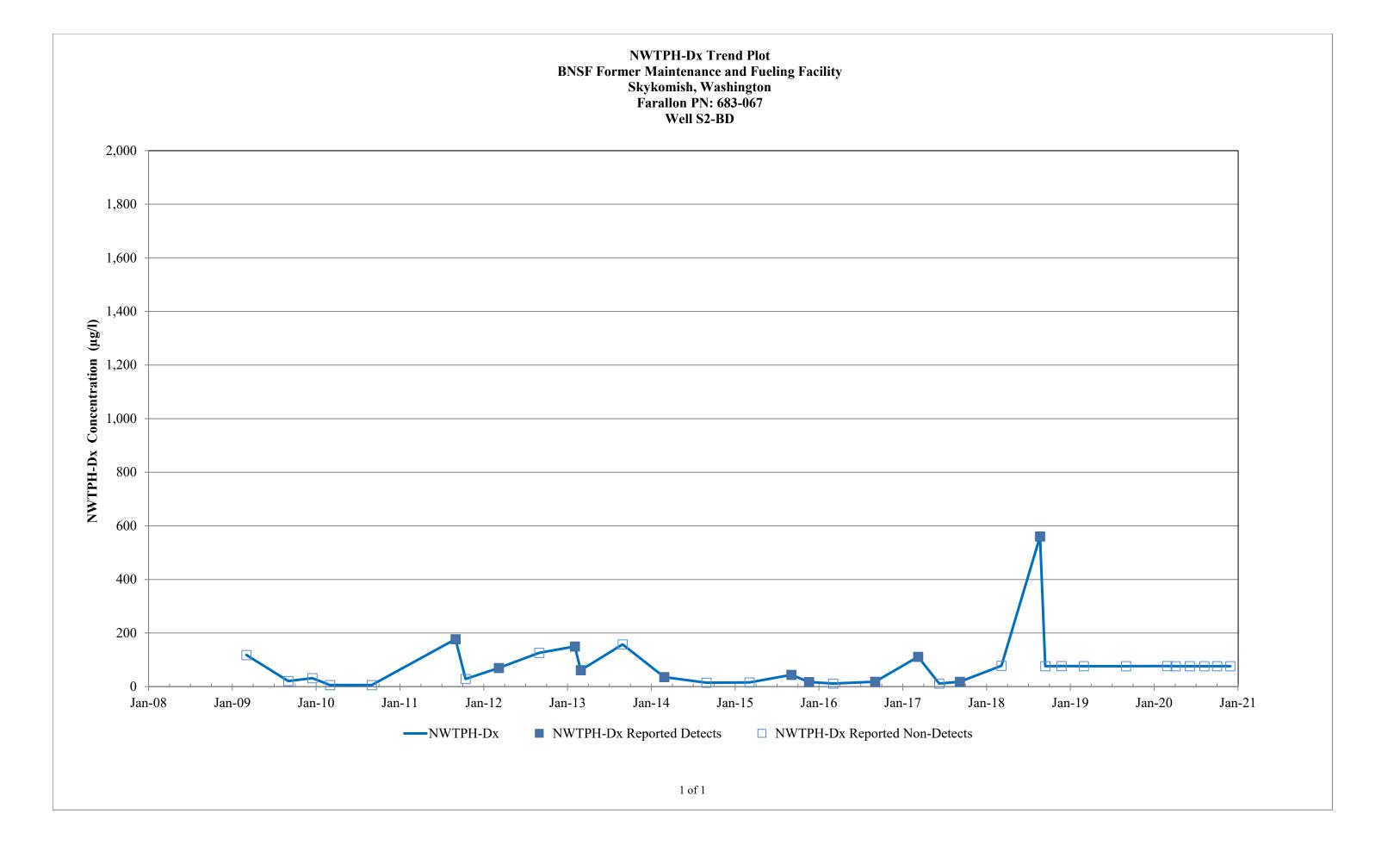


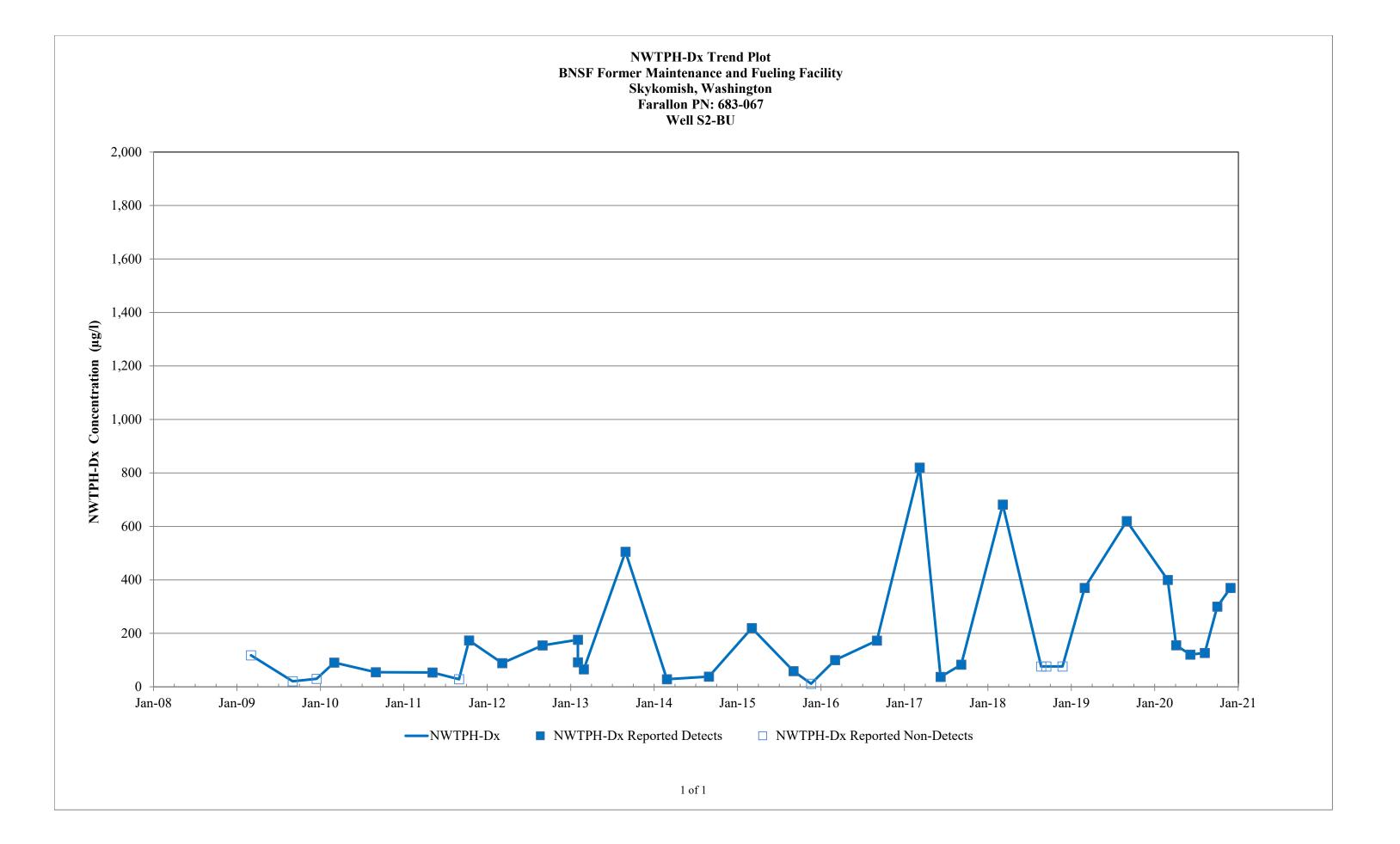


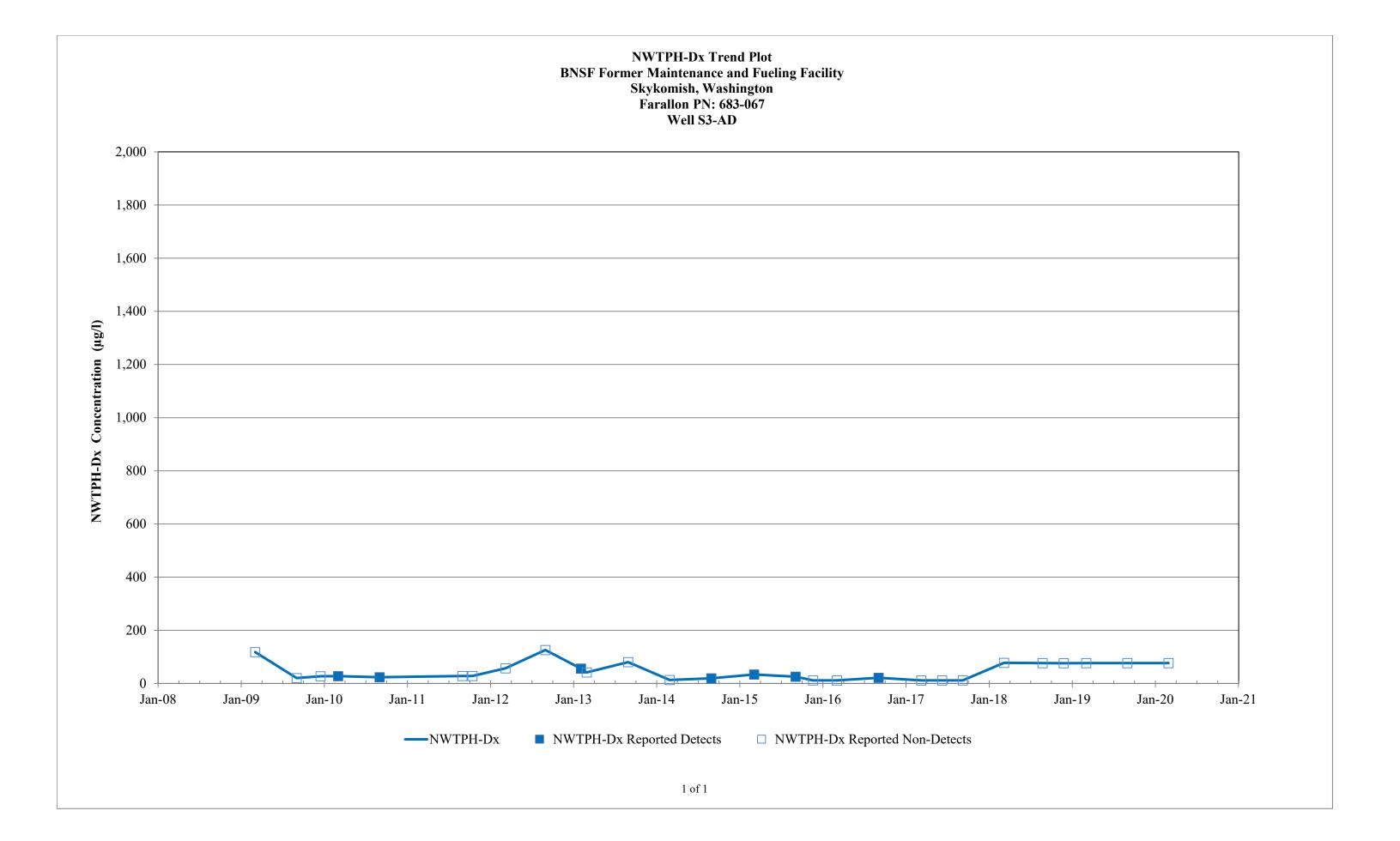


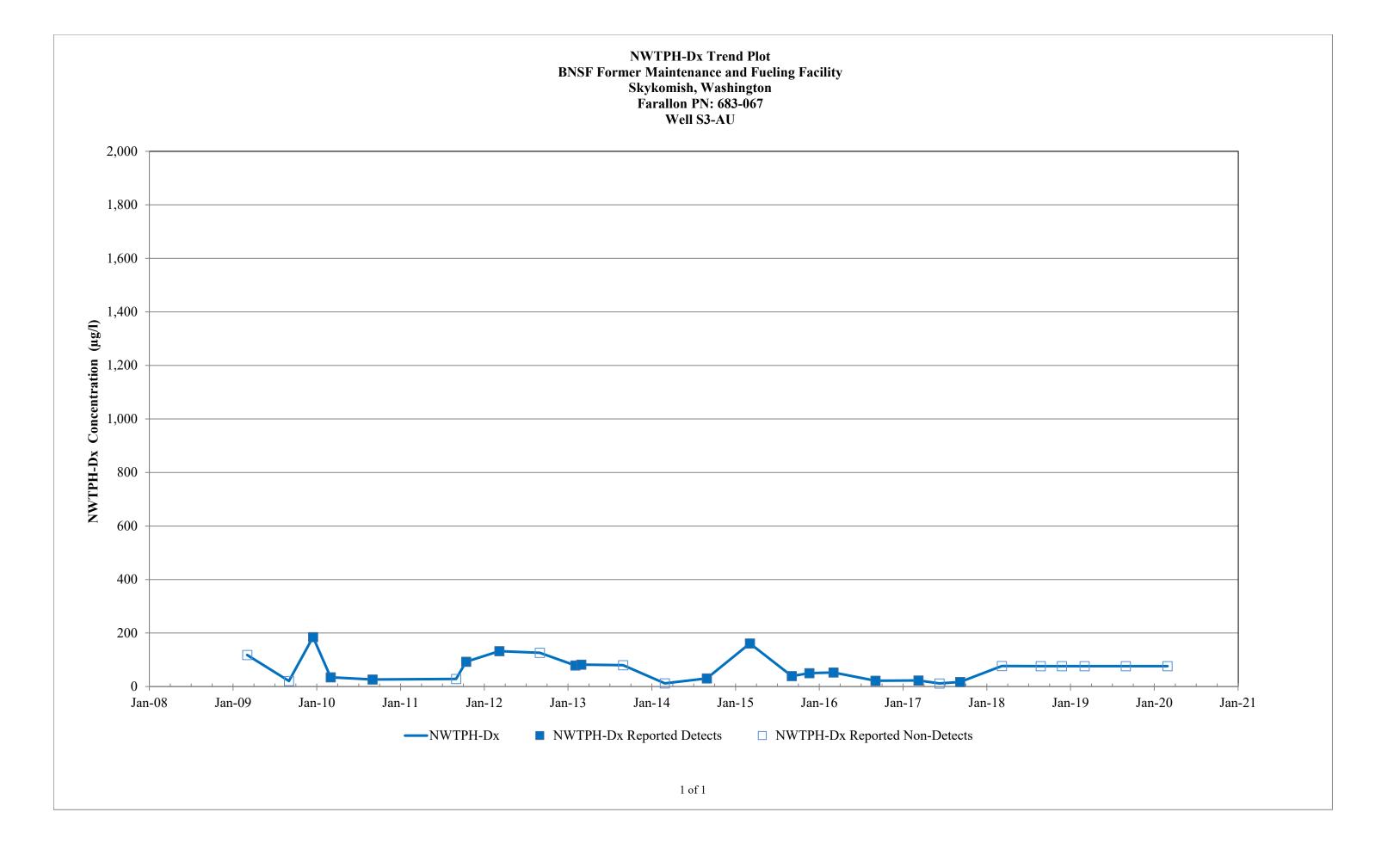


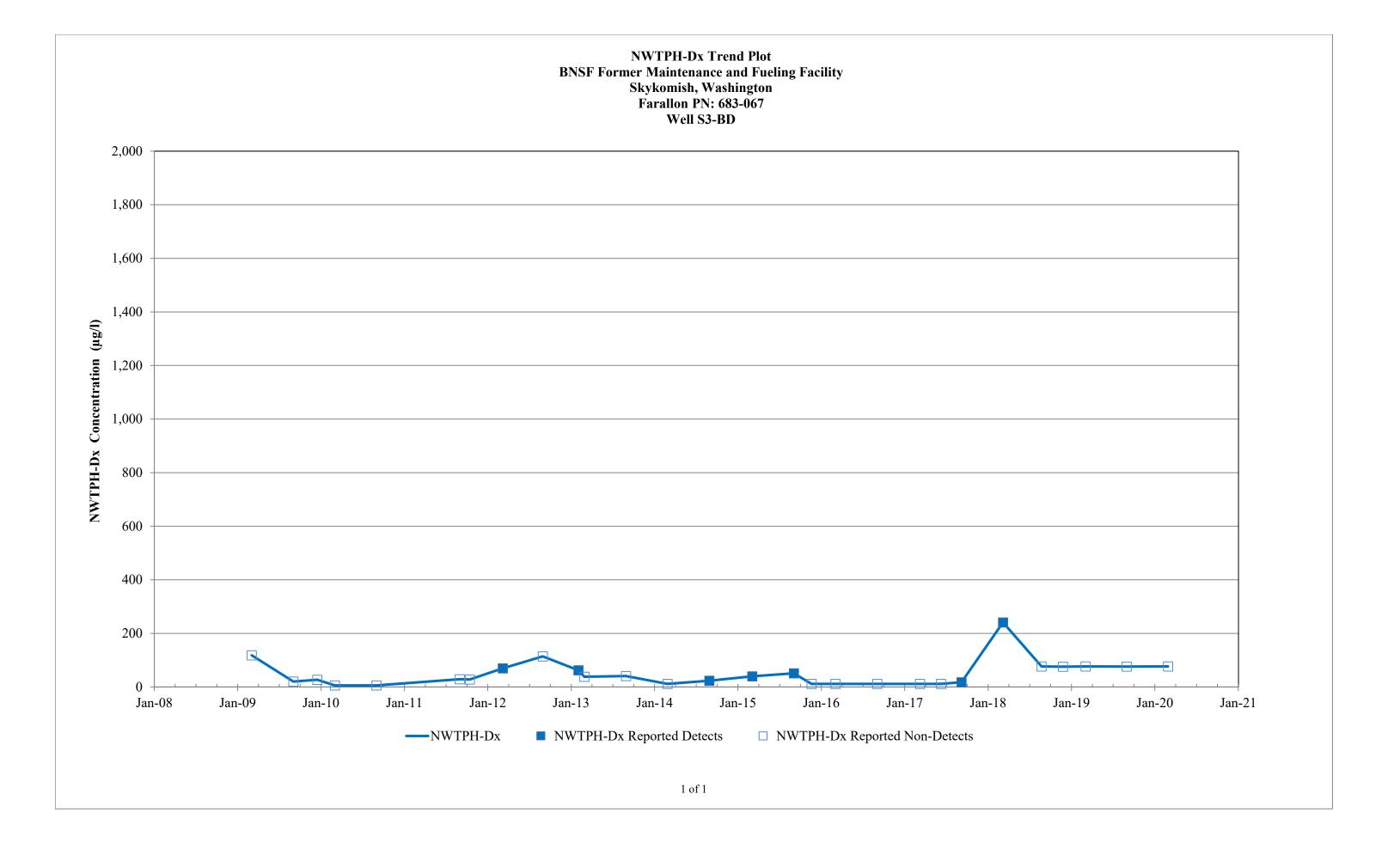


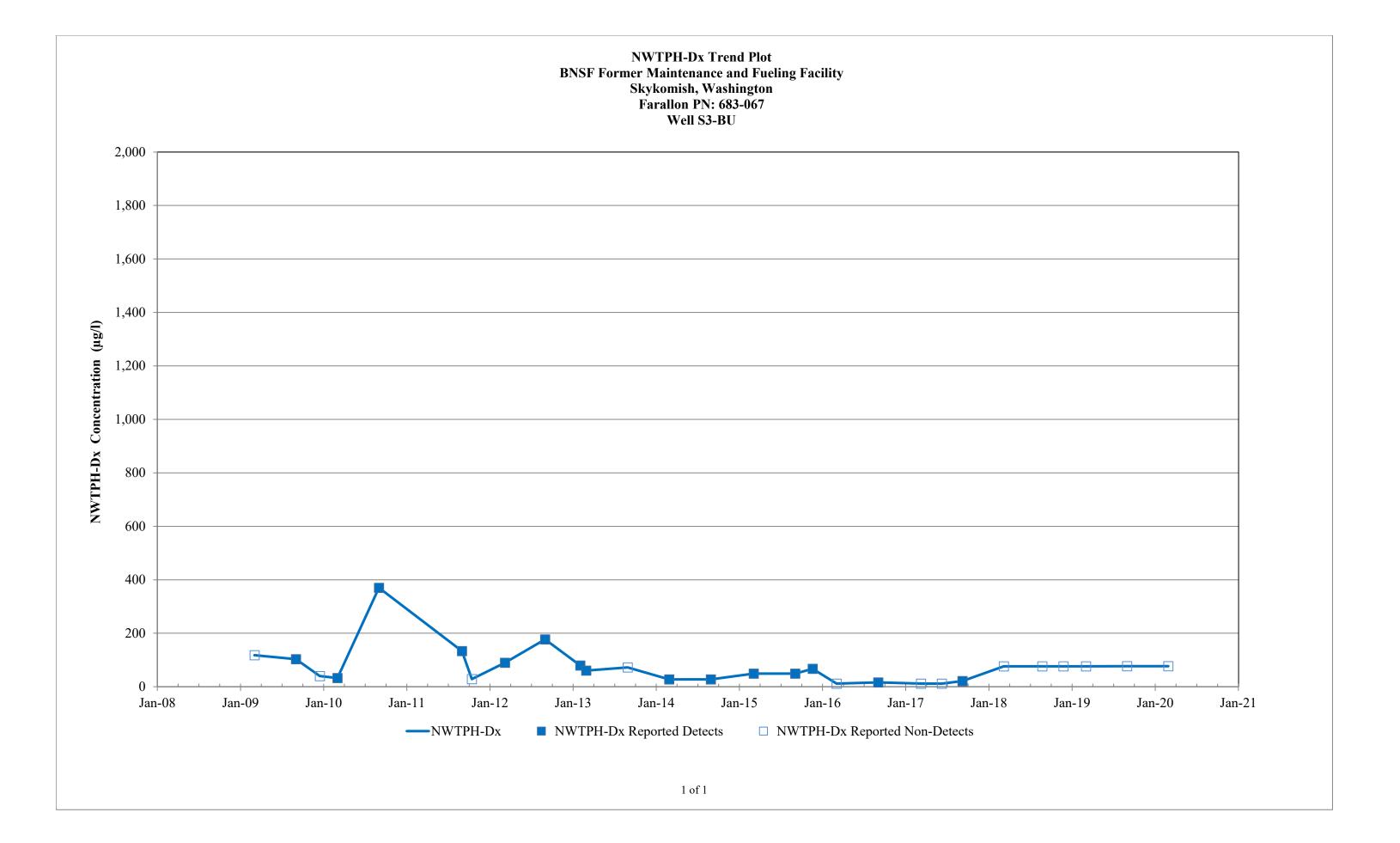


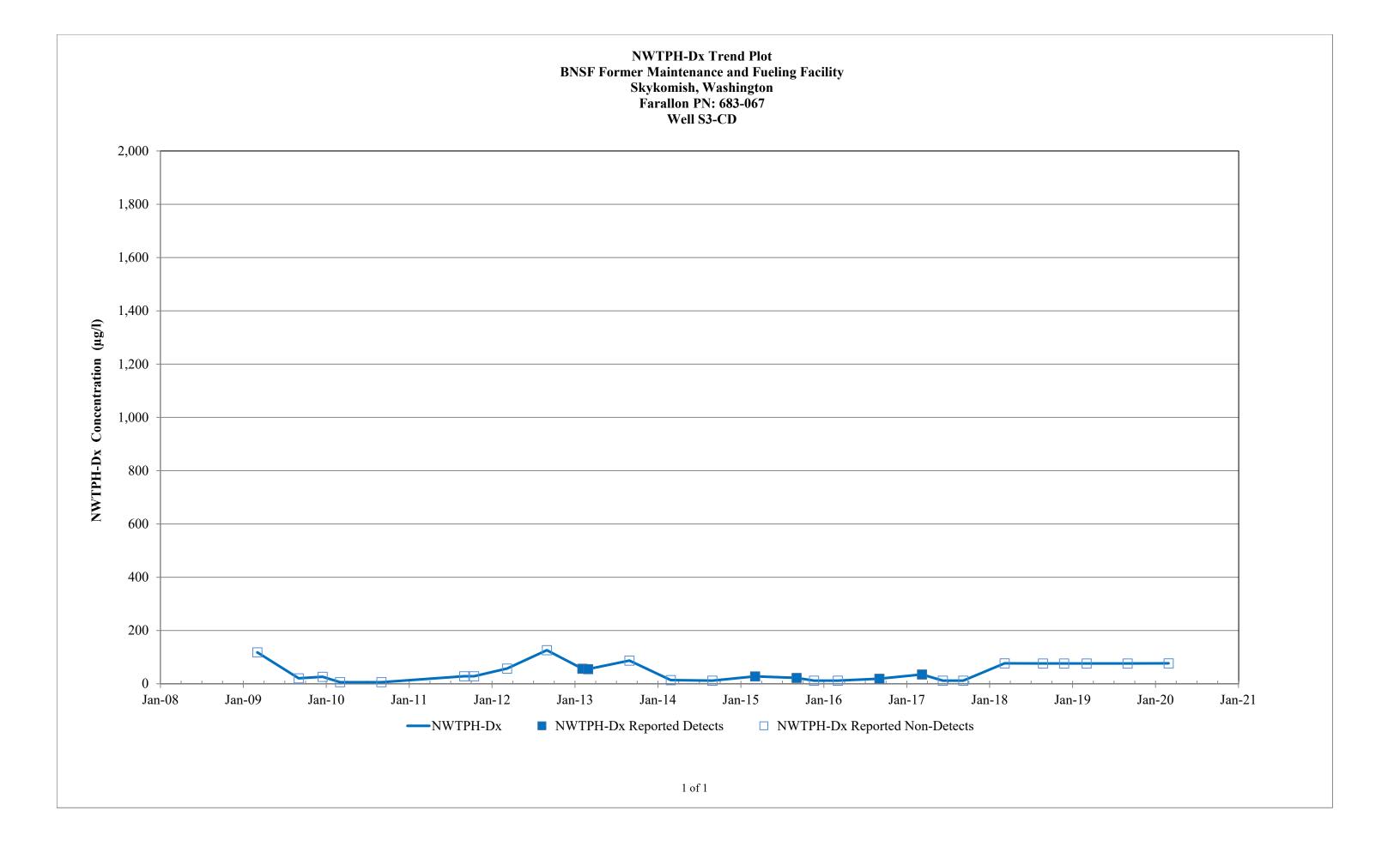


