

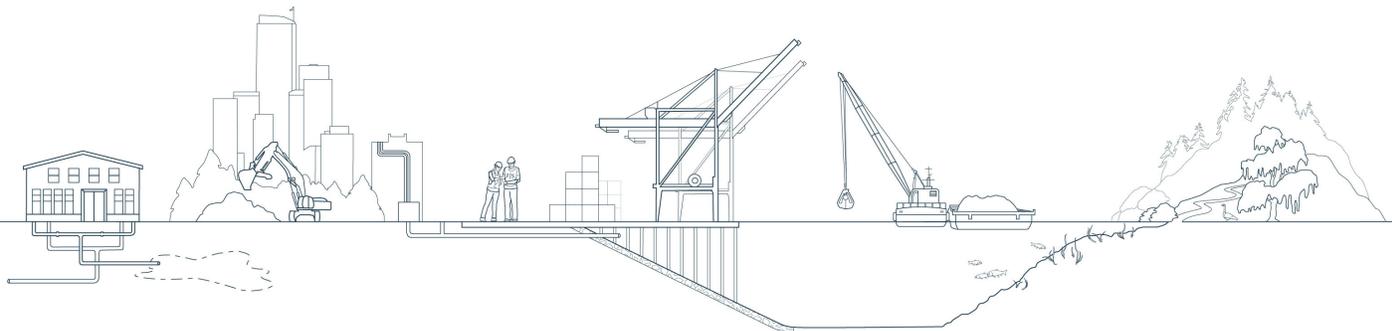
# 2025 Annual Progress Report for the K Ply Site

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## K Ply Site

**Prepared for**  
Port of Port Angeles

February 2026



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strategy ■ science ■ engineering

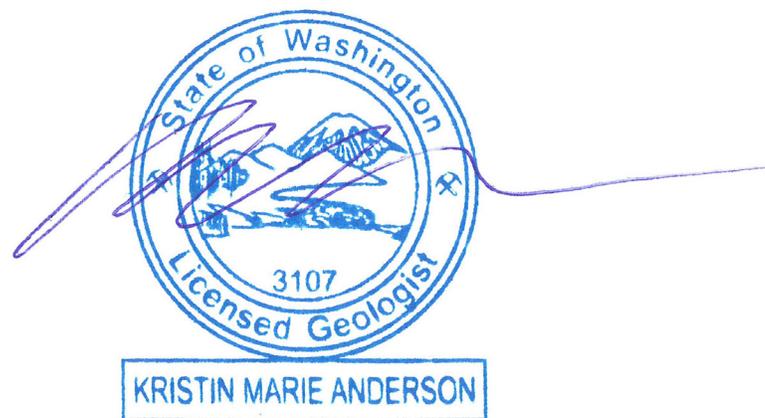


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## 2025 Annual Progress Report for the K Ply Site

This document was prepared for  
the Port of Port Angeles  
under the supervision of:



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Date: 02/04/2026

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### List of Abbreviations

<b>Abbreviation</b>	<b>Definition</b>
AO	Agreed Order
ATG	Alliance Technical Group (formerly Fremont Analytical, Inc.)
BTEX	Benzene, toluene, ethylbenzene, and xylenes
COC	Contaminant of concern
CPOC	Conditional point of compliance
CUL	Cleanup level
DO	Dissolved oxygen
DRO	Diesel-range organics
EC	Environmental Covenant
Ecology	Washington State Department of Ecology
EDR	Engineering Design Report
EIM	Environmental Information Management
FS	Feasibility Study
GRO	Gasoline-range organics
IC	Institutional Controls
IG	Infiltration gallery
LNAPL	Light non-aqueous phase liquid
µg/L	Micrograms per liter
mg/kg	Milligrams per kilogram
MNA	Monitored natural attenuation

<b>Abbreviation</b>	<b>Definition</b>
ORC	Oxygen-releasing compound
ORO	Oil-range organics
ORP	Oxidation–reduction potential
PCP	Pentachlorophenol
Port	Port of Port Angeles
RI	Remedial Investigation
SAP/QAPP	Sampling and Analysis Plan/Quality Assurance Project Plan
SDG	Sample delivery group
Site	K Ply Site
SMP	Soil Management Plan
TPH	Total petroleum hydrocarbons

## 1.0 Introduction

This Annual Progress Report has been prepared by Floyd|Snider on behalf of the Port of Port Angeles (Port) to meet the reporting requirements of the 2015 Agreed Order (AO) No. DE 11302 with the Washington State Department of Ecology (Ecology) for the K Ply Site (Site). The Site is located at 439 Marine Drive in Port Angeles, Washington.

The objective of this report is to describe work performed for the monitoring period of January 2025 to December 2025, consistent with the requirements of Section VII, subsection C of the AO.

### 1.1 SITE BACKGROUND

The Site is located directly west of downtown Port Angeles and historically operated primarily as a plywood manufacturer. Environmental contamination under the former mill building was first documented in the late 1980s with partial cleanup actions undertaken by ITT Rayonier, one of the prior mill owners. The mill was demolished by the Port in 2013, which allowed for a final Site Remedial Investigation (RI)/Feasibility Study (FS; Floyd|Snider 2015a) and cleanup action to be completed. The RI/FS field work was completed in 2014 and documented a broad area of both gasoline- and hydraulic oil-contaminated soil and groundwater under the former mill. The Ecology-selected cleanup remedy was described in the Cleanup Action Report (Ecology 2015) and implemented under the AO for multiple cleanup areas, identified in the Construction Completion Report (Floyd|Snider 2016) as either a “primary” or “minor” cleanup area. This remedial action was implemented between August 2015 and May 2016 and included excavation followed by bioremediation of contaminated soil and groundwater. The final cleanup removed the majority of soil contamination and greatly reduced the source mass of contamination that was causing elevated contaminant concentrations in groundwater in two primary cleanup areas.

#### 1.1.1 Primary Cleanup Areas

The two primary cleanup areas included the following:

- **The Gasoline Area (Areas 5 and 6).** This area extended continuously from the northern to southern boundary of the Site (Figure 1.1). Gasoline was present in soil and groundwater at concentrations greater than Site cleanup levels (CULs) throughout this area. Remediation consisted of excavation of both vadose and smear zone soils to CULs in Area 6 and excavation of vadose zone soils to CULs and smear zone soils to remediation levels in Area 5, followed by application of bio-amendments during backfilling to promote natural attenuation. Residual smear zone soils in Area 5 and a small area of gasoline-range organics (GRO) along the bulkhead in Area 6 (where impacted soil could not be removed without potentially destabilizing the bulkhead) are additionally being addressed through monitored natural attenuation (MNA).
- **The Hydraulic Oil Area (Area 6).** This area is located in the vicinity of the former hydraulic presses. Hydraulic oil was present as a light non-aqueous phase liquid

(LNAPL) pooled on the groundwater surface and also present in soil and groundwater downgradient of the LNAPL zone. Remediation consisted of excavation of both vadose and smear zone soils exceeding CULs followed by application of bio-amendments during backfilling. A portion of the soil in the Hydraulic Oil Area was commingled with contamination from the Gasoline Area.

Per the Ecology-approved remedial design, smear zone soils with gasoline and benzene concentrations in soil greater than the remediation levels of 3,000 milligrams per kilogram (mg/kg) and 10 mg/kg, respectively, were left in place in Area 5. These concentrations in soil within Area 5 were expected to attenuate over time after removal of a majority of source material, and the resulting reduction in upgradient groundwater contaminant concentrations was expected to allow for biodegradation as groundwater flows downgradient through clean backfill soil. The remedial action also included groundwater treatment to stimulate biodegradation of residual petroleum contamination in groundwater following excavation activities.

Groundwater within these primary cleanup areas at the Site was treated via application of bio-amendments in two forms:

- **Cedar Street Plume Bio-Injections:** The RI defined a plume of gasoline and benzene in groundwater emanating from the Gasoline Area (Area 5) and extending under Cedar Street toward the north. This area of dissolved-phase groundwater contamination was treated with an oxygen-releasing compound (ORC) that was injected during the construction phase of the project throughout an approximately 1-acre area between wells PP-15R2 and PP-37R (Figure 1.1). The treated area roughly corresponded to benzene concentrations in the plume greater than 500 micrograms per liter ( $\mu\text{g/L}$ ). In 2017, after 2 years of post-remediation groundwater monitoring that indicated the aquifer geochemical conditions were highly reducing, a limited area of the benzene plume around wells PP-14R and PP-37/PP-37R was additionally treated with injections of activated carbon amended with magnesium sulfate to promote anaerobic degradation of benzene (Figure 1.1).
- **Groundwater Infiltration Galleries:** Infiltration galleries (IGs) were installed in Areas 5 and 6 prior to backfilling in 2016. These IGs were designed to allow for future application of an ORC or bacteriological nutrients if groundwater monitoring indicates that the groundwater CULs are not being attained at the conditional point of compliance (CPOC). Between 2017 and 2019, targeted treatment with sulfate-rich amendments were applied to the IGs and ground surface of Areas 5 and 6 (refer to Section 1.2.1). In 2018, the IGs were modified by extending IGs 3 and 5 to provide more treatment coverage to the west outside of the excavation footprint and bifurcating IGs 1 through 4 to target treatment applications along the west side of the excavation areas. Figure 1.1 shows the current IG alignment.

The effects of bio-amendment treatment are discussed in Section 2.1.2.4.

### 1.1.2 Minor Cleanup Areas

Outside of the primary cleanup areas, there were several other minor cleanup areas defined in the RI, including the Stack Area (Area 1), the Hog Fuel Storage Area (Areas 2 and 3), the Pentachlorophenol (PCP) Area (Area 4), and the Log Pond Fill Area. The Stack Area, Hog Fuel Storage Area, and the PCP Area were excavated to address soil impacts. The only minor cleanup area being monitored under the long-term compliance monitoring program is the Log Pond Fill Area, which has residual soil impacts of oil-range organics (ORO) being managed with an environmental covenant and soil management plan. In coordination with Ecology, monitoring wells PP-21 and PP-22, located along the shoreline in the downgradient portion of the Log Pond Fill Area, were added to the long-term compliance monitoring network starting in October 2023. These two monitoring wells will be monitored at a frequency of every 2.5 years to confirm the long-term stability of the Log Pond Fill Area, with the next monitoring event to occur in April or May 2026.

## 1.2 SUMMARY OF ADDITIONAL POST-REMEDATION ACTIVITIES COMPLETED UNDER THE AGREED ORDER

Additional activities to fulfill the AO after the completion of cleanup action construction include supplemental investigations such as the Log Pond Fill Area soil investigation conducted in 2016 (further described in the K Ply 2023 Annual Progress Report; Floyd|Snider 2024), long-term soil monitoring conducted every 5 years, and bioremediation applications to treat groundwater. No soil monitoring activities were conducted in 2025; refer to previous progress reports for additional information on soil monitoring activities.

The need for active bioremediation of groundwater is evaluated annually under an adaptive treatment plan, as described in Section 3.7.4 of the Engineering Design Report (EDR; Floyd|Snider 2015b). The following section summarizes the post-remediation bioremediation treatment completed to date, which is used in conjunction with the 2025 groundwater data discussed in Section 2.1.2, to provide recommendations for future bioremediation treatment options.

### 1.2.1 In Situ Groundwater Treatment

One year after the initial groundwater treatment applications conducted in 2016 (described in Section 1.1.1), groundwater was assessed to have low to high concentrations of contaminants and low dissolved oxygen (DO) that would not be conducive to aerobic degradation. Groundwater conditions have remained anaerobic to date. Per Table 3.2 in the EDR, additional bio-amendments with sulfate (as electron acceptors) to Site groundwater were injected to support anaerobic degradation of contaminants. In November 2017, two targeted areas around PP-14R and PP-37R were injected with activated carbon amended with magnesium sulfate to control plume migration. In conjunction with these carbon injections, bio-amendment applications consisting of magnesium sulfate and seawater injections into upland IGs began in 2017 and reoccurred every 3 to 6 months until October 2019 to promote anaerobic degradation of benzene under sulfate-reducing conditions. A summary of the bio-amendment applications to date is included in Table 1.1.

**Table 1.1  
Summary of Bio-Amendments**

Date	Bio-Amendment	Location Applied (Figure 1.1)
November 2017	MgSO <sub>4</sub> injection, 3,500 pounds (17% solution) with 2,000 gallons chase water per IG	Area 6: IGs 3, 4, and 5
	MgSO <sub>4</sub> (400 pounds total) and activated carbon (1,200 pounds total) slurry direct injected via Geoprobe	Vicinity of PP-37R and PP-14R
	Land spread CaSO <sub>4</sub> , 8,000 pounds	Area 5
April 2018	Land spread CaSO <sub>4</sub> , 8,000 pounds	Excavation footprint
July 2018	Injected 30,000 gallons of seawater followed by 2,000 gallons chase water per IG	IGs 4 and 5
January 2019	Injected 20,000 gallons of seawater followed by 1,000 gallons chase water per IG	IGs 2, 3, 4, and 5
April 2019		
July 2019		
October 2019		

Abbreviations:

CaSO<sub>4</sub> Calcium sulfate

MgSO<sub>4</sub> Magnesium sulfate

No bio-amendment applications were made to the Site between 2020 and 2025 to allow the aquifer to recover to a state of equilibrium and to gauge the effectiveness of the bio-amendment process on groundwater conditions. Current groundwater conditions are discussed in Section 2.1, but in general, the groundwater concentrations of contaminants of concern (COCs) have decreased substantially since active remediation was completed in 2016.

**1.3 AGREED ORDER ACTIVITIES COMPLETED IN 2025**

Activities completed during the 2025 monitoring period presented in this Annual Progress Report include the 21<sup>st</sup> and 22<sup>nd</sup> rounds of post-remediation groundwater monitoring, which represent 9 years of post-remediation groundwater monitoring data. Groundwater samples were collected in May 2025 and October 2025 from 14 wells in the long-term monitoring network in accordance with the Ecology-approved Sampling and Analysis Plan/Quality Assurance Project Plan (SAP/QAPP; Appendix G of the EDR; Floyd | Snider 2015b).

The Port received Ecology’s Draft 5-Year Periodic Review Report for the K Ply Site on December 9, 2025. The Periodic Review Report provides Ecology’s analysis of progress toward cleanup goals since substantial completion of the cleanup action construction in May 2016 and recommendations for future Site work. The findings of the draft Periodic Review Report are discussed in the conclusions of the Annual Progress Report (refer to Section 3.0); however, implementation of Ecology’s recommendations will be fully addressed in the annual report for 2026 given the short time frame between receipt of the Periodic Review Report and submittal of this report in accordance with the AO.

#### 1.4 SITE REDEVELOPMENT ACTIVITIES

In 2025, the Port completed the construction activities to support the redevelopment of the Site into a Marine Trades Industrial Park. Construction activities began in 2024 and included the following:

- Required backfilling and grading in Areas 5 and 6 was completed with dredge spoils from Terminal 3, which meet the criteria for reuse as shallow grading material as described in the EDR (Floyd|Snider 2015b). Placement of the dredge spoils at the Site was completed in accordance with the Ecology-approved reuse plan of Terminal 3 dredge material, as documented in the Dredged Material Management memorandum for the separate Terminal 3 project (Floyd|Snider 2020).
- Installing utilities (underground water, sewer, electrical, and stormwater conveyance).
- Installing stormwater treatment.
- Altering the stick-up monitoring well monuments to be flush with the new surface grade.
  - Top of casing elevations remain unchanged. New ground surface elevations for monitoring wells in Areas 5 and 6 will be included in the next Environmental Information Management (EIM) submittal to Ecology.
- Additional paving in select areas.

In conjunction with Site redevelopment activities, the Port received Ecology approval to decommission monitoring well MW-8, which is located in the southwestern portion of the Site within Cedar Street and not part of the Site monitoring network. Decommissioning of this well was not completed in 2025 as expected. MW-8 will be decommissioned at the next opportunity that a licensed driller is on-site.

## 2.0 Groundwater Compliance Monitoring

Groundwater monitoring is conducted per the schedule identified in the AO to ensure that residual soil contamination does not pose a risk to the surface water in Port Angeles Harbor via leaching of contaminants to groundwater and migration of contaminated groundwater to surface water. This section presents the groundwater monitoring results from the May 2025 and October 2025 monitoring events. Except where deviations are noted, the field methods used were conducted in accordance with the SAP/QAPP (Appendix G of the EDR; Floyd|Snider 2015b). The groundwater data from these monitoring events were loaded to Ecology's EIM database in June 2025 and December 2025. Notification of acceptance of the data into the EIM database has not yet been received for either data set.

