BP - Olympic Pipeline

Environmental Sampling Report

Conway, Washington

MP-46 Gasoline Spill

December 14, 2023 - March 28, 2024

Project #032692

EXECUTIVE SUMMARY

Following the release of an estimated 21,168 gallons of gasoline from the Olympic Pipeline into Hill Ditch, near Conway, WA, CTEH was activated by BP to provide environmental assessment support. This report presents the results of the environmental monitoring and sampling conducted by CTEH during the response and on completion of response operations.

During the response, CTEH developed several Environmental Sampling and Analysis Plans and Addenda that were approved by Unified Command (UC) and are appended to this report.

CTEH conducted sampling and monitoring of surface water and bank sediment to assess and delineate impact to Hill Ditch and downstream waterbodies, including Fisher Slough, the Skagit River and Skagit Bay. Concentrations of total petroleum hydrocarbons, gasoline range (TPHGX) and BTEX (benzene, toluene, ethyl benzene and xylenes) that exceeded the water quality standards for surface waters of the State of Washington (173-201A WAC) were identified in surface water samples from December 14, 2023 – December 23, 2023 in Hill Ditch in the area immediately downstream the spill site. There were five instances between January 10, 2024, and February 15, 2024, that surface water samples results reported 173-201A WAC exceedances for benzene immediately downstream of the spill site. These exceedances corresponded with significant rain events. All other surface water samples reported no exceedances of gasoline related compounds above 173-201A WAC water quality standards following source control and remedial efforts. Surface water sampling of Hill Ditch and downstream water bodies continued until March 28, 2024. Bank sediment samples were collected from December 20, 2024 – March 26, 2024. There were no exceedances of Washington State Model Toxic Control Act Method A (MTCA Method A) standards reported for the duration of bank sediment sampling.

A coffer dam was constructed to minimize impacts to Hill Ditch during soil excavation operations. CTEH conducted turbidity monitoring during the coffer dam construction and excavation operations. During this period, one turbidity exceedance was documented and reported on February 6, 2024.

Out of extreme precaution, twelve private water sources were sampled by CTEH for gasoline constituents, eleven of which were sampled multiple times. No results indicated the presence of any analyte at concentrations greater than the screening levels.

Screening and sampling of soils between the release site and Hill Ditch were conducted by CTEH to delineate impact, guide excavation operations, and confirm removal to below screening levels. During remediation operations it was necessary to remove more than 250 trees, prior to which a tree survey was conducted by CTEH sub-contractor, Calypso Restoration.

During the preparation for, and installation of, the coffer dam, de-watering was necessary to allow equipment access and sheet-piling installation. Water was pumped to an onsite water treatment system designed to reduce concentrations of gasoline constituents to acceptable levels for discharge into Hill Ditch. Thirty samples were collected by CTEH during operation of the treatment system. As expected, the influent samples frequently exceeded the screening level criteria, however, treated water did not exceed screening levels at the time of discharge, indicating effective treatment.

The results of the monitoring, sampling, and surveys are detailed in individual sections in this report. Laboratory results, sampling summary tables, and sampling location and results maps are appended to this report.

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1 INTRODUCTION

On December 14, 2023, CTEH was requested by BP Olympic Pipeline Company (Olympic Pipeline) to provide environmental sampling and monitoring support in response to the MP-46 Gasoline Spill near Conway, Washington. The spill was first reported on December 10, 2023 and is estimated to have released 21,168 gallons of gasoline into the surface soil, sediment, and waterway along Hill Ditch. A map of the incident location is provided in **Appendix A.**

This report presents the results of the environmental monitoring and sampling conducted by CTEH during the response and on completion of response operations. Since there were several components to the monitoring and sampling, the report is broken down into individual sections as follows:

- Surface Water Sampling and Analysis
- Surface Water Turbidity Monitoring
- Sediment Sampling and Analysis
- Private Well Water Sampling and Analysis
- Soil Sampling and Analysis
- Tree Survey
- Water Treatment Sampling and Analysis
- Waste Characterization Sampling and Analysis

2 SURFACE WATER SAMPLING AND ANALYSIS

Between December 14, 2023, and March 28, 2024, surface water samples were collected from Hill Ditch, the Skagit River, and the Skagit Bay, including representative background, or pre-impact, surface water samples to determine a baseline and develop the range of potential background concentrations for comparative analysis. Surface water samples were also collected from locations in Fisher Slough between December 21, 2023, and January 2, 2024.

2.1 Surface Water Sampling Methodology

The Surface Water Sampling Plan was approved by Unified Command (UC) on December 13, 2023: version 2 (**Appendix B-1**) was approved on December 26, 2023. A separate Fisher Slough Sediment & Surface Water Sample Collection Plan (**Appendix B-2**) was approved by UC on December 20, 2023. CTEH developed and implemented these plans to document and quantify the potential downstream presence of gasoline or gasoline constituents related to the MP-46 Gasoline Spill. In accordance with the UC-approved plan, surface water samples were collected from waterbodies downstream of the incident site during the response and on completion of response operations between December 14, 2023, and March

28, 2024. All samples were sent to a third-party TNI[1] accredited laboratory for analysis using state or federal analytical methods, listed in **Table 2.1**. Each laboratory report underwent data verification and/or validation by an independent contractor.

Table 2.1. Surface Water Sampling Analytical Methods

Analysis	Method
Total Petroleum Hydrocarbons (TPH)	NWTPH-Gx
Volatile Organic Compounds (VOCs) - BTEX only	US EPA 8260
Semi Volatile Organic Compounds (SVOCs)[2]	US EPA 8270

2.2 Surface Water Screening Levels

Analytical results were compared to applicable health-protective screening levels or background concentrations. It is important to note that the methods utilized to analyze surface water and sediment samples are also able to detect compounds unrelated to the MP-46 Gasoline Spill. Thus, detection of a compound does not necessarily mean that the compound is directly related to the incident.

In accordance with Water Quality Standards for Surface Waters of the State of Washington as found in the Chapter 173-201A of the Washington Administrative Code (WAC), surface water samples were screened against freshwater criteria protective of both human health and aquatic life, provided in Table 240 of WAC 173-291A-240. In lieu of a published state (173-201A) or federal (CWA 304) standard for TPH, the Washington State Department of Ecology's Cleanup Levels and Risk Calculation (CLARC) table was used. Specifically, a chemical-specific consideration for TPH provides concentrations of gasoline range organics that are protective of aquatic receptors in fresh surface waters. For instances where multiple standards or recommendations were available for a target analyte, the lowest value was selected to serve as a conservative comparator for the purposes of screening the surface water samples.

2.3 Surface Water Sampling Results

Surface water sampling summaries, including location descriptions, dates, and the number of samples collected are provided in **Table 2.2.**

[1] The NELAC Institute

2 The Surface Water Sampling Plan lists analysis methods for TPH and BTEX, however surface water samples collected on December 21 and 23 (W017-W021) were also analyzed for SVOCs.

Table 2.2. Surface Water Sampling Locations and Dates

Location Code	Location Description	First Sample Date	Last Sample Date	# Samples Collected
W001	Approximately 20 yards NE of Hwy 534 bridge	12/14/2023	3/26/2024	36
W002	Approximately 150 yards SW of Hwy 534 bridge	12/14/2023	3/26/2024	34
W003	North side of Conway Hill Rd bridge	12/14/2023	3/26/2024	34
W004	Approximately 575 feet south of residential bridge off Cedardale Rd	12/14/2023	3/26/2024	35
W005	Skagit River at Milltown Rd boat launch	12/15/2023	3/26/2024	24
W006	Skagit River off of Pioneer Hwy; approx. 200 yds south of Pioneer Hwy bridge overflow path	12/15/2023	3/26/2024	25
W007	Approximately 0.80 miles downstream of South Fork Skagit River	12/16/2023	3/26/2024	22
W008	Approximately 0.5 miles downstream of South Fork Skagit River	12/16/2023	3/26/2024	23
W009	SW area of Similk Bay, W of Skagit Island Marine State Park	12/15/2023	3/28/2024	8
W010	SW area of Skagit Bay	12/15/2023	3/28/2024	8
W011	S area of Skagit Bay	12/15/2023	3/28/2024	8
W012	Center area of Skagit Bay, E side	12/15/2023	3/28/2024	7
W013	Approximately 150 yards SE of confluence on Hill Ditch	12/16/2023	3/26/2024	26
W014	North edge of hill ditch, approximately 20 yards downstream of confluence	12/16/2023	3/26/2024	26
W015	Approximately 25 yards East of bridge on Pioneer Highway	12/14/2023	3/26/2024	26
W016	0.2 miles N of Hwy 534, NW bank of Hill Ditch	12/16/2023	2/23/2024	5
W017	SW corner of Fisher Slough, approximately 20 yards inside banked levee	12/21/2024	12/21/2024	1
W018	W side of Fisher Slough; 140 yards SSE of the intersection of Fisher Slough and Pioneer Hwy; roughly 5-10 yd E of the berm	12/21/2024	12/21/2024	1
W019	NW side of Fisher Slough; 75 yards SE of the intersection of Fisher Slough and Pioneer Hwy; 5 yards E of the berm	12/21/2024	12/21/2024	1
W020	Fisher Slough, along levy approximately 0.2 miles E of Pioneer Hwy	12/21/2024	12/21/2024	1
W021	Fisher Slough, SW corner of bottom half of Slough, approximately 30 yards E of the levee	12/23/2024	12/23/2024	1
W022	N section of open water near Hill Ditch in Fisher Slough	12/28/2024	12/28/2024	1
W023	NE section of open water near Hill Ditch in Fisher Slough	12/28/2024	12/28/2024	1
W024	N side of Fisher Slough; approximately 0.4 miles east of Pioneer Hwy	01/02/2024	01/02/2024	1
W025	Northside of pipeline right of way in Hill Ditch	01/05/2024	01/05/2024	1
W026	5 yards South of the SR-534 bridge over Hill Ditch	01/10/2024	01/10/2024	1
W027	30 yards South of the SR-534 bridge on Cedardale Rd	01/10/2024	01/10/2024	1
W028	Interceptor Trench in A2	01/22/2024	02/02/2024	3
W029	A1 Excavation	01/22/2024	01/22/2024	1

Location Code	Location Description	First Sample Date	Last Sample Date	# Samples Collected
W030	Next to boom, approx. 50 yards upstream if bridge on Cedardale Rd	01/26/2024	01/26/2024	1
W031	Approx. 40 yards North of W004, on grassy inland area of property owner's land	02/21/2024	02/21/2024	1
W032	Pipeline right of way in Hill Ditch	02/21/2024	02/21/2024	1
W033	A19 North corner inside wall of coffer dam	3/7/2024	3/7/2024	1
W034	A15 Middle of the inside wall of the coffee dam	3/7/2024	3/7/2024	1
W035	A11 Southern inside wall of the coffer dam along the creek	3/7/2024	3/7/2024	1
W036	Inside coffer dam, NW side of center of A18 grid	3/18/2024	3/18/2024	2
W037	Edge of Hill Ditch, approximately 5 yards downstream of SW corner of sheet piling coffer dam	3/22/2024	3/22/2024	1
SWE001	Post Hill Ditch flood sampling in A2 and A3	2/29/2024	2/29/2024	1
SWE002	Post Hill Ditch flood sampling in A2 and A3	2/29/2024	2/29/2024	1
SWE003	Post Hill Ditch flood sampling in A2 and A3	2/29/2024	2/29/2024	1

A map of surface water sample locations is provided in **Appendix B-3.** A summary of analyte detections is provided in **Table 2.3.** Full summaries of the surface water sampling results are provided in **Appendix B-4**. Summary maps depicting TPH + BTEX concentrations are provided in **Appendix B-5.**

Table 2.3 Surface Water Sampling Detection Summary

Analyte	Count of Lab Results	Count of Detections	Range of Detections	Screening Value (µg/L)	Detections Above Screening Value
1-Methylnaphthalene	110	46	0.0694 (J)- 41.4 (J) µg/L	NA	-
2-Methylnaphthalene	110	55	0.00824 (J)- 81.7 (J) µg/L	NA	-
Acenaphthene	108	9	0.0275 (J)- 1.26 (J) µg/L	110[1]	0
Alkalinity	1	1	62,700 µg/L	NA	-
Anthracene	108	6	0.05 (J)- 0.36 (J) µg/L	3100[1]	0
Arsenic	4	4	0.844 (J)- 4.71 µg/L	10[1]	0
Barium	4	4	24.1- 84.6 µg/L	NA	-
Benzene	371	126	0.096 (J)- 649 µg/L	0.44[1]	49
Benzo(a)anthracene	108	8	0.0439 (J)- 1.42 µg/L	0.014[1]	8
Benzo(a)pyrene	111	4	0.0368 (J)- 0.94 µg/L	0.0014[1]	4
Benzo(b)fluoranthene	111	5	0.0451 (J)- 1.18 µg/L	0.014[1]	5
Benzo(g,h,i)perylene	108	6	0.0452 (J)- 1.55 µg/L	NA	-
Benzo(k)fluoranthene	108	1	0.164 µg/L	0.014[1]	1
Calcium	1	1	12,700 µg/L	NA	-
Chromium	4	3	13.2- 17.5 µg/L	NA	-

Analyte	Count of Lab Results	Count of Detections	Range of Detections	Screening Value (µg/L)	Detections Above Screening Value
Chrysene	111	7	0.0392 (J)- 1.37 µg/L	1.4[1]	0
COD	1	1	89,200 µg/L	NA	-
Copper	4	4	2.39- 20.4 µg/L	11[2]	3
Dibenz(a,h)anthracene	108	1	0.0914 (J) µg/L	0.0014[1]	1
Diesel Range Organics	9	5	135 (J)- 4,040 µg/L	3000[3]	1
Ethylbenzene	370	126	0.138 (J)- 1,630 µg/L	12[3]	9
Fluoranthene	111	9	0.113 (J)- 4.96 µg/L	16[1]	0
Fluorene	111	16	0.0407 (J)- 18 µg/L	420[1]	0
Gasoline Range Organics	370	76	31.7 (J)- 75,900 µg/L	1000[3]	10
Hardness (calculated) as CaCO3	1	1	67,000 µg/L	NA	-
Indeno(1,2,3-cd) pyrene	108	2	0.0473 (J)- 0.217 µg/L	0.014[1]	2
Iron	1	1	510 µg/L	NA	-
Lead	4	3	3.81- 5.14 µg/L	2.5[2]	3
Magnesium	1	1	8,590 µg/L	NA	-
Naphthalene	111	55	0.0947 (J)- 73.1 (J) µg/L	NA	-
Nickel	4	4	5.09- 28.1 µg/L	150[1]	0
Nitrate as (N)	1	1	70.6 (BJ) µg/L	NA	-
ORP	1	1	166 (T8) mV	NA	-
pH	1	1	6.72 (T8) su	NA	-
Phenanthrene	111	21	0.0193 (J)- 26.7 µg/L	NA	-
Phosphorus,Total	1	1	138 (B) µg/L	NA	-
Pyrene	111	14	0.0371 (J)- 7.51 µg/L	310[1]	0
Residual Range Organics	7	3	106 (J)- 732 (J) µg/L	NA	-
TOC (Total Organic Carbon)	1	1	11,700 µg/L	NA	-
Toluene	371	196	0.284 (J)- 20,800 µg/L	53[3]	11
Total Petroleum Hydrocarbons	3	3	307- 504 µg/L	NA	-
Total Xylenes	367	172	0.174 (J)- 8,450 µg/L	57[3]	13
Turbidity	1	1	6.24 NTU	NA	-
Zinc	4	3	29.3- 35.3 µg/L	100[2]	0

[1] 173-201A WAC - Human Health - Fresh Water
[2] 173-201A WAC - Aquatic Life -Fresh/Chronic
[3] CLARC - Chemical-Specific Considerations – TPH – Concentrations Protective of Aquatic Receptors in Surface Water - Fresh Water
J: The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
B: The same analyte is found in the associated blank.
T8: Sample(s) received past/too close to hold time expiration.

2.4 Surface Water Sampling Discussion

In response to the spill of gasoline into Hill Ditch and at the request of Washington Department of Ecology (WDOE), various locations were sampled to better understand the transport of gasoline constituents downstream of the site and the persistence of those chemicals in the environment. Sample locations included points along Hill Ditch, Fisher Slough, the Skagit River and Skagit Bay. Concentrations of total petroleum hydrocarbons, gasoline range (TPHGX) and BTEX (benzene, toluene, ethyl benzene and xylenes) that exceeded the water quality standards for surface waters of the State of Washington (173-201A WAC) were identified in surface water samples from December 14, 2023 – December 23, 2023, in Hill Ditch in the area immediately downstream the spill site. There were five instances between January 10, 2024, and February 15, 2024, that surface water samples results reported 173-201A WAC exceedances for benzene immediately downstream of the spill site. These exceedances corresponded with significant rain events. All other surface water samples reported no exceedances of gasoline related compounds above 173-201A WAC water quality standards following source control and remedial efforts. Surface water sampling of Hill Ditch and downstream water bodies continued until March 28, 2024.

Three hundred and seventy-three (373) surface water samples were collected at various locations throughout the response. Eight (8) sample locations in Hill Ditch were designated for periodic sampling and each was sampled a minimum of twenty-two (22) times. This practice allowed for monitoring of gasoline constituents and documented the decrease in concentrations over time and as remedial efforts were employed. Repeated sampling (minimum of 7 events) also occurred at four locations in Skagit Bay.

Contaminant Screening Levels 173-201A WAC (Human Health – Fresh Water) and 173-201A WAC (Aquatic Life – Fresh Water) were used to assess impacts to the water of Hill Ditch. BTEX concentrations exceeding screening levels were present at locations in the vicinity and downstream of the spill site. Concentration of BTEX diminished over time.

No exceedances of screening levels were ever encountered in the Skagit River or Skagit Bay. The frequency of sampling events varied with a more intense effort occurring at the onset of the project and decreasing as the fate and transport of the gasoline was better understood.

3 SURFACE WATER TURBIDITY MONITORING

A Water Quality Monitoring Plan (WQMP, **Appendix C-1**) was approved by Unified Command on February 3, 2024, to implement a water quality monitoring strategy that documents the performance of Best Management Practices (BMPs) used during response-related construction procedures that may contribute to increased surface water turbidity in nearby water bodies. Turbidity was a concern due to the potential for salmonids to migrate downstream into Fisher Slough or through Hill Ditch to creeks above. Fish exclusion netting was in place during coffer dam construction to minimize potential for

barotrauma to any fish present in the area. Fish removal operations also occurred prior to construction and removal of the coffer dam. Turbidity screens were in place during soil removal operations but were designed to allow for fish passage. The WQMP also describes notification and response requirements if compliance was not met. From February 6 through March 25, 2024, CTEH personnel collected turbidity data in accordance with the WQMP and communicated real-time turbidity compliance status to Unified Command during ongoing construction and excavation activities within and adjacent to Hill Ditch.

In-water work activities that occurred under the WQMP included the following:

- Boat operations and manual labor to install, maintain, and remove BMPs, including fish exclusion nets, turbidity curtains, and boom.
- The installation and removal of the cofferdam, including driving sheet piling and I-beams.
- Excavation operations to remove impacted material from inside the cofferdam.
- Vegetation agitation and sampling.
- Discharge of treated water from the treatment system constructed on-site.

3.1 Turbidity Monitoring Methodology

A total of 8 fixed monitoring locations were established in accordance with the WQMP to satisfy turbidity monitoring requirements during the period of in-water construction activities and soil removal efforts along impacted areas of Hill Ditch associated with the incident. The fixed routine monitoring locations included an upstream location to record representative background, or baseline, turbidity levels in the waterway during each monitoring round. This upstream location, MP-1, was compared against a downstream location, MP-2, established 50 ft downstream of a turbidity curtain system installed in Hill Ditch. Following a comparison of MP-1 and MP-2 during each monitoring round, samplers would determine compliance status of the BMPs as defined by the WQMP or otherwise follow a decision tree to measure additional fixed monitoring locations for further comparison against MP-1. If samplers determined, using the WQMP, that the in-water work was causing a noncompliant turbidity to increase in Hill Ditch, Incident Command was immediately notified, and work was stopped until compliance was achieved.

Turbidity data was collected using a Hach 2100Q Portable Turbidimeter that was calibrated daily and operated according to manufacturer recommendations.

3.2 Turbidity Monitoring Screening Levels

The compliance thresholds for each turbidity monitoring point are outlined in the WQMP. These thresholds were established with respect to the baseline turbidity of Hill Ditch, recorded at MP-1. Compliance was initially assessed by comparing MP-2 to MP-1. If MP-2 was greater than or equal to 5

nephelometric turbidity units (NTU) above MP-1, a decision tree was followed to strategically select an additional downstream monitoring point, either CP-1, CP-2, or CP-3, based on the measured flow rate of the creek and compared against MP-1. If the exceedance persisted and met the noncompliance criteria described in the WQMP, Incident Command was immediately notified, and all work stopped until additional BMPs were put in place and compliance was achieved.

3.3 Turbidity Monitoring Results

A summary of turbidity monitoring readings collected under the WQMP is provided below in **Table 3.1**. A map of fixed turbidity monitoring locations is provided in **Appendix C-2**. On March 4, 2024, no turbidity monitoring was conducted, due to an inclement weather work standdown. A full table of all turbidity measurements collected can be found in **Appendix C-3**. Field datasheets created during the WQMP turbidity monitoring efforts are provided in **Appendix C-4**.

Table 3.1. WQMP Turbidity Monitoring Summary

Location	Count of Turbidity Readings	Detection Range (NTU)	Average Concentration (NTU)
MP-1	107	2.8 - 46.27	6.07
MP-2	106	2.85 - 51.03	6.56
CP-1	11	3.02 - 33.8	6.4
CP-2	19	3.13 - 44.9	10.83
CP-3	14	3.02 - 10.37	4.89
E. Tributary	93	5.9 - 188.33	14.5
CP-4	9	3.28 - 18.47	6.86
CP-5	9	2.98 - 16.43	6.75

On February 6, 2024, at approximately 1700 PST, a turbidity exceedance was reported by field personnel to Incident Command following the completion of turbidity curtain installation efforts in Hill Ditch. At the time of recording, background turbidity concentration at MP-1 was recorded at 4.5 NTU, and downstream turbidity at CP-2 was recorded at 10.6 NTU. Because in-water work activities were already completed for the day, an immediate work stoppage was not required. During the documentation of this exceedance, it was observed by field personnel that CP-2 was established downstream of a confluence point between Hill Ditch and Carpenter Creek, and that turbid discharge from this tributary likely contributed to the elevated turbidity reading at CP-2. The following morning, routine turbidity monitoring performed at MP-1 and MP-2 reported readings that were in compliance. A written notification report describing this event was delivered by Incident Command to representatives from the Washington Department of Ecology, US Army Corps of Engineers, and Washington Department of

Fish and Wildlife on February 7. On February 9, approval was granted by Incident Command to establish CP-3 in Hill Ditch, upstream of Carpenter Creek's discharge point, and to discontinue routine use of CP-2. On February 8, field personnel established an additional monitoring point in Carpenter Creek (E. Tributary) to document potential turbidity influences this water body had on downstream monitoring points in Hill Ditch. On average, Carpenter Creek was more turbid than Hill Ditch and experienced the widest range in turbidity of all routine monitoring points.

On February 10, 2024, an I-beam fell into Hill Ditch during the construction of the cofferdam. Turbidity monitoring was immediately conducted downstream of the incident and no exceedances were reported. An underwater drone was deployed into Hill Ditch on February 14 to observe the I-beam in preparation for its retrieval. Turbidity readings were recorded during the drone's deployment and did not report any exceedances.

On February 28, 2024, the water treatment system constructed on-site began discharging treated water back into Hill Ditch. Routine turbidity monitoring conducted during the full duration the treatment system was active on-site did not report any exceedances.

3.4 Turbidity Monitoring Discussion

Turbidity monitoring in Hill Ditch was conducted daily from February 6 through March 25, 2024, at fixed locations and monitoring frequencies defined in the WQMP. During this period, one turbidity exceedance was documented and reported on February 6, 2024. No other noncompliance events requiring action were reported during the work activities monitored under the WQMP.

4 SEDIMENT SAMPLING AND ANALYSIS

Between December 20, 2023, and March 26, 2024, sediment samples were collected from Hill Ditch, Fisher Slough, and the Skagit River, including representative background, or pre-impact, surface water samples to determine a baseline and develop the range of potential background concentrations for comparative analysis. Additionally, on December 27-29, 2023, sediment samples were collected by Ponar along transects of hill Ditch to identify and delineate any localized impact. Ponar sediment samples were collected from an additional transect of Hill Ditch on February 22, 2024, to assess an area of sheening near the pipeline corridor where a historical diesel spill occurred.

4.1 Sediment Sampling Methodology

The Environmental Sampling and Analysis Plan (SAP) for Bank Sediment Sampling (**Appendix D-1**) was approved by Unified UC on December 20, 2023. A separate Fisher Slough Sediment & Surface Water Sample Collection Plan (**Appendix B-2**) was approved by UC on December 20, 2023. The Division B

Characterization Plan (**Appendix D-2**) for Ponar sediment sampling of Hill Ditch was approved on December 29, 2023. CTEH developed and implemented these plans to document and quantify the potential downstream presence of gasoline or gasoline constituents related to the MP-46 Gasoline Spill. In accordance with the UC-approved plans, sediment samples were collected from waterbodies downstream of the incident site during the response and on completion of response operations.

In response to concerns of potential gasoline migration under Hill Ditch, an addendum to the ESAP was prepared that governed the installation of soil gas probes in the field west of Hill Ditch. The addendum was approved by the UC on 12/28/23. Soil gas probes were installed by GeoEngineers at several locations along an approximate 300-meter section west of Hill Ditch. Results of the soil gas borings suggested that product had not migrated beneath Hill Ditch into shallow groundwater beneath the farm field. Results of the investigation were reported separately by GeoEngineers. A table of results was developed to assist the UC with decision-making on next steps in the farm field area.

All samples were sent to a third-party National Environmental Laboratory Accreditation Program (NELAP)-accredited laboratory for analysis using state or federal analytical methods, listed in **Table 4.1 and 4.2**. To ensure completeness, each laboratory report underwent data verification and/or validation by an independent contractor.

Table 4.1 Bank Sediment and Fisher Slough Analytical Methods

Analysis	Method
Total Petroleum Hydrocarbons (TPH)	NWTPH-Gx
Volatile Organic Compounds (VOCs) – BTEX only	US EPA 8260

Table 4.2. Hill Ditch (Ponar) Sediment Sample Analytical Methods

Analysis	Method
Total Petroleum Hydrocarbons (TPH)	NWTPH-Gx
Volatile Organic Compounds (VOCs) including BTEX	US EPA 8260
Semi Volatile Organic Compounds (SVOCs)	US EPA 8270
Metals (RCRA-8)	EPA Method 6010/6020 and 7471
TCLP VOCs (benzene only)	Prep: SW-846 Method 1311 Analytical: EPA Method 8260
TCLP Metals (RCRA-8)	Prep: SW-846 Method 1311 Analytical: EPA Method 6010/6020 and 7471

4.2 Sediment Screening Levels

Analytical results were compared to applicable health-protective screening levels or background concentrations. It is important to note that the methods utilized to analyze surface water and sediment samples are also able to detect compounds unrelated to the MP-46 Gasoline Spill. Thus, detection of a compound does not necessarily mean that the compound is directly related to the incident.

In accordance with the Washington State Model Toxic Control Act (MTCA), sediment samples were screened against Method A Soil Cleanup Levels for Unrestricted Land Use.

4.3 Sediment Sampling Results

Sampling summaries, including locations, descriptions and the number of samples collected are provided in **Tables 4.3 and 4.4.**

Table 4.3. Bank Sediment Sampling Locations and Dates

Location Code	Location Description	First Sample Date	Last Sample Date	# Samples Collected
M001	Fir Island Farms Reserve Unit	12/20/2023	12/20/2023	2
M002	English Boom Trail County Park	12/20/2023	12/20/2023	1
M003	SW of Hwy 534 bridge	12/20/2023	3/26/2024	9
M004	North side of Conway Hill Rd bridge	12/20/2023	3/26/2024	9
M005	Hill Ditch, downstream from Conway Hill Rd bridge	12/20/2023	3/26/2024	9
M006	S of residential bridge off Cedardale Rd	12/20/2023	3/26/2024	9
M007	SE of confluence on Hill Ditch	12/20/2023	3/26/2024	9
M008	Hill Ditch, downstream of confluence	12/20/2023	3/26/2024	9
M009	Skagit River at Milltown Rd boat launch	12/20/2023	12/20/2023	1
M010	Skagit River, South of Pioneer Hwy bridge	12/20/2023	12/20/2023	1
M011	South Fork Skagit River, 1 mile downstream	12/20/2023	12/20/2023	1
M012	South Fork Skagit River, 0.5 mile downstream	12/20/2023	12/20/2023	1
M013	South of pipeline Right of Way	12/21/2023	3/26/2024	7
M014	SR-534 bridge	12/21/2023	3/26/2024	7
M015	Hill Ditch, 0.5 north of Hwy 534	12/21/2023	12/21/2023	1
M016	Fisher Slough, SW corner	12/21/2023	12/21/2023	1
M017	Fisher Slough, West side	12/21/2023	12/21/2023	1
M018	Fisher Slough, NW corner	12/21/2023	12/21/2023	1
M019	Fisher Slough, E of Pioneer Hwy	12/21/2023	12/21/2023	1
M020	Fisher Slough, South	12/23/2023	12/23/2023	1
M021	Hill Ditch, SR-534 bridge	1/10/2024	1/10/2024	1
M022	Hill Ditch, south of SR-534 bridge	1/10/2024	1/10/2024	1

Location Code	Location Description	First Sample Date	Last Sample Date	# Samples Collected
M023	Sediment collected with reed canary grass samples	2/20/2024	2/20/2024	2
M024	Sediment collected with reed canary grass samples	2/20/2024	2/20/2024	1
M025	Sediment collected with reed canary grass samples	2/20/2024	2/20/2024	1
M026	Sediment collected with reed canary grass samples	2/20/2024	2/20/2024	1
M027	Sediment collected with reed canary grass samples	2/20/2024	2/20/2024	2
M028	Sediment collected with reed canary grass samples	2/20/2024	2/20/2024	1
M029	Sediment collected with reed canary grass samples	2/20/2024	2/20/2024	1
M030	Sediment collected with reed canary grass samples	2/20/2024	2/20/2024	1
M031	Sediment collected with reed canary grass samples	2/20/2024	2/20/2024	1
M032	Sediment collected with reed canary grass samples	2/20/2024	2/20/2024	1
M033	Sediment collected with reed canary grass samples	2/20/2024	2/20/2024	2
M034	Sediment collected with reed canary grass samples	2/20/2024	2/20/2024	1
M035	Sediment collected with reed canary grass samples	2/20/2024	2/20/2024	1
M036	Sediment collected with reed canary grass samples	2/20/2024	2/20/2024	1
M037	Sediment collected with reed canary grass samples	2/20/2024	2/20/2024	1
M038	Sediment collected with reed canary grass samples	2/22/2024	2/22/2024	1
M039	Sediment collected with reed canary grass samples	2/22/2024	2/22/2024	1
M040	Sediment collected with reed canary grass samples	2/22/2024	2/22/2024	1
M041	Sediment collected with reed canary grass samples	2/22/2024	2/22/2024	1
M042	Sediment collected with reed canary grass samples	2/22/2024	2/22/2024	1
M043	Sediment collected with reed canary grass samples	2/22/2024	2/22/2024	1
M044	Sediment collected with reed canary grass samples	2/22/2024	2/22/2024	1
M045	Sediment collected with reed canary grass samples	2/22/2024	2/22/2024	1
M046	Sediment collected with reed canary grass samples	2/22/2024	2/22/2024	1
M047	Sediment collected with reed canary grass samples	2/22/2024	2/22/2024	1

Table 4.4. Hill Ditch (Ponar) Sediment Sampling Locations and Dates

Location Code	Location Description	Sample Date
P-17	Ponar Transect # 1 (Upstream)	12/29/2023
P001 – P005	Ponar Transect # 2	12/27/2023
P006-P008	Ponar Transect # 3	12/27/2023
P009-P013	Ponar Transect # 4	12/27 and 12/29/2023
P014- P016	Ponar Transect # 5	12/29/2023
P018-P020	Pipeline Right of Way	2/22/2024

A map of sediment sample locations is provided in **Appendix D-3**. A summary of analyte detections is provided in Table 4.5 Full summaries of the sediment sampling results are provided in **Appendix D-5**. Summary maps depicting TPH + BTEX concentrations are provided in **Appendix D-6**.

Table 4.5 Bank Sediment Sampling Detection Summary

Analyte	Count of Lab Results	Count of Detections	Range of Detections	Screening Value	Detections Above Screening Value
Benzene	83	8	1.14 (J)- 17.3 (J) µg/kg	30 µg/kg [1]	0
Ethylbenzene	83	16	3.08 (J)- 202 (J) µg/kg	6,000 µg/kg [1]	0
Gasoline Range Organics	83	5	3,010 (J)- 16,900 µg/kg	30,000 µg/kg [1]	0
Toluene	83	33	2.97 (J)- 799 (J) µg/kg	7,000 µg/kg [1]	0
Xylenes, Total	83	38	1.68 (J)- 1,250 (J) µg/kg	9,000 µg/kg [1]	0

[1] Washington State Model Toxic Control Act (MTCA) - Method A Soil Cleanup Levels for Unrestricted Land Use
J: The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

Table 4.6 Ponar Sediment Sampling Detection Summary

Analyte	Count of Lab Results	Count of Lab Results	Count of Detections	Range of Detections	Screening Value	Detections Above Screening Value
Arsenic	Solid	18	18	1,870 (J)- 10,100 (J) µg/kg	20,000 µg/kg [1]	0
	TCLP	18	1	0.383 mg/L	5 mg/L [2]	0
Barium	Solid	18	18	49,200- 215,000 µg/kg	NA	-
	TCLP	18	18	0.33- 0.512 mg/L	100 mg/L [2]	0
Benzene	Solid	22	4	1.71 (J)- 7.02 (J) µg/kg	30 µg/kg [1]	0
Chromium	Solid	18	18	18,700- 80,500 µg/kg	NA	-
Diesel Range Organics	Solid	4	4	8,050 (J)- 117,000 (J) µg/kg	2,000,000 µg/kg [1]	0
Ethylbenzene	Solid	22	8	12.6 (J)- 41.4 µg/kg	6,000 µg/kg [1]	0
Gasoline Range Organics	Solid	18	15	1,600 (J)- 16,100 (BJ) µg/kg	30,000 µg/kg [1]	0
Lead	Solid	18	18	5,760- 20,100 µg/kg	250,000 µg/kg [1]	0
Mercury	Solid	18	18	25.4 (J)- 176 (J) µg/kg	2,000 µg/kg [1]	0
Naphthalene	Solid	18	1	71.1 (J) µg/kg	5,000 µg/kg [1]	0
Selenium	TCLP	18	1	0.125 mg/L	1 mg/L [2]	0
Toluene	Solid	22	13	2.92 (J)- 227 µg/kg	7,000 µg/kg [1]	0

Xylenes, Total	Solid	22	13	9.49 (JJ3)- 216 µg/kg	9,000 µg/kg [1]	0

[1] Washington State Model Toxic Control Act (MTCA) - Method A Soil Cleanup Levels for Unrestricted Land Use
[2] Toxicity Characteristic Leaching Procedure (TCLP) screening level
J: The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J3: The associated batch QC was outside the established quality control range for precision.
B: The same analyte is found in the associated blank.

4.4 Sediment Sampling Discussion

Sediment sampling was conducted from December 20, 2024 – March 26, 2024, to assess for the presence of gasoline constituents in sediments along the shoreline and beneath Hill Ditch. Most sample locations were in close proximity to the spill site, however additional samples were collected at the request of WDOE in response to observances of sheen or other potential indicators of contamination. Sediment samples were collected either as a grab sample using hand tools or in the case of below water samples, using a Ponar sampler.

111 sediment samples at 22 distinct locations were collected along the banks of Hill Ditch. Several locations had repeated samples over the duration of the response and the remainder were one-time sample locations. No analytical results exceeded the MTCA Method A screening level.

Twenty sediment samples were collected using a Ponar device along five sediment sampling transects in the area nearest the spill site (including an upstream background location) as well as several discreet locations as requested by WDOE. All data from sediment sampling was reviewed by the UC as well as the WDOE Toxics Cleanup Program staff. No exceedances of MTCA Method A screening levels were encountered. At the request of WDOE, a Bioassay Plan was developed to evaluate sediment toxicity following the remedial actions conducted at the site.

5 Bioassay Sampling

In an effort to determine appropriate screening levels for gasoline constituents in sediment and MTCA compliance, the WDOE Toxics Cleanup Program (TCP) was consulted. After several discussions with TCP, it was decided that the best method to determine if sediment in the vicinity of the spill in Hill Ditch was in compliance would be to complete a bioassay study. A Bioassay Workplan Appendix E was developed and approved by the UC on March 12, 2024. Collection of sediment samples for conducting the bioassay would not be completed until all response activities concluded. The plan was revised in June 2024 to address comments from TCP. Coordination with WDOE is ongoing and field sampling collection is anticipated in September 2024. A separate report documenting sample collection, bioassay techniques, and results will be prepared at the conclusion of the study.

6 PRIVATE WATER SOURCE SAMPLING AND ANALYSIS

Between December 17, 2023, and March 27, 2024, water samples were collected from private wells, animal troughs, and ponds identified by Washington Department of Ecology and Skagit County.

6.1 Private Water Source Sampling Methodology

The Well Water Sampling Plan was approved by UC on December 18, 2023. CTEH developed and implemented the Well Water Sampling Plan (**Appendix F-1**) to monitor drinking water quality during the response. In accordance with the UC-approved plan, water samples were collected from wells and other private water sources in the area identified by Washington Department of Ecology and Skagit County during the response and on completion of response operations.

All samples were sent to a third-party National Environmental Laboratory Accreditation Program (NELAP)-accredited laboratory for analysis using state or federal analytical methods, listed in **Table 6.1**. To ensure completeness, each laboratory report underwent data verification and/or validation by an independent contractor.

Table 6.1 Well Water Analytical Methods

Analysis	Method
Total Petroleum Hydrocarbons (TPH)	NWTPH-Gx
Volatile Organic Compounds (VOCs) – BTEX only	US EPA 8260

6.2 Private Well Sampling Screening Levels

Analytical results were compared to applicable health-protective screening levels or background concentrations. It is important to note that the methods utilized to analyze surface water and sediment samples are also able to detect compounds unrelated to the MP-46 Gasoline Spill. Thus, detection of a compound does not necessarily mean that the compound is directly related to the incident.

In accordance with Washington State groundwater cleanup standards, as found in the Chapter 173-340-720 of the Washington Administrative Code (WAC), well water BTEX samples were screened against Method A cleanup levels for potable water, provided in Table 720-1 of the WAC.

In accordance with the US EPA Primary Drinking Water Regulations Method A cleanup levels for potable water well water TPH samples were screened against EPA Maximum Contaminant Levels (MCLs).

6.3 Private Well Sampling Results

Sampling summaries, including locations, descriptions and the number of samples collected are provided in **Table 6.2**

Table 6.2. Well Water Sampling Locations and Dates

Location Code	Location Description	First Sample Date	Last Sample Date	# Samples Collected
G001	19510 SR-534: NE corner of red barn near pigpen	12/17/2023	3/26/2024	3
G002	19356 Conway Hill Rd: Artesian spring outfall approximately 50 yards N of bridge	12/17/2023	3/26/2024	4
G003	19356 Conway Hill Rd: Holding tank on the SW corner of the house	12/17/2023	3/26/2024	4
G004	21190 Locken Hill Ln: Spigot on the S side of the house	12/18/2023	3/26/2024	4
G005	19651SR-534: Spigot at pumphouse 40 yards E of the house	12/18/2023	3/26/2024	4
G006	19651 SR-534: Spigot on the N side of the house	12/18/2023	3/26/2024	4
G007	21462 Conway Hill Ln: Spigot in the backyard	12/19/2023	12/19/2023	1
G008	21498 Conway Hill Ln: Spigot on front of the house	12/20/2023	3/26/2024	6
G009	21596 Snowden Ln: Spigot on the S side of the house	12/22/2023	3/27/2024	6
G010	21340 Conway Hill Rd: Spigot on N side of house	12/28/2023	2/9/2024	3
G011	19510 SR-534: NE corner of red barn near pigpen	1/5/2024	3/26/2024	3
G012	21214 Locken Ln: Spigot in basement	1/8/2024	2/11/2024	3

A map of well water sample locations is provided in **Appendix F-2.** A summary of analyte detections is provided in **Table 6.3** Full summaries of the well water sampling results are provided in **Appendix F-3**. Summary maps depicting TPH + BTEX concentrations are provided in **Appendix F-4.**

Table 6.3 Well Water Sampling Detection Summary

Analyte	Count of Lab Results	Count of Detections	Range of Detections	Screening Value	Detections Above Screening Value
Gasoline Range Organics	45	1	39.4 (J) µg/L	800[2]	0
Toluene	45	1	1.65 µg/L	1,000[1]	0

[1] USEPA National Primary Drinking Water Regulations - Maximum Contaminant Levels (MCLs)
[2] WAC 173-340-720 - Method A cleanup levels for potable ground water (Table 720-1)
J: The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

6.4 Private Well Sampling Discussion

Out of extreme precaution a survey was conducted for any private wells or domestic water sources within a one-mile radius of the spill location. Several wells, both drinking water and irrigation wells, were identified and sampled to assess whether gasoline constituents were present. In addition, natural springs and other surface waters present on private properties were sampled at the request of the property owner or WDOE.

Twelve (12) private water sources were sampled for gasoline constituents. Eleven of the locations were sampled multiple times. A total of forty-five samples were collected in accordance with the Water Well Sampling Plan. Samples were analyzed for TPHg and BTEX and results were compared against EPA National Primary Drinking Water Regulations – Maximum Contamination Levels (MCLs). No results indicated the presence of any analyte at concentrations greater than the MCLs.

7 SOIL SAMPLING AND ANALYSIS

The Environmental Sampling and Analysis Plan (SAP) for Delineation and Remediation of Impacted Soils (Soil Delineation Plan) (**Appendix G-1)** was approved by UC on December 13, 2023. The Soil Delineation Plan A2- A3 Excavation Addendum was approved by UC on January 24, 2024 (**Appendix G-2)**. The Division A4 and Addendum was approved on January 29, 2024. (**Appendix G-3)**. Between December 14, 2023, and March 19, 2024, soil samples were collected from Divisions A1, A2, A4, and C to delineate hydrocarbon contamination of the soil in each division. Prior to, and following the installation of the coffer dam and during excavation of Divisions A2 and A3, Soil VOC screening by PID headspace analysis was conducted to guide excavation operations. On completion of excavation operations, samples were collected from the excavated area in Divisions A2 and A3 between January 31, 2024, and March 19, 2024. Samples were also collected from the backfill source material stockpile to assess suitability for backfilling the excavation.

7.1 Soil Sampling Methodology

7.1.1 Soil Delineation Sampling of Impacted Soils

CTEH developed and implemented the Soil Delineation Plan to document and quantify the potential presence of gasoline or gasoline constituents related to the MP-46 Gasoline Spill in soil at and downgradient of the release site. During the delineation sampling, in accordance with the Plan, a 25ft^2 sampling grid was developed and soil samples were collected from push probe or hand auger borings. Additionally, samples were collected from a geotechnical hollow stem auger boring following discovery of historical diesel in the northern corner of A2/A3. Hand trowels were used occasionally to collect surface soil samples when soil conditions were too saturated for the use of a hand auger or push probe.

7.1.2 VOC Headspace Delineation of Impacted Soils

To guide excavation operations, soil screening of VOCs was conducted in the field using a properly calibrated photo-ionization detector (PID). A headspace VOC concentration of 100 pm was used to delineate the boundaries of the impacted area, and excavation continued from impacted areas until a depth was reached at which headspace VOC concentrations did not exceed the threshold of 100 ppm. On January 24, 2024, an addendum to the Soil Delineation Plan was approved by Incident Command providing additional guidance for VOC headspace screening thresholds for soil in Divisions A-2 and A-3 of the excavation area. VOC headspace concentrations of 100 ppm continued to be used for Division A-2, and an additional VOC screening level of 25 ppm was implemented for Division A-3.

7.1.3 Post Excavation Soil Sampling of Impacted Soils

CTEH developed and implemented the A2-A3 Excavation Addendum to document and quantify efficacy of remedial excavation of gasoline impacted soils in Divisions A2 and A3. Upon clearance of VOC headspace screening, or when the limitations of excavation were met, soil samples were collected from 25'x25' grids in Divisions A2 and A3 to confirm that soils that may exceed clean-up criteria have been removed via excavation in accordance with the addendum. In areas that further excavation was not possible and VOC headspace delineation concentrations exceeded the screening levels indicating that impacted soils that would exceed clean-up criteria may still be present, soil samples were collected to quantify and document the concentration of gasoline constituents remaining. Locations with analytical results in exceedance with the clean-up criteria were documented, identified on a map, and referred to the long-term remediation and restoration group for further evaluation.

Post excavation delineation and soil sampling in Division A1 was performed by another environmental consulting group, Antea. A final report of sampling results and location maps created by Antea can be found in **Appendix G-4.**

All samples were sent to a third-party National Environmental Laboratory Accreditation Program (NELAP)-accredited laboratory for analysis using state or federal analytical methods, listed in **Table 7.1**. To ensure completeness, each laboratory report underwent data verification and/or validation by an independent contractor.

Table 7.1 Soil Analytical Methods

Analysis	Method
Total Petroleum Hydrocarbons (TPH)	NWTPH-Gx and NWTPH-Dx
Volatile Organic Compounds (VOCs) - BTEX only	US EPA 8260

Semi Volatile Organic Compounds (SVOCs)[3]	US EPA 8270
Metals (RCRA)[4]	US EPA 6010 and 7470/7471

7.2 Soil Sampling Screening Levels

Analytical results were compared to applicable health-protective screening levels or background concentrations. It is important to note that the methods utilized to analyze surface water and sediment samples are also able to detect compounds unrelated to the MP-46 Gasoline Spill. Thus, detection of a compound does not necessarily mean that the compound is directly related to the incident.

In accordance with the Washington State Model Toxic Control Act (MTCA), soil samples were screened against Method A Soil Cleanup Levels for Unrestricted Land Use.

7.3 Soil Sampling Results

Sampling summaries, including division, collection method, location code, sample dates, and detection summaries are provided in **Tables 7.2 through 7.6.** Full sampling results summaries can be found in **Appendix G-5** and a sampling results map depicting TPH + BTEX concentrations can be found in **Appendix G-6**.

Grid squares were labeled alphanumerically using letters for rows and numbers for columns. Grid squares that have been sampled include the sample collection method as a prefix in their labels. Prefixes are coded using the following scheme: Soil Boring Probe: SB; Geotechnical Auger: GT; Hand Auger: HA; Surface Sample: No prefix. (Example: HA-D08 for a hand auger sample; D17 for a surface soil sample)

Table 7.2. Delineation Soil Sampling Locations and Dates

Division	Collection Method	Location Codes	Sample Dates
A-2	Hand Trowel	C14., C15, C16, C17, C18, C19, D14, D15, D16, D17, D18, D19	1/30, 1/31/24
	Hand Aguer	HA-B20, HA-C18, HA-C19B, HA-D16, HA-D17A, HA-D17B, HA-D18A, HA-D19	1/9, 1/16/24
	Soil Bore	SB-B12, SB-B14, SB-B18, SB-B19, SB-B11, SB-C13, SB-D11	1/2, 1/5/24
	GeoTech Probe	GT-2	1/2, 1/5/24
A-3	Hand Aguer	HA-A12, HA-A13, HA-A14, HA-A15, HA-A16, HA-A17HA-A20	1/9, 1/16, 2/5/24
	Soil Bore	SB-A18, SB-A19	1/2, 1/4/24

[3] SVOCs only analyzed on soil boring samples (PAHs only) and samples from the interceptor trench soil stockpile
[4] Metals only analyzed on soil boring samples (total only) ramp samples (total only), and samples from the stockpile for the interceptor trench (Total and TCLP)

Division	Collection Method	Location Codes	Sample Dates
A-4	Hand Aguer	HA-A01, HA-A03, HA-A05, HA-A07, HA-A08, HA-B02, HA-B04, HA-B06, HA-B08, HA-C03, HA-C05, HA-C07, HA-C08, HA-D08	1/27, 1/28/24
A-4	Soil Bore	SB-A09, SB-A10, SB-A11, SB-B09, SB-B10, SB-B11, SB-C10, SB-C11, SB-D10	1/2,1/4, 1/5/24
N/A	GeoTech Probe	GT-2B	1/5/24
C	Hand Trowel	S001, S002, S003	12/14/23

Table 7.3. Post Excavation Soil Sampling Locations and Dates

Division / Location	Collection Method	Location Codes	Sample Dates
A-1	Hand Trowels	S083, S088, S089	3/18, 3/19/24
A-2	Hand Trowels	D14, S028, S029, S030, S033, S042, S047, S048, S049, S050, S051, S052, S053, S054, S055, S056, S057, S058, S059, S060, S061, S062, S063, S064, S065, S066, S067, S079, S080, S081, S082,	1/31, 2/26, 2/28, 3/5, 3/6, 3/7, 3/8, 3/9, 3/10, 3/16, 3/18/24
A-3	Hand Trowels	S068, S069, S070, S071, S072, S073, S074, S075, S076, S077, S078	3/14, 3/15, 3/16/24
Stockpile	Hand Trowels	S087	3/19/24

Table 7.4. Backfill Soil Sampling Locations and Dates

Location	Collection Method	Location Codes	Sample Dates
Lenz, North Hill Resources	Hand Trowels	S600, S601	2/27/24

Table 7.5 Delineation Soil Sampling Detection Summary

Analyte	Number of Samples	Number of Detections	Range of Detections	Screening Value (µg/kg)	Detections Above Screening Value
1-Methylnaphthalene	9	3	9.37 (J)- 57.5 µg/kg	NA	-
2-Methylnaphthalene	9	2	48.8 (J)- 72.8 µg/kg	NA	-
Arsenic	47	36	1,070 (J)- 10,400 µg/kg	20,000 µg/kg [1]	0
Barium	47	46	0.115- 198,000 µg/kg	NA	-
Benzene	138	54	0.778 (J)- 16,700 µg/kg	30 µg/kg [1]	24
Benzo(a)anthracene	9	1	4.55 (J) µg/kg	NA	-
Benzo(a)pyrene	9	1	3.27 (J) µg/kg	100 µg/kg [1]	0
Benzo(b)fluoranthene	9	1	4.03 (J) µg/kg	NA	-

Analyte	Number of Samples	Number of Detections	Range of Detections	Screening Value (µg/kg)	Detections Above Screening Value
Cadmium	47	32	64.1 (J)- 467 (J) µg/kg	2,000 µg/kg [1]	0
Chromium	47	36	25,900- 72,700 µg/kg	NA	-
Chrysene	9	1	3.11 (J) µg/kg	NA	-
Diesel Range Organics	42	29	1,740 (J)- 518,000 (J) µg/kg	2,000,000 µg/kg [1]	0
Ethylbenzene	138	58	1.7 (J)- 167,000 µg/kg	6,000 µg/kg [1]	16
Fluoranthene	9	1	10.9 µg/kg	NA	-
Fluorene	9	1	15.8 µg/kg	NA	-
Gasoline Range Organics	138	46	1,440 (J)- 9,250,000 µg/kg	30,000 µg/kg [1]	27
Lead	47	36	3,470- 25,300 µg/kg	250,000 µg/kg [1]	0
Mercury	47	34	28.7 (J)- 119 µg/kg	2,000 µg/kg [1]	0
Naphthalene	9	1	11.9 (J) µg/kg	5,000 µg/kg [1]	0
Phenanthrene	9	1	25.3 µg/kg	NA	-
Pyrene	9	1	13.8 µg/kg	NA	-
Residual Range Organics	41	18	4,660 (J)- 34,200 (J) µg/kg	2,000,000 µg/kg [1]*	0
Selenium	47	13	998 (J)- 2,100 (J) µg/kg	NA	-
Toluene	138	72	1.93 (J)- 755,000 µg/kg	7,000 µg/kg [1]	14
Xylenes, Total	138	80	1.66 (J)- 879,000 µg/kg	9,000 µg/kg [1]	17

Table 7.6 Post Excavation Soil Sampling Detection Summary

Analyte	Count of Lab Results	Count of Detections	Range of Detections	Screening Value (µg/kg)	Detections Above Screening Value
Benzene	68	41	0.937 (J)- 2,600 µg/kg	30 µg/kg [1]	19
Diesel Range Organics	68	25	1,530 (J)- 3,050,000 µg/kg	2,000,000 µg/kg [1]	1
Ethylbenzene	68	39	0.835 (J)- 156,000 µg/kg	6,000 µg/kg [1]	6
Gasoline Range Organics	68	30	1,540 (J)- 7,400,000 µg/kg	30,000 µg/kg [1]	12
Residual Range Organics	68	7	3,670 (J)- 41,600 (J) µg/kg	2,000,000 µg/kg [1]*	0
Toluene	68	53	1.99 (J)- 214,000 µg/kg	7,000 µg/kg [1]	4
Xylenes, Total	68	47	1.96 (J)- 877,000 µg/kg	9,000 µg/kg [1]	7

[1] Washington State Model Toxic Control Act (MTCA) - Method A Soil Cleanup Levels for Unrestricted Land Use
* Cleanup Level for Heavy Oils

J: The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

7.4 Soil Sampling Discussion

A total of 238 soil samples were collected between December 14, 2023, and March 19, 2024, to delineate and quantify soils potentially impacted by the MP-46 gasoline pipeline spill that occurred on December 10, 2024. Delineation soil samples were collected to guide excavation for removal of impacted soil, both horizontally and vertically (depth).

A total of 68 post excavation samples were collected from Divisions A2 and A3 to document the efficacy of remedial excavation/removal of impacted soils and to quantify that soils that remained were not in exceedance with MTCA Method A cleanup standards. Once all practical excavation was completed, there were a total of 19 locations where analytical results with concentrations of gasoline constituents in exceedance MTCA Method A were reported. These locations were documented and were referred to the long-term remediation team for further treatment and monitoring. A map depicting grid locations in exceedance of MTCA Method A can be found in **Appendix G-7.**

8 TREE SURVEY

To facilitate assessment of impacted soils and allow for removal of contaminated soil near Hill Ditch it was necessary to remove more than 250 trees from a restored riparian zone adjacent the waterway. Prior to cutting and removing the trees, the size (diameter at breast height) and species of each tree present was documented as outlined in the UC-approved Tree Survey Plan December 22, 2023. Calypso Restoration was retained to complete the survey and completed the survey on December 23, 2023. The report titled Carpenter Creek Remediation Site Plant Survey 19199 SR 534, Mount Vernon, WA 98274 is included as **Appendix H.**

9 WATER TREATMENT SYSTEM SAMPLING AND ANALYSIS

9.1 Water Treatment System Sampling Methodology

In conjunction with the preparation for and installation of the coffer dam, de-watering was necessary to allow equipment access and sheet-piling installation. De-watering was accomplished using a network of water capture wells. Water pumped from these wells was piped to a water treatment system installed at the site designed to reduce concentrations of gasoline constituents to acceptable levels for discharge into Hill Ditch. GeoEngineers and Northwest Soil Cement (NWSC) designed and operated the water

treatment system. CTEH conducted the sampling necessary to maintain compliance with the Treated Water Discharge Permit authorizing surface water discharge.