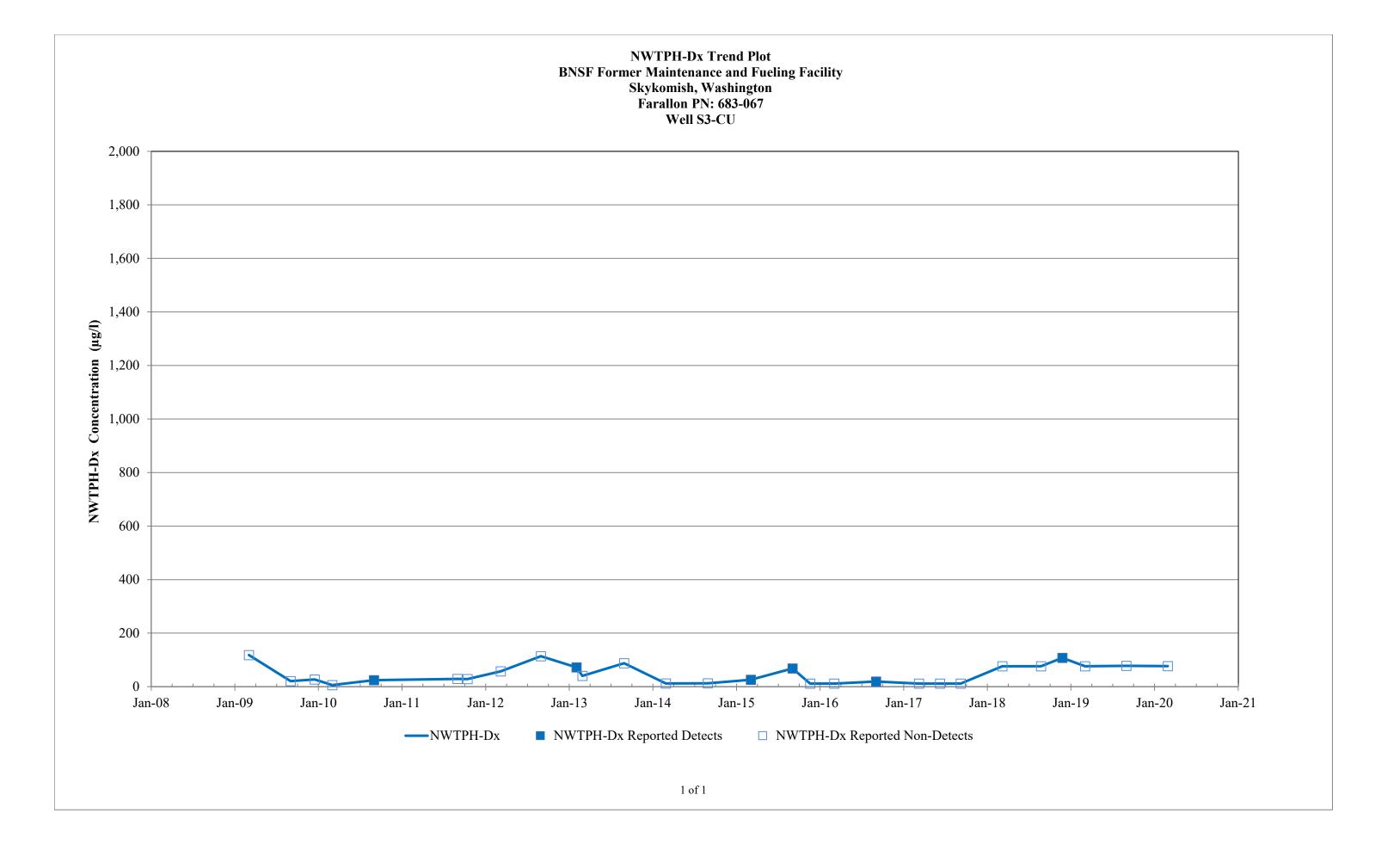


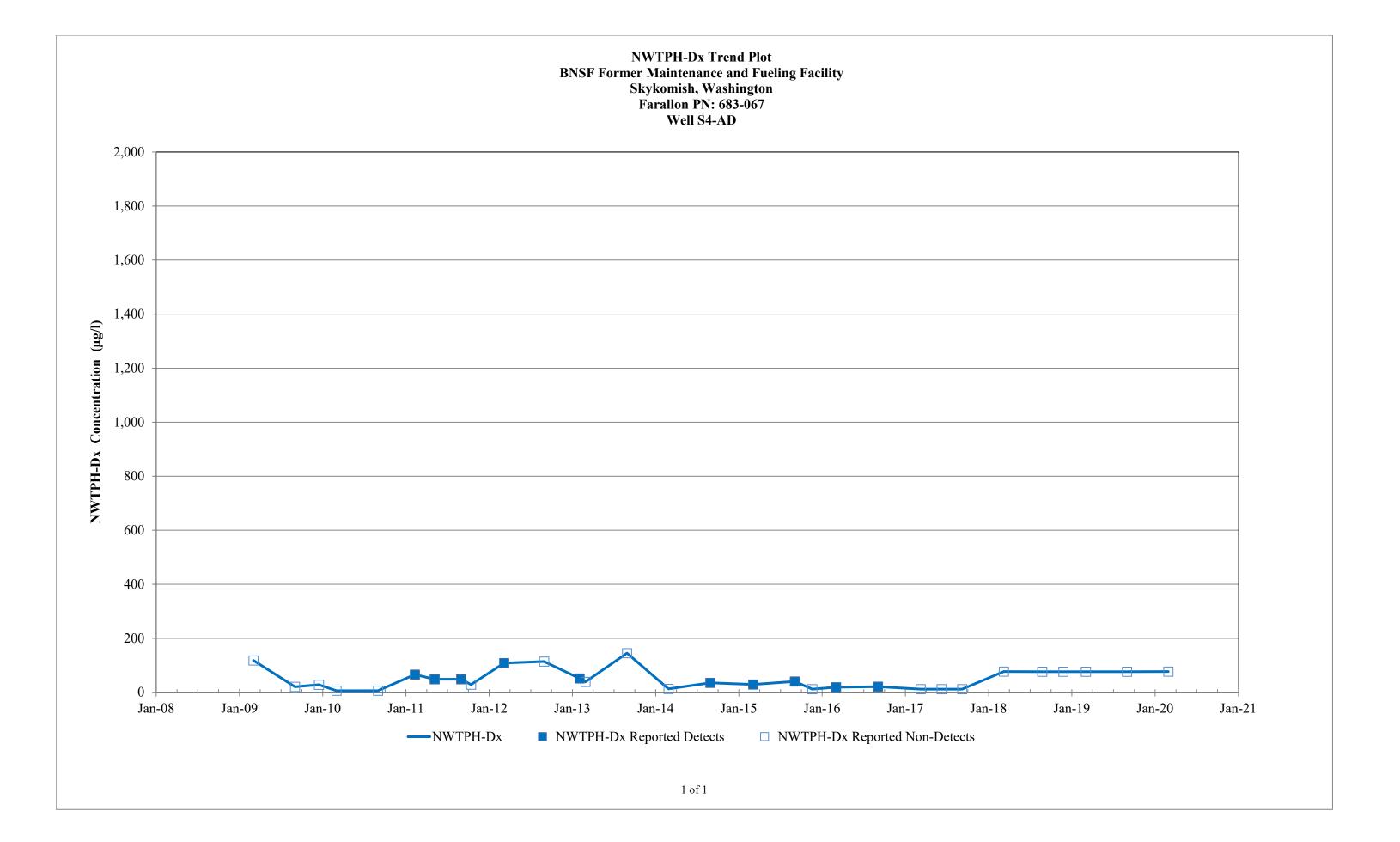


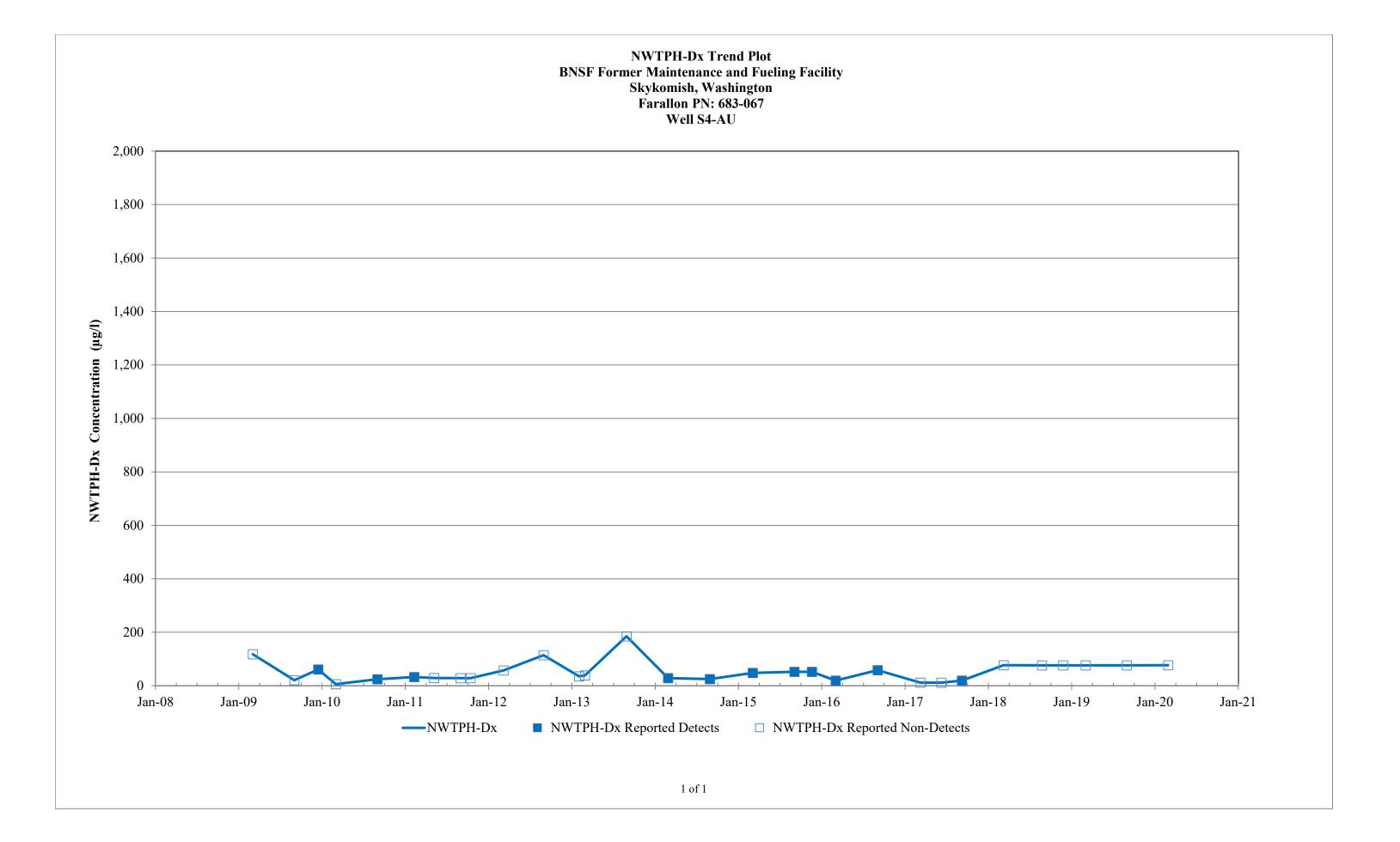


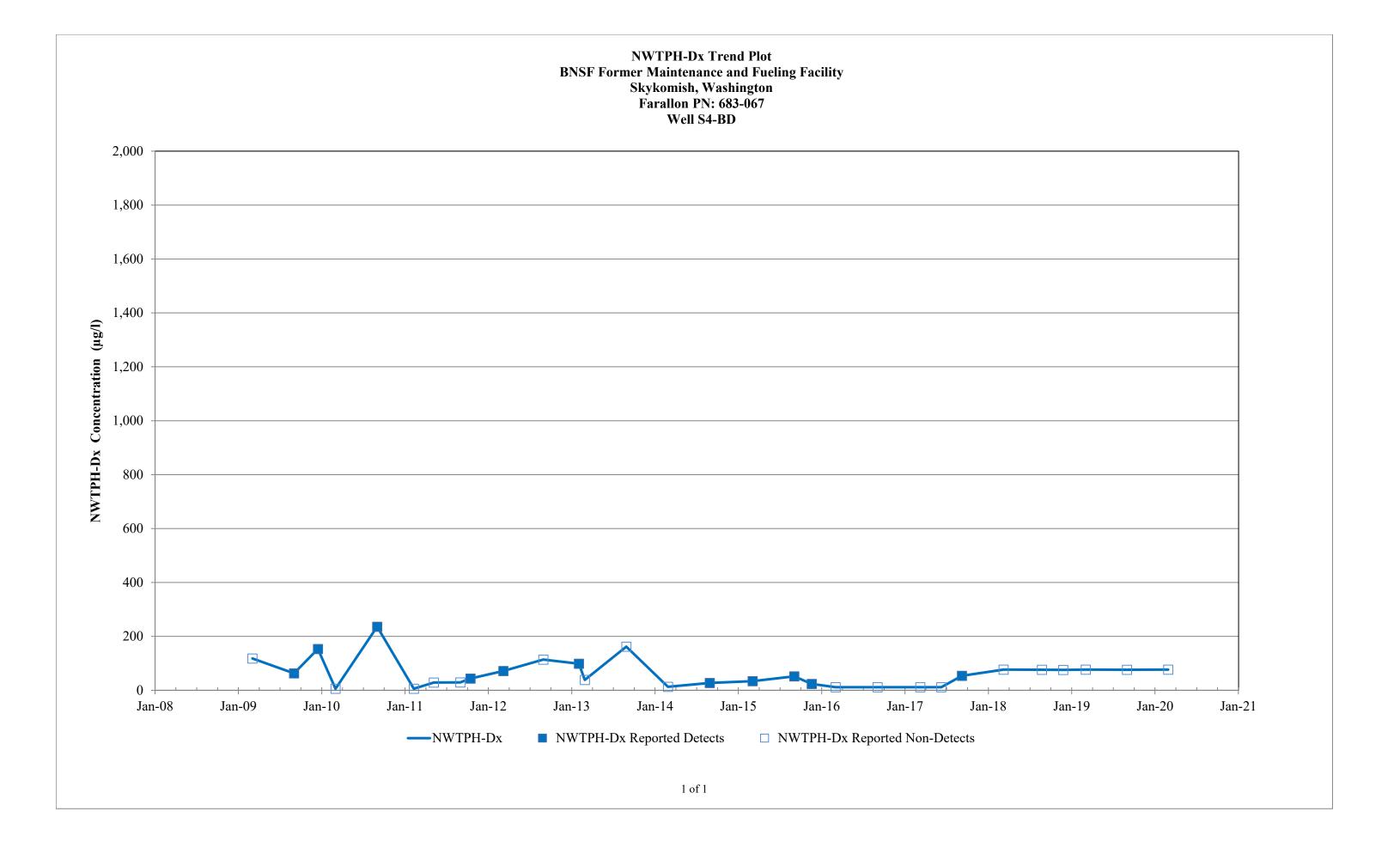


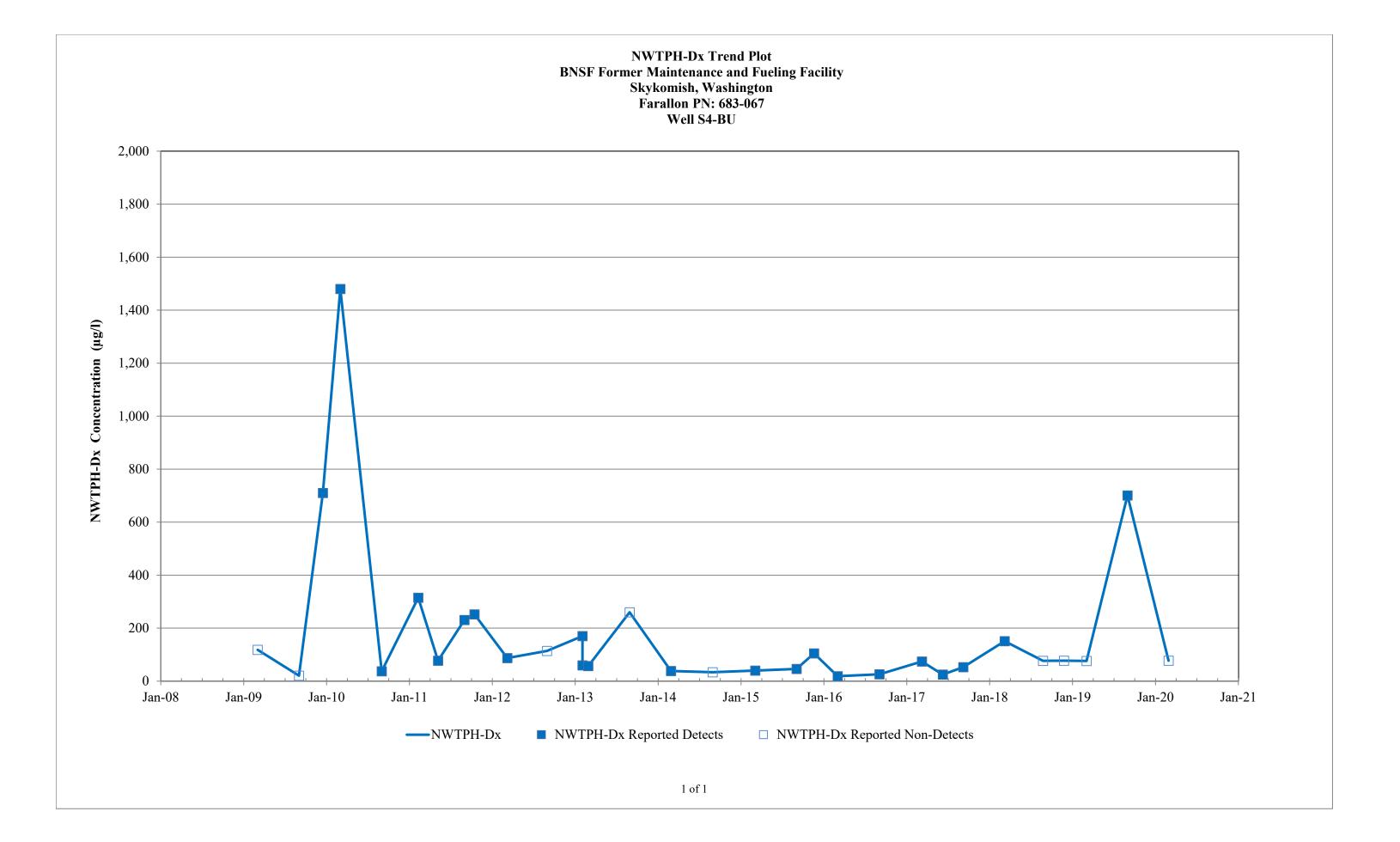


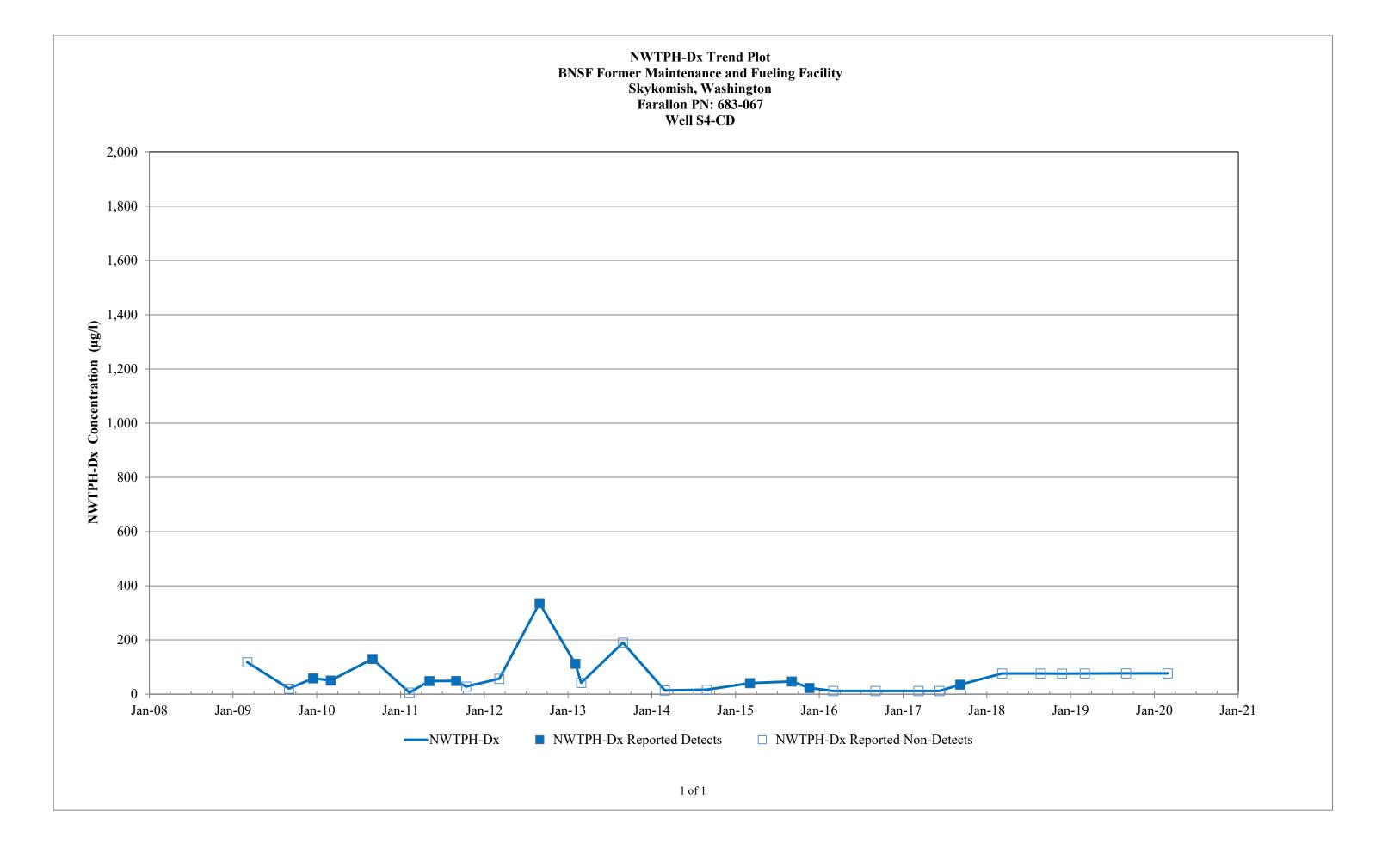