The following sections present the results of monitoring for Site groundwater COCs compared to CULs. The Site groundwater COCs are GRO, diesel-range organics (DRO), ORO, and benzene.

### 2.1 SEMIANNUAL GROUNDWATER COMPLIANCE MONITORING RESULTS

The list of long-term monitoring wells includes 4 CPOC wells (PP-17, PP-18R2, PP-19, and PP-34) and 10 performance monitoring wells (PP-13R, PP-14R, PP-15R2, PP-27, PP-29, PP-30, PP-32, PP-33, PP-36, and PP-37R) within the larger excavation areas (Areas 5 and 6) of the Site. Monitoring well locations are shown in Figure 1.1. Groundwater samples were collected from the 14 wells within Areas 5 and 6 on May 1 and May 2, 2025, and October 15, 2025, using standard low-flow sampling methods. Purge water was collected and placed in a 55-gallon drum stored on-site for profiling and off-site disposal in accordance with applicable laws by Clean Harbors as industrial wastewater. All compliance monitoring samples were analyzed according to the Ecology-approved plans. All samples were analyzed for GRO; DRO; ORO; and benzene, toluene, ethylbenzene, and xylenes (BTEX).

Water quality parameters, including specific conductivity, pH, DO, oxidation–reduction potential (ORP), temperature, and turbidity, were field monitored during sampling of all wells using a YSI Pro DSS water quality meter and a LaMotte turbidity meter. Field parameters are presented in Table 2.1. Elevated pH ranging between 8.34 and 11.93 measured at certain locations (PP-13R, PP-14R, PP-17, PP-27, PP-30, PP-34, and PP-36) are a result of the crushed concrete backfill placed throughout the excavation area, which is expected to neutralize over time. In general, groundwater at the Site has anaerobic/reducing geochemical qualities, such as low DO and negative ORP. There are some seasonal variations in DO and ORP measurements that are likely influenced by tides and stormwater infiltration.

#### 2.1.1 Data Quality

As described in the SAP/QAPP (Appendix G of the EDR; Floyd|Snider 2015b), a Compliance Screening (Stage 2A) data quality review was performed on total petroleum hydrocarbons (TPH) and select volatile organic compound data resulting from laboratory analysis. The analytical data were reviewed and validated using guidance and quality control criteria documented in the

RI/FS Work Plan SAP/QAPP (Floyd|Snider 2013), Test Methods for Evaluating Solid Waste: Physical/Chemical Methods (USEPA 1986), and the National Functional Guidelines for Organic Superfund Methods Data Review (USEPA 2020).

A total of 14 groundwater samples, 1 field duplicate, and 1 trip blank from the May 2025 groundwater sampling event were submitted to Alliance Technical Group (ATG; formerly Fremont Analytical) in Seattle, Washington, under one sample delivery group (SDG): 2505051. A total of 14 groundwater samples and 1 field duplicate from the October 2025 groundwater sampling event were submitted to ATG under SDG 2510412. All SDGs were submitted for chemical analysis by NWTPH-Dx with and without silica gel cleanup, NWTPH-Gx, and USEPA 8260D.

Based on each data quality review, all data are determined to be of acceptable quality for use as reported or qualified.

## 2.1.2 Groundwater Analytical Results within Areas 5 and 6

Analytical results for the 2025 post-remediation groundwater compliance monitoring are presented in Table 2.2 and on Figures 2.1a through 2.6. The 2025 groundwater results are discussed separately by contaminant group: GRO, DRO, ORO, and benzene. For reference, the cumulative post-remediation groundwater monitoring results from 2016 to 2025 are presented in Table A.1<sup>1</sup> for all COCs and Table A.2 for all monitored geochemical parameters (Appendix A).

### 2.1.2.1 Gasoline-Range Organics

The most recent GRO concentrations in groundwater at Site wells from May and October 2025 are presented in Figures 2.1a and 2.1b, respectively. Figure 2.2 graphically presents all post-remediation GRO concentrations in CPOC wells since 2016.

GRO concentrations in groundwater at the CPOC have generally decreased or remained stable, except at PP-18R2 which increased, since the 2024 sampling events. However, for both 2025 monitoring events, GRO concentrations in and around the CPOC remained less than the CUL of 800 µg/L, with concentrations ranging from non-detect (at a reporting limit of 50.0 µg/L) to 278 µg/L, at all four CPOC wells (PP-17, PP-18R2, PP-19, and PP-34) and PP-37R immediately upgradient of the CPOC.

GRO concentrations in other site monitoring wells are less than the CUL of 800 µg/L except at PP-15R2, PP-27, and PP-36. GRO concentrations at performance wells PP-15R2 and PP-27 are generally decreasing and ranged between 604 µg/L and 2,520 µg/L. GRO concentrations at PP-36 are more seasonally variable with concentrations exceeding the CUL in May but less than the CUL in October. These performance wells are located in Area 5, where residually contaminated soil with concentrations greater than the CUL (but less than the remediation level of 3,000 mg/kg)

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<sup>1</sup> In October 2021, the laboratory shifted the reporting of DRO and ORO concentrations based on carbon chains to quantification based on the chromatographic pattern and the conceptual site model of residual diesel fuel in soil. ORO concentrations reported in 2016 through April 2021 (Table A.1) are more consistent with a weathered diesel product rather than ORO.

was left in place in the smear zone, so some groundwater exceedances are anticipated. However, the site-wide GRO concentrations continue to slowly decline relative to pre-remediation concentrations, and the GRO CUL is being achieved at the other performance wells and at the CPOC, indicating that attenuation is occurring as anticipated.

#### **2.1.2.2 Diesel-Range Organics**

The most recent DRO concentrations in groundwater at Site wells from May and October 2025 are presented in Figures 2.3a and 2.3b, respectively. Figure 2.4 graphically presents all post-remediation DRO concentrations in CPOC wells since 2016 (quantified by the laboratory as ORO between 2016 and April 2021 and quantified as DRO beginning in October 2021).

DRO concentrations in groundwater continue to be relatively stable or variable since remediation was completed in 2016. DRO concentrations measured in groundwater from CPOC well PP-19 continued to be less than the Site CUL of 500 µg/L. Groundwater samples from the other three CPOC wells (PP-17, PP-18R2, and PP-34) consistently demonstrate exceedances of DRO with concentrations measured in 2025 ranging from 546 µg/L to 1,710 µg/L, or approximately 1.1 to 3.4 times the Site CUL. DRO concentrations in PP-17 and PP-34 are stable; however, DRO concentrations in PP-18R2 continue to trend downward. Additionally, DRO exceedances in upgradient performance monitoring wells range from 535 µg/L to 2,490 µg/L.

The use of silica gel cleanup on these samples site-wide results in a significant decrease in DRO concentrations, with an average decrease of 74% for all 2025 results, indicating that polar organics including fuel metabolites and/or naturally occurring organic carbon may comprise up to 74% of the DRO in Site groundwater. The range of background organic carbon in groundwater which may contribute to polar organics concentrations in the vicinity is not known because monitoring wells without petroleum impacts are not available for sampling upgradient of the Site. Silica gel cleanup on the CPOC well samples resulted in DRO concentrations less than the CUL at all four CPOC wells during both monitoring events (refer to Table 2.2), indicating that the remaining contamination is highly weathered at the CPOC. Resulting polar organics concentrations were greater than 500 µg/L at PP-17 and PP-34 during both events. Upgradient performance monitoring wells PP-15R2 and PP-36 were the only two locations where DRO concentrations remained greater than the CUL with silica gel cleanup. DRO concentrations with silica gel cleanup at these locations ranged from 190 µg/L to 1,020 µg/L. ATG additionally noted that these detections were biased high due to overlap with GRO.

The DRO concentrations with silica gel cleanup are a line of evidence that despite stable DRO concentrations, diesel-range compounds are degrading, and continued exceedances of DRO represent a mix of weathered diesel, fuel metabolites, and naturally occurring organics in the aquifer.

#### **2.1.2.3 Oil-Range Organics**

ORO concentrations resulting from hydraulic oil in groundwater comply with the Site CUL of 500 µg/L at the CPOC and all upgradient performance monitoring wells. In both May and

October 2025, ORO was not detected in any monitoring well. This is consistent with previous results and the RI findings that ORO was not detected in most groundwater samples from the southern portion of the former mill building (Area 5) or in the northern portion of the former mill building and bulkhead (Area 6; Floyd|Snider 2015a). Because ORO was not detected in any monitoring wells in 2025, there is no figure depicting ORO results in groundwater.

#### **2.1.2.4 Benzene**

The most recent benzene concentrations in groundwater at Site wells from May and October 2025 are presented in Figures 2.5a and 2.5b, respectively. Figure 2.6 graphically presents all post-remediation benzene concentrations in CPOC wells since 2016.

The 2025 benzene concentrations measured in all four CPOC wells (PP-17, PP-18R2, PP-19, and PP-34) are all less than the site-specific CUL of 51 µg/L and have been less than the CUL during the past 5 years of monitoring. Benzene concentrations in groundwater across the Site have steadily decreased since 2016, and the overall plume footprint continues to shrink with some seasonal variability. The only 2025 benzene exceedances were measured at upgradient site monitoring wells PP-14R and PP-15R2. Benzene concentrations at PP-14R were less than the site-specific CUL in May but exceeded the CUL with a concentration of 232 µg/L in October. Benzene concentrations at PP-15R2 were 366 µg/L and 224 µg/L in May and October, respectively. The benzene exceedance at PP-14R in October 2025 is the first CUL exceedance since October 2023. Upgradient wells are expected to continue to have benzene results that exceed the CUL due to residual source mass in soil in Area 5 that is contributing to elevated groundwater concentrations. Benzene concentrations at the CPOC have remained less than the CUL since 2020, demonstrating that upgradient exceedances are successfully attenuating before reaching the CPOC and cleanup standards are being met.

### 3.0 Groundwater Monitoring Conclusions and Recommendations

The groundwater monitoring results presented in this report confirm the overall effectiveness of remediation in reducing groundwater contamination to meet CULs at the CPOC. The COC concentrations in groundwater are generally stable or decreasing with a few non-exceedance, localized increases upgradient of the CPOC described in this section. The results support the following summary conclusions:

- Post-remediation groundwater concentrations for most COCs are gradually declining across the Site with some seasonal variability.
- Despite some seasonal variability and temporary ground-disturbing activities upgradient in 2023 that temporarily remobilized upgradient COCs, the site-wide data indicate that the GRO and benzene groundwater plumes continue to shrink, with at least 4 consecutive years of data resulting in concentrations less than the Site CULs at the CPOC.
- Hydraulic oil as ORO is not detected and remains in compliance with CULs at the CPOC.
- Weathered diesel as DRO concentrations (and historically quantified with overlap between DRO and ORO) in groundwater have remained generally stable with exceedances of approximately 1.1 to 3.4 times the CUL at the CPOC. DRO results after silica gel cleanup at the CPOC were less than the CUL or non-detect for the past five monitoring events. The DRO concentrations with silica gel cleanup are a compelling line of evidence that despite stable DRO concentrations, diesel-range compounds are degrading, and continued exceedances of DRO represent a mix of weathered diesel, fuel metabolites, and naturally occurring organics in the aquifer. Per Ecology's Guidance for Silica Gel Cleanup in Washington State (Ecology 2023), the DRO concentrations with silica gel cleanup are relevant for compliance evaluation because the source of DRO is weathered and there is evidence of natural attenuation.
- Groundwater monitoring is proposed to continue on a semiannual basis for groundwater COCs within the Area 5 and 6 monitoring well network. Groundwater samples with detectable concentrations of DRO will continue to be analyzed with and without silica gel cleanup during the 2026 monitoring events.
  - Further assessment of naturally occurring organic carbon in groundwater in the Site vicinity is recommended in 2026, and selection of appropriate background wells will be coordinated with Ecology.
  - The need for additional in situ treatment or other contingency actions to address residual DRO in groundwater will be coordinated with Ecology after further assessment of the composition of DRO at the Site.
- Localized increases of benzene concentrations were observed in 2023 at PP-13R, PP-14R, and PP-37R but decreased at all three wells in 2024. The 2024 annual report presented additional microbial population and geochemical parameter analysis

indicating that conditions are satisfactory for anaerobic degradation of benzene. In 2025, benzene increased relative to 2024 concentrations only at PP-14R. Given the limited, upgradient footprint of the benzene increase observed at PP-14R, continued monitoring is recommended to further assess trends at this location. Potential additional in situ treatment will be evaluated adaptively per the EDR in the next annual report based on the apparent trends observed during 2026.

- In accordance with Ecology's recommendations in the draft Periodic Review Report, future benzene results at the CPOC will also be screened against a surface water protection criterion of 1.6 µg/L. The Port will coordinate with Ecology in 2026 to determine whether the existing CPOC wells are situated appropriately to assess compliance with this additional criterion for surface water protection.

### **3.1 OTHER AGREED ORDER REPORTING REQUIREMENTS**

Information on other AO reporting requirements includes the following:

- Summary of deviations from the approved work plan: None.
- Summary of contacts with representatives of the local community; public interest groups; press; and federal, state, or tribal governments related to the Site cleanup: None.
- Changes in key personnel: None.

### **3.2 UPCOMING WORK**

AO work activities planned during the next work period, ending in December 2026, are described in the following sections.

#### **3.2.1 Groundwater Monitoring**

- Groundwater monitoring will continue on the Ecology-approved semiannual schedule in spring (April or May) and fall (October or November) 2026.
- Groundwater monitoring downgradient of the Log Pond Fill Area will also continue on a 2.5-year schedule with the next monitoring to occur in spring 2026.
- Further assessment of naturally occurring organic carbon in groundwater in the Site vicinity and the selection of appropriate background wells will be coordinated with Ecology in 2026.
- Evaluation of the potential need for additional in situ treatment or contingency actions to address residual DRO contamination in groundwater will be coordinated with Ecology after further assessment of the composition of DRO at the Site.
- The 2026 annual groundwater monitoring report will be submitted in January 2027.

### 3.2.2 Site Development

- Decommissioning MW-8, as approved by Ecology, is expected to be completed in 2026.
- All monitoring well modifications will be completed by a licensed driller per WAC 173-160-420(8).

Preparation of the Site for future anticipated marine industrial uses, which included grading and pavement, was completed in 2025. Design of the K Ply redevelopment plans are not yet final; however, a vapor intrusion assessment is required prior to construction of any buildings per the existing Soil Management Plan for the Site as required by Section VII of the AO. As redevelopment plans are finalized, a vapor intrusion assessment work plan, which is expected to include soil gas sampling, will be coordinated with Ecology for approval. After any required assessment, the Port will work with Ecology to assess the data for further action.

### 3.2.3 Long-Term Soil Monitoring

The CAP anticipates that long-term soil monitoring will be conducted every 5 years at the Site, with the goal of eventually documenting site-wide compliance with soil CULs that are protective of unrestricted property use. As discussed in the draft Periodic Review Report, the first soil monitoring event completed in 2021 found that COC concentrations in the saturated zone of Area 5 were consistent with excavation confirmation samples collected during the cleanup action and that concentrations near the shoreline had attenuated since cleanup. The soil monitoring results were consistent with the findings of long-term groundwater monitoring in these areas.

Given the site preparations that have been completed to date to support future marine industrial activities, the Port does not foresee a near-term need to document compliance with soil CULs that would be driven by unrestricted property use. As described in Section 3.2.2, any enclosed buildings that would be developed in the future would be required to assess potential vapor intrusion related to residual soil contamination under the existing Soil Management Plan for the Site.

Ongoing groundwater compliance monitoring provides key information regarding the leaching of residual soil contamination in the saturated zone. Therefore, the Port recommends deferment of the next long-term soil monitoring event in favor of groundwater monitoring with supplemental vapor intrusion assessment if triggered by redevelopment plans. This recommendation will be reassessed if changes in site use or groundwater contaminant conditions occur in the future.

## 4.0 References

- Floyd|Snider. 2013. *K Ply Site Remedial Investigation/Feasibility Study Work Plan*. Prepared for the Port of Port Angeles. September.
- \_\_\_\_\_. 2015a. *K Ply Site Remedial Investigation/Feasibility Study*. Prepared for the Port of Port Angeles. May.
- \_\_\_\_\_. 2015b. *K Ply Site Engineering Design Report*. Prepared for the Port of Port Angeles. August.
- \_\_\_\_\_. 2016. *K Ply Site Construction Completion Report*. Prepared for the Port of Port Angeles. December.
- \_\_\_\_\_. 2020. *Port of Port Angeles Terminal 3 Dredged Material Management*. Memorandum from Corey Wilson and Jessi Massingale, Floyd|Snider, to Connie Groven, Washington State Department of Ecology. 28 January.
- \_\_\_\_\_. 2024. *2023 Annual Progress Report for the K Ply Site*. Prepared for the Port of Port Angeles. 9 January.
- U.S. Environmental Protection Agency (USEPA). 1986. *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods*. U.S. Prepared by the Office of Solid Waste and Emergency Response. EPA-530/SW-846.
- \_\_\_\_\_. 2020. *National Functional Guidelines for Inorganic Superfund Methods Data Review*. Prepared by the Office of Superfund Remediation and Technology Innovation. EPA-542-R-20-006/OLEM 9240.1-66. November.
- Washington State Department of Ecology (Ecology). 2015. *K Ply Site Cleanup Action Plan*. 23 March.
- \_\_\_\_\_. 2023. *Guidance for Silica Gel Cleanup in Washington State*. Publication No. 22-09-059. November.