The treatment system consisted of a large frac tank for storage of recovered water, a turbidity reduction tank, cannisters of granulated activated carbon (GAC) and associated piping. Several sample ports were incorporated into the system to allow sampling of pre-treated and treated water and to assess the quality of the GAC over time. Samples were collected from a minimum of three locations in the treatment system per sampling event and always included the treated water to be discharged to Hill Ditch. The frequency of sampling varied but was more frequent at the start-up of the system and less frequent as operations became routine.

All samples were sent to a third-party National Environmental Laboratory Accreditation Program (NELAP)-accredited laboratory for analysis using state or federal analytical methods, listed in **Table 9.1**.

Table 9.1. Water Treatment Sampling Analytical Methods

Analysis	Method
Total Petroleum Hydrocarbons	NWTPH-Dx
Total Petroleum Hydrocarbons (TPH)	NWTPH-Gx
Volatile Organic Compounds (VOCs) including BTEX	US EPA Method 8260D
Semi Volatile Organic Compounds (SVOCs)	US EPA Method 8270ESIM
Metals	US EPA Method 200.8
Semi Volatile Organic Compounds (SVOCs)	US EPA Method 625.1

9.2 Water Treatment System Sampling Screening Levels

All water samples collected for treatment were analyzed for diesel, gasoline, diesel and gasoline constituents, and metals and compared against the discharge permit requirements. Screening levels and the associated permit and documentation were prepared by GeoEngineers in conjunction with NWSC.

9.3 Water Treatment System Sampling Results

A summary of all analytical detections in water treatment samples is provided in Table 9.1. Analytical results associated with the water treatment system samples can be found in **Appendix I**.

Table 9.2 Water Treatment Sampling Detection Summary

Analyte	Count of Lab Results	Count of Detections	Range of Detections	Fresh Water Screening Value (µg/L)	Detections Above Screening Value	Locations with Detections Above Screening Value
1-Methylnaphthalene	30	15	0.718- 16.6 (D) µg/L	10.0 [1]	7	LB-A, LB-B
2-Methylnaphthalene	30	15	0.49- 18.1 (J) µg/L	10.0 [1]	4	LB-A, LB-B
Arsenic	30	30	0.283 (J)- 9.35 µg/L	360 [2]	0	-
Barium	30	30	6.74- 162 µg/L	1000 [4]	0	-
Benz(a)anthracene	30	5	0.0111 (J)- 0.0193 (J) µg/L	NA	-	-
Benzene	30	15	0.603- 224 (D) µg/L	2.0 [1]	13	LB-A, LB-B
Benzo(a)pyrene	30	1	0.0107 (J) µg/L	NA	-	-
Chromium	30	29	0.137 (J)- 28.7 µg/L	15 [3]	1	LB-A
Copper	30	27	0.189 (J)- 30.5 µg/L	8.2 [2]	3	LB-A, LB-B
Diesel Range Organics	30	15	53 (J)- 1,230 µg/L	250 [1]	11	LB-A, LB-B
Ethylbenzene	30	14	0.493- 66 (D) µg/L	2.0 [1]	13	LB-A, LB-B
Fluorene	30	15	0.0227 (J)- 0.765 µg/L	5.7 [1]	0	-
Gasoline Range Organics	30	19	21.8 (J)- 9,440 (D) µg/L	250 [1]	14	LB-A, LB-B
Heavy Oil	30	14	27.9 (J)- 1,540 µg/L	250 [1]	1	LB-B
Lead	30	18	0.12 (J)- 6.63 µg/L	27.5 [2]	0	-
m,p-Xylene	30	15	8.2- 536 (D) µg/L	2.0 [1]	15	LB-A, LB-B
Naphthalene	30	15	0.471- 17.2 (J) µg/L	NA	-	-
Nickel	30	30	0.198 (J)- 46.7 µg/L	733.79 [2]	0	-
o-Xylene	30	16	0.404 (J)- 258 (D) µg/L	2.0 [1]	15	LB-A, LB-B
Phenanthrene	30	14	0.0209 (J)- 0.68 µg/L	16.2 [1]	0	-
Toluene	30	17	0.418 (J)- 2,010 (J) µg/L	2.0 [1]	15	LB-A, LB-B
Total Petroleum Hydrocarbons	30	16	86.2 (J)- 2,780 µg/L	NA	-	-
Zinc	30	26	2.6- 65.2 µg/L	59.27 [2]	2	LB-A, LB-C

[1] No applicable surface water criterion; value is laboratory quantitation level.
[2] Acute – Freshwater Toxic Substances Criteria (WAC 173-201A-240). Based on Hardness of 46.0 mg/L for Hardness Dependent Metals. The Indicator Level for hardness dependent metals is expressed as a dissolved metal value. Meeting the Indicator Level using analytical protocol for total or dissolved metal values meets the intent of this order.
[3] Indicator Level total chromium is for hexavalent chromium using Acute – Freshwater Toxic Substances Criteria (WAC 173-201A-240) because there is no water quality standard for total chromium.
[4] Applicable surface water criterion does not exist for barium. The indicator level of 1,000 µg/L for barium is based on groundwater quality standards to be protective of human health and the environment.
D: Dilution was required.
J: The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

9.4 Water Treatment System Sampling Discussion.

Thirty samples were collected and analyzed during operation of the treatment system. As expected, the influent samples frequently exceeded the screening level criteria, however, treated water did not exceed screening levels at the time of discharge, indicating effective treatment.

10 WASTE CHARACTERIZATION SAMPLING

The Waste Management Plan was developed to describe the requirements for waste collection, storage, and disposal, and was approved by UC on December 13, 2023 **(Appendix J)** In accordance with support the Waste Management Plan, and to aid in characterization of wastewater and soil for waste management, samples were collected from three frac tanks containing wastewater that had been removed from on-site excavation operations. Soil samples were collected from the Division A2 interceptor trench and from the stockpile of soil excavated from the trench.

10.1 Waste Characterization Sampling Methodology

Prior to implementation of on-site water treatment, water that was recovered from excavation and skimming operation was collected via vacuum truck and stored in frac tanks for disposal. Samples were collected from three frac tanks to characterize the waste to determine proper disposal methods. Wastewater samples were collected using bailers and transferred to appropriate containers for lab analysis.

To support characterization of the soil for waste management, soil samples were collected from the Division A2 interceptor trench and from the stockpile of soil excavated from the trench. Hand trowels and/or hand augers were used to collect soil samples.

All samples were sent to a third-party National Environmental Laboratory Accreditation Program (NELAP)-accredited laboratory for analysis using state or federal analytical methods, listed in **Tables 10.1**. and **10.2**

Table 10.1 Wastewater Analytical Sampling Methods

Analysis	Method
Volatile Organic Compounds (VOCs) including BTEX	US EPA Method 8260B
Semi Volatile Organic Compounds (SVOCs)	US EPA Method 8270ESIM

Table 10.2 Waste Soil Analytical Sampling Methods

Analysis	Method
Benzene, toluene, ethylbenzene, and xylenes (BTEX)	US EPA Method 8260D
RCRA Metals (Total and TCLP)	US EPA Method 6010D/7471B
Total Petroleum Hydrocarbons (TPH)	NWTPH-Gx
Ignitability	ASTM D-93/US EPA Method 1010A

10.5 Waste Characterization Thresholds

Samples collected for the purposes of waste characterization were compared with the EPA Maximum Concentration of Contaminants for the Toxicity Characteristics (40CFR 261.24), and the EPA Ignitibility Characteristic (40 CFR section 261.21).

10.3 Waste Characterization Sampling Results

A summary of the sample locations and dates is provided in **Table 10.3**. The reports were provided to BP at the time of receipt for waste profiling.

Table 10.3 Waste Characterization Sampling Locations and Dates

Division / Location	Collection Method	Location Codes	Sample Dates
Stockpile	Hand Trowels	Interceptor Trench Soil Stockpile - S007, S008, S009, S010, S011, S012	1/22/24
A2	Hand Trowels	Interceptor Trench - Z004	12/29/23
Allen Station	Bailer	F1095, F1078, F138	12/17/23, 12/18/23, 01/31/24

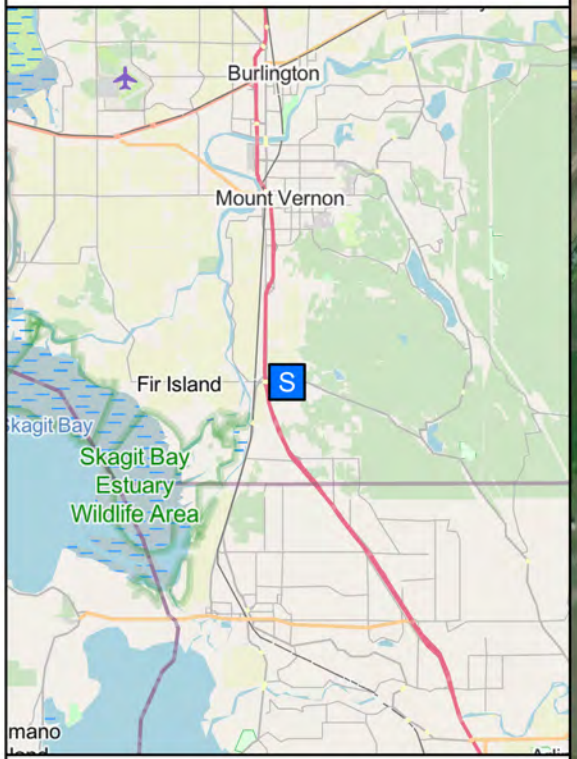
Appendix A

Incident Location

CTEH®

Olympic Pipeline Gasoline Spill

Mt. Vernon, WA | PROJ-032692



Updated At: 1/4/2024 7:49 PM

Projection: NAD 1983 2011 UTM Zone 10N

Appendix B-1

Surface Water Sampling Plan

Cover Sheet

Document Name: Surface Water Sampling Plan
Incident Name: Olympic Pipeline Gasoline Spill Conway 12/10/23
Printed: 12/29/2023 16:15 PST UTC-8

Approved By

Name/Position	*Comments*	*Status*	*Date/Time*
Tonel, Monica Federal OSC		Approved	12/24/2023 10:34
Cromley, Joan Local Government OSC		Approved	12/26/2023 12:43
Hout, Tony (Tony) Planning Section Chief		Approved	12/24/2023 05:53
Zimmerman, Terry RP Incident Commander		Approved	12/24/2023 06:41
Fritzen, Madeline State OSC		Approved	12/24/2023 06:23
Beasley, Shaun Swinomish Tribal OSC		Approved	12/24/2023 07:30
Hayes, Laura Environment Branch Director		Approved	12/26/2023 13:49

Olympic Pipeline Gasoline Spill, Conway, WA

Surface Water Sampling Plan

BP Mount Vernon Spill

Version 2.0

Prepared on Behalf of:

Olympic Pipeline Company

Prepared By:

CTEH, LLC

5120 Northshore Drive

Little Rock, AR 72118

501-801-8500

December 22, 2023

	Name/Organization	Signature	Date Signed
Prepared by:	Tony Palagyi - CTEH		12-22-2023
Approved by:			
Approved by:			
Approved by:			

1. Introduction and Purpose

This Sampling and Analysis Plan (SAP) was prepared by CTEH®, LLC. on behalf of Olympic Pipeline Company (Olympic) to provide environmental sampling work plans related to the Olympic Pipeline Gasoline Spill in Conway, WA. The incident occurred on December 10, 2023. The coordinates for the approximate location of the release site are 19651 SR 534, Conway, WA. The location of the incident is depicted on the Site Location Map in Appendix A.

The objectives of the environmental investigation and proposed sampling include:

1. Collection of surface water samples to evaluate the potential presence of gasoline or gasoline constituents in Hill Ditch downstream of the release site and in the waters of Skagit Bay.
2. The collection of surface water (where present) samples to delineate extent and nature of potential impact related to the incident.
3. The collection of background samples to determine a baseline and develop the range of potential background concentrations for comparative purposes and to distinguish between target analytes related to this incident and non-related target analytes.

2. Health and Safety

CTEH sampling personnel will review and adhere to the site-specific Health and Safety Plan. Sampling and documentation activities will be conducted only under weather and other environmental conditions that do not create an unsafe working environment.

3. Data Quality Objectives

The data collected during field activities will be used to assess potential exposures to human health and the environment to constituents potentially related to the release.

A strategic planning approach based on scientific method will be employed for data collection activities providing a systematic procedure to ensure the type, quantity and quality of data used in decision-making will be appropriate for the intended application. All samples will be submitted to the analytical laboratory for a Level II data quality package.

4. Surface Water Monitoring and Sampling

4.1 Surface Water Monitoring

In order to determine that water quality is maintained for the duration of response and post response/remediation activities, monitoring at various surface water sampling locations may be conducted using a Horiba multi-parameter water quality meter, or equivalent. Surface water monitoring

may be conducted daily or on an as needed basis (e.g., concurrent with sample collection) and may include the following parameters and information:

- Temperature (°C)
- pH (0-14 standard units)
- Conductivity (Siemens/meter)
- Dissolved Oxygen (milligrams/liter)
- Turbidity (NTU)
- Current Tidal Conditions (high and low tide timelines)
- Water depth when applicable
- Flow direction
- Visual observations of anthropogenic activity
- Occurrence of motorized vessels in the vicinity

Visual observations of sheen will be made at each surface water sampling location and electronically noted using a hand-held data collection device or recorded in a log dedicated to this project. The water quality meters in use on this project will be calibrated in accordance with the manufacturer's specifications.

4.2 Location and Frequency

Where present, Surface water samples may be collected from moving surface waters or ponded waters near and downstream from the Site, as well as upstream from the Site to establish background concentrations. Collection of surface water samples will, whenever possible, occur in slower moving water, or in an eddy.

Surface water samples have been collected at 16 locations along Hill Ditch, in the Skagit River and in Skagit Bay. Analytical results have been mapped to better understand the distribution of gasoline constituents. Based on these findings it is recommended that sampling frequency be reduced to once every three days. Should unexpected elevations in gasoline constituent concentrations be encountered, the sampling frequency may be adjusted. A map of surface water sample locations and related analytical findings is included as **Appendix A**.

4.3 Revised Surface Water Sampling Methodology and Analysis

Surface water samples will be decanted directly into laboratory supplied sample containers and submitted to Pace Analytical for laboratory analysis. Based on analytical findings to date it is proposed that semi-

volatile petroleum hydrocarbons be removed from the analyte list. As of December 23, 2023, surface water samples will be analyzed using the methods outlined in **Table 1**.

Table 1 Surface Water Sampling Summary

Analysis	Method	Sample Container	Preservative	Hold Time
Total Petroleum Hydrocarbons (TPH)	NWTPH-Gx	2 x 40 mL VOA vials	HCL to pH < 2; Ice, maintained at 0-6°C	14 days
Volatile Organic Compounds (VOCs) including BTEX	US EPA 8260	3 x 40mL HCl VOAs	HCL to pH < 2; Ice, maintained at 0-6°C	14 days

5. Sample Handling Procedures

Samples will be placed in laboratory supplied sample containers, appropriate for the intended analysis, labeled with sample identification number, sample depth, sampler name, sample date, analysis and methodology requested, and time of sample collection, and immediately placed in a cooler on ice pending laboratory analysis. Samples will be packaged, labeled, retained on ice, and documented in an area which is free of impact and provides for secure storage. Custody seals will be placed on each sample containing cooler, and chain-of-custody procedures will be maintained from the time of sample collection until arrival at the laboratory to protect sample integrity. Shipping or transporting of samples to the laboratory will be done within a timeframe such that recommended holding times are met.

6. Sample Labeling

Sample containers will be clearly labeled with the following information:

- Unique sample identification.
- Sample Type (discrete or composite, sediment and/or soil samples only)
- Sampler name or initials.
- Date sample collected.
- Time sample collected; and
- Analysis to be performed.

Acceptable QA designations include MS (1 in 20 by media), MSD (1 in 20 by media), rinsate blank (RB) only when using non-dedicated sampling equipment, and duplicates (DUP) in 1 out of 10 samples by media. Field blank samples will be collected once every 10 samples.

7. Quality Assurance

Sampling will be carried out in conjunction with a well-defined quality assurance (QA) program. The goal of the field QA program is to document that samples are collected without the effects of accidental cross- or systematic contamination and refers to the sampling, analysis, and data validation procedures for

generating valid and defensible data. To provide QA for the proposed sampling event, the following sampling, analysis, and data validation procedures will be performed:

7.4 Field Calibration

Instruments used in the field as part of this sampling event are anticipated to consist of GPS units, digital cameras, and handheld data collection devices such as tablets/smart phones. Other equipment are not anticipated to require field calibration. Operators of each piece of equipment are responsible for maintaining (including proper battery charge) and operating this equipment such that it conforms to each respective manufacturer's specifications. The type of equipment, brand, battery type and lot numbers will be recorded. Meters will be calibrated for PH and other water quality standards as possible.

7.5 Field Duplicate Sample

For approximately every ten samples collected in the field, one field duplicate will be collected and submitted for laboratory analyses to verify the reproducibility of the sampling methods. Field duplicates will be prepared by separately submitting an aliquot from the same sample location to the laboratory for analysis consistent with the proscribed analyses. The submitted duplicate will be submitted such that the laboratory is not aware that it is a duplicate (i.e., the sample ID will not identify it as a "duplicate" for any specific sample location). At least one field duplicate will be collected each day that samples are collected.

7.6 Field Split Samples

Field split samples refer to samples collected by the regulatory agency or its designee from the same sampling location and independently submitted to a different laboratory for analysis. Field split samples may be collected at the discretion of representatives of the regulatory agency or Incident Command.

7.7 Laboratory QA

Laboratory quality control procedures will be conducted in a manner consistent with relevant State and federal regulatory guidance. Deliverables will contain the supporting documentation necessary for data validation. Internal laboratory quality control checks will include method blanks, matrix spikes (and matrix spike duplicates), surrogate samples, calibration standards, and laboratory control standards (LCSs).

7.8 Matrix Spike/Matrix Spike Duplicate Sample

Matrix Spike/Matrix Spike Duplicate (MS/MSD) samples refer to field samples spiked with the analytes of interest prior to being analyzed at the laboratory to gauge the quality of analysis. Approximately one in twenty samples will be analyzed as MS/MSD samples.

7.9 Data Validation

Validation of the data generated by the laboratory performing the analyses will include at a minimum sample holding times, accuracy, precision, contamination of field generated or laboratory method blanks, and surrogate compound recovery. Accuracy will be determined by evaluating LCS and MS recovery.

Precision will be determined by evaluating laboratory and field duplicate samples. Level II data verification will be performed on 100% of the samples.

8. Decontamination Procedures

Decontamination procedures refer to the steps undertaken to minimize the potential for offsite contamination and cross-contamination between individual sampling locations. Prior to collecting any sample for this release the following decontamination procedures will be undertaken: non-disposable sampling equipment such as stainless-steel hand trowels which come into contact with sampling media will be decontaminated using a bristled brush and a solution comprised of a laboratory grade, non-phosphate detergent (e.g., Alconox or Liquinox) and deionized water. Depending on ancillary activities being conducted for the response to this release, the decontamination of sampling equipment will be conducted over poly sheeting at the sample location or in a nearby designated area. The sampling equipment to be decontaminated will first be placed in a bucket containing the detergent solution and thoroughly washed using a bristled brush. The items will then be transferred to the second 5-gallon bucket containing deionized water for rinsing. Following the initial rinsing, the item will be held over the third 5-gallon bucket while deionized water is carefully decanted over each item. Decontaminated items will be wrapped in clean aluminum foil for transit to the next sampling location.
Nitrile gloves will be worn by sampling personnel and changed between activities at each discrete sample collection location. Previously worn nitrile gloves will be discarded in appropriate waste receptacles with other PPE.

9. Sampling Waste Disposal

Decontamination fluids and contaminated Personal Protective Equipment (PPE) will be containerized and collected at the designated onsite waste staging area as needed.

All produced waste onsite will be managed and disposed of in a manner consistent with all regulatory guidelines and requirements.

10. Data Analysis

To assess the potential impact from the incident, the results of sampling will be reviewed for the presence/absence of these compounds, and should they be found, the concentrations of these parameters relative to appropriate regulatory standards. The results of laboratory analyses will be provided to the Olympic Pipeline Company.

11. Records Management

Records management refers to the procedures for generating, controlling, and archiving project-specific records and records of field activities. Project records, particularly those that are anticipated to be used as evidentiary data, directly support current or ongoing technical studies and activities, and provide historical evidence needed for later reviews and analyses, will be legible, identifiable, retrievable and protected against damage, deterioration, or loss on a centralized electronic database. Handwritten records will be written in indelible ink. Records will likely include, but are not limited to, the following: bound field notebooks on pre-numbered pages, sample collection forms, personnel qualification and training forms, sample location maps, equipment maintenance and calibration forms, chain-of custody forms, maps and drawings, transportation and disposal documents, reports issued as a result of the work, procedures used, correspondences, and any deviations from the procedural records. Documentation errors will be corrected by drawing a single line through the error so it remains legible and will be initialed by the responsible individual, along with the date of change, and the correction will be written adjacent to the error.

Appendix A

Surface Water Sampling Locations

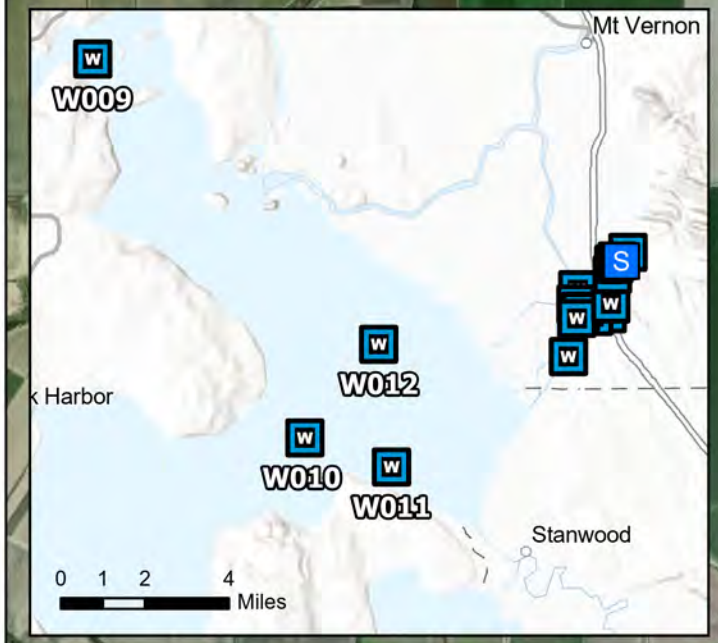
Surface Water Sampling Locations

BP Gasoline Release

0 0.25 0.5 1 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



W016
W001
W002
W003
W008
W007
W004
W015
W013
W014
W006
W005

S Incident Site
W Surface Water Sample

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 12/17/2023 11:24 AM

Appendix B-2

Fisher Slough Sediment & Surface Water Sample Collection Plan

DOCUMENTATION – COVER SHEET

Olympic Pipeline Gasoline Spill Conway

Date: 20 December 2023

Document Control Name: Fisher Slough Sediment + Surface Water Sample Collection Plan

Prepared by: Matt Bissell

Preparer Role: Env. branch director

Approvals

Responsible Party / Incident Commander	Terry Zimmerman		12/20/2023 1434
	Print Name above	*Sign Above*	*Date* *Time*
Federal On-Scene Coordinator	Monica Tonel / MIKE SIBLEY		12/20/23 1223
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Washington State On-Scene Coordinator	Madeline Fritzen		12/20/2023 1416
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Local On-Scene Coordinator	Julie DeLosada Charles Fleming	Charles Fleming	12/20/23 13:51
	Print Name above	*Sign Above*	*Date* *Time*
Tribal Coordinator	Shaun Beasley		12-20-2023 1423
	Print Name above	*Sign Above*	*Date* *Time*
Section Chief	Tony Hout James Ochoa	FOR: TONY HOUT	12.2023 14:36
	Print Name above	*Sign Above*	*Date* *Time*
Unit Leader			
	Print Name above	*Sign Above*	*Date* *Time*

Date	Revision Record	Description of Changes
Date:	Revision 0	
Date:		
Date:		

CTEH®

Olympic Pipeline Gasoline Spill, Conway, WA

Fisher Slough Sediment & Surface Water Sample Collection Plan

BP Mount Vernon Spill

Version 1.1

Prepared on Behalf of:

Olympic Pipeline Company

Prepared By:

CTEH, LLC

5120 Northshore Drive

Little Rock, AR 72118

501-801-8500

December 20, 2023

	Name/Organization	Signature	Date Signed
Prepared by:	Paula Skryja/bp		
Approved by:			
Approved by:			
Approved by:			

CTEH®

1. Introduction and Purpose

This Sampling and Analysis Plan (SAP) was prepared by CTEH®, LLC. on behalf of Olympic Pipeline Company (Olympic) to provide environmental sampling work plans related to the Olympic Pipeline Gasoline Spill in Conway, WA. The incident occurred on December 10, 2023. The approximate location of the release site is 19651 SR 534, Conway, WA. The location of the incident is depicted on the Site Location Map in Appendix A. In close proximity to the spill site is Fisher Slough. This property is a recent salmon restoration project completed by The Nature Conservancy and several other state and local natural resource trustees. Hill Ditch runs adjacent to Fisher Slough west of the spill location.

The objectives of the environmental investigation and proposed sampling include:

1. Collection of surface water samples to evaluate the potential presence of gasoline or gasoline constituents in Fisher Slough downstream of the release site.
2. Collection of soil/sedimentation samples to evaluate the potential presence of gasoline or gasoline constituents in areas of Fisher Slough potentially impacted by the BP spill.
3. if deemed necessary, the collection of background samples to determine a baseline and develop the range of potential background concentrations for comparative purposes and to distinguish between target analytes related to this incident and not related target analytes.

2. Health and Safety

Safety is the most important consideration when implementing this plan. All site personnel will review and adhere to the incident Site Safety and Control Plan (ICS Form 208) and company/contractor-specific Health and Safety Plans (HASP), as applicable. Daily tailgate safety briefings will be conducted prior to going into the field. Additional safety briefings may be given prior to undertaking activities such as vessel operations, sampling near water, etc. In general, sampling will only be conducted during daylight hours by qualified, 3rd party personnel and under weather or other environmental conditions that do not create unsafe working conditions. The appropriate personal protective equipment (PPE) will be utilized for each task.

CTEH sampling personnel will review and adhere to the site-specific Health and Safety Plan. Sampling and documentation activities will be conducted only under weather and other environmental conditions that do not create an unsafe working environment.

3. Data Quality Objectives

The data collected during field activities will be used to assess potential exposures to human health and the environment to constituents potentially related to the release.

A strategic planning approach based on scientific method will be employed for data collection activities providing a systematic procedure to ensure the type, quantity and quality of data used in decision-making will be appropriate for the intended application. All samples will be submitted to the analytical laboratory for a Level II data quality package.

4. Surface Water Monitoring and Sampling

4.1 Surface Water Monitoring

In order to determine that water quality is maintained for the duration of response and post response/remediation activities, monitoring at various surface water sampling locations may be conducted using a Horiba multi-parameter water quality meter, or equivalent. Surface water monitoring may be conducted daily or on an as needed basis (e.g., concurrent with sample collection) and may include the following parameters and information:

- Temperature (°C)
- pH (0-14 standard units)
- Conductivity (Siemens/meter)
- Dissolved Oxygen (milligrams/liter)
- Turbidity (NTU)
- Current Tidal Conditions (high and low tide timelines)
- Water depth when applicable
- Flow direction
- Visual observations of anthropogenic activity

Visual observations of sheen will be made at each surface water sampling location and electronically noted using a hand-held data collection device or recorded in a log dedicated to this project. The water quality meters in use on this project will be calibrated in accordance with the manufacturer's specifications.

4.2 Surface Water and Sediment Sampling Methodology and Analysis

Surface water samples will be decanted directly into laboratory supplied sample containers and submitted to Pace Analytical for laboratory analysis as presented in Table 2. Water quality parameters, including temperature, pH, conductivity, dissolved oxygen, and turbidity may be recorded for each surface water sample. Surface water sampling may involve collection of water

at various depths. Locations where samples are collected will be geo-referenced for inclusion in GIS mapping. Surface water and sediment samples will be analyzed for Total Petroleum Hydrocarbons (TPH) as gasoline using method NWTPH-Gx and Volatile organic Compounds including BTEX compounds using method US EPA 8260. Due to the potential for non-point source contamination to enter the slough and the fact that the product spilled was gasoline, no sampling for semi-volatiles or polynuclear aromatic hydrocarbons (PAHs) are planned.

Table 2 Surface Water and Sediment Sampling Summary

Analysis	Method	Sample Container	Preservative	Hold Time
Total Petroleum Hydrocarbons (TPH)	NWTPH-Gx	2 x 40 mL VOA vials	HCL to pH < 2; Ice, maintained at 0-6°C	14 days
Volatile Organic Compounds (VOCs) including BTEX	US EPA 8260	3 x 40mL HCl VOAs	HCL to pH < 2; Ice, maintained at 0-6°C	14 days

4.3 Location and Frequency

Surface water samples will be collected from surface waters within Fisher Slough either by boat or shore in locations deemed safe for sampling as well as in areas of the site considered to represent background conditions.

The focus of this plan is to assess the potential for gasoline constituents to enter the area known as Fisher Slough, a Nature Conservancy Restoration Area. Sample locations will be developed in conjunction with Nature Conservancy and Washington Department of Ecology (WDOE). Access to sampling sites may be challenging. Field teams have the discretion to modify proposed sample locations to assure the safety of the team members.

Surface water samples will be collected every other day initially at each location for eight days following implementation of the plan. Due to the holiday (Christmas and New Years) the sampling frequency may be modified. Notification will be made to The Land Conservancy designated staff the day prior to each sampling. Proposed sampling locations are identified in Appendix B.Sample Handling Procedures
Samples will be placed in laboratory supplied sample containers, appropriate for the intended analysis, labeled with sample identification number, sample depth, sampler name, sample date, analysis and methodology requested, and time of sample collection, and immediately placed in a cooler on ice pending laboratory analysis. Samples will be packaged, labeled, retained on ice, and documented in an area which is free of impact and provides for secure storage. Custody seals will be placed on each sample containing

cooler, and chain-of-custody procedures will be maintained from the time of sample collection until arrival at the laboratory to protect sample integrity. Shipping or transporting of samples to the laboratory will be done within a timeframe such that recommended holding times are met.

5. Sample Labeling

Sample containers will be clearly labeled with the following information:

- Unique sample identification.
- Sample Type (discrete or composite, sediment and/or soil samples only)
- Sampler name or initials.
- Date sample collected.
- Time sample collected; and
- Analysis to be performed.

Acceptable QA designations include MS (1 in 20 by media), MSD (1 in 20 by media), rinsate blank (RB) only when using non-dedicated sampling equipment, and duplicates (DUP) in 1 out of 10 samples by media. Field blank samples will be collected once every 10 samples.

6. Quality Assurance

Sampling will be carried out in conjunction with a well-defined quality assurance (QA) program. The goal of the field QA program is to document that samples are collected without the effects of accidental cross- or systematic contamination and refers to the sampling, analysis, and data validation procedures for generating valid and defensible data. To provide QA for the proposed sampling event, the following sampling, analysis, and data validation procedures will be performed:

Field Calibration

Instruments used in the field as part of this sampling event are anticipated to consist of GPS units, digital cameras, and handheld data collection devices such as tablets/smart phones. Other equipment is not anticipated to require field calibration. Operators of each piece of equipment are responsible for maintaining (including proper battery charge) and operating this equipment such that it conforms to each respective manufacturer's specifications. The type of equipment, brand, battery type and lot numbers will be recorded. Meters will be calibrated for PH and other water quality standards as possible.

Field Duplicate Sample

For approximately every ten samples collected in the field, one field duplicate will be collected and submitted for laboratory analyses to verify the reproducibility of the sampling methods. Field duplicates will be prepared by separately submitting an aliquot from the same sample location to the laboratory for analysis consistent with the proscribed analyses. The submitted duplicate will be submitted such that the

laboratory is not aware that it is a duplicate (i.e., the sample ID will not identify it as a "duplicate" for any specific sample location). At least one field duplicate will be collected each day that samples are collected.

Field Split Samples

Field split samples refer to samples collected by the regulatory agency or its designee from the same sampling location and independently submitted to a different laboratory for analysis. Field split samples may be collected at the discretion of representatives of the regulatory agency or Incident Command.

Laboratory QA

Laboratory quality control procedures will be conducted in a manner consistent with relevant State and Federal regulatory guidance. Deliverables will contain the supporting documentation necessary for data validation. Internal laboratory quality control checks will include method blanks, matrix spikes (and matrix spike duplicates), surrogate samples, calibration standards, and laboratory control standards (LCSs).

Matrix Spike/Matrix Spike Duplicate Sample

Matrix Spike/Matrix Spike Duplicate (MS/MSD) samples refer to field samples spiked with the analytes of interest prior to being analyzed at the laboratory to gauge the quality of analysis. Approximately one in twenty samples will be analyzed as MS/MSD samples.

Data Validation

Validation of the data generated by the laboratory performing the analyses will include at a minimum sample holding times, accuracy, precision, contamination of field generated or laboratory method blanks, and surrogate compound recovery. Accuracy will be determined by evaluating LCS and MS recovery. Precision will be determined by evaluating laboratory and field duplicate samples. Level II data verification will be performed on 100% of the samples.

7. Decontamination Procedures

Decontamination procedures refer to the steps undertaken to minimize the potential for offsite contamination and cross-contamination between individual sampling locations. Prior to collecting any sample for this release, the following decontamination procedures will be undertaken: non-disposable sampling equipment such as stainless-steel hand trowels which come into contact with sampling media will be decontaminated using a bristled brush and a solution comprised of a laboratory grade, non-phosphate detergent (e.g., Alconox or Liquinox) and deionized water. Depending on ancillary activities being conducted for the response to this release, the decontamination of sampling equipment will be conducted over poly sheeting at the sample location or in a nearby designated area. The sampling equipment to be decontaminated will first be placed in a bucket containing the detergent solution and thoroughly washed using a bristled brush. The items will then be transferred to the second 5-gallon bucket

containing deionized water for rinsing. Following the initial rinsing, the item will be held over the third 5-gallon bucket while deionized water is carefully decanted over each item. Decontaminated items will be wrapped in clean aluminum foil for transit to the next sampling location.
Nitrile gloves will be worn by sampling personnel and changed between activities at each discrete sample collection location. Previously worn nitrile gloves will be discarded in appropriate waste receptacles with other PPE.

8. Sampling Waste Disposal

Decontamination fluids and contaminated Personal Protective Equipment (PPE) will be containerized and collected at the designated onsite waste staging area as needed.

All produced waste onsite will be managed and disposed of in a manner consistent with all regulatory guidelines and requirements.

9. Data Analysis

To assess the potential impact from the incident, the results of sampling will be reviewed for the presence/absence of these compounds, and should they be found, the concentrations of these parameters relative to appropriate regulatory standards. The results of laboratory analyses will be provided to the Olympic Pipeline Company.

10.Records Management

Records management refers to the procedures for generating, controlling, and archiving project-specific records and records of field activities. Project records, particularly those that are anticipated to be used as evidentiary data, directly support current or ongoing technical studies and activities, and provide historical evidence needed for later reviews and analyses, will be legible, identifiable, retrievable, and protected against damage, deterioration, or loss on a centralized electronic database. Handwritten records will be written in indelible ink. Records will likely include, but are not limited to, the following: bound field notebooks on pre-numbered pages, sample collection forms, personnel qualification and training forms, sample location maps, equipment maintenance and calibration forms, chain-of custody forms, maps and drawings, transportation and disposal documents, reports issued as a result of the work, procedures used, correspondences, and any deviations from the procedural records. Documentation errors will be corrected by drawing a single line through the error so it remains legible and will be initialed by the responsible individual, along with the date of change, and the correction will be written adjacent to the error.

CTEH®

Proposed Fisher Slough Sampling Locations

BP Gasoline Release

0 200 400 Feet

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 12/20/2023 10:20 AM

Appendix B-3

Surface Water Sampling Locations Map

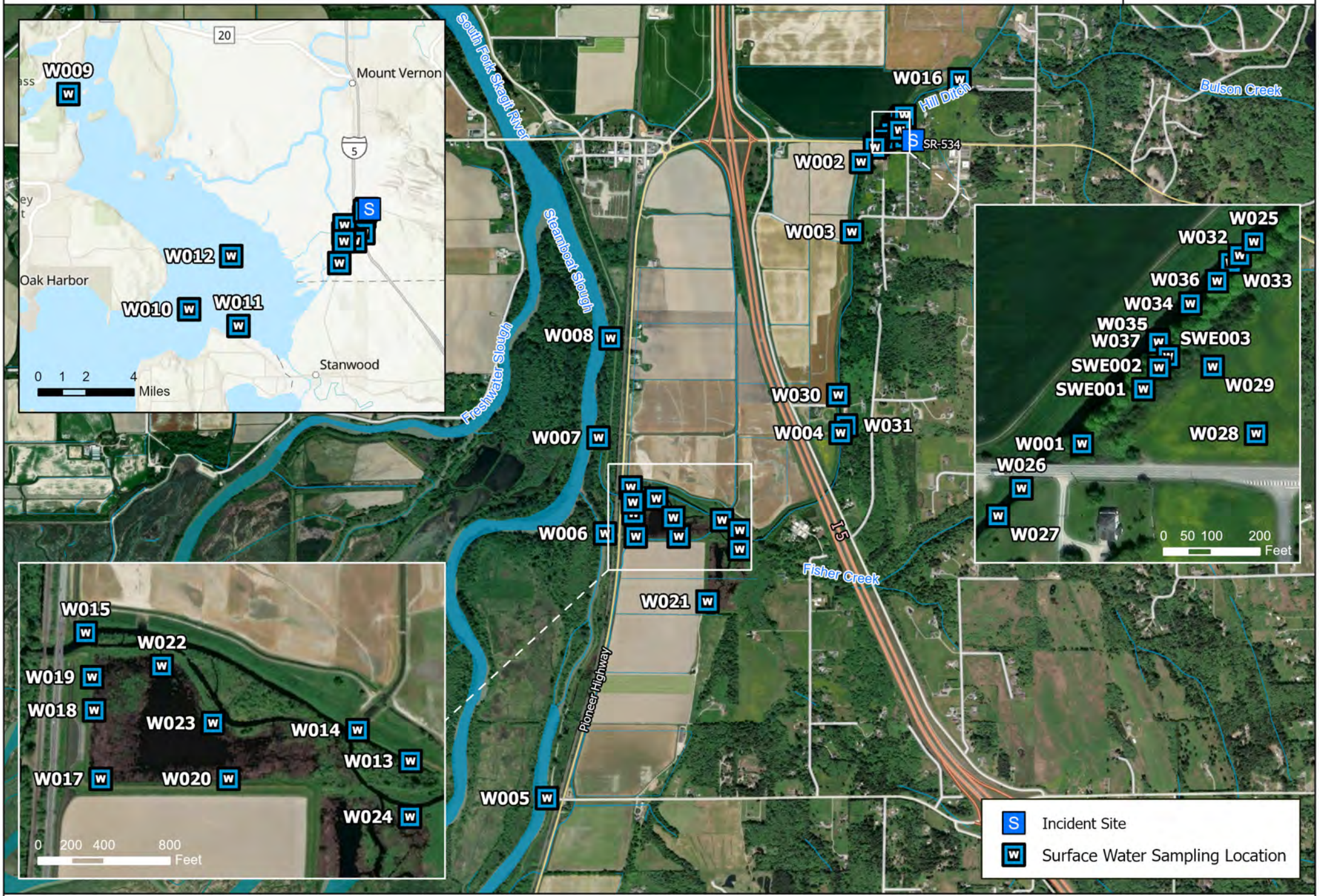
Surface Water Sampling Locations

Olympic Pipeline Gasoline Spill - Conway, WA

0 0.25 0.5 1 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 7/22/2024 1:38 PM

Appendix B-4

Surface Water Sampling Results Summary

Preliminary Laboratory Results | Surface Water

PROJ-032692 | BP - Gasoline Release

Data Updated at 3/22/2024 11:27:13 AM

Analytical Method	Analyte	Screening Value (µg/L)	12/15/2023 MTWA1215W001	12/16/2023 MTWA1216W001	12/17/2023 MTWA1217V001	12/17/2023 MTWA1217W001	12/18/2023 MTWA1218W001	12/20/2023 MTWA1220W001	12/22/2023 MTWA1222W001	12/26/2023 MTWA1226W001	12/28/2023 MTWA1228W001	12/29/2023 MTWA1229W001	12/30/2023 MTWA1230W001	12/31/2023 MTWA1231W001	1/4/2024 MTWA0104W001	1/7/2024 MTWA0107W001	W001 Approximately 20 yards NE of Hwy 534 bridge 1/10/2024 MTWA0110V001	1/10/2024 MTWA0110W001	1/17/2024 MTWA0117W001	1/19/2024 MTWA0119W001
200.8	Arsenic	10[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Copper	11[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	2.5[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
365.4	Phosphorus, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
410.4	COD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2130 B-2011	Turbidity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2320 B-2011	Alkalinity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2580	ORP	NA																		
4500P E-2011	Phosphate, Ortho	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6010D	Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8260D	Benzene	0.44[3]	1.78 µg/L	2.26 µg/L (J)	1.59 µg/L	1.95 µg/L	< 4.71 µg/L	2.02 µg/L (J)	0.631 µg/L (J)	0.143 µg/L (J)	0.413 µg/L (J)	< 0.0941 µg/L	< 0.0941 µg/L	0.096 µg/L (J)	< 0.0941 µg/L	NA	0.437 µg/L (J)	0.464 µg/L (J)	0.472 µg/L (J)	0.793 µg/L (J)
	Ethylbenzene	12[3]	43.9 µg/L	27.1 µg/L	11.3 µg/L (J)	15.7 µg/L (J)	61.9 µg/L	12.8 µg/L	4.65 µg/L	0.437 µg/L (J)	0.431 µg/L (J)	0.178 µg/L (J)	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	NA	0.617 µg/L (J)	0.632 µg/L (J)	0.266 µg/L (J)	0.751 µg/L (J)
	Toluene	53[3]	52.7 µg/L	49.7 µg/L	44.8 µg/L (J)	56 µg/L (J)	94.2 µg/L	70.7 µg/L	20.8 µg/L	3.23 µg/L	5.14 µg/L	5.13 µg/L	< 0.278 µg/L	1.19 µg/L	2.74 µg/L	NA	8.8 µg/L	9 µg/L	5.8 µg/L	12.6 µg/L
	Total Xylenes	57[3]	283 µg/L	241 µg/L	92.4 µg/L (J)	138 µg/L (J)	404 µg/L	84.3 µg/L	32.3 µg/L	4.18 µg/L	2.98 µg/L (J)	1.96 µg/L (J)	< 0.174 µg/L	0.738 µg/L (J)	< 0.174 µg/L	NA	3.69 µg/L	3.76 µg/L	1.44 µg/L (J)	4.49 µg/L
8270E	1,2-Dichlorobenzene	2000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trichlorobenzene	0.12[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,3-Dichlorobenzene	13[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,4-Dichlorobenzene	460[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chloronaphthalene	170[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chlorophenol	15[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,2-Oxybis(1-Chloropropane)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dichlorophenol	25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dimethylphenol	85[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrophenol	60[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrotoluene	0.039[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4,6-Trichlorophenol	0.25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3,3-Dichlorobenzidine	0.0031[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Bromophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chloro-3-methylphenol	36[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chlorophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4,6-Dinitro-2-methylphenol	7.1[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	110[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	3100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzidine	0.00002[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	0.0014[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzylbutyl phthalate	0.56[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethoxy)methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethyl)ether	0.02[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-ethylhexyl)phthalate	0.23[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butyl phthalate	450[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-octyl phthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.0014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Diethyl phthalate	4200[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dimethyl phthalate	92000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	420[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloro-1,3-butadiene	0.69[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobenzene	0.000051[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorocyclopentadiene	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloroethane	0.11[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Isophorone	27[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodi-n-propylamine	0.0044[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodimethylamine	0.00065[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodiphenylamine	0.62[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrobenzene	55[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorophenol	0.046[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenol	18000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	310[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8270E-SIM	1-Methylnaphthalene	NA	8.57 µg/L	24.4 µg/L	9.95 µg/L	11 µg/L	26 µg/L	35 µg/L	1.18 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chloronaphthalene	170[1]	< 0.135 µg/L	< 0.136 µg/L	< 0.136 µg/L	< 0.273 µg/L	< 0.0682 µg/L	< 0.136 µg/L	< 0.136 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methylnaphthalene	NA	17.1 µg/L	48.8 µg/L	19.1 µg/L	20.7 µg/L	55 µg/L	61.2 µg/L	1.95 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	110[1]	0.203 µg/L	0.43 µg/L	0.214 µg/L	0.217 µg/L	1.2 µg/L	< 0.038 µg/L	< 0.038 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	NA	< 0.0342 µg/L	< 0.0342 µg/L	< 0.0342 µg/L	< 0.0684 µg/L	< 0.0171 µg/L	< 0.0342 µg/L	< 0.0342 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	3100[1]	0.05 µg/L (J)	0.0545 µg/L (J)	0.0521 µg/L (J)	< 0.076 µg/L	< 0.019 µg/L	< 0.038 µg/L	< 0.038 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	0.014[1]	0.0568 µg/L (J)	0.0542 µg/L (J)	0.0439 µg/L (J)	< 0.0812 µg/L	0.261 µg/L	1.42 µg/L	< 0.0406 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	0.0014[3]	< 0.0368 µg/L	< 0.0368 µg/L	< 0.0368 µg/L	< 0.0736 µg/L	0.178 µg/L	0.94 µg/L	< 0.0368 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	0.014[1]	< 0.0336 µg/L	< 0.0336 µg/L	< 0.0336 µg/L	< 0.0672 µg/L	0.213 µg/L	1.18 µg/L	< 0.0336 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	NA	< 0.0308 µg/L	0.0557 µg/L (J)	< 0.0308 µg/L	< 0.0736 µg/L	0.3 µg/L	1.55 µg/L	< 0.0308 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	0.014[1]	< 0.0404 µg/L	< 0.0404 µg/L	< 0.0404 µg/L	< 0.0808 µg/L	< 0.0202 µg/L	0.164 µg/L	< 0.0404 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	1.4[1]	0.0443 µg/L (J)	< 0.0358 µg/L	0.0392 µg/L (J)	< 0.0716 µg/L	0.191 µg/L	1.37 µg/L	< 0.0358 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.0014[1]	< 0.032 µg/L	< 0.032 µg/L	< 0.032 µg/L	< 0.064 µg/L	< 0.016 µg/L	0.0914 µg/L (J)	< 0.032 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	16[1]	0.152 µg/L (J)	0.175 µg/L (J)	0.113 µg/L (J)	0.128 µg/L (J)	0.77 µg/L	4.96 µg/L	< 0.054 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	420[1]	0.434 µg/L	0.758 µg/L	0.453 µg/L	0.462 µg/L	2.55 µg/L	18 µg/L	0.0889 µg/L (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	0.014[1]	< 0.0316 µg/L	< 0.0316 µg/L	< 0.0316 µg/L	< 0.0632 µg/L	0.0473 µg/L (J)	0.217 µg/L	< 0.0316 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	NA	23 µg/L	66.1 µg/L	18.5 µg/L (J)	26.8 µg/L (J)	27.8 µg/L	18.8 µg/L	2.75 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	NA	0.948 µg/L	1.31 µg/L	0.736 µg/L	0.692 µg/L	4.09 µg/L	26.7 µg/L	0.151 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	310[1]	0.258 µg/L	0.32 µg/L	0.17 µg/L	0.195 µg/L (J)	1.28 µg/L	7.51 µg/L	< 0.0338 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9040C	pH	NA																		
9056A	Bromide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate as (N)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9060A	TOC (Total Organic Carbon)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-NO SGT	Diesel Range Organics (DRO)	3000[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-SGT	Diesel Range Organics (DRO)	3000[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHGX	Gasoline Range Organics-NWTPH	1000[3]	4,480 µg/L	5,610 µg/L	1,470 µg/L (J)	4,710 µg/L (J)	6,570 µg/L	1,160 µg/L	299 µg/L	71.1 µg/L (J)	49.9 µg/L (J)	39.3 µg/L (J)	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 53.4 µg/L	32.5 µg/L (J)	44.2 µg/L (J)	< 31.6 µg/L	53.8 µg/L (J)
SM2340B	Hardness (calculated) as CaCO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

[1] 173-201A WAC - Human Health - Fresh Water
[2] 173-201A WAC - Aquatic Life -Fresh/Chronic
[3] CLARC - Chemical-Specific Considerations – TPH – Concentrations Protective of Aquatic Receptors in Surface Water - Fresh Water
Laboratory non-detections are reported as less than ("<") the laboratory MR.
Laboratory result qualifiers are reported to the right of corresponding detections (in parentheses). Definitions of reported qualifiers are below:
B: The same analyte is found in the associated blank.
J: Result is estimated between the laboratory method detection limit and reporting limit.

Detection > Screening Value
Detection
Non-detection > Screening Value
Non-detection
Not Analyzed

Preliminary Laboratory Results | Surface Water

PROJ-032692 | BP - Gasoline Release

Data Updated at 3/22/2024 11:27:13 AM

			W001																W002	
			Approximately 20 yards NE of Hwy 534 bridge														AS001, approximately 20 ...	Along S bank of Hill ditch, ...	Approximately 150 yards SW of Hwy 534 bridge	
			1/22/2024	1/25/2024	1/29/2024	2/1/2024	2/5/2024	2/8/2024	2/12/2024		2/15/2024	2/19/2024	2/24/2024	3/5/2024	3/10/2024	3/17/2024	12/14/2023	12/15/2023	12/26/2023	12/28/2023
Analytical Method	Analyte	Screening Value (µg/L)	MTWA0122W001	MTWA0125W001	MTWA0129W001	MTWA0201W001	MTWA0205W001	MTWA0208W001	MTWA0212V001	MTWA0212W001	MTWA0215W001	MTWA0219W001	MTWA0224W001	MTWA0305W001	MTWA0310W001	MTWA0317W001	MTWA1214W001	MTWA1215W002	MTWA1226W002	MTWA1228W002
200.8	Arsenic	10[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Copper	11[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	2.5[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
365.4	Phosphorus, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
410.4	COD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2130 B-2011	Turbidity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2320 B-2011	Alkalinity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2580	ORP	NA																		
4500P E-2011	Phosphate, Ortho	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6010D	Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8260D	Benzene	0.44[2]	0.539 µg/L (J)	0.372 µg/L (J)	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	0.306 µg/L (J)	< 0.0941 µg/L	< 0.0941 µg/L	0.445 µg/L (J)	0.294 µg/L (J)	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 1.88 µg/L	1.44 µg/L	0.401 µg/L (J)	0.296 µg/L (J)
	Ethylbenzene	12[3]	0.578 µg/L (J)	0.389 µg/L (J)	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	0.233 µg/L (J)	0.326 µg/L (J)	< 0.137 µg/L	0.164 µg/L (J)	0.216 µg/L (J)	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	52.2 µg/L	7.59 µg/L	0.75 µg/L (J)	0.312 µg/L (J)
	Toluene	53[3]	10.1 µg/L	7.11 µg/L	< 0.278 µg/L	< 0.278 µg/L	0.897 µg/L (J)	4.51 µg/L	6.79 µg/L (J)	< 0.278 µg/L	5.91 µg/L	4.5 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	59.4 µg/L	39.7 µg/L	7.74 µg/L	3.55 µg/L
	Total Xylenes	57[3]	4 µg/L	2.26 µg/L (J)	< 0.174 µg/L	< 0.174 µg/L	0.174 µg/L (J)	1.38 µg/L (J)	1.81 µg/L (J)	< 0.174 µg/L	1.09 µg/L (J)	1.28 µg/L (J)	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	383 µg/L	58.6 µg/L	5.19 µg/L	1.92 µg/L (J)
8270E	1,2-Dichlorobenzene	2000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trichlorobenzene	0.12[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,3-Dichlorobenzene	13[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,4-Dichlorobenzene	460[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chloronaphthalene	170[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chlorophenol	15[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,2-Oxybis(1-Chloropropane)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dichlorophenol	25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dimethylphenol	85[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrophenol	60[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrotoluene	0.039[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4,6-Trichlorophenol	0.25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3,3-Dichlorobenzidine	0.0031[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Bromophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chloro-3-methylphenol	36[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chlorophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4,6-Dinitro-2-methylphenol	7.1[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	110[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	3100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzidine	0.00002[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	0.0014[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzylbutyl phthalate	0.56[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethoxy)methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethyl)ether	0.02[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-ethylhexyl)phthalate	0.23[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butyl phthalate	450[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-octyl phthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.0014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Diethyl phthalate	4200[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dimethyl phthalate	92000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	420[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloro-1,3-butadiene	0.69[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobenzene	0.000051[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorocyclopentadiene	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloroethane	0.11[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Isophorone	27[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodi-n-propylamine	0.0044[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodimethylamine	0.00065[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodiphenylamine	0.62[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrobenzene	55[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorophenol	0.046[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenol	18000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	310[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8270E-SIM	1-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.4 µg/L (J)	0.381 µg/L (J)	NA	NA
	2-Chloronaphthalene	170[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.136 µg/L	< 0.136 µg/L	NA	NA
	2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	81.7 µg/L (J)	0.668 µg/L	NA	NA
	Acenaphthene	110[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.26 µg/L (J)	< 0.038 µg/L	NA	NA
	Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0342 µg/L	< 0.0342 µg/L	NA	NA
	Anthracene	3100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.36 µg/L (J)	< 0.038 µg/L	NA	NA
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.105 µg/L (J)	< 0.0406 µg/L	NA	NA
	Benzo(a)pyrene	0.0014[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0368 µg/L	< 0.0368 µg/L	NA	NA
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0452 µg/L (J)	< 0.0336 µg/L	NA	NA
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0452 µg/L (J)	< 0.0368 µg/L	NA	NA
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0404 µg/L	< 0.0404 µg/L	NA	NA
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0707 µg/L (J)	< 0.0385 µg/L	NA	NA
	Dibenz(a,h)anthracene	0.0014[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.032 µg/L	< 0.032 µg/L	NA	NA
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.451 µg/L (J)	< 0.064 µg/L	NA	NA
	Fluorene	420[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.63 µg/L (J)	< 0.0338 µg/L	NA	NA
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0316 µg/L	< 0.0316 µg/L	NA	NA
	Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	73.1 µg/L (J)	1.79 µg/L	NA	NA
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.82 µg/L (J)	< 0.038 µg/L	NA	NA
	Pyrene	310[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.722 µg/L (J)	< 0.0338 µg/L	NA	NA
9040C	pH	NA																		
9056A	Bromide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate as (N)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9060A	TOC (Total Organic Carbon)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-NO SGT	Diesel Range Organics (DRO)	3000[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-SGT	Diesel Range Organics (DRO)	3000[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHGX	Gasoline Range Organics-NWTPH	1000[3]	43.7 µg/L (J)	< 31.6 µg/L	< 31.6 µg/L	< 35.1 µg/L	< 31.6 µg/L	< 35.3 µg/L	< 31.6 µg/L	32.9 µg/L (J)	< 31.6 µg/L	50.3 µg/L (BJ)	35.9 µg/L (BJ)	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	1,510 µg/L (J)	498 µg/L	61.5 µg/L (J)	35.2 µg/L (J)
SM2340B	Hardness (calculated) as CaCO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

[1] 173-201A WAC - Human Health - Fresh Water
[2] 173-201A WAC - Aquatic Life -Fresh/Chronic
[3] CLARC - Chemical-Specific Considerations – TPH – Concentrations Protective of Aquatic Receptors in Surface Water - Fresh Water

Laboratory non-detections are reported as less than ("<") the laboratory MR.
Laboratory result qualifiers are reported to the right of corresponding detections (in parentheses). Definitions of reported qualifiers are below:
B: The same analyte is found in the associated blank.
J: Result is estimated between the laboratory method detection limit and reporting limit.