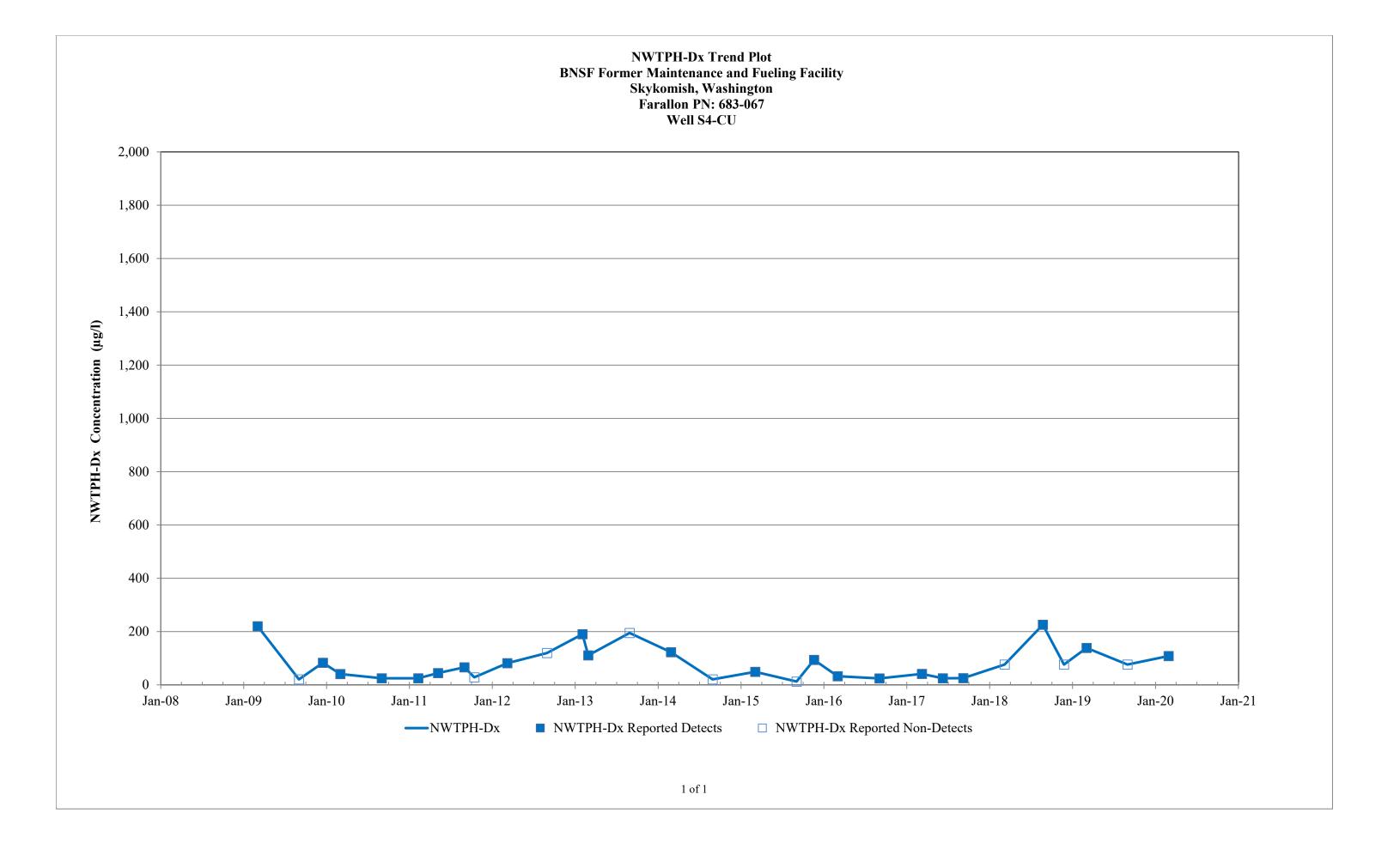




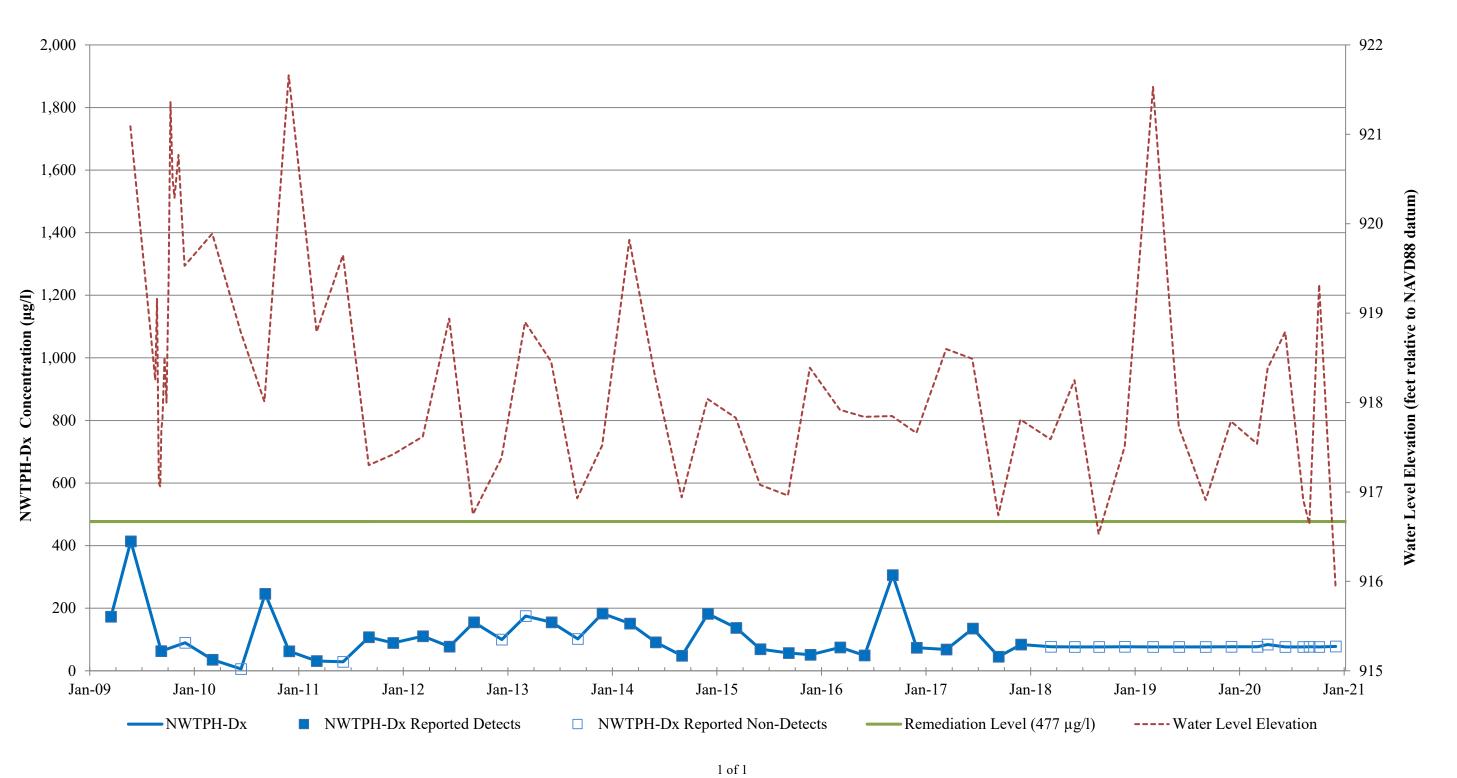




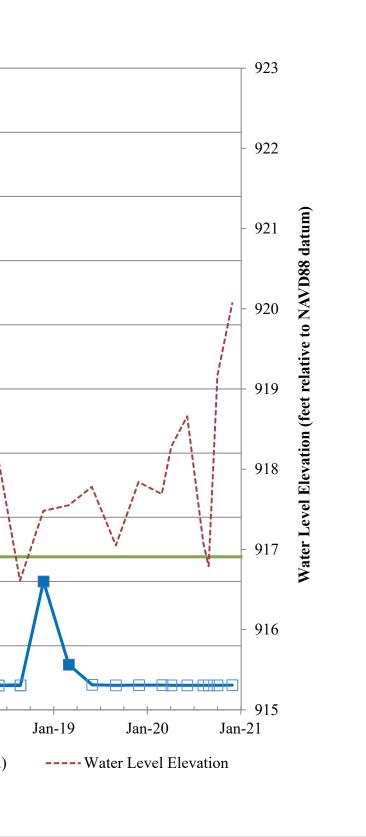




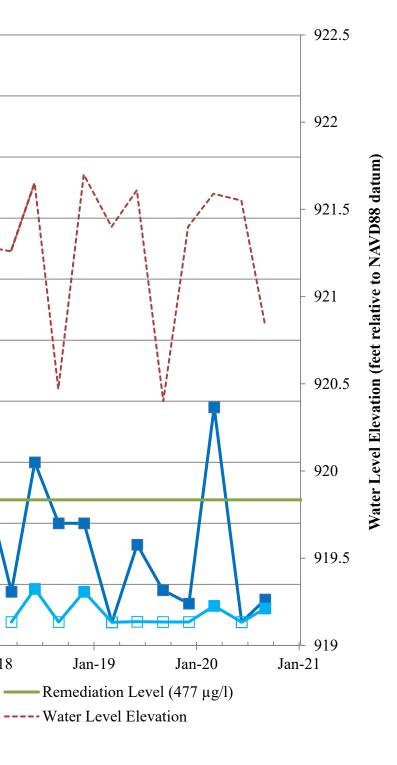
NWTPH-Dx Trend Plot BNSF Former Maintenance and Fueling Facility Skykomish, Washington Farallon PN: 683-067 Well GW-1