# 2025 Annual Progress Report for the K Ply Site

K Ply Site

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**Tables**

**Table 2.1  
2025 Groundwater Field Parameters**

Field Parameter <sup>(1)</sup>			Depth to Water	Groundwater Elevation	Specific Conductance	pH	Dissolved Oxygen	ORP	Temperature	Turbidity
Unit			Feet bTOC	Feet NAVD 88	µS/cm	pH	mg/L	mV	°C	NTU
Location Name	Measured Date	Screened Interval (feet bgs)								
PP-13R	5/1/2025	7-17	9.69	5.05	826	9.52	0.49	79.2	12.8	1.19
	10/15/2025		9.65	5.09	1,350	8.7	1.03	-171.6	15.4	1.90
PP-14R	5/1/2025	7-17	10.35	5.22	865	9.57	0.45	71.0	12.9	1.02
	10/15/2025		10.35	5.22	1,493	8.34	0.69	-53.1	16.0	0.74
PP-15R2	5/2/2025	7-17	9.23	6.18	992	7.67	0.43	51.7	13.2	1.48
	10/15/2025		9.49	5.92	1,453	7.61	0.99	-179.4	15.1	1.82
PP-17	5/1/2025	5-15	11.16	5.60	796	10.62	1.33	221.7	11.9	1.43
	10/15/2025		11.39	5.37	961	10.36	1.15	-223.7	15.2	1.90
PP-18R2	5/1/2025	10-20	12.40	4.24	2,010	7.62	3.44	224.0	11.6	0.64
	10/15/2025		11.92	4.72	12,835	7.21	1.05	124.6	14.3	1.26
PP-19	5/1/2025	5-15	11.29	5.05	11,323	7.15	6.06	190.7	12.9	1.15
	10/15/2025		11.31	5.03	25,596	6.97	3.67	149.5	16.1	1.25
PP-27	5/2/2025	7-17	9.33	6.13	985	10.77	0.43	41.6	12.2	1.70
	10/15/2025		9.89	5.57	1,284	9.87	0.94	-142.9	15.0	1.50
PP-29	5/2/2025	7-17	9.08	6.88	1,004	7.4	1.01	234.6	12.2	0.40
	10/15/2025		9.50	6.46	1,937	7.32	0.82	7.10	15.7	1.06
PP-30	5/1/2025	7-17	10.27	5.23	1,473	11.81	1.21	231.3	11.2	1.54
	10/15/2025		10.34	5.16	1,488	11.2	0.71	-180.7	15.7	1.18
PP-32	5/1/2025	8-18	10.85	4.20	1,462	7.22	1.42	189.6	13.4	0.52
	10/15/2025		10.16	4.89	2,507	7.84	0.67	-75.2	16.1	1.87
PP-33	5/1/2025	7-17	11.53	4.09	979	7.67	0.79	41.7	13.5	1.69
	10/15/2025		9.33	6.29	1,170	7.54	1.12	-160.2	14.5	1.58
PP-34	5/1/2025	10-20	11.96	4.90	1,841	11.93	1.18	220.9	12.2	1.09
	10/15/2025		11.98	4.88	3,005	11.9	0.97	-65.5	15.8	0.82
PP-36	5/2/2025	10-20	9.72	6.37	479.4	9.42	1.18	238.6	11.6	0.13
	10/15/2025		9.95	6.14	596	7.91	1.14	-186.3	14.0	1.45
PP-37R	5/1/2025	10-20	10.61	5.05	600	7.41	0.51	120.7	12.9	2.07
	10/15/2025		10.80	4.86	1,450	7.66	1.08	-185.4	15.4	2.09

Notes:

1 Field parameters collected with YSI Pro DSS water quality meter and LaMotte 2020t/we turbidity meter.

Abbreviations:

- bgs Below ground surface
- bTOC Below top of casing
- °C Degrees Celsius
- µS/cm Microsiemens per centimeter
- mg/L Milligrams per liter
- mV Millivolts
- NAVD 88 North American Vertical Datum of 1988
- NTU Nephelometric turbidity units
- ORP Oxidation-reduction potential

Table 2.2  
2025 Groundwater Analytical Results

Analyte Class		Total Petroleum Hydrocarbons						Benzene, Toluene, Ethylbenzene, and Xylenes			
Analyte		Gasoline-Range Organics	Diesel-Range Organics	Diesel-Range Organics (Silica Gel)	Diesel-Range Polar Organics (estimated) <sup>(1)</sup>	Oil-Range Organics	Oil-Range Organics (Silica Gel)	Benzene	Ethylbenzene	Toluene	Xylene (total)
Cleanup Level		800	500	500	500	500	500	51	--	--	--
Unit		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Location	Sample Date										
<b>Conditional Point of Compliance Monitoring Wells</b>											
PP-17	5/1/2025 <sup>(2)</sup>	128 <sup>(3)</sup>	<b>1,120<sup>(4)</sup></b>	145 <sup>(5)</sup>	975	138 U	138 U	14.3	0.974	0.500 U	2.16
	10/15/2025	130 <sup>(6)</sup>	<b>972<sup>(4)</sup></b>	94.3 U	972	141 U	141 U	16.9	0.886	0.500 U	2.25
PP-18R2	5/1/2025	278 <sup>(3)</sup>	<b>546<sup>(4)</sup></b>	230 J <sup>(5)</sup>	316	141 U	141 U	0.367	0.500 U	0.500 U	1.00 U
	10/15/2025 <sup>(2)</sup>	132 <sup>(6)</sup>	<b>591 J<sup>(4)</sup></b>	116 J <sup>(5)</sup>	475	145 U	145 U	0.200 U	0.500 U	0.500 U	1.00 U
PP-19	5/1/2025	50.0 U	199 J <sup>(4)</sup>	91.9 J <sup>(4)</sup>	107	138 U	138 U	0.200 U	0.500 U	0.500 U	1.00 U
	10/15/2025	50.0 U	94.0 U	94.0 U	--	141 U	141 U	0.200 U	0.500 U	0.500 U	1.00 U
PP-34	5/1/2025	118 <sup>(3)</sup>	<b>1,630<sup>(4)</sup></b>	130 <sup>(5)</sup>	1500	139 U	139 U	1.56	5.58	0.500 U	4.15
	10/15/2025	155 <sup>(6)</sup>	<b>1,710 J<sup>(4)</sup></b>	170 J <sup>(5)</sup>	1540	146 UJ	146 UJ	1.92	7.16	0.614	5.95
<b>Other Site Monitoring Wells</b>											
PP-13R	5/1/2025	50.0 U	<b>840<sup>(4)</sup></b>	117 J <sup>(4)</sup>	723	139 U	139 U	1.70	0.500 U	0.500 U	1.00 U
	10/15/2025	50.0 U	458 <sup>(4)</sup>	94.9 U	458	142 U	142 U	7.91	0.500 U	0.500 U	1.00 U
PP-14R	5/1/2025	70.3 <sup>(6)</sup>	<b>1,070<sup>(4)</sup></b>	99.0 J <sup>(4)</sup>	971	140 U	140 U	29.5	0.500 U	0.500 U	1.00 U
	10/15/2025	96.9 <sup>(6)</sup>	<b>987<sup>(4)</sup></b>	94.4 U	987	142 U	142 U	<b>232</b>	0.500 U	0.668	1.00 U
PP-15R2	5/2/2025	<b>2,520<sup>(3)</sup></b>	<b>2,490<sup>(4)</sup></b>	<b>506<sup>(5)</sup></b>	1984	138 U	138 U	<b>366</b>	54.6	10.0 U	35.4
	10/15/2025	<b>2,300<sup>(6)</sup></b>	<b>2,040<sup>(4,5)</sup></b>	418 <sup>(5)</sup>	1622	145 U	145 U	<b>224</b>	25.3	10.0	30.0
PP-27	5/2/2025	<b>945<sup>(3)</sup></b>	<b>1,970<sup>(4)</sup></b>	467 <sup>(5)</sup>	1503	139 U	139 U	45.6	47.8	4.07	23.9
	10/15/2025	604 <sup>(6)</sup>	<b>732<sup>(4,5)</sup></b>	178 <sup>(5)</sup>	554	142 U	142 U	19.3	22.3	1.65	10.1
PP-29	5/2/2025	50.0 U	<b>929<sup>(4)</sup></b>	105 <sup>(4)</sup>	824	142 U	142 U	0.200 U	0.500 U	0.500 U	1.00 U
	10/15/2025	50.0 U	<b>694<sup>(4)</sup></b>	95.1 U	694	143 U	143 U	0.200 U	0.500 U	0.500 U	1.00 U
PP-30	5/1/2025	198 <sup>(3)</sup>	<b>1,670<sup>(4)</sup></b>	142 J <sup>(5)</sup>	1528	138 U	138 U	10.3	4.10	0.733	5.04
	10/15/2025	338 <sup>(6)</sup>	<b>1,530 J<sup>(4)</sup></b>	237 J <sup>(5)</sup>	1293	145 UJ	145 UJ	9.40	5.49	0.930	6.83
PP-32	5/1/2025	50.0 U	411 J <sup>(4)</sup>	99.6 J <sup>(4)</sup>	311	139 U	139 U	0.575	0.500 U	0.500 U	1.00 U
	10/15/2025	50.0 U	285 J <sup>(4)</sup>	153 J <sup>(6)</sup>	132	147 UJ	147 UJ	3.36	0.500 U	0.500 U	1.00 U
PP-33	5/1/2025	50.0 U	<b>1,140<sup>(4)</sup></b>	95.9 U	1140	144 U	144 U	1.51	0.500 U	0.500 U	1.00 U
	10/15/2025	50.0 U	<b>535 J<sup>(4)</sup></b>	97.8 UJ	535	147 UJ	147 UJ	0.200 U	0.500 U	0.500 U	1.00 U
PP-36	5/2/2025	<b>1,740<sup>(3)</sup></b>	<b>1,270<sup>(4)</sup></b>	<b>1,020<sup>(5)</sup></b>	250	139 U	139 U	16.0	12.7	0.619	2.23
	10/15/2025	574 <sup>(6)</sup>	411 J <sup>(4)</sup>	190 J <sup>(5)</sup>	221	147 UJ	147 UJ	1.37	0.631	0.500 U	1.00 U
PP-37R	5/1/2025	50.0 U	<b>644<sup>(4)</sup></b>	93.4 U	644	140 U	140 U	0.200 U	0.500 U	0.500 U	1.00 U
	10/15/2025	50.0 U	467 J <sup>(4)</sup>	98.4 UJ	467	148 UJ	148 UJ	0.873	0.500 U	0.500 U	1.00 U

Notes:

-- Not available.

**RED/BOLD** Detected concentration that exceeds criterion.

- 1 Polar organics concentration is estimated and is equal to the difference between diesel-range organics results with and without silica gel cleanup.
- 2 A field duplicate was collected. The greatest detected value is reported; in cases where both results were not detected, the lowest reporting limit is given.
- 3 Laboratory noted that the chromatographic pattern indicates a material consistent with weathered gasoline.
- 4 Laboratory noted that the chromatographic pattern indicates an unresolved complex mixture, which may be weathered and/or organic material.
- 5 Laboratory noted that the detection is biased high by overlap with gasoline-range material.
- 6 Laboratory noted that the detection is due to non-petroleum compounds.

Abbreviation:

µg/L Micrograms per liter

Qualifiers:

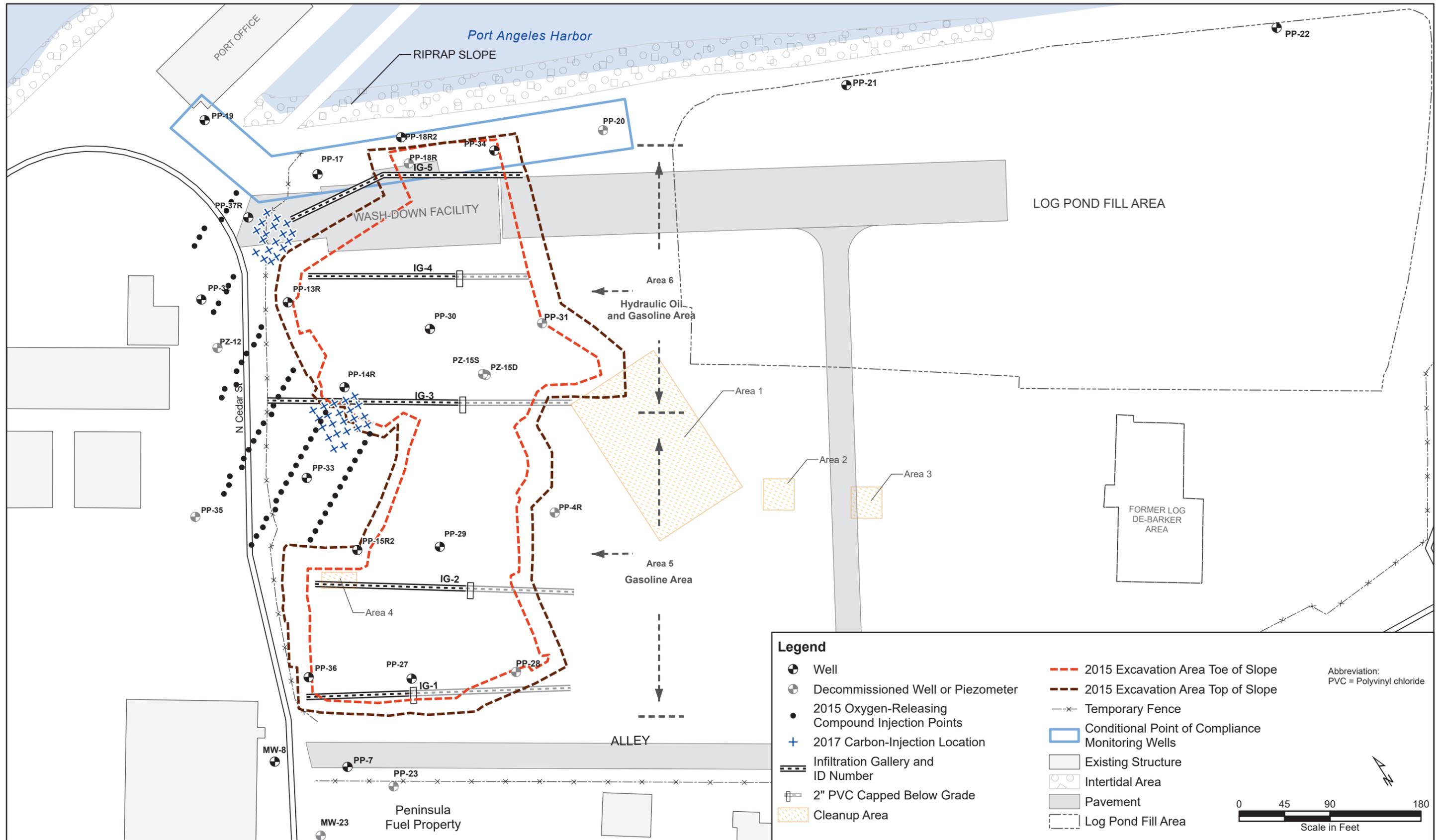
- J Concentration is estimated but acceptable for most uses.
- U Analyte is not detected at the associated reporting limit.