Detection > Screening Value
Detection
Non-detection > Screening Value
Non-detection
Not Analyzed

Preliminary Laboratory Results | Surface Water

PROJ-032692 | BP - Gasoline Release

Data Updated at 3/22/2024 11:27:13 AM

																W002						
														Approximately 150 yards SW of Hwy 534 bridge								
Analytical Method	Analyte	Screening Value (µg/L)	12/29/2023 MTWA1229W002	12/30/2023 MTWA1230W002	12/31/2023 MTWA1231W002	1/4/2024 MTWA0104W002	1/7/2024 MTWA0107W002	1/10/2024 MTWA0110W002	1/17/2024 MTWA0117W002	1/17/2024 MTWA0117W002	1/19/2024 MTWA0119W002	1/22/2024 MTWA0122W002	1/25/2024 MTWA0125W002	1/29/2024 MTWA0129W002	2/1/2024 MTWA0201W002	2/5/2024 MTWA0205W002	2/8/2024 MTWA0208W002	2/12/2024 MTWA0212W002	2/15/2024 MTWA0215W002	2/19/2024 MTWA0219W002
200.8	Arsenic	10[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Copper	11[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	2.5[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	150[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	100[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
365.4	Phosphorus, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
410.4	COD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2130 B-2011	Turbidity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2320 B-2011	Alkalinity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2580	ORP	NA																				
4500P E-2011	Phosphate, Ortho	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6010D	Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8260D	Benzene	0.44[1]	< 0.0941 µg/L	0.399 µg/L (J)	0.382 µg/L (J)	< 0.0941 µg/L	0.387 µg/L (J)	0.28 µg/L (J)	0.286 µg/L (J)	0.272 µg/L (J)	0.686 µg/L (J)	0.319 µg/L (J)	0.198 µg/L (J)	< 0.0941 µg/L	< 0.0941 µg/L	0.314 µg/L (J)	0.298 µg/L (J)	0.438 µg/L (J)	0.386 µg/L (J)	0.29 µg/L (J)
	Ethylbenzene	12[2]	0.192 µg/L (J)	0.452 µg/L (J)	0.328 µg/L (J)	< 0.137 µg/L	0.433 µg/L (J)	0.388 µg/L (J)	< 0.137 µg/L	0.158 µg/L (J)	0.635 µg/L (J)	0.4 µg/L (J)	0.254 µg/L (J)	< 0.137 µg/L	< 0.137 µg/L	0.325 µg/L (J)	0.232 µg/L (J)	0.287 µg/L (J)	0.141 µg/L (J)	0.226 µg/L (J)
	Toluene	53[2]	5.03 µg/L	5.06 µg/L	4.5 µg/L	3.42 µg/L	5.06 µg/L	5.58 µg/L	3.24 µg/L	3.25 µg/L	10.6 µg/L	5.96 µg/L	3.84 µg/L	0.496 µg/L (J)	< 0.278 µg/L	5.98 µg/L	4.17 µg/L	6.39 µg/L	5.35 µg/L	4.49 µg/L
	Total Xylenes	57[2]	1.87 µg/L (J)	2.99 µg/L (J)	2.44 µg/L (J)	< 0.174 µg/L	2.6 µg/L (J)	2.38 µg/L (J)	0.814 µg/L (J)	0.72 µg/L (J)	3.7 µg/L	2.36 µg/L (J)	1.04 µg/L (J)	0.202 µg/L (J)	< 0.174 µg/L	1.79 µg/L (J)	1.1 µg/L (J)	1.66 µg/L (J)	0.938 µg/L (J)	1.3 µg/L (J)
8270E	1,2-Dichlorobenzene	2000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trichlorobenzene	0.12[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,3-Dichlorobenzene	13[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,4-Dichlorobenzene	460[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chloronaphthalene	1700[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chlorophenol	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,2-Oxybis(1-Chloropropane)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dichlorophenol	25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dimethylphenol	85[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrophenol	60[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrotoluene	0.039[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4,6-Trichlorophenol	0.25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3,3-Dichlorobenzidine	0.0031[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Bromophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chloro-3-methylphenol	36[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chlorophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4,6-Dinitro-2-methylphenol	7.1[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	110[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	3100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzidine	0.00002[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	0.0014[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzylbutyl phthalate	0.56[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethoxy)methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethyl)ether	0.02[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-ethylhexyl)phthalate	0.23[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butyl phthalate	450[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-octyl phthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.0014[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Diethyl phthalate	4200[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dimethyl phthalate	92000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	420[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloro-1,3-butadiene	0.69[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobenzene	0.000051[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorocyclopentadiene	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloroethane	0.11[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Isophorone	27[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodi-n-propylamine	0.0044[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodimethylamine	0.00065[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodiphenylamine	0.62[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrobenzene	55[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorophenol	0.046[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenol	18000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	310[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8270E-SIM	1-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chloronaphthalene	1700[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	110[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	3100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	0.0014[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.0014[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	420[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	310[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9040C	pH	NA																				
9056A	Bromide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate as (N)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9060A	TOC (Total Organic Carbon)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-NO SGT	Diesel Range Organics (DRO)	3000[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-SGT	Diesel Range Organics (DRO)	3000[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHGX	Gasoline Range Organics-NWTPH	1000[2]	33 µg/L (J)	42.4 µg/L (J)	32.8 µg/L (J)	< 31.6 µg/L	36.5 µg/L (J)	< 31.6 µg/L	< 31.6 µg/L	52 µg/L (J)	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 37.8 µg/L	< 36.3 µg/L	< 37.2 µg/L	< 31.6 µg/L	< 31.6 µg/L	45.2 µg/L (BJ)
SM2340B	Hardness (calculated) as CaCO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

[1] 173-201A WAC - Human Health - Fresh Water
[2] 173-201A WAC - Aquatic Life -Fresh/Chronic
[3] CLARC - Chemical-Specific Considerations – TPH – Concentrations Protective of Aquatic Receptors in Surface Water - Fresh Water
Laboratory non-detections are reported as less than ("<") the laboratory MRL.
Laboratory result qualifiers are reported to the right of corresponding detections (in parentheses). Definitions of reported qualifiers are below:
B: The same analyte is found in the associated blank.
J: Result is estimated between the laboratory method detection limit and reporting limit.

Detection > Screening Value
Detection
Non-detection > Screening Value
Non-detection
Not Analyzed

Preliminary Laboratory Results | Surface Water

PROJ-032692 | BP - Gasoline Release

Data Updated at 3/22/2024 11:27:13 AM

			W002																		W003
			Approximately 150 yards SW of Hwy 534 bridge							Approximately 500 yards SW of Hwy 534 bridge					AS002, approximately 50..	Along S bank of Hill Ditch, ..	AS003, NE side of bridge ..				North side of Conway Hill Rd bridge
			2/19/2024	2/24/2024	3/5/2024	3/10/2024	3/17/2024	12/16/2023	12/17/2023	12/18/2023		12/20/2023	12/22/2023	12/14/2023	12/15/2023	12/14/2023	12/16/2023	12/17/2023	12/18/2023	12/20/2023
Analytical Method	Analyte	Screening Value (µg/L)	MTWA0219W002	MTWA0224W002	MTWA0305W002	MTWA0310W002	MTWA0317W002	MTWA1216W002	MTWA1217W002	MTWA1218W002	MTWA1218W002	MTWA1220W002	MTWA1222W002	MTWA1214W002	MTWA1215W003	MTWA1214W003	MTWA1216W003	MTWA1217W003	MTWA1218W003	MTWA1220W003
200.8	Arsenic	10[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Copper	11[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	2.5[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
365.4	Phosphorus, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
410.4	COD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2130 B-2011	Turbidity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2320 B-2011	Alkalinity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2580	ORP	NA																		
4500P E-2011	Phosphate, Ortho	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6010D	Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8260D	Benzene	0.44[4]	0.343 µg/L (J)	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	1.81 µg/L	1.41 µg/L	2.47 µg/L	2.23 µg/L	1.44 µg/L	0.685 µg/L (J)	1.63 µg/L	1.61 µg/L	2.05 µg/L	1.68 µg/L	1.19 µg/L	2.61 µg/L	1.24 µg/L
	Ethylbenzene	12[3]	0.253 µg/L (J)	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	6.62 µg/L	5.57 µg/L	9.51 µg/L (J)	7.59 µg/L (J)	7.67 µg/L	4.85 µg/L	7.21 µg/L	8.32 µg/L	8.35 µg/L	5.19 µg/L	5.09 µg/L	8.12 µg/L	5.18 µg/L
	Toluene	53[3]	4.98 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	42.7 µg/L	39.7 µg/L	53.2 µg/L	53.7 µg/L	47.3 µg/L	20.1 µg/L	47.1 µg/L	43.5 µg/L	61.5 µg/L	35.1 µg/L	34.9 µg/L	62.1 µg/L	34.3 µg/L
	Total Xylenes	57[4]	1.38 µg/L (J)	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	43.2 µg/L	40.8 µg/L	57.5 µg/L	47.4 µg/L	50 µg/L	32.8 µg/L	43.9 µg/L	61 µg/L	51.3 µg/L	35.5 µg/L	37.5 µg/L	49.9 µg/L	33.7 µg/L
8270E	1,2-Dichlorobenzene	2000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trichlorobenzene	0.12[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,3-Dichlorobenzene	13[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,4-Dichlorobenzene	460[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chloronaphthalene	170[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chlorophenol	15[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,2-Oxybis(1-Chloropropane)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dichlorophenol	25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dimethylphenol	85[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrophenol	60[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrotoluene	0.039[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4,6-Trichlorophenol	0.25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3,3-Dichlorobenzidine	0.0031[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Bromophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chloro-3-methylphenol	36[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chlorophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4,6-Dinitro-2-methylphenol	7.1[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	110[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	3100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzidine	0.00002[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	0.0014[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzylbutyl phthalate	0.56[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethoxy)methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethyl)ether	0.02[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-ethylhexyl)phthalate	0.23[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butyl phthalate	450[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-octyl phthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.0014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Diethyl phthalate	4200[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dimethyl phthalate	92000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	420[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloro-1,3-butadiene	0.69[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobenzene	0.000051[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorocyclopentadiene	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloroethane	0.11[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Isophorone	27[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodi-n-propylamine	0.0044[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodimethylamine	0.00065[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodiphenylamine	0.62[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrobenzene	55[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorophenol	0.046[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenol	18000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	310[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8270E-SIM	1-Methylnaphthalene	NA	NA	NA	NA	NA	NA	1.04 µg/L	0.312 µg/L (J)	0.23 µg/L (J)	0.224 µg/L (J)	0.892 µg/L	1.06 µg/L	0.406 µg/L (J)	0.242 µg/L (J)	0.21 µg/L (J)	0.616 µg/L	0.588 µg/L	0.181 µg/L (J)	0.339 µg/L (J)
	2-Chloronaphthalene	170[1]	NA	NA	NA	NA	NA	< 0.136 µg/L	< 0.273 µg/L	< 0.136 µg/L	< 0.136 µg/L	< 0.0682 µg/L	< 0.136 µg/L	< 0.136 µg/L	< 0.136 µg/L	< 0.136 µg/L	< 0.136 µg/L	< 0.136 µg/L	< 0.136 µg/L	< 0.136 µg/L
	2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	1.86 µg/L	0.576 µg/L (J)	0.367 µg/L (J)	0.381 µg/L (J)	1.57 µg/L	1.59 µg/L	0.772 µg/L	0.403 µg/L (J)	0.391 µg/L (J)	1.03 µg/L	1.03 µg/L	0.296 µg/L (J)	0.539 µg/L
	Acenaphthene	110[1]	NA	NA	NA	NA	NA	< 0.038 µg/L	< 0.076 µg/L	< 0.038 µg/L	< 0.038 µg/L	0.0275 µg/L (J)	< 0.038 µg/L	< 0.038 µg/L	< 0.038 µg/L	< 0.038 µg/L	< 0.038 µg/L	< 0.038 µg/L	< 0.038 µg/L	< 0.038 µg/L
	Acenaphthylene	NA	NA	NA	NA	NA	NA	< 0.0342 µg/L	< 0.0684 µg/L	< 0.0342 µg/L	< 0.0342 µg/L	< 0.0171 µg/L	< 0.0342 µg/L	< 0.0342 µg/L	< 0.0342 µg/L	< 0.0342 µg/L	< 0.0342 µg/L	< 0.0342 µg/L	< 0.0342 µg/L	< 0.0342 µg/L
	Anthracene	3100[1]	NA	NA	NA	NA	NA	< 0.038 µg/L	< 0.076 µg/L	< 0.038 µg/L	< 0.038 µg/L	< 0.019 µg/L	< 0.038 µg/L	< 0.038 µg/L	< 0.038 µg/L	< 0.038 µg/L	< 0.038 µg/L	< 0.038 µg/L	< 0.038 µg/L	< 0.038 µg/L
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	< 0.0406 µg/L	< 0.0812 µg/L	< 0.0406 µg/L	< 0.0406 µg/L	< 0.0203 µg/L	< 0.0406 µg/L	< 0.0406 µg/L	< 0.0406 µg/L	< 0.0406 µg/L	< 0.0406 µg/L	< 0.0406 µg/L	< 0.0406 µg/L	< 0.0406 µg/L
	Benzo(a)pyrene	0.0014[4]	NA	NA	NA	NA	NA	< 0.0368 µg/L	< 0.0736 µg/L	< 0.0368 µg/L	< 0.0368 µg/L	< 0.0184 µg/L	< 0.0368 µg/L	< 0.0368 µg/L	< 0.0368 µg/L	< 0.0368 µg/L	< 0.0368 µg/L	< 0.0368 µg/L	< 0.0368 µg/L	< 0.0368 µg/L
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	< 0.0336 µg/L	< 0.0672 µg/L	< 0.0336 µg/L	< 0.0336 µg/L	< 0.0168 µg/L	< 0.0336 µg/L	< 0.0336 µg/L	< 0.0336 µg/L	< 0.0336 µg/L	< 0.0336 µg/L	< 0.0336 µg/L	< 0.0336 µg/L	< 0.0336 µg/L
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	< 0.0368 µg/L	< 0.0736 µg/L	< 0.0368 µg/L	< 0.0368 µg/L	< 0.0184 µg/L	< 0.0368 µg/L	< 0.0368 µg/L	< 0.0368 µg/L	< 0.0368 µg/L	< 0.0368 µg/L	< 0.0368 µg/L	< 0.0368 µg/L	< 0.0368 µg/L
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	< 0.0404 µg/L	< 0.0808 µg/L	< 0.0404 µg/L	< 0.0404 µg/L	< 0.0202 µg/L	< 0.0404 µg/L	< 0.0404 µg/L	< 0.0404 µg/L	< 0.0404 µg/L	< 0.0404 µg/L	< 0.0404 µg/L	< 0.0404 µg/L	< 0.0404 µg/L
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	< 0.0358 µg/L	< 0.0716 µg/L	< 0.0358 µg/L	< 0.0358 µg/L	< 0.0179 µg/L	< 0.0358 µg/L	< 0.0358 µg/L	< 0.0358 µg/L	< 0.0358 µg/L	< 0.0358 µg/L	< 0.0358 µg/L	< 0.0358 µg/L	< 0.0358 µg/L
	Dibenz(a,h)anthracene	0.0014[4]	NA	NA	NA	NA	NA	< 0.032 µg/L	< 0.064 µg/L	< 0.032 µg/L	< 0.032 µg/L	< 0.016 µg/L	< 0.032 µg/L	< 0.032 µg/L	< 0.032 µg/L	< 0.032 µg/L	< 0.032 µg/L	< 0.032 µg/L	< 0.032 µg/L	< 0.032 µg/L
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	< 0.054 µg/L	< 0.108 µg/L	< 0.054 µg/L	< 0.054 µg/L	< 0.027 µg/L	< 0.054 µg/L	< 0.054 µg/L	< 0.054 µg/L	< 0.054 µg/L	< 0.054 µg/L	< 0.054 µg/L	< 0.054 µg/L	< 0.054 µg/L
	Fluorene	420[1]	NA	NA	NA	NA	NA	0.0446 µg/L (J)	< 0.0676 µg/L	< 0.0338 µg/L	< 0.0338 µg/L	< 0.0169 µg/L	< 0.0338 µg/L	< 0.0338 µg/L	< 0.0338 µg/L	< 0.0338 µg/L	< 0.0338 µg/L	< 0.0338 µg/L	< 0.0338 µg/L	< 0.0338 µg/L
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	< 0.0316 µg/L	< 0.0632 µg/L	< 0.0316 µg/L	< 0.0316 µg/L	< 0.0158 µg/L	< 0.0316 µg/L	< 0.0316 µg/L	< 0.0316 µg/L	< 0.0316 µg/L	< 0.0316 µg/L	< 0.0316 µg/L	< 0.0316 µg/L	< 0.0316 µg/L
	Naphthalene	NA	NA	NA	NA	NA	NA	2.9 µg/L	1.41 µg/L	1.37 µg/L	1.47 µg/L	2.63 µg/L	2.52 µg/L	1.61 µg/L	1.36 µg/L	0.974 µg/L	2.17 µg/L	2.49 µg/L	0.99 µg/L	1.49 µg/L
	Phenanthrene	NA	NA	NA	NA	NA	NA	0.116 µg/L	< 0.072 µg/L	< 0.036 µg/L	< 0.036 µg/L	< 0.018 µg/L	0.134 µg/L	0.0465 µg/L (J)	< 0.036 µg/L	< 0.036 µg/L	< 0.036 µg/L	< 0.036 µg/L	< 0.036 µg/L	< 0.0411 µg/L
	Pyrene	310[1]	NA	NA	NA	NA	NA	0.0375 µg/L (J)	< 0.0676 µg/L	< 0.0338 µg/L	< 0.0338 µg/L	0.0398 µg/L (J)	0.0371 µg/L (J)	< 0.0338 µg/L	< 0.0338 µg/L	< 0.0338 µg/L	< 0.0338 µg/L	< 0.0338 µg/L	< 0.0338 µg/L	< 0.0338 µg/L
9040C	pH	NA																		
9056A	Bromide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate as (N)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9060A	TOC (Total Organic Carbon)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-NO SGT	Diesel Range Organics (DRO)	3000[5]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-SGT	Diesel Range Organics (DRO)	3000[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHGX	Gasoline Range Organics-NWTPH	1000[3]	50.9 µg/L (BJ)	37 µg/L (BJ)	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	426 µg/L	411 µg/L	286 µg/L	359 µg/L (J)	355 µg/L	422 µg/L	341 µg/L	352 µg/L	348 µg/L	348 µg/L	288 µg/L	286 µg/L	223 µg/L
SM2340B	Hardness (calculated) as CaCO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

[1] 173-201A WAC - Human Health - Fresh Water
[2] 173-201A WAC - Aquatic Life -Fresh/Chronic
[3] CLARC - Chemical-Specific Considerations – TPH – Concentrations Protective of Aquatic Receptors in Surface Water - Fresh Water
Laboratory non-detections are reported as less than ("<") the laboratory MRL.
Laboratory result qualifiers are reported to the right of corresponding detections (in parentheses). Definitions of reported qualifiers are below:
B: The same analyte is found in the associated blank.
J: Result is estimated between the laboratory method detection limit and reporting limit.

Detection > Screening Value
Detection
Non-detection > Screening Value
Non-detection
Not Analyzed

Preliminary Laboratory Results | Surface Water

PROJ-032692 | BP - Gasoline Release

Data Updated at 3/22/2024 11:27:13 AM

			W003																	
			North side of Conway Hill Rd bridge																	
			12/22/2023	12/26/2023		12/28/2023	12/29/2023	12/30/2023	12/31/2023	1/4/2024	1/7/2024	1/10/2024	1/17/2024	1/19/2024	1/22/2024		1/25/2024	1/29/2024	2/1/2024	2/5/2024
Analytical Method	Analyte	Screening Value (µg/L)	MTWA1222W003	MTWA1226V003	MTWA1226W003	MTWA1228W003	MTWA1229W003	MTWA1230W003	MTWA1231W003	MTWA0104W003	MTWA0107W003	MTWA0110W003	MTWA0117W003	MTWA0119W003	MTWA0122V003	MTWA0122W003	MTWA0125W003	MTWA0129W003	MTWA0201W003	MTWA0205W003
200.8	Arsenic	10[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Copper	11[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	2.5[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
365.4	Phosphorus, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
410.4	COD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2130 B-2011	Turbidity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2320 B-2011	Alkalinity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2580	ORP	NA																		
4500P E-2011	Phosphate, Ortho	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6010D	Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8260D	Benzene	0.44[4]	0.333 µg/L (J)	0.204 µg/L (J)	0.193 µg/L (J)	0.209 µg/L (J)	< 0.0941 µg/L	0.276 µg/L (J)	0.293 µg/L (J)	< 0.0941 µg/L	0.314 µg/L (J)	0.301 µg/L (J)	0.243 µg/L (J)	0.665 µg/L (J)	0.278 µg/L (J)	0.27 µg/L (J)	0.228 µg/L (J)	< 0.0941 µg/L	< 0.0941 µg/L	0.338 µg/L (J)
	Ethylbenzene	12[3]	3.1 µg/L	0.509 µg/L (J)	0.459 µg/L (J)	0.232 µg/L (J)	0.186 µg/L (J)	< 0.137 µg/L	0.257 µg/L (J)	< 0.137 µg/L	0.381 µg/L (J)	0.387 µg/L (J)	< 0.137 µg/L	0.539 µg/L (J)	0.265 µg/L (J)	0.274 µg/L (J)	0.219 µg/L (J)	< 0.137 µg/L	< 0.137 µg/L	0.343 µg/L (J)
	Toluene	53[3]	7.95 µg/L	4.34 µg/L	3.89 µg/L	2.78 µg/L	4.12 µg/L	3.07 µg/L	3.47 µg/L	2.98 µg/L	4.36 µg/L	5.82 µg/L	3.08 µg/L	10.1 µg/L	4.72 µg/L	4.71 µg/L	4.06 µg/L	0.552 µg/L (J)	0.293 µg/L (J)	5.75 µg/L
	Total Xylenes	57[4]	22.9 µg/L	3.04 µg/L	2.76 µg/L (J)	1.86 µg/L (J)	1.82 µg/L (J)	1 µg/L (J)	1.95 µg/L (J)	< 0.174 µg/L	2.17 µg/L (J)	2.53 µg/L (J)	0.735 µg/L (J)	3.77 µg/L	1.84 µg/L (J)	1.86 µg/L (J)	1.37 µg/L (J)	0.396 µg/L (J)	< 0.174 µg/L	1.71 µg/L (J)
8270E	1,2-Dichlorobenzene	2000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trichlorobenzene	0.12[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,3-Dichlorobenzene	13[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,4-Dichlorobenzene	460[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chloronaphthalene	170[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chlorophenol	15[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,2-Oxybis(1-Chloropropane)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dichlorophenol	25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dimethylphenol	85[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrophenol	60[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrotoluene	0.039[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4,6-Trichlorophenol	0.25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3,3-Dichlorobenzidine	0.0031[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Bromophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chloro-3-methylphenol	36[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chlorophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4,6-Dinitro-2-methylphenol	7.1[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	110[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	3100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzidine	0.00002[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	0.0014[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzylbutyl phthalate	0.56[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethoxy)methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethyl)ether	0.02[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-ethylhexyl)phthalate	0.23[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butyl phthalate	450[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-octyl phthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.0014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Diethyl phthalate	4200[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dimethyl phthalate	92000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	420[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloro-1,3-butadiene	0.69[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobenzene	0.000051[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorocyclopentadiene	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloroethane	0.11[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Isophorone	27[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodi-n-propylamine	0.0044[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodimethylamine	0.00065[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodiphenylamine	0.62[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrobenzene	55[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorophenol	0.046[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenol	18000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	310[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8270E-SIM	1-Methylnaphthalene	NA	1.33 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chloronaphthalene	170[1]	< 0.136 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methylnaphthalene	NA	1.9 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	110[1]	< 0.038 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	NA	< 0.0342 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	3100[1]	< 0.038 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	0.014[1]	< 0.0406 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	0.0014[4]	< 0.0368 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	0.014[1]	< 0.0336 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	NA	< 0.0308 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	0.014[1]	< 0.0404 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	1.4[1]	< 0.0318 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.0014[4]	< 0.032 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	16[1]	< 0.054 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	420[1]	0.0723 µg/L (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	0.014[1]	< 0.0316 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	NA	3.58 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	NA	0.118 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	310[1]	< 0.0338 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9040C	pH	NA																		
9056A	Bromide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate as (N)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9060A	TOC (Total Organic Carbon)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-NO SGT	Diesel Range Organics (DRO)	3000[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-SGT	Diesel Range Organics (DRO)	3000[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHGX	Gasoline Range Organics-NWTPH	1000[3]	284 µg/L	43.1 µg/L (J)	46.9 µg/L (J)	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	38.4 µg/L (J)	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	47 µg/L (J)	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 46.5 µg/L	< 34 µg/L
SM2340B	Hardness (calculated) as CaCO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

[1] 173-201A WAC - Human Health - Fresh Water
[2] 173-201A WAC - Aquatic Life -Fresh/Chronic
[4] CLARC - Chemical-Specific Considerations – TPH – Concentrations Protective of Aquatic Receptors in Surface Water - Fresh Water

Laboratory non-detections are reported as less than ("<") the laboratory MRL.
Laboratory result qualifiers are reported to the right of corresponding detections (in parentheses). Definitions of reported qualifiers are below:
B: The same analyte is found in the associated blank.
J: Result is estimated between the laboratory method detection limit and reporting limit.

Detection > Screening Value
Detection
Non-detection > Screening Value
Non-detection
Not Analyzed

Preliminary Laboratory Results | Surface Water

PROJ-032692 | BP - Gasoline Release

Data Updated at 3/22/2024 11:27:13 AM

			W003										Approximately 575 feet S..								W004	
			North side of Conway Hill Rd bridge																		Approximately 575 feet south of residential bridge off of Cedardale Rd	
			2/8/2024	2/12/2024	2/15/2024	2/19/2024	2/24/2024	3/5/2024	3/10/2024		3/17/2024		12/14/2023	12/15/2023	12/16/2023	12/17/2023	12/18/2023	12/20/2023	12/22/2023	12/26/2023	12/28/2023	
Analytical Method	Analyte	Screening Value (µg/L)	MTWA0208W003	MTWA0212W003	MTWA0215W003	MTWA0219W003	MTWA0224W003	MTWA0305W003	MTWA0310V003	MTWA0310W003	MTWA0317W003		MTWA1214W004	MTWA1215W004	MTWA1216W004	MTWA1217W004	MTWA1218W004	MTWA1220W004	MTWA1222W004	MTWA1226W004	MTWA1228V004	
200.8	Arsenic	10[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Barium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Copper	11[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Lead	2.5[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Nickel	150[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Zinc	100[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
365.4	Phosphorus, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
410.4	COD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
2130 B-2011	Turbidity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
2320 B-2011	Alkalinity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
2580	ORP	NA																				
4500P E-2011	Phosphate, Ortho	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
6010D	Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Chromium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
8260D	Benzene	0.44[1]	0.269 µg/L (J)	0.374 µg/L (J)	0.309 µg/L (J)	0.222 µg/L (J)	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L		2.94 µg/L	1.2 µg/L	1.17 µg/L	0.989 µg/L (J)	2.22 µg/L	0.669 µg/L (J)	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	
	Ethylbenzene	12[3]	0.192 µg/L (J)	0.205 µg/L (J)	0.143 µg/L (J)	0.165 µg/L (J)	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L		16.1 µg/L	3.31 µg/L	4.64 µg/L	4.12 µg/L	6.4 µg/L	3.2 µg/L	1.01 µg/L	0.218 µg/L (J)	< 0.137 µg/L	
	Toluene	53[3]	3.63 µg/L	5.44 µg/L	4.03 µg/L	3.19 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L		97.9 µg/L	29.6 µg/L	23.4 µg/L	26.2 µg/L	48.4 µg/L	17.2 µg/L	1.9 µg/L	1.07 µg/L	0.653 µg/L (J)	
	Total Xylenes	57[4]	0.859 µg/L (J)	1.37 µg/L (J)	0.723 µg/L (J)	0.902 µg/L (J)	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L		91.1 µg/L	21.5 µg/L	33.2 µg/L	32.1 µg/L	40.3 µg/L	24 µg/L	8.89 µg/L	1.52 µg/L (J)	0.718 µg/L (J)	
8270E	1,2-Dichlorobenzene	2000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1,2,4-Trichlorobenzene	0.12[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1,3-Dichlorobenzene	13[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1,4-Dichlorobenzene	460[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2-Chloronaphthalene	170[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2-Chlorophenol	15[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2,2-Oxybis(1-Chloropropane)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2,4-Dichlorophenol	25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2,4-Dimethylphenol	85[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2,4-Dinitrophenol	60[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2,4-Dinitrotoluene	0.039[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2,4,6-Trichlorophenol	0.25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	3,3-Dichlorobenzidine	0.0031[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	4-Bromophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	4-Chloro-3-methylphenol	36[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	4-Chlorophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	4,6-Dinitro-2-methylphenol	7.1[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Acenaphthene	110[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Anthracene	3100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzidine	0.00002[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzo(a)pyrene	0.0014[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzylbutyl phthalate	0.56[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Bis(2-chloroethoxy)methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Bis(2-chloroethyl)ether	0.02[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Bis(2-ethylhexyl)phthalate	0.23[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Di-n-butyl phthalate	450[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Di-n-octyl phthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Dibenz(a,h)anthracene	0.0014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Diethyl phthalate	4200[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Dimethyl phthalate	92000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Fluorene	420[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Hexachloro-1,3-butadiene	0.69[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Hexachlorobenzene	0.000051[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Hexachlorocyclopentadiene	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Hexachloroethane	0.11[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Isophorone	27[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	n-Nitrosodi-n-propylamine	0.0044[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	n-Nitrosodimethylamine	0.00065[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	n-Nitrosodiphenylamine	0.62[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Nitrobenzene	55[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Pentachlorophenol	0.046[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Phenol	18000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Pyrene	310[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
8270E-SIM	1-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		6.37 µg/L	< 0.137 µg/L	8.79 µg/L	0.658 µg/L	0.164 µg/L (J)	0.27 µg/L	0.658 µg/L	NA	NA	
	2-Chloronaphthalene	170[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA		< 0.0682 µg/L	< 0.136 µg/L	< 0.136 µg/L	< 0.136 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.136 µg/L	NA	NA	
	2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		12.6 µg/L	0.136 µg/L (J)	17.2 µg/L	1.11 µg/L	0.264 µg/L	0.406 µg/L	0.729 µg/L	NA	NA	
	Acenaphthene	110[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA		0.296 µg/L	< 0.038 µg/L	< 0.038 µg/L	< 0.038 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.038 µg/L	NA	NA	
	Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		< 0.0171 µg/L	< 0.0342 µg/L	< 0.0342 µg/L	< 0.0342 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0342 µg/L	NA	NA	
	Anthracene	3100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		0.0864 µg/L	< 0.038 µg/L	0.0659 µg/L (J)	< 0.038 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.038 µg/L	NA	NA	
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		0.0619 µg/L	< 0.0406 µg/L	0.0734 µg/L (J)	< 0.0405 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0406 µg/L	NA	NA	
	Benzo(a)pyrene	0.0014[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA		0.0368 µg/L (J)	< 0.0368 µg/L	0.0384 µg/L (J)	< 0.0368 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0368 µg/L	NA	NA	
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		0.0451 µg/L (J)	< 0.0336 µg/L	0.0764 µg/L (J)	< 0.0336 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0336 µg/L	NA	NA	
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		0.0541 µg/L	< 0.0368 µg/L	0.085 µg/L (J)	< 0.0368 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0368 µg/L	NA	NA	
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		< 0.0202 µg/L	< 0.0404 µg/L	< 0.0404 µg/L	< 0.0404 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0404 µg/L	NA	NA	
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		0.0556 µg/L	< 0.0358 µg/L	0.0896 µg/L (J)	< 0.0358 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0358 µg/L	NA	NA	
	Dibenz(a,h)anthracene	0.0014[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA		< 0.016 µg/L	< 0.032 µg/L	< 0.032 µg/L	< 0.032 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.032 µg/L	NA	NA	
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		0.205 µg/L	< 0.054 µg/L	0.288 µg/L	< 0.054 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.054 µg/L	NA	NA	
	Fluorene	420[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		0.764 µg/L	< 0.0338 µg/L	1.08 µg/L	< 0.0338 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	0.0407 µg/L (J)	NA	NA	
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA		< 0.0158 µg/L	< 0.0316 µg/L	< 0.0316 µg/L	< 0.0316 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0316 µg/L	NA	NA	
	Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		4.12 µg/L	0.367 µg/L (J)	3.95 µg/L	2.64 µg/L	0.747 µg/L	0.976 µg/L	1.02 µg/L	NA	NA	
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		1.31 µg/L	< 0.038 µg/L	2.24 µg/L	< 0.038 µg/L	< 0.018 µg/L	< 0.027 µg/L	0.064 µg/L (J)	NA	NA	
	Pyrene	310[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA		0.339 µg/L	< 0.0338 µg/L	0.529 µg/L	< 0.0338 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0338 µg/L	NA	NA	
9040C	pH	NA																				
9056A	Bromide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Nitrate as (N)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
9060A	TOC (Total Organic Carbon)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
NWTPHDX-NO SGT	Diesel Range Organics (DRO)	3000[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
NWTPHDX-SGT	Diesel Range Organics (DRO)	3000[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	
NWTPHGX	Gasoline Range Organics-NWTPH	1000[2]	< 33.4 µg/L	< 31.6 µg/L	< 31.6 µg/L	41.5 µg/L (BJ)	36.4 µg/L (BJ)	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L		1,110 µg/L	193 µg/L	623 µg/L	269 µg/L	232 µg/L	< 149 µg/L	108 µg/L	< 31.6 µg/L	< 31.6 µg/L	
SM2340B	Hardness (calculated) as CaCO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	

[1] 173-201A WAC - Human Health - Fresh Water
[2] 173-201A WAC - Aquatic Life -Fresh/Chronic
[3] CLARC - Chemical-Specific Considerations – TPH – Concentrations Protective of Aquatic Receptors in Surface Water - Fresh Water
Laboratory non-detections are reported as less than ("<") the laboratory MR.
Laboratory result qualifiers are reported to the right of corresponding detections (in parentheses). Definitions of reported qualifiers are below:
B: The same analyte is found in the associated blank.
J: Result is estimated between the laboratory method detection limit and reporting limit.

Detection > Screening Value
Detection
Non-detection > Screening Value
Non-detection
Not Analyzed

Preliminary Laboratory Results | Surface Water

PROJ-032692 | BP - Gasoline Release

Data Updated at 3/22/2024 11:27:13 AM

			W004																		
			Approximately 575 feet south of residential bridge off of Cedardale Rd																		
			12/28/2023	12/29/2023	12/30/2023	1/1/2024	1/5/2024	1/8/2024	1/11/2024	1/18/2024	1/20/2024		1/23/2024	1/26/2024		1/29/2024	1/30/2024	2/1/2024	2/5/2024	2/8/2024	
Analytical Method	Analyte	Screening Value (µg/L)	MTWA1228W004	MTWA1229W004	MTWA1230W004	MTWA0101W004	MTWA0105W004	MTWA0108W004	MTWA0111W004	MTWA0118W004	MTWA0120V004	MTWA0120W004	MTWA0123W004	MTWA0126W004	MTWA0126W004A	MTWA0129W004	MTWA0130W004	MTWA0201W004	MTWA0205W004	MTWA0208W004	
200.8	Arsenic	10[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Barium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Copper	11[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Lead	2.5[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Nickel	150[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Zinc	100[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
365.4	Phosphorus, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
410.4	COD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2130 B-2011	Turbidity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2320 B-2011	Alkalinity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2580	ORP	NA																			
4500P E-2011	Phosphate, Ortho	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
6010D	Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Chromium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
8260D	Benzene	0.44[3]	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	0.146 µg/L (J)	< 0.0941 µg/L	0.201 µg/L (J)	0.374 µg/L (J)	0.246 µg/L (J)	0.415 µg/L (J)	0.391 µg/L (J)	0.174 µg/L (J)	0.182 µg/L (J)	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	0.371 µg/L (J)	0.18 µg/L (J)	
	Ethylbenzene	12[3]	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	0.147 µg/L (J)	0.331 µg/L (J)	0.154 µg/L (J)	0.339 µg/L (J)	0.336 µg/L (J)	0.207 µg/L (J)	0.182 µg/L (J)	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	0.353 µg/L (J)	< 0.137 µg/L	
	Toluene	53[3]	0.622 µg/L (J)	0.373 µg/L (J)	0.642 µg/L (J)	1.44 µg/L	0.987 µg/L (J)	2.25 µg/L	5.21 µg/L	2.91 µg/L	6.19 µg/L	6.28 µg/L	3.34 µg/L	3.35 µg/L	< 0.278 µg/L	1.58 µg/L	1.39 µg/L	0.349 µg/L (J)	5.87 µg/L	2.35 µg/L	
	Total Xylenes	57[4]	0.719 µg/L (J)	< 0.174 µg/L	< 0.174 µg/L	0.712 µg/L (J)	0.26 µg/L (J)	0.923 µg/L (J)	2.3 µg/L (J)	0.741 µg/L (J)	2.55 µg/L (J)	2.55 µg/L (J)	1.29 µg/L (J)	1.28 µg/L (J)	< 0.174 µg/L	0.868 µg/L (J)	0.519 µg/L (J)	< 0.174 µg/L	1.64 µg/L (J)	0.642 µg/L (J)	
8270E	1,2-Dichlorobenzene	2000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1,2,4-Trichlorobenzene	0.12[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1,3-Dichlorobenzene	13[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1,4-Dichlorobenzene	460[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2-Chloronaphthalene	170[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2-Chlorophenol	15[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2,2-Oxybis(1-Chloropropane)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2,4-Dichlorophenol	25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2,4-Dimethylphenol	85[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2,4-Dinitrophenol	60[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2,4-Dinitrotoluene	0.039[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2,4,6-Trichlorophenol	0.25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	3,3-Dichlorobenzidine	0.0031[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	4-Bromophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	4-Chloro-3-methylphenol	36[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	4-Chlorophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	4,6-Dinitro-2-methylphenol	7.1[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Acenaphthene	110[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Anthracene	3100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzidine	0.00002[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzo(a)pyrene	0.0014[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzylbutyl phthalate	0.56[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Bis(2-chloroethoxy)methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Bis(2-chloroethyl)ether	0.02[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Bis(2-ethylhexyl)phthalate	0.23[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Di-n-butyl phthalate	450[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Di-n-octyl phthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Dibenz(a,h)anthracene	0.0014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Diethyl phthalate	4200[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Dimethyl phthalate	92000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Fluorene	420[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Hexachloro-1,3-butadiene	0.69[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Hexachlorobenzene	0.000051[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Hexachlorocyclopentadiene	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Hexachloroethane	0.11[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Isophorone	27[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	n-Nitrosodi-n-propylamine	0.0044[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	n-Nitrosodimethylamine	0.00065[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	n-Nitrosodiphenylamine	0.62[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Nitrobenzene	55[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Pentachlorophenol	0.046[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Phenol	18000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Pyrene	310[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
8270E-SIM	1-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2-Chloronaphthalene	170[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Acenaphthene	110[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Anthracene	3100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzo(a)pyrene	0.0014[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Dibenz(a,h)anthracene	0.0014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Fluorene	420[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Pyrene	310[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
9040C	pH	NA																			
9056A	Bromide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Nitrate as (N)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
9060A	TOC (Total Organic Carbon)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
NWTPHDX-NO SGT	Diesel Range Organics (DRO)	3000[5]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
NWTPHDX-SGT	Diesel Range Organics (DRO)	3000[6]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
NWTPHGX	Gasoline Range Organics-NWTPH	1000[5]	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	52.1 µg/L (J)	< 31.6 µg/L	< 31.6 µg/L	33.5 µg/L (J)	< 31.6 µg/L	31.7 µg/L (J)	32.1 µg/L (J)	< 46.6 µg/L	< 50.9 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 42.7 µg/L	< 31.6 µg/L	< 31.6 µg/L	
SM2340B	Hardness (calculated) as CaCO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

[1] 173-201A WAC - Human Health - Fresh Water
[2] 173-201A WAC - Aquatic Life -Fresh/Chronic
[3] CLARC - Chemical-Specific Considerations – TPH – Concentrations Protective of Aquatic Receptors in Surface Water - Fresh Water
Laboratory non-detections are reported as less than ("<") the laboratory MR.
Laboratory result qualifiers are reported to the right of corresponding detections (in parentheses). Definitions of reported qualifiers are below:
B: The same analyte is found in the associated blank.
J: Result is estimated between the laboratory method detection limit and reporting limit.

Detection > Screening Value
Detection
Non-detection > Screening Value
Non-detection
Not Analyzed

Preliminary Laboratory Results | Surface Water

PROJ-032692 | BP - Gasoline Release

Data Updated at 3/22/2024 11:27:13 AM

			W004								Approximately 25 yards East of Pioneer Highway bridge			Milltown Boat Launch						W005	
			Approximately 575 feet south of residential bridge off of Cedardale Rd																	Skagit River at Milltown Rd boat launch	
			2/12/2024	2/15/2024	2/19/2024	2/24/2024	3/5/2024	3/10/2024	3/17/2024	12/17/2023	12/19/2023	12/21/2023	12/18/2023	12/28/2023	12/29/2023		12/30/2023	12/31/2023	1/4/2024	1/7/2024
Analytical Method	Analyte	Screening Value (µg/L)	MTWA0212W004	MTWA0215W004	MTWA0219W004	MTWA0224W004	MTWA0305W004	MTWA0310W004	MTWA0317W004	MTWA1217W005	MTWA1219W005	MTWA1221W005	MTWA1218W005	MTWA1228W005	MTWA1229W005	MTWA1229W005	MTWA1230W005	MTWA1231W005	MTWA0104W005	MTWA0107W005
200.8	Arsenic	10[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Copper	11[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	2.5[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
365.4	Phosphorus, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
410.4	COD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2130 B-2011	Turbidity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2320 B-2011	Alkalinity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2580	ORP	NA																		
4500P E-2011	Phosphate, Ortho	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6010D	Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8260D	Benzene	0.44[1]	0.35 µg/L (J)	0.244 µg/L (J)	0.122 µg/L (J)	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L
	Ethylbenzene	12[2]	0.218 µg/L (J)	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L
	Toluene	53[2]	4.76 µg/L	3.14 µg/L	1.68 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	0.497 µg/L (J)	0.47 µg/L (J)	< 0.278 µg/L	0.461 µg/L (J)	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L
	Total Xylenes	57[3]	1.23 µg/L (J)	0.514 µg/L (J)	0.442 µg/L (J)	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	0.506 µg/L (J)	0.682 µg/L (J)	0.233 µg/L (J)	0.439 µg/L (J)	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L
8270E	1,2-Dichlorobenzene	2000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trichlorobenzene	0.12[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,3-Dichlorobenzene	13[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,4-Dichlorobenzene	460[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chloronaphthalene	1700[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chlorophenol	15[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,2-Oxybis(1-Chloropropane)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dichlorophenol	25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dimethylphenol	85[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrophenol	60[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrotoluene	0.039[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4,6-Trichlorophenol	0.25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3,3-Dichlorobenzidine	0.0031[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Bromophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chloro-3-methylphenol	36[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chlorophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4,6-Dinitro-2-methylphenol	7.1[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	110[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	3100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzidine	0.00002[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	0.0014[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzylbutyl phthalate	0.56[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethoxy)methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethyl)ether	0.02[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-ethylhexyl)phthalate	0.23[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butyl phthalate	450[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-octyl phthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.0014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Diethyl phthalate	4200[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dimethyl phthalate	92000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	420[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloro-1,3-butadiene	0.69[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobenzene	0.000051[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorocyclopentadiene	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloroethane	0.11[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Isophorone	27[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodi-n-propylamine	0.0044[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodimethylamine	0.00065[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodiphenylamine	0.62[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrobenzene	55[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorophenol	0.046[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenol	18000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	310[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8270E-SIM	1-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	NA	NA	NA	NA	NA	NA	NA
	2-Chloronaphthalene	170[1]	NA	NA	NA	NA	NA	NA	NA	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	NA	NA	NA	NA	NA	NA	NA
	2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	110[1]	NA	NA	NA	NA	NA	NA	NA	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	NA	NA	NA	NA	NA	NA	NA
	Anthracene	3100[1]	NA	NA	NA	NA	NA	NA	NA	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	0.0014[4]	NA	NA	NA	NA	NA	NA	NA	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	NA	NA	NA	NA	NA	NA	NA
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	NA	NA	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.0014[4]	NA	NA	NA	NA	NA	NA	NA	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	NA	NA	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	NA	NA	NA	NA	NA	NA	NA
	Fluorene	420[1]	NA	NA	NA	NA	NA	NA	NA	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	NA	NA	NA	NA	NA	NA	NA
	Pyrene	310[1]	NA	NA	NA	NA	NA	NA	NA	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	NA	NA	NA	NA	NA	NA	NA
9040C	pH	NA																		
9056A	Bromide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate as (N)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9060A	TOC (Total Organic Carbon)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-NO SGT	Diesel Range Organics (DRO)	3000[5]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-SGT	Diesel Range Organics (DRO)	3000[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHGX	Gasoline Range Organics-NWTPH	1000[2]	< 31.6 µg/L	< 31.6 µg/L	40.6 µg/L (BJ)	33.3 µg/L (BJ)	< 31.6 µg/L	< 31.6 µg/L	51.6 µg/L (BJ)	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 64.2 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L
SM2340B	Hardness (calculated) as CaCO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

[1] 173-201A WAC - Human Health - Fresh Water
[2] 173-201A WAC - Aquatic Life -Fresh/Chronic
[3] CLARC - Chemical-Specific Considerations – TPH – Concentrations Protective of Aquatic Receptors in Surface Water - Fresh Water
Laboratory non-detections are reported as less than ("<") the laboratory MRL.
Laboratory result qualifiers are reported to the right of corresponding detections (in parentheses). Definitions of reported qualifiers are below:
B: The same analyte is found in the associated blank.
J: Result is estimated between the laboratory method detection limit and reporting limit.

Detection > Screening Value
Detection
Non-detection > Screening Value
Non-detection
Not Analyzed

Preliminary Laboratory Results | Surface Water

PROJ-032692 | BP - Gasoline Release

Data Updated at 3/22/2024 11:27:13 AM

			W005																W006	
			Skagit River at Milltown Rd boat launch										Skagit River; Milltown Boat Launch off Pioneer Hwy		Skagit River				Skagit River access point across railroad tracks off Pio..	
			1/10/2024	1/17/2024	1/19/2024	1/22/2024	1/25/2024	2/1/2024	2/14/2024	2/28/2024		3/10/2024	12/15/2023	12/16/2023	12/18/2023	12/19/2023		12/21/2023	12/15/2023	
Analytical Method	Analyte	Screening Value (µg/L)	MTWA0110W005	MTWA0117W005	MTWA0119W005	MTWA0122W005	MTWA0125W005	MTWA0201W005	MTWA0214W005	MTWA0228W005	MTWA0228W005	MTWA0310W005	MTWA1215W005	MTWA1216W005	MTWA1218W006	MTWA1219W006	MTWA1219W006	MTWA1221W006	MTWA1215W006	MTWA1215W006D
200.8	Arsenic	10[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Copper	11[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	2.5[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	150[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	100[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
365.4	Phosphorus, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
410.4	COD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2130 B-2011	Turbidity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2320 B-2011	Alkalinity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2580	ORP	NA																		
4500P E-2011	Phosphate, Ortho	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6010D	Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8260D	Benzene	0.44[4]	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	1.34 µg/L	1.44 µg/L
	Ethylbenzene	12[3]	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	0.144 µg/L (J)	4.01 µg/L	4.06 µg/L
	Toluene	53[3]	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	0.446 µg/L (J)	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	0.301 µg/L (J)	0.746 µg/L (J)	0.611 µg/L (J)	< 0.278 µg/L	< 0.278 µg/L	0.808 µg/L (J)	32.8 µg/L	34.1 µg/L
	Total Xylenes	57[4]	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	0.617 µg/L (J)	0.651 µg/L (J)	< 0.174 µg/L	< 0.174 µg/L	1.11 µg/L (J)	24.4 µg/L	25.5 µg/L
8270E	1,2-Dichlorobenzene	2000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trichlorobenzene	0.12[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,3-Dichlorobenzene	13[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,4-Dichlorobenzene	460[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chloronaphthalene	1700[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chlorophenol	15[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,2-Oxybis(1-Chloropropane)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dichlorophenol	25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dimethylphenol	85[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrophenol	60[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrotoluene	0.039[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4,6-Trichlorophenol	0.25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3,3-Dichlorobenzidine	0.0031[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Bromophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chloro-3-methylphenol	30[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chlorophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4,6-Dinitro-2-methylphenol	7.1[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	110[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	3100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzidine	0.00002[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	0.0014[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzylbutyl phthalate	0.56[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethoxy)methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethyl)ether	0.02[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-ethylhexyl)phthalate	0.23[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butyl phthalate	450[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-octyl phthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.0014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Diethyl phthalate	4200[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dimethyl phthalate	92000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	420[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloro-1,3-butadiene	0.69[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobenzene	0.000051[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorocyclopentadiene	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloroethane	0.11[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Isophorone	27[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodi-n-propylamine	0.0044[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodimethylamine	0.00065[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodiphenylamine	0.62[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrobenzene	55[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorophenol	0.046[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenol	18000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	310[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8270E-SIM	1-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.137 µg/L	< 0.137 µg/L
	2-Chloronaphthalene	1700[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.136 µg/L	< 0.136 µg/L
	2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	0.186 µg/L (J)	0.192 µg/L (J)
	Acenaphthene	110[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.038 µg/L	< 0.038 µg/L
	Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0342 µg/L	< 0.0342 µg/L
	Anthracene	3100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.038 µg/L	< 0.038 µg/L
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0406 µg/L	< 0.0406 µg/L
	Benzo(a)pyrene	0.0014[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0368 µg/L	< 0.0368 µg/L
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0336 µg/L	< 0.0336 µg/L
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0368 µg/L	< 0.0368 µg/L
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0404 µg/L	< 0.0404 µg/L
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0358 µg/L	< 0.0358 µg/L
	Dibenz(a,h)anthracene	0.0014[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.032 µg/L	< 0.032 µg/L
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.054 µg/L	< 0.054 µg/L
	Fluorene	420[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0338 µg/L	< 0.0338 µg/L
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0316 µg/L	< 0.0316 µg/L
	Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	0.0947 µg/L (J)	0.564 µg/L
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.036 µg/L	0.573 µg/L
	Pyrene	310[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0338 µg/L	< 0.0338 µg/L
9040C	pH	NA																		
9056A	Bromide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate as (N)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9060A	TOC (Total Organic Carbon)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-NO SGT	Diesel Range Organics (DRO)	3000[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-SGT	Diesel Range Organics (DRO)	3000[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHGX	Gasoline Range Organics-NWTPH	1000[3]	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 57.7 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	155 µg/L	189 µg/L
SM2340B	Hardness (calculated) as CaCO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

[1] 173-201A WAC - Human Health - Fresh Water
[2] 173-201A WAC - Aquatic Life -Fresh/Chronic
[3] CLARC - Chemical-Specific Considerations – TPH – Concentrations Protective of Aquatic Receptors in Surface Water - Fresh Water
Laboratory non-detections are reported as less than ("<") the laboratory MR.
Laboratory result qualifiers are reported to the right of corresponding detections (in parentheses). Definitions of reported qualifiers are below:
B: The same analyte is found in the associated blank.
J: Result is estimated between the laboratory method detection limit and reporting limit.