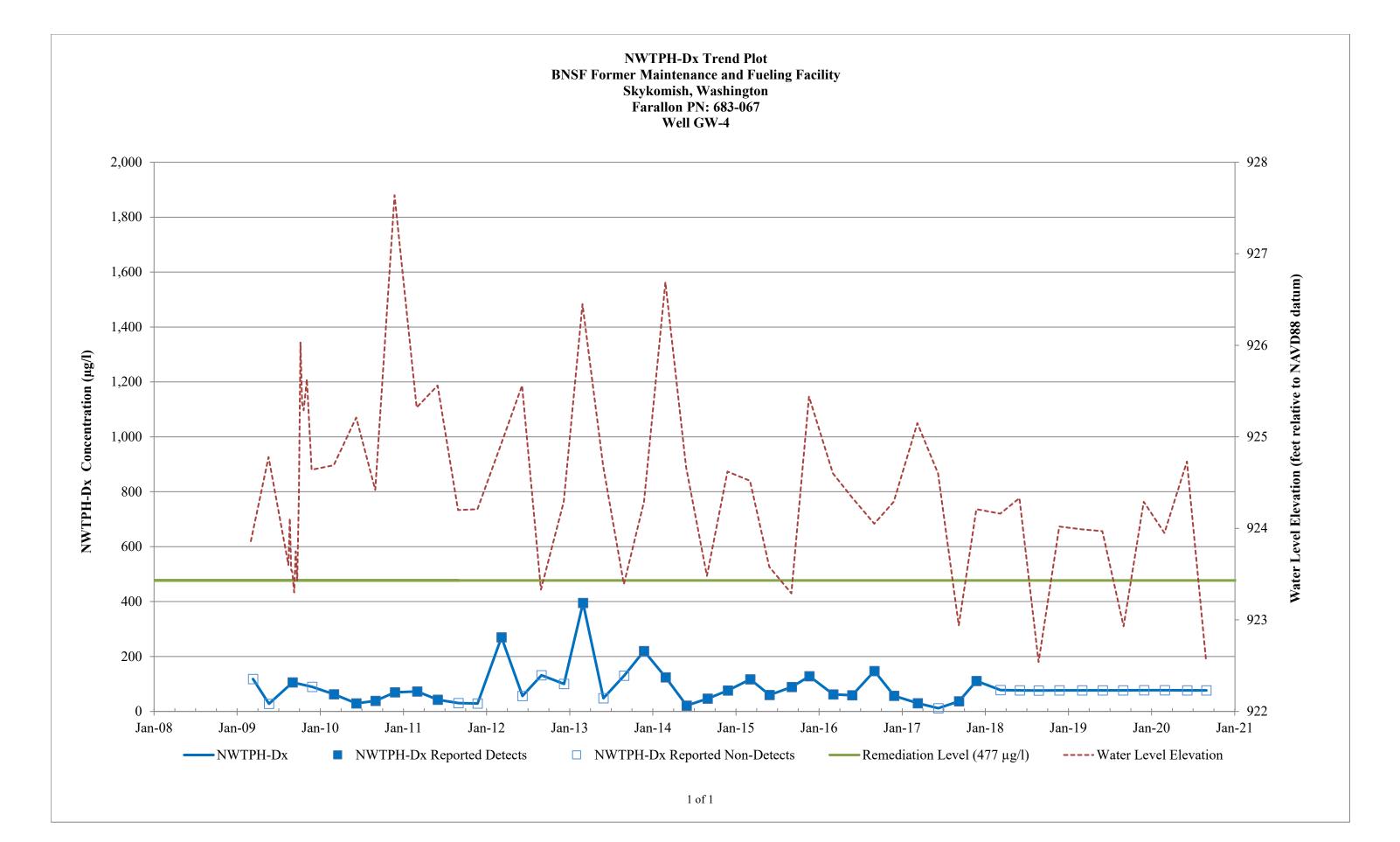


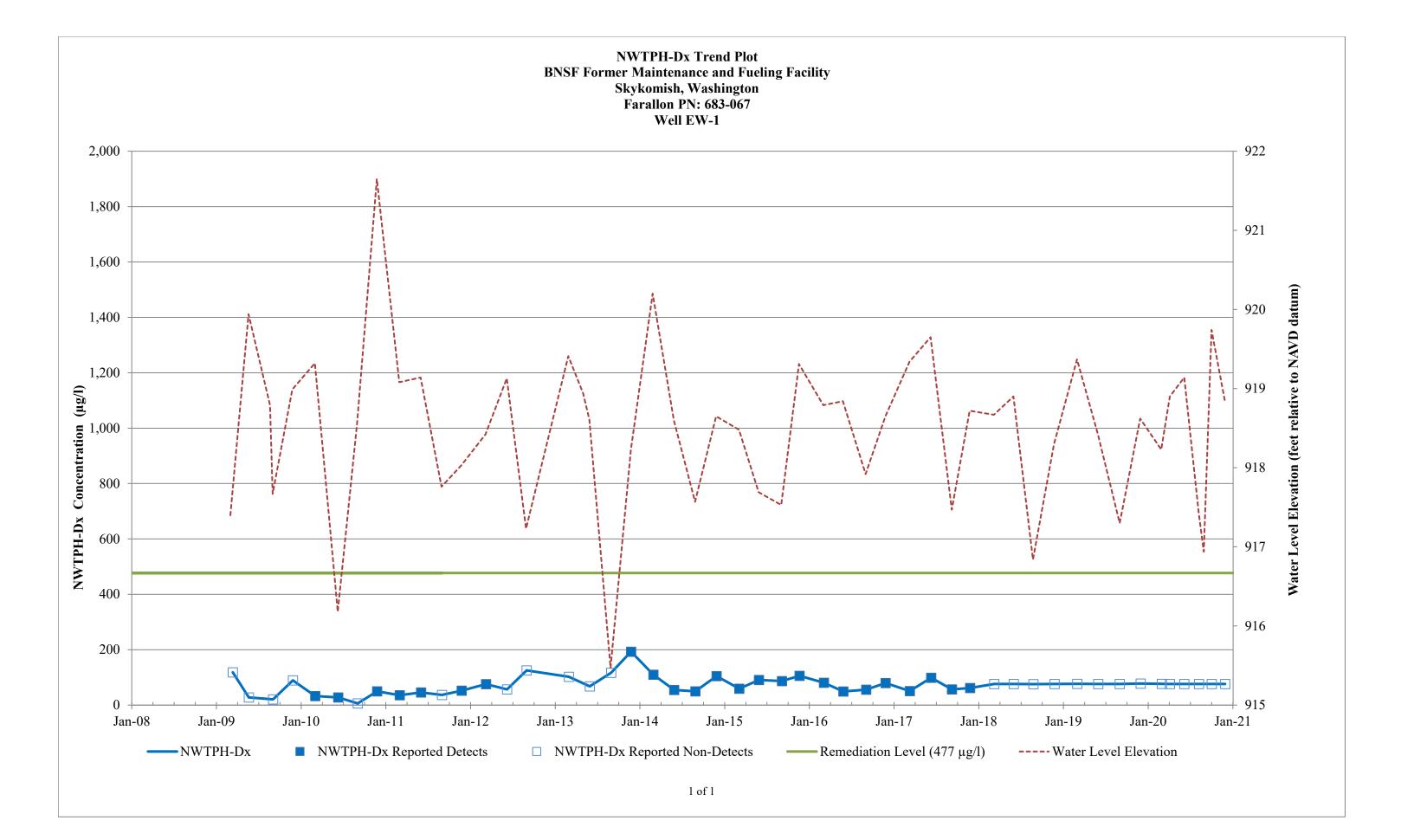
**NWTPH-Dx Trend Plot BNSF Former Maintenance and Fueling Facility** Skykomish, Washington Farallon PN: 683-067 Well GW-2 2,000 1,800 / 1,600 1,400 NWTPH-Dx Concentration (µg/l) 1,200 1,000 800 600 400 200 0 Jan-09 Jan-18 Jan-08 Jan-10 Jan-11 Jan-12 Jan-13 Jan-14 Jan-15 Jan-16 Jan-17 -NWTPH-Dx ■ NWTPH-Dx Reported Detects □ NWTPH-Dx Reported Non-Detects Remediation Level (477 µg/l) \_



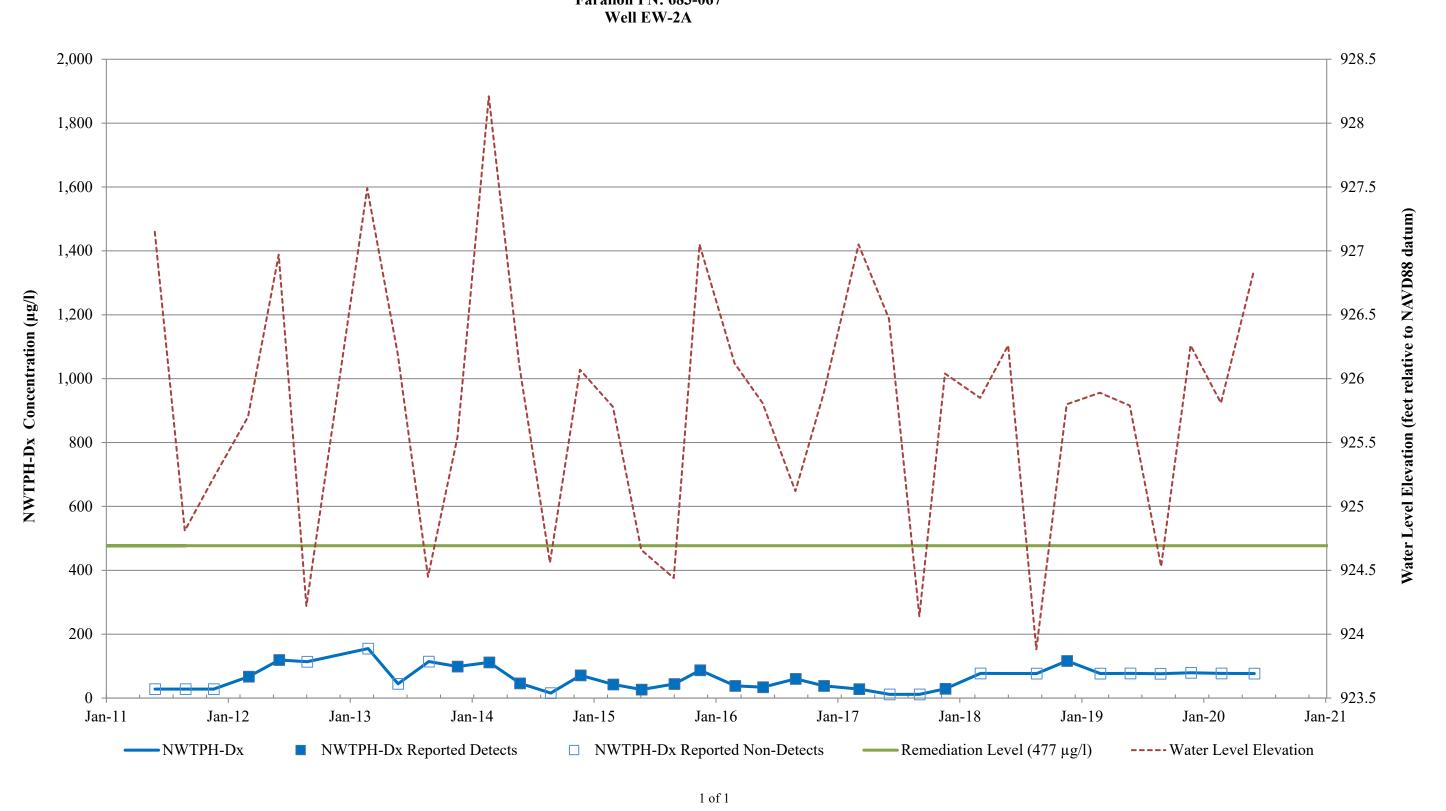
**NWTPH-Dx Trend Plot BNSF Former Maintenance and Fueling Facility** Skykomish, Washington Farallon PN: 683-067 Well GW-3 2,000 1,800 1,600 1,400 NWTPH-Dx Concentration (µg/l) 1,200 1,000 800 600 400 200 0 Jan-12 Jan-13 Jan-09 Jan-10 Jan-11 Jan-14 Jan-15 Jan-16 Jan-17 Jan-18 ■ NWTPH-Dx Reported Detects □ NWTPH-Dx Reported Non-Detects NWTPH-Dx/SGC Reported Detects □ NWTPH-Dx/SGC Reported Non-Detects ----- Water Level Elevation 1 of 1