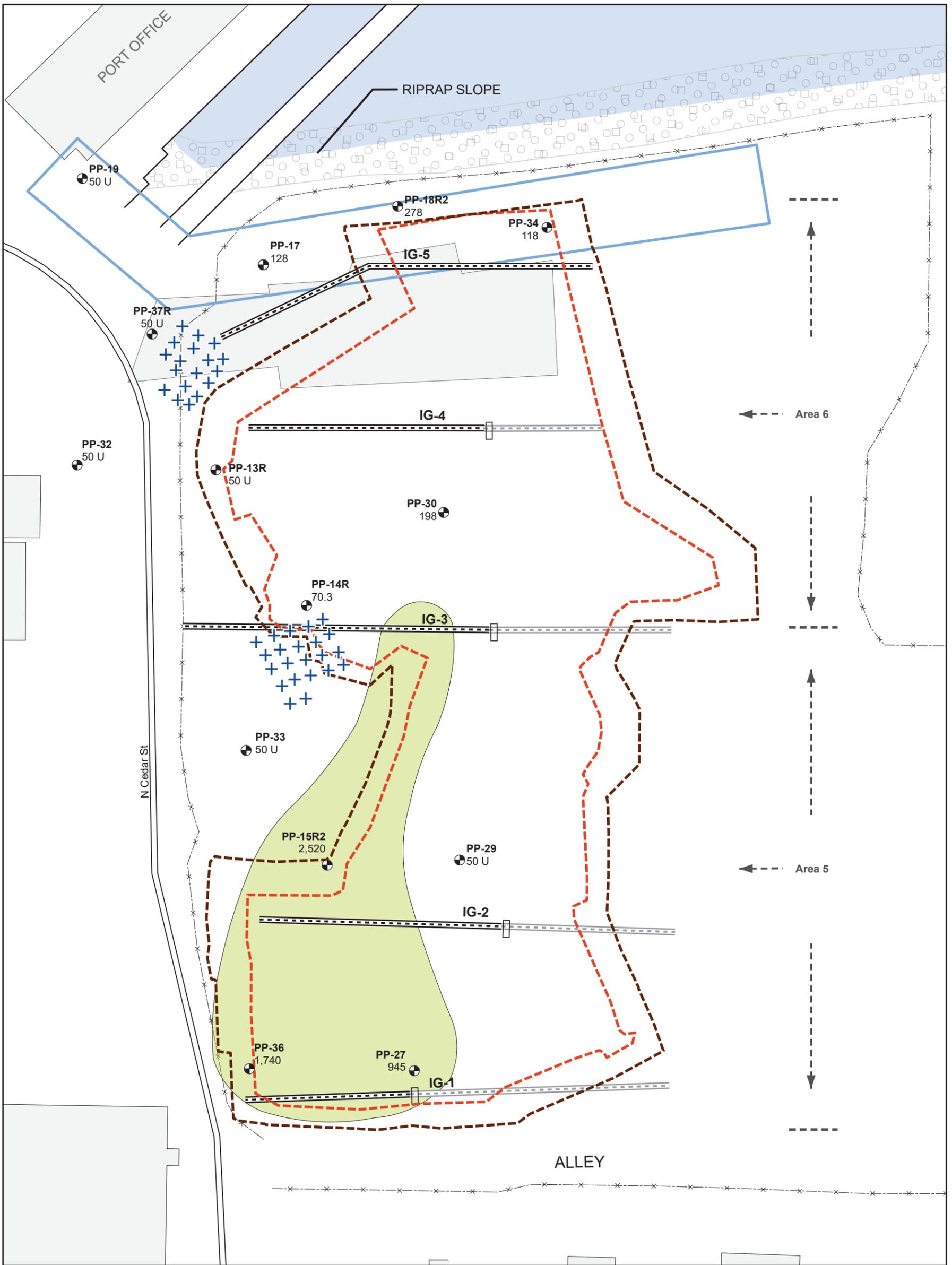
# 2025 Annual Progress Report for the K Ply Site

K Ply Site

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**Figures**





**Legend**

- Well
- Carbon-Injection Location
- Infiltration Gallery and ID Number
- 2" PVC Capped Below Grade
- Extent of GRO in Groundwater (µg/L)**
- >800
- 2015 Excavation Area Toe of Slope
- 2015 Excavation Area Top of Slope
- Conditional Point of Compliance Monitoring Wells
- Temporary Fence
- Existing Structure
- Intertidal Area

**Notes:**

- Cleanup level is 800 µg/L.
- If duplicate collected, greater concentration reported.
- Results rounded to three significant figures.

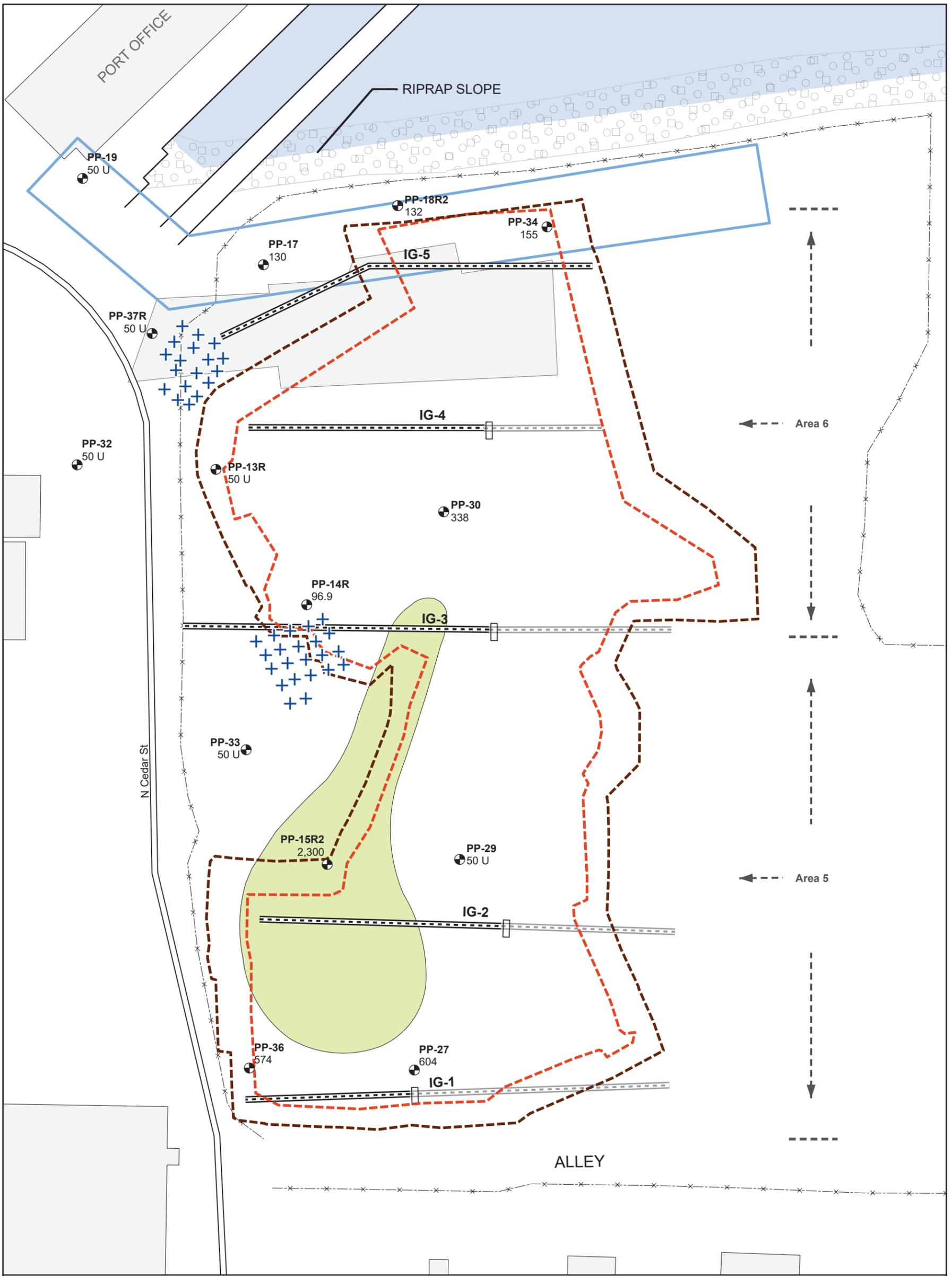
**Abbreviations:**

- GRO = Gasoline-range organics
- µg/L = Micrograms per liter
- PVC = Polyvinyl chloride

**Qualifier:**

- U = Analyte is not detected at the associated reporting limit.





**Legend**

- Well
- Carbon-Injection Location
- Infiltration Gallery and ID Number
- 2" PVC Capped Below Grade
- Extent of GRO in Groundwater (µg/L)**
- >800
- 2015 Excavation Area Toe of Slope
- 2015 Excavation Area Top of Slope
- Conditional Point of Compliance Monitoring Wells
- Temporary Fence
- Existing Structure
- Intertidal Area

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**Abbreviations:**

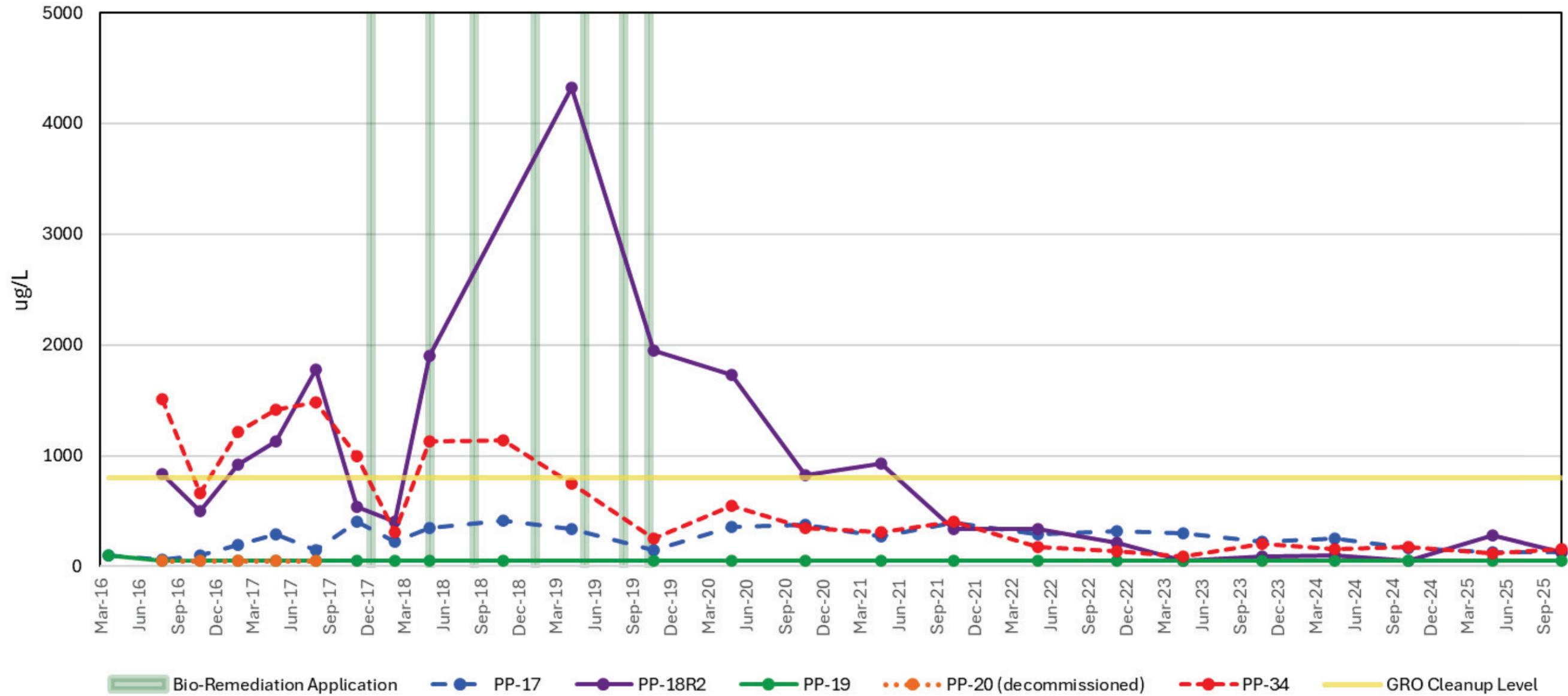
- GRO = Gasoline-range organics
- µg/L = Micrograms per liter
- PVC = Polyvinyl chloride

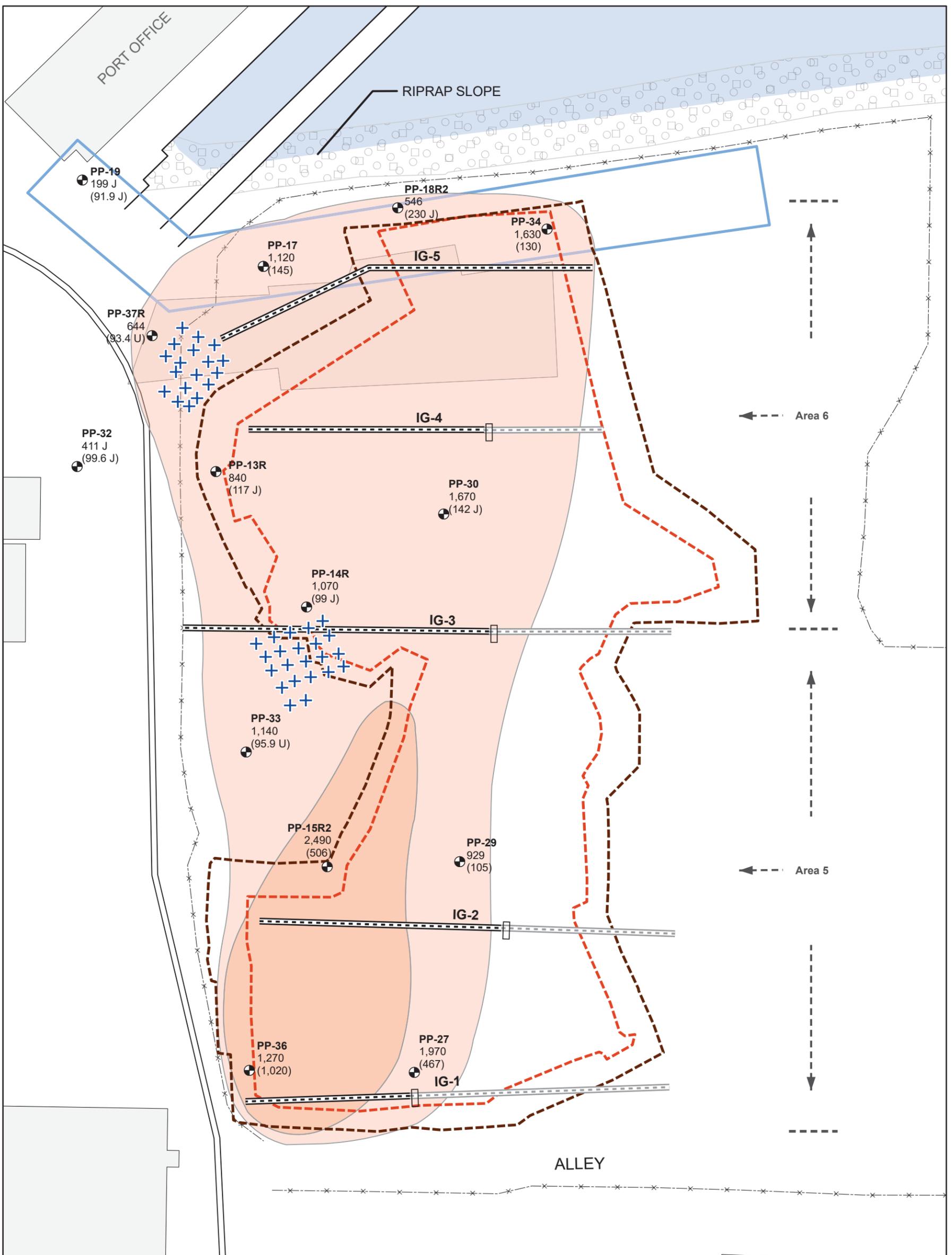
**Qualifier:**

- U = Analyte is not detected at the associated reporting limit.



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12/17/2025





**Legend**

- Well
- + Carbon-Injection Location
- Infiltration Gallery and ID Number
- ▭ 2" PVC Capped Below Grade
- Extent of DRO in Groundwater (µg/L)
- Light Orange: >500
- Dark Orange: >500 with SGC
- - - - Temporary Fence
- Existing Structure
- Intertidal Area
- - - - 2015 Excavation Area Toe of Slope
- - - - 2015 Excavation Area Top of Slope
- Blue Outline: Conditional Point of Compliance Monitoring Wells

**Location Label**

- PP-36 ← Location
- 878 ← DRO Result
- (759) ← DRO Result with SGC

**Notes:**

- Cleanup level is 500 µg/L.
- If duplicate collected, greater concentration reported.
- Results rounded to three significant figures.