Detection > Screening Value
Detection
Non-detection > Screening Value
Non-detection
Not Analyzed

Preliminary Laboratory Results | Surface Water

PROJ-032692 | BP - Gasoline Release

Data Updated at 3/22/2024 11:27:13 AM

			W006																		
			Skagit River approximatel..	Skagit River, off of Pioneer Hwy; approx 200 yds south of Pioneer Hwy bridge over flowpath																W006 - Skagit River acces..
			12/17/2023	12/28/2023	12/29/2023	12/30/2023	12/31/2023		1/4/2024	1/7/2024	1/10/2024	1/17/2024	1/19/2024	1/22/2024	1/25/2024	2/1/2024	2/14/2024	2/28/2024	3/10/2024	12/16/2023
Analytical Method	Analyte	Screening Value (µg/L)	MTWA1217W006	MTWA1228W006	MTWA1229W006	MTWA1230W006	MTWA1231V006	MTWA1231W006	MTWA0104W006	MTWA0107W006	MTWA0110W006	MTWA0117W006	MTWA0119W006	MTWA0122W006	MTWA0125W006	MTWA0201W006	MTWA0214W006	MTWA0228W006	MTWA0310W006	MTWA1216W006
200.8	Arsenic	10[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Copper	11[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	2.5[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
365.4	Phosphorus, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
410.4	COD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2130 B-2011	Turbidity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2320 B-2011	Alkalinity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2580	ORP	NA																		
4500P E-2011	Phosphate, Ortho	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6010D	Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8260D	Benzene	0.44[3]	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L
	Ethylbenzene	12[3]	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	0.168 µg/L (J)
	Toluene	53[3]	0.729 µg/L (J)	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	0.56 µg/L (J)	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	0.859 µg/L (J)
	Total Xylenes	57[3]	0.803 µg/L (J)	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	0.942 µg/L (J)
8270E	1,2-Dichlorobenzene	2000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trichlorobenzene	0.12[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,3-Dichlorobenzene	13[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,4-Dichlorobenzene	460[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chloronaphthalene	170[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chlorophenol	15[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,2-Oxybis(1-Chloropropane)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dichlorophenol	25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dimethylphenol	85[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrophenol	60[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrotoluene	0.039[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4,6-Trichlorophenol	0.25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3,3-Dichlorobenzidine	0.0031[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Bromophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chloro-3-methylphenol	30[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chlorophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4,6-Dinitro-2-methylphenol	7.1[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	110[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	3100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzidine	0.00002[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	0.0014[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzylbutyl phthalate	0.56[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethoxy)methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethyl)ether	0.02[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-ethylhexyl)phthalate	0.23[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butyl phthalate	450[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-octyl phthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.0014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Diethyl phthalate	4200[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dimethyl phthalate	92000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	420[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloro-1,3-butadiene	0.69[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobenzene	0.000051[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorocyclopentadiene	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloroethane	0.11[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Isophorone	27[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodi-n-propylamine	0.0044[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodimethylamine	0.00065[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodiphenylamine	0.62[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrobenzene	55[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorophenol	0.046[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenol	18000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	310[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8270E-SIM	1-Methylnaphthalene	NA	< 0.0687 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0687 µg/L
	2-Chloronaphthalene	170[1]	< 0.0682 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0682 µg/L
	2-Methylnaphthalene	NA	< 0.0674 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0674 µg/L
	Acenaphthene	110[1]	< 0.019 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.019 µg/L
	Acenaphthylene	NA	< 0.0171 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0171 µg/L
	Anthracene	3100[1]	< 0.019 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.019 µg/L
	Benzo(a)anthracene	0.014[1]	< 0.0203 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0203 µg/L
	Benzo(a)pyrene	0.0014[4]	< 0.0184 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0184 µg/L
	Benzo(b)fluoranthene	0.014[1]	< 0.0168 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0168 µg/L
	Benzo(g,h,i)perylene	NA	< 0.0184 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0184 µg/L
	Benzo(k)fluoranthene	0.014[1]	< 0.0202 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0202 µg/L
	Chrysene	1.4[1]	< 0.0179 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0179 µg/L
	Dibenz(a,h)anthracene	0.0014[4]	< 0.016 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.016 µg/L
	Fluoranthene	16[1]	< 0.027 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.027 µg/L
	Fluorene	420[1]	< 0.0169 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0169 µg/L
	Indeno(1,2,3-cd)pyrene	0.014[1]	< 0.0158 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0158 µg/L
	Naphthalene	NA	< 0.0917 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0917 µg/L
	Phenanthrene	NA	< 0.018 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.018 µg/L
	Pyrene	310[1]	< 0.0169 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0169 µg/L
9040C	pH	NA																		
9056A	Bromide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate as (N)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9060A	TOC (Total Organic Carbon)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-NO SGT	Diesel Range Organics (DRO)	3000[5]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-SGT	Diesel Range Organics (DRO)	3000[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHGX	Gasoline Range Organics-NWTPH	1000[2]	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 35.5 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L
SM2340B	Hardness (calculated) as CaCO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

[1] 173-201A WAC - Human Health - Fresh Water
[2] 173-201A WAC - Aquatic Life -Fresh/Chronic
[3] CLARC - Chemical-Specific Considerations – TPH – Concentrations Protective of Aquatic Receptors in Surface Water - Fresh Water

Laboratory non-detections are reported as less than ("<") the laboratory MRL.
Laboratory result qualifiers are reported to the right of corresponding detections (in parentheses). Definitions of reported qualifiers are below:
B: The same analyte is found in the associated blank.
J: Result is estimated between the laboratory method detection limit and reporting limit.

Detection > Screening Value
Detection
Non-detection > Screening Value
Non-detection
Not Analyzed

Preliminary Laboratory Results | Surface Water

PROJ-032692 | BP - Gasoline Release

Data Updated at 3/22/2024 11:27:13 AM

			W007																		
			Approximately 0.80 miles downstream of South Fork Skagit River																		
			12/17/2023	12/18/2023		12/19/2023	12/21/2023	12/28/2023	12/29/2023	12/30/2023	1/1/2024	1/5/2024	1/8/2024	1/11/2024	1/18/2024	1/20/2024	1/23/2024	1/26/2024	2/1/2024	2/14/2024
Analytical Method	Analyte	Screening Value (µg/L)	MTWA1217W007	MTWA1218V007	MTWA1218W007	MTWA1219W007	MTWA1221W007	MTWA1228W007	MTWA1229W007	MTWA1230W007	MTWA0101W007	MTWA0105W007	MTWA0108W007	MTWA0111W007	MTWA0118W007	MTWA0120W007	MTWA0123W007	MTWA0126W007	MTWA0201W007	MTWA0214W007
200.8	Arsenic	10[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Copper	11[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	2.5[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	150[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	100[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
365.4	Phosphorus, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
410.4	COD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2130 B-2011	Turbidity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2320 B-2011	Alkalinity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2580	ORP	NA																		
4500P E-2011	Phosphate, Ortho	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6010D	Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8260D	Benzene	0.44[3]	0.475 µg/L (J)	0.625 µg/L (J)	0.635 µg/L (J)	0.315 µg/L (J)	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L
	Ethylbenzene	12[3]	1.76 µg/L	2.11 µg/L	2.03 µg/L	1.63 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L
	Toluene	53[3]	11.5 µg/L	13.8 µg/L	13.6 µg/L	5.92 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	0.353 µg/L (J)	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	1.04 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L
	Total Xylenes	57[3]	14.1 µg/L	13.7 µg/L	13.5 µg/L	13.2 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	0.181 µg/L (J)	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L
8270E	1,2-Dichlorobenzene	2000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trichlorobenzene	0.12[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,3-Dichlorobenzene	13[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,4-Dichlorobenzene	460[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chloronaphthalene	1700[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chlorophenol	15[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,2-Oxybis(1-Chloropropane)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dichlorophenol	25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dimethylphenol	85[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrophenol	60[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrotoluene	0.039[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4,6-Trichlorophenol	0.25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3,3-Dichlorobenzidine	0.0031[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Bromophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chloro-3-methylphenol	30[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chlorophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4,6-Dinitro-2-methylphenol	7.1[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	110[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	3100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzidine	0.00002[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	0.0014[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzylbutyl phthalate	0.56[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethoxy)methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethyl)ether	0.02[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-ethylhexyl)phthalate	0.23[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butyl phthalate	450[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-octyl phthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.0014[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Diethyl phthalate	4200[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dimethyl phthalate	92000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	420[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloro-1,3-butadiene	0.69[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobenzene	0.000051[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorocyclopentadiene	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloroethane	0.11[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Isophorone	27[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodi-n-propylamine	0.0044[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodimethylamine	0.00065[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodiphenylamine	0.62[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrobenzene	55[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorophenol	0.046[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenol	18000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	310[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8270E-SIM	1-Methylnaphthalene	NA	< 0.137 µg/L	< 0.137 µg/L	0.137 µg/L (J)	0.22 µg/L (J)	0.0694 µg/L (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chloronaphthalene	170[1]	< 0.136 µg/L	< 0.136 µg/L	< 0.136 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methylnaphthalene	NA	0.136 µg/L (J)	0.166 µg/L (J)	0.215 µg/L (J)	0.354 µg/L	0.101 µg/L (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	110[1]	< 0.038 µg/L	< 0.038 µg/L	< 0.038 µg/L	< 0.019 µg/L	< 0.019 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	NA	< 0.0342 µg/L	< 0.0342 µg/L	< 0.0342 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	3100[1]	< 0.038 µg/L	< 0.038 µg/L	< 0.038 µg/L	< 0.019 µg/L	< 0.019 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	0.014[1]	< 0.0406 µg/L	< 0.0406 µg/L	< 0.0406 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	0.0014[3]	< 0.0368 µg/L	< 0.0368 µg/L	< 0.0368 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	0.014[1]	< 0.0336 µg/L	< 0.0336 µg/L	< 0.0336 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	NA	< 0.0368 µg/L	< 0.0368 µg/L	< 0.0368 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	0.014[1]	< 0.0404 µg/L	< 0.0404 µg/L	< 0.0404 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	1.4[1]	< 0.0358 µg/L	< 0.0358 µg/L	< 0.0358 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.0014[3]	< 0.032 µg/L	< 0.032 µg/L	< 0.032 µg/L	< 0.016 µg/L	< 0.016 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	16[1]	< 0.054 µg/L	< 0.054 µg/L	< 0.054 µg/L	< 0.027 µg/L	< 0.027 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	420[1]	< 0.0338 µg/L	< 0.0338 µg/L	< 0.0338 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	0.014[1]	< 0.0316 µg/L	< 0.0316 µg/L	< 0.0316 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	NA	0.396 µg/L (J)	0.402 µg/L (J)	0.423 µg/L (J)	0.933 µg/L	0.194 µg/L (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	NA	< 0.036 µg/L	< 0.036 µg/L	< 0.036 µg/L	0.0193 µg/L (J)	< 0.018 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	310[1]	< 0.0338 µg/L	< 0.0338 µg/L	< 0.0338 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9040C	pH	NA																		
9056A	Bromide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate as (N)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9060A	TOC (Total Organic Carbon)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-NO SGT	Diesel Range Organics (DRO)	3000[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-SGT	Diesel Range Organics (DRO)	3000[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHGX	Gasoline Range Organics-NWTPH	1000[2]	88 µg/L (J)	< 117 µg/L	< 115 µg/L	117 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L
SM2340B	Hardness (calculated) as CaCO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

[1] 173-201A WAC - Human Health - Fresh Water
[2] 173-201A WAC - Aquatic Life -Fresh/Chronic
[3] CLARC - Chemical-Specific Considerations – TPH – Concentrations Protective of Aquatic Receptors in Surface Water - Fresh Water
Laboratory non-detections are reported as less than ("<") the laboratory MRL.
Laboratory result qualifiers are reported to the right of corresponding detections (in parentheses). Definitions of reported qualifiers are below:
B: The same analyte is found in the associated blank.
J: Result is estimated between the laboratory method detection limit and reporting limit.

Detection > Screening Value
Detection
Non-detection > Screening Value
Non-detection
Not Analyzed

Preliminary Laboratory Results | Surface Water

PROJ-032692 | BP - Gasoline Release

Data Updated at 3/22/2024 11:27:13 AM

			W007			W008															
			nately 0.80 miles downstream of South Fork Skagit River		W007 - ~0.80 miles downs..	Approximately 0.5 miles downstream of South Fork Skagit River															
			2/28/2024	3/10/2024	12/16/2023	12/17/2023	12/18/2023	12/19/2023	12/21/2023	12/28/2023	12/29/2023	12/30/2023	1/1/2024	1/5/2024	1/8/2024	1/11/2024	1/18/2024	1/20/2024	1/23/2024	1/26/2024	
Analytical Method	Analyte	Screening Value (µg/L)	MTWA0228W007	MTWA0310W007	MTWA1216W007	MTWA1217W008	MTWA1218W008	MTWA1219W008	MTWA1221W008	MTWA1228W008	MTWA1229W008	MTWA1230W008	MTWA0101W008	MTWA0105W008	MTWA0108W008	MTWA0111W008	MTWA0118W008	MTWA0120W008	MTWA0123W008	MTWA0126W008	
200.8	Arsenic	10[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Barium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Copper	11[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Lead	2.5[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Nickel	150[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Zinc	100[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
365.4	Phosphorus, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
410.4	COD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2130 B-2011	Turbidity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2320 B-2011	Alkalinity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2580	ORP	NA																			
4500P E-2011	Phosphate, Ortho	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
6010D	Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Chromium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
8260D	Benzene	0.44[3]	< 0.0941 µg/L	< 0.0941 µg/L	0.192 µg/L (J)	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	82.6 % 107 %	< 0.0941 µg/L	< 0.0941 µg/L	
	Ethylbenzene	12[3]	< 0.137 µg/L	< 0.137 µg/L	0.896 µg/L (J)	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	75.4 % 103 % (D)	< 0.137 µg/L	< 0.137 µg/L	
	Toluene	53[3]	< 0.278 µg/L	< 0.278 µg/L	4.58 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	77.8 % 102 %	< 0.278 µg/L	< 0.278 µg/L	
	Total Xylenes	57[3]	< 0.174 µg/L	< 0.174 µg/L	6.3 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	80 % 103 %	< 0.174 µg/L	< 0.174 µg/L	
8270E	1,2-Dichlorobenzene	2000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1,2,4-Trichlorobenzene	0.12[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1,3-Dichlorobenzene	13[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1,4-Dichlorobenzene	460[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2-Chloronaphthalene	1700[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2-Chlorophenol	15[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2,2-Oxybis(1-Chloropropane)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2,4-Dichlorophenol	25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2,4-Dimethylphenol	85[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2,4-Dinitrophenol	60[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2,4-Dinitrotoluene	0.039[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2,4,6-Trichlorophenol	0.25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	3,3-Dichlorobenzidine	0.0031[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	4-Bromophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	4-Chloro-3-methylphenol	36[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	4-Chlorophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	4,6-Dinitro-2-methylphenol	7.1[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Acenaphthene	110[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Anthracene	3100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzidine	0.00002[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzo(a)pyrene	0.0014[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzylbutyl phthalate	0.56[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Bis(2-chloroethoxy)methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Bis(2-chloroethyl)ether	0.02[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Bis(2-ethylhexyl)phthalate	0.23[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Di-n-butyl phthalate	450[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Di-n-octyl phthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Dibenz(a,h)anthracene	0.0014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Diethyl phthalate	4200[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Dimethyl phthalate	92000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Fluorene	420[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Hexachloro-1,3-butadiene	0.69[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Hexachlorobenzene	0.000051[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Hexachlorocyclopentadiene	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Hexachloroethane	0.11[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Isophorone	27[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	n-Nitrosodi-n-propylamine	0.0044[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	n-Nitrosodimethylamine	0.00065[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	n-Nitrosodiphenylamine	0.62[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Nitrobenzene	55[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Pentachlorophenol	0.046[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Phenol	18000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Pyrene	310[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
8270E-SIM	1-Methylnaphthalene	NA	NA	NA	< 0.137 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2-Chloronaphthalene	1700[1]	NA	NA	< 0.136 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	2-Methylnaphthalene	NA	NA	NA	< 0.135 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Acenaphthene	110[1]	NA	NA	< 0.038 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Acenaphthylene	NA	NA	NA	< 0.0942 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Anthracene	3100[1]	NA	NA	< 0.038 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzo(a)anthracene	0.014[1]	NA	NA	< 0.0406 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzo(a)pyrene	0.0014[3]	NA	NA	< 0.0368 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzo(b)fluoranthene	0.014[1]	NA	NA	< 0.0336 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzo(g,h,i)perylene	NA	NA	NA	< 0.0368 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Benzo(k)fluoranthene	0.014[1]	NA	NA	< 0.0404 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Chrysene	1.4[1]	NA	NA	< 0.0358 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Dibenz(a,h)anthracene	0.0014[3]	NA	NA	< 0.032 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Fluoranthene	16[1]	NA	NA	< 0.054 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Fluorene	420[1]	NA	NA	< 0.0338 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	< 0.0316 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Naphthalene	NA	NA	NA	0.251 µg/L (J)	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Phenanthrene	NA	NA	NA	< 0.036 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Pyrene	310[1]	NA	NA	< 0.0338 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
9040C	pH	NA																			
9056A	Bromide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Nitrate as (N)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
9060A	TOC (Total Organic Carbon)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
NWTPHDX-NO SGT	Diesel Range Organics (DRO)	3000[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
NWTPHDX-SGT	Diesel Range Organics (DRO)	3000[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
NWTPHGX	Gasoline Range Organics-NWTPH	1000[3]	< 31.6 µg/L	< 31.6 µg/L	52.6 µg/L (J)	< 31.6 µg/L	< 33.4 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	98 % 95.3 %	< 31.6 µg/L	< 32.9 µg/L	< 31.6 µg/L
SM2340B	Hardness (calculated) as CaCO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

[1] 173-201A WAC - Human Health - Fresh Water
[2] 173-201A WAC - Aquatic Life -Fresh/Chronic
[3] CLARC - Chemical-Specific Considerations – TPH – Concentrations Protective of Aquatic Receptors in Surface Water - Fresh Water

Laboratory non-detections are reported as less than ("<") the laboratory MR.
Laboratory result qualifiers are reported to the right of corresponding detections (in parentheses). Definitions of reported qualifiers are below:
B: The same analyte is found in the associated blank.
J: Result is estimated between the laboratory method detection limit and reporting limit.

Detection > Screening Value
Detection
Non-detection > Screening Value
Non-detection
Not Analyzed

Preliminary Laboratory Results | Surface Water

PROJ-032692 | BP - Gasoline Release

Data Updated at 3/22/2024 11:27:13 AM

			W008						W008 - ~0.5 miles downstream of South Fork Skagit Ri..		SW area of Similk Bay, W of Skagit Island Marind State..			W009							W010			SW area of Skagit Bay
			Approximately 0.5 miles downstream of South Fork Skagit River											SW area of Similk Bay, W of Skagit Island Marine State Park										
			2/1/2024		2/14/2024	2/28/2024	3/10/2024		12/16/2023		12/15/2023	12/16/2023	12/17/2023	12/18/2023		12/19/2023	12/21/2023			12/15/2023	12/16/2023	12/17/2023	12/18/2023
Analytical Method	Analyte	Screening Value (µg/L)	MTWA0201V008	MTWA0201W008	MTWA0214W008	MTWA0228W008	MTWA0310W008	MTWA1216V008	MTWA1216W008	MTWA1215W009	MTWA1216W009	MTWA1217W009	MTWA1218V009	MTWA1218W009	MTWA1219W009	MTWA1221W009	MTWA1215W010	MTWA1216W010	MTWA1217W010	MTWA1218W010
200.8	Arsenic	10[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Copper	11[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	2.5[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
365.4	Phosphorus, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
410.4	COD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2130 B-2011	Turbidity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2320 B-2011	Alkalinity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2580	ORP	NA																		
4500P E-2011	Phosphate, Ortho	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6010D	Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8260D	Benzene	0.44[3]	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L
	Ethylbenzene	12[3]	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L
	Toluene	53[3]	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L
	Total Xylenes	57[3]	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L
8270E	1,2-Dichlorobenzene	2000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trichlorobenzene	0.12[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,3-Dichlorobenzene	13[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,4-Dichlorobenzene	460[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chloronaphthalene	1700[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chlorophenol	15[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,2-Oxybis(1-Chloropropane)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dichlorophenol	25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dimethylphenol	85[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrophenol	60[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrotoluene	0.039[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4,6-Trichlorophenol	0.25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3,3-Dichlorobenzidine	0.0031[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Bromophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chloro-3-methylphenol	36[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chlorophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4,6-Dinitro-2-methylphenol	7.1[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	110[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	3100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzidine	0.00002[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	0.0014[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzylbutyl phthalate	0.56[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethoxy)methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethyl)ether	0.02[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-ethylhexyl)phthalate	0.23[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butyl phthalate	450[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-octyl phthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.0014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Diethyl phthalate	4200[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dimethyl phthalate	92000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	420[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloro-1,3-butadiene	0.69[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobenzene	0.000051[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorocyclopentadiene	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloroethane	0.11[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Isophorone	27[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodi-n-propylamine	0.0044[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodimethylamine	0.00065[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodiphenylamine	0.62[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrobenzene	55[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorophenol	0.046[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenol	18000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	310[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8270E-SIM	1-Methylnaphthalene	NA	NA	NA	NA	NA	NA	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L
	2-Chloronaphthalene	170[1]	NA	NA	NA	NA	NA	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L
	2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L
	Acenaphthene	110[1]	NA	NA	NA	NA	NA	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L
	Acenaphthylene	NA	NA	NA	NA	NA	NA	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L
	Anthracene	3100[1]	NA	NA	NA	NA	NA	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L
	Benzo(a)pyrene	0.0014[4]	NA	NA	NA	NA	NA	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L
	Dibenz(a,h)anthracene	0.0014[4]	NA	NA	NA	NA	NA	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L
	Fluorene	420[1]	NA	NA	NA	NA	NA	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L
	Naphthalene	NA	NA	NA	NA	NA	NA	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0917 µg/L
	Phenanthrene	NA	NA	NA	NA	NA	NA	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L
	Pyrene	310[1]	NA	NA	NA	NA	NA	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L
9040C	pH	NA																		
9056A	Bromide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate as (N)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9060A	TOC (Total Organic Carbon)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-NO SGT	Diesel Range Organics (DRO)	3000[5]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-SGT	Diesel Range Organics (DRO)	3000[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHGX	Gasoline Range Organics-NWTPH	1000[3]	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 38.9 µg/L	< 45 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L
SM2340B	Hardness (calculated) as CaCO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

[1] 173-201A WAC - Human Health - Fresh Water
[2] 173-201A WAC - Aquatic Life -Fresh/Chronic
[3] CLARC - Chemical-Specific Considerations – TPH – Concentrations Protective of Aquatic Receptors in Surface Water - Fresh Water
Laboratory non-detections are reported as less than ("<") the laboratory MRL.
Laboratory result qualifiers are reported to the right of corresponding detections (in parentheses). Definitions of reported qualifiers are below:
B: The same analyte is found in the associated blank.
J: Result is estimated between the laboratory method detection limit and reporting limit.

Detection > Screening Value
Detection
Non-detection > Screening Value
Non-detection
Not Analyzed

Preliminary Laboratory Results | Surface Water

PROJ-032692 | BP - Gasoline Release

Data Updated at 3/22/2024 11:27:13 AM

			W010			W011							W012						W013	
			SW area of Skagit Bay			S area of Skagit Bay							Center area of Skagit Bay, E side						Approximately 150 yards SE of confluence on Hill Ditch	
			12/19/2023	12/21/2023		12/15/2023	12/16/2023	12/17/2023		12/18/2023	12/19/2023	12/21/2023	12/15/2023	12/16/2023	12/17/2023	12/18/2023	12/19/2023	12/21/2023	12/16/2023	12/17/2023
Analytical Method	Analyte	Screening Value (µg/L)	MTWA1219W010	MTWA1221V010	MTWA1221W010	MTWA1215W011	MTWA1216W011	MTWA1217V011	MTWA1217W011	MTWA1218W011	MTWA1219W011	MTWA1221W011	MTWA1215W012	MTWA1216W012	MTWA1217W012	MTWA1218W012	MTWA1219W012	MTWA1221W012	MTWA1216W013	MTWA1217W013
200.8	Arsenic	10[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Copper	11[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	2.5[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
365.4	Phosphorus, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
410.4	COD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2130 B-2011	Turbidity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2320 B-2011	Alkalinity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2580	ORP	NA																		
4500P E-2011	Phosphate, Ortho	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6010D	Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8260D	Benzene	0.44[1]	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	0.635 µg/L (J)	0.141 µg/L (J)
	Ethylbenzene	12[2]	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	2.85 µg/L	1.08 µg/L
	Toluene	53[2]	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	12.9 µg/L	3.32 µg/L
	Total Xylenes	57[2]	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	20.3 µg/L	8.92 µg/L
8270E	1,2-Dichlorobenzene	2000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trichlorobenzene	0.12[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,3-Dichlorobenzene	13[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,4-Dichlorobenzene	460[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chloronaphthalene	1700[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chlorophenol	15[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,2-Oxybis(1-Chloropropane)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dichlorophenol	25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dimethylphenol	85[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrophenol	60[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrotoluene	0.039[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4,6-Trichlorophenol	0.25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3,3-Dichlorobenzidine	0.0031[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Bromophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chloro-3-methylphenol	30[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chlorophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4,6-Dinitro-2-methylphenol	7.1[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	110[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	3100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzidine	0.00002[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	0.0014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzylbutyl phthalate	0.56[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethoxy)methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethyl)ether	0.02[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-ethylhexyl)phthalate	0.23[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butyl phthalate	450[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-octyl phthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.0014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Diethyl phthalate	4200[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dimethyl phthalate	92000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	420[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloro-1,3-butadiene	0.69[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobenzene	0.000051[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorocyclopentadiene	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloroethane	0.11[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Isophorone	27[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodi-n-propylamine	0.0044[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodimethylamine	0.00065[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodiphenylamine	0.62[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrobenzene	55[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorophenol	0.046[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenol	18000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	310[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8270E-SIM	1-Methylnaphthalene	NA	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	0.283 µg/L (J)	< 0.137 µg/L
	2-Chloronaphthalene	1700[1]	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.136 µg/L	< 0.136 µg/L
	2-Methylnaphthalene	NA	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	0.141 µg/L (J)	< 0.0674 µg/L	0.461 µg/L (J)	0.192 µg/L (J)
	Acenaphthene	110[1]	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.038 µg/L	< 0.038 µg/L
	Acenaphthylene	NA	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0342 µg/L	< 0.0342 µg/L
	Anthracene	3100[1]	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.038 µg/L	< 0.038 µg/L
	Benzo(a)anthracene	0.014[1]	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0406 µg/L	< 0.0406 µg/L
	Benzo(a)pyrene	0.0014[1]	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0368 µg/L	< 0.0368 µg/L
	Benzo(b)fluoranthene	0.014[1]	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0336 µg/L	< 0.0336 µg/L
	Benzo(g,h,i)perylene	NA	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0368 µg/L	< 0.0368 µg/L
	Benzo(k)fluoranthene	0.014[1]	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0404 µg/L	< 0.0404 µg/L
	Chrysene	1.4[1]	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0358 µg/L	< 0.0358 µg/L
	Dibenz(a,h)anthracene	0.0014[1]	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.032 µg/L	< 0.032 µg/L
	Fluoranthene	16[1]	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.054 µg/L	< 0.054 µg/L
	Fluorene	420[1]	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0338 µg/L	< 0.0338 µg/L
	Indeno(1,2,3-cd)pyrene	0.014[1]	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0316 µg/L	< 0.0316 µg/L
	Naphthalene	NA	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0937 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	1.33 µg/L	0.407 µg/L (J)
	Phenanthrene	NA	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.018 µg/L	0.125 µg/L	< 0.036 µg/L
	Pyrene	310[1]	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	0.0455 µg/L (J)	< 0.0338 µg/L
9040C	pH	NA																		
9056A	Bromide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate as (N)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9060A	TOC (Total Organic Carbon)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-NO SGT	Diesel Range Organics (DRO)	3000[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-SGT	Diesel Range Organics (DRO)	3000[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHGX	Gasoline Range Organics-NWTPH	1000[2]	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 47.2 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 83.2 µg/L	< 31.6 µg/L	< 42.4 µg/L	< 31.6 µg/L	< 31.6 µg/L	175 µg/L	70.6 µg/L (J)
SM2340B	Hardness (calculated) as CaCO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

[1] 173-201A WAC - Human Health - Fresh Water
[2] 173-201A WAC - Aquatic Life -Fresh/Chronic
[3] CLARC - Chemical-Specific Considerations – TPH – Concentrations Protective of Aquatic Receptors in Surface Water - Fresh Water
Laboratory non-detections are reported as less than ("<") the laboratory MRL.
Laboratory result qualifiers are reported to the right of corresponding detections (in parentheses). Definitions of reported qualifiers are below:
B: The same analyte is found in the associated blank.
J: Result is estimated between the laboratory method detection limit and reporting limit.

Detection > Screening Value
Detection
Non-detection > Screening Value
Non-detection
Not Analyzed

Preliminary Laboratory Results | Surface Water

PROJ-032692 | BP - Gasoline Release

Data Updated at 3/22/2024 11:27:13 AM

			W013																		
			Approximately 150 yards SE of confluence on Hill Ditch																		
			12/18/2023	12/20/2023	12/22/2023		12/26/2023	12/28/2023	12/29/2023	12/30/2023	1/3/2024	1/6/2024	1/9/2024	1/18/2024	1/19/2024	1/21/2024	1/24/2024		1/30/2024	2/7/2024
Analytical Method	Analyte	Screening Value (µg/L)	MTWA1218W013	MTWA1220W013	MTWA1222V013	MTWA1222W013	MTWA1226W013	MTWA1228W013	MTWA1229W013	MTWA1230W013	MTWA0103W013	MTWA0106W013	MTWA0109W013	MTWA0118W013	MTWA0119W013	MTWA0121W013	MTWA0124V013	MTWA0124W013	MTWA0130W013	MTWA0207W013
200.8	Arsenic	10[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Copper	11[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	2.5[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
365.4	Phosphorus, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
410.4	COD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2130 B-2011	Turbidity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2320 B-2011	Alkalinity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2580	ORP	NA																		
4500P E-2011	Phosphate, Ortho	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6010D	Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8260D	Benzene	0.44[1]	0.129 µg/L (J)	0.481 µg/L (J)	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	0.152 µg/L (J)	< 0.0941 µg/L	0.134 µg/L (J)	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L
	Ethylbenzene	12[1]	0.99 µg/L (J)	3.08 µg/L	0.198 µg/L (J)	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	0.145 µg/L (J)	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L
	Toluene	53[1]	2.25 µg/L	15.1 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	0.409 µg/L (J)	< 0.278 µg/L	1.16 µg/L	1.64 µg/L	1.06 µg/L	2.2 µg/L	0.401 µg/L (J)	0.402 µg/L (J)	0.355 µg/L (J)	0.8 µg/L (J)
	Total Xylenes	57[1]	8 µg/L	23.1 µg/L	2 µg/L (J)	1.52 µg/L (J)	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	0.468 µg/L (J)	0.486 µg/L (J)	< 0.174 µg/L	0.908 µg/L (J)	0.229 µg/L (J)	0.229 µg/L (J)	< 0.174 µg/L	0.254 µg/L (J)
8270E	1,2-Dichlorobenzene	2000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trichlorobenzene	0.12[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,3-Dichlorobenzene	13[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,4-Dichlorobenzene	460[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chloronaphthalene	1700[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chlorophenol	15[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,2-Oxybis(1-Chloropropane)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dichlorophenol	25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dimethylphenol	85[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrophenol	60[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrotoluene	0.039[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4,6-Trichlorophenol	0.25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3,3-Dichlorobenzidine	0.0031[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Bromophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chloro-3-methylphenol	36[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chlorophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4,6-Dinitro-2-methylphenol	7.1[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	110[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	3100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzidine	0.00002[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	0.0014[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzylbutyl phthalate	0.56[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethoxy)methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethyl)ether	0.02[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-ethylhexyl)phthalate	0.23[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butyl phthalate	450[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-octyl phthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.0014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Diethyl phthalate	4200[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dimethyl phthalate	92000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	420[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloro-1,3-butadiene	0.69[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobenzene	0.000051[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorocyclopentadiene	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloroethane	0.11[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Isophorone	27[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodi-n-propylamine	0.0044[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodimethylamine	0.00065[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodiphenylamine	0.62[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrobenzene	55[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorophenol	0.046[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenol	18000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	310[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8270E-SIM	1-Methylnaphthalene	NA	< 0.137 µg/L	0.271 µg/L	0.154 µg/L (J)	0.139 µg/L (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chloronaphthalene	1700[1]	< 0.136 µg/L	< 0.0682 µg/L	< 0.136 µg/L	< 0.136 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methylnaphthalene	NA	0.173 µg/L (J)	0.377 µg/L	< 0.135 µg/L	< 0.135 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	110[1]	< 0.038 µg/L	< 0.019 µg/L	< 0.038 µg/L	< 0.038 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	NA	< 0.0342 µg/L	< 0.0171 µg/L	< 0.0342 µg/L	< 0.0342 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	3100[1]	< 0.038 µg/L	< 0.019 µg/L	< 0.038 µg/L	< 0.038 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	0.014[1]	< 0.0406 µg/L	< 0.0203 µg/L	< 0.0406 µg/L	< 0.0406 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	0.0014[2]	< 0.0368 µg/L	< 0.0184 µg/L	< 0.0368 µg/L	< 0.0368 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	0.014[1]	< 0.0336 µg/L	< 0.0168 µg/L	< 0.0336 µg/L	< 0.0336 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	NA	< 0.0369 µg/L	< 0.0184 µg/L	< 0.0369 µg/L	< 0.0369 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	0.014[1]	< 0.0404 µg/L	< 0.0202 µg/L	< 0.0404 µg/L	< 0.0404 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	1.4[1]	< 0.0358 µg/L	< 0.0179 µg/L	< 0.0358 µg/L	< 0.0358 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.0014[2]	< 0.032 µg/L	< 0.016 µg/L	< 0.032 µg/L	< 0.032 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	16[1]	< 0.054 µg/L	< 0.027 µg/L	< 0.054 µg/L	< 0.054 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	420[1]	< 0.0338 µg/L	< 0.0169 µg/L	< 0.0338 µg/L	< 0.0338 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	0.014[1]	< 0.0316 µg/L	< 0.0158 µg/L	< 0.0316 µg/L	< 0.0316 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	NA	0.364 µg/L (J)	0.953 µg/L	< 0.183 µg/L	< 0.183 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	NA	< 0.0288 µg/L	< 0.0288 µg/L	< 0.036 µg/L	< 0.036 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	310[1]	< 0.0338 µg/L	< 0.0169 µg/L	< 0.0338 µg/L	< 0.0338 µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9040C	pH	NA																		
9056A	Bromide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate as (N)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9060A	TOC (Total Organic Carbon)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-NO SGT	Diesel Range Organics (DRO)	3000[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-SGT	Diesel Range Organics (DRO)	3000[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHGX	Gasoline Range Organics-NWTPH	1000[3]	57.9 µg/L (J)	< 127 µg/L	< 31.6 µg/L	33 µg/L (J)	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 35.5 µg/L	< 39.3 µg/L	< 31.6 µg/L	< 33.8 µg/L
SM2340B	Hardness (calculated) as CaCO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

[1] 173-201A WAC - Human Health - Fresh Water
[2] 173-201A WAC - Aquatic Life -Fresh/Chronic
[3] CLARC - Chemical-Specific Considerations – TPH – Concentrations Protective of Aquatic Receptors in Surface Water - Fresh Water

Laboratory non-detections are reported as less than ("<") the laboratory MRL.
Laboratory result qualifiers are reported to the right of corresponding detections (in parentheses). Definitions of reported qualifiers are below:
B: The same analyte is found in the associated blank.
J: Result is estimated between the laboratory method detection limit and reporting limit.

Detection > Screening Value
Detection
Non-detection > Screening Value
Non-detection
Not Analyzed

Preliminary Laboratory Results | Surface Water

PROJ-032692 | BP - Gasoline Release

Data Updated at 3/22/2024 11:27:13 AM

			W013						W014													
			Approximately 150 yards SE of confluence on Hill Ditch					North edge of hill ditch, a...										North edge of hill ditch, approximately 20 yards downstream of confluence				
			2/13/2024	2/20/2024	3/6/2024		3/17/2024	3/6/2024	12/16/2023	12/17/2023	12/18/2023	12/20/2023	12/22/2023	12/26/2023	12/28/2023	12/29/2023	12/30/2023		1/3/2024	1/6/2024		
Analytical Method	Analyte	Screening Value (µg/L)	MTWA0213W013	MTWA0220W013	MTWA0306V013	MTWA0306W013	MTWA0317W013	MTWA0306W014	MTWA1216W014	MTWA1217W014	MTWA1218W014	MTWA1220W014	MTWA1222W014	MTWA1226W014	MTWA1228W014	MTWA1229W014	MTWA1230V014	MTWA1230W014	MTWA0103W014	MTWA0106W014		
200.8	Arsenic	10[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Barium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Copper	11[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Lead	2.5[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Nickel	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Zinc	100[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
365.4	Phosphorus, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
410.4	COD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
2130 B-2011	Turbidity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
2320 B-2011	Alkalinity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
2580	ORP	NA																				
4500P E-2011	Phosphate, Ortho	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
6010D	Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Chromium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
8260D	Benzene	0.44[3]	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	96.8 % 90.4 % ▬	0.679 µg/L (J)	0.626 µg/L (J)	0.758 µg/L (J)	0.323 µg/L (J)	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L		
	Ethylbenzene	12[3]	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	97.4 % 96.6 % ▬	2.84 µg/L	2.37 µg/L	2.92 µg/L	1.88 µg/L	0.339 µg/L (J)	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L		
	Toluene	53[3]	0.328 µg/L (J)	0.813 µg/L (J)	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	97.8 % 100 % ▬	14.4 µg/L	15.8 µg/L	16.4 µg/L	9.32 µg/L	0.939 µg/L (J)	< 0.278 µg/L	0.355 µg/L (J)	< 0.278 µg/L	0.421 µg/L (J)	0.42 µg/L (J)	0.619 µg/L (J)	0.404 µg/L (J)		
	Total Xylenes	57[4]	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	88.7 % 88.7 % ▬	20.9 µg/L	18.5 µg/L	21.7 µg/L	14.1 µg/L	2.94 µg/L (J)	0.229 µg/L (J)	0.486 µg/L (J)	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L		
8270E	1,2-Dichlorobenzene	2000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	1,2,4-Trichlorobenzene	0.12[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	1,3-Dichlorobenzene	13[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	1,4-Dichlorobenzene	460[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	2-Chloronaphthalene	1700[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	2-Chlorophenol	15[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	2,2-Oxybis(1-Chloropropane)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	2,4-Dichlorophenol	25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	2,4-Dimethylphenol	85[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	2,4-Dinitrophenol	60[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	2,4-Dinitrotoluene	0.039[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	2,4,6-Trichlorophenol	0.25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	3,3-Dichlorobenzidine	0.0031[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	4-Bromophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	4-Chloro-3-methylphenol	36[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	4-Chlorophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	4,6-Dinitro-2-methylphenol	7.1[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Acenaphthene	110[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Anthracene	3100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Benzidine	0.00002[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Benzo(a)pyrene	0.0014[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Benzylbutyl phthalate	0.56[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Bis(2-chloroethoxy)methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Bis(2-chloroethyl)ether	0.02[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Bis(2-ethylhexyl)phthalate	0.23[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Di-n-butyl phthalate	450[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Di-n-octyl phthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Dibenz(a,h)anthracene	0.0014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Diethyl phthalate	4200[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Dimethyl phthalate	92000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Fluorene	420[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Hexachloro-1,3-butadiene	0.69[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Hexachlorobenzene	0.000051[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Hexachlorocyclopentadiene	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Hexachloroethane	0.11[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Isophorone	27[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	n-Nitrosodi-n-propylamine	0.0044[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	n-Nitrosodimethylamine	0.00065[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	n-Nitrosodiphenylamine	0.62[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Nitrobenzene	55[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Pentachlorophenol	0.046[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Phenol	18000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Pyrene	310[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
8270E-SIM	1-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	0.611 µg/L	0.397 µg/L (J)	0.168 µg/L (J)	0.206 µg/L (J)	0.185 µg/L (J)	NA	NA	NA	NA	NA	NA	NA		
	2-Chloronaphthalene	1700[1]	NA	NA	NA	NA	NA	NA	< 0.136 µg/L	< 0.136 µg/L	< 0.136 µg/L	< 0.0682 µg/L	< 0.136 µg/L	NA	NA	NA	NA	NA	NA	NA		
	2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	1.14 µg/L	0.67 µg/L	0.27 µg/L (J)	0.27 µg/L	< 0.135 µg/L	NA	NA	NA	NA	NA	NA	NA		
	Acenaphthene	110[1]	NA	NA	NA	NA	NA	NA	< 0.038 µg/L	< 0.038 µg/L	< 0.038 µg/L	< 0.019 µg/L	< 0.038 µg/L	NA	NA	NA	NA	NA	NA	NA		
	Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	< 0.0342 µg/L	< 0.0342 µg/L	< 0.0342 µg/L	< 0.0171 µg/L	< 0.0342 µg/L	NA	NA	NA	NA	NA	NA	NA		
	Anthracene	3100[1]	NA	NA	NA	NA	NA	NA	< 0.038 µg/L	< 0.038 µg/L	< 0.038 µg/L	< 0.019 µg/L	< 0.038 µg/L	NA	NA	NA	NA	NA	NA	NA		
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	NA	< 0.0406 µg/L	< 0.0406 µg/L	< 0.0406 µg/L	< 0.0203 µg/L	< 0.0406 µg/L	NA	NA	NA	NA	NA	NA	NA		
	Benzo(a)pyrene	0.0014[4]	NA	NA	NA	NA	NA	NA	< 0.0368 µg/L	< 0.0368 µg/L	< 0.0368 µg/L	< 0.0184 µg/L	< 0.0368 µg/L	NA	NA	NA	NA	NA	NA	NA		
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	< 0.0336 µg/L	< 0.0336 µg/L	< 0.0336 µg/L	< 0.0168 µg/L	< 0.0336 µg/L	NA	NA	NA	NA	NA	NA	NA		
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	< 0.0368 µg/L	< 0.0368 µg/L	< 0.0368 µg/L	< 0.0184 µg/L	< 0.0368 µg/L	NA	NA	NA	NA	NA	NA	NA		
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	< 0.0404 µg/L	< 0.0404 µg/L	< 0.0404 µg/L	< 0.0202 µg/L	< 0.0404 µg/L	NA	NA	NA	NA	NA	NA	NA		
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	NA	< 0.0358 µg/L	< 0.0358 µg/L	< 0.0358 µg/L	< 0.0179 µg/L	< 0.0358 µg/L	NA	NA	NA	NA	NA	NA	NA		
	Dibenz(a,h)anthracene	0.0014[1]	NA	NA	NA	NA	NA	NA	< 0.032 µg/L	< 0.032 µg/L	< 0.032 µg/L	< 0.016 µg/L	< 0.032 µg/L	NA	NA	NA	NA	NA	NA	NA		
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	NA	< 0.054 µg/L	< 0.054 µg/L	< 0.054 µg/L	< 0.027 µg/L	< 0.054 µg/L	NA	NA	NA	NA	NA	NA	NA		
	Fluorene	420[1]	NA	NA	NA	NA	NA	NA	0.123 µg/L	< 0.0338 µg/L	< 0.0338 µg/L	< 0.0169 µg/L	< 0.0338 µg/L	NA	NA	NA	NA	NA	NA	NA		
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	NA	< 0.0316 µg/L	< 0.0316 µg/L	< 0.0316 µg/L	< 0.0158 µg/L	< 0.0316 µg/L	NA	NA	NA	NA	NA	NA	NA		
	Naphthalene	NA	NA	NA	NA	NA	NA	NA	1.61 µg/L	1.74 µg/L	0.784 µg/L	0.623 µg/L	< 0.183 µg/L	NA	NA	NA	NA	NA	NA	NA		
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	0.309 µg/L	< 0.036 µg/L	< 0.036 µg/L	< 0.0249 µg/L	< 0.036 µg/L	NA	NA	NA	NA	NA	NA	NA		
	Pyrene	310[1]	NA	NA	NA	NA	NA	NA	0.0477 µg/L (J)	< 0.0338 µg/L	< 0.0338 µg/L	< 0.0169 µg/L	< 0.0338 µg/L	NA	NA	NA	NA	NA	NA	NA		
9040C	pH	NA																				
9056A	Bromide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Nitrate as (N)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
9060A	TOC (Total Organic Carbon)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
NWTPHDX-NO SGT	Diesel Range Organics (DRO)	3000[5]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
NWTPHDX-SGT	Diesel Range Organics (DRO)	3000[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
NWTPHGX	Gasoline Range Organics-NWTPH	1000[2]	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	33.7 µg/L (BJ)	83.4 % 51.8 % (J3) ▬	203 µg/L	170 µg/L	118 µg/L	< 88.2 µg/L	34.7 µg/L (J)	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L		
SM2340B	Hardness (calculated) as CaCO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

[1] 173-201A WAC - Human Health - Fresh Water
[2] 173-201A WAC - Aquatic Life -Fresh/Chronic
[3] CLARC - Chemical-Specific Considerations – TPH – Concentrations Protective of Aquatic Receptors in Surface Water - Fresh Water

Laboratory non-detections are reported as less than ("<") the laboratory MRL.
Laboratory result qualifiers are reported to the right of corresponding detections (in parentheses). Definitions of reported qualifiers are below:
B: The same analyte is found in the associated blank.
J: Result is estimated between the laboratory method detection limit and reporting limit.

Detection > Screening Value
Detection
Non-detection > Screening Value
Non-detection
Not Analyzed

Preliminary Laboratory Results | Surface Water

PROJ-032692 | BP - Gasoline Release

Data Updated at 3/22/2024 11:27:13 AM

			W014												W015					
			North edge of hill ditch, approximately 20 yards downstream of confluence												Approximately 25 yards East of bridge on Pioneer Highway					
			1/6/2024	1/9/2024	1/18/2024	1/19/2024	1/21/2024	1/24/2024	1/30/2024	2/7/2024	2/13/2024	2/20/2024		3/17/2024	12/17/2023	12/18/2023	12/20/2023	12/22/2023	12/26/2023	12/28/2023
Analytical Method	Analyte	Screening Value (µg/L)	MTWA0106W014	MTWA0109W014	MTWA0118W014	MTWA0119W014	MTWA0121W014	MTWA0124W014	MTWA0130W014	MTWA0207W014	MTWA0213W014	MTWA0220V014	MTWA0220W014	MTWA0317W014	MTWA1217W015	MTWA1218W015	MTWA1220W015	MTWA1222W015	MTWA1226W015	MTWA1228W015
200.8	Arsenic	10[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Copper	11[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	2.5[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	150[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	100[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
365.4	Phosphorus, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
410.4	COD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2130 B-2011	Turbidity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2320 B-2011	Alkalinity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2580	ORP	NA																		
4500P E-2011	Phosphate, Ortho	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6010D	Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8260D	Benzene	0.44[3]	< 0.0941 µg/L	0.232 µg/L (J)	0.166 µg/L (J)	< 0.0941 µg/L	0.192 µg/L (J)	0.146 µg/L (J)	< 0.0941 µg/L	0.133 µg/L (J)	0.219 µg/L (J)	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	0.616 µg/L (J)	0.846 µg/L (J)	0.15 µg/L (J)	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L
	Ethylbenzene	12[3]	< 0.137 µg/L	0.282 µg/L (J)	< 0.137 µg/L	< 0.137 µg/L	0.2 µg/L (J)	0.138 µg/L (J)	< 0.137 µg/L	0.178 µg/L (J)	0.159 µg/L (J)	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	2.64 µg/L	2.82 µg/L	0.864 µg/L (J)	0.259 µg/L (J)	< 0.137 µg/L	< 0.137 µg/L
	Toluene	53[3]	0.405 µg/L (J)	3.88 µg/L	1.98 µg/L	3.94 µg/L	2.95 µg/L	2.44 µg/L	0.832 µg/L (J)	2.33 µg/L	3.1 µg/L	0.727 µg/L (J)	0.752 µg/L (J)	< 0.278 µg/L	13.3 µg/L	18.9 µg/L	3.34 µg/L	0.701 µg/L (J)	< 0.278 µg/L	< 0.278 µg/L
	Total Xylenes	57[3]	< 0.174 µg/L	1.65 µg/L (J)	0.461 µg/L (J)	1.14 µg/L (J)	1.19 µg/L (J)	0.898 µg/L (J)	0.355 µg/L (J)	0.789 µg/L (J)	1.05 µg/L (J)	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	18.4 µg/L	20.2 µg/L	6.64 µg/L	2.24 µg/L (J)	0.291 µg/L (J)	< 0.174 µg/L
8270E	1,2-Dichlorobenzene	2000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trichlorobenzene	0.12[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,3-Dichlorobenzene	13[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,4-Dichlorobenzene	460[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chloronaphthalene	1700[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chlorophenol	15[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,2-Oxybis(1-Chloropropane)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dichlorophenol	25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dimethylphenol	85[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrophenol	60[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrotoluene	0.039[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4,6-Trichlorophenol	0.25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3,3-Dichlorobenzidine	0.0031[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Bromophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chloro-3-methylphenol	36[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chlorophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4,6-Dinitro-2-methylphenol	7.1[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	110[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	3100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzidine	0.00002[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	0.0014[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzylbutyl phthalate	0.56[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethoxy)methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethyl)ether	0.02[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-ethylhexyl)phthalate	0.23[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butyl phthalate	450[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-octyl phthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.0014[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Diethyl phthalate	4200[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dimethyl phthalate	92000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	420[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloro-1,3-butadiene	0.69[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobenzene	0.000051[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorocyclopentadiene	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloroethane	0.11[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Isophorone	27[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodi-n-propylamine	0.0044[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodimethylamine	0.00065[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodiphenylamine	0.62[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrobenzene	55[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorophenol	0.046[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenol	18000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	310[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8270E-SIM	1-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.149 µg/L (J)	< 0.137 µg/L	0.255 µg/L (J)	< 0.137 µg/L	NA	NA
	2-Chloronaphthalene	1700[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.136 µg/L	< 0.136 µg/L	< 0.136 µg/L	< 0.136 µg/L	NA	NA
	2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.246 µg/L (J)	0.217 µg/L (J)	0.337 µg/L (J)	< 0.135 µg/L	NA	NA
	Acenaphthene	110[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.038 µg/L	< 0.038 µg/L	< 0.038 µg/L	< 0.038 µg/L	NA	NA
	Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0342 µg/L	< 0.0342 µg/L	< 0.0342 µg/L	< 0.0342 µg/L	NA	NA
	Anthracene	3100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.038 µg/L	< 0.038 µg/L	< 0.038 µg/L	< 0.038 µg/L	NA	NA
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0405 µg/L	< 0.0405 µg/L	< 0.0405 µg/L	< 0.0405 µg/L	NA	NA
	Benzo(a)pyrene	0.0014[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0368 µg/L	< 0.0368 µg/L	< 0.0368 µg/L	< 0.0368 µg/L	NA	NA
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0336 µg/L	< 0.0336 µg/L	< 0.0336 µg/L	< 0.0336 µg/L	NA	NA
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0358 µg/L	< 0.0368 µg/L	< 0.0368 µg/L	< 0.0368 µg/L	NA	NA
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0404 µg/L	< 0.0404 µg/L	< 0.0404 µg/L	< 0.0404 µg/L	NA	NA
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0358 µg/L	< 0.0358 µg/L	< 0.0358 µg/L	< 0.0358 µg/L	NA	NA
	Dibenz(a,h)anthracene	0.0014[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.032 µg/L	< 0.032 µg/L	< 0.032 µg/L	< 0.032 µg/L	NA	NA
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.054 µg/L	< 0.054 µg/L	< 0.054 µg/L	< 0.054 µg/L	NA	NA
	Fluorene	420[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0338 µg/L	< 0.0338 µg/L	< 0.0338 µg/L	< 0.0338 µg/L	NA	NA
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0316 µg/L	< 0.0316 µg/L	< 0.0316 µg/L	< 0.0316 µg/L	NA	NA
	Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.682 µg/L	0.548 µg/L	0.561 µg/L	< 0.183 µg/L	NA	NA
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.038 µg/L	< 0.038 µg/L	< 0.038 µg/L	< 0.038 µg/L	NA	NA
	Pyrene	310[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0338 µg/L	< 0.0338 µg/L	< 0.0338 µg/L	< 0.0338 µg/L	NA	NA
9040C	pH	NA																		
9056A	Bromide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate as (N)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9060A	TOC (Total Organic Carbon)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-NO SGT	Diesel Range Organics (DRO)	3000[5]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-SGT	Diesel Range Organics (DRO)	3000[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHGX	Gasoline Range Organics-NWTPH	1000[2]	< 31.6 µg/L	32.7 µg/L (J)	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 34.4 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	101 µg/L	< 1.34 µg/L	59.3 µg/L (J)	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L
SM2340B	Hardness (calculated) as CaCO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

[1] 173-201A WAC - Human Health - Fresh Water
[2] 173-201A WAC - Aquatic Life -Fresh/Chronic
[3] CLARC - Chemical-Specific Considerations – TPH – Concentrations Protective of Aquatic Receptors in Surface Water - Fresh Water
Laboratory non-detections are reported as less than ("<") the laboratory MR.
Laboratory result qualifiers are reported to the right of corresponding detections (in parentheses). Definitions of reported qualifiers are below:
B: The same analyte is found in the associated blank.
J: Result is estimated between the laboratory method detection limit and reporting limit.