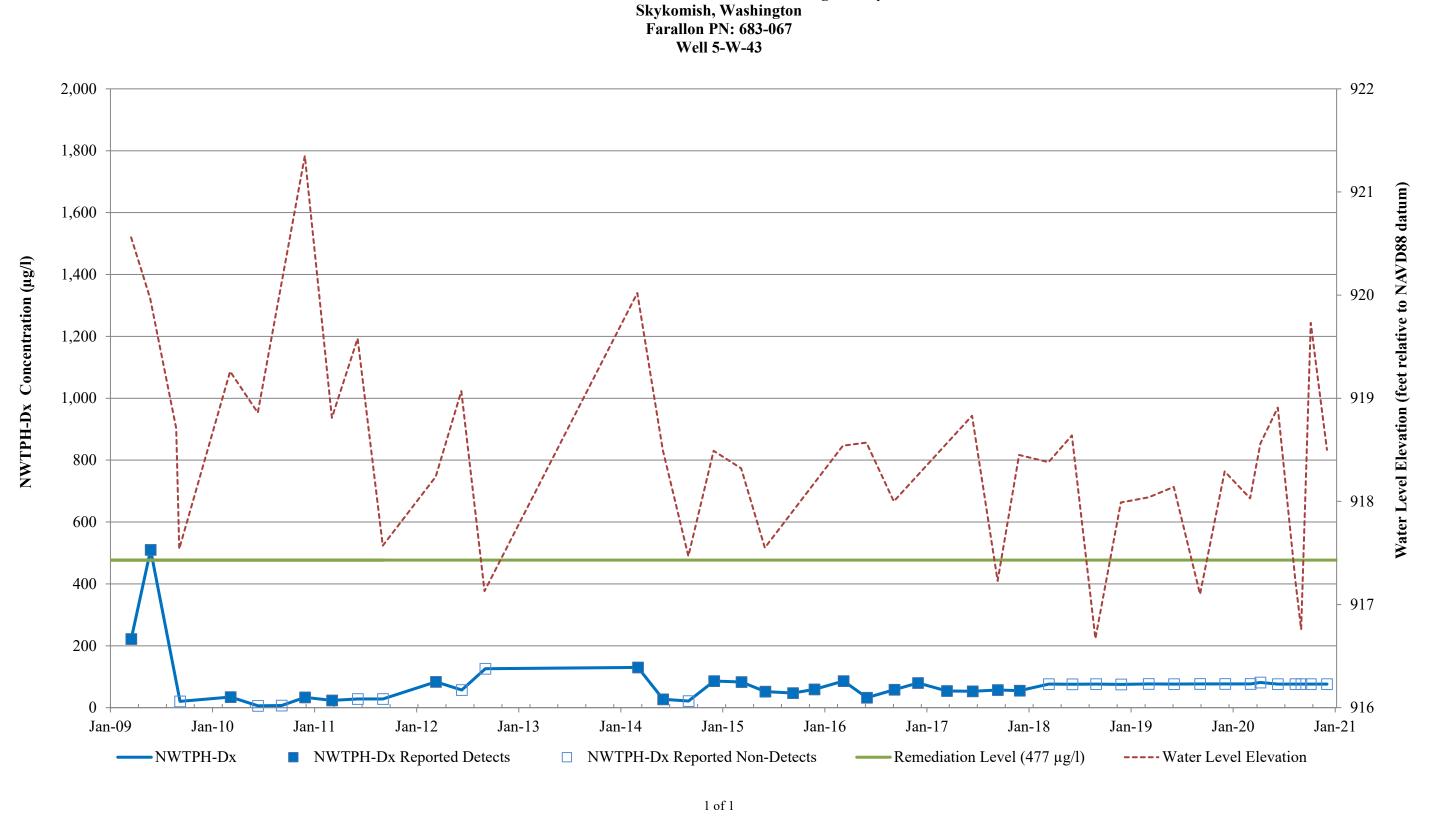


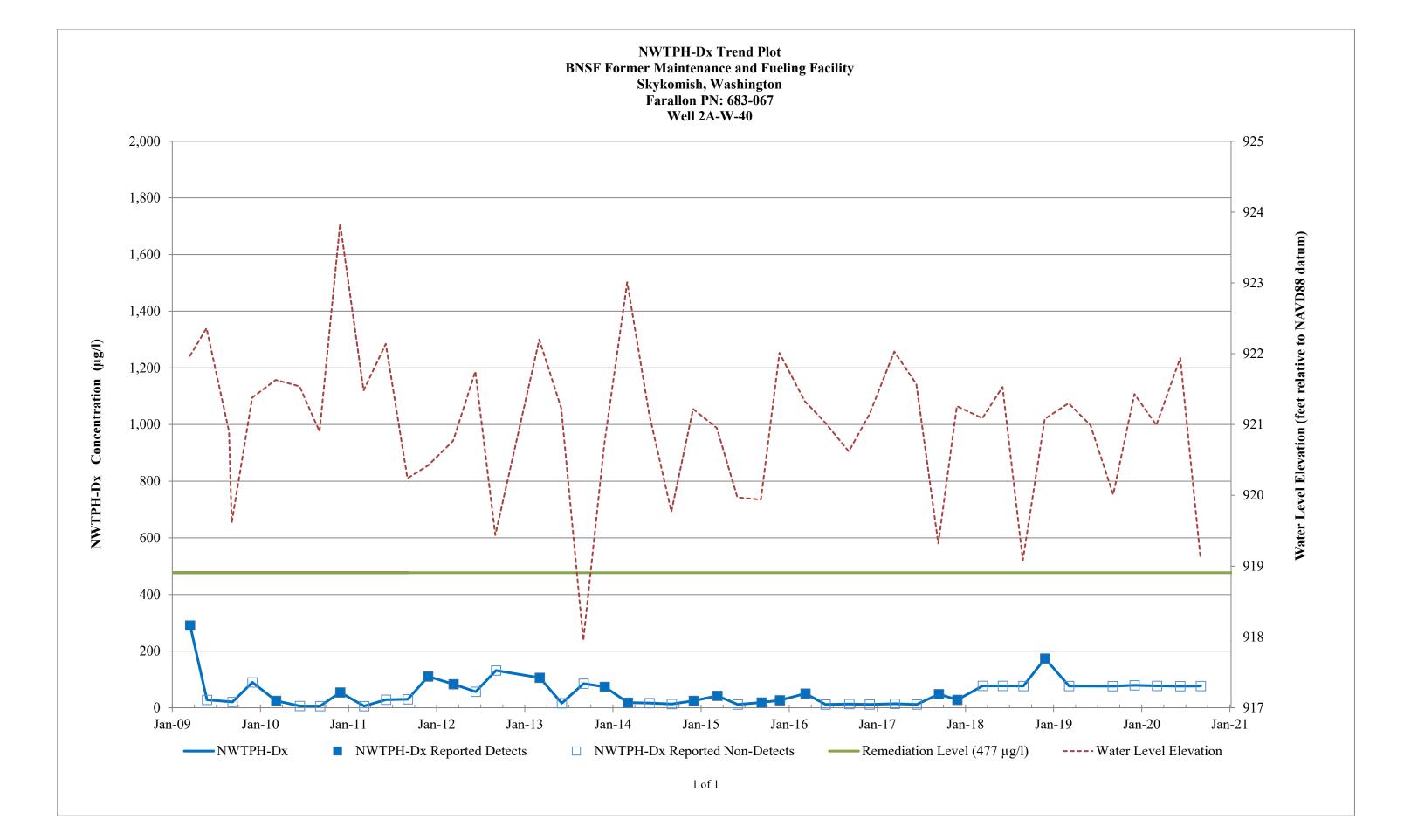


NWTPH-Dx Trend Plot BNSF Former Maintenance and Fueling Facility Skykomish, Washington Farallon PN: 683-067 Well EW-2A

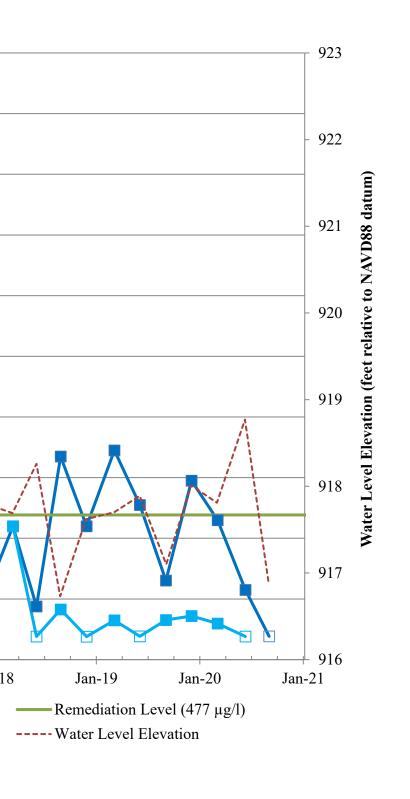


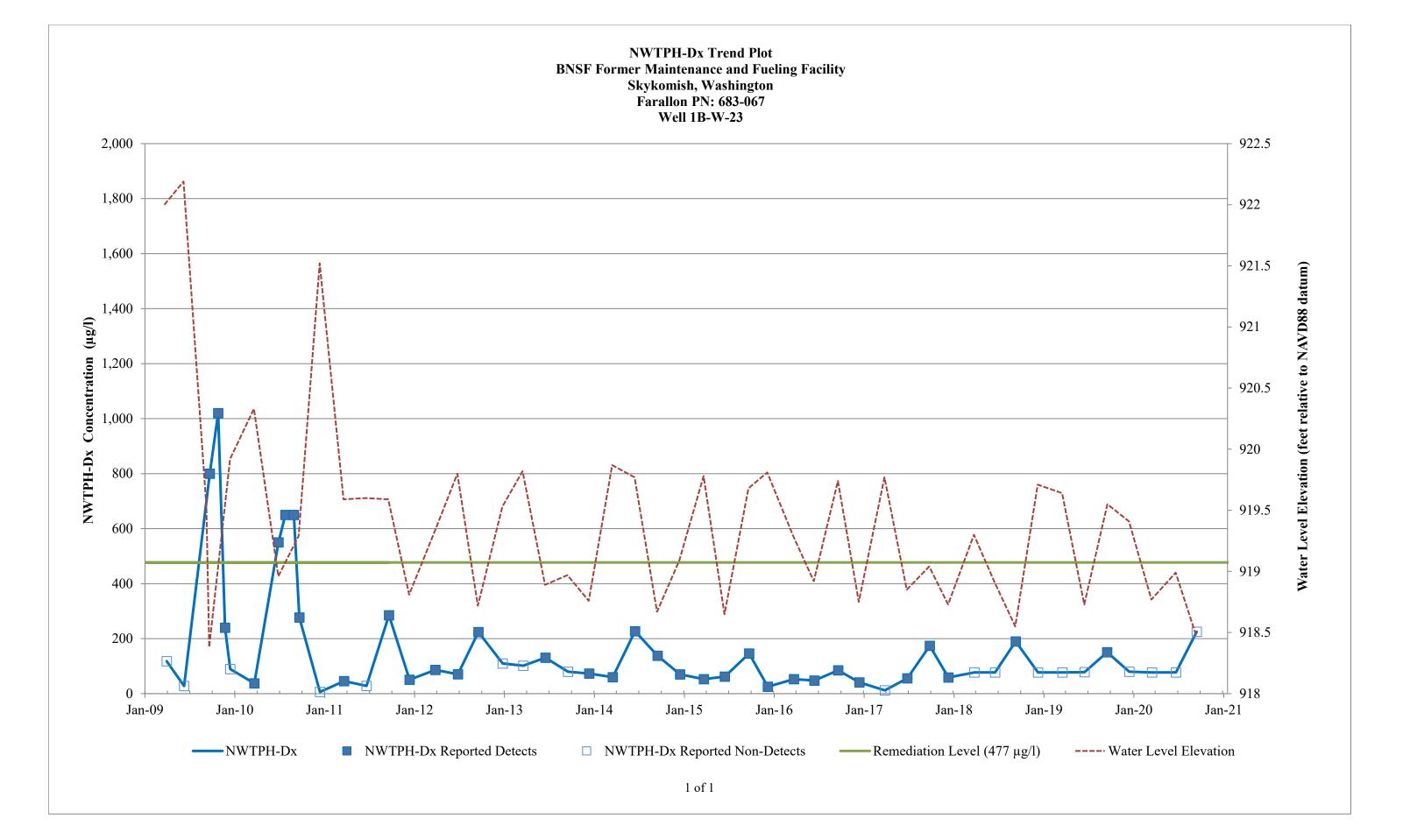
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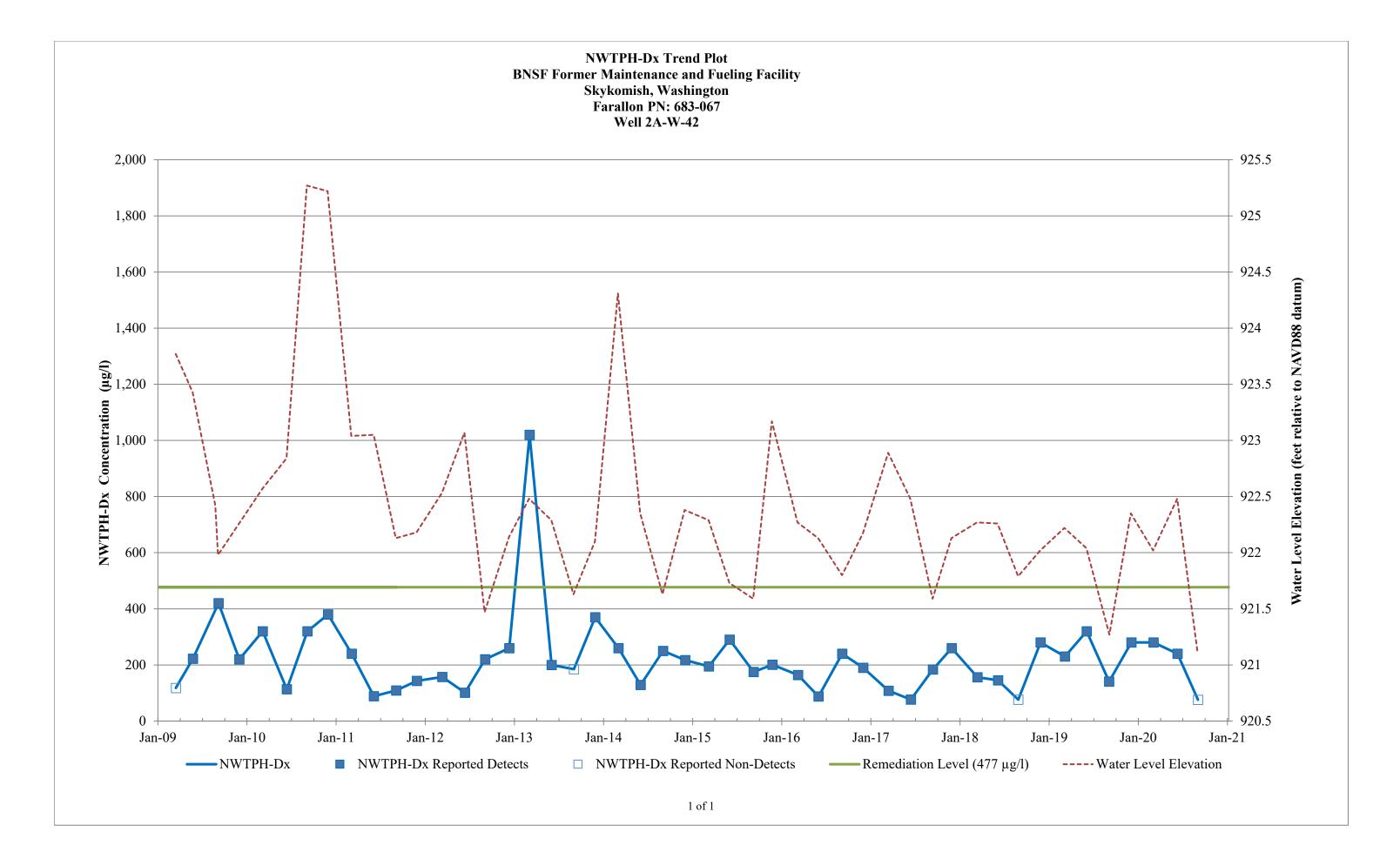




**NWTPH-Dx Trend Plot BNSF Former Maintenance and Fueling Facility** Skykomish, Washington Farallon PN: 683-067 Well 2A-W-41 2,000 1,800 1,600 1,400 NWTPH-Dx Concentration (µg/l) 1,200 1,000 800 600 400 200 0 Jan-13 Jan-09 Jan-10 Jan-11 Jan-12 Jan-14 Jan-15 Jan-16 Jan-17 Jan-18 ■ NWTPH-Dx Reported Detects □ NWTPH-Dx Reported Non-Detects □ NWTPH-Dx/SGC Reported Non-Detects ■ NWTPH-Dx/SGC Reported Detects 1 of 1



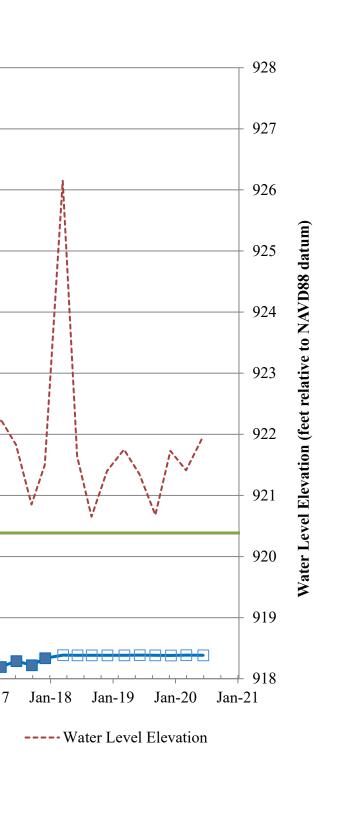


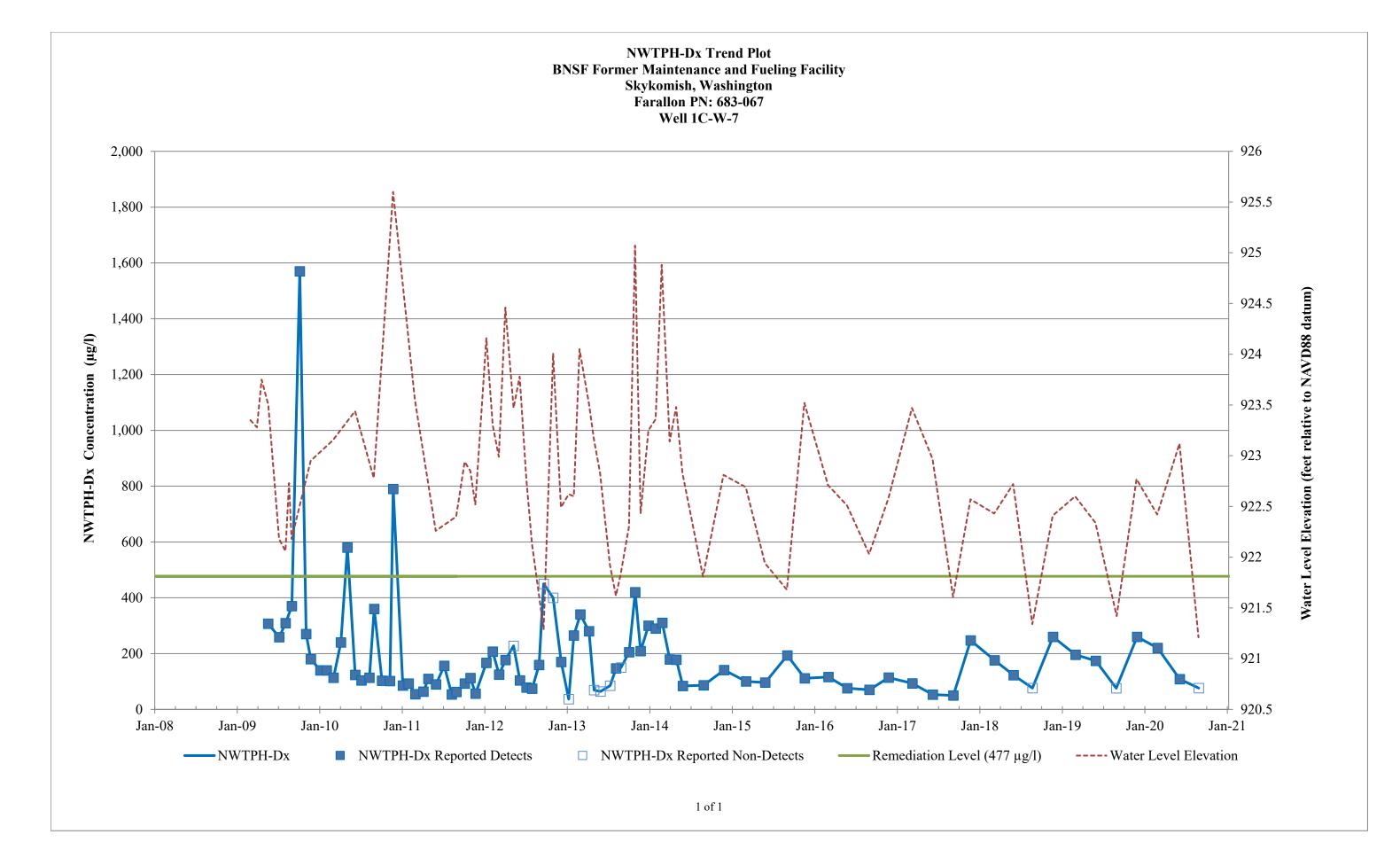


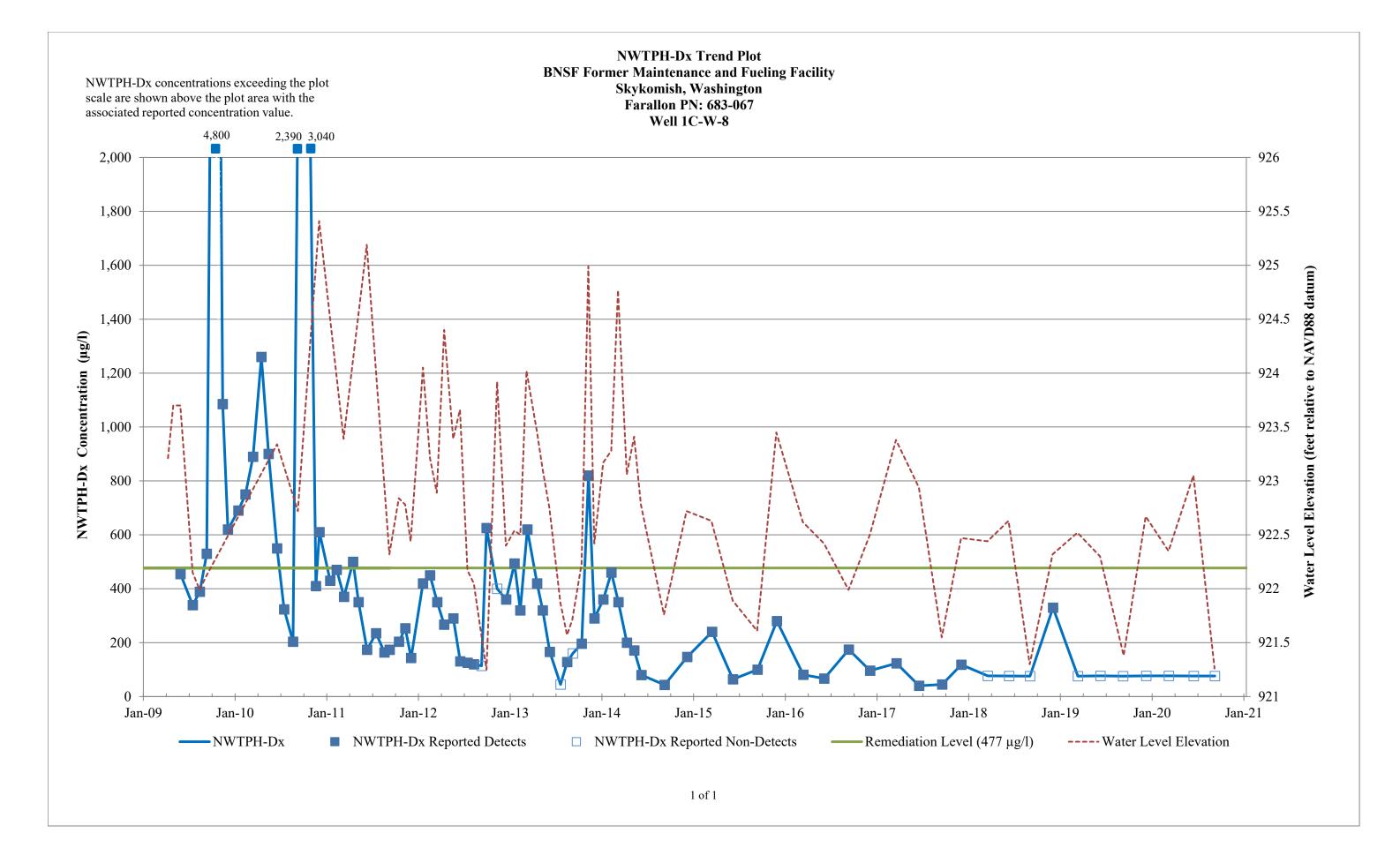
## Former Air Sparge Area Monitoring Wells