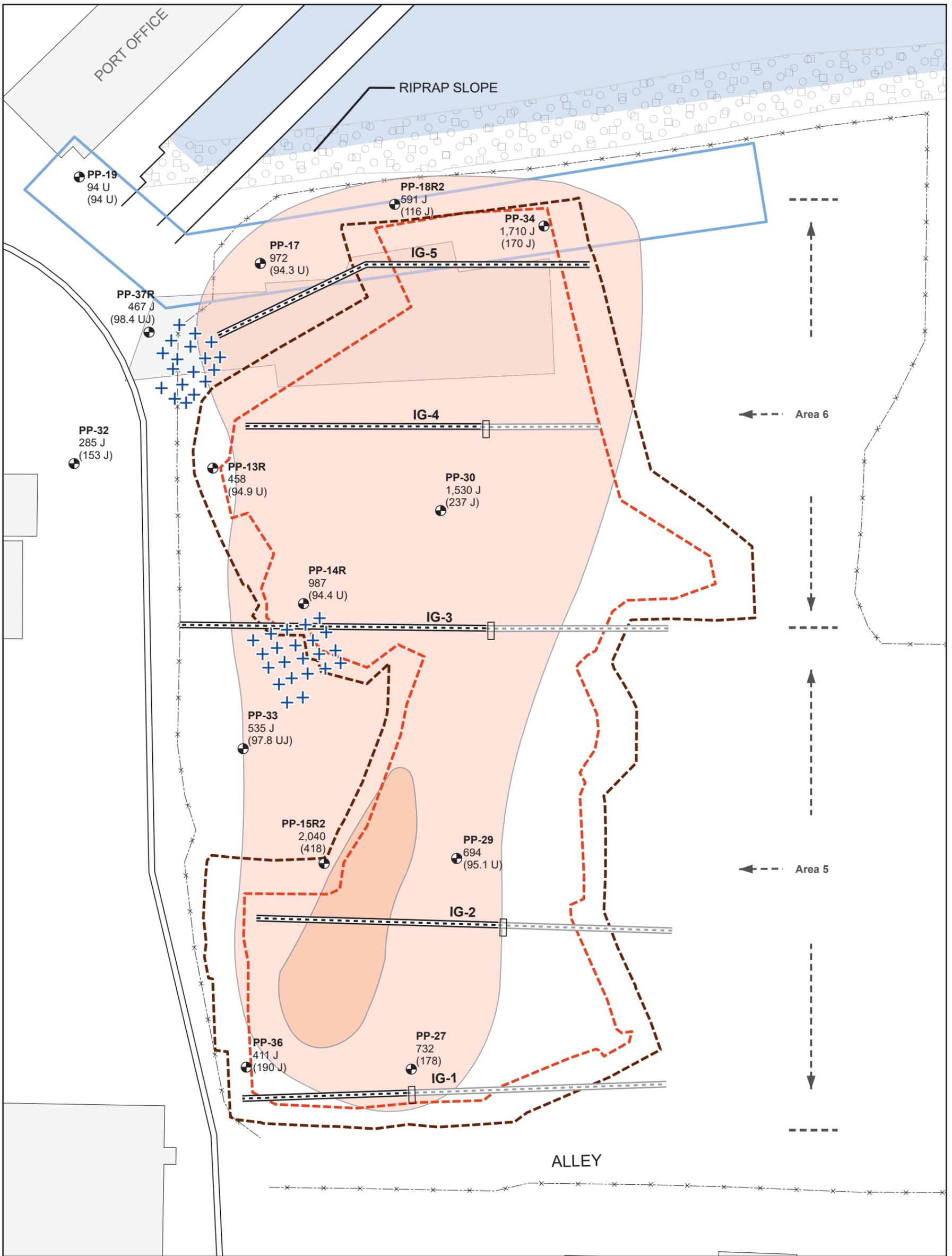
**Abbreviations:**

- DRO = Diesel-range organics
- µg/L = Micrograms per liter
- PVC = Polyvinyl chloride
- SGC = Silica gel cleanup

**Qualifier:**

- J = Concentration is estimated but acceptable for most uses.
- U = Analyte is not detected at the associated reporting limit.





**Legend**

- Well
- + Carbon-Injection Location
- Infiltration Gallery and ID Number
- ⌘ 2" PVC Capped Below Grade
- Extent of DRO in Groundwater (µg/L)
- Light Orange: >500
- Dark Orange: >500 with SGC
- 2015 Excavation Area Toe of Slope
- 2015 Excavation Area Top of Slope
- Blue Outline: Conditional Point of Compliance Monitoring Wells
- Temporary Fence
- Grey Outline: Existing Structure
- Circle with X: Intertidal Area

**Location Label**

- PP-36 ← Location
- 878 ← DRO Result
- (759) ← DRO Result with SGC

**Notes:**

- Cleanup level is 500 µg/L.
- If duplicate collected, greater concentration reported.
- Results rounded to three significant figures.

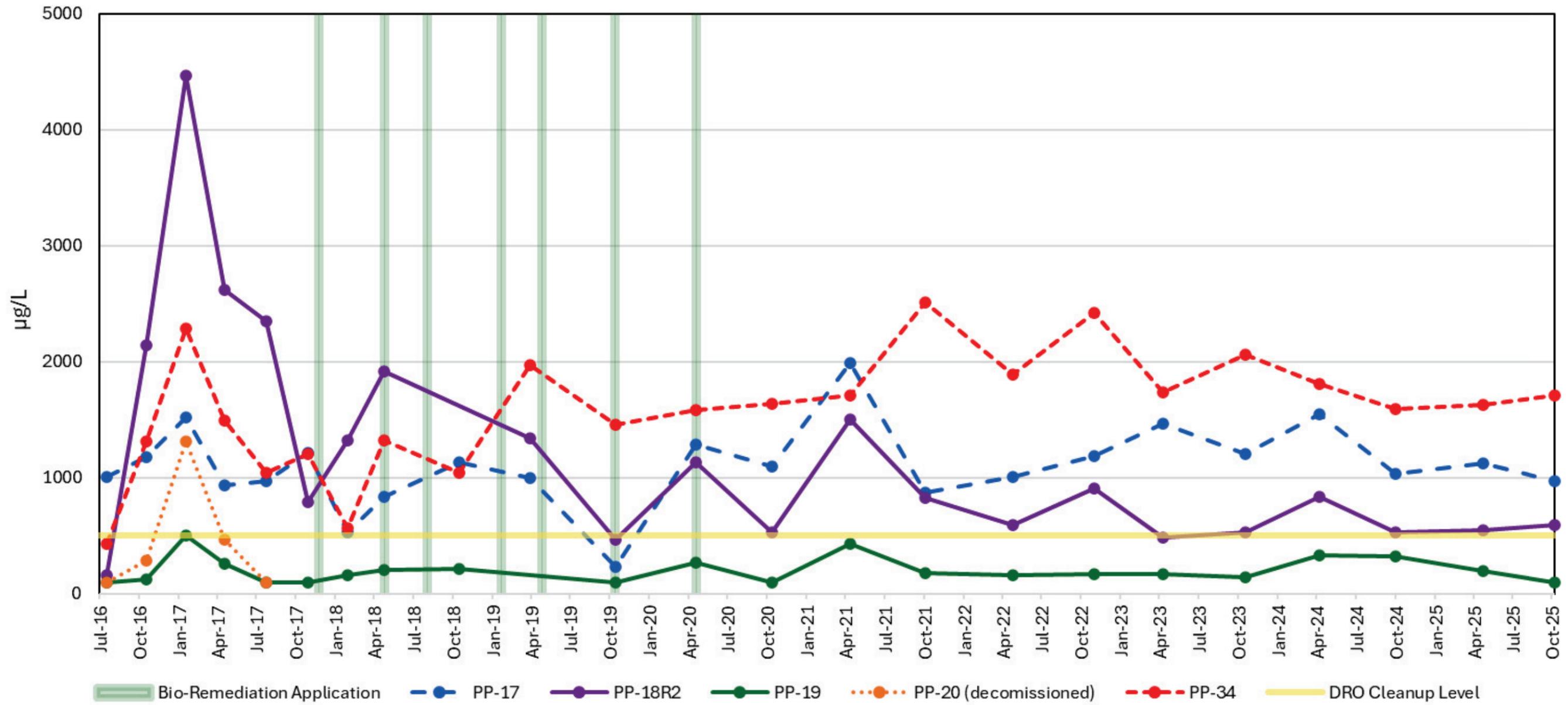
**Abbreviations:**

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- µg/L = Micrograms per liter
- PVC = Polyvinyl chloride
- SGC = Silica gel cleanup

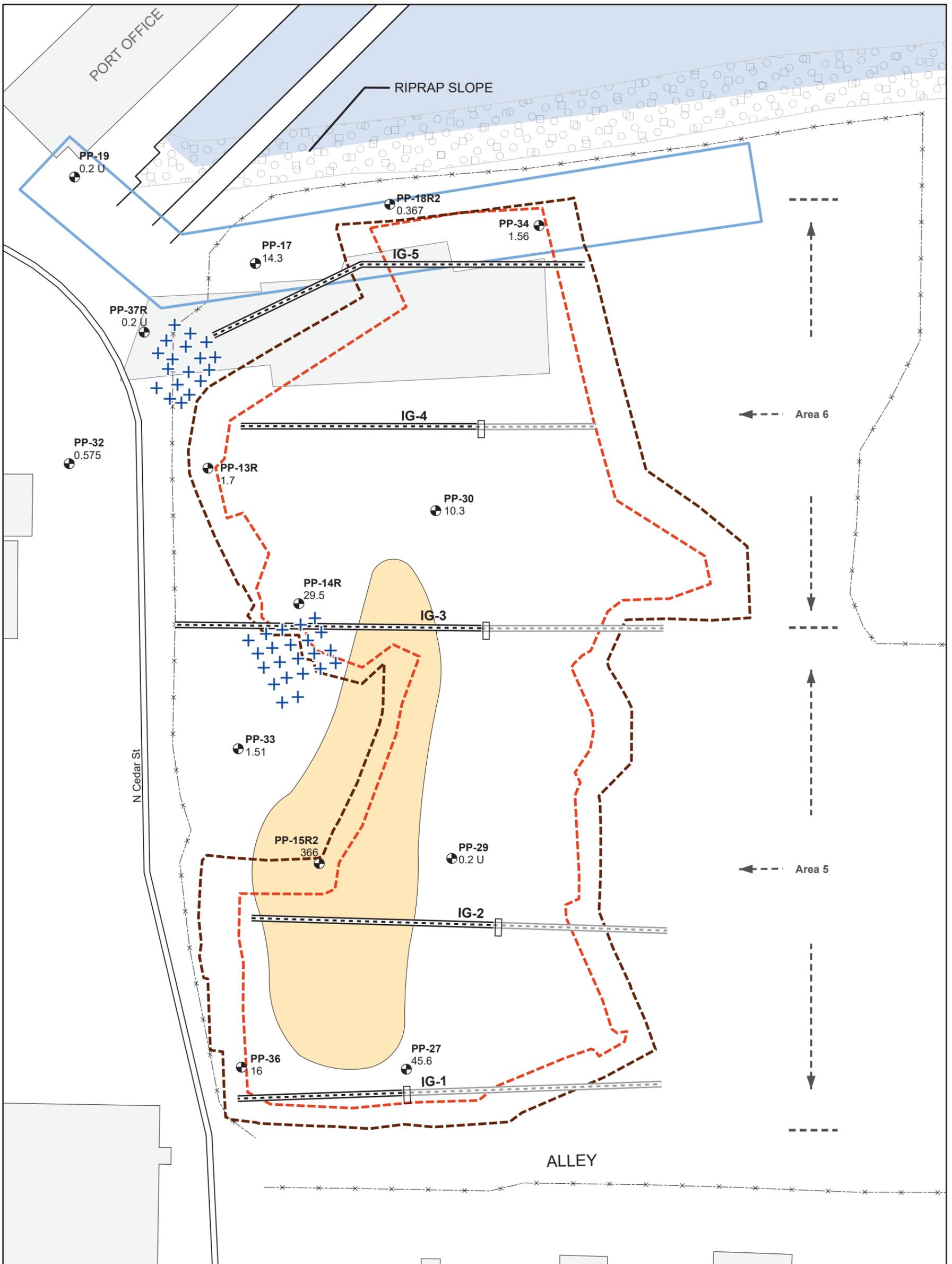
**Qualifier:**

- J = Concentration is estimated but acceptable for most uses.
- U = Analyte is not detected at the associated reporting limit.





Abbreviations:  
 CPOC = Conditional point of compliance  
 DRO = Diesel-range organics  
 µg/L = Micrograms per liter



**Legend**

- Well
- Carbon-Injection Location
- Infiltration Gallery and ID Number
- 2" PVC Capped Below Grade
- 2015 Excavation Area Toe of Slope
- 2015 Excavation Area Top of Slope
- Conditional Point of Compliance Monitoring Wells
- Temporary Fence
- Existing Structure
- Intertidal Area

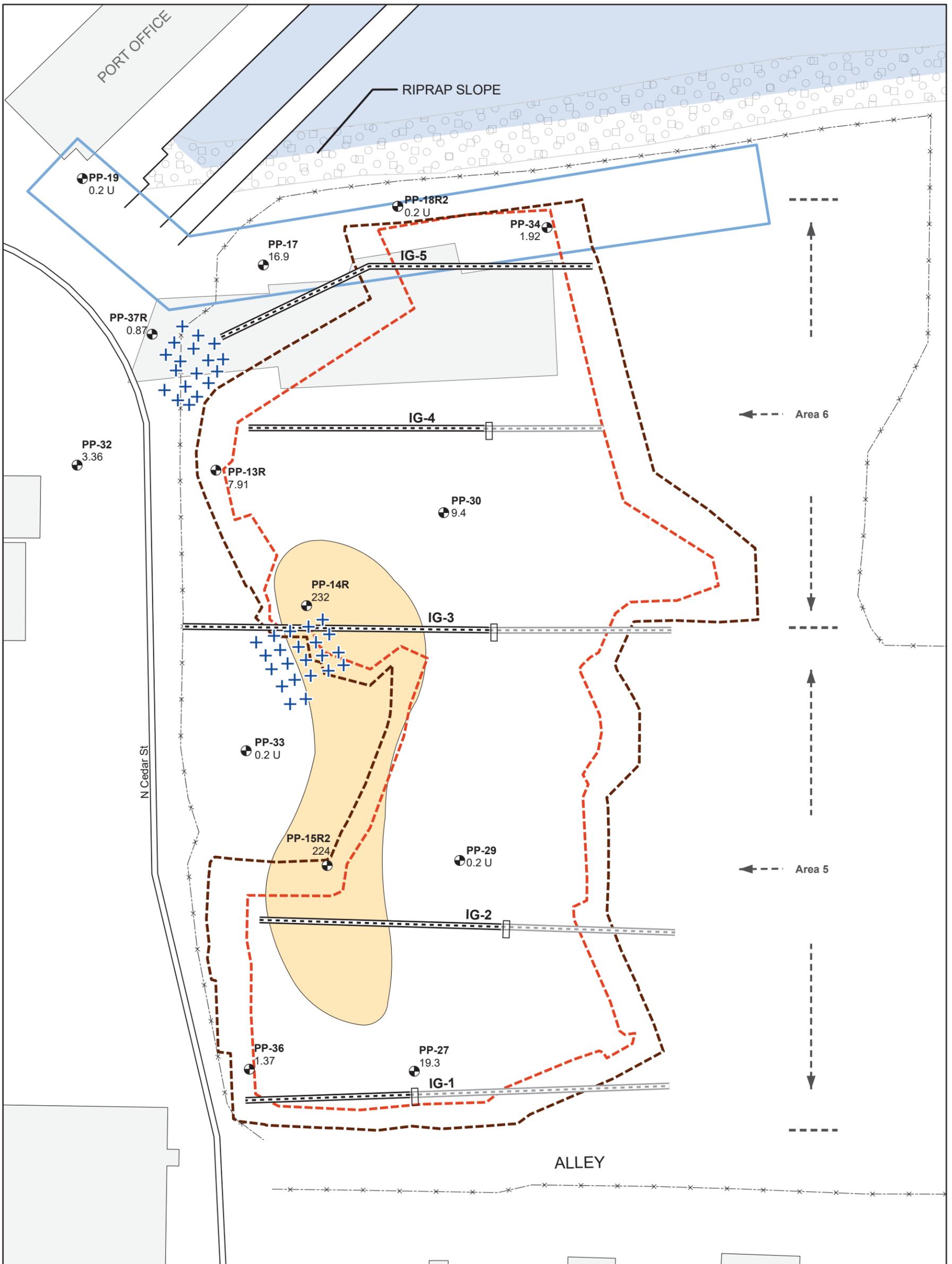
**Extent of Benzene in Groundwater (µg/L)**  
 >51

**Notes:**  
 · Cleanup level is 51 µg/L.  
 · If duplicate collected, greater concentration reported.  
 · Results rounded to three significant figures.