Detection > Screening Value
Detection
Non-detection > Screening Value
Non-detection
Not Analyzed

Preliminary Laboratory Results | Surface Water

PROJ-032692 | BP - Gasoline Release

Data Updated at 3/22/2024 11:27:13 AM

Analytical Method	Analyte	Screening Value (µg/L)	W015 Approximately 25 yards East of bridge on Pioneer Highway																	Approximately 25 yards E...
			12/29/2023	12/30/2023	1/3/2024		1/6/2024	1/9/2024	1/18/2024	1/19/2024	1/21/2024	1/24/2024	1/30/2024	2/7/2024		2/13/2024	2/20/2024	3/6/2024	3/17/2024	12/16/2023
			MTWA1229W015	MTWA1230W015	MTWA0103V015	MTWA0103W015	MTWA0106W015	MTWA0109W015	MTWA0118W015	MTWA0119W015	MTWA0121W015	MTWA0124W015	MTWA0130W015	MTWA0207V015	MTWA0207W015	MTWA0213W015	MTWA0220W015	MTWA0306W015	MTWA0317W015	MTWA1216W015
200.8	Arsenic	10[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Copper	11[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	2.5[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
365.4	Phosphorus, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
410.4	COD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2130 B-2011	Turbidity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2320 B-2011	Alkalinity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2580	ORP	NA																		
4500P E-2011	Phosphate, Ortho	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6010D	Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8260D	Benzene	0.44[3]	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	0.104 µg/L (J)	< 0.0941 µg/L	0.168 µg/L (J)	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	0.122 µg/L (J)	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	0.663 µg/L (J)
	Ethylbenzene	12[3]	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	0.148 µg/L (J)	< 0.187 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	2.86 µg/L
	Toluene	53[3]	< 0.278 µg/L	< 0.278 µg/L	0.401 µg/L (J)	0.461 µg/L (J)	0.303 µg/L (J)	0.842 µg/L (J)	1.14 µg/L	1.98 µg/L	2.43 µg/L	1.5 µg/L	0.581 µg/L (J)	0.446 µg/L (J)	0.502 µg/L (J)	1.69 µg/L	0.713 µg/L (J)	< 0.278 µg/L	< 0.278 µg/L	14.5 µg/L
	Total Xylenes	57[3]	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	0.389 µg/L (J)	0.299 µg/L (J)	0.408 µg/L (J)	0.984 µg/L (J)	0.561 µg/L (J)	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	0.579 µg/L (J)	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	20.4 µg/L
8270E	1,2-Dichlorobenzene	2000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trichlorobenzene	0.12[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,3-Dichlorobenzene	13[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,4-Dichlorobenzene	460[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chloronaphthalene	1700[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chlorophenol	15[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,2-Oxybis(1-Chloropropane)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dichlorophenol	25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dimethylphenol	85[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrophenol	60[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrotoluene	0.039[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4,6-Trichlorophenol	0.25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3,3-Dichlorobenzidine	0.0031[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Bromophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chloro-3-methylphenol	36[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chlorophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4,6-Dinitro-2-methylphenol	7.1[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	110[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	3100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzidine	0.00002[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	0.0014[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzylbutyl phthalate	0.56[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethoxy)methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethyl)ether	0.02[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-ethylhexyl)phthalate	0.23[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butyl phthalate	450[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-octyl phthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.0014[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Diethyl phthalate	4200[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dimethyl phthalate	92000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	420[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloro-1,3-butadiene	0.69[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobenzene	0.000051[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorocyclopentadiene	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloroethane	0.11[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Isophorone	27[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodi-n-propylamine	0.0044[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodimethylamine	0.00065[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodiphenylamine	0.62[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrobenzene	55[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorophenol	0.046[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenol	18000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	310[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8270E-SIM	1-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.182 µg/L (J)
	2-Chloronaphthalene	1700[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.136 µg/L
	2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.309 µg/L (J)
	Acenaphthene	110[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.038 µg/L
	Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0342 µg/L
	Anthracene	3100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.038 µg/L
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0406 µg/L
	Benzo(a)pyrene	0.0014[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0368 µg/L
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0336 µg/L
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0304 µg/L
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0404 µg/L
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0353 µg/L
	Dibenz(a,h)anthracene	0.0014[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.032 µg/L
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.054 µg/L
	Fluorene	420[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0338 µg/L
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0316 µg/L
	Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.933 µg/L
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.108 µg/L
	Pyrene	310[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0338 µg/L
9040C	pH	NA																		
9056A	Bromide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate as (N)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9060A	TOC (Total Organic Carbon)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-NO SGT	Diesel Range Organics (DRO)	3000[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-SGT	Diesel Range Organics (DRO)	3000[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHGX	Gasoline Range Organics-NWTPH	1000[3]	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 33 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.9 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	154 µg/L
SM2340B	Hardness (calculated) as CaCO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

[1] 173-201A WAC - Human Health - Fresh Water
[2] 173-201A WAC - Aquatic Life -Fresh/Chronic
[3] CLARC - Chemical-Specific Considerations – TPH – Concentrations Protective of Aquatic Receptors in Surface Water - Fresh Water

Laboratory non-detections are reported as less than ("<") the laboratory MR.
Laboratory result qualifiers are reported to the right of corresponding detections (in parentheses). Definitions of reported qualifiers are below:
B: The same analyte is found in the associated blank.
J: Result is estimated between the laboratory method detection limit and reporting limit.

Detection > Screening Value
Detection
Non-detection > Screening Value
Non-detection
Not Analyzed

Preliminary Laboratory Results | Surface Water

PROJ-032692 | BP - Gasoline Release

Data Updated at 3/22/2024 11:27:13 AM

Analytical Method	Analyte	Screening Value (µg/L)	W015	W016				W017	W018	W019	W020	W021	W022	W023	W024	W025	W026	W027	W028
			AS004, Approximately 25 ...	0.2 miles N of Hwy 534, NW bank of Hill ditch				0.2 miles N of WA-534, N...	SW corner of Fisher Sloug...	West side of Fisher Sloug...	NW side of Fisher Slough;...	Fisher Slough, along levy ...	Fisher Slough, SW corner ...	Northern portion of open ...	North eastern portion of ...	Approximately 0.4 miles e...	Northside of pipeline righ...	5 yards south of the bridg...	30 yards south of the brid...	Excavation in Division A2
			12/14/2023	1/29/2024	2/15/2024	2/23/2024		12/16/2023	12/21/2023	12/21/2023	12/21/2023	12/21/2023	12/23/2023	12/28/2023	12/28/2023	1/2/2024	1/5/2024	1/10/2024	1/10/2024	1/24/2024
			MTWA1214W015	MTWA0129W016	MTWA0129W016	MTWA0215W016	MTWA0223W016	MTWA1216W016	MTWA1221W017	MTWA1221W018	MTWA1221W019	MTWA1221W020	MTWA1223W021	MTWA1228W022	MTWA1228W023	MTWA0102W024	MTWA0105W025	MTWA0110W026	MTWA0110W027	MTWA0124W028
200.8	Arsenic	10[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Copper	11[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	2.5[2]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
365.4	Phosphorus, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	138 µg/L (B)
410.4	COD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	89,200 µg/L
2130 B-2011	Turbidity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.24 NTU
2320 B-2011	Alkalinity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	62,700 µg/L
2580	ORP	NA																		166 mV (T8)
4500P E-2011	Phosphate, Ortho	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.9 µg/L
6010D	Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	12,700 µg/L
	Chromium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.4 µg/L
	Iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	510 µg/L
	Magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8,590 µg/L
8260D	Benzene	0.44[4]	0.755 µg/L (J)	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	0.139 µg/L (J)	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L	0.332 µg/L (J)	0.34 µg/L (J)	NA
	Ethylbenzene	12[3]	4.06 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	1.04 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	0.495 µg/L (J)	0.431 µg/L (J)	NA
	Toluene	53[3]	22 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	3.55 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	< 0.278 µg/L	6.66 µg/L	6.45 µg/L	NA
	Total Xylenes	57[4]	25.6 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	0.66 µg/L (J)	0.614 µg/L (J)	0.405 µg/L (J)	7.58 µg/L	< 0.174 µg/L	0.312 µg/L (J)	< 0.174 µg/L	< 0.174 µg/L	< 0.174 µg/L	2.97 µg/L (J)	2.84 µg/L (J)	NA
8270E	1,2-Dichlorobenzene	2000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0713 µg/L
	1,2,4-Trichlorobenzene	0.12[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0698 µg/L
	1,3-Dichlorobenzene	13[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.132 µg/L
	1,4-Dichlorobenzene	460[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0942 µg/L
	2-Chloronaphthalene	170[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0648 µg/L
	2-Chlorophenol	15[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.133 µg/L
	2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.117 µg/L
	2,2-Oxybis(1-Chloropropane)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.21 µg/L
	2,4-Dichlorophenol	25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.102 µg/L
	2,4-Dimethylphenol	85[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0636 µg/L
	2,4-Dinitrophenol	60[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 5.93 µg/L
	2,4-Dinitrotoluene	0.039[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0983 µg/L
	2,4,6-Trichlorophenol	0.25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.1 µg/L
	2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.25 µg/L
	3,3-Dichlorobenzidine	0.0031[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.212 µg/L
	4-Bromophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0877 µg/L
	4-Chloro-3-methylphenol	30[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.131 µg/L
	4-Chlorophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0926 µg/L
	4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.143 µg/L
	4,6-Dinitro-2-methylphenol	7.1[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.12 µg/L
	Acenaphthene	110[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0886 µg/L
	Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0921 µg/L
	Anthracene	3100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0804 µg/L
	Benzidine	0.00002[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 3.74 µg/L
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.199 µg/L
	Benzo(a)pyrene	0.0014[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0381 µg/L
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.13 µg/L
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.121 µg/L
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.12 µg/L
	Benzylbutyl phthalate	0.56[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.765 µg/L
	Bis(2-chloroethoxy)methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.116 µg/L
	Bis(2-chloroethyl)ether	0.02[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.137 µg/L
	Bis(2-ethylhexyl)phthalate	0.23[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.895 µg/L
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.13 µg/L
	Di-n-butyl phthalate	450[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.453 µg/L
	Di-n-octyl phthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.942 µg/L
	Dibenz(a,h)anthracene	0.0014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0644 µg/L
	Diethyl phthalate	4200[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.287 µg/L
	Dimethyl phthalate	92000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.26 µg/L
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.102 µg/L
	Fluorene	420[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0903 µg/L (J)
	Hexachloro-1,3-butadiene	0.69[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0965 µg/L
	Hexachlorobenzene	0.000051[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0755 µg/L
	Hexachlorocyclopentadiene	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0598 µg/L
	Hexachloroethane	0.11[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.127 µg/L
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.279 µg/L
	Isophorone	27[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.143 µg/L
	n-Nitrosodi-n-propylamine	0.0044[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.261 µg/L
	n-Nitrosodimethylamine	0.00065[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.998 µg/L
	n-Nitrosodiphenylamine	0.62[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 2.37 µg/L
	Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	26.8 µg/L
	Nitrobenzene	55[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.297 µg/L
	Pentachlorophenol	0.046[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.313 µg/L
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.112 µg/L
	Phenol	18000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 4.33 µg/L
	Pyrene	310[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.107 µg/L
8270E-SIM	1-Methylnaphthalene	NA	0.167 µg/L (J)	NA	NA	NA	NA	< 0.137 µg/L	< 0.0687 µg/L	< 0.0687 µg/L	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L	NA	NA	NA	NA	NA	NA	NA
	2-Chloronaphthalene	170[1]	< 0.0682 µg/L	NA	NA	NA	NA	< 0.136 µg/L	< 0.0682 µg/L	< 0.0682 µg/L	< 0.136 µg/L	< 0.136 µg/L	< 0.136 µg/L	NA	NA	NA	NA	NA	NA	NA
	2-Methylnaphthalene	NA	0.302 µg/L	NA	NA	NA	NA	< 0.135 µg/L	< 0.0674 µg/L	< 0.0674 µg/L	< 0.135 µg/L	0.136 µg/L (J)	< 0.135 µg/L	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	110[1]	< 0.019 µg/L	NA	NA	NA	NA	< 0.038 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.038 µg/L	< 0.038 µg/L	< 0.038 µg/L	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	NA	< 0.0171 µg/L	NA	NA	NA	NA	< 0.0342 µg/L	< 0.0171 µg/L	< 0.0171 µg/L	< 0.0342 µg/L	< 0.0342 µg/L	< 0.0342 µg/L	NA	NA	NA	NA	NA	NA	NA
	Anthracene	3100[1]	< 0.019 µg/L	NA	NA	NA	NA	< 0.038 µg/L	< 0.019 µg/L	< 0.019 µg/L	< 0.038 µg/L	< 0.038 µg/L	< 0.038 µg/L	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	0.014[1]	< 0.0203 µg/L	NA	NA	NA	NA	< 0.0406 µg/L	< 0.0203 µg/L	< 0.0203 µg/L	< 0.0406 µg/L	< 0.0406 µg/L	< 0.0406 µg/L	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	0.0014[4]	< 0.0184 µg/L	NA	NA	NA	NA	< 0.0368 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0368 µg/L	< 0.0368 µg/L	< 0.0368 µg/L	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	0.014[1]	< 0.0168 µg/L	NA	NA	NA	NA	< 0.0336 µg/L	< 0.0168 µg/L	< 0.0168 µg/L	< 0.0336 µg/L	< 0.0336 µg/L	< 0.0336 µg/L	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	NA	< 0.0368 µg/L	NA	NA	NA	NA	< 0.0368 µg/L	< 0.0184 µg/L	< 0.0184 µg/L	< 0.0368 µg/L	< 0.0368 µg/L	< 0.0368 µg/L	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	0.014[1]	< 0.0202 µg/L	NA	NA	NA	NA	< 0.0404 µg/L	< 0.0202 µg/L	< 0.0202 µg/L	< 0.0404 µg/L	< 0.0404 µg/L	< 0.0404 µg/L	NA	NA	NA	NA	NA	NA	NA
	Chrysene	1.4[1]	< 0.0179 µg/L	NA	NA	NA	NA	< 0.0358 µg/L	< 0.0179 µg/L	< 0.0179 µg/L	< 0.0358 µg/L	< 0.0358 µg/L	< 0.0358 µg/L	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.0014[1]	< 0.016 µg/L	NA	NA	NA	NA	< 0.032 µg/L	< 0.016 µg/L	< 0.016 µg/L	< 0.032 µg/L	< 0.032 µg/L	< 0.032 µg/L	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	16[1]	< 0.027 µg/L	NA	NA	NA	NA	< 0.054 µg/L	< 0.027 µg/L	< 0.027 µg/L	< 0.054 µg/L	< 0.054 µg/L	< 0.054 µg/L	NA	NA	NA	NA	NA	NA	NA
	Fluorene	420[1]	< 0.0169 µg/L	NA	NA	NA	NA	< 0.0338 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0338 µg/L	< 0.0338 µg/L	< 0.0338 µg/L	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	0.014[1]	< 0.0158 µg/L	NA	NA	NA	NA	< 0.0316 µg/L	< 0.0158 µg/L	< 0.0158 µg/L	< 0.0316 µg/L	< 0.0316 µg/L	< 0.0316 µg/L	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	NA	0.774 µg/L	NA	NA	NA	NA	< 0.183 µg/L	< 0.0917 µg/L	< 0.0917 µg/L	< 0.183 µg/L	0.304 µg/L (J)	< 0.183 µg/L	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	NA	0.0239 µg/L (J)	NA	NA	NA	NA	< 0.036 µg/L	< 0.018 µg/L	< 0.018 µg/L	< 0.036 µg/L	< 0.036 µg/L	< 0.036 µg/L	NA	NA	NA	NA	NA	NA	NA
	Pyrene	310[1]	< 0.0169 µg/L	NA	NA	NA	NA	< 0.0338 µg/L	< 0.0169 µg/L	< 0.0169 µg/L	< 0.0338 µg/L	< 0.0338 µg/L	< 0.0338 µg/L	NA	NA	NA	NA	NA	NA	NA
9040C	pH	NA																		6.72 su (T8)
9056A	Bromide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 76.3 µg/L
	Nitrate as (N)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	70.6 µg/L (BJ)
9060A	TOC (Total Organic Carbon)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-NO SGT	Diesel Range Organics (DRO)	3000[5]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 131 µg/L	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	181 µg/L (J)	NA	NA	NA
NWTPHDX-SGT	Diesel Range Organics (DRO)	3000[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHGX	Gasoline Range Organics-NWTPH	1000[3]	226 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 58.5 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 49.2 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L	38.6 µg/L (J)	34.4 µg/L (J)	NA
SM2340B	Hardness (calculated) as CaCO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	67,000 µg/L

[1] 173-201A WAC - Human Health - Fresh Water
[2] 173-201A WAC - Aquatic Life -Fresh/Chronic
[3] CLARC - Chemical-Specific Considerations – TPH – Concentrations Protective of Aquatic Receptors in Surface Water - Fresh Water

Laboratory non-detections are reported as less than ("<") the laboratory MRL.
Laboratory result qualifiers are reported to the right of corresponding detections (in parentheses). Definitions of reported qualifiers are below:
B: The same analyte is found in the associated blank.
J: Result is estimated between the laboratory method detection limit and reporting limit.

Detection > Screening Value
Detection
Non-detection > Screening Value
Non-detection
Not Analyzed

Preliminary Laboratory Results | Surface Water

PROJ-032692 | BP - Gasoline Release

Data Updated at 3/22/2024 11:27:13 AM

Analytical Method	Analyte	Screening Value (µg/L)	W028 Excavation in Division A2 2/2/2024 MTWA0202W028	Middle of excavation in zo.. 1/22/2024 MTWA0122W028	W029 Excavation zone A1 1/22/2024 MTWA0122W029	W030 Next to boom, approximat.. 1/26/2024 MTWA0126W030	W031 Approximately 40 yards N.. 2/21/2024 MTWA0221W031	W032 Pipeline right of way in hil.. 2/21/2024 MTWA0221W032	W033 A19 North corner inside w.. 3/7/2024 MTWA0307W033	W034 A15 Middle of the inside .. 3/7/2024 MTWA0307W034	W035 A11 Southern inside wall ... 3/7/2024 MTWA0307W035
200.8	Arsenic	10[1]	0.844 µg/L (J)	NA	NA	NA	NA	NA	NA	NA	NA
	Barium	NA	24.1 µg/L	NA	NA	NA	NA	NA	NA	NA	NA
	Copper	11[2]	2.39 µg/L	NA	NA	NA	NA	NA	NA	NA	NA
	Lead	2.5[2]	< 0.513 µg/L	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	150[1]	5.09 µg/L	NA	NA	NA	NA	NA	NA	NA	NA
	Zinc	100[1]	< 7.96 µg/L	NA	NA	NA	NA	NA	NA	NA	NA
365.4	Phosphorus, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
410.4	COD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2130 B-2011	Turbidity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2320 B-2011	Alkalinity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2580	ORP	NA									
4500P E-2011	Phosphate, Ortho	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6010D	Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chromium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8260D	Benzene	0.44[3]	529 µg/L	649 µg/L	0.253 µg/L (J)	0.178 µg/L (J)	< 0.0941 µg/L	0.257 µg/L (J)	< 0.0941 µg/L	< 0.0941 µg/L	< 0.0941 µg/L
	Ethylbenzene	12[3]	629 µg/L	1,630 µg/L	0.701 µg/L (J)	0.185 µg/L (J)	< 0.137 µg/L	0.456 µg/L (J)	< 0.137 µg/L	< 0.137 µg/L	< 0.137 µg/L
	Toluene	53[3]	12,800 µg/L	20,800 µg/L	5.58 µg/L	3.01 µg/L	< 0.278 µg/L	5.18 µg/L	0.284 µg/L (J)	0.972 µg/L (J)	< 0.278 µg/L
	Total Xylenes	57[3]	7,600 µg/L	8,450 µg/L	20.8 µg/L	1.09 µg/L (J)	< 0.174 µg/L	3.01 µg/L	< 0.174 µg/L	0.627 µg/L (J)	< 0.174 µg/L
8270E	1,2-Dichlorobenzene	2000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,2,4-Trichlorobenzene	0.12[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,3-Dichlorobenzene	13[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1,4-Dichlorobenzene	460[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chloronaphthalene	170[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chlorophenol	15[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,2-Oxybis(1-Chloropropane)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dichlorophenol	25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dimethylphenol	85[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrophenol	60[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4-Dinitrotoluene	0.039[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,4,6-Trichlorophenol	0.25[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3,3-Dichlorobenzidine	0.0031[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Bromophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chloro-3-methylphenol	36[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Chlorophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4,6-Dinitro-2-methylphenol	7.1[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	110[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	3100[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzidine	0.00002[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	0.0014[4]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Benzylbutyl phthalate	0.56[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethoxy)methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-chloroethyl)ether	0.02[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bis(2-ethylhexyl)phthalate	0.23[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	1.4[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-butyl phthalate	450[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Di-n-octyl phthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.0014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Diethyl phthalate	4200[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dimethyl phthalate	92000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	16[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	420[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloro-1,3-butadiene	0.69[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorobenzene	0.000051[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachlorocyclopentadiene	150[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Hexachloroethane	0.11[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	0.014[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Isophorone	27[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodi-n-propylamine	0.0044[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodimethylamine	0.00065[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	n-Nitrosodiphenylamine	0.62[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrobenzene	55[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pentachlorophenol	0.046[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Phenol	18000[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	310[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA
8270E-SIM	1-Methylnaphthalene	NA	7.43 µg/L	NA	NA	NA	NA	NA	NA	NA	NA
	2-Chloronaphthalene	170[1]	< 0.136 µg/L	NA	NA	NA	NA	NA	NA	NA	NA
	2-Methylnaphthalene	NA	11.4 µg/L	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthene	110[1]	0.109 µg/L	NA	NA	NA	NA	NA	NA	NA	NA
	Acenaphthylene	NA	< 0.0342 µg/L	NA	NA	NA	NA	NA	NA	NA	NA
	Anthracene	3100[1]	< 0.038 µg/L	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)anthracene	0.014[1]	< 0.0406 µg/L	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(a)pyrene	0.0014[4]	< 0.0368 µg/L	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(b)fluoranthene	0.014[1]	< 0.0336 µg/L	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(g,h,i)perylene	NA	< 0.0368 µg/L	NA	NA	NA	NA	NA	NA	NA	NA
	Benzo(k)fluoranthene	0.014[1]	< 0.0404 µg/L	NA	NA	NA	NA	NA	NA	NA	NA
	Chrysene	1.4[1]	< 0.0358 µg/L	NA	NA	NA	NA	NA	NA	NA	NA
	Dibenz(a,h)anthracene	0.0014[4]	< 0.032 µg/L	NA	NA	NA	NA	NA	NA	NA	NA
	Fluoranthene	16[1]	< 0.054 µg/L	NA	NA	NA	NA	NA	NA	NA	NA
	Fluorene	420[1]	0.214 µg/L	NA	NA	NA	NA	NA	NA	NA	NA
	Indeno(1,2,3-cd)pyrene	0.014[1]	< 0.0316 µg/L	NA	NA	NA	NA	NA	NA	NA	NA
	Naphthalene	NA	54.3 µg/L	NA	NA	NA	NA	NA	NA	NA	NA
	Phenanthrene	NA	0.232 µg/L	NA	NA	NA	NA	NA	NA	NA	NA
	Pyrene	310[1]	< 0.0338 µg/L	NA	NA	NA	NA	NA	NA	NA	NA
9040C	pH	NA									
9056A	Bromide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nitrate as (N)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9060A	TOC (Total Organic Carbon)	NA	NA	11,700 µg/L	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-NO SGT	Diesel Range Organics (DRO)	3000[3]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Residual Range Organics (RRO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NWTPHDX-SGT	Diesel Range Organics (DRO)	3000[4]	< 66.7 µg/L	135 µg/L (J)	NA	NA	NA	4,040 µg/L	NA	NA	NA
	Residual Range Organics (RRO)	NA	< 83.3 µg/L	< 83.3 µg/L	NA	NA	NA	106 µg/L (J)	NA	NA	NA
NWTPHGX	Gasoline Range Organics-NWTPH	1000[3]	51,500 µg/L	75,900 µg/L	192 µg/L	< 39.4 µg/L	< 31.6 µg/L	62.4 µg/L (J)	< 31.6 µg/L	< 31.6 µg/L	< 31.6 µg/L
SM2340B	Hardness (calculated) as CaCO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

[1] 173-201A WAC - Human Health - Fresh Water
[2] 173-201A WAC - Aquatic Life -Fresh/Chronic
[3] CLARC - Chemical-Specific Considerations – TPH – Concentrations Protective of Aquatic Receptors in Surface Water - Fresh Water
[4] Laboratory non-detections are reported as less than ("<") the laboratory MRL.
Laboratory result qualifiers are reported to the right of corresponding detections (in parentheses). Definitions of reported qualifiers are below:
B: The same analyte is found in the associated blank.
J: Result is estimated between the laboratory method detection limit and reporting limit.

Detection > Screening Value
Detection
Non-detection > Screening Value
Non-detection
Not Analyzed

Appendix B-5

Surface Water Sampling Results Maps

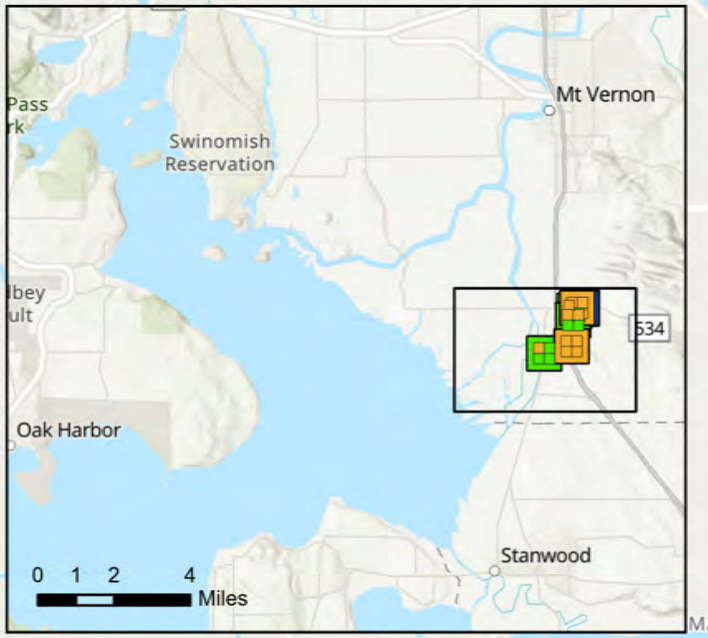
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill | December 14, 2023

0 0.5 1 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



W001
W002
W003
W004
W015

Conway
Cedardale
Conway Elementary School
Bulson Road
English Road
Pioneer Highway
Hill Ditch
Cedardale Road
Snowden Place
Franklin Road
Mann Road
Milltown
250 ft
5 ft
5 ft

S Incident Site

TPH-Gx

B	T
E	X

Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 12/24/2023 1:39 PM

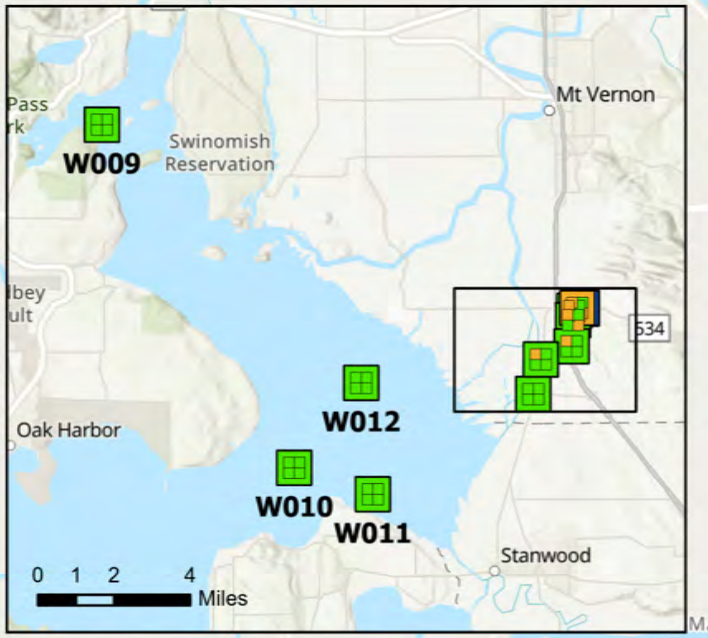
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill | December 15, 2023

0 0.5 1 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



W001
W002
W003
W004
W005
W006
S
Conway
Cedardale
Conway Elementary School
Pioneer Highway
Bulson Road
English Road
Hill Ditch
Cedardale Road
Snowden Place
Franklin Road
Mann Road
250 ft
5 ft
5 ft

S Incident Site

TPH-Gx

B	T
E	X

Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 12/24/2023 1:43 PM

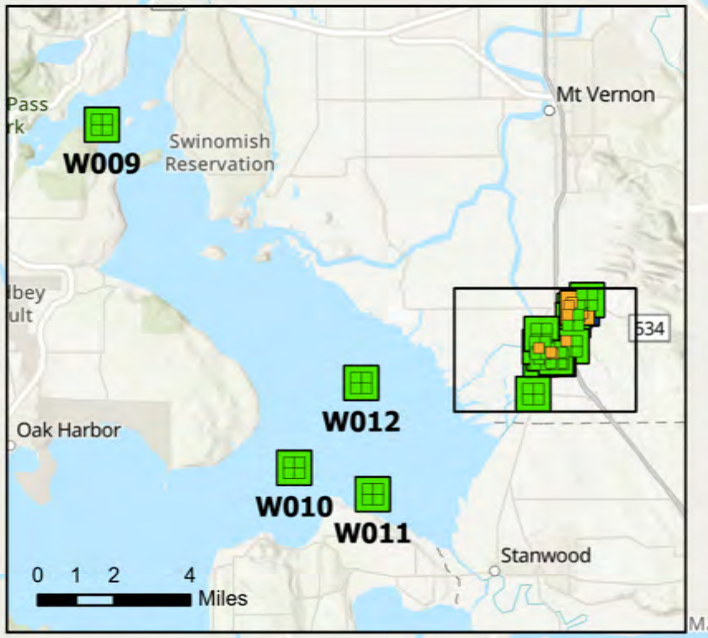
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill | December 16, 2023

0 0.5 1 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



W001 W016 W002 W003 W004 W008 W007 W015 W014 W013 W006 W005

Conway Cedardale Conway Elementary School Bulson Road Pioneer Highway Hill Ditch Cedardale Road Snowden Place English Road Franklin Road Mann Road 250 ft 5 ft 5 ft

S Incident Site

TPH-Gx

B	T
E	X

Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 12/24/2023 1:53 PM

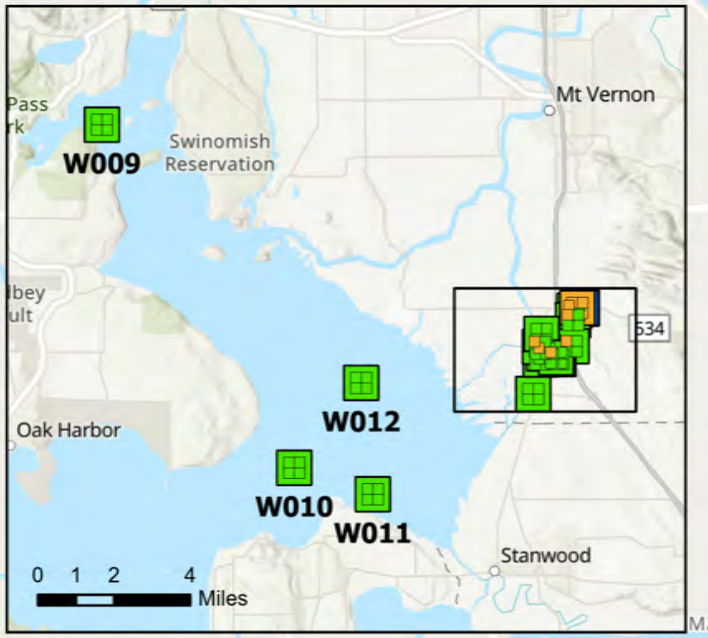
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill | December 17, 2023

0 0.5 1 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



W001
W002
W003
W004
W005
W006
W007
W008
W010
W011
W012
W013
W014
W015

Conway
Cedardale
Conway Elementary School
Pioneer Highway
Mann Road
Bulson Road
English Road
Hill Ditch
Cedardale Road
Snowden Place
Franklin Road
250 ft
5 ft
5 ft

S Incident Site

TPH-Gx

B	T
E	X

Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 12/24/2023 1:49 PM

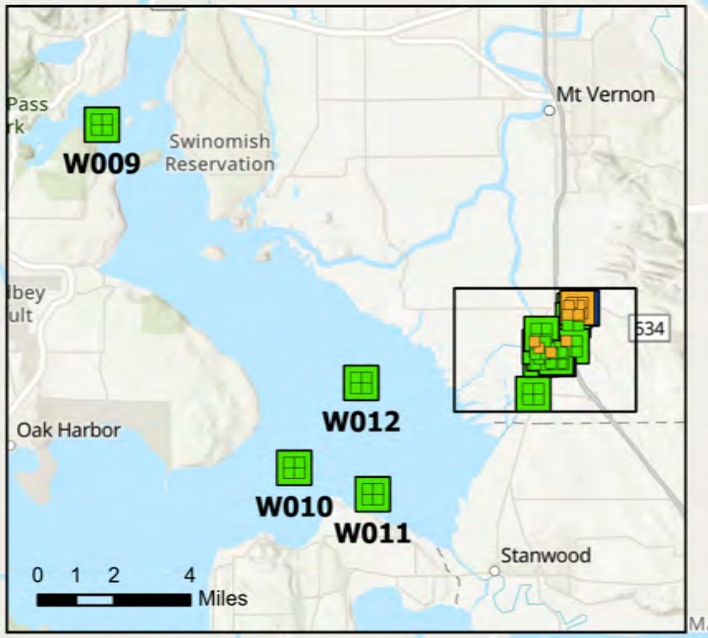
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill | December 18, 2023

0 0.5 1 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



W001
W002
W003
W004
W005
W006
W007
W008
W013
W014
W015
S
Conway
Cedardale
Conway Elementary School
Pioneer Highway
Mann Road
Bulson Road
English Road
Hill Ditch
Cedardale Road
Snowden Place
Franklin Road
250 ft
5 ft
5 ft

S Incident Site

TPH-Gx

B	T
E	X

Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 12/24/2023 1:59 PM

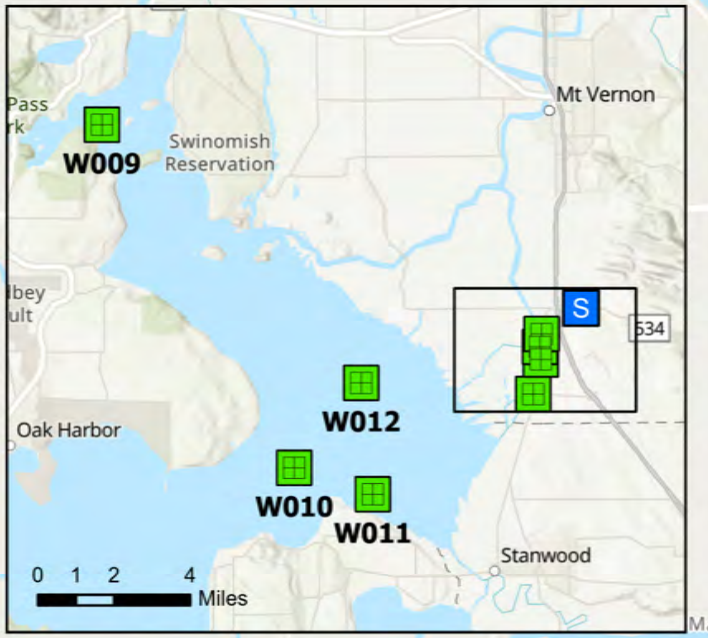
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill | December 19, 2023

0 0.5 1 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



Conway
Cedardale
Conway Elementary School
Bulson Road
Pioneer Highway
Hill Ditch
Snowden Place
Cedardale Road
English Road
Mann Road
Franklin Road
250 ft
5 ft
5 ft
W008
W007
W006
W005

S Incident Site

TPH-Gx

B	T
E	X

Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 12/24/2023 2:04 PM

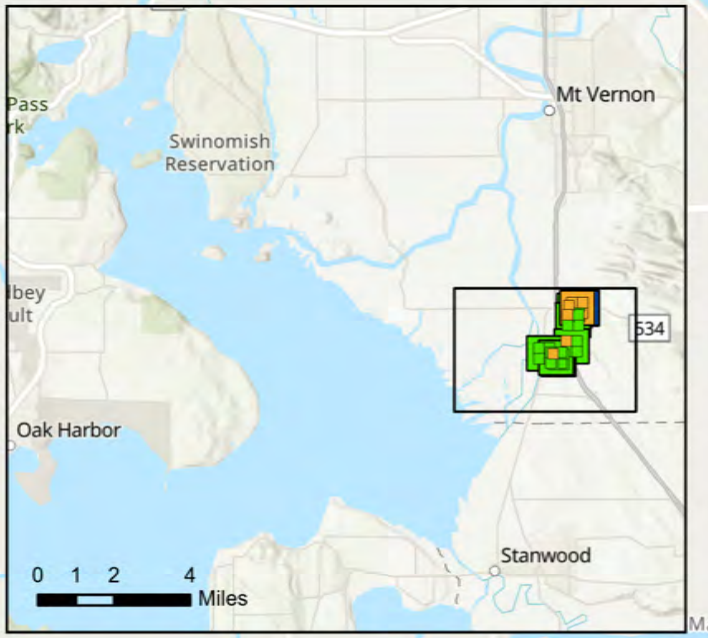
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill | December 20, 2023

0 0.5 1 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



W001
W002
W003
W004
W013
W014
W015

Conway
Cedardale
Conway Elementary School
Pioneer Highway
Hill Ditch
Cedardale Road
Snowden Place
Bulson Road
English Road
Mann Road
Franklin Road
Milltown
250 ft
5 ft
5 ft

S Incident Site

TPH-Gx

B	T
E	X

Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 12/24/2023 2:06 PM

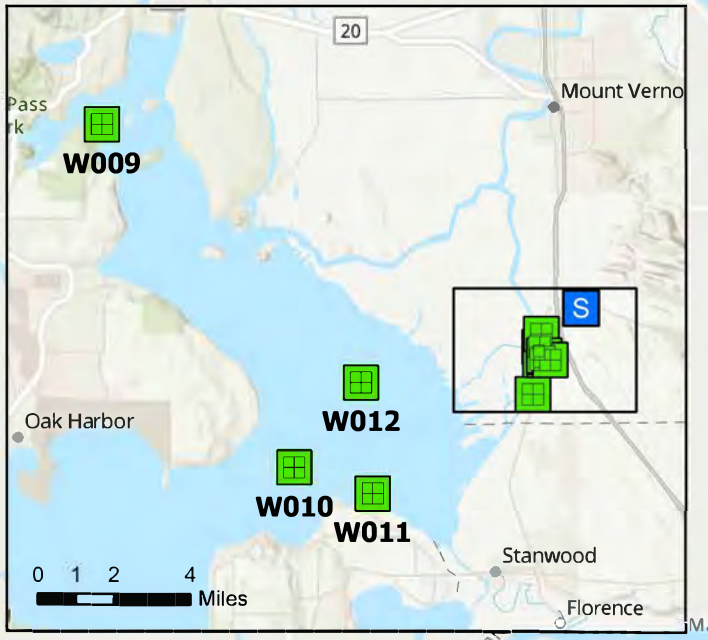
Surface Water Sampling Results

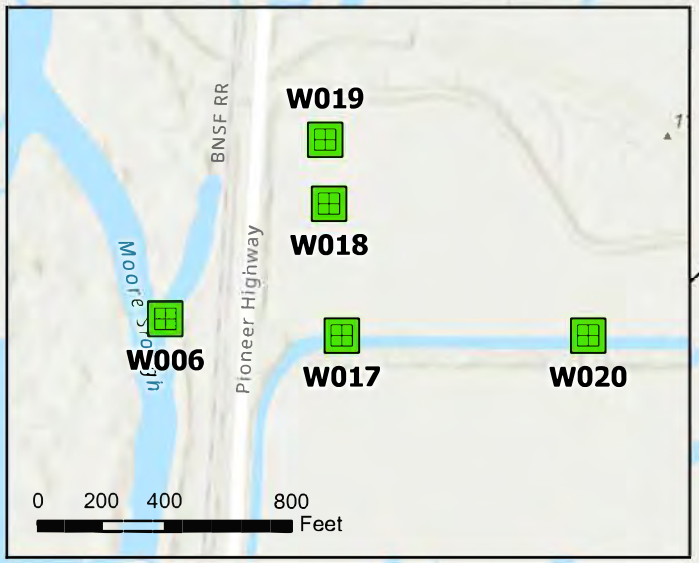
Olympic Pipeline Gasoline Spill | December 21, 2023

0 0.5 1 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit





Conway
Conway Park
Conway Elementary School
Pioneer Highway
Cedardale Road
Hill Ditch
Snowden Place
Franklin Road
Bulson Road
English Road
Mann Road
250 ft
W008
W007
W005
town

S Incident Site

TPH-Gx

B	T
E	X

Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 1/5/2024 7:52 PM

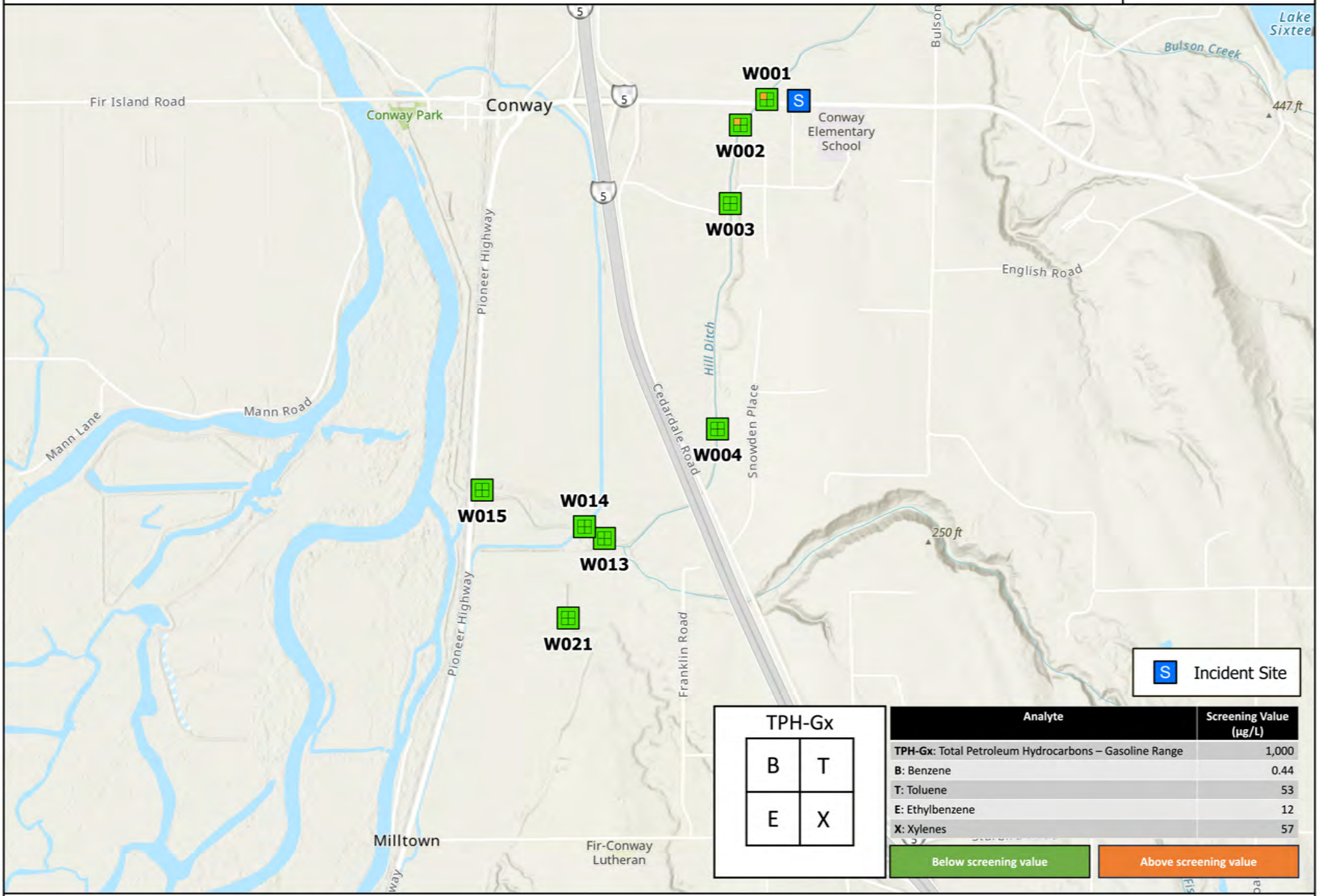
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill | December 22, 2023 to December 23, 2023

0 0.25 0.5 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



S Incident Site

TPH-Gx

B	T
E	X

Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 2/22/2024 4:00 PM

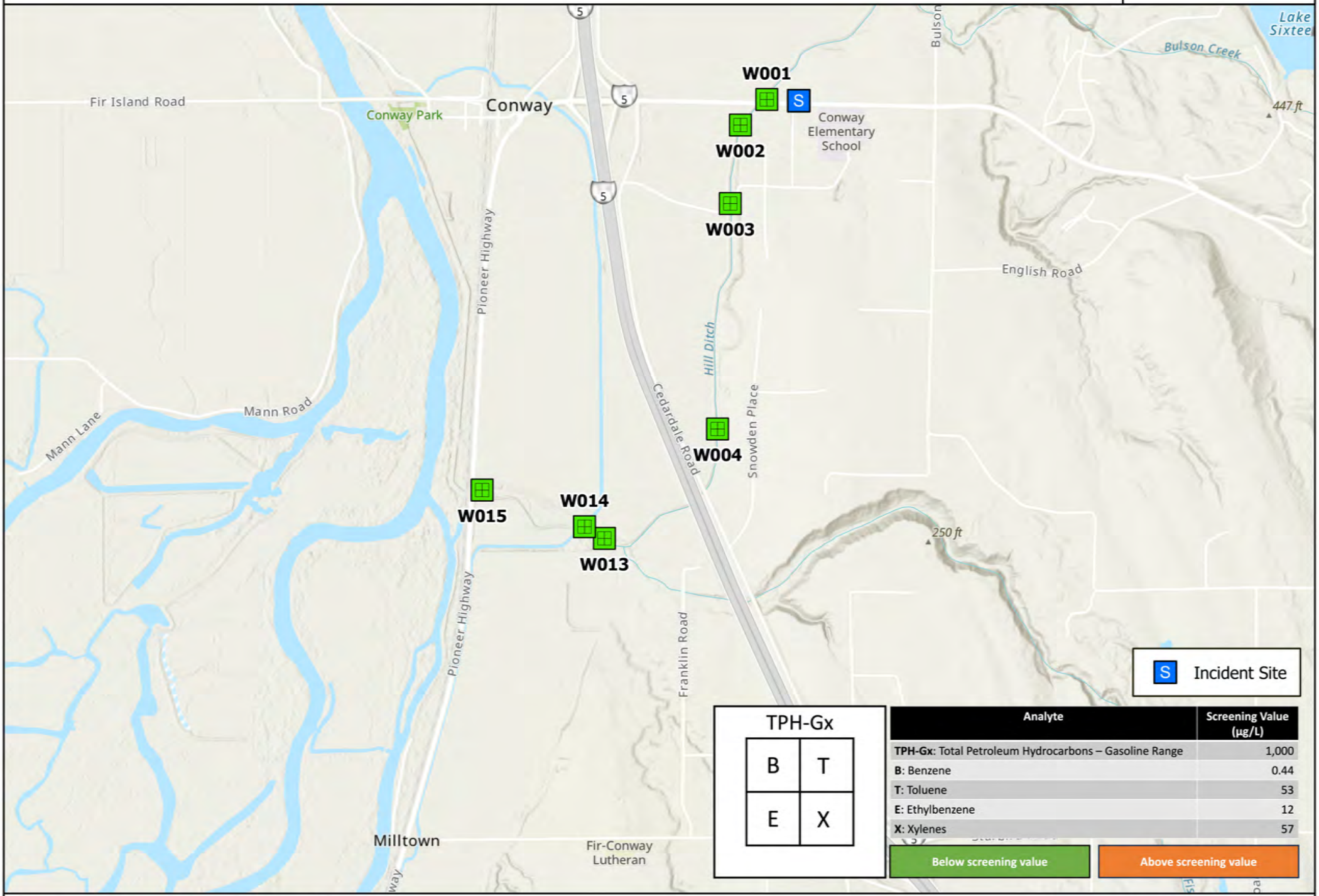
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill | December 26, 2023

0 0.25 0.5 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



S Incident Site

TPH-Gx

B	T
E	X

Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 2/22/2024 4:06 PM

CTEH®

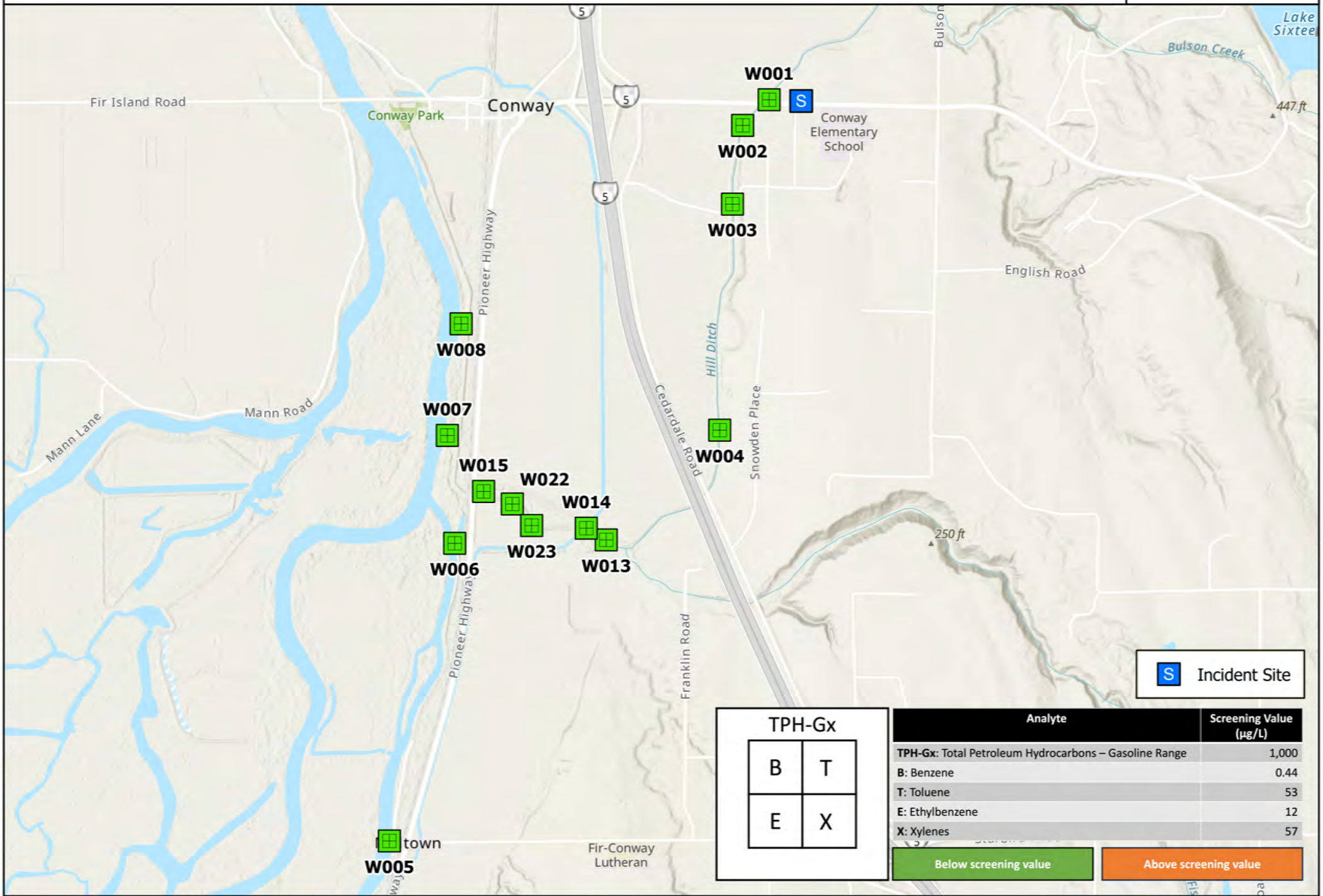
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill | December 28, 2023

0 0.25 0.5 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



S Incident Site

TPH-Gx

B	T
E	X

Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 2/22/2024 4:07 PM

CTEH®

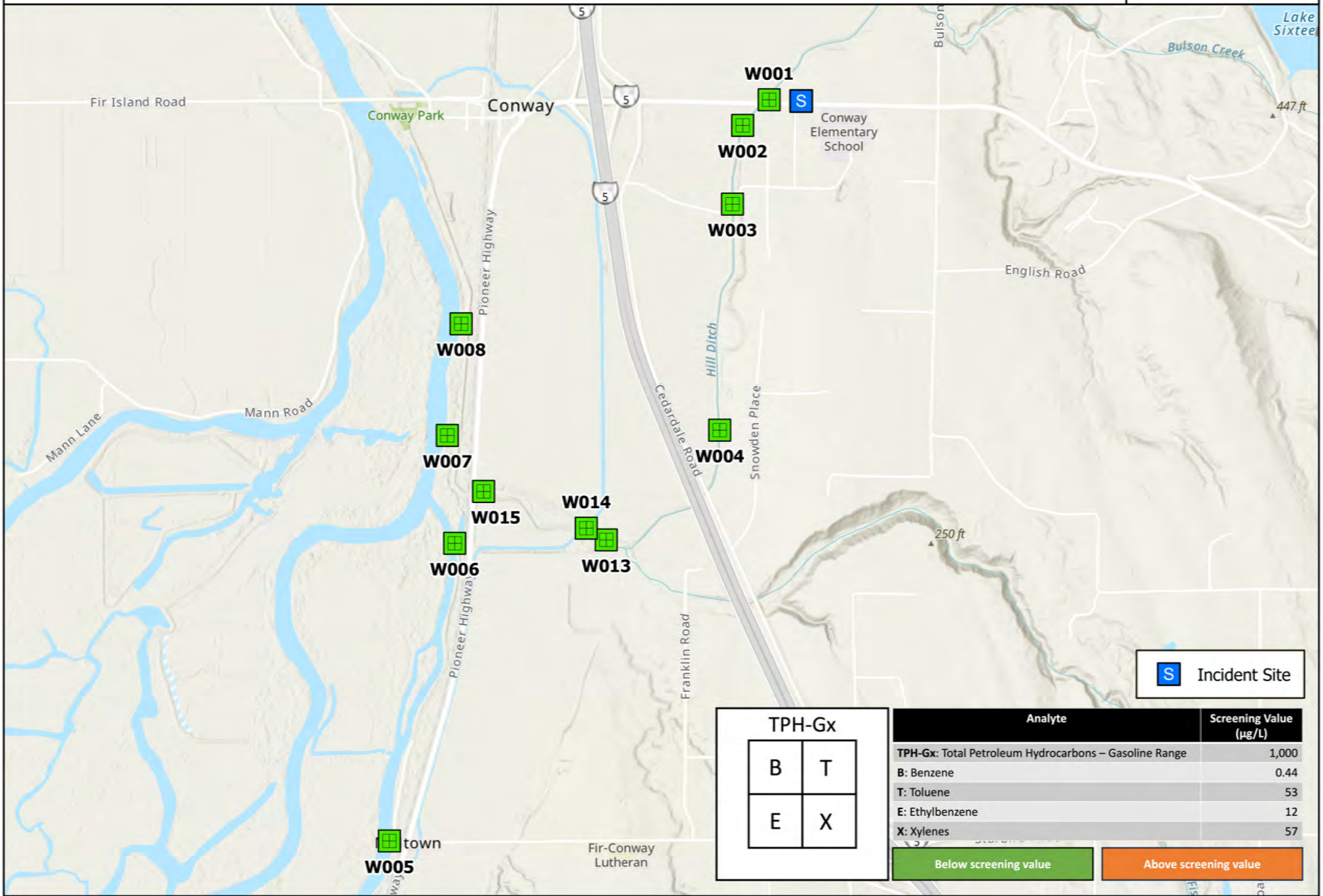
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill | December 29, 2023