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 2,000 1,800 1,600 1,400 NWTPH-Dx Concentration (µg/l) 1'000 800 900 900 400 200 0 Jan-01 Jan-02 Jan-03 Jan-04 Jan-05 Jan-06 Jan-07 Jan-08 Jan-09 Jan-10 Jan-11 Jan-12 Jan-13 Jan-14 Jan-15 Jan-16 Jan-17 Jan-18 Jan-19 Jan-20 Jan-21 ■ NWTPH-Dx Reported Detects □ NWTPH-Dx Reported Non-Detects ----- Remediation Level (477 µg/l)

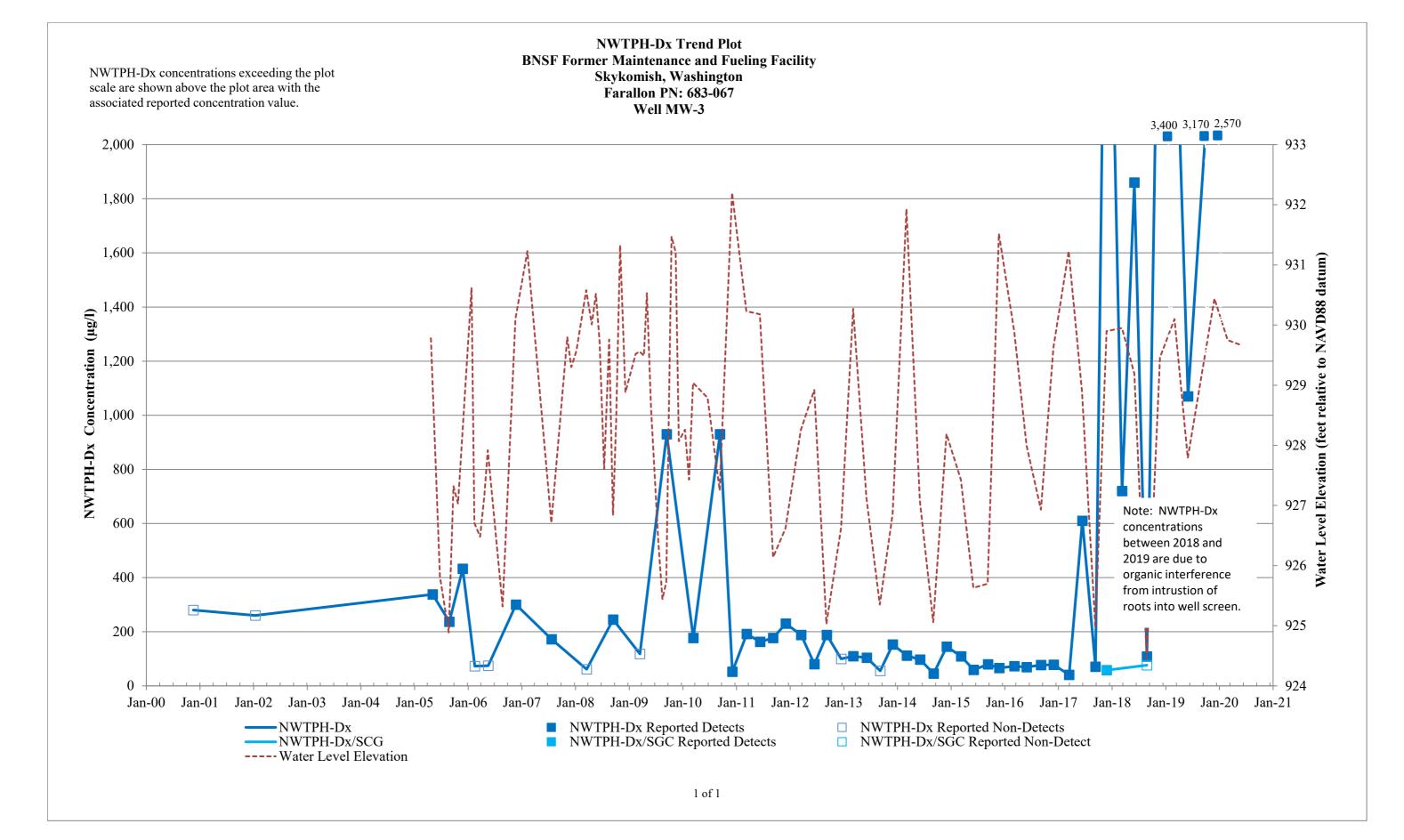


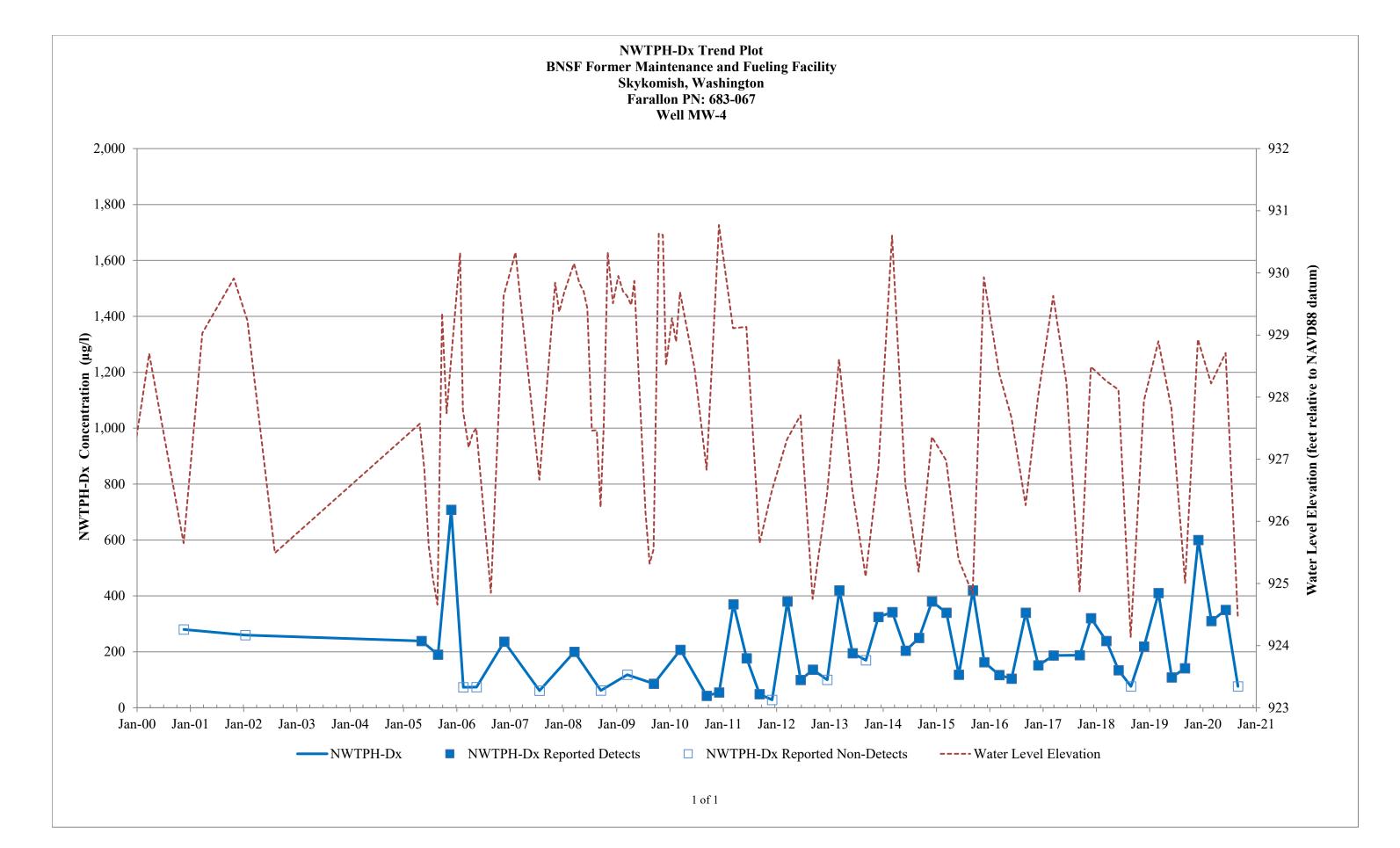


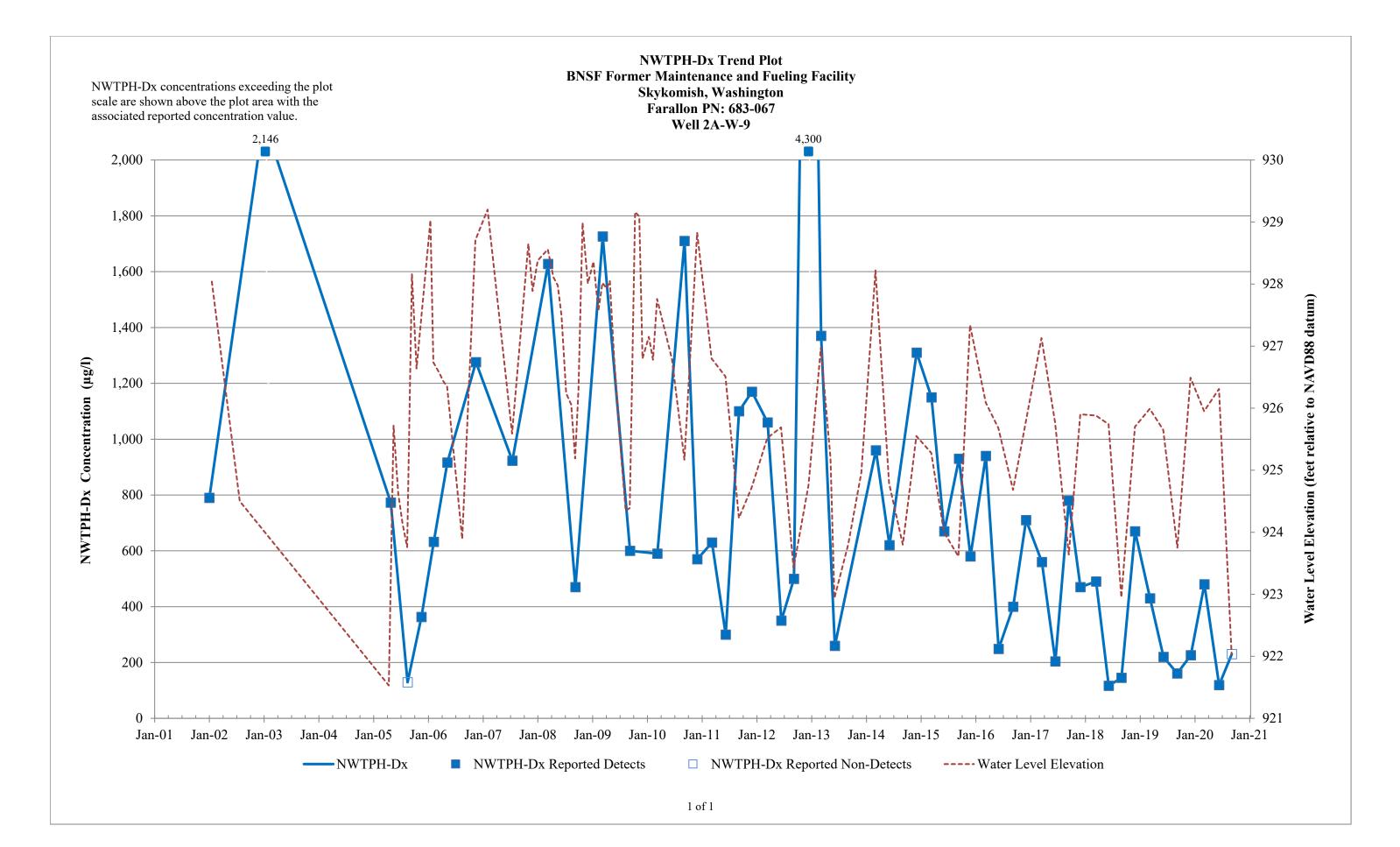


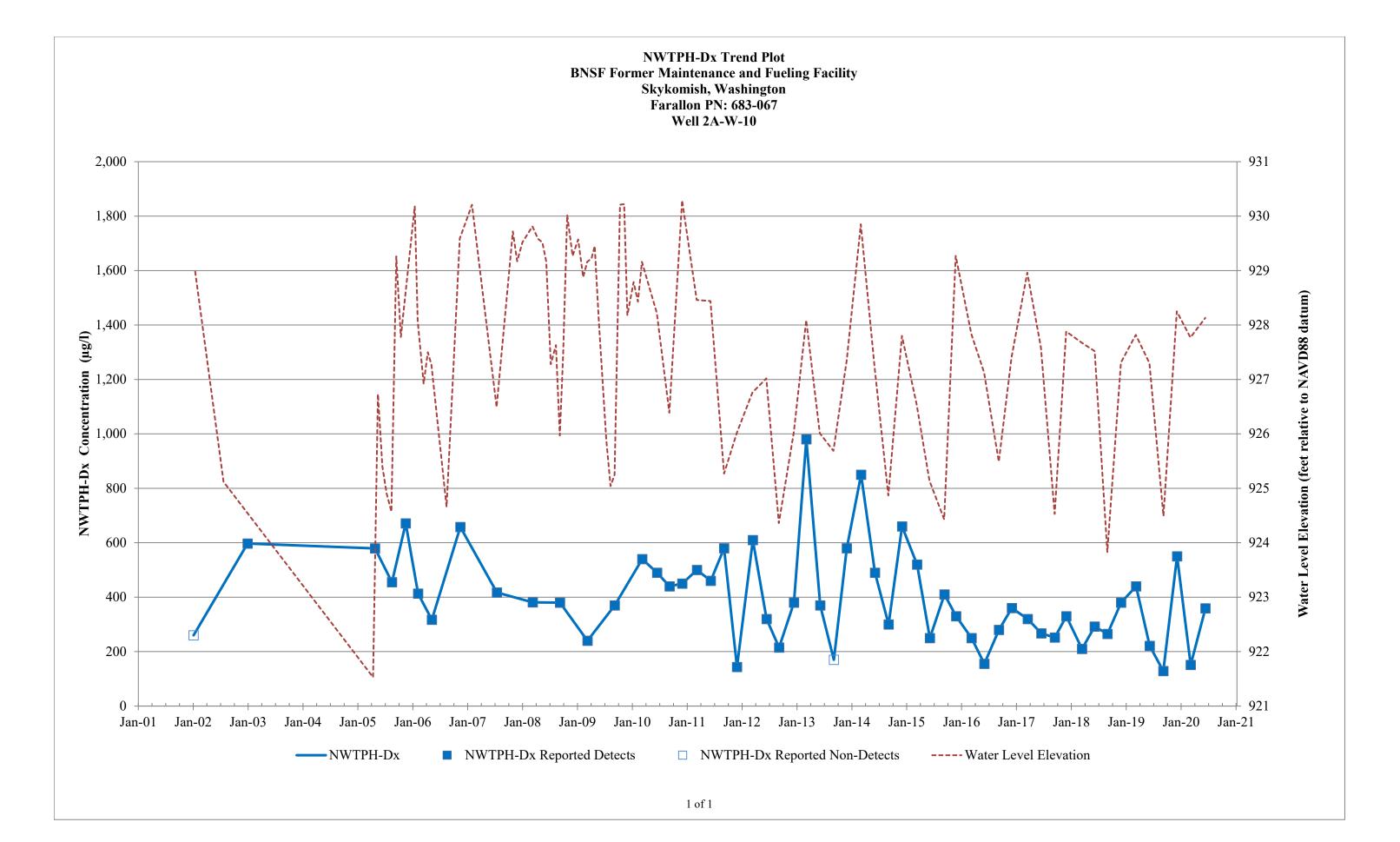
## Former Maloney Creek Zone Monitoring Wells

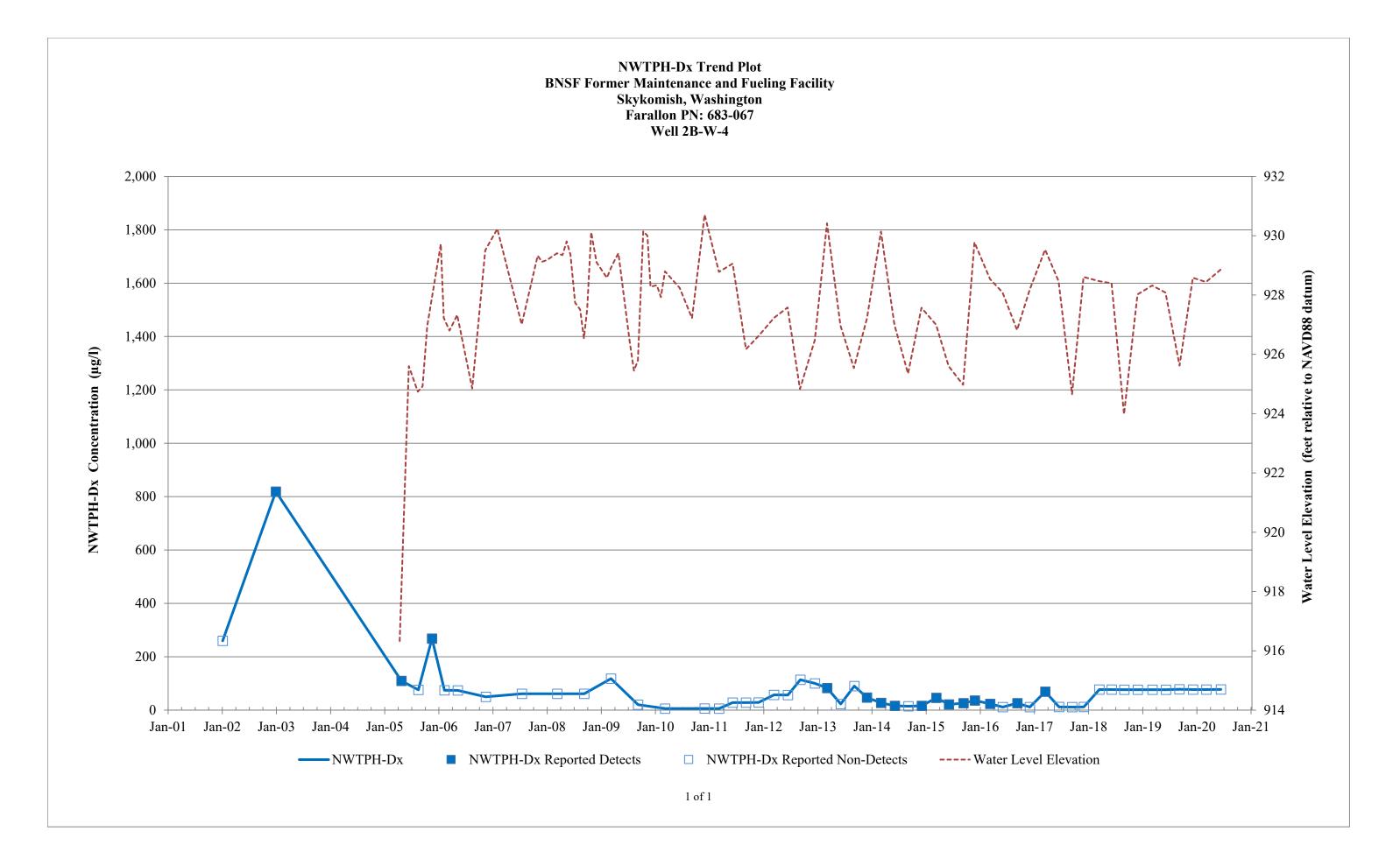
Note: Former Maloney Creek Zone monitoring wells are located within the railyard and NWTPH-Dx groundwater results from these wells have no NWTPH-Dx target.