**Abbreviations:**  
 µg/L = Micrograms per liter  
 PVC = Polyvinyl chloride

**Qualifier:**  
 U = Analyte is not detected at the associated reporting limit.





**Legend**

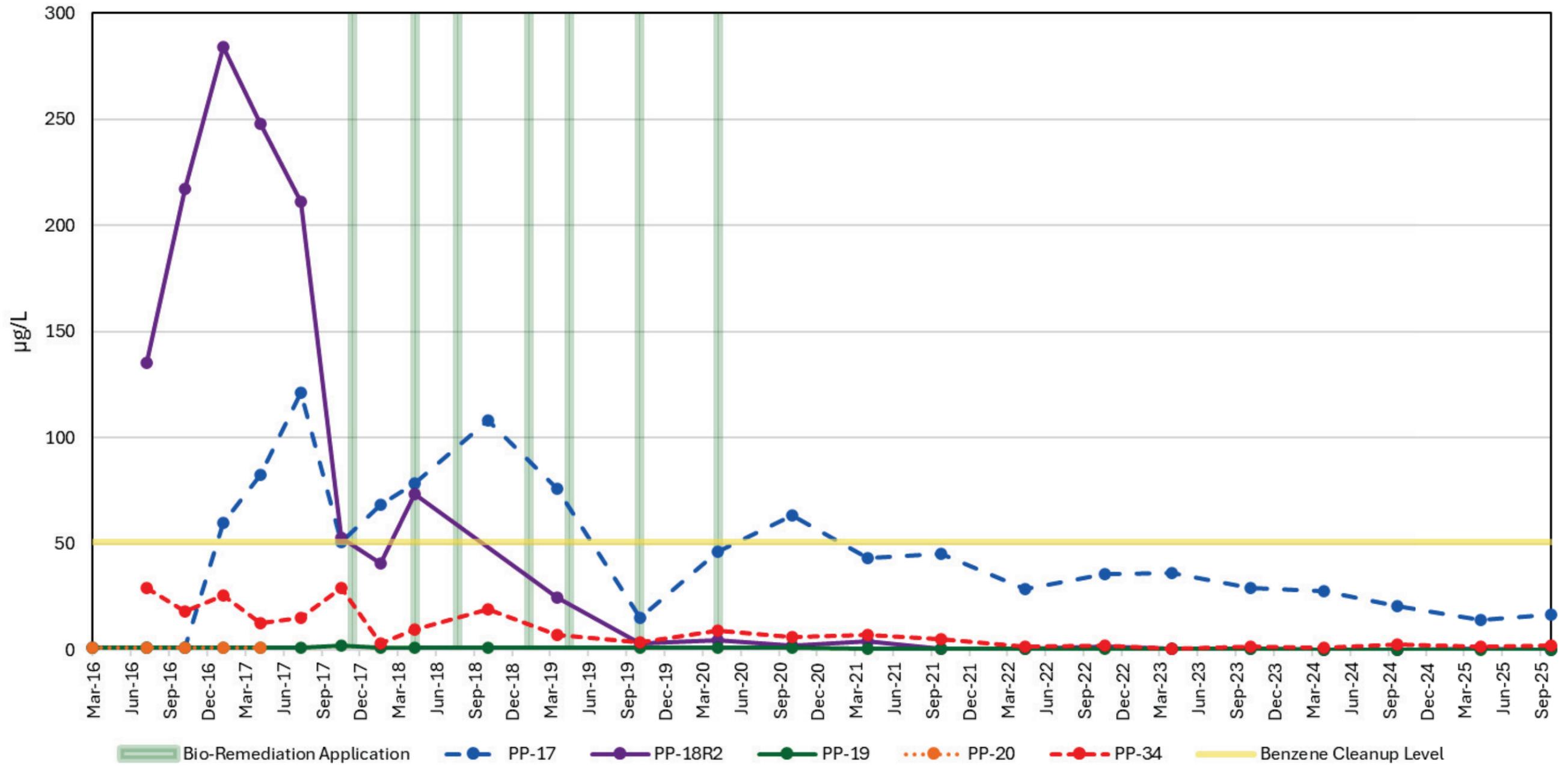
- Well
- + Carbon-Injection Location
- ==== Infiltration Gallery and ID Number
- ⌘ 2" PVC Capped Below Grade
- Extent of Benzene in Groundwater (µg/L)
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Notes:  
 · Cleanup level is 51 µg/L.  
 · If duplicate collected, greater concentration reported.  
 · Results rounded to three significant figures.

Abbreviations:  
 µg/L = Micrograms per liter  
 PVC = Polyvinyl chloride

Qualifier:  
 U = Analyte is not detected at the associated reporting limit.





Abbreviations:  
 CPOC = Conditional point of compliance  
 µg/L = Micrograms per liter

# **2025 Annual Progress Report for the K Ply Site**

K Ply Site

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## **Appendix A Cumulative Post-Remediation Groundwater Results (2016 to 2025)**

**Table A.1**  
**Cumulative Analytical Groundwater Results**

Analyte Class	Total Petroleum Hydrocarbons (TPH)						Benzene, Toluene, Ethylbenzene, and Xylenes			
	Gasoline-Range Organics	Diesel-Range Organics	Diesel-Range Organics (Silica Gel)	Oil-Range Organics <sup>(1)</sup>	Oil-Range Organics (Silica Gel)	Total TPH (DRO + ORO)	Benzene	Ethylbenzene	Toluene	Xylene (total)
Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Criteria	800	500	500	500	500	500	51.0	--	--	--
<b>Sample Location and Date</b>										
<b>Conditional Point of Compliance Monitoring Wells</b>										
<b>PP-17 (Screened Interval 5–15 ft)</b>										
3/21/2016	100 U						1.00 U	1.00 U	1.00 U	3.00 U
7/27/2016	59.5	417 J <sup>(2)</sup>		1,010		1,430 J	1.00 U	1.00 U	1.00 U	1.00 U
10/27/2016	102	257	153	1,180	543	1,440	1.00 U	1.00 U	1.00 U	1.00 U
1/26/2017	195	160	49.8 U	1,520	633	1,680	60.1	1.00 U	1.00 U	1.00 U
4/26/2017	287	167		931		1,100	82.3	1.10	1.09	2.01
8/2/2017	147	135 <sup>(2)</sup>		969		1,100	121	1.32	1.31	2.33
11/7/2017	404	471		1,210		1,680	50.9	1.00 U	1.00 U	1.23
2/8/2018	228	91.1 <sup>(2)</sup>		525		616	68.6	1.06	1.00 U	1.39
5/2/2018 <sup>(3)</sup>	352	218 <sup>(2)</sup>		834		1,050	78.6	1.76	1.07	2.52
10/25/2018	417	354		1,130		1,480	108	2.70	1.04	2.76
4/8/2019	341	49.6 U		996		996	76.2	1.80	1.00 U	2.62
10/22/2019	150	49.8 UJ	49.8 UJ	234 J	178 J	234 J	15.0	1.00 U	1.00 U	1.00 U
4/27/2020 <sup>(3)</sup>	353	158 <sup>(2)</sup>		1,290		1,450	46.1	1.53	1.00 U	2.70
10/21/2020	375	49.3 U		1,100		1,100	63.6	1.90	1.00 U	3.34
4/21/2021	272	99.5 U		1,990		1,990	43.4	1.68	0.750 U	2.75
10/13/2021	397	873		98.1 U		873	45.2	1.77	0.750 U	2.98
5/4/2022 <sup>(3)</sup>	291	1,010 <sup>(2)</sup>	651 <sup>(2)</sup>	93.6 U	93.6 U	1,010	28.6	1.41	0.750 U	2.40
11/10/2022	317	1,190 <sup>(2)</sup>	194 J <sup>(2,4)</sup>	94.2 U	94.2 U	1,190	35.7	3.56	1.31	5.52
4/19/2023 <sup>(3)</sup>	298	1,470 <sup>(2)</sup>	274 J <sup>(4)</sup>	94.8 U	94.8 U	1,470	36.1	1.84	1.00 U	3.00
10/26/2023	226	1,200 J <sup>(2)</sup>	229 J	95.1 U	95.1 U	1,200 J	29.2	1.41	1.00 U	2.38
4/17/2024	249	1,550 <sup>(2)</sup>	94.7 U	142 U	94.7 U	1,550	27.7	5.00 U	5.00 U	10.0 U
10/10/2024	171	1,030 <sup>(2,4)</sup>	183 <sup>(2,4)</sup>	143 U	143 U	1,030 <sup>(2,4)</sup>	20.9	1.20	0.518	2.23
5/1/2025 <sup>(3)</sup>	128 <sup>(8)</sup>	1,120 <sup>(2)</sup>	145 <sup>(4)</sup>	138 U	138 U	1,120 <sup>(2)</sup>	14.3	0.974	0.500 U	2.16
10/15/2025	130 <sup>(2)</sup>	972 <sup>(2)</sup>	94.3 U	141 U	141 U	972 <sup>(2)</sup>	16.9	0.886	0.500 U	2.25
<b>PP-18R2 (Screened Interval 10–20 ft)<sup>(5)</sup></b>										
7/28/2016	835	151 J <sup>(2)</sup>		163		314	135	2.10	2.82	6.69
10/27/2016	503	1,090	406	2,140	1,200	3,230	217	1.31	1.00 U	2.05
1/26/2017	921	494	279	4,470	1,760	4,960	284	11.2	4.32	19.4
4/26/2017	1,130	643		2,620		3,260	248	12.9	4.46	22.6
8/2/2017	1,780	572 J <sup>(2)</sup>		2,350 J		2,920	211	15.5	3.93	19.8
11/7/2017	538	425		789		1,210	52.8	7.06	1.20	9.74
2/8/2018	401	596 <sup>(2)</sup>		1,320		1,920	40.9	14.4	1.65	15.7
5/2/2018	1,900	781 <sup>(2)</sup>		1,920		2,700	73.3	17.8	1.94	20.2
4/8/2019 <sup>(3)</sup>	4,320	50.4 U	50.4 U	1,340	1,120	1,340	24.5	19.8	1.00 U	6.09
10/22/2019	1,950	84.6 J <sup>(2)</sup>	129 J <sup>(2)</sup>	462 J	375 J	547 J	3.28	13.4	1.00 U	1.23
4/27/2020	1,730	271 <sup>(2)</sup>		1,130		1,400	4.87	9.84	1.00 U	1.61
10/21/2020	829	242 <sup>(2)</sup>		526		768	2.09	7.14	1.00 U	1.00 U
4/21/2021	933	394 <sup>(2)</sup>		1,500		1,890	4.34	4.20	0.750 U	1.31
10/13/2021	337	828		98.9 U		828	0.440 U	0.400 U	0.750 U	1.00 U
5/4/2022	336 <sup>(2)</sup>	591 <sup>(2)</sup>	307 <sup>(2)</sup>	93.9 U	93.9 U	591	0.485	1.27	0.750 U	1.00 U
11/10/2022	217	910 <sup>(2)</sup>	172 J <sup>(4)</sup>	94.7 U	94.7 U	910	1.47	1.02	1.00 U	1.00 U
4/19/2023	50.0 U	482 <sup>(2)</sup>	93.1 U	93.1 U	93.1 U	482	0.440 U	0.400 U	1.00 U	1.00 U
10/26/2023	89.9	532 J <sup>(2)</sup>	95.4 U	95.4 U	95.4 U	532 J	0.440 U	0.400 U	1.00 U	1.00 U
4/17/2024	99.1 <sup>(2)</sup>	831 <sup>(2)</sup>	95.2 U	143 U	95.2 U	831	0.340	0.500 U	0.500 U	1.00 U
10/10/2024 <sup>(3)</sup>	50.0 U	529 <sup>(2)</sup>	93.5 U	140 U	140 U	529 <sup>(2)</sup>	0.314	0.500 U	0.500 U	1.00 U
5/1/2025	278 <sup>(8)</sup>	546 <sup>(2)</sup>	230 J <sup>(4)</sup>	141 U	141 U	546 <sup>(2)</sup>	0.367	0.500 U	0.500 U	1.00 U
10/15/2025 <sup>(3)</sup>	132 <sup>(2)</sup>	591 J <sup>(2)</sup>	116 J <sup>(4)</sup>	145 U	145 U	591 J	0.200 U	0.500 U	0.500 U	1.00 U
<b>PP-19 (Screened Interval 5–15 ft)</b>										
3/21/2016	100 U						1.00 U	1.00 U	1.00 U	3.00 U
7/27/2016	50.0 U	49.9 U		99.7 U		99.7 U	1.00 U	1.00 U	1.00 U	1.00 U
10/27/2016	50.0 U	50.0 U		127		127	1.00 U	1.00 U	1.00 U	1.00 U
1/26/2017	50.0 U	49.8 U	49.8 U	500	248	500	1.00 U	1.00 U	1.00 U	1.00 U
4/26/2017	50.0 U	49.8 U		260		260	1.00 U	1.00 U	1.00 U	1.00 U
8/2/2017	50.0 U	50.0 U		100 U		100 U	1.00 U	1.00 U	1.00 U	1.00 U
11/7/2017	50.0 U	49.7 U		99.4 U		99.4 U	1.96	1.00 U	1.00 U	1.00 U
2/8/2018	50.0 U	50.0 U		159		159	1.00 U	1.00 U	1.00 U	1.00 U
5/2/2018	50.0 U	50.2 U		203		203	1.00 U	1.00 U	1.00 U	1.00 U
10/25/2018	50.0 U	50.0 U		215		215	1.00 U	1.00 U	1.00 U	1.00 U
10/22/2019	50.0 U	49.9 UJ		99.9 UJ		99.9 UJ	1.00 U	1.00 U	1.00 U	1.00 U
4/27/2020	50.0 U	49.9 U		266		226	1.00 U	1.00 U	1.00 U	1.00 U
10/21/2020	50.0 U	49.5 U		99.0 U		99.0 U	1.00 U	1.00 U	1.00 U	1.00 U
4/20/2021	50.0 U	98.5 U		425		425	0.440 U	0.400 U	0.750 U	1.00 U
10/13/2021	50.0 U	181		98.8 U		198 U	0.440 U	0.400 U	0.750 U	1.00 U
5/4/2022	50.0 U	156 <sup>(2)</sup>	94.9 U	94.9 U	94.9 U	190 U	0.440 U	0.400 U	0.750 U	1.00 U
11/10/2022	50.0 U	166 <sup>(2)</sup>		94.1 U		188 U	0.440 U	0.400 U	1.00 U	1.00 U
4/19/2023	50.0 U	167 <sup>(2)</sup>		93.0 U		186 U	0.440 U	0.400 U	1.00 U	1.00 U
10/26/2023	50.0 U	142 J <sup>(2)</sup>	95.4 U	95.4 U	95.4 U	191 U	0.440 U	0.400 U	1.00 U	1.00 U
4/17/2024	50.0 U	327 <sup>(2)</sup>	93.9 U	141 U	93.9 U	327	0.200 U	0.500 U	0.500 U	1.00 U
10/10/2024	50.0 U	324 <sup>(2)</sup>	101 U	151 U	151 U	324 <sup>(2)</sup>	0.200 U	0.500 U	0.500 U	1.00 U
5/1/2025	50.0 U	199 J <sup>(2)</sup>	91.9 J <sup>(2)</sup>	138 U	138 U	199 J	0.200 U	0.500 U	0.500 U	1.00 U
10/15/2025	50.0 U	94.0 U	94.0 U	141 U	141 U	141 U	0.200 U	0.500 U	0.500 U	1.00 U
<b>PP-20 (Screened Interval 8–18 ft) (Decommissioned)</b>										
7/26/2016	50.0 U	50.1 U		100 U		100 U	1.00 U	1.00 U	1.00 U	1.00 U
10/27/2016	50.0 U	50.0 U	92.7	289	177	289	1.00 U	1.00 U	1.00 U	1.00 U
1/26/2017	50.0 U	49.9 U	49.9 U	1,310	454	1,310	1.00 U	1.00 U	1.00 U	1.00 U
4/26/2017	50.0 U	49.8 U		468		468	1.00 U	1.00 U	1.00 U	1.00 U
8/2/2017	50.0 U	50.0 U		100 U		100 U	1.00 U	1.00 U	1.00 U	1.00 U