0 0.25 0.5 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



TPH-Gx

B	T
E	X

Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 2/22/2024 4:08 PM

CTEH®

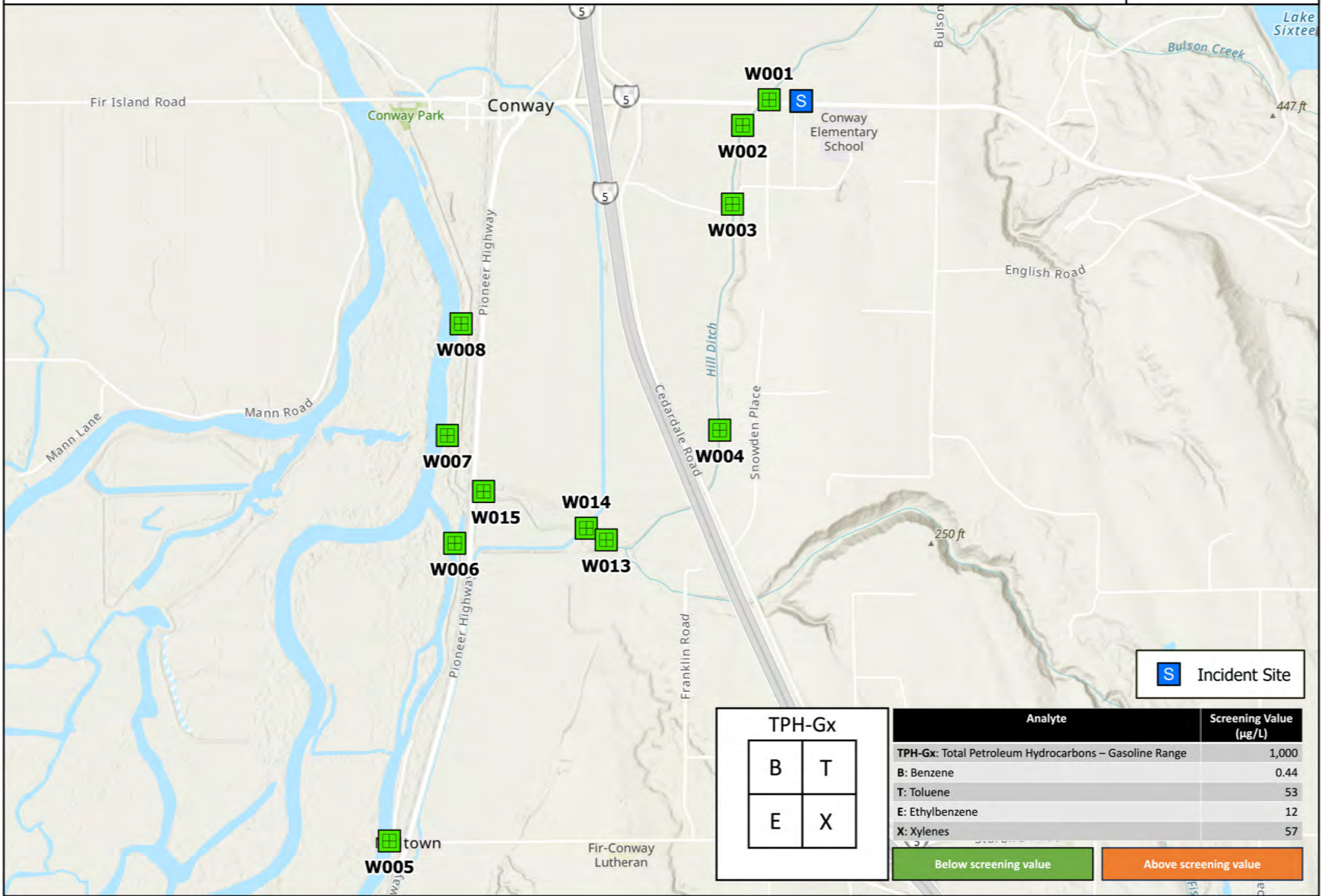
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill | December 30, 2023

0 0.25 0.5 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



TPH-Gx

B	T
E	X

Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 2/22/2024 4:09 PM

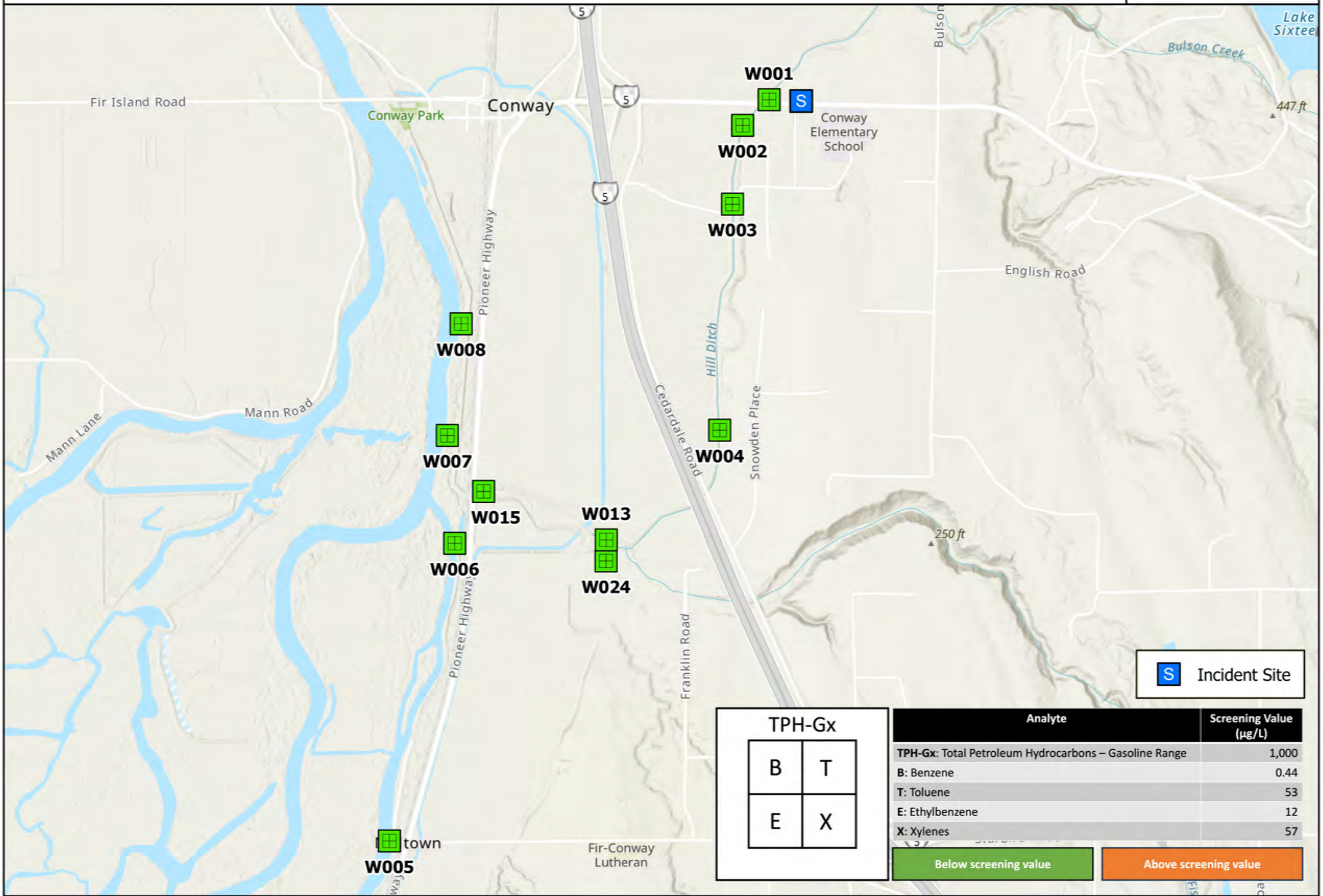
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill | December 31, 2023 to January 3, 2024

0 0.25 0.5 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



S Incident Site

TPH-Gx

B	T
E	X

Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 2/22/2024 4:11 PM

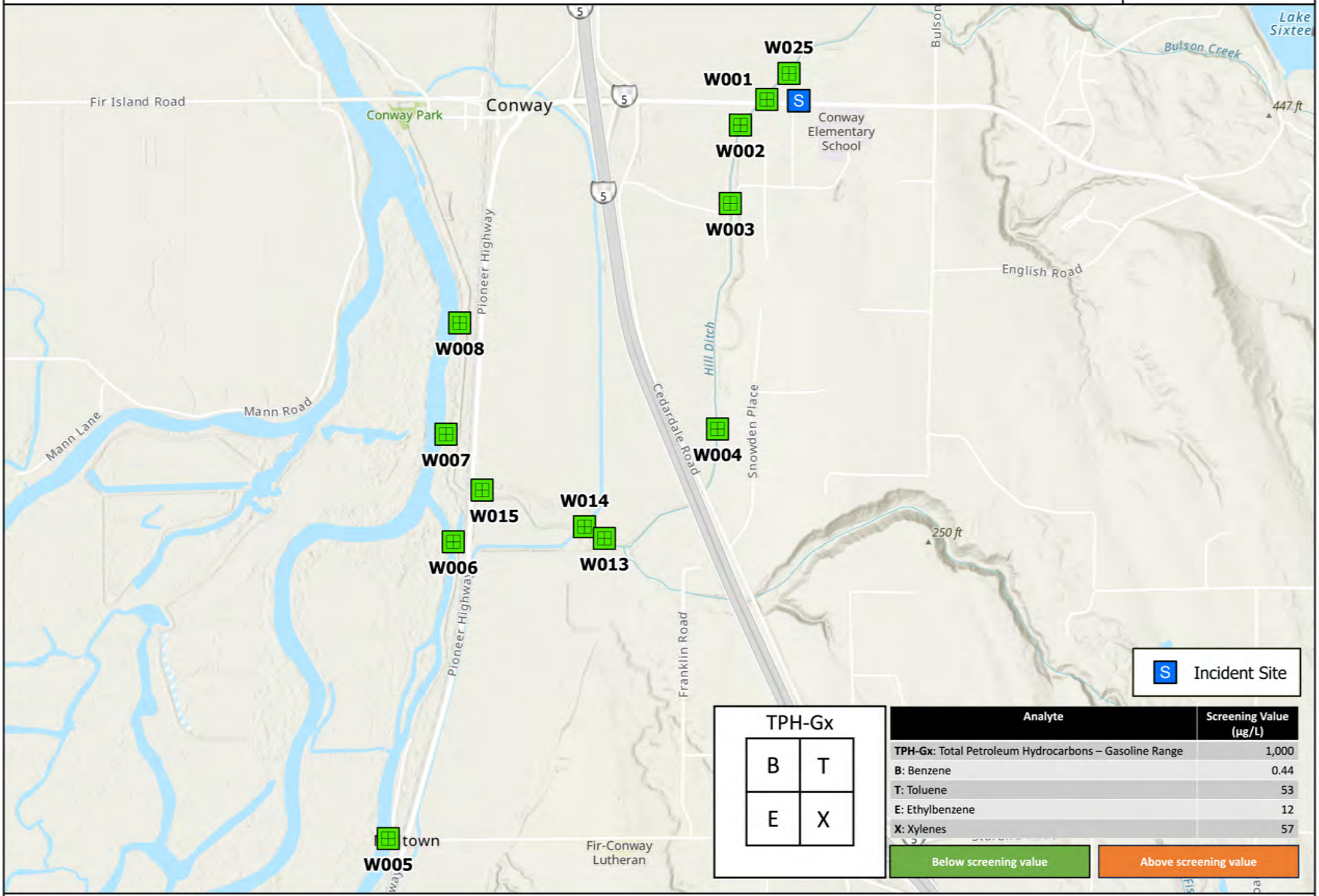
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill | January 4, 2024 to January 6, 2024

0 0.25 0.5 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 2/22/2024 4:13 PM

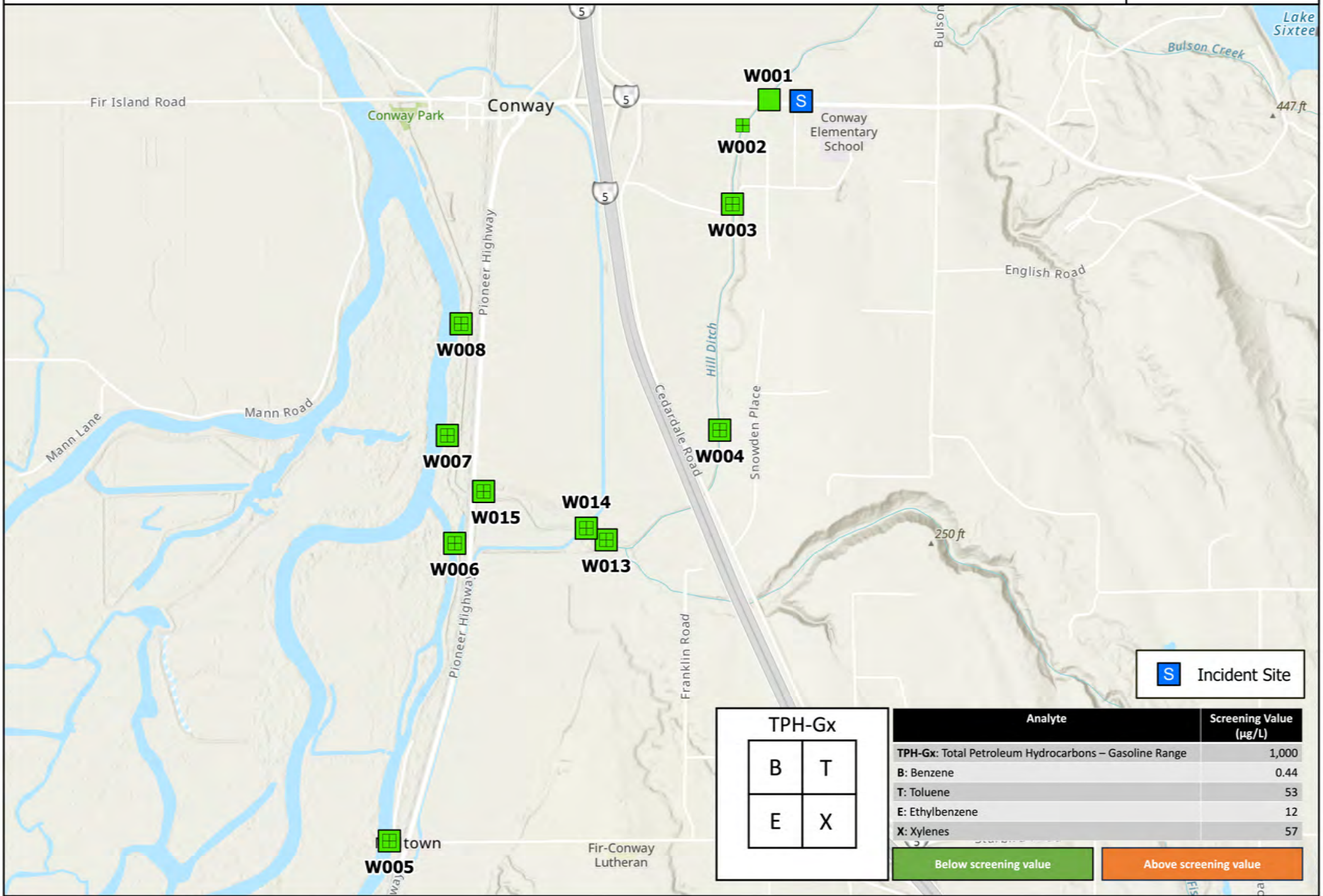
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill | January 7, 2024 to January 9, 2024

0 0.25 0.5 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



S Incident Site

TPH-Gx

B	T
E	X

Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 2/22/2024 4:30 PM

CTEH®

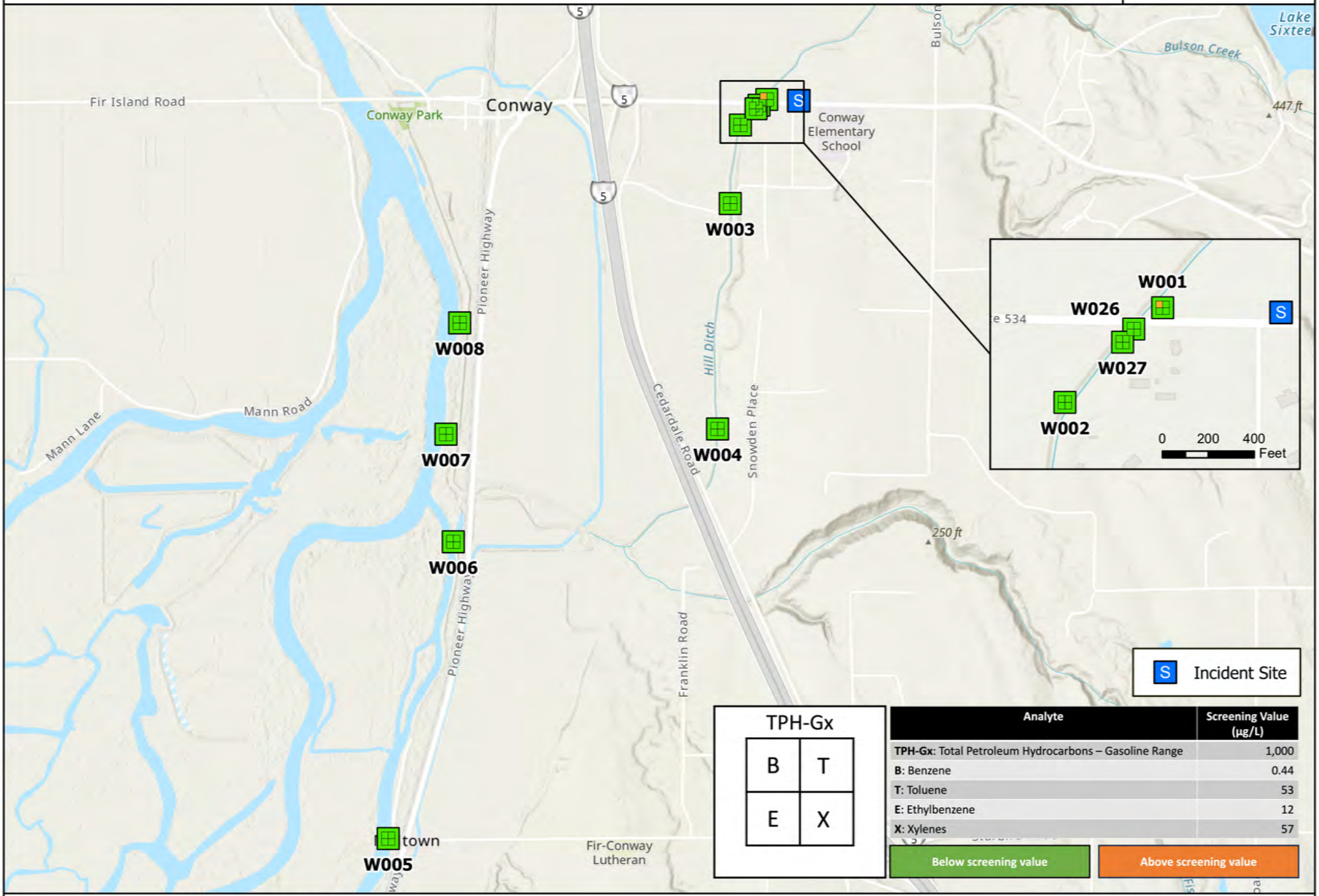
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill | January 10, 2024 to January 11, 2024

0 0.25 0.5 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



TPH-Gx

B	T
E	X

Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 2/22/2024 4:45 PM

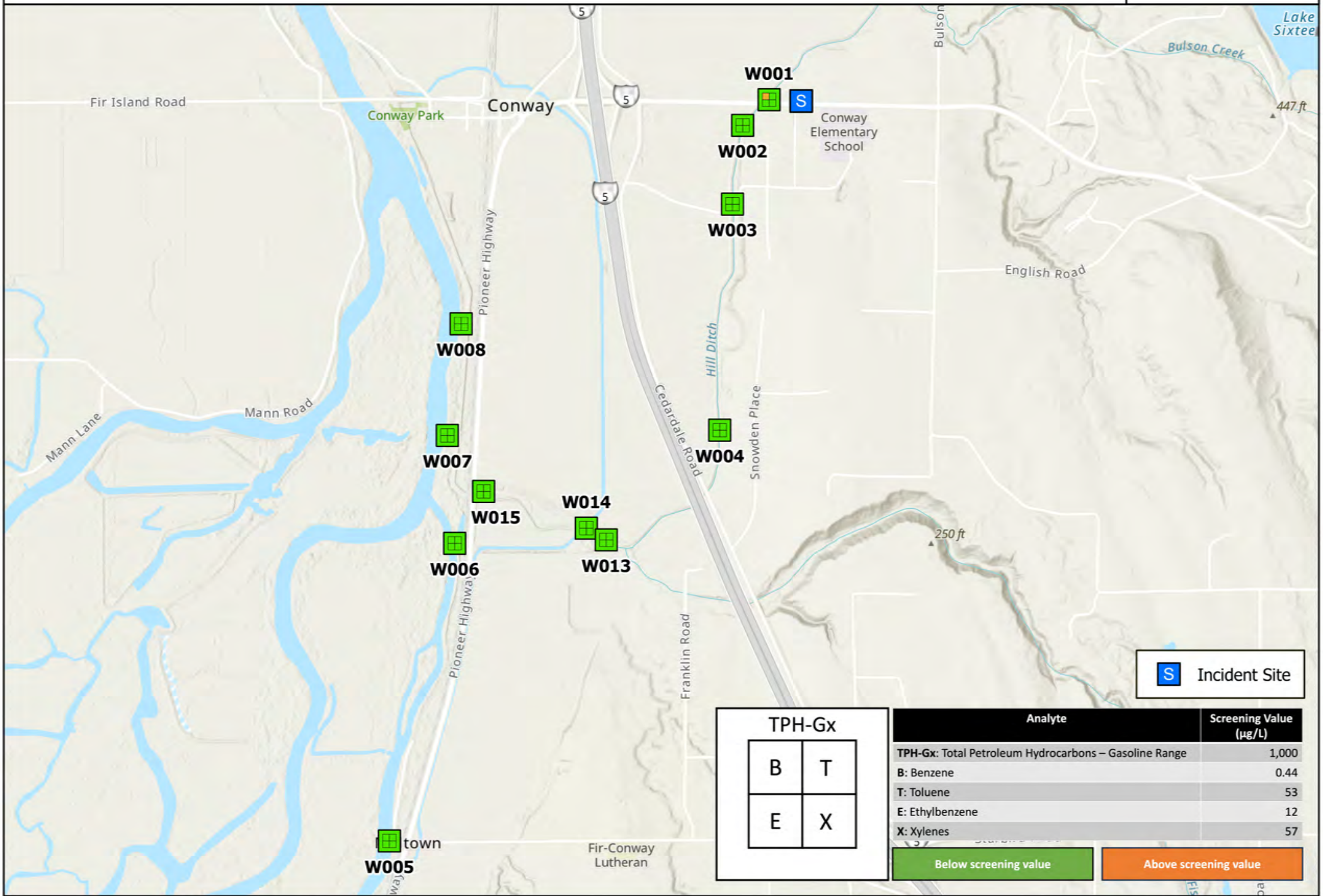
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill | January 17, 2024 to January 18, 2024

0 0.25 0.5 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



S Incident Site

TPH-Gx

B	T
E	X

Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 2/22/2024 4:48 PM

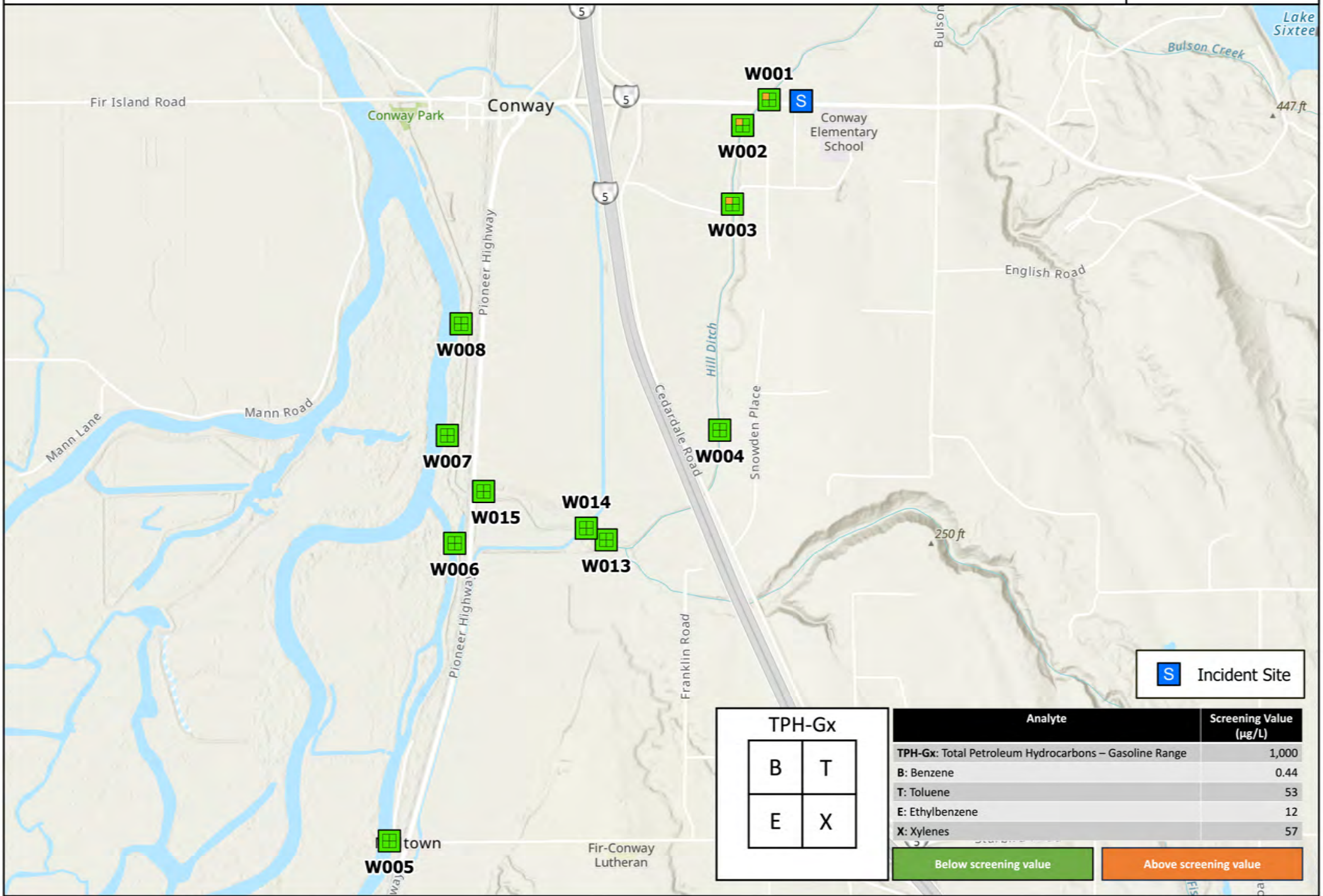
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill | January 19, 2024 to January 20, 2024

0 0.25 0.5 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



S Incident Site

TPH-Gx

B	T
E	X

Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 2/22/2024 5:00 PM

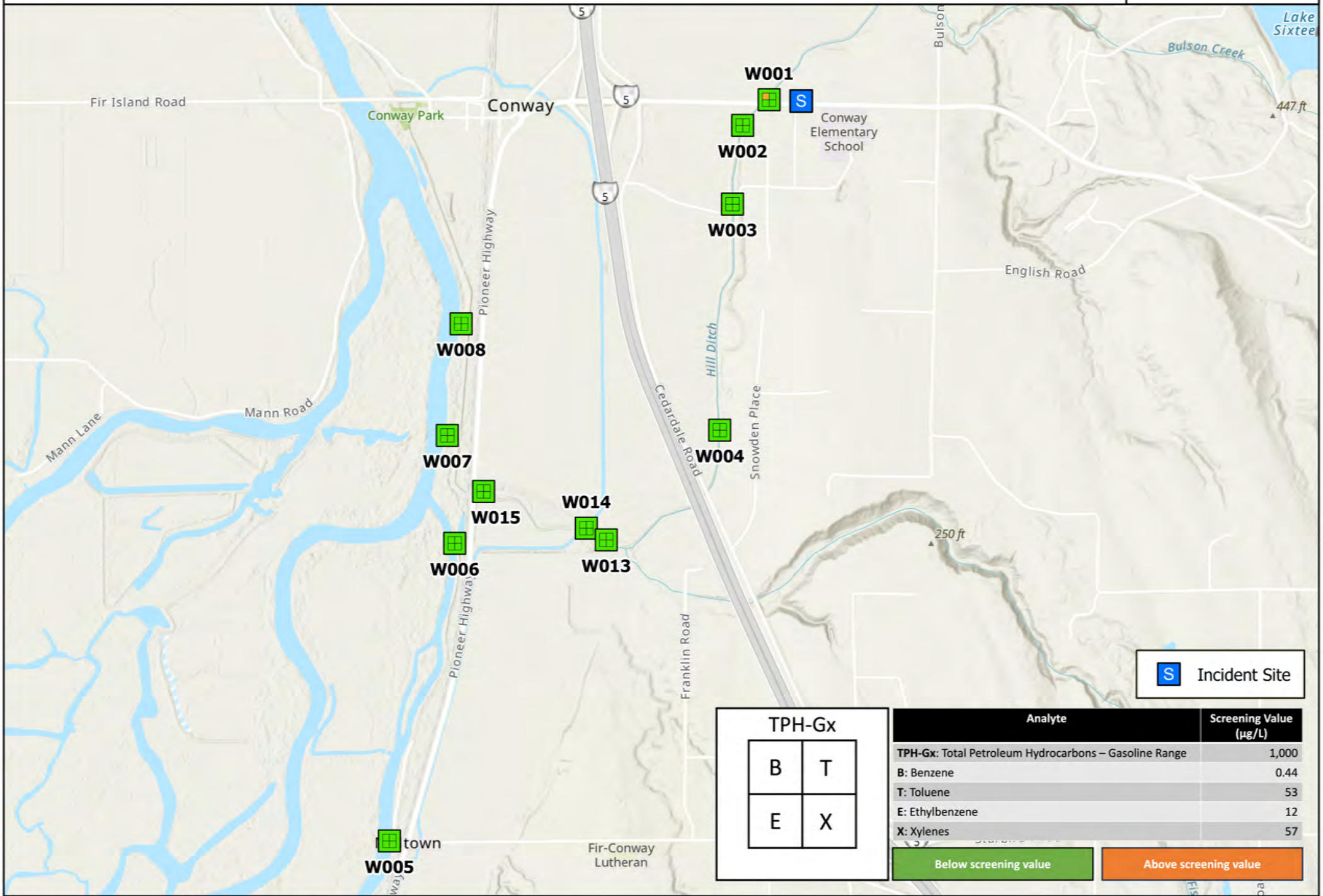
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill | January 21, 2024 to January 23, 2024

0 0.25 0.5 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 2/22/2024 5:05 PM

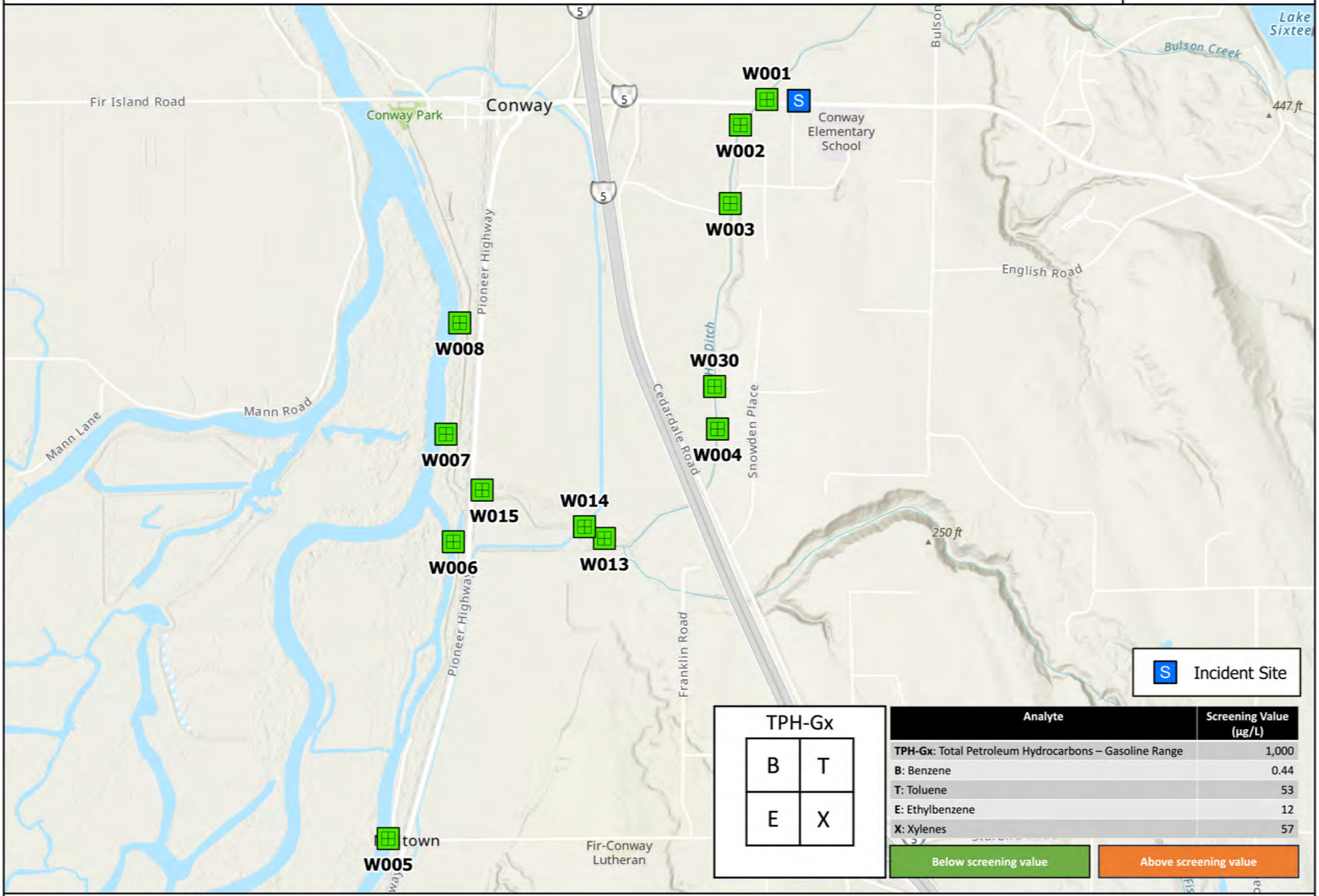
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill | January 24, 2024 to January 26, 2024

0 0.25 0.5 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



TPH-Gx

B	T
E	X

Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 2/22/2024 5:11 PM

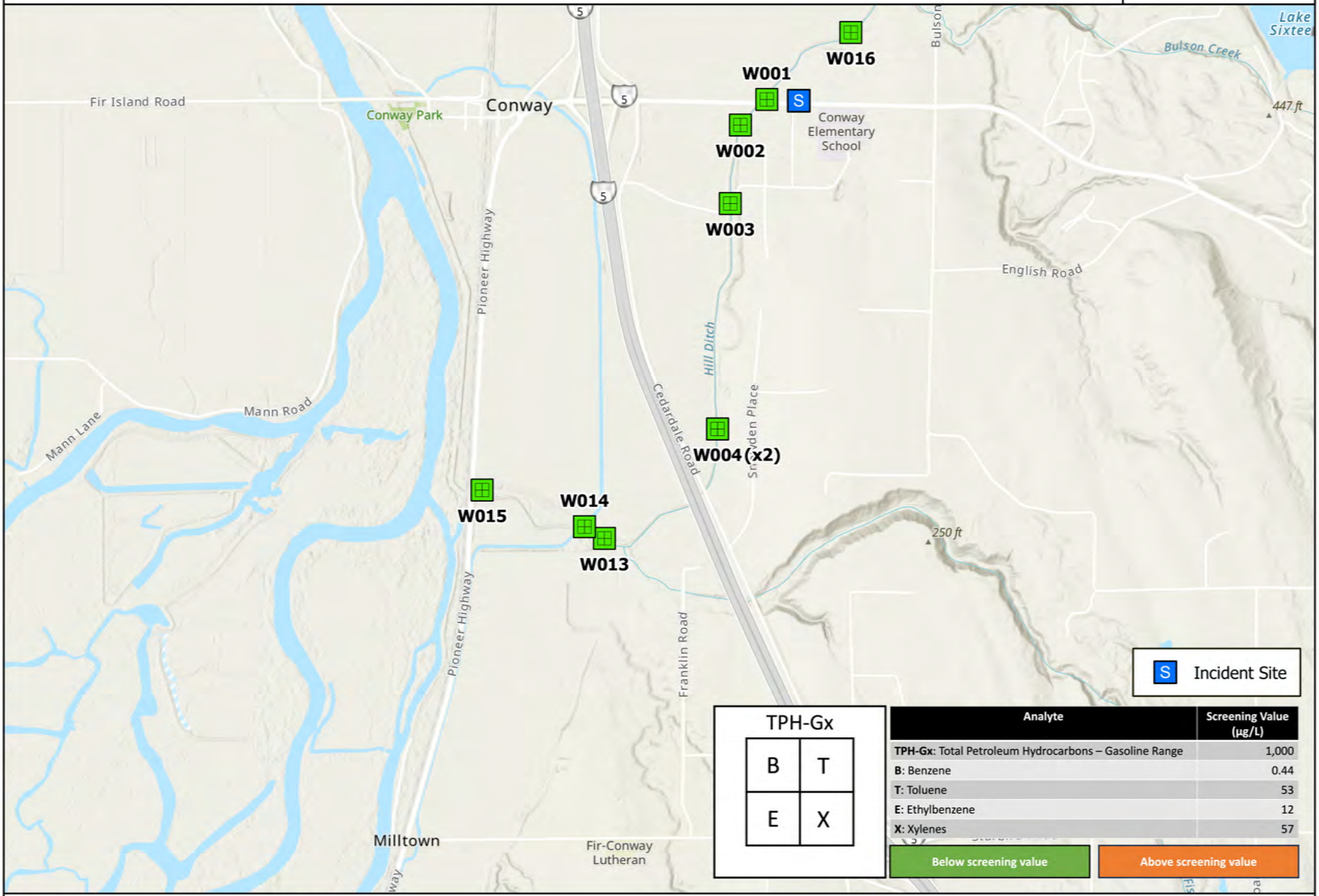
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill | January 29, 2024 to January 30, 2024

0 0.25 0.5 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



S Incident Site

TPH-Gx

B	T
E	X

Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 2/22/2024 5:17 PM

CTEH®

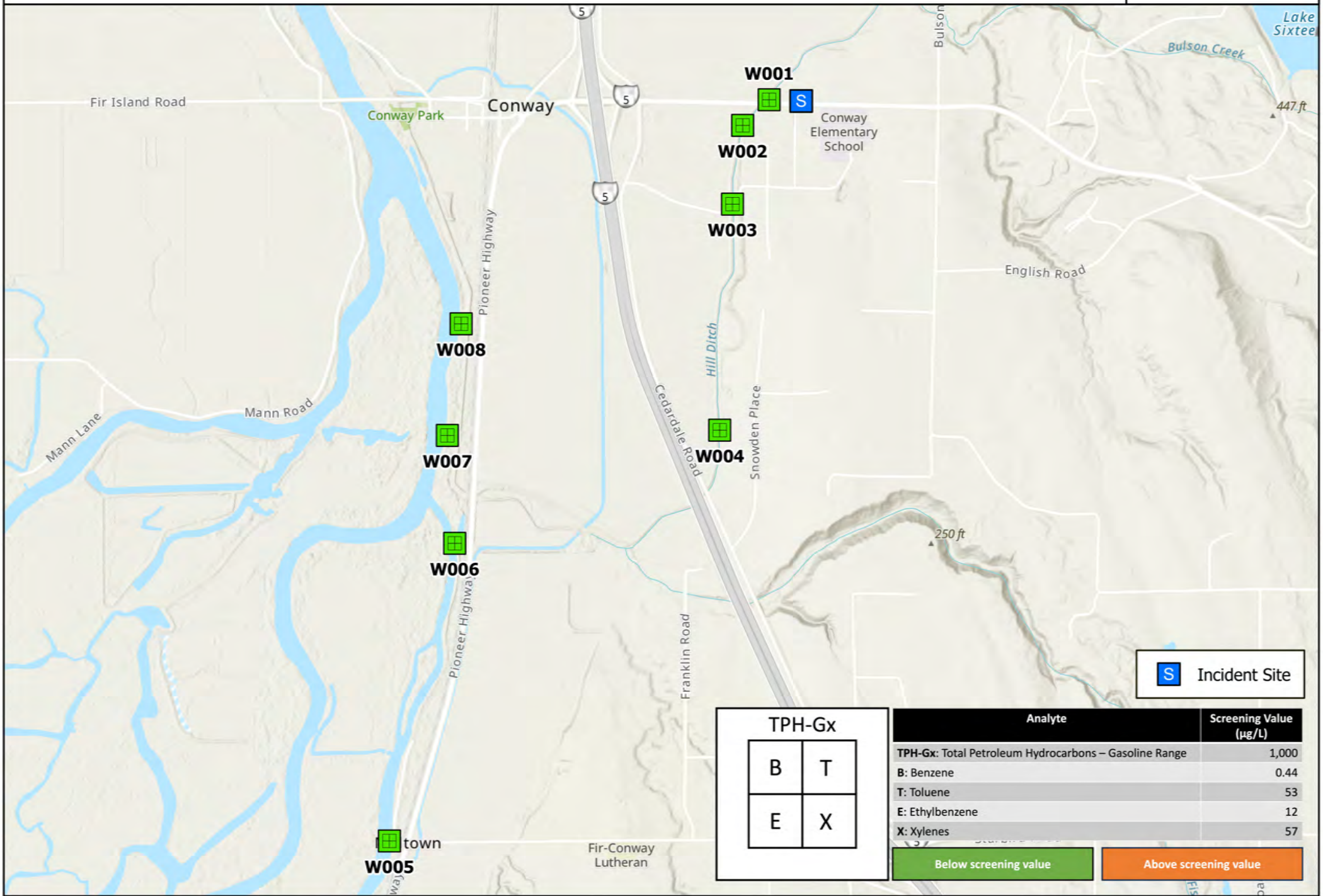
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill | February 1, 2024

0 0.25 0.5 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



S Incident Site

TPH-Gx

B	T
E	X

Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 2/22/2024 5:20 PM

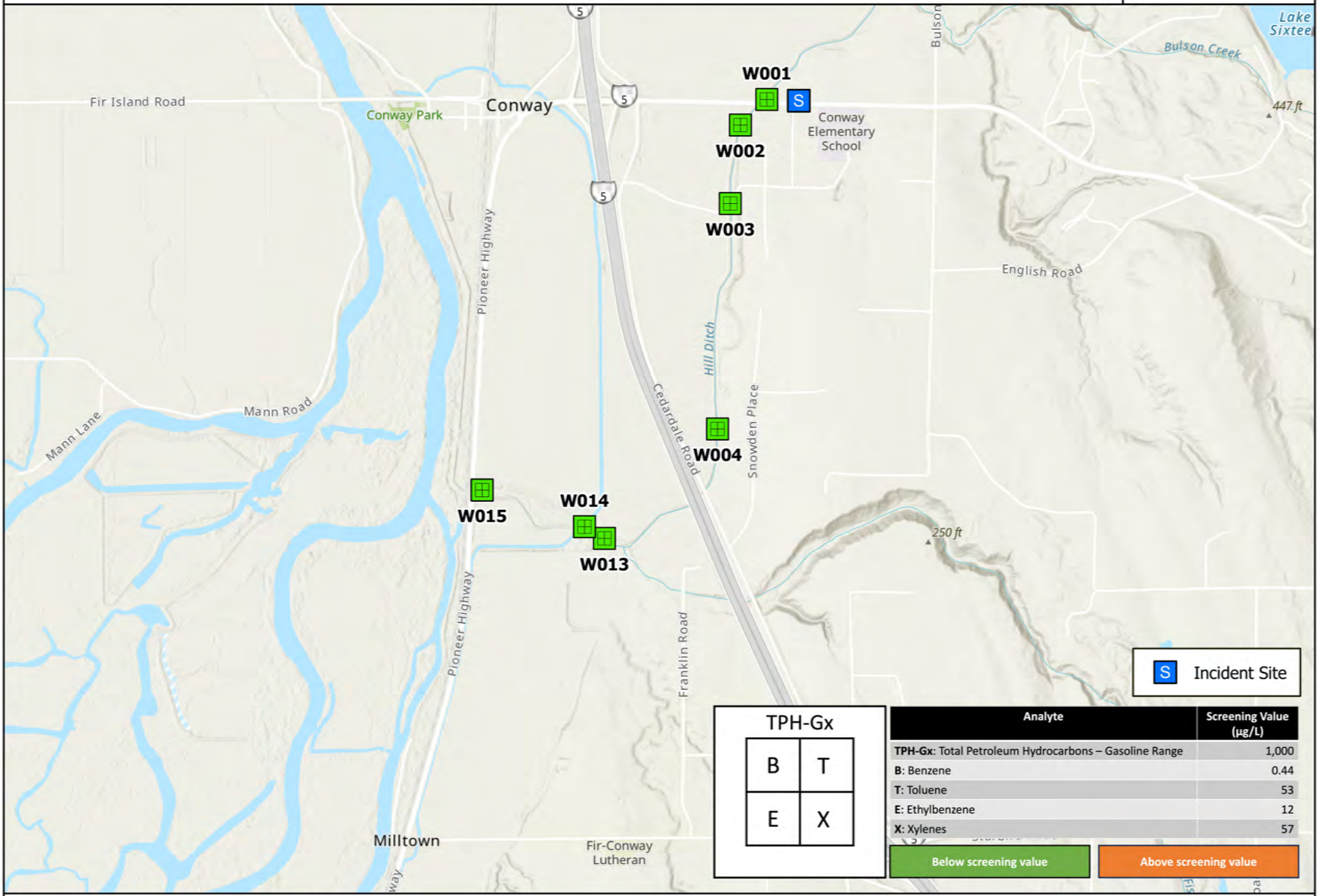
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill | February 5, 2024 to February 7, 2024

0 0.25 0.5 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 2/22/2024 5:21 PM

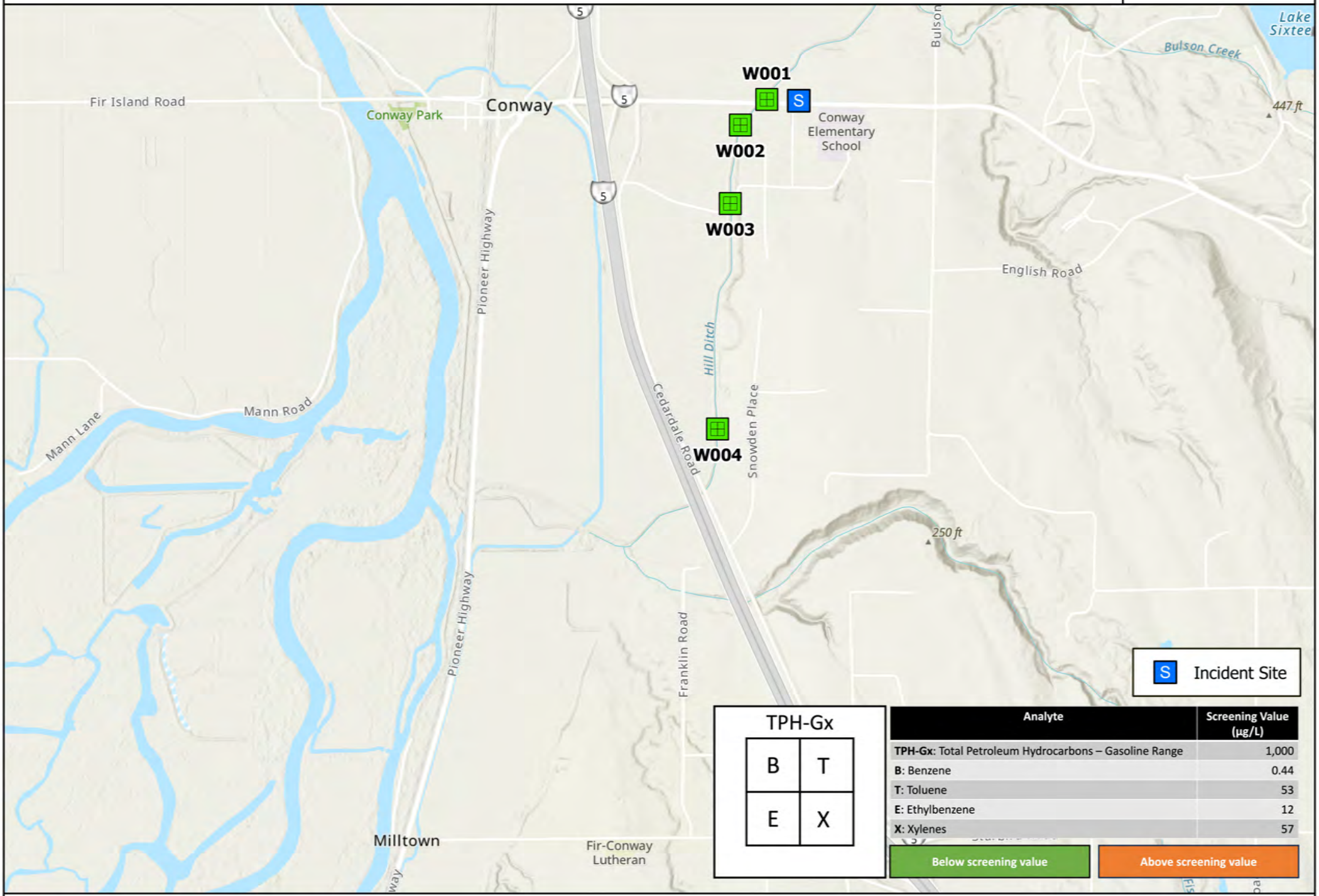
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill | February 8, 2024

0 0.25 0.5 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 2/22/2024 5:23 PM

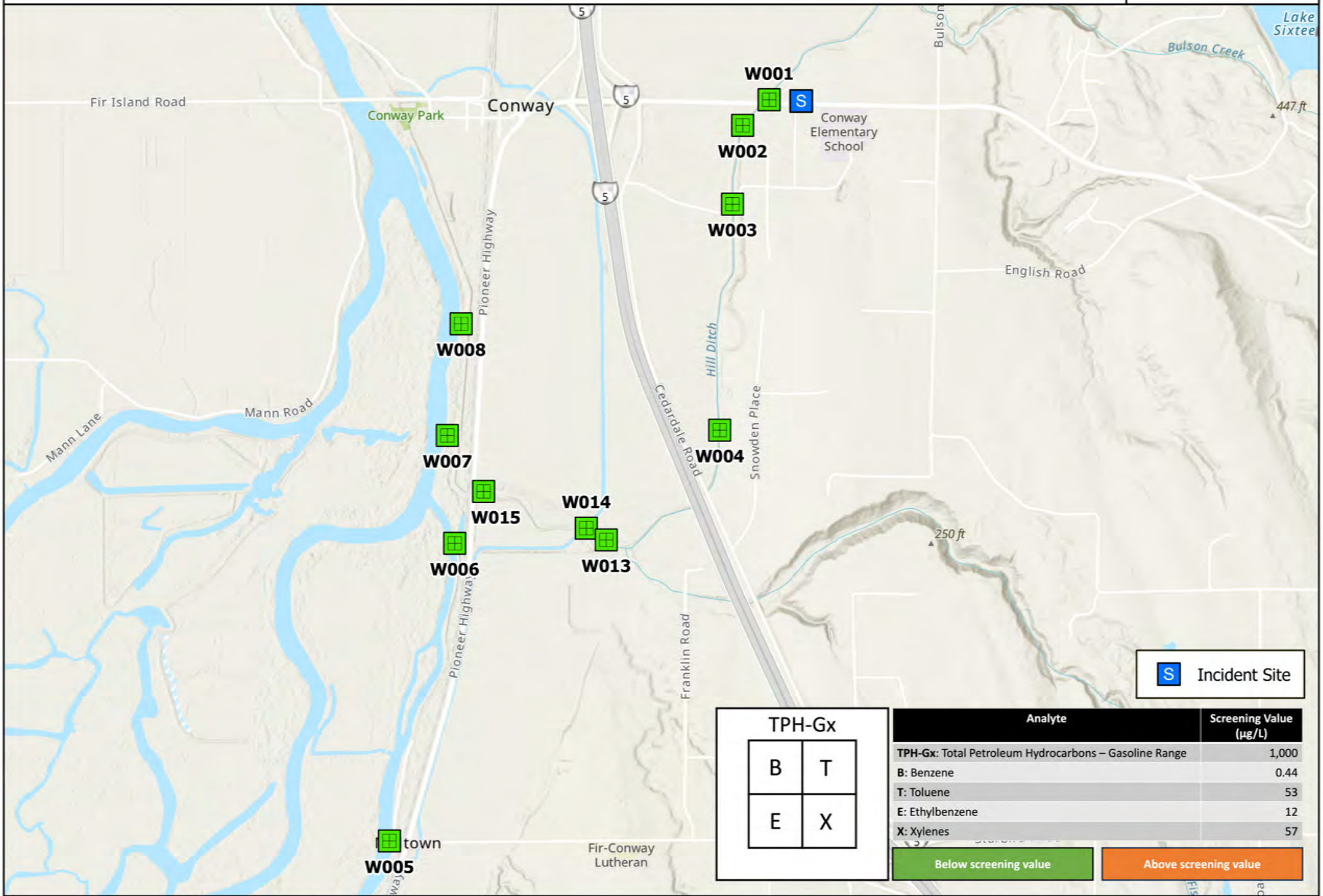
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill | February 12, 2024 to February 14, 2024