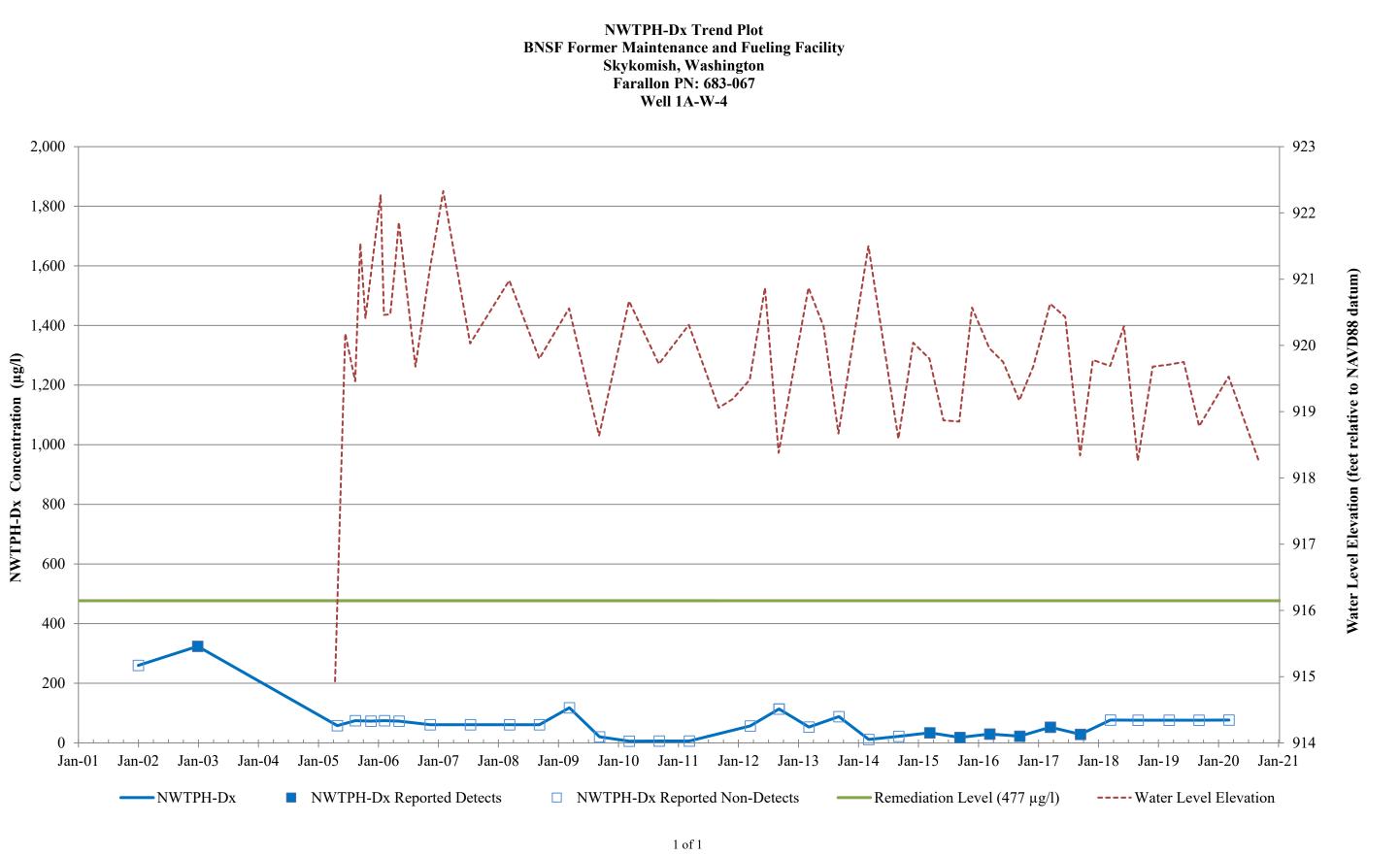


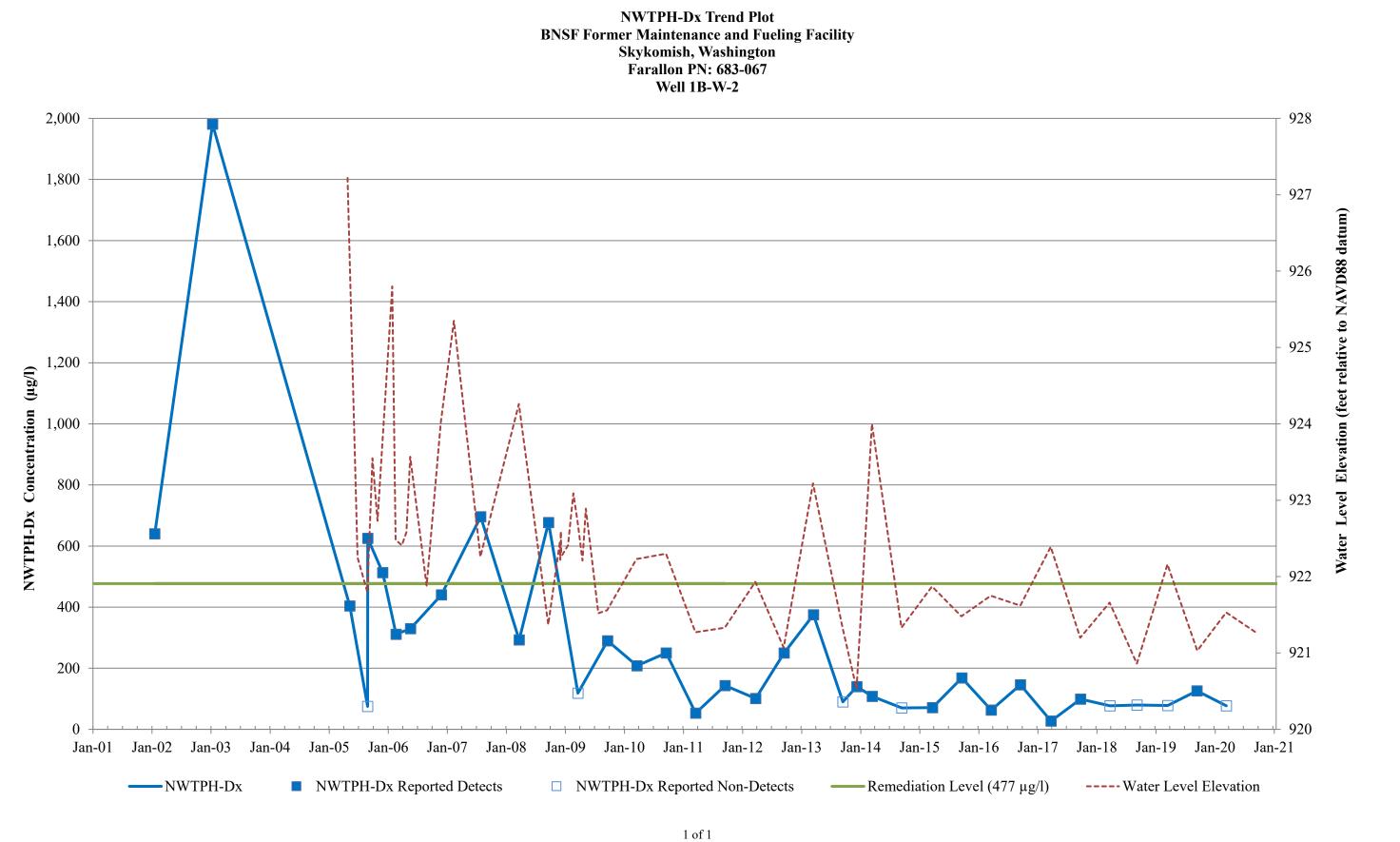


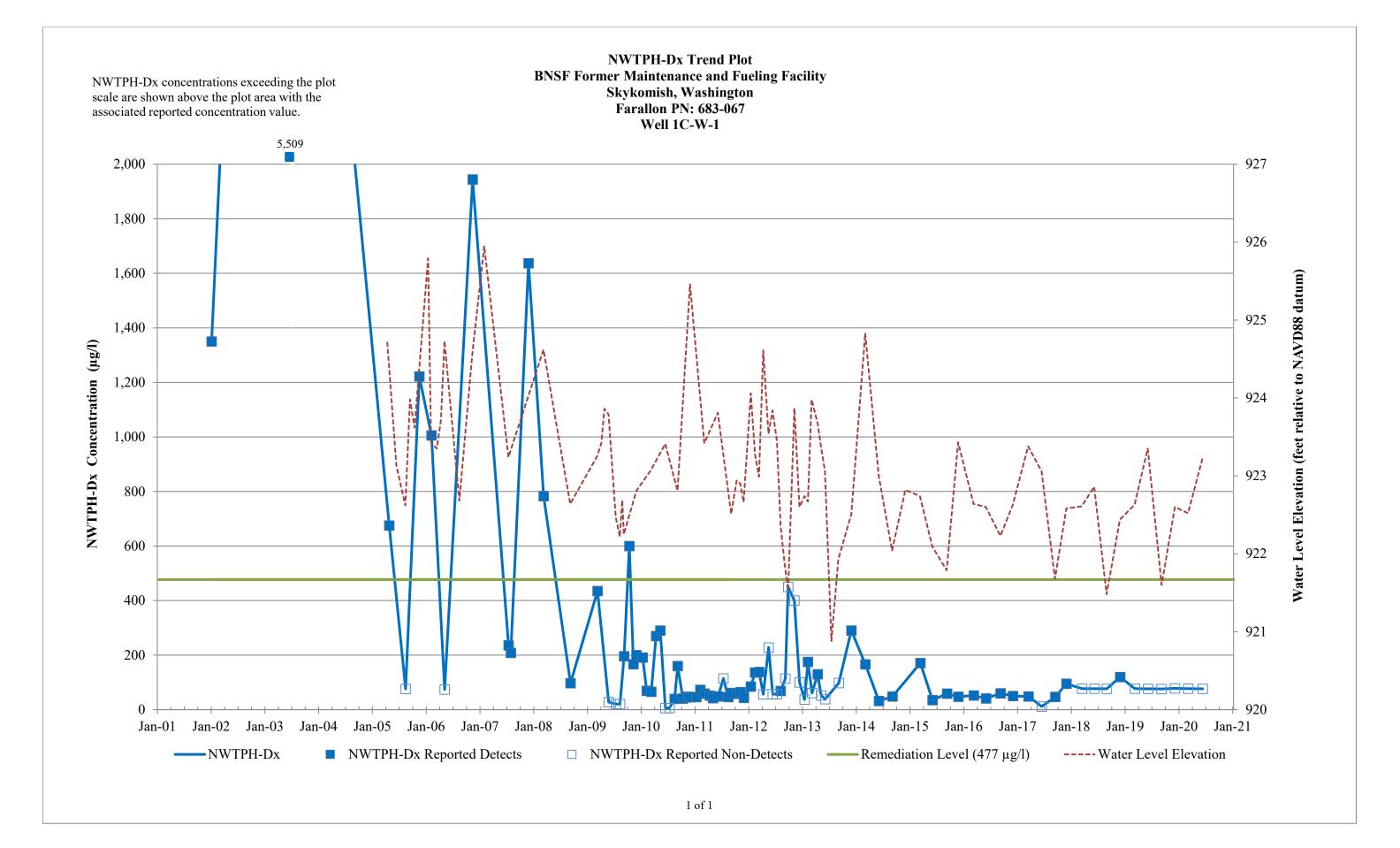


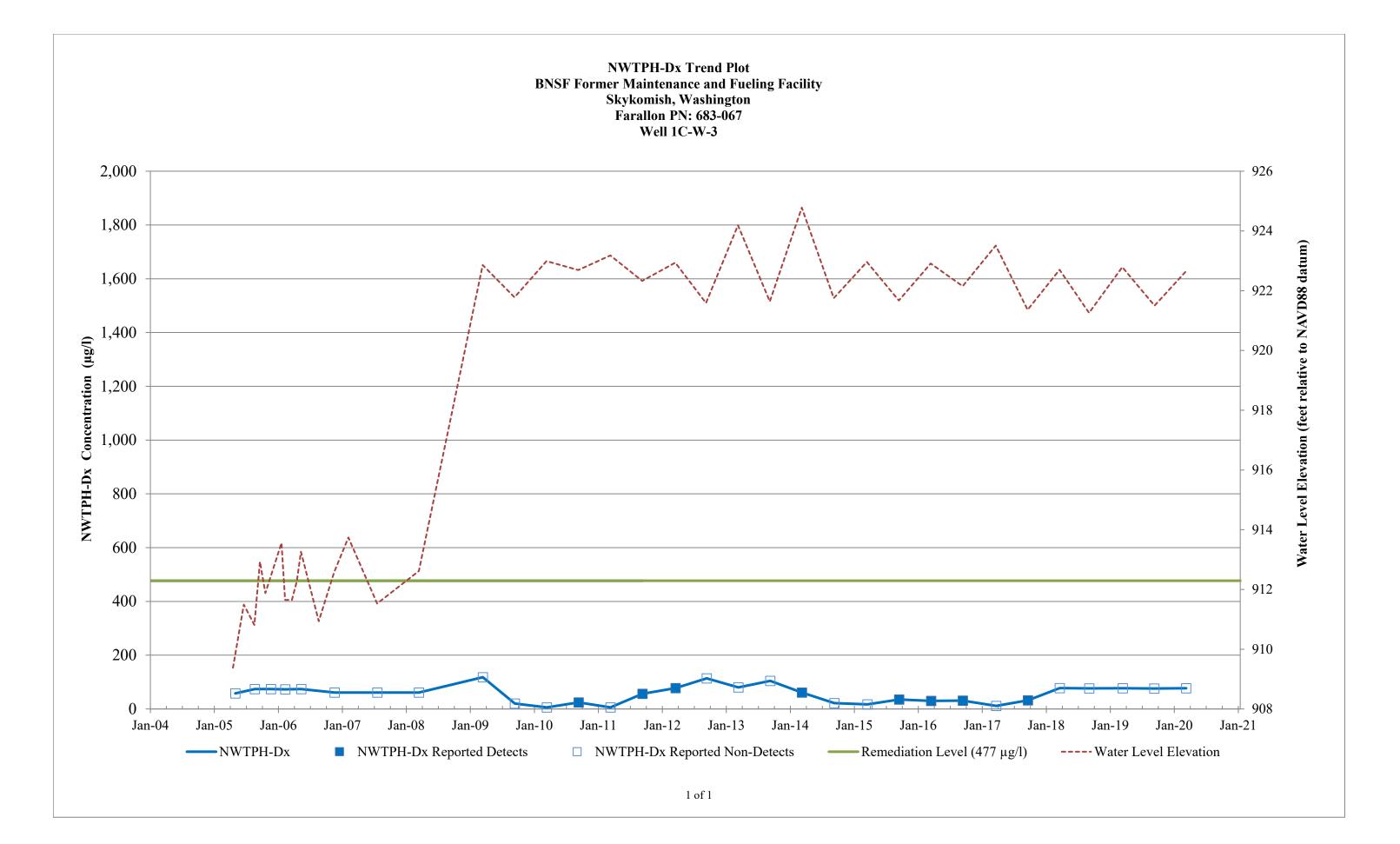
## Site-Wide Monitoring Wells

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.