**Table A.1**  
**Cumulative Analytical Groundwater Results**

Analyte Class	Total Petroleum Hydrocarbons (TPH)						Benzene, Toluene, Ethylbenzene, and Xylenes			
	Gasoline-Range Organics	Diesel-Range Organics	Diesel-Range Organics (Silica Gel)	Oil-Range Organics <sup>(1)</sup>	Oil-Range Organics (Silica Gel)	Total TPH (DRO + ORO)	Benzene	Ethylbenzene	Toluene	Xylene (total)
Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Criteria	800	500	500	500	500	500	51.0	--	--	--
<b>Sample Location and Date</b>										
<b>Conditional Point of Compliance Monitoring Wells (cont.)</b>										
<b>PP-34 (Screened Interval 8–18 ft)</b>										
7/28/2016	1,510	328 J <sup>(2)</sup>		433		761	29.1	76.3	7.19	132
10/27/2016	665	603	493	1,310	772	1,910	18.0	35.1	3.77	62.6
1/26/2017	1,220	503	348	2,290	688	2,790	25.8	61.8	4.10	88.7
4/26/2017	1,420	357		1,490		1,850	12.9	70.4	3.81	83.9
8/2/2017	1,480	238 <sup>(2)</sup>		1,040		1,280	15.1	117	5.26	122
11/7/2017 <sup>(3)</sup>	1,000	695		1,200		1,900	29.2	82.6	3.92	86.1
2/8/2018	309	212 <sup>(2)</sup>		560		772	3.31	15.2	1.00 U	15.0
5/2/2018	1,130	458 <sup>(2)</sup>		1,320		1,780	9.78	44.6	1.81	45.0
10/25/2018	1,140	417 <sup>(2)</sup>		1,040		1,460	19.2	60.8	2.30	51.9
4/8/2019	749	50.0 U		1,970		1,970	7.39	29.4	1.38	23.9
10/22/2019	249	90.7 J <sup>(2)</sup>	105 J <sup>(2)</sup>	1,460 J	1,030 J	1,550 J	3.79	9.81	1.00 U	6.53
4/27/2020	552	376 <sup>(2)</sup>		1,580		1,960	9.01	17.4	1.00 U	10.6
10/21/2020	351	114 <sup>(2)</sup>		1,640		1,750	6.28	20.9	1.00 U	11.6
4/21/2021 <sup>(3)</sup>	307	99.9 U		1,710		1,710	7.09	13.8	0.750 U	8.54
10/13/2021	403	2,510 <sup>(6)</sup>		98.2 U <sup>(6)</sup>		2,510	5.28	16.9	0.750 U	10.1
		110 <sup>(2,7)</sup>	110 <sup>(2,7)</sup>	250 U <sup>(7)</sup>	250 U <sup>(7)</sup>	110				
5/4/2022	174	1,890 <sup>(2)</sup>	969 <sup>(2)</sup>	93.7 U	93.7 U	1,890	1.37	5.23	0.750 U	3.30
11/10/2022	140	2,420 <sup>(2)</sup>	260 J <sup>(4)</sup>	94.3 U	94.3 U	2,420	1.94	7.56	1.00 U	4.96
4/19/2023	86.5	1,740 <sup>(2)</sup>	199	95.1 U	95.1 U	1,740	0.522	2.04	1.00 U	1.67
10/26/2023	205	2,060 J <sup>(2)</sup>	177	94.3 U	94.3 U	2,060 J	1.75	5.90	1.00 U	4.18
4/17/2024	155 <sup>(2)</sup>	1,810 J <sup>(2)</sup>	94.5 U	142 U	94.5 U	1,810 J	1.19	3.94	0.500 U	3.05
10/10/2024	180	1,590 <sup>(2,4)</sup>	328 <sup>(2,4)</sup>	142 U	142 U	1,590 <sup>(2,4)</sup>	2.44	8.41	0.619	7.21
5/1/2025	118 <sup>(8)</sup>	1,630 <sup>(2)</sup>	130 <sup>(4)</sup>	139 U	139 U	1,630 <sup>(2)</sup>	1.56	5.58	0.500 U	4.15
10/15/2025	155 <sup>(2)</sup>	1,710 J <sup>(2)</sup>	170 J <sup>(4)</sup>	146 UJ	146 UJ	1,710 J	1.92	7.16	0.614	5.95
<b>Other Site Monitoring Wells</b>										
<b>PP-4R (Screened Interval 8–18 ft) (Decommissioned)</b>										
7/26/2016	2,240	352 J <sup>(2)</sup>		205 J <sup>(2)</sup>		557 J	26.6	117	3.64	18.3
10/26/2016	667	125		618		743	6.64	1.00 U	1.00 U	1.00 U
1/25/2017	921	49.7 U		548		548	16.8	7.68	1.00 U	1.11
4/25/2017	3,090	172		728		900	38.6	105	3.80	14.8
8/2/2017	1,070	50.0 U		367		367	22.9	63.8	1.25	1.67
<b>PP-13R (Screened Interval 5–15 ft)</b>										
7/28/2016	4,560	124 J <sup>(2)</sup>		377		501 J	1.00 U	5.44	24.3	43.2
10/27/2016	340	157		611		768	106	1.00 U	1.96	2.55
1/25/2017	66.5	49.8 U		1,030		1,030	7.43	1.00 U	1.00 U	1.00 U
4/25/2017	1,460	80.7 J		1,060		1,140 J	518	1.31	6.61	4.96
8/2/2017	6,700	156 <sup>(2)</sup>		518		674	1,730	3.94	26.6	32.9
11/7/2017	7,630	289		481		770	2,150	4.49	28.0	32.9
2/8/2018	159	106 <sup>(2)</sup>		565		671	39.8	1.00 U	1.00 U	1.43
5/2/2018	1,110	302 <sup>(2)</sup>		1,150		1,450	358	1.68	6.00	7.48
10/25/2018 <sup>(3)</sup>	546	94.9 <sup>(2)</sup>		398		483	123	1.00 U	1.54	2.17
4/8/2019	433	50.0 U		684		684	163	1.00 U	1.52	2.07
10/21/2019	1,100	49.7 UJ		646 J		646 J	606	1.00 U	2.50	3.99
4/27/2020	446	122 <sup>(2)</sup>		975		1,100	209	1.00 U	1.00 U	1.00 U
10/21/2020	250	49.2 U		201		201	80.1	1.00 U	1.00 U	1.00 U
4/21/2021	71.4	99.3 U		909		909	20.8	0.400 U	0.750 U	1.00 U
10/13/2021	93.8	501		99.4 U		501	26.7	0.400 U	0.750 U	1.00 U
5/4/2022	50.0 U	845 <sup>(2)</sup>	414 <sup>(2)</sup>	93.3 U	93.3 U	845	2.81	0.400 U	0.750 U	1.00 U
11/11/2022	50.0 U	873 <sup>(2)</sup>	123 <sup>(2)</sup>	98.1 U	98.1 U	873	2.81	0.400 U	1.00 U	1.00 U
4/19/2023	50.0 U	501 <sup>(2)</sup>	164	93.3 U	93.3 U	501	3.27	0.400 U	1.00 U	1.00 U
10/26/2023	50.0 U	405 J <sup>(2)</sup>	161 J	94.6 U	94.6 U	405 J	18.6	0.400 U	1.00 U	1.00 U
4/17/2024	50.0 U	586 <sup>(2)</sup>	94.9 U	142 U	94.9 U	586	2.50	5.00 U	5.00 U	10.0 U
10/10/2024	50.0 U	418 <sup>(2)</sup>	95.6 U	143 U	143 U	418 <sup>(2)</sup>	4.18	0.500 U	0.500 U	1.00 U
5/1/2025	50.0 U	840 <sup>(2)</sup>	117 J <sup>(2)</sup>	139 U	139 U	840 <sup>(2)</sup>	1.70	0.500 U	0.500 U	1.00 U
10/15/2025	50.0 U	458 <sup>(2)</sup>	94.9 U	142 U	142 U	458 <sup>(2)</sup>	7.91	0.500 U	0.500 U	1.00 U
<b>PP-14R (Screened Interval 5–15 ft)</b>										
7/28/2016	4,350	105 J <sup>(2)</sup>		99.4 U		105 J	1,550	35.7	42.6	51.2
10/27/2016	5,640	90.0		193		283	2,120	20.9	35.1	51.7
1/25/2017	4,140	266		1,440		1,710	1,180	12.7	20.8	20.7
4/25/2017	7,290	60.3		552		612	1,870	15.6	27.7	27.5
8/2/2017	6,480	168 <sup>(2)</sup>		480		648	1,960	6.51	19.1	19.1
11/7/2017	7,430	185		299		484	2,100	7.67	18.7	20.6
2/8/2018	1,320	249 <sup>(2)</sup>		710		959	415	2.78	3.60	3.20
5/2/2018	9,690	156 <sup>(2)</sup>		475		631	1,290	3.42	4.93	4.21
10/25/2018	1,490	282 <sup>(2)</sup>		674		956	362	1.76	3.07	3.30
4/8/2019	830	49.6 U		141		141	356	1.58	2.67	2.00
10/21/2019	209	49.3 UJ		296 J		296 J	38.4	1.00 U	1.00 U	1.00 U
4/27/2020	375	80.6 <sup>(2)</sup>		290		371	83.8	1.00 U	1.00 U	1.00 U
10/21/2020	420	56.5 <sup>(2)</sup>		472		529	105	1.00 U	1.00 U	1.00 U
4/20/2021	78.0	99.2 U		477		518	25.9	0.400 U	0.750 U	1.00 U
10/13/2021 <sup>(3)</sup>	156	1,570 J		99.0 U		1,570 J	24.4	0.400 U	0.750 U	1.00 U
5/4/2022	82.1 <sup>(2)</sup>	752 J <sup>(2)</sup>	200 <sup>(2)</sup>	95.4 UJ	95.4 U	752	9.91	0.400 U	0.750 U	1.00 U
11/10/2022	127	353 <sup>(2,4)</sup>		94.3 U		353	3.18	0.400 U	1.00 U	1.00 U
4/19/2023	290 <sup>(2)</sup>	873 <sup>(2)</sup>	94.8 U	94.8 U	94.8 U	873	115	0.400 U	1.00 U	1.00 U
10/26/2023	635	1,030 J <sup>(2)</sup>	154 J	94.4 U	94.4 U	1,030 J	260	2.00 U	5.00 U	5.00 U
4/17/2024	50.0 U	614 <sup>(2)</sup>	94.1 U	141 U	94.1 U	614	7.45	5.00 U	5.00 U	10.0 U
10/10/2024	50.0 U	694 <sup>(2)</sup>	97.7 U	147 U	147 U	694 <sup>(2)</sup>	5.57	0.500 U	0.500 U	1.00 U
5/1/2025	70.3 <sup>(2)</sup>	1,070 <sup>(2)</sup>	99.0 J <sup>(2)</sup>	140 U	140 U	1,070 <sup>(2)</sup>	29.5	0.500 U	0.500 U	1.00 U
10/15/2025	96.9 <sup>(2)</sup>	987 <sup>(2)</sup>	94.4 U	142 U	142 U	987 <sup>(2)</sup>	232	0.500 U	0.668	1.00 U

**Table A.1**  
**Cumulative Analytical Groundwater Results**

Analyte Class	Total Petroleum Hydrocarbons (TPH)						Benzene, Toluene, Ethylbenzene, and Xylenes			
	Gasoline-Range Organics	Diesel-Range Organics	Diesel-Range Organics (Silica Gel)	Oil-Range Organics <sup>(1)</sup>	Oil-Range Organics (Silica Gel)	Total TPH (DRO + ORO)	Benzene	Ethylbenzene	Toluene	Xylene (total)
Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Criteria	800	500	500	500	500	500	51.0	--	--	--
<b>Sample Location and Date</b>										
<b>Other Site Monitoring Wells (cont.)</b>										
<b>PP-15R2 (Screened Interval 5–15 ft)</b>										
7/27/2016	9,940	574 J <sup>(2)</sup>		526		1,100 J	1.00 U	215	29.7	41.8
10/26/2016	1,040	217		289		506	542 J	106	13.7	33.1
1/25/2017 <sup>(3)</sup>	15,200	1,110		3,640		4,750	622	704	42.9	351
4/25/2017	18,500	501		2,810		3,310	490	912	31.9	520
8/2/2017	7,260	277 <sup>(2)</sup>		1,520		1,800	1,190	171	11.2	68.6
11/8/2017	4,840	649		1,470		2,120	1,200	48.5	11.6	73.1
2/8/2018	11,600	990 <sup>(2)</sup>		2,010		3,000	265	887	52.6	234
5/2/2018	10,600	843 <sup>(2)</sup>		2,190		3,030	1,440	324	18.4	78.9
10/25/2018	3,560	405 <sup>(2)</sup>		959		1,360	828	21.2	10.0 U	27.6
4/8/2019	7,540	574	499	1,990	1,380	2,560	367	117	10.1	79.8
10/21/2019	6,950	411 J <sup>(2)</sup>		871 J		1,280 J	1,680	44.6	8.10	40.2
4/27/2020	7,480	447 <sup>(2)</sup>		2,120		2,570	404	232	15.7	79.9
10/21/2020	5,070	189 <sup>(2)</sup>		1,530		1,720	809	62.0	5.82	42.0
4/20/2021	6,800	335 <sup>(2)</sup>		3,210		3,540	456	388	23.7	91.2
10/13/2021	7,660	2,240 <sup>(6)</sup>		99.0 U <sup>(6)</sup>		2,240	1,550	70.2	7.15	33.3
		1,600 <sup>(2,7)</sup>	520 <sup>(2,7)</sup>	730 <sup>(2,7)</sup>	250 U <sup>(7)</sup>	2,330				
5/4/2022	8,870	7,330 <sup>(2)</sup>	2,930 <sup>(2)</sup>	96.0 U	96.0 U	7,330	359	482	23.5	130
11/11/2022	8,140	3,110 J <sup>(2,4)</sup>	1,200 J <sup>(4)</sup>	95.4 U	95.4 U	3,110 J	502	183	26.1	71.4
4/19/2023	4,590 J <sup>(2)</sup>	2,680 J <sup>(2,4)</sup>	1,090 <sup>(4)</sup>	92.1 U	92.1 U	2,680 J	921	60.7	13.1	31.7
10/27/2023	3,740	1,420 J <sup>(2)</sup>	469 J	93.5 U	93.5 U	1,420 J	1,170	8.00 U	20.0 U	20.0 U
4/17/2024	3,660 <sup>(2)</sup>	3,860 J <sup>(2)</sup>	891 <sup>(4)</sup>	144 U	96.2 U	3,860 J	187	136	6.98	18.4
10/10/2024	2,200	2,290 <sup>(2,4)</sup>	737 <sup>(4)</sup>	147 U	147 U	2,290 <sup>(2,4)</sup>	239	10.0 U	10.0 U	20.0 U
5/2/2025	2,520 <sup>(8)</sup>	2,490 <sup>(2)</sup>	506 <sup>(4)</sup>	138 U	138 U	2,490 <sup>(2)</sup>	366	54.6	10.0 U	35.4
10/15/2025	2,300 <sup>(2)</sup>	2,040 <sup>(2,4)</sup>	418 <sup>(4)</sup>	145 U	145 U	2,040 <sup>(2,4)</sup>	224	25.3	10.0	30.0
<b>PP-27 (Screened Interval 5–15 ft)</b>										
7/27/2016	507	90.4 J <sup>(2)</sup>		257		347 J	64.0	28.0	5.51	27.5
10/26/2016	298	72.4		421		493	19.0	3.97	1.00 U	4.24
1/25/2017	3,810	1,060		2,960		4,020	455	75.1	16.3	80.7
4/25/2017	4,460	744		1,360		2,100	464	130	15.1	86.5
8/2/2017	1,230	120 <sup>(2)</sup>		323		443	101	31.6	2.80	17.4
11/8/2017	313 J	249		434		683	73.8	17.4	2.02	10.2
2/8/2018	2,060	1,390 <sup>(2)</sup>		1,330		2,720	240	99.7	11.3	66.2
5/3/2018	1,700	585 <sup>(2)</sup>		1,090		1,680	136	51.7	4.50	26.0
10/25/2018	428	198 <sup>(2)</sup>		235		433	27.6	11.2	1.00 U	6.47
4/8/2019	1,710	1,050		405		1,460	95.7	58.8	5.85	38.7
10/21/2019	960	150 J <sup>(2)</sup>		158 J		308 J	43.2	31.4	1.83	12.1
4/27/2020	1,940	681 <sup>(2)</sup>		992		1,670	85.1	67.3	6.15	34.9
10/21/2020	1,220	179 <sup>(2)</sup>		525		704	69.4	46.3	3.42	19.5
4/20/2021	1,740	1,360 <sup>(2)</sup>		906		2,270	73.6	61.5	5.68	38.1
10/13/2021	1,100	841		98.5 U		841	31.3	31.8	1.60	11.2
5/4/2022	1,810	1,710 <sup>(2)</sup>	1,170 <sup>(2)</sup>	93.1 U	93.1 U	1,710	58.1	56.1	4.15	28.0
11/11/2022	1,800	1,780 J <sup>(2,4)</sup>	547 J <sup>(4)</sup>	94.6 U	94.6 U	1,780 J	54.0	54.9	4.91	27.3
4/19/2023	1,040	1,750 J <sup>(2)</sup>	545 <sup>(4)</sup>	93.6 U	93.6 U	1,750 J	52.6	43.4	3.92	21.5
10/27/2023	1,410	1,760 J <sup>(2)</sup>	580 J	94.5 U	94.5 U	1,760 J	47.7	49.2	5.00 U	18.6
4/17/2024	1,220 <sup>(2)</sup>	2,760 J <sup>(2)</sup>	438 <sup>(4)</sup>	144 U	95.8 U	2,760 J	50.2	46.4	5.00 U	24.2
10/10/2024	828	1,290 <sup>(2,4)</sup>	425 <sup>(4)</sup>	144 U	144 U	1,290 <sup>(2,4)</sup>	24.8	35.0	2.14	14.8
5/2/2025	945 <sup>(8)</sup>	1,970 <sup>(2)</sup>	467 <sup>(4)</sup>	139 U	139 U	1,970 <sup>(2)</sup>	45.6	47.8	4.07	23.9
10/15/2025	604 <sup>(2)</sup>	732 <sup>(2,4)</sup>	178 <sup>(4)</sup>	142 U	142 U	732 <sup>(2,4)</sup>	19.3	22.3	1.65	10.1
<b>PP-28 (Screened Interval 5–15 ft) (Decommissioned)</b>										
7/27/2016 <sup>(3)</sup>	387	149 J <sup>(2)</sup>		100 U		149 J	25.7	3.08	1.00 U	2.35
10/26/2016	5,270	1,680		152		1,830	23.4	151	1.31	157
1/25/2017	769	157		615		772	1.00 U	7.44	1.00 U	3.72
4/25/2017	4,500	1,050		100 U		1,050	1.00 U	38.7	1.00 U	16.8
8/2/2017	3,870	546 <sup>(2)</sup>		99.8 U		546	1,050	48.8	2.05	13.2
11/8/2017	1,750	774		227		1,000	1.00 U	23.5	1.00 U	8.30
2/8/2018	91.7	189 <sup>(2)</sup>		182		371	1.00 U	1.00 U	1.00 U	1.00 U
5/3/2018	1,740	482		192		674	1.00 U	5.76	1.00 U	1.38
<b>PP-29 (Screened Interval 5–15 ft)</b>										
7/28/2016	4,170	531 J <sup>(2)</sup>		985		1,520 J	1,480	40.8	14.6	83.9
10/26/2016	160	268 J		402		670 J	35.3	1.00 U	1.00 U	1.00 U
1/25/2017	1,550	174		1,650		1,820	448	13.2	4.97	24.4
4/25/2017 <sup>(3)</sup>	3,180	586		1,750		2,310	878	19.7	6.40	30.6
8/2/2017	752	183 <sup>(2)</sup>		1,190		1,370	202	4.67	1.53	6.81
11/8/2017	997	646		1,560		2,210	326	5.29	1.85	7.33
2/8/2018	288	387 <sup>(2)</sup>		664		1,050	55.7	6.12	3.93	15.8
5/3/2018	324	179 <sup>(2)</sup>		921		1,100	38.9	3.10	1.00 U	5.78
10/25/2018	170	487 <sup>(2)</sup>		952		1,440	10.9	1.00 U	1.00 U	1.00 U
4/8/2019	145	49.9 U		1,660		1,660	17.9	1.28	1.00 U	1.41
10/21/2019	252	49.2 UJ		836 J		836 J	26.4	1.00 U	1.00 U	1.00 U
4/27/2020	322	112 <sup>(2)</sup>		1,420		1,530	20.3	4.14	1.00 U	1.00 U
10/21/2020 <sup>(3)</sup>	55.8	93.8 <sup>(2)</sup>		863		952	1.00 U	1.00 U	1.00 U	1.00 U
4/20/2021	50.0 U	99.7 U		1,400		1,400	4.23	0.400 U	0.750 U	1.00 U
10/13/2021	65.6	1,180 J		98.8 U		1,180 J	0.440 U	0.400 U	0.750 U	1.00 U
5/4/2022	115	1,790 <sup>(2)</sup>	790 <sup>(2)</sup>	93.4 U	93.4 U	1,790	7.88	0.753	0.750 U	1.00 U
11/11/2022 <sup>(3)</sup>	55.7	1,130 <sup>(2)</sup>	112 <sup>(2)</sup>	101 U	96.7 U	1,130	1.28	0.400 U	1.00 U	1.00 U
4/19/2023	50.0 U	427 <sup>(2)</sup>	93.1 U	93.1 U	93.1 U	427	0.440 U	0.400 U	1.00 U	1.00 U
10/27/2023	50.0 U	1,210 J <sup>(2)</sup>	93.7 U	93.7 U	93.7 U	1,210 J	0.440 U	0.400 U	1.00 U	1.00 U
4/17/2024	500 U	780 <sup>(2)</sup>	94.6 U	142 U	94.6 U	780	2.00 U	5.00 U	5.00 U	10.0 U
10/10/2024	50.0 U	583 <sup>(2)</sup>	204 <sup>(2)</sup>	141 U	141 U	583 <sup>(2)</sup>	0.200 U	0.500 U	0.500 U	1.00 U
5/2/2025	50.0 U	929 <sup>(2)</sup>	105 <sup>(2)</sup>	142 U	142 U	929 <sup>(2)</sup>	0.200 U	0.500 U	0.500 U	1.00 U
10/15/2025	50.0 U	694 <sup>(2)</sup>	95.1 U	143 U	143 U	694 <sup>(2)</sup>	0.200 U	0.500 U	0.500 U	1.00 U