0 0.25 0.5 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



S Incident Site

TPH-Gx

B	T
E	X

Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 2/22/2024 6:14 PM

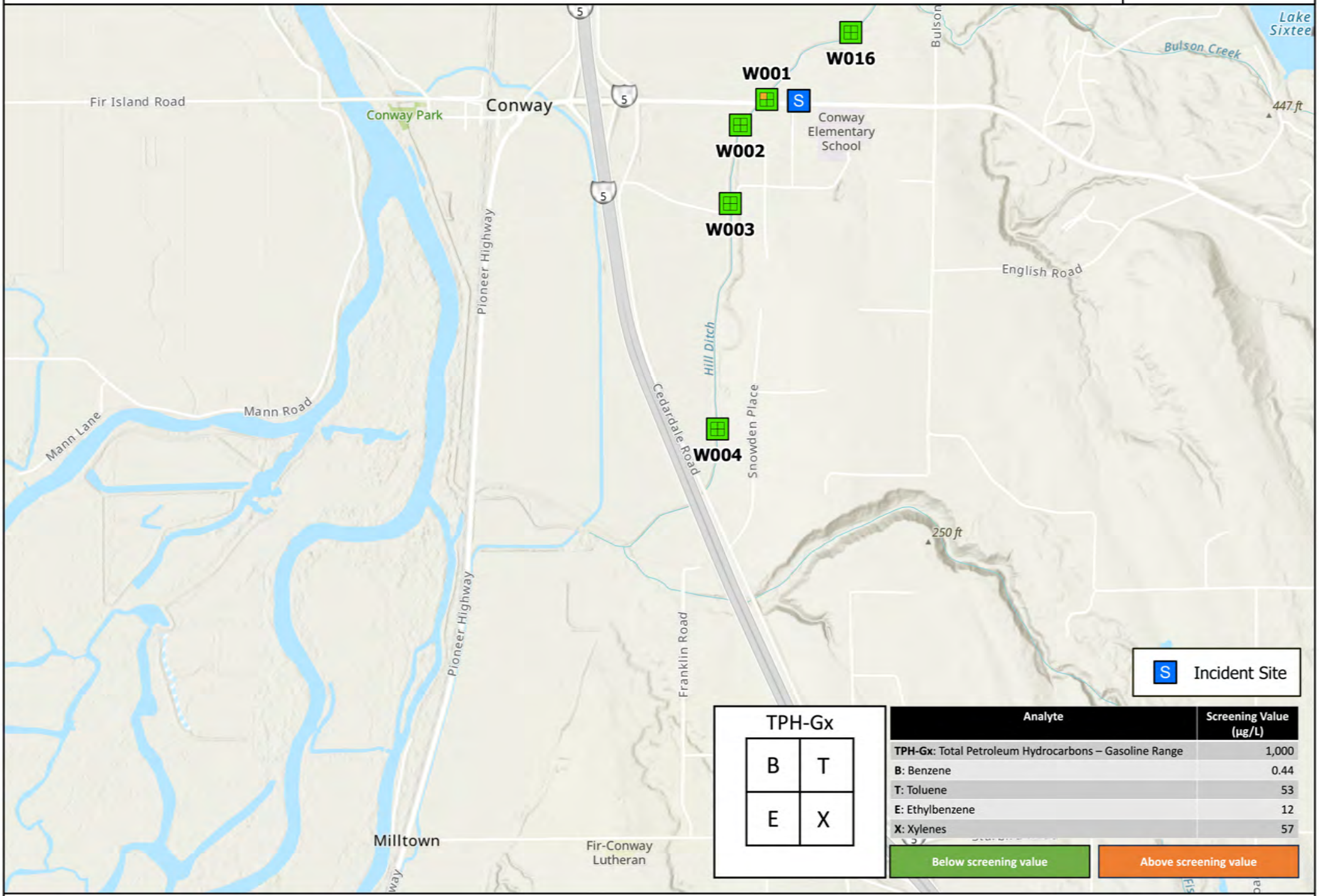
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill | February 15, 2024

0 0.25 0.5 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 2/22/2024 8:43 PM

CTEH®

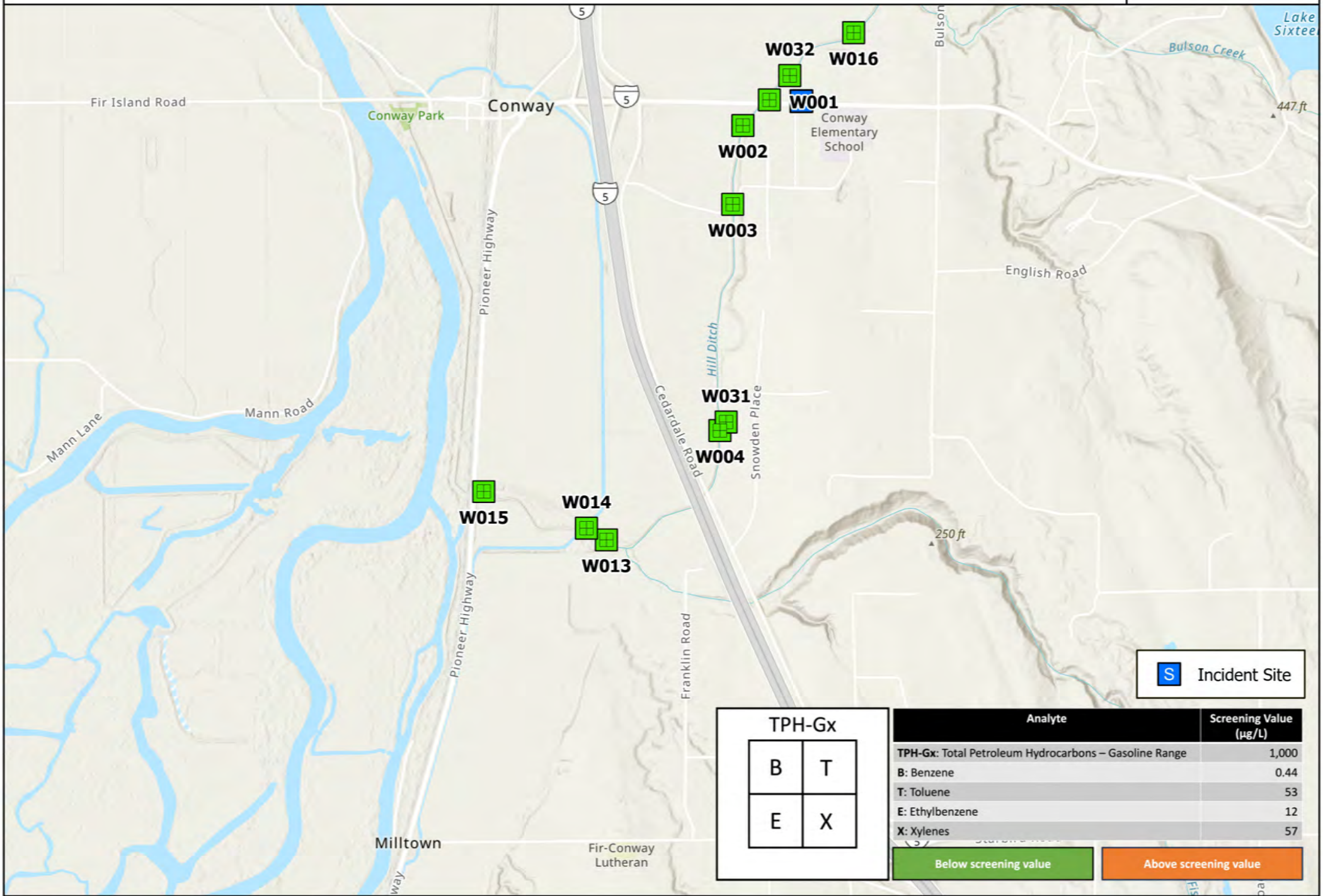
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill | February 19, 2024 to February 23, 2024

0 0.25 0.5 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 2/29/2024 5:50 PM

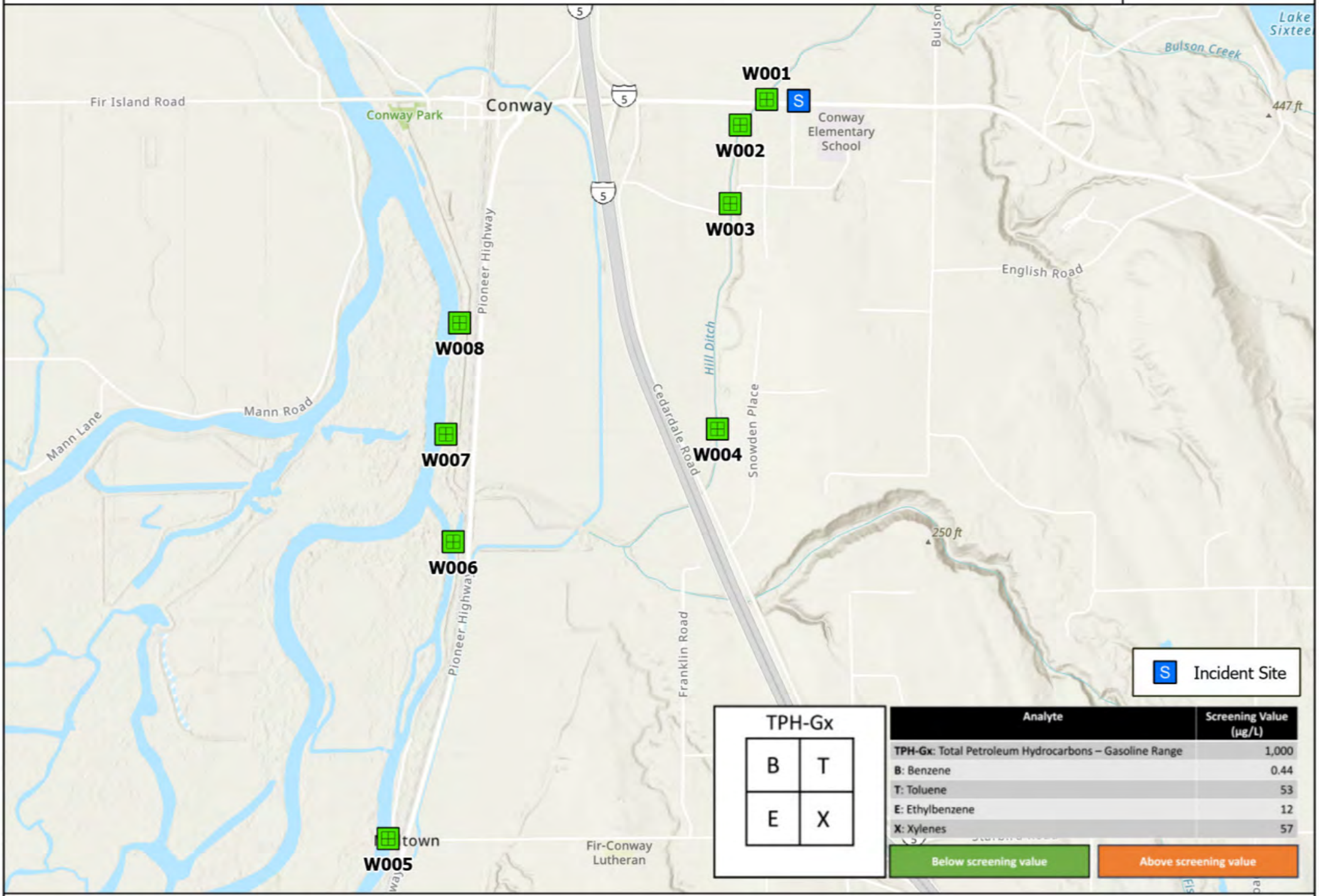
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill | February 24, 2024 to February 28, 2024

0 0.25 0.5 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



TPH-Gx

B	T
E	X

Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 3/8/2024 11:54 AM

CTEH®

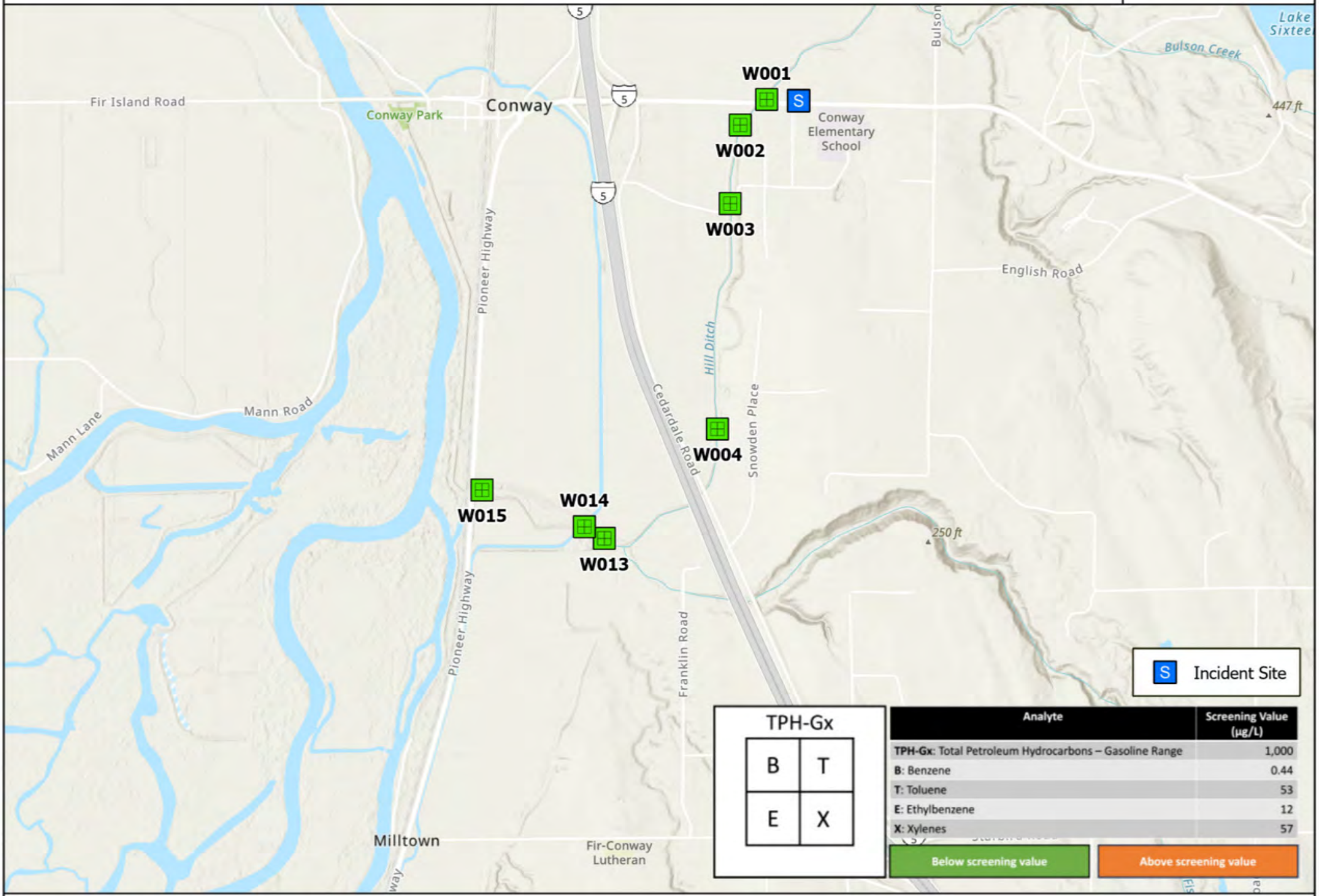
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill | February 29, 2024 to March 6, 2024

0 0.25 0.5 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 3/15/2024 1:28 PM

CTEH®

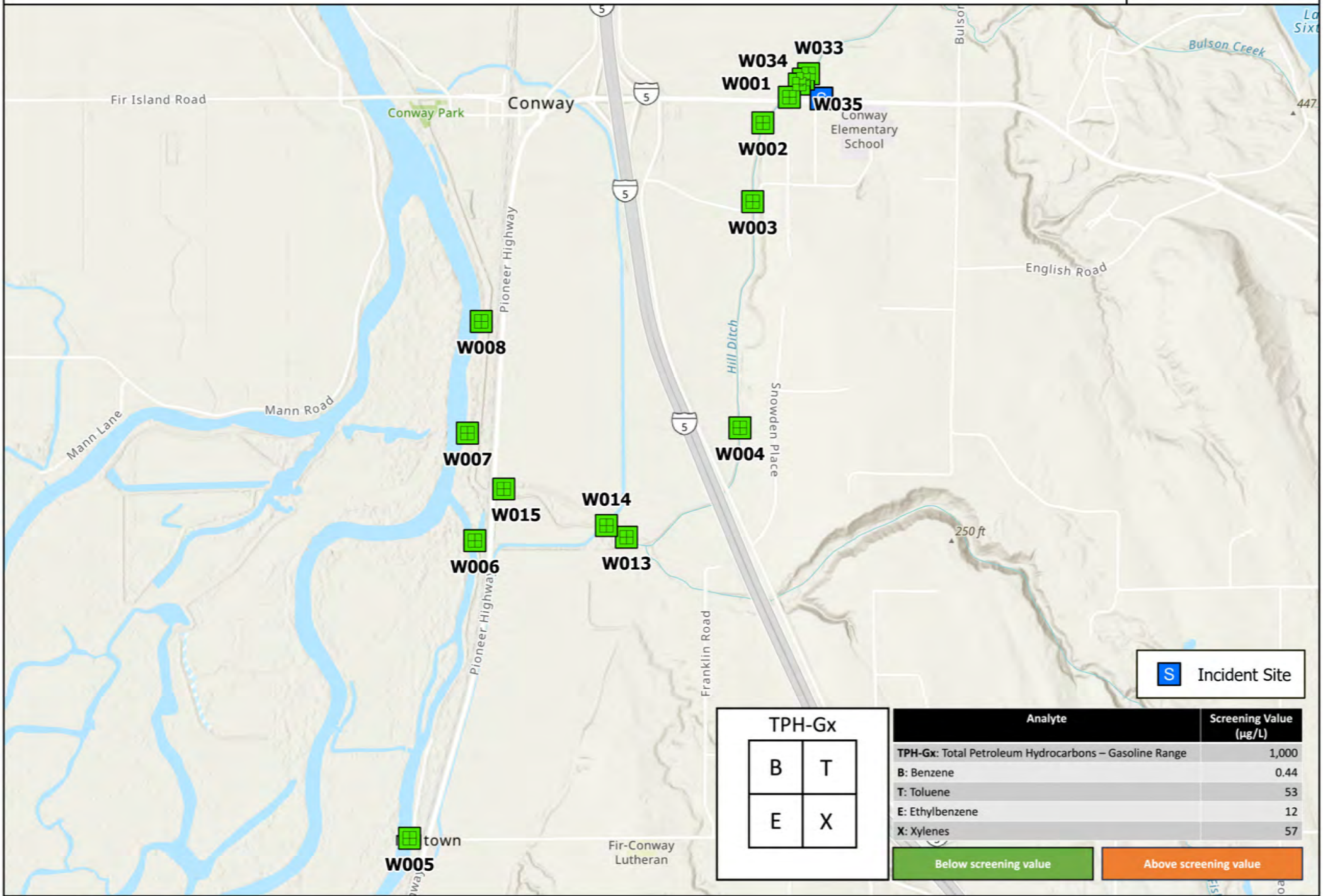
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill | March 7, 2024 to March 17, 2024

0 0.25 0.5 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 3/22/2024 11:40 AM

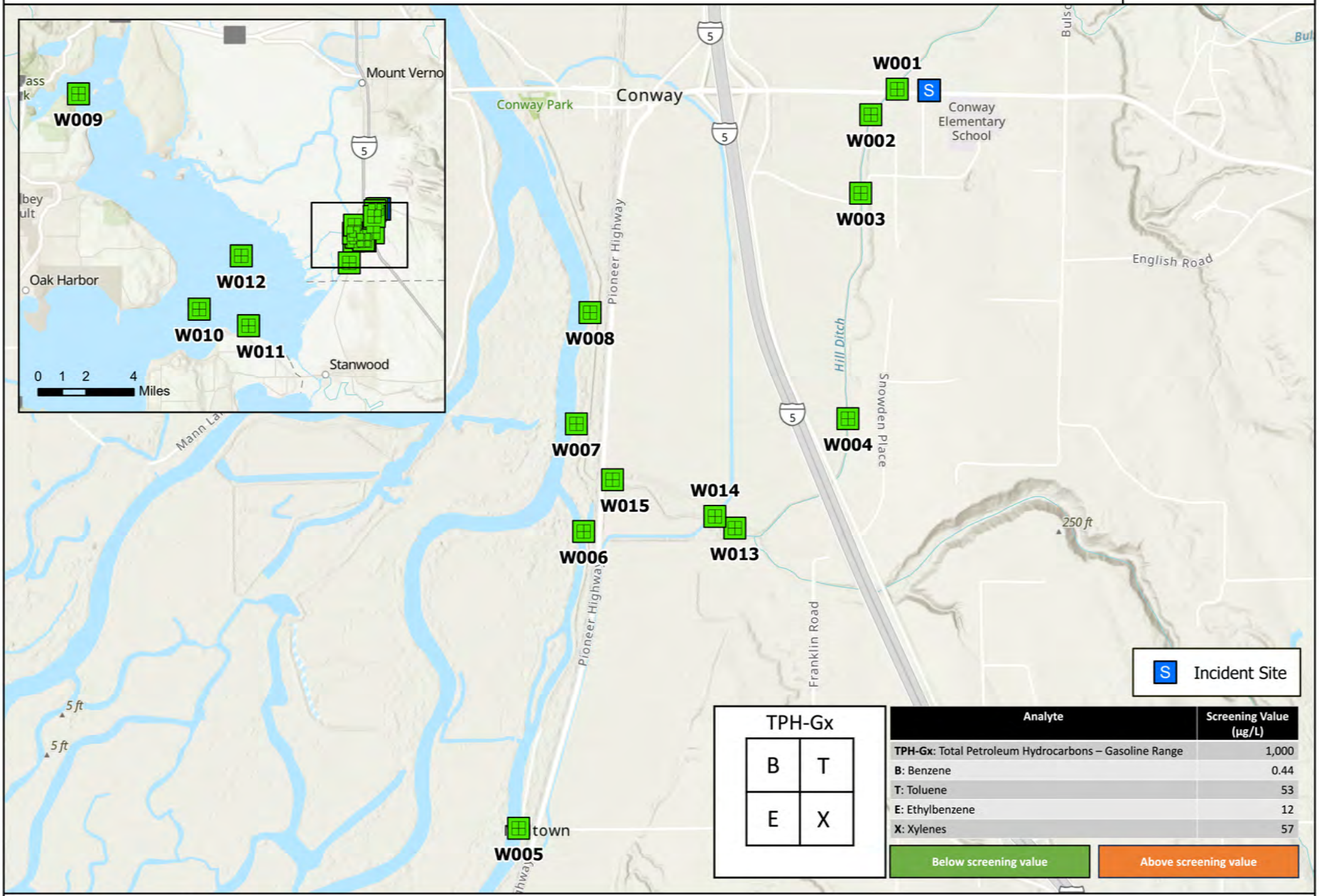
Surface Water Sampling Results

Olympic Pipeline Gasoline Spill - Conway, WA

0 0.25 0.5 Miles

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit



S Incident Site

TPH-Gx

B	T
E	X

Analyte	Screening Value (µg/L)
TPH-Gx: Total Petroleum Hydrocarbons – Gasoline Range	1,000
B: Benzene	0.44
T: Toluene	53
E: Ethylbenzene	12
X: Xylenes	57

Below screening value | Above screening value

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 6/14/2024 4:21 PM

Appendix C-1

Water Quality Monitoring Plan

Water Quality Monitoring Plan

Olympic Pipeline Gasoline Spill Response, Conway, Skagit County, Washington

for
Olympic Pipe Line Company LLC/
BP Terminals & Pipelines

February 3, 2024 (updated February 13, 2024)

GeoEngineers

17425 NE Union Hill Road, Suite 250
Redmond, Washington 98052
425.861.6000

Water Quality Monitoring Plan
Olympic Pipeline Gasoline Spill Response, Conway
Skagit County, Washington

File No. 0894-259-00

February 3, 2024 (updated February 13, 2024)

Prepared for:

Olympic Pipe Line Co. LLC/BP Terminals & Pipelines
600 SW 39th Street
Renton, Washington 98057

Attention: Paula Skryja

Prepared by:

GeoEngineers, Inc.
17425 NE Union Hill Road, Suite 250
Redmond, Washington 98052
425.861.6000

Lisa J. Bona, LG, CESCL
Associate

LJB:

Disclaimer: Any electronic form, facsimile or hard copy of the original document (email, text, table, and/or figure), if provided, and any attachments are only a copy of the original document. The original document is stored by GeoEngineers, Inc. and will serve as the official document of record.

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FIGURES

Figure 1. Water Quality Monitoring Plan During Work in Division A-3
Figure 2. Water Quality Monitoring Plan During Work in Division A-4

APPENDIX

Appendix A. Blank Water Quality Monitoring Form
Appendix B. Water Quality Monitoring Process Flowchart (updated February 13, 2024)

1.0 PURPOSE

This Water Quality Monitoring Plan (WQMP) is intended to describe and/or provide specific information on activities that will be performed within and/or over waters of the state, including wetlands for the Olympic Pipeline Gasoline Spill response. The spill site is located north of State Route 534 and east of and including Hill Ditch in Skagit County, Washington. This WQMP includes a monitoring schedule for tracking the performance of Best Management Practices (BMPs) used during in-water work within the response-established limits of the proposed excavation in the riparian zone at Division A-3, and – as a contingency - during activities in Division A-4 if they generate turbid stormwater runoff that cannot be managed using upland BMPs. Excavation will start in Division A-3 after a sheet pile cofferdam is installed 3 to 5 feet from and parallel to the shoreline within Hill Ditch over approximately 212 lineal feet. Wetland A is immediately adjacent to and east of Hill Ditch and will be removed/impacted during the response activities in Division A-3 and could be disturbed during activities in Division A-4. A mitigation/restoration plan for Wetland A will be provided as a separate document and prepared by WSP, a consultant/contractor for BP Remediation Management. This separate document also will show the extent of Wetland A in both divisions.

This WQMP is being prepared to share with representatives of the U.S. Army Corps of Engineers (USACE), U.S. Fish and Wildlife Service (USFWS) via the USACE, the U.S. Environmental Protection Agency, Washington State Department of Ecology (Ecology), and Washington State Department of Fish and Wildlife (WDFW). We understand that these agencies, or the Response Unified Command, may share this plan with others.

2.0 OBJECTIVES

This WQMP will:

- Document the performance of BMPs and construction procedures used within and over waters of the state, including wetlands, we are working in.
- Determine if Water Quality Standards are being met at the point of compliance.

Prior to excavation at Division A-3, upland excavation will remove gasoline-impacted soil from upland Division A-2 in the area of the crane pad. The Temporary Erosion and Sedimentation Control (TESC) BMPs to protect Wetland A until excavation of Division A-3 are included in the response's Construction Stormwater Pollution Prevention Plan.

Before the sheet pile cofferdam - and after fish exclusion nets - are installed, a turbidity curtain system will be installed per this Water Quality Monitoring Plan.

The monitoring plan during sheet pile cofferdam installation, while the cofferdam is in place, and during removal of the cofferdam is attached as Figure 1. Prior to removal of the cofferdam, the turbidity curtain system will be temporarily disconnected from the bank attachments and moved to the opposite bank while the area is cleared of fish and until the fish exclusion screens are reinstalled. Additional details on fish exclusion activities are available in the Fish Exclusion Plan.

After the sheet pile cofferdam is removed, the turbidity curtain system may be moved downstream of Division A-4 if field activities warrant protection of the ditch from stormwater runoff during ground disturbance in Division A-4. The configuration could consist of just two turbidity curtains instead of four or, if needed, the full four-curtain system. If used, this turbidity curtain system will be removed once Division A-4 is stabilized. The monitoring plan during turbidity curtain system installation, during work in Division A-4 and when the turbidity curtain system is removed is attached as Figure 2.

The following BMPs will be used to prevent and/or limit discharges of pollutants to waters of the state that may result while working below the ordinary high water mark (OHWM) of the ditch:

- Oil-absorbent booms and a free product recovery skimmer system to collect floating gasoline that is in the waterway because of the December 10, 2023 gasoline discharge will continue to be deployed/operated downstream of the work area through the Division A-3 activities.

- A turbidity curtain system will be deployed by Clean Harbors, as shown on, and described in Figure 1. The turbidity curtain system will consist of three or four turbidity (silt) curtains placed in an alternating, stair step configuration. The upstream turbidity curtain will be installed on the east side of the ditch downstream of the sheet pile cofferdam, approximately 300 feet north of the SR 534 bridge. Installation will occur from the shoreline. The 5- to 10-foot-high turbidity curtains (depending on water depth at the time of use) will be anchored with T-Posts on either shore and weighted with chain at the bottom. The turbidity curtain system will be installed either perpendicular or in a cascading deflection to flow, as appropriate. Installation distance between turbidity curtains will be partially dependent on angle of installation and flow of water in the ditch during installation. The anchoring technique may be adjusted during installation depending on field conditions.

  When the turbidity curtain system is placed within the fish exclusion zone, as during cofferdam installation and removal (see the Fish Exclusion Plan), each boom may be stretched across the entire channel. However, when the turbidity curtain system is used without the presence of the fish exclusion zone, such as between cofferdam installation and removal and during Division A-4 field activities (if the turbidity curtain system is used then), the booms will extend past the center of the channel, but not to the opposite bank, to allow for fish passage. Since boom lengths will be 50 feet long, excess material not required to span the channel will be dragged onto the shore to prevent the booms from forming a "J" that could trap fish.

- There may be some turbid water trapped in the water column between the turbidity curtain booms when the turbidity curtain system is to be removed. The system will be removed starting at the upstream end and working downstream. The downstream boom and turbidity curtain will be removed slowly. Turbidity will be monitored as described in this plan as the turbidity curtain system is removed.

3.0 MONITORING

3.1. Monitoring Contacts

The Olympic Pipe Line Environmental Coordinator or delegate will be responsible for providing stakeholder agencies, including Ecology, with the necessary notifications. Qualified staff will conduct the water quality monitoring and/or sampling during in-water operational activities. See preliminary contact information in Table 1.

TABLE 1. PROJECT CONTACTS

Role	Responsibilities	Contacts
Owner Contact Project Owner	Emergency contact	Paula Skryja, Olympic 425.469.4043 paula.skryja@bp.com
Water Quality Monitoring Personnel	Contact in case of failure of Erosion and Sediment Control (ESC) measures for recommendation of additional BMPs Water quality monitoring during installation and removal of the turbidity curtain system and installation and removal of the sheet pile cofferdam	Supervisor Lisa Bona, GeoEngineers Associate Geologist, CESCL 425.466.5435 lbona@geoengineers.com Supervisor Lisa Howes, CTEH 501.271.1150 lhowes@cteh.com Craig Besel, Clean Harbors 907.953.6876 besel.craig@cleanharbors.com
Contractor BMP implementation and management	Construction Superintendent will be responsible for BMP implementation and management	David Walker, Hanging H Companies 360.661.3535 djwalker@hanginghco.com
Agencies to Notify for a Non-compliance Event Related to Turbidity		
USACE/USFWS	Project manager for the USACE emergency permit issuance and communication lead with USFWS and NOAA Fisheries	Kristin Murray 360.979.3698 Kristin.M.Murray@usace.army.mil Reference NWS-2023-953
Ecology 401 Federal Permit Unit	Ecology contact in case of noncompliant event for turbidity (within 24 hours)	Loree' Randall 360.485.2796 lora461@ecy.wa.gov and ecyrefedpermits@ecy.wa.gov Reference Aquatics ID No. 143375
WDFW	Area Habitat Biologist and responsible for issuing the project's Hydraulic Project Approval	Alexander Richard 360.791.3517 Alexander.Richard@dfw.wa.gov Reference App. ID No. 33719

Agencies to Notify for a Non-compliance Event Related to Contaminated Liquids or Product		
ERTS Reporting (Ecology Northwest Region Office)	Reporting center to be contacted if contaminated liquids or product enter surface waters from the project *not* related to the December 10, 2023 gasoline discharge	Environmental Report Tracking System (ERTS): 206.594.0000
National Response Center (NRC)	Reporting center to be contacted if contaminated liquids or product enter surface waters *not* related to the December 10, 2023 gasoline discharge	NRC 1.800.424.8802

3.2. Monitoring Parameters

Physical (i.e., using a turbidimeter) turbidity monitoring is proposed for this response. More frequent monitoring will be completed during the initial and final short-term activities of the response that may provide the highest risk of discharging sediment into the ditch downstream of the work area, including the installation and removal of the turbidity curtain system and sheet pile cofferdam. Once the sheet pile cofferdam is in place, physical monitoring will continue until it can be demonstrated that turbidity is not exceeding the water quality standard at the downstream compliance point. The water quality standards include the following:

* The measured turbidity at the compliance point shall remain less than [<] 5 nephelometric turbidity units (NTUs) over background if background is less than or equal [≤] 50 NTUs, **or**

* The measured turbidity at the compliance point shall remain ≤ 10 percent increase if background is greater than [>] 50 NTUs (Washington Administrative Code [WAC] 173-201A-200 Table 200(1)(e)).

If compliance with the water quality standards is met after the short-term higher-risk activities described in Table 2, physical turbidity monitoring is proposed daily except when monitoring frequency may be increased as described in Table 2.

Visual monitoring for presence of an oily sheen will be noted throughout the duration of the project and throughout the project area and downstream at the compliance point. However, unless the sheen represents a new release from the construction activities, it will not be reported to agencies. Ecology, the U.S. Environmental Protection Agency and WDFW already are involved with emergency response of the initial gasoline discharge that continues to contribute a sheen to the waterway at the spill site. If an oily sheen is observed in the ditch within the dewatered bed inside the cofferdam that is related to construction, the source of sheen shall be corrected, and appropriate remedial measures implemented, prior to removing the sheet pile cofferdam. Paula Skryja, Olympic, will be notified immediately regarding any new releases of petroleum products to Hill Ditch and will conduct reporting as required by regulations and this plan.

3.3. Monitoring Schedule

The following table outlines the monitoring parameters and schedule for all in-water work activities within Hill Ditch and the process is shown in a flowchart format as Appendix B. The background monitoring point location MP-1 will be upstream of the work area and will be selected for accessibility (the location shown on Figure 1 and contingency plan Figure 2 may be adapted in the field based on safety considerations).

Monitoring point MP-2 is a location that is readily accessible downstream of the turbidity curtain system to be employed in Hill Ditch (Figure 1 and contingency plan Figure 2).

TABLE 2. MONITORING SCHEDULE

In-water Activity	Monitoring Point Location	Frequency	Parameter	Water Quality (WQ) Standard
Short-term higher-risk activities: installation and removal of the turbidity curtain system and sheet pile cofferdam ***Contingency for upland work:*** Activities in Division A-4 if upland BMPs are not sufficient to protect Hill Ditch from turbid stormwater runoff	MP-1: Upstream of the work area to obtain background value MP-2: approximately 50 feet downstream of turbidity curtain system. If the WQ standard is exceeded at MP-2, move to: 1) CP-1 (if flow is ≤10 cfs [cubic feet per second]) **or** 2) CP-2 (if flow is >10 but <100 cfs) for monitoring* **or** 3) CP-3 (if flow is >10 but <100 cfs and if CP-2 is downstream of discharge from Carpenter Creek	**During active work:** Physical monitoring for a minimum of **2 days** or until no exceedance observed, recorded every 2 hours starting within 30 minutes of activity starting, through activity completion If there are not exceedances, monitoring frequency can be decreased to every 4 hours **Post Activity:** Monitoring frequency changes to daily Continues until the next short-term higher-risk activity starts or until Divisions A-2 and A-3 are stabilized. Physical monitoring will be recorded daily during Division A-4 activities Monitoring frequency may be increased to every 4 hours during active work if high wind or heavy rain, or if visual turbid plumes are observed at the shoreline of Division A-4 between the daily physical monitoring events	Turbidity	For CP-1 or CP-2, turbidity shall be no more than 5 NTUs over background if background ≤ 50 NTUs **or** ≤ 10 percent increase if background is > 50 NTUs If physical monitoring is warranted during Division A-4 work to supplement that required in the NPDES Construction Stormwater General Permit (CSWGP), then MP-2, CP-1/CP-2 will be reestablished as shown in Figure 2. This monitoring data would be obtained to help assess the effectiveness of the turbidity curtain system if used as a contingency for work in A-4.

	Anywhere on the project within waters of the state, including within the channel with no flowing water and downstream of the work area	Continuous, Recorded Every 4 hours during active work	Oil and Grease	No visible sheen resulting from construction activities (note: there may be a visible sheen from the initial gasoline release)

* As of February 9, CP-2 was replaced by CP-3 because of the location of the confluence with the more turbid Carpenter Creek relative to the downstream turbidity curtain If/when the point of compliance is adjusted to match field conditions, monitoring at CP-2 may be re-established and replace monitoring at CP-3.

3.4. Monitoring Duration

Physical monitoring will be completed every 2 hours during active work, starting within 30 minutes of the installation **o**r removal of the turbidity curtain system **or** the sheet pile cofferdam. This frequency may decrease to every 4 hours if no exceedances are identified for at least 2 days or after monitoring results indicate no increase of turbidity above the water quality standard at MP-2. However, if an exceedance is observed at the downstream monitoring point (MP-2), the physical monitoring point will be moved to either CP-1 or CP-2, depending on the water flow rate within the ditch, and at the same frequency as was monitored at MP-2. CP-3 was added on February 9 and replaces CP-2 when flow rates are >10 and <100 cfs because CP-2 was just downstream of and influenced by somewhat higher turbidity in discharge from Carpenter Creek at the confluence with Hill Ditch. Monitoring may be moved back to MP-2 if the water quality standard is achieved there after the exceedance.

After removal of the turbidity curtain system, monitoring may stop after a minimum of 2 days of 4-hour monitoring events during active work if no exceedances are identified.

During Division A-4 operational activities, if upland BMPs are not sufficient to protect Hill Ditch from turbid stormwater runoff, the turbidity curtain system will be reinstalled at the downstream end of the Division A-4 work area and physical monitoring in Hill Ditch will provide supplemental data to help assess the effectiveness of the turbidity curtain system. This monitoring will not replace the required monitoring for upland stormwater discharges per the NPDES CSWGP. Physical monitoring will be recorded daily; however, monitoring frequency may be increased to every 4 hours during active work in Division A-4 in the event of high wind or heavy rain, or if visual turbid plumes are observed at the shoreline of Division A-4.

Recording will be conducted as described in Table 2. *A visible turbid plume at the compliance point* (Section 3.5 Contingency Monitoring) is a violation of 90.48 Revised Code of Washington (RCW) *and will be addressed by slowing or stopping the work and/or repairing or adding additional BMPs until a visible plume is not observed and water quality is measured to compliant* with water quality standards. Paula Skryja, Olympic, will be notified immediately of non-compliant events and report to the Ecology Federal Permit Unit within 24 hours of the event.

Visual monitoring for a sheen, indicating the presence of oil and grease spilled or released from work equipment, will be conducted during all work conducted within waters of the state, including within the cofferdam in Hill Ditch, and at MP-2. A visible sheen observed anywhere on the site within waters of the state will be addressed as described in Section 3.2 Monitoring Parameters.

3.5. Contingency Monitoring

Consistent with WAC 173-201A-200(1)(e)(i), the turbidity criteria shall be modified, without specific written authorization from the department, to allow a temporary area of mixing during and immediately after necessary in-water construction activities that result in the disturbance of in-place sediment. This zone of mixing does not apply to work in Division A-4 for upland stormwater discharges to Hill Ditch. Further, the temporary area of mixing is subject to the constraints of WAC 173-201A-400 (4) and (6) and can occur only after the activity has received all other necessary local and state permits and approvals, and after the implementation of appropriate BMPs to avoid or minimize disturbance of in-place sediments and exceedances of the turbidity criteria. The temporary area of mixing for turbidity is as follows:

When flow rates are less than 10 cfs, the point of compliance (CP-1) should be 100 feet downstream of the activity that could cause a turbidity exceedance and will be set at 100 feet downstream of the turbidity curtain system for this response. However, the point of compliance will be adjusted if flows are higher during the period of work. The point of compliance (CP-2) for flows greater than 10 cfs was selected at 200 feet downstream of the activity causing the turbidity exceedance (i.e., turbidity curtain system). However, CP-2 was abandoned and CP-3 was installed 155 feet downstream of the turbidity curtain system to prevent influence from more turbid discharge from Carpenter Creek. If maintenance of the fish exclusion screens contributes turbidity and is determined to be an in-water work activity requiring a point of compliance, then CP-1 and CP-2 will be adjusted downstream of the downstream fish exclusion screen. If this is implemented, CP-3 will no longer be monitored. These points of compliance (CP-1, CP-2 and CP-2) for the project are shown in Figure 1 (and CP-1 and CP-2 in Figure 2 if the contingency plan for operational activities in Division A-4 is implemented). **If physical results for turbidity confirm that the water quality standard is being exceeded at MP-2, then Paula Skryja, Olympic, will be notified. Ms. Skryja will discuss the exceedance with the Operations Section Chief and Environmental Unit Leader, who may modify the activity causing the problem.**

In the event of an exceedance, the water quality monitoring personnel (CTEH) will physically monitor/document the results on an hourly basis for observations at MP-1 and CP-1 or CP-2/CP-3 (as applicable) until the water quality standards are met at the applicable point of compliance.

As there is no allowed area of mixing for oil and grease, there is no applicable contingency monitoring for a visible sheen.

TABLE 3. CONTINGENCY MONITORING

Parameter	Contingency Sampling Location	Contingency Documentation Frequency	Water Quality Standard
Turbidity	Point of Compliance (CP-1 or CP-2/CP-3 (as applicable)	Hourly until the water quality standard achieved	5 NTUs over background if background ≤ 50 NTUs **or** 10 percent increase if background is > 50 NTUs

Once visual compliance of turbidity with the water quality standard is achieved, the project shall return to the standard monitoring schedule outlined in Table 2.

4.0 NON-COMPLIANCE

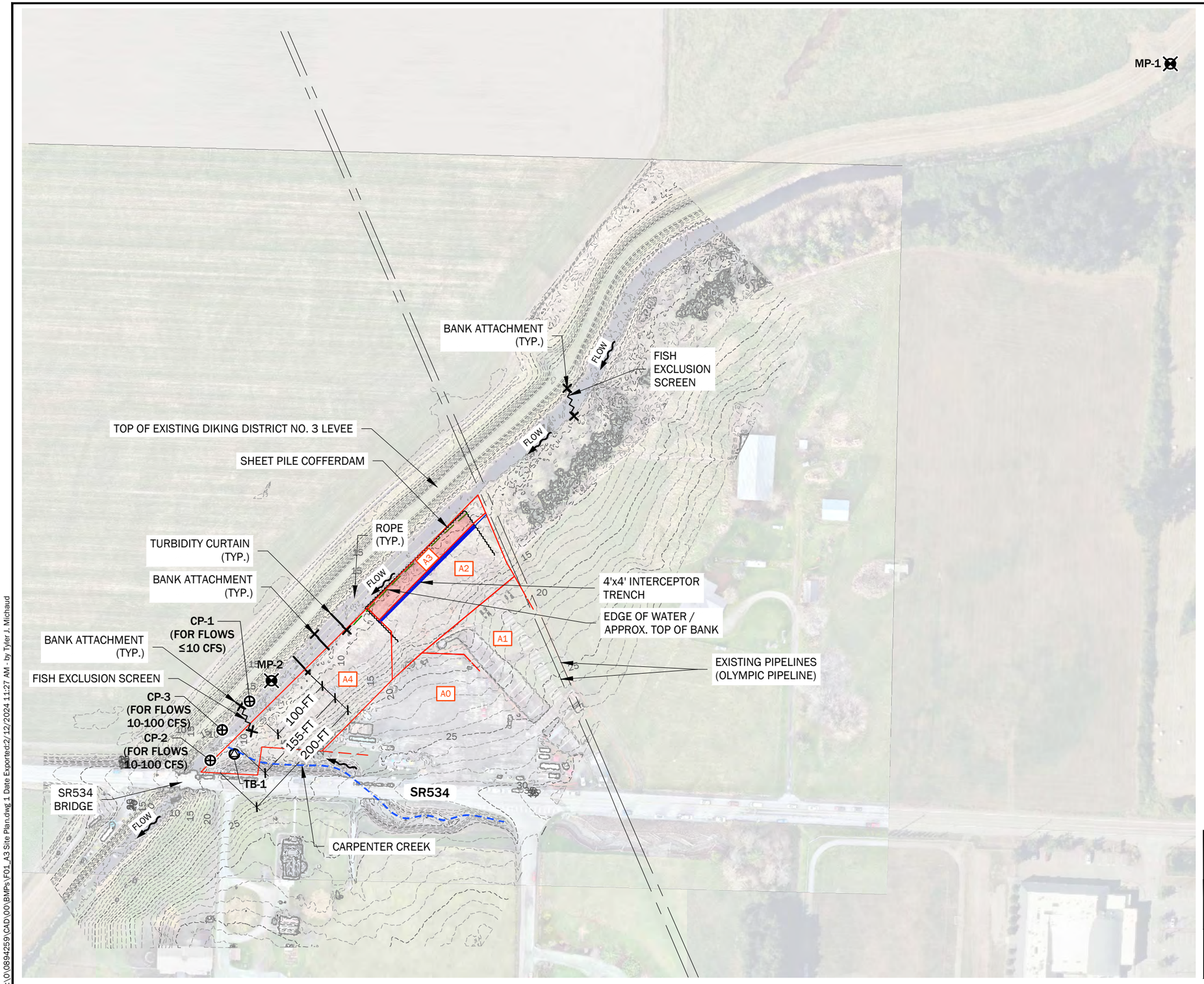
If the water quality standard for turbidity is exceeded at CP-1 or CP-2, the actions described in Sections 3.4 and 3.5 will be initiated, and reporting will be required (Section 5.0 Reporting).

If a visible sheen is observed anywhere on the site within waters of the state that is not attributable to the December 10, 2023 gasoline discharge, including within the channel with no flowing water, it needs to be noted, cleaned up and sources investigated and addressed. Paula Skryja, Olympic, will be notified immediately regarding any new releases of petroleum products to Hill Ditch and will conduct reporting as required by regulations and this plan.

5.0 REPORTING

All water quality monitoring results will be recorded on the monitoring form attached (Appendix A, Blank Water Quality Monitoring Form).

If an exceedance of turbidity relative to the water quality standard is recorded at CP-1 or CP-2/CP-3 (as applicable), notification by Paula Skryja shall be made within 24 hours to the agencies listed in Table 1. Immediate reporting of visible sheen if it is not attributed to the December 10, 2023 gasoline discharge will be completed if visible sheen is observed in flowing waters.



Legend

- Turbidity Curtain
- Fish Exclusion Screens
- MP-1 — Monitoring Location
- CP-1 — Compliance Location
- TB-1 — Tributary Monitoring Location

Source(s):
- Aerial photo by BP, dated 12/28/2023
- LIDAR data provided by BP, dated 12/30/2023

Projection: WA State Plane, N Zone, NAD83, US Foot

Disclaimer: This figure was created for a specific purpose and project. Any use of this figure for any other project or purpose shall be at the user's sole risk and without liability to GeoEngineers. The locations of features shown may be approximate. GeoEngineers makes no warranty or representation as to the accuracy, completeness, or suitability of the figure, or data contained therein. The file containing this figure is a copy of a master document, the original of which is retained by GeoEngineers and is the official document of record.

N

0 150
Feet

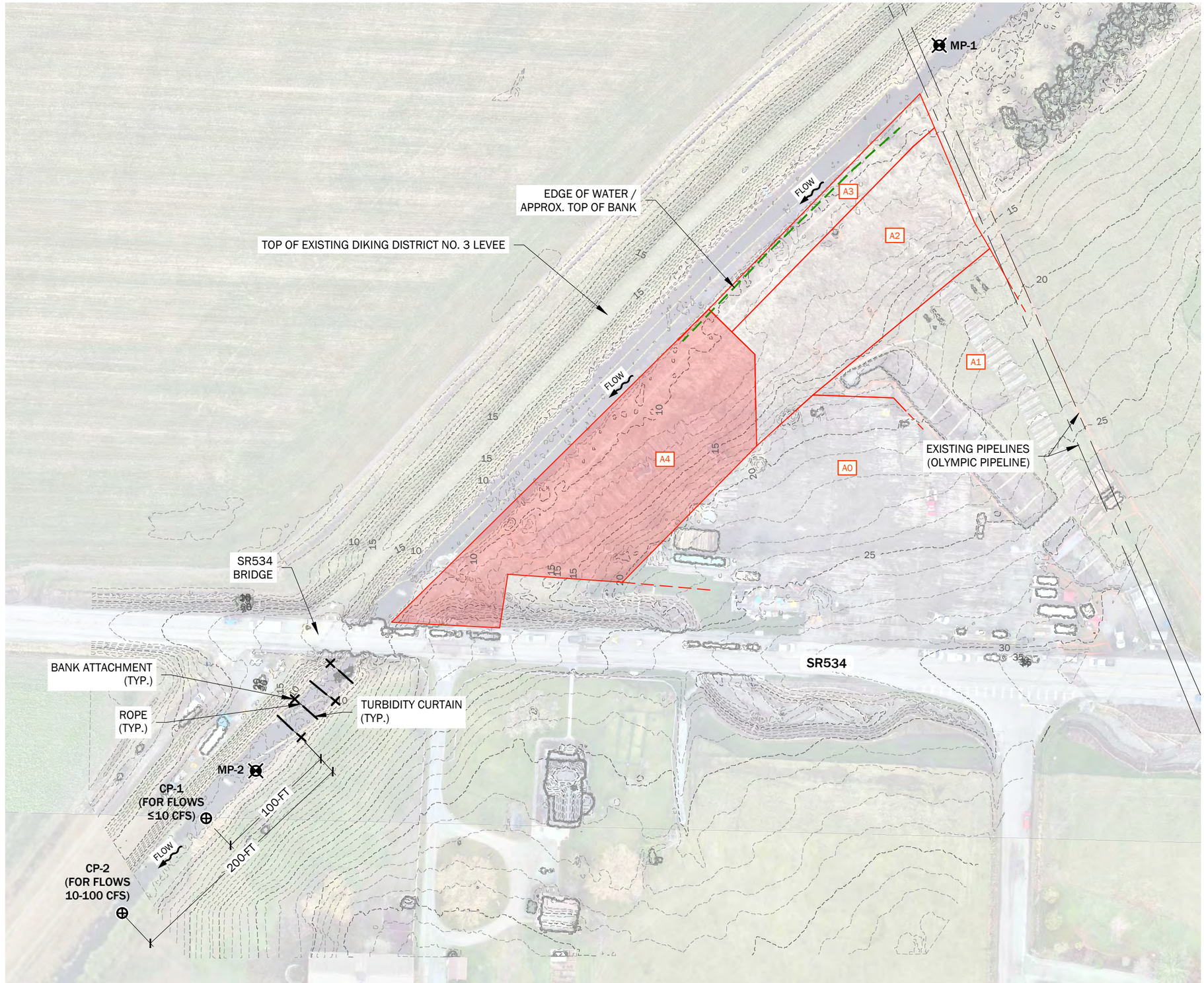
Water Quality Monitoring Plan During Work in Zone A-3

Olympic Pipeline Gasoline Spill Response, Conway
Skagit County, Washington

GeoEngineers

Figure 1

P:\0\0894259\CAD\00\BMPs\F01_A3 Site Plan.dwg 1 Date Exported:2/12/2024 11:27 AM - by Tyler J. Michaud



Legend

- Turbidity Curtain
- MP-1 Monitoring Location
- CP-1 Compliance Location

Note(s):

Source(s):

- Aerial photo by BP, dated 12/28/2023
- LIDAR data provided by BP, dated 12/30/2023

Projection: WA State Plane, N Zone, NAD83, US Foot

Disclaimer: This figure was created for a specific purpose and project. Any use of this figure for any other project or purpose shall be at the user's sole risk and without liability to GeoEngineers. The locations of features shown may be approximate. GeoEngineers makes no warranty or representation as to the accuracy, completeness, or suitability of the figure, or data contained therein. The file containing this figure is a copy of a master document, the original of which is retained by GeoEngineers and is the official document of record.

N

0 80

Feet

Water Quality Monitoring Plan During Work in Zone A-4

Olympic Pipeline Gasoline Spill Response, Conway
Skagit County, Washington

GeoEngineers

Figure 2

P:\0\0894259\CAD\00\BMPs\F02_A4 Site Plan.dwg 1 Date Exported:1/29/2024 2:53 PM - by Tyler J. Michaud

APPENDIX A
Blank Water Quality Monitoring Form

WATER QUALITY MONITORING FORM
In-Water Work Monitoring
Olympic Pipeline Gasoline Spill Response, Conway
Skagit County, Washington

WQ Monitoring Personnel _____
Waterbody: Hill Ditch

Activity: (circle active work activity/activities)

- Turbidity Curtain System Installation for Cofferdam Installation
- Perimeter Best Management Practice (BMP) Installation – Sheet Pile Cofferdam
- Between Cofferdam Installation and Removal
- Perimeter Best Management Practice (BMP) Removal – Sheet Pile Cofferdam
- Turbidity Curtain System Removal after Cofferdam Removal
- Turbidity Curtain Installation for Work in Zone A-4
- Work in Zone A-4 until Stabilized
- Turbidity Curtain Removal after Stabilization in Zone A-4

Sample Locations Include (at a minimum):

Monitoring Point Name	Monitoring Point Objective
MP-1	Upstream (Background) Ditch Monitoring Point
MP-2	Downstream Ditch Monitoring Point
CP-1	Compliance Monitoring Point in ditch for flows ≤10 cubic feet per second (cfs)
CP-2	Compliance Monitoring Point in ditch for flows >10 but <100 cfs
CP-3	Compliance Monitoring Point in ditch for flows >10 but <100 cfs and if CP-2 is downstream of discharge from Carpenter Creek
Notes: **Water quality standard (turbidity) for Hill Ditch: Turbidity must not exceed 5 nephelometric turbidity units (NTUs) over background when the background is 50 NTUs or less; or no more than a 10 percent increase in turbidity when the background turbidity is greater than 50 NTUs.** **Approximate monitoring locations are shown on Figure 1, Monitoring Plan. See Table 1 of the Water Quality Monitoring Plan for the applicable monitoring frequency and water quality standard for each monitoring point.**	

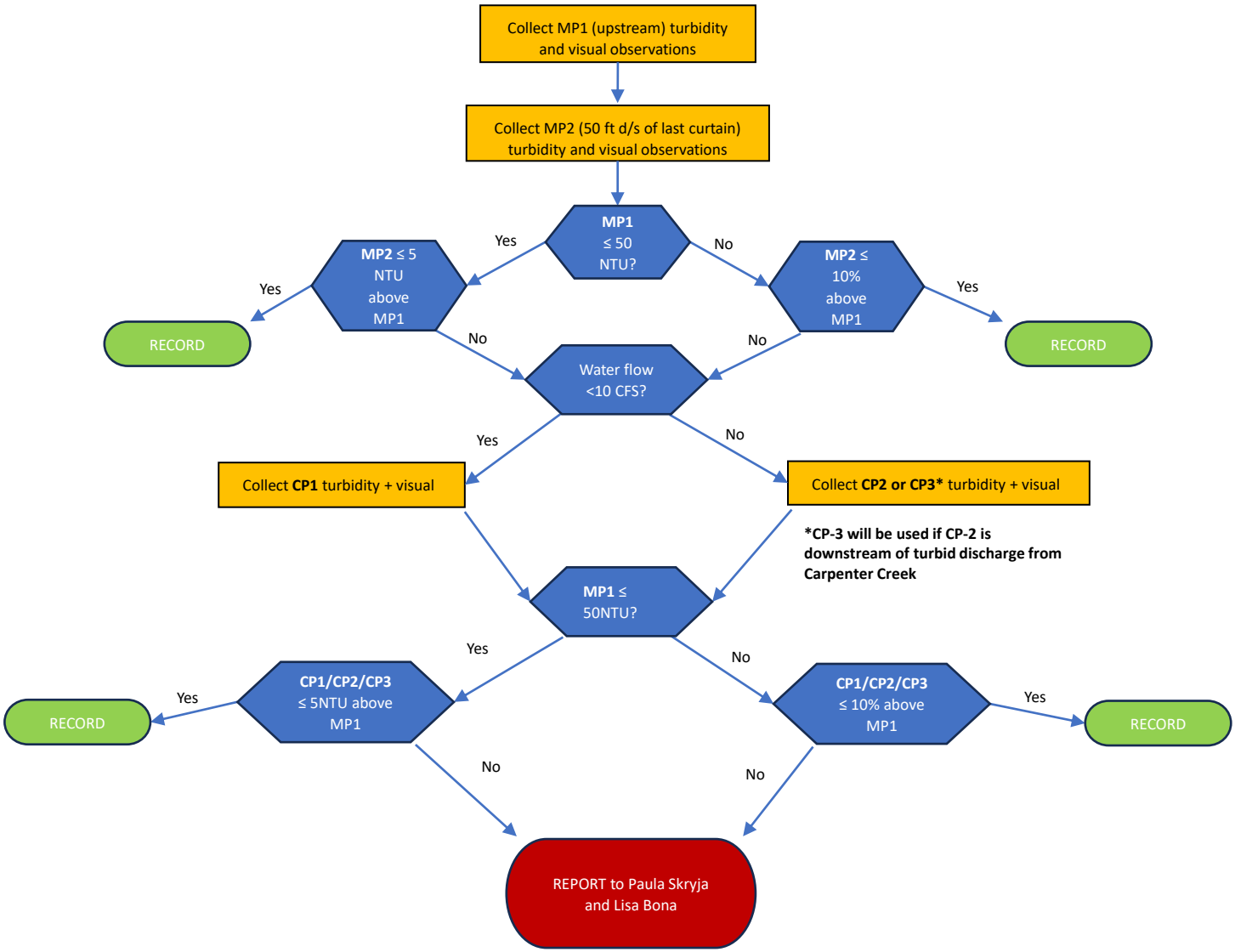
Project Name **Olympic Pipeline Gasoline Spill Response, Conway** Date

Monitoring Point	Date	Time	Hill Ditch Flow Rate (cfs)	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, relevant high-risk activities for turbidity, other observations of waterbody, etc.)