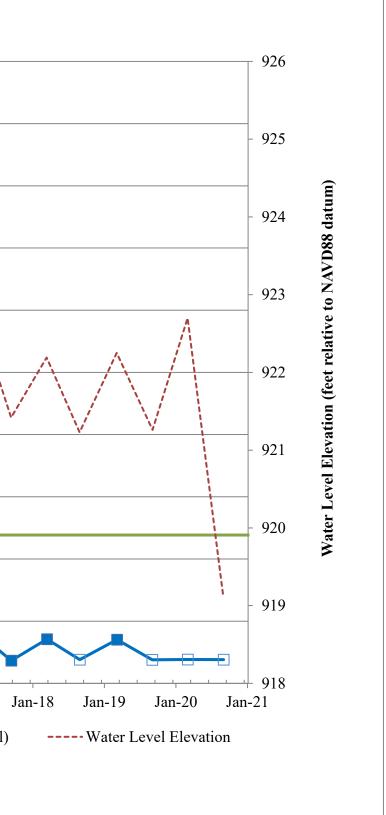


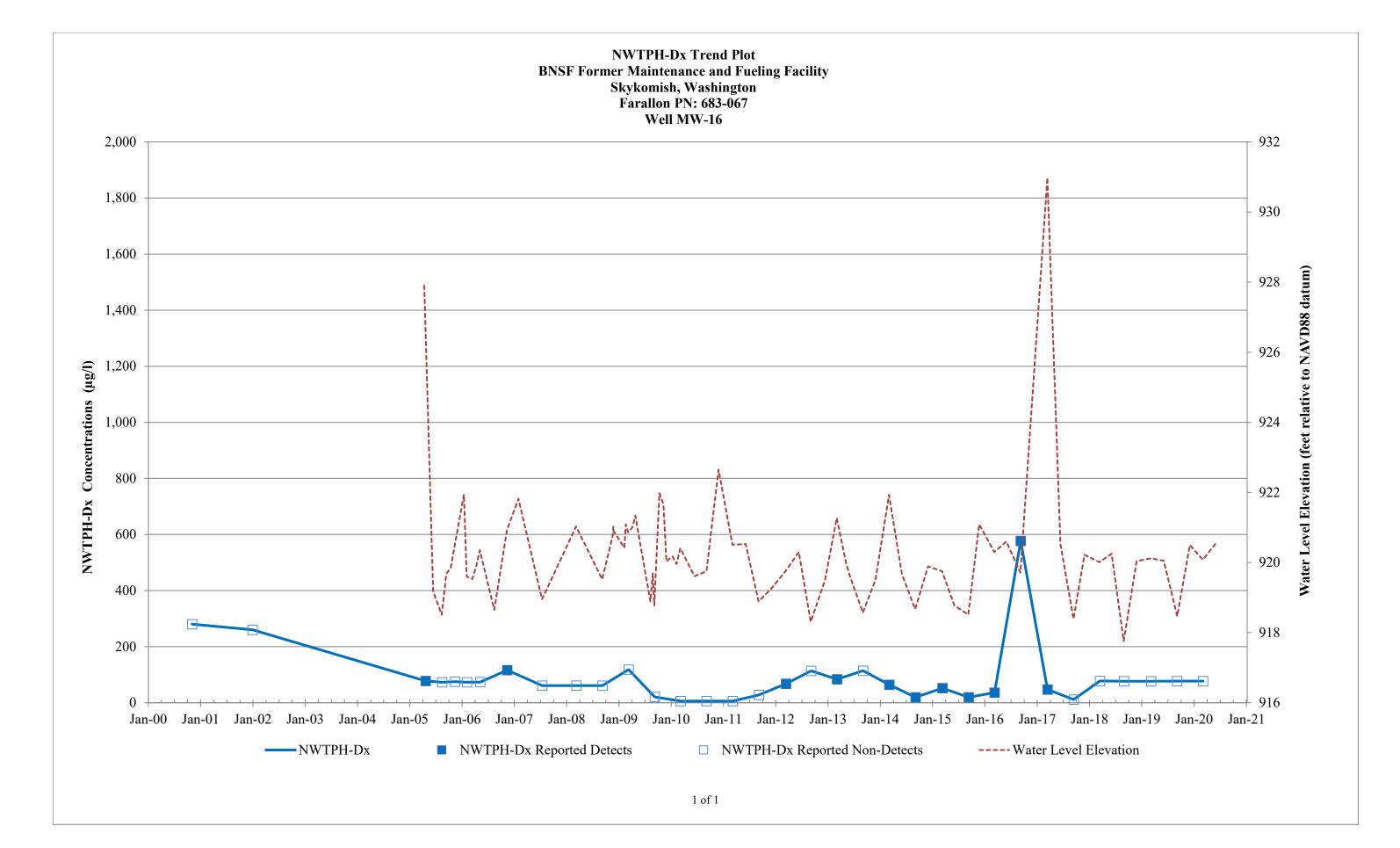


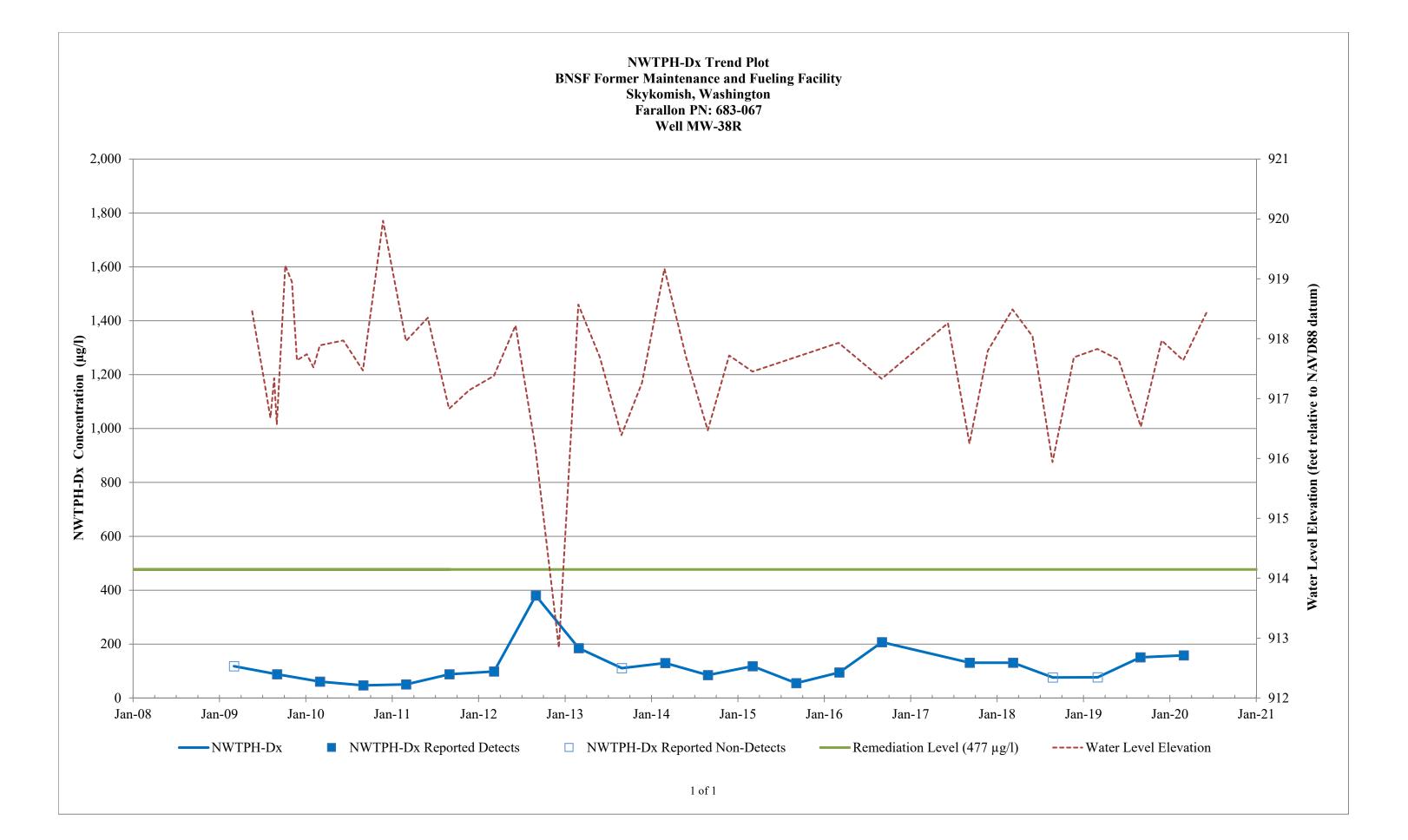




**NWTPH-Dx Trend Plot BNSF Former Maintenance and Fueling Facility** Skykomish, Washington Farallon PN: 683-067 Well 1C-W-4 2,000 1,800 1,600 1,400 Concentration (µg/l) 1,200 1,000 NWTPH-Dx 800 600 400 200 0 Jan-09 Jan-04 Jan-05 Jan-06 Jan-07 Jan-08 Jan-10 Jan-11 Jan-12 Jan-13 Jan-14 Jan-15 Jan-17 Jan-16 -NWTPH-Dx ■ NWTPH-Dx Reported Detects □ NWTPH-Dx Reported Non-Detects ----- Remediation Level (477 µg/l)



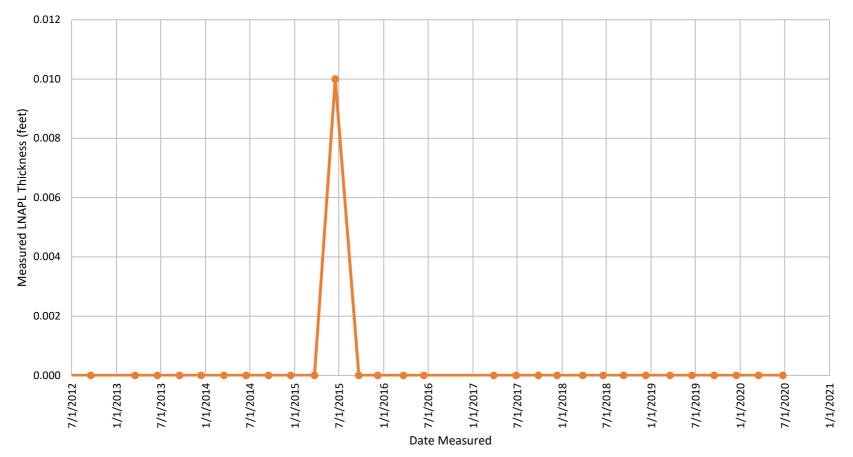




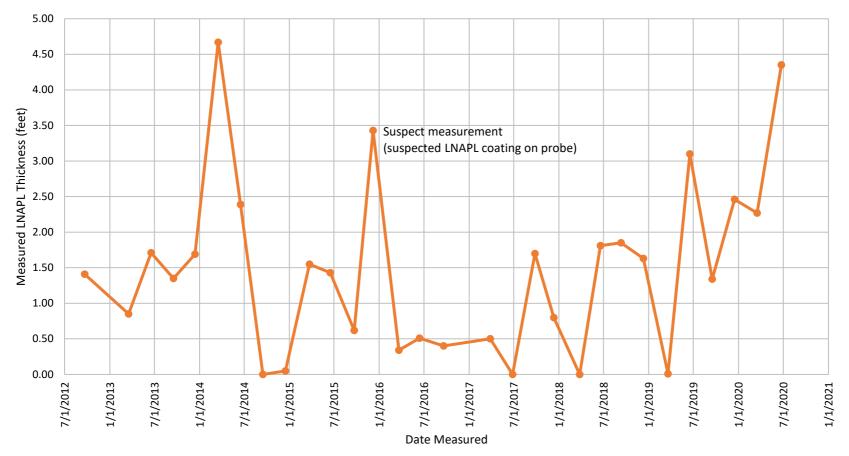
#### APPENDIX E LNAPL TREND PLOTS

### 2020 SITE-WIDE GROUNDWATER MONITORING REPORT BNSF Former Maintenance and Fueling Facility Skykomish, Washington Consent Decree No. 07-2-33672-9 SEA

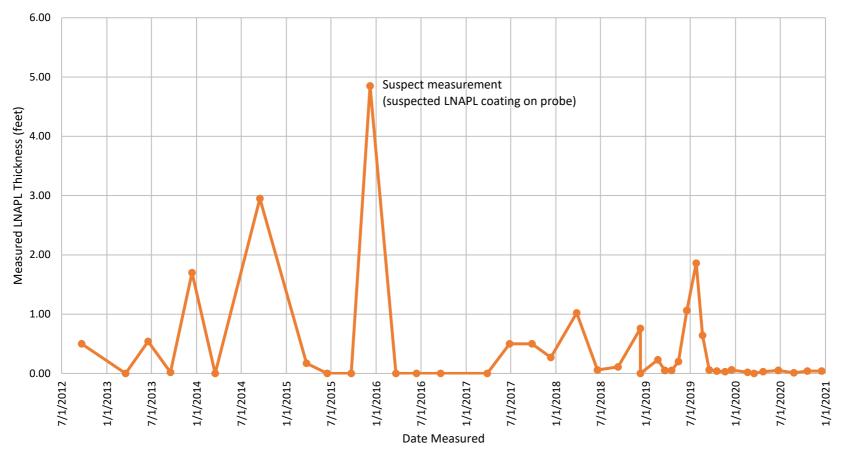
Farallon PN: 683-071



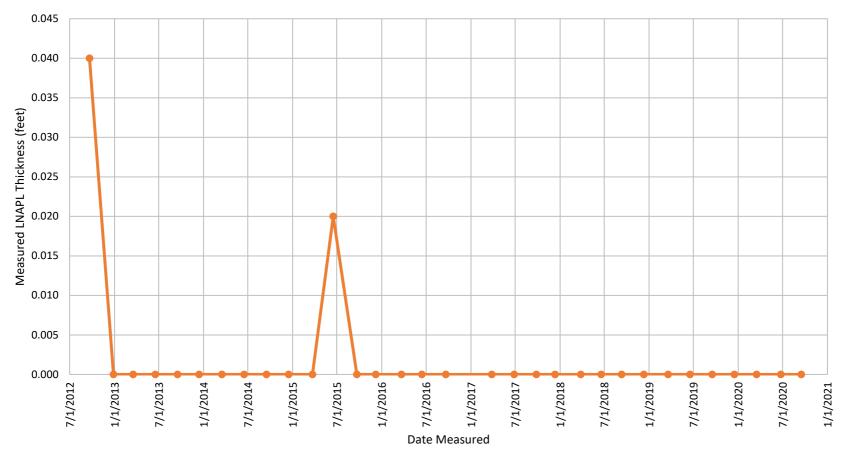
Piezometer PZ-4S LNAPL Thickness Measurements



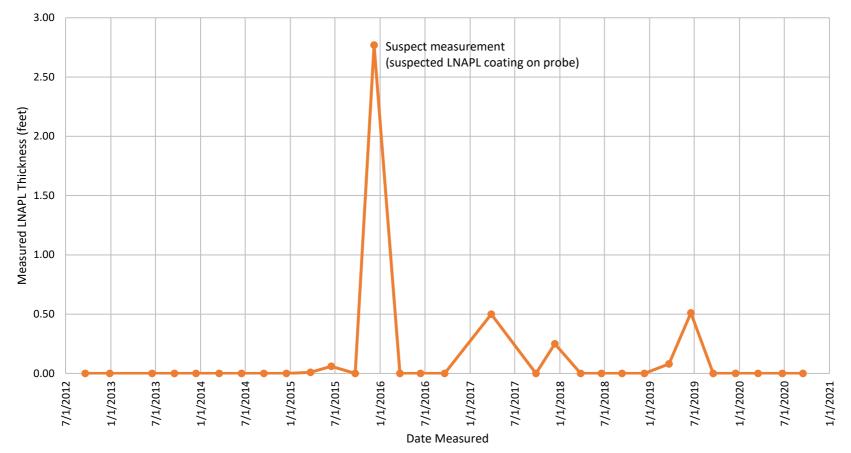
#### Piezometer PZ-5S LNAPL Thickness Measurements



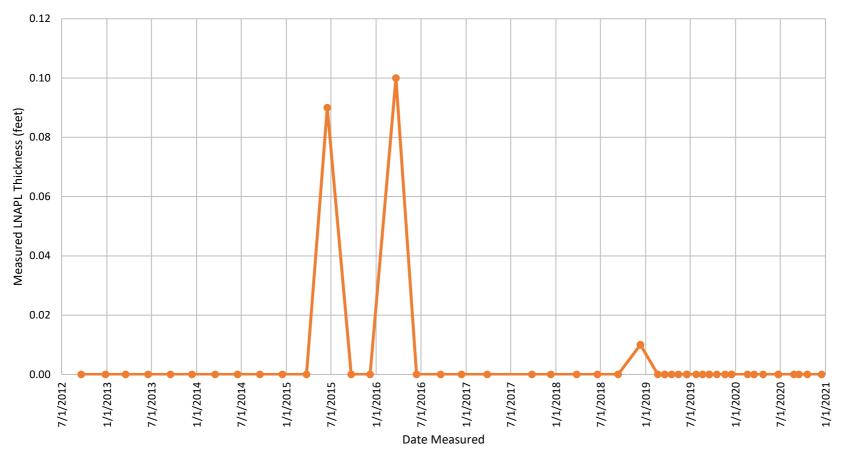
## Piezometer PZ-6S LNAPL Thickness Measurements



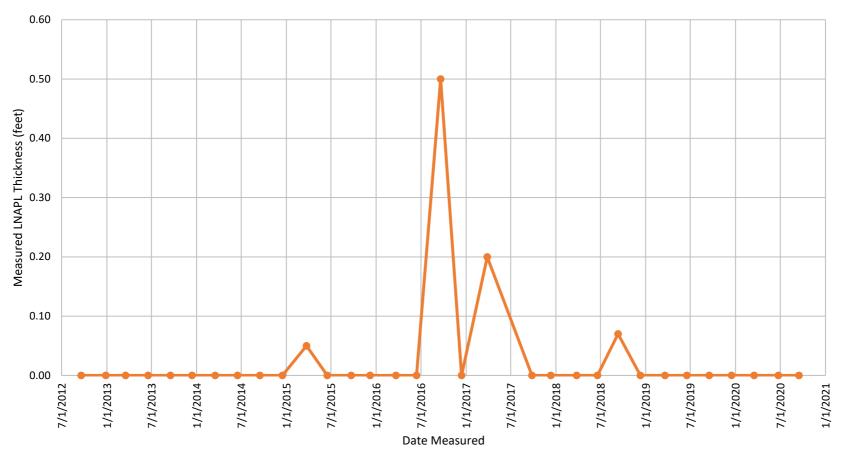
Well RW-03 LNAPL Thickness Measurements



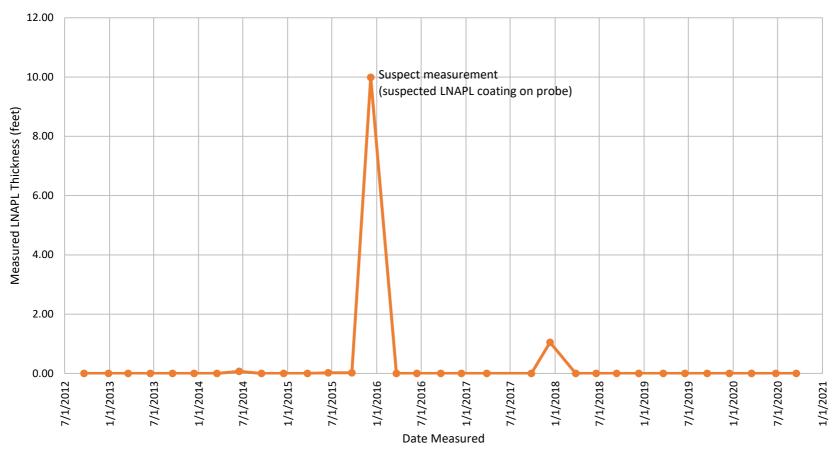
# Well RW-04 LNAPL Thickness Measurements



Well RW-05 LNAPL Thickness Measurements



Well RW-07 LNAPL Thickness Measurements



Well RW-08 LNAPL Thickness Measurements