Notes:

APPENDIX B
Water Quality Monitoring Process Flowchart

Olympic Pipeline Spill, Conway, WA
Water Quality (turbidity) Monitoring process per WAC-173-201A-200



During activity: Every 2 hours starting within 30 minutes of activity starting and throughout activity and only during actual work. After 2 days of compliance, decrease to every 4 hours.
Post Activity: Every 4 hours for 2 days or until no exceedance observed, then daily until the next short-term higher-risk activity starts or until Divisions A-2 and A-3 are stabilized.

As of February 9, CP-2 was replaced by CP-3 because of the location of the confluence with the more turbid Carpenter Creek relative to the downstream turbidity curtain If/when the point of compliance is adjusted to match field conditions, monitoring at CP-2 may be re-established and replace monitoring at CP-3.

Olympic Pipeline Spill, Conway, WA
Water Quality (turbidity) Monitoring process per WAC-173-201A-200:

Example 1:

- MP1 = 10 NTU (i.e., ≤50 NTU) so MP2 must be ≤10 + 5 ≤ 15 NTU
- MP2 = 13 NTU
- **ACTION:** Record

Example 2:

- MP1 = 10 NTU (i.e., ≤50 NTU) so MP2 must be ≤10 + 5 ≤ 15 NTU
- MP2 = 16 NTU
- **ACTION:** get flow
- Flow is 5 cfs (i.e., <10)
- **ACTION:** Collect turbidity data at CP1
- CP1 = 14 (i.e. < 15NTU)
- **ACTION:** Record

Example 3:

- MP1 = 55 NTU (i.e., ≥ 50 NTU) so MP2 must be ≤10% above 55 ≤ 60.5 NTU
- MP2 = 72 NTU
- **ACTION:** get flow
- Flow is 12 cfs (i.e. >10)
- **ACTION:** Collect turbidity data at CP2 or CP3
    - CP3 will be used if CP2 is downstream of turbid discharge from Carpenter Creek
- CP2 or CP3 = 63 (i.e. > 60.5 NTU)
- **ACTION:** REPORT to Lisa Howes (CTEH env lead), who reports to Paula Skryja (BP permit lead) and Lisa Bona (GeoEngineers)

Appendix C-2

Turbidity Monitoring Locations Map

CTEH® WQMP Turbidity Monitoring Locations

Olympic Pipeline Gasoline Spill

0 100 200 400 Feet

N

Project: PROJ-032692
Client: BP
City: Mt. Vernon, WA
County: Skagit

MP-1

Hill Ditch

Div A-3

Div A-2

Div B

Div A-1

Div A-0

Div A-4

S

State Route 534

State Route 534

Div C

S Incident Site

Turbidity Monitoring Location

Operational Division

Projection: NAD 1983 2011 UTM Zone 10N Datum: NAD 1983 2011

Updated At: 6/21/2024 2:38 PM

Appendix C-3

Turbidity Monitoring Field Forms

Turbidity Crosstab

Reading Date	Location Description	Turbidity (NTU)
2/6/2024 8:45:00 AM	0.2 miles N of Hwy 5..	3.94
2/6/2024 9:40:00 AM	Approximately 20 ya..	3.81
2/6/2024 1:20:00 PM	0.2 miles N of Hwy 5..	4.67
2/6/2024 1:30:00 PM	Approximately 20 ya..	8.61
2/6/2024 3:25:00 PM	0.2 miles N of Hwy 5..	4.3
2/6/2024 3:40:00 PM	Approximately 20 ya..	14.6
2/6/2024 4:17:31 PM	MP-2	12.1
2/6/2024 4:35:26 PM	CP-2	10.6
2/6/2024 4:45:11 PM	0.2 miles N of Hwy 5..	4.05
2/7/2024 8:48:59 AM	CP2	4.7
2/7/2024 9:09:33 AM	MP2	3.41
2/7/2024 10:25:40 AM	MP 2	3.95
2/7/2024 10:36:49 AM	0.2 miles N of Hwy 5..	3.7
2/7/2024 12:26:48 PM	0.2 miles N of Hwy 5..	4.55
2/7/2024 12:41:15 PM	MP 2	4.14
2/7/2024 1:35:22 PM	MP 2	3.9
2/7/2024 2:20:03 PM	0.2 miles N of Hwy 5..	4.5
2/7/2024 2:33:48 PM	MP 2	4.03
2/7/2024 4:21:11 PM	0.2 miles N of Hwy 5..	4.16
2/7/2024 4:31:41 PM	MP 2	4
2/8/2024 8:13:27 AM	0.2 miles N of Hwy 5..	4.14
2/8/2024 8:23:25 AM	MP 2	4.26
2/8/2024 10:03:25 AM	East tributary at con..	7.16
2/8/2024 10:07:49 AM	East tributary adjace..	7.47
2/8/2024 10:25:55 AM	MP 2	4.33
2/8/2024 10:35:44 AM	0.2 miles N of Hwy 5..	3.54
2/8/2024 12:18:06 PM	MP 2	5.33
2/8/2024 12:30:02 PM	0.2 miles N of Hwy 5..	4.49
2/8/2024 2:27:28 PM	0.2 miles N of Hwy 5..	4.08
2/8/2024 2:39:12 PM	MP 2	3.73
2/8/2024 4:25:59 PM	0.2 miles N of Hwy 5..	4.11
2/8/2024 4:40:12 PM	MP 2	4.02
2/8/2024 5:10:25 PM	0.2 miles N of Hwy 5..	4.68
2/8/2024 5:23:11 PM	MP 2	3.88
2/9/2024 8:19:30 AM	0.2 miles N of Hwy 5..	4.24
2/9/2024 8:29:36 AM	CP-3	4.34
2/9/2024 8:58:20 AM	CP-3	4.85
2/9/2024 9:00:10 AM	E. Tributary	8.41
2/9/2024 9:16:06 AM	CP-1	3.79
2/9/2024 10:56:13 AM	E. Tributary	8.31
2/9/2024 11:08:37 AM	W016	3.84
2/9/2024 11:27:37 AM	CP-3	3.88
2/9/2024 1:21:09 PM	MP-2	3.83
2/9/2024 1:32:54 PM	0.2 miles N of Hwy 5..	3.68

Turbidity Crosstab

Reading Date	Location Description	Turbidity (NTU)
2/9/2024 1:56:40 PM	E. Tributary	7.96
2/9/2024 3:16:27 PM	MP-2	6.32
2/9/2024 3:28:30 PM	0.2 miles N of Hwy 5..	3.62
2/9/2024 3:41:24 PM	E Tributary	8.3
2/9/2024 4:39:52 PM	E Tributary	8.14
2/9/2024 4:45:53 PM	MP-2	6.1
2/9/2024 4:52:33 PM	W016	4.3
2/10/2024 8:13:43 AM	East tributary	6.63
2/10/2024 8:22:41 AM	MP-2	4.08
2/10/2024 8:36:00 AM	0.2 miles N of Hwy 5..	3.53
2/10/2024 11:56:04 AM	E Tributary	6.9
2/10/2024 12:10:01 PM	W016	3.65
2/10/2024 12:18:31 PM	MP-2	3.6
2/10/2024 2:26:59 PM	MP-2	5.9
2/10/2024 3:57:10 PM	E. Tributary	6.4
2/10/2024 4:09:40 PM	W016	2.8
2/10/2024 4:22:00 PM	MP-2	3.65
2/10/2024 4:54:01 PM	E. Tributary	7.14
2/10/2024 5:00:17 PM	MP-2	3.6
2/10/2024 5:09:38 PM	0.2 miles N of Hwy 5..	3.7
2/11/2024 8:19:26 AM	E. Tributary	11
2/11/2024 8:55:30 AM	MP-2	4.4
2/11/2024 9:02:35 AM	MP-1	3.58
2/11/2024 12:07:00 PM	E. Tributary	10.3
2/11/2024 12:12:53 PM	MP-2	4.4
2/11/2024 12:21:15 PM	MP-1	3.6
2/11/2024 3:28:10 PM	E. Tributary	9.8
2/11/2024 3:34:06 PM	MP-2	4.6
2/11/2024 3:41:42 PM	MP-1	3.3
2/12/2024 8:02:04 AM	E. Tributary	32.1
2/12/2024 8:16:02 AM	MP-1	9.11
2/12/2024 8:25:00 AM	MP-2	8.8
2/12/2024 11:24:12 AM	E. Tributary	25.3
2/12/2024 11:41:07 AM	MP-1	6.5
2/12/2024 11:49:37 AM	MP-2	6.65
2/12/2024 2:52:32 PM	E. Tributary	18.8
2/12/2024 3:04:44 PM	MP-1	5.53
2/12/2024 3:12:23 PM	MP-2	8.15
2/12/2024 4:24:44 PM	E. Tributary	16.85
2/12/2024 4:34:38 PM	MP-2	6.87
2/12/2024 4:42:47 PM	MP-1	5.4
2/13/2024 8:04:53 AM	E. Tributary	10.1
2/13/2024 8:11:41 AM	MP-2	6.23
2/13/2024 8:19:05 AM	MP-1	5.2

Turbidity Crosstab

Reading Date	Location Description	Turbidity (NTU)
2/13/2024 11:48:05 AM	E. Tributary	8.97
2/13/2024 12:01:59 PM	MP-2	6.09
2/13/2024 12:09:57 PM	MP-1	6.59
2/13/2024 3:47:00 PM	E. Tributary	9.7
2/13/2024 3:51:00 PM	MP-2	6.28
2/13/2024 3:59:17 PM	MP-1	4.9
2/14/2024 8:01:49 AM	E. Tributary	8.07
2/14/2024 8:06:36 AM	MP-2	4.61
2/14/2024 8:15:25 AM	MP-1	4.5
2/14/2024 11:36:13 AM	E. Tributary	7.83
2/14/2024 11:42:22 AM	MP-2	4.17
2/14/2024 11:51:20 AM	MP-1	3.86
2/14/2024 1:58:28 PM	MP-1	4.2
2/14/2024 2:07:03 PM	MP-2	4.11
2/14/2024 2:11:35 PM	E. Tributary	7.79
2/14/2024 2:25:42 PM	CP-2	3.8
2/14/2024 3:45:00 PM	E. Tributary	6.66
2/14/2024 3:57:43 PM	MP-1	4.29
2/14/2024 4:07:13 PM	MP-2	3.88
2/15/2024 8:00:23 AM	E. Tributary	9.98
2/15/2024 8:15:49 AM	MP-1	3.95
2/15/2024 8:23:17 AM	MP-2	3.77
2/15/2024 1:13:00 PM	E. Tributary	9.22
2/15/2024 1:17:28 PM	MP-2	3.86
2/15/2024 1:25:34 PM	MP-1	3.79
2/15/2024 2:25:00 PM	CP-2	3.8
2/15/2024 2:40:33 PM	MP-2	6.91
2/15/2024 3:16:00 PM	E. Tributary	7.94
2/15/2024 3:23:35 PM	MP-2	3.84
2/15/2024 3:31:24 PM	MP-1	3.46
2/15/2024 4:02:17 PM	CP-3	4.2
2/15/2024 4:08:35 PM	CP-2	3.31
2/15/2024 4:30:22 PM	MP-2	4.06
2/15/2024 5:16:00 PM	E. Tributary	8.75
2/15/2024 5:26:04 PM	MP-1	3.36
2/15/2024 5:33:25 PM	MP-2	3.41
2/16/2024 1:46:45 PM	CP-1	3.82
2/16/2024 1:58:18 PM	0.2 miles N of Hwy 5..	3.47
2/16/2024 2:27:31 PM	About 10 feet upstre..	8.65
2/17/2024 2:22:52 PM	E Tributary north of ..	6.65
2/17/2024 2:36:54 PM	MP-1	3.92
2/17/2024 2:46:00 PM	CP-1	3.64
2/18/2024 9:11:39 AM	East tributary	5.9
2/18/2024 9:30:13 AM	MP-1	3.54

Turbidity Crosstab

Reading Date	Location Description	Turbidity (NTU)
2/18/2024 9:38:43 AM	CP-1	3.02
2/19/2024 9:52:20 AM	MP-1	4.58
2/19/2024 10:01:07 AM	MP-2	7.15
2/20/2024 8:58:41 AM	E. Tributary	6.54
2/20/2024 9:15:34 AM	~25 yds downstream..	12.3
2/20/2024 9:27:18 AM	CP-2	28.12
2/20/2024 9:31:04 AM	MP-2	3.69
2/20/2024 9:44:12 AM	MP-1	3.96
2/20/2024 10:01:57 AM	Approximately 150 y..	12.1
2/20/2024 10:10:09 AM	CP-3	3.49
2/20/2024 10:56:27 AM	CP-4	3.59
2/20/2024 10:58:43 AM	CP-5	3.46
2/20/2024 11:40:33 AM	MP-1	6.89
2/20/2024 11:48:41 AM	MP-2	3.31
2/20/2024 11:51:13 AM	CP-1	3.44
2/20/2024 11:53:41 AM	CP-3	3.7
2/20/2024 12:05:46 PM	CP-2	3.37
2/20/2024 12:10:42 PM	CP-4	3.49
2/20/2024 12:12:23 PM	CP-5	3.22
2/20/2024 4:51:08 PM	E. Tributary	6.39
2/20/2024 5:02:00 PM	0.2 miles N of Hwy 5..	3.42
2/20/2024 5:22:00 PM	MP-2	2.85
2/20/2024 5:23:31 PM	CP-1	3.22
2/20/2024 5:25:28 PM	CP-3	3.02
2/20/2024 5:27:42 PM	CP-2	3.13
2/20/2024 5:29:57 PM	CP-4: 150 - S of CP-2	3.28
2/20/2024 5:31:45 PM	CP-5: 250 ft S of CP-2	2.98
2/21/2024 9:04:05 AM	E. Tributary	6.75
2/21/2024 9:18:57 AM	0.2 miles N of Hwy 5..	3.86
2/21/2024 9:28:15 AM	MP-2	3.41
2/21/2024 9:30:16 AM	CP-1	4.05
2/21/2024 9:32:02 AM	CP-3	3.44
2/21/2024 9:35:03 AM	CP-2	23.4
2/21/2024 9:42:00 AM	CP-4	9.47
2/21/2024 9:44:00 AM	CP-5	11.6
2/22/2024 8:40:00 AM	E. Tributary	10.4
2/22/2024 8:50:59 AM	MP-1	4.3
2/22/2024 8:59:00 AM	MP-2	3.98
2/22/2024 9:01:36 AM	CP-1	4.52
2/22/2024 9:03:18 AM	CP-3	4.18
2/22/2024 9:04:18 AM	CP-2	3.99
2/22/2024 9:10:05 AM	CP-4	4.47
2/22/2024 9:14:19 AM	CP-5	4.23
2/23/2024 9:06:00 AM	E. Tributary	7.45

Turbidity Crosstab

Reading Date	Location Description	Turbidity (NTU)
2/23/2024 9:24:16 AM	MP-1	3.8
2/23/2024 9:33:26 AM	MP-2	3.36
2/23/2024 9:36:20 AM	CP-1	3.36
2/23/2024 9:38:15 AM	CP-3	3.28
2/23/2024 9:39:45 AM	CP-2	3.15
2/23/2024 9:43:07 AM	CP-4	3.58
2/23/2024 9:47:04 AM	CP-5	3.45
2/24/2024 9:10:25 AM	E. Tributary	5.99
2/24/2024 9:38:14 AM	MP-1	3.7
2/24/2024 9:45:45 AM	MP-2	3.33
2/24/2024 9:47:52 AM	CP-1	3.71
2/24/2024 9:49:03 AM	CP-3	3.29
2/24/2024 9:50:26 AM	CP-2	3.27
2/24/2024 9:56:00 AM	CP-4	3.32
2/24/2024 10:01:00 AM	CP-5	3.04
2/25/2024 7:52:00 AM	E. Tributary	122
2/25/2024 8:09:43 AM	MP-1	15.97
2/25/2024 8:18:04 AM	MP-2	9.71
2/25/2024 8:20:20 AM	CP-1	33.8
2/25/2024 8:21:36 AM	CP-3	10.37
2/25/2024 8:22:53 AM	CP-2	25.4
2/25/2024 8:28:00 AM	CP-4	18.47
2/25/2024 8:33:00 AM	CP-5	16.43
2/26/2024 8:27:28 AM	E. Tributary	13.33
2/26/2024 8:41:05 AM	MP-1	9.7
2/26/2024 8:49:56 AM	MP-2	8.79
2/26/2024 8:52:47 AM	CP-2	8.61
2/27/2024 7:48:00 AM	E. Tributary	9.78
2/27/2024 8:01:53 AM	MP-1	5.96
2/27/2024 8:11:34 AM	MP-2	5.18
2/27/2024 8:14:00 AM	CP-2	5.21
2/28/2024 7:37:20 AM	MP-2	4.75
2/28/2024 7:46:18 AM	MP-1	6.3
2/28/2024 8:06:00 AM	E. Tributary	9.56
2/28/2024 8:09:00 AM	MP-2	4.73
2/28/2024 8:32:24 AM	MP-1	6.23
2/28/2024 8:51:02 AM	E. Tributary	8.15
2/28/2024 4:26:12 PM	E. Tributary	9.38
2/28/2024 4:31:27 PM	MP-2	5.03
2/28/2024 4:38:41 PM	MP-1	5.13
2/29/2024 7:55:38 AM	E. Tributary	188.33
2/29/2024 8:00:46 AM	MP-2	51.03
2/29/2024 8:10:48 AM	Mp--1	46.27
2/29/2024 8:24:00 AM	CP-2	44.9

Turbidity Crosstab

Reading Date	Location Description	Turbidity (NTU)
2/29/2024 1:03:20 PM	MP-1	43.57
2/29/2024 1:10:26 PM	MP-2	44.93
2/29/2024 4:32:21 PM	E. Tributary	40.9
2/29/2024 4:46:36 PM	MP-1	30.3
2/29/2024 4:53:50 PM	MP-2	31.4
3/1/2024 8:09:10 AM	E. Tributary	14.6
3/1/2024 8:22:49 AM	MP-1	17.9
3/1/2024 8:30:00 AM	MP-2	17.7
3/2/2024 8:14:00 AM	E. Trib	11.53
3/2/2024 8:25:48 AM	MP-1	8.64
3/2/2024 8:33:46 AM	MP-2	8.57
3/3/2024 8:06:50 AM	E. Tributary	10.33
3/3/2024 8:18:46 AM	MP-1	6.59
3/3/2024 8:26:39 AM	MP-2	6.15
3/5/2024 9:31:00 AM	E. Tributary	8.84
3/5/2024 9:48:45 AM	MP-1	6.63
3/5/2024 10:00:39 AM	MP-2	6.31
3/6/2024 7:50:00 AM	E. Tributary	8.81
3/6/2024 8:07:00 AM	MP-1	5.02
3/6/2024 8:14:00 AM	MP-2	4.95
3/6/2024 2:47:32 PM	E. Trib	9.09
3/6/2024 2:57:25 PM	MP-1	5.27
3/6/2024 3:08:00 PM	MP-2	6
3/7/2024 8:01:09 AM	E. Tributary	8.67
3/7/2024 8:16:00 AM	MP-2	4.91
3/7/2024 8:24:26 AM	MP-2	5.13
3/8/2024 8:02:11 AM	E. Trib	8.15
3/8/2024 8:13:46 AM	MP-1	4.82
3/8/2024 8:21:31 AM	MP-2	4.51
3/9/2024 7:17:18 AM	E. Tributary	8.3
3/9/2024 7:29:32 AM	MP-1	4.6
3/9/2024 7:38:11 AM	MP-2	4.3
3/10/2024 8:14:00 AM	MP-1	3.75
3/10/2024 8:24:09 AM	MP-2	3.7
3/10/2024 8:44:25 AM	E Tributary north of ..	8.2
3/11/2024 7:43:22 AM	E. Tributary	8.72
3/11/2024 7:56:02 AM	MP-1	4.32
3/11/2024 8:04:27 AM	MP-2	3.78
3/12/2024 7:45:25 AM	E Tributary	8.05
3/12/2024 8:00:54 AM	MP-1	3.99
3/12/2024 8:11:26 AM	MP-2	3.65
3/13/2024 7:39:34 AM	East Tributary	11.97
3/13/2024 7:52:02 AM	MP-1	9.71
3/13/2024 8:02:26 AM	MP-2	9.27

Turbidity Crosstab

Reading Date	Location Description	Turbidity (NTU)
3/14/2024 7:54:48 AM	E. Tributary	8.7
3/14/2024 8:06:25 AM	MP-1	5.03
3/14/2024 8:14:06 AM	MP-2	4.34
3/15/2024 7:34:00 AM	E. Tributary	8.3
3/15/2024 7:45:37 AM	MP-1	4.8
3/15/2024 7:54:00 AM	MP-2	3.86
3/16/2024 7:38:17 AM	E. Tributary	7.44
3/16/2024 7:50:06 AM	MP-1	4.33
3/16/2024 7:57:57 AM	MP-2	4.53
3/17/2024 7:13:13 AM	E. Tributary	8.04
3/17/2024 7:24:35 AM	MP-1	4.06
3/17/2024 7:32:50 AM	MP-2	3.92
3/18/2024 7:50:42 AM	E. Tributary	7.88
3/18/2024 8:02:18 AM	MP-1	4.03
3/18/2024 8:09:54 AM	MP-2	3.65
3/19/2024 8:01:21 AM	E Tributary	7.33
3/19/2024 8:16:03 AM	MP-1	4.01
3/19/2024 8:25:24 AM	MP-2	3.85
3/20/2024 8:09:54 AM	E. Tributary	7.03
3/20/2024 8:23:00 AM	MP-1	4.22
3/20/2024 8:32:47 AM	MP-2	5.08
3/20/2024 10:33:52 AM	E Tributary	6.77
3/20/2024 10:45:01 AM	MP-1	3.99
3/20/2024 10:53:50 AM	MP-2	5.46
3/20/2024 12:34:51 PM	E. Tributary	6.69
3/20/2024 12:45:51 PM	MP-1	3.56
3/20/2024 12:54:19 PM	MP-2	6.68
3/20/2024 2:28:37 PM	E Tributary	6.89
3/20/2024 2:40:40 PM	MP-1	3.54
3/20/2024 2:50:01 PM	MP-2	6.7
3/20/2024 4:31:08 PM	E. Tributary	6.52
3/20/2024 4:42:43 PM	MP-1	3.84
3/20/2024 4:51:48 PM	MP-2	4.49
3/20/2024 6:25:34 PM	E. Tributary	6.8
3/20/2024 6:36:11 PM	MP-1	4.09
3/20/2024 6:44:40 PM	MP-2	3.82
3/21/2024 8:05:18 AM	E Tributary	7.82
3/21/2024 8:18:04 AM	MP-1	3.9
3/21/2024 8:26:11 AM	MP-2	4.55
3/21/2024 10:02:20 AM	E Tributary	9.61
3/21/2024 10:13:20 AM	MP-1	3.9
3/21/2024 10:21:20 AM	MP-2	4.15
3/21/2024 12:01:09 PM	E Tributary	7.31
3/21/2024 12:13:23 PM	MP-1	4.61

Turbidity Crosstab

Reading Date	Location Description	Turbidity (NTU)
3/21/2024 12:20:34 PM	MP-2	4.82
3/21/2024 2:07:36 PM	E Tributary	7.38
3/21/2024 2:17:16 PM	MP-1	3.8
3/21/2024 2:24:04 PM	MP-2	6.91
3/21/2024 4:05:21 PM	E Tributary	7.27
3/21/2024 4:14:15 PM	MP-1	3.63
3/21/2024 4:22:25 PM	MP-2	8.82
3/21/2024 4:37:09 PM	CP-3	7.76
3/21/2024 6:07:58 PM	E Tributary	8.26
3/21/2024 6:20:35 PM	MP-1	4.02
3/21/2024 6:27:37 PM	MP-2	7.02
3/22/2024 9:09:36 AM	E. Tributary	6.8
3/22/2024 9:14:50 AM	MP-2	3.71
3/22/2024 9:22:39 AM	MP-1	4.08
3/22/2024 11:08:30 AM	E. Tributary	6.9
3/22/2024 11:14:08 AM	MP-2	5.81
3/22/2024 11:22:58 AM	MP-1	4.18
3/22/2024 1:06:12 PM	E. Tributary	7.42
3/22/2024 1:11:33 PM	MP-2	5.22
3/22/2024 1:18:23 PM	MP-1	4.25
3/22/2024 3:07:32 PM	E. Tributary	6.83
3/22/2024 3:12:35 PM	MP-2	6.46
3/22/2024 3:20:02 PM	MP-1	4.81
3/22/2024 4:38:14 PM	E. Tributary	7.85
3/22/2024 4:43:06 PM	MP-2	8.52
3/22/2024 4:50:34 PM	MP-1	4.3
3/23/2024 7:53:43 AM	E. Tributary	7.97
3/23/2024 7:57:19 AM	MP-2	4.34
3/23/2024 8:04:56 AM	MP-1	3.93
3/23/2024 9:44:31 AM	E Tributary	9.77
3/23/2024 9:47:39 AM	MP-2	13.47
3/23/2024 9:56:05 AM	MP-1	3.82
3/23/2024 10:18:29 AM	CP-3	8.72
3/23/2024 12:06:08 PM	E. Tributary	10.83
3/23/2024 12:16:57 PM	MP-2	9.02
3/23/2024 12:25:23 PM	MP-1	4.29
3/23/2024 2:41:23 PM	E Tributary	69.2
3/23/2024 2:46:14 PM	MP-2	5.27
3/23/2024 2:54:25 PM	MP-1	5.33
3/23/2024 4:23:32 PM	E. Tributary	77.1
3/23/2024 4:28:12 PM	MP-2	6.12
3/23/2024 4:35:50 PM	MP-1	15.87
3/24/2024 7:45:39 AM	E Tributary	15.8
3/24/2024 7:51:44 AM	MP-2	7.09

Turbidity Crosstab

Reading Date	Location Description	Turbidity (NTU)
3/24/2024 7:59:01 AM	MP-1	6.26
3/24/2024 9:50:25 AM	E Tributary	13.47
3/24/2024 10:01:41 AM	MP-1	7.94
3/24/2024 10:09:56 AM	MP-2	6.34
3/24/2024 11:53:30 AM	E Tributary	14.03
3/24/2024 12:08:16 PM	MP-1	8.94
3/24/2024 12:16:09 PM	MP-2	8.08
3/24/2024 2:03:29 PM	E Tributary	12.4
3/24/2024 2:13:41 PM	MP-1	8.85
3/24/2024 2:22:02 PM	MP-2	8.67
3/24/2024 3:50:23 PM	E Tributary	12.67
3/24/2024 3:59:17 PM	MP-1	9.11
3/24/2024 4:07:55 PM	MP-2	8.88
3/25/2024 7:25:34 AM	E Tributary	40.3
3/25/2024 7:35:00 AM	MP-1	6.35
3/25/2024 7:45:03 AM	MP-2	6.84

Olympic Pipeline Gasoline Spill Response, Conway

2.7.24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
CP2		0848	4.7	n	operations began ~ 0830
MP2		0909	3.41	n	
MP2		1025	3.95	n	
W016 / MP1		1036	3.70	n	
W016 / MP1		1226	4.55	n	
MP2		1241	4.14	n	
MP2		1335	3.90	n	
W016/MP1		1420	4.50	n	
MP2		1433	4.03	n	
MP1		1621	4.16	n	
MP2		1631	4.00	n	operations wrapped up

Notes: T. Johnstone
K. Weinzirl

Olympic Pipeline Gasoline Spill Response, Conway

2/8/24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
MP-1	2.8.24	0813	4.14	n	operations began ~ 0815
MP-2		0823	4.26	n	
E. Trib		1003	7.16	n	operations in progress
E. Trib		1007	7.47		
MP-2		1025	4.33		
MP-1		1035	3.54		
MP-2		1218	5.33		
MP-1		1230	4.49		
MP-1		1625	4.11		
MP-2		1640	4.02		
MP-1		1710	4.68		operations ended ~ 1645
MP-2		1723	3.88		

Notes: J. Brandon
J. Johnstae

Olympic Pipeline Gasoline Spill Response, Conway

2.9.24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
MP-1	2/9/24	0819	4.24	n	
CP-3	↓	0822	4.34	n	boat working on not on upstream side
CP-3	↓	0858	4.85	n	
E. Tributary	29.24	0900	8.41	n	sheet pile operations underway
CP-1	↓	0916	3.79	n	↓
E. Trib	↓	1056	8.31	n	
CRT MP-1	↓	1108	3.84	n	
MP-2	↓	1127	3.88	n	
MP-2	↓	1321	3.83	n	
MP-1	↓	1332	3.68	n	
E. Trib	↓	1356	7.96	n	
MP-2	↓	1516	6.32	n	sheet piling operations underway
MP-1	↓	1528	3.62	n	↓
E. Trib	↓	1541	8.3	n	↓
E. Trib	↓	1639	8.14	n	Sheet piling ceased at 1630
MP-2	↓	1645	6.1	n	↓
MP-1	↓	1652	4.3	n	↓

Notes: J. Johnstone
Devan Zajac

Project Name **Olympic Pipeline Gasoline Spill Response, Conway** Date 2.10.24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E Tributary	2.10.24	0813	6.63	n	sheet piling began ~ 0810
MP-2	2.10.24	0822	4.09	n	↓
MP-1	2.10.24	0836	3.53	n	↓
E. Tributary	2.10.24	1156	6.90	n	stream bottom visible
MP-1	2.10.24	1210	3.65	n	↓
MP-2	2.10.24	1218	3.60	n	↓
MP-2	2.10.24	1426	5.90	n	collected after I Beam fell into ditch
(DZ) ~~E Tributary~~	~~2.10.24~~				
E. Tributary	2.10.24	1557	6.40	n	Sheet piling in progress
MP-1	2.10.24	1609	2.80	~~y~~ n	↓
MP-2	2.10.24	1622	3.65	y	↓
E. Tributary	2.10.24	1654	7.14	n	operations ended ~ 1650
MP-1	2.10.24	1709	3.70	n	↓
MP-2	2.10.24	1700	3.60	n	↓

Notes: Devan Zajac
Joe Johnstone

Project Name **Olympic Pipeline Gasoline Spill Response, Conway** Date 2.11.24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Tributary	2.11.24	0819	11.0	no	operations begin ~ 0840
MP-2	2.11.24	0855	4.40	no	
MP-1	2.11.24	0902	3.58	no	
E. Tributary	2.11.24	~~1227~~ 1207	10.30	no	Light rain; sheet piling in progress.
MP-1	"	1221	3.60	no	
MP-2	"	1212	4.40	no	
E. Tributary	2.11.24	1528	9.80	no	Operations ended ~ 1525
MP-1	"	1541	3.30	no	
MP-2	"	1534	4.60	yes	

Notes:

D. Zajac
J. Johnstone

Project Name **Olympic Pipeline Gasoline Spill Response, Conway** Date 2.12.24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Tributary	2.12.24	0802	32.10	n	operations began ~0800
MP-1	2.12.24	0816	9.11	n	I
MP-2	2.12.24	0825	8.80	n	I beam being driven into bank
E. Tributary	2.12.24	1124	25.30	n	Pile driving in progress; no rain.
MP-1	I	1141	6.50	n	I
MP-2	I	1149	6.65	n	
E. Tributary	2.12.24	1452	18.8	n	I
MP-1	I	1504	5.53	n	I
MP-2	I	1512	8.15	n	I-beam being driven in
E. Tributary	2.12.24	1624	16.85	n	Pile driving ceased ~1620.
MP-1	I	1642	5.40	n	I
MP-2	I	1634	6.87	n	

Notes: D. Zajac
J. Johnstone

Project Name **Olympic Pipeline Gasoline Spill Response, Conway** Date 2.13.24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Tributary	2.13.24	0804	1010	n	Sheet piling began ~0755.
MP-1	"	0819	5.20	n	"
MP-2	"	0811	6.23	n	"
E. Tributary	2.13.24	1148	8.97	n	Sheet piling in progress.
MP-1	"	1209	6.59	n	"
MP-2	"	1201	6.09	n	"
E. Tributary	2.13.24	1547	9.70	n	Sheet piling ceased ~1530.
MP-1	"	1559	4.90	n	"
MP-2	"	1551	6.28	n	"

Notes: D. Zajac

J. Johnstone

Olympic Pipeline Gasoline Spill Response, Conway 2.14.24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Tributary	2.14.24	0801	8.07	n	Sheet piling began ~0750
MP-1		0815	4.50	n	
MP-2		0806	4.61	n	
E. Tributary	2.14.24	1136	7.83	n	Sheet piling in progress.
MP-1		1151	3.86	n	
MP-2		1142	4.17	n	
E. Tributary	2.14.24	1411	7.79	n	Sheet piling in progress; water drone in progress.
MP-1		1358	4.20	n	
MP-2		1407	4.11	n	
MP-2	2.14.24	1425	3.80	n	Water drone pulled ~1420.
E. Tributary		1545	6.66	n	Sheet piling ceased ~1540.
MP-1		1557	4.29	n	
MP-2		1607	3.88	n	

Notes:

D. Zajac

J. Johnstone

Olympic Pipeline Gasoline Spill Response, Conway

2.15.24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Tributary	2.15.24	0800	9.78	n	mats being moved onsite
MP-1	"	0815	3.95	n	"
MP-2	"	0823	3.77	n	"
E. Tributary	2.15.24	1313	9.22	n	mats being moved onsite
MP-1	"	1325	3.79	n	"
MP-2	"	1317	3.86	n	"
~~E. Tributary~~	~~2.15.24~~			n	
~~MP-1~~	"			n	
MP-2	"	1440	6.91	n	I-beam removed via excavator at 1433.
E. Tributary	2.15.24	1516	7.94	n	collected ~1 hr after I-beam removal.
MP-1	"	1531	3.46	n	"
MP-2	"	1523	3.84	n	"
CP-3	2.15.24	1602	4.20	n	Downstream fish netting removed ~1555.
CP-2	"	1608	3.31	n	"
MP-2	2.15.24	1630	4.06	n	"
E. Tributary	2.15.24	1716	8.75	n	no work activity
MP-1	"	1726	3.36	n	"
MP-2	"	1733	3.41	n	"

Notes:

J. Johnstone
D Zajac

2.16.24

Olympic Pipeline Gasoline Spill Response, Conway

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
MP-1	2-16-24	1358	3.47	NO	Background
CP-1	2-16-24	1346	3.82	NO	Drilling began Approx 1315
E-Tributary	2-16-24	1427	8.65	No	High flow.

Notes:

M. Beck
J. Brandon

Olympic Pipeline Gasoline Spill Response, Conway 2.17.24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Tributary	2.17.24	1422	6.65	n	Drilling in progress.
~~MP-1~~ CP-1	"	1446	3.64	n	"
~~MP-2~~ MP-1	"	1436	3.92	n	"

Notes: D. Zajac

J. Brandon

Olympic Pipeline Gasoline Spill Response, Conway 2.18.24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Tributary	2.17.24	0911	5.9	n	No operations.
MP-1	"	0930	3.54	n	"
CP-1	"	0938	3.02	n	"

Notes: D. Zajac

M. Beck

Cal #s

20	100	800	10
20.2	99.5	798	10.2

Olympic Pipeline Gasoline Spill Response, Conway

2.19.24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Tributary	2.19.24		5.59	n	Drilling + excavation
MP-1	〃	0952	4.58	n	operations occurring
MP-2	〃	1001	7.15	n	in cofferdam.

Notes: D. Zajac

J. Johnstone

Olympic Pipeline Gasoline Spill Response, Conway 2.20.24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Tributary	2.20.24	0858	6.54	n	vegetation agitation began
~25 yrds downstream of Hwy 534		0915	12.3	n	~0850 at W001.
MP-1		0944	3.96	n	
MP-2		0931	3.69	n	
CP-2		0927	28.12	n	
CP-3		1004	3.49	n	
W002		1001	12.1	n	
CP-4		1056	3.59	n	
CP-5		1058	3.46	n	
MP-1		1140	6.89	n	
MP-2		1148	3.31	n	
CP-1		1151	3.44	n	
CP-3		1153	3.70	n	
CP-2		1205	3.37	n	
CP-4		1210	3.49	n	
CP-5		1212	3.22	n	
E. Tributary		1651	6.39	n	
W016		1702	3.42	n	
MP-2		1722	2.85	n	no work activity
CP-1		1723	3.22	n	no work activity
CP-3		1725	3.02	n	no work activity
CP-2		1727	3.13	n	no work activity

Notes:

D. Zajac

J. Johnstone

CP-4	2.20.24	1729	3.28	n	~~vegetation agitation started at W001.~~ ~0850 at W001. no work activity
CP-5		1731	2.98	n	no work activity

Project Name **Olympic Pipeline Gasoline Spill Response, Conway** Date 2.21.24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (Include weather, waterbody flow in cfs, other observations of waterbody, etc.)
MP-1	2.21.24	0918	3.86	n	vegetation agitation +
E. Tributary		0904	6.75	n	vegetation sampling in progress
MP-2		0928	3.41	n	~50 upstream of CP-2.
CP-1		0930	4.05	n	
CP-2		0935	23.4	n	
CP-3		0932	3.44	n	
CP-4		0942	9.47	n	
CP-5		0944	11.6	n	

Notes:

D. Zajac

J. Johnstone

Olympic Pipeline Gasoline Spill Response, Conway 2.22.24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Tributary	2.22.24	0840	10.40	n	No operations currently.
MP-1		0850	4.30	n	
MP-2		0859	3.98	n	
CP-1		0901	4.52	n	
CP-2		0904	3.99	n	
CP-3		0903	4.18	n	
CP-4		0910	4.47	n	
CP-5		0914	4.23	n	

Notes: D. Zajac

J. Johnstone

Olympic Pipeline Gasoline Spill Response, Conway 2-23-24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Tributary	2·23·24		7.45	n	No operations currently.
MP-1		0924	3.80	n	
MP-2		0933	3.36	n	
CP-1		0936	3.36	n	
CP-2		0939	3.15	n	
CP-3		0938	3.28	n	
CP-4			3.58	n	
CP-5			3.45	n	

Notes:

D. Zajac

J. Johnstone

Olympic Pipeline Gasoline Spill Response, Conway 2-24-24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Tributary	2.24.24	0910	5.99	n	No earth-moving operations. Light rain, slightly increased flow from yesterday.
MP-1		0938	3.70	n	
MP-2		0945	3.33	n	
CP-1		0947	3.71	n	
CP-2		0950	3.27	n	
CP-3		0949	3.29	n	
CP-4		0956	3.32	n	
CP-5		1001	3.04	n	

Notes: D. Zajac

J. JohnStone

Olympic Pipeline Gasoline Spill Response, Conway

2-25-24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Tributary	2-25-24	0752	122	n	Light rain, no operations
MP-1		0809	15.97	n	on site currently, water
MP-2		0818	9.71	n	level noticeably higher
CP-1		0820	33.8	n	than yesterday (2/24),
CP-2		0822	25.4	n	water appears more murky
CP-3		0821	10.37	n	than yesterday (2/24),
CP-4		0828	18.47	n	noticeable sediment runoff
CP-5		0833	16.43	n	coming from tributary and
					flowing downstream.

Notes:

D. Zajac

J. Johnstone

Olympic Pipeline Gasoline Spill Response, Conway

2.26.24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Tributary	2.26.24		13.33	n	no in-stream operations.
MP-1		0841	9.70	n	
MP-2		0849	8.79	n	
DZ ~~CP 2~~		~~0852~~		n	

Notes:

J. Johnstone
D. Zajac

2.27.24

Olympic Pipeline Gasoline Spill Response, Conway

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Trib	2.27.24	0748	9.78	n	light snowfall 2.26 & 2.27,
MP-1	〃	0801	5.96	n	no instream work activities
MP-2	〃	0811	5.18	n	〃

Notes: D. Zajac
J. Johnstone

Olympic Pipeline Gasoline Spill Response, Conway 2-28-24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Tributary	2-28-24	0806	9.56	n	No operations in
MP-1		0746	6.3	n	stream currently.
MP-2		0737	4.75	n	I
MP-2		0809	4.73	n	Treated water discharge
MP-1		0832	6.23	n	began at approximately
E. Tributary		0851	3.15	n	~~0737~~ 0746, upstream
E. Tributary		1626	9.38	n	of MP-2.
MP-1		1638	5.13	n	Water treatment
MP-2		1631	5.03	n	Sampling ended at
					approximately 1530.

Notes: D. Zajac

J. Johnstone

Olympic Pipeline Gasoline Spill Response, Conway 2.29.24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Trib	2.29.24	0755	188.33	n	Light rain, water level
MP-1		0800	51.03	n	considerably higher than
MP-2		0810	46.27	n	yesterday (2-28),
MP-1		1303	43.57	n	Water level higher than
MP-2	"	1310	44.43	n	2/29 morning
E. Tributary		1632	40.9	n	+
MP-1		1646	30.5	n	Waste water being
MP-2	+	1653	31.4	n	discharged

Notes: D. Zajac

J. Johnstone

Olympic Pipeline Gasoline Spill Response, Conway

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (Include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Trib	31.24	0809	14.6	n	Dill Hill Ditch at bank full,
MP-1	1	0822	17.9	n	no wastewater discharge
MP-2	1	0830	17.7	n	

Notes:

Olympic Pipeline Gasoline Spill Response, Conway 3.2.24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Trib	3.2.24	0814	11.53	n	stream level lower than
MP-1	"	0825	8.64	n	on 3/1.
MP-2	"	0833	8.57	n	+

Notes:

D. Zajac

J. Johnstone

Olympic Pipeline Gasoline Spill Response, Conway

3 3.24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Trib	3.3.24	0806	10.33	n	no wastewater discharge
MP-1	"	0818	6.59	n	water level lower than 3.2
MP-2	"	0826	6.15	n	"

Notes:

J. Johnstone
D. Zajac

Olympic Pipeline Gasoline Spill Response, Conway

3.5.24

Monitoring Point	Date 3.5.24	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Trib	~~3.5.24~~	0931	8.84	n	no ~~exxx~~ in-stream
MP-1	"	0948	6.63	n	activities
MP-2	"	1000	6.31	n	"

Notes:

J. Johnstone

D. Zajac

Project Name: **Olympic Pipeline Gasoline Spill Response, Conway** Date: 3.6.24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Trib	3.6.24	0750	8.8	n	no in-stream activities
MP-1	"	0807	5.02	n	"
MP-2	"	0814	4.95	n	"
E. Trib	"	1447	4.09	n	post silt curtain removal
MP-1	"	1457	5.27	n	"
MP-2	"	1508	6.0	n	"

Notes:

D. Zajac
J. Johnston

Olympic Pipeline Gasoline Spill Response, Conway 3.11.24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (Include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Tributary	3.11.24	0743	8.72	n	no in-stream activities
MP-1	3.11.24	0756	4.32	n	"
MP-2	3.11.24	0804	3.78	n	"

Notes:

D. Zajac
J. Johnstone

Olympic Pipeline Gasoline Spill Response, Conway 3·13·24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E Tributary	3·13·24	0739	11.97	n	No instream operations currently; rain event yesterday (3·12·24).
MP-1	"	0752	9.71	n	
MP-2	"	0802	9.27	n	

Notes:

D. Zajac
E. Schell

Olympic Pipeline Gasoline Spill Response, Conway

3.15.24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (Include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Trib	3.15.24	0734	8.30	n	no in-stream activities
MP-1	"	0745	4.80	n	"
MP-2	"	0754	3.86	n	"

Notes: J. Johnston
D. Zgjac

Olympic Pipeline Gasoline Spill Response, Conway

3.17.24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (Include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Trib	3.17.24	0713	8.04	n	no in-stream activities
MP-1	"	0724	4.06	n	"
MP-2	"	0732	3.92	n	"

Notes:

J. Johnston

D. Zajac

Olympic Pipeline Gasoline Spill Response, Conway 3.18.24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Tributary	3-18-24	0750	7.88	n	no in stream activity
MP-1	"	0802	4.03	n	"
MP-2	"	0809	3.65	n	"

Notes:

3.7.24

Olympic Pipeline Gasoline Spill Response, Conway

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Trib	3.7.24	0801	8.67	n	no in-stream
MP-1	↓	0816	4.91	n	activities ↓
MP-2	↓	0824	5.13	n	↓

Notes:

D. Zajac

J. Johnstone

Olympic Pipeline Gasoline Spill Response, Conway

3.8.24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Trib	3.8.24	0802	8.15	n	no in-stream activities
MP-1	"	0813	4.82	n	"
MP-2	"	0821	4.51	n	"

Notes: J. Jonnston

D. Zajac

3.9.24

Olympic Pipeline Gasoline Spill Response, Conway

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E.Trib	3.9.24	0717	8.3	n	no instream activities
MP-1	|	0729	4.60	n	↓
MP-2	|	0738	4.30	n	

Notes: D. Zojac
J. Johnston

Olympic Pipeline Gasoline Spill Response, Conway

3.10.24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (Include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Tributary	3.10.24	0844	3.20	n	No instream activities
MP-1	"	0814	3.75	n	"
MP-2	"	0824	3.70	n	"

Notes:

J. Johnstone
E. Schell
J. Brandon

Olympic Pipeline Gasoline Spill Response, Conway 3.12.24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E Tributary	3.12.24	0745		n	No in-stream operations currently.
MP-1	"	0800		n	"
MP-2	"	0811		n	"

Notes:

D. Zajac

K. Hensley

Olympic Pipeline Gasoline Spill Response, Conway 3.14.24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Tributary	3.14.24		8.7	n	No instream operations
MP-1	〃		5.03	n	currently. 〃
MP-2	〃		4.34	n	

Notes:

J. Johnstone

D. Zajac

Olympic Pipeline Gasoline Spill Response, Conway

3.16.24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Trib	3.16.24	0738	7.44	n	no instream activities
MP-1	"	0750	4.33	n	"
MP-2	"	0757	4.53	n	"

Notes: J. Johnstone
D. Zajac

Olympic Pipeline Gasoline Spill Response, Conway

3.16.24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E Trib	3.16.24	0738	7.44	n	no instream activities
MP-1	"	0750	4.33	n	"
MP-2	"	0757	4.53	n	"

Notes: J. Johnstone
D. Zajac

Olympic Pipeline Gasoline Spill Response, Conway

3-19-24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E Trib	3.19.24	0801	7.33	n	yes - in stream activity - ecology maintenance of site
MP 1	"	0816	4.01	n	no activity
MP 2	"	0825	3.85	n	downstream ecology activity

Notes:

Olympic Pipeline Gasoline Spill Response, Conway 3-20-24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Tributary	3-20-24	0809	~~7.06~~ 7.05	n	no activity
MP-1	"	0823	4.22	n	no activity
MP-2	"	0832	5.08	n	boat ops/boom deployment upstream
E Tributary	3-20-24	10.33	6.77	n	no activity
MP-1	"	1045	3.99	n	no activity
MP-2	"	1053	5.46	n	no activity- boom prev. deployed
E. Tributary	3-20-24	1234	6.69	n	no activity
MP-1	"	1245	3.52	n	no activity
MP-2	"	1254	6.68	n	no activity
E. Tributary	3-20-24	1428	6.89	n	sheet pile removal operations
MP-1	"	1440	3.54	n	"
MP-2	"	1450	6.70	n	"
E. Tributary	3-20-24	1631	6.52	n	sheet pile removal ops
MP-1	"	1642	3.84	n	ongoing "
MP-2	"	1651	4.49	n	"
E Tributary	3-20-24	1825	6.80	n	activity ceased
MP-1	"	1836	4.09	n	"
MP-2	"	1844	3.82	n	"

Notes:

Olympic Pipeline Gasoline Spill Response, Conway 3-21-24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Tributary	3-21-24	0805	7.82	NO	Wildlife boat ops nearby
MP-1	"	0818	3.90	NO	no activity
MP-2	"	0826	4.55	No	D/S from sheet piling removal ops @ approx 08:05
E. Tributary	3-21-24	1002	9.61	NO	Sheet piling removal ops
MP-1	"	1013	3.90	No	in progress, wildlife
MP-2	"	1021	4.15	NO	boat ops in progress
E. Tributary	3-21-24	1301	7.31	NO	Sheet piling ops on hold
MP-1	"	1213	4.61	ND	for lunch break. no
MP-2	"	1220	4.82	ND	current activity.
E. Tributary	3-21-24	1407	7.38	NO	sheet piling being removed
MP-1	"	1417	3.80	ND	from W wall of coffer
MP-2	"	1424	6.91	ND	dam.
E. Tributary	"	1605	7.27	NO	"
MP-1	"	1614	3.63	"	"
MP-2	"	1622	8.82	"	"
CP-3	"	1637	7.76	NO	No Sheet piling being removed currently.
E. Tributary	"	1807	8.26	NO	Sheet Piling removal ended
MP-1	"	1820	4.02	NO	at approximately 1805.
MP-2	"	1827	7.02	NO	"

Notes: D. Zajac

K. Hensley

Olympic Pipeline Gasoline Spill Response, Conway 3-22-24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Tributary	3-22-24	0909	6.80	n	sheet pile removal began
MP-1		0922	4.08	n	~0900
MP-2		0914	3.71	n	
E. Tributary		1108	6.90	n	sheet pile removal underway
MP-1		1122	4.18	n	
MP-2		1114	5.81	n	
E. Tributary		1306	7.42	n	sheet pile removal underway
MP-1		1318	4.25	n	
MP-2		1311	5.22	n	
E. Tributary		1507	6.83	n	
MP-1		1520	4.81	n	
MP-2		1512	6.46	n	
E. Tributary		1638	7.85	n	sheet pile removal ceased ~1645,
MP-1		1650	4.3	n	boat driving upstream of
MP-2		1643	8.52	n	turbidity curtain

Notes:

D. Zajac

J. Johnstone

Olympic Pipeline Gasoline Spill Response, Conway 3-23-24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (Include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Tributary	3-23-24	0753	7.97	n	sheet pile removal ops ongoing
MP-1		0804	3.93	n	
MP-2		0759	4.34	n	
E. Tributary		0944	9.79	n	sheet pile removal ops ongoing
MP-1		0956	3.82	n	
MP-2		0947	13.47	n	
CP-3		1018	8.72	n	
E. Tributary		1206	10.83	n	light rain; no activity
MP-1		1225	4.29	n	
MP-2		1216	9.02	n	
E Tributary		1441	69.2	n	rain
MP-1		1454	5.33	n	
MP-2		1446	5.27	n	sheet piling removal in progress
E. Tributary		1623	77.1	n	crane ops stopped. light rain.
MP-1		1635	15.87	n	
MP-2		1628	6.12	n	downstream block net removed

Notes:

D. Zajac * light rain throughout day

A. Adams

Olympic Pipeline Gasoline Spill Response, Conway 3-24-24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (Include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. TRIBUTARY	3-24-24	0745	15.8	NO	Sheet piling removal ops
MP-1		0751	6.26	NO	in progress, rainfall event in
MP-2		0759	7.09	NO	the last 24 hrs
E. Tributary		0950	13.47	NO	
MP-1		1001	7.94	NO	
MP-2		1009	6.34	NO	
E. TRIBUTARY		1153	14.03	No	Sheet piling removal ops
MP-1		1208	8.94	No	completed at approx 1045.
MP-2		1216	8.08	NO	NO activity.
E. Tributary		1403	12.4	NO	No operations.
MP-1		1413	8.85	NO	
MP-2		1422	8.67	NO	
E. Tributary	3-24-24	1550	12.67	NO	NO work activity.
MP-1		1559	9.11	NO	Turbidity curtain removed
MP-2		1607	8.88	NO	

Notes: K. Hensley, D. Zajac

Olympic Pipeline Gasoline Spill Response, Conway

3-25-24

Monitoring Point	Date	Time	Turbidity (NTU or yes/no)	Sheen (yes/no)	Notes (Include weather, waterbody flow in cfs, other observations of waterbody, etc.)
E. Tributary	3.25.24	0725	40.3	NO	NO operations.
MP-1	"	0735	6.35	NO	"
MP-2	"	0745	6.84	NO	"

Notes:

D. Zajac

K. Hensley