**Table A.1**  
**Cumulative Analytical Groundwater Results**

Analyte Class	Total Petroleum Hydrocarbons (TPH)						Benzene, Toluene, Ethylbenzene, and Xylenes			
	Gasoline-Range Organics	Diesel-Range Organics	Diesel-Range Organics (Silica Gel)	Oil-Range Organics <sup>(1)</sup>	Oil-Range Organics (Silica Gel)	Total TPH (DRO + ORO)	Benzene	Ethylbenzene	Toluene	Xylene (total)
Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Criteria	800	500	500	500	500	500	51.0	--	--	--
Sample Location and Date										
<b>Other Site Monitoring Wells (cont.)</b>										
<b>PP-30 (Screened Interval 5–15 ft)</b>										
7/28/2016	2,310	1,210		1,430		2,640	450	61.2	8.89	86.9
10/27/2016	2,980	164		353		517	539	10.1	4.42	39.5
1/25/2017	1,570	1,510		4,330		5,840	139	25.9	4.55	43.6
4/25/2017	1,920	1,040		3,090		4,130	132	37.9	5.92	81.3
8/2/2017	1,460	453 <sup>(2)</sup>		1,890		2,340	184	26.5	4.15	56.3
11/7/2017	1,280	987		1,640		2,630	229	32.1	4.12	56.3
2/8/2018	862	910 <sup>(2)</sup>		3,560		4,470	26.7	11.0	1.40	14.2
5/2/2018	2,800	865 <sup>(2)</sup>		2,530		3,400	99.5	125	4.47	108
10/25/2018	1,640	547 <sup>(2)</sup>		1,200		1,750	294	22.1	1.52	31.3
4/8/2019	1,180	49.9 U	49.9 U	3,060	1,760	3,060	36.1	44.4	2.74	42.9
10/22/2019	963	167 J <sup>(2)</sup>	138 J <sup>(2)</sup>	2,690 J	1,610 J	2,860 J	119	12.6	1.54	15.0
4/27/2020	1,220	668 <sup>(2)</sup>		2,530		3,200	60.7	19.2	1.44	18.6
10/21/2020	853	394 <sup>(2)</sup>		2,680		3,070	118	13.6	1.74	16.5
4/21/2021	522	99.5 U		2,420		2,470	37.2	9.68	0.961	8.07
10/13/2021	863	1,580		99.3 U		1,580	31.5	3.96	0.750 U	5.21
5/4/2022	365	704 <sup>(2)</sup>	755 <sup>(2)</sup>	94.7 U	94.7 U	704	17.9	3.83	0.750 U	2.80
11/10/2022	353	2,030 J <sup>(2,4)</sup>	261 J <sup>(2,4)</sup>	98.6 U	98.6 U	2,030 J	18.5	4.39	1.00 U	7.00
4/19/2023	439	1,510 J <sup>(2)</sup>	241 <sup>(4)</sup>	92.9 U	92.9 U	1,510 J	24.0	4.23	1.03	4.67
10/26/2023 <sup>(3)</sup>	651	1,630 J <sup>(2)</sup>	192	95.4 U	95.4 U	1,630 J	18.0	2.63	1.00 U	3.87
4/17/2024	401 <sup>(2)</sup>	1,480 J <sup>(2)</sup>	194 <sup>(4)</sup>	143 U	95.6 U	1,480 J	21.7	3.10	0.789	3.01
10/10/2024	347	1,350 <sup>(2,4)</sup>	297 <sup>(2,4)</sup>	145 U	145 U	1,350 <sup>(2,4)</sup>	12.3	3.10	0.703	3.34
5/1/2025	198 <sup>(8)</sup>	1,670 <sup>(2)</sup>	142 J <sup>(4)</sup>	138 U	138 U	1,670 <sup>(2)</sup>	10.3	4.10	0.733	5.04
10/15/2025	338 <sup>(2)</sup>	1,530 J <sup>(2)</sup>	237 J <sup>(4)</sup>	145 UJ	145 UJ	1,530 J	9.40	5.49	0.930	6.83
<b>PP-31 (Screened Interval 5–15 ft) (Decommissioned)</b>										
7/28/2016	356	125 J <sup>(2)</sup>		234		359 J	1.73	6.47	1.00 U	8.92
10/26/2016	360	72.0		335		407	1.42	2.65	1.00 U	4.05
1/25/2017	97.9	121		853		974	1.00 U	1.15	1.00 U	1.36
4/25/2017	1,580	129		616		745	1.94	41.4	1.57	44.5
8/2/2017	158	72.3 <sup>(2)</sup>		496		568	1.45	16.1	1.00 U	11.4
<b>PP-32 (Screened Interval 8–18 ft)</b>										
7/28/2016	296	50.0 U		142		142	113	1.00 U	1.00 U	1.00 U
10/27/2016	50.0 U	50.3 U		152		152	2.74	1.00 U	1.00 U	1.00 U
1/26/2017	373	50.0 U		542		542	160	1.00 U	1.00 U	1.00 U
4/26/2017	289	49.8 U		114		114	97.0	1.00 U	1.00 U	1.00 U
8/2/2017	114	49.8 U		99.6 U		99.6 U	80.4	1.00 U	1.00 U	1.00 U
11/8/2017	50.0 U	50.0 U		159		159	40.3	1.00 U	1.00 U	1.00 U
2/8/2018	50.0 U	49.7 U		99.4 U		99.4 U	26.1	1.00 U	1.00 U	1.00 U
5/2/2018	221	49.9 U		175 J		175 J	88.4	1.00 U	1.00 U	1.00 U
10/25/2018	85.1	50.1 U		100 U		100 U	30.1	1.00 U	1.00 U	1.00 U
4/8/2019	50.0 U	49.9 U		271		271	2.37	1.00 U	1.00 U	1.00 U
10/22/2019	95.0	49.4 UJ		146 J		146 J	34.1	1.00 U	1.00 U	1.00 U
4/27/2020	50.0 U	49.6 U		231		231	1.00 U	1.00 U	1.00 U	1.00 U
10/21/2020	50.0 U	49.3 U		332		332	16.2	1.00 U	1.00 U	1.00 U
4/20/2021	50.0 U	98.6 U		414		414	0.440 U	0.400 U	0.750 U	1.00 U
10/13/2021	57.1	347		98.6 U		347	8.86	0.400 U	0.750 U	1.00 U
5/4/2022	50.0 U	187 <sup>(2)</sup>	92.0 U	92.0 U	92.0 U	187	1.20	0.400 U	0.750 U	1.00 U
11/10/2022	50.0 U	355 <sup>(2)</sup>		95.8 U		355	8.16	0.400 U	1.00 U	1.00 U
4/19/2023	50.0 U	259 <sup>(2)</sup>	93.5 U	93.5 U	93.5 U	259	0.440 U	0.400 U	1.00 U	1.00 U
10/27/2023	50.0 U	428 J <sup>(2)</sup>	96.5 U	96.5 U	96.5 U	428 J	1.64	0.400 U	1.00 U	1.00 U
4/18/2024	50.0 U	337 <sup>(2)</sup>	94.5 U	142 U	94.5 U	337	3.85	0.500 U	0.500 U	1.00 U
10/10/2024	50.0 U	363 <sup>(2,4)</sup>	93.9 U	141 U	141 U	363 <sup>(2,4)</sup>	5.15	0.500 U	0.500 U	1.00 U
5/1/2025	50.0 U	411 J <sup>(2)</sup>	99.6 J <sup>(2)</sup>	139 U	139 U	411 J	0.575	0.500 U	0.500 U	1.00 U
10/15/2025	50.0 U	285 J <sup>(2)</sup>	153 J <sup>(2)</sup>	147 UJ	147 UJ	285 J	3.36	0.500 U	0.500 U	1.00 U
<b>PP-33 (Screened Interval 5–15 ft)</b>										
7/28/2016	1,560	55.0 J <sup>(2)</sup>		99.5 U		55.0 J	670	3.90	6.30	4.38
10/26/2016 <sup>(3)</sup>	50.0 U	94.8		140		235	1.00 U	1.00 U	1.00 U	1.00 U
1/25/2017	316	109		520		629	49.6	1.00 U	1.00 U	1.00 U
4/25/2017	442	170		685		855	80.6	1.00 U	1.00 U	1.11
8/2/2017	457	49.8 U		99.6 U		99.6 U	207	1.00 U	1.24	1.03
11/7/2017	50.0 U	146		264		410	20.1	1.00 U	1.00 U	1.12
2/8/2018 <sup>(3)</sup>	1,160	218 <sup>(2)</sup>		614		832	128	2.09	1.57	1.93
5/3/2018	647	205 <sup>(2)</sup>		690		895	164	1.00 U	1.10	1.00 U
10/25/2018	81.4	142		302		444	1.00 U	1.00 U	1.00 U	1.00 U
4/8/2019	128	49.9 U		416		416	1.04	1.00 U	1.00 U	1.00 U
10/21/2019	50.0 U	49.4 UJ		254 J		254 J	1.00 U	1.00 U	1.00 U	1.00 U
4/27/2020	50.0 U	68.6 <sup>(2)</sup>		831		900	1.00 U	1.00 U	1.00 U	1.00 U
10/21/2020	50.0 U	50.0 U		366		366	1.00 U	1.00 U	1.00 U	1.00 U
4/20/2021	50.0 U	98.7 U		1,460		1,460	0.440 U	0.400 U	0.750 U	1.00 U
10/13/2021	50.0 U	663		99.6 U		663	0.440 U	0.400 U	0.750 U	1.00 U
5/4/2022	243 <sup>(2)</sup>	1,380 <sup>(2)</sup>	800 <sup>(2)</sup>	96.9 U	96.9 U	1,380	31.5	1.82	1.37	1.00 U
11/11/2022	50.0 U	801 <sup>(2)</sup>	94.0 U	94.0 U	94.0 U	801	5.23	0.400 U	1.00 U	1.00 U
4/19/2023	50.0 U	590 <sup>(2)</sup>	93.0 U	93.0 U	93.0 U	590	0.440 U	0.400 U	1.00 U	1.00 U
10/26/2023	50.0 U	701 J <sup>(2)</sup>	93.6 U	93.6 U	93.6 U	701 J	0.440 U	0.400 U	1.00 U	1.00 U
4/17/2024 <sup>(3)</sup>	50.0 U	982 <sup>(2)</sup>	97.7 U	146 U	97.7 U	982	1.22	0.500 U	0.500 U	1.00 U
10/10/2024	50.0 U	571 <sup>(2)</sup>	94.7 U	142 U	142 U	571 <sup>(2)</sup>	0.200 U	0.500 U	0.500 U	1.00 U
5/1/2025	50.0 U	1,140 <sup>(2)</sup>	95.9 U	144 U	144 U	1,140 <sup>(2)</sup>	1.51	0.500 U	0.500 U	1.00 U
10/15/2025	50.0 U	535 J <sup>(2)</sup>	97.8 UJ	147 UJ	147 UJ	535 J	0.200 U	0.500 U	0.500 U	1.00 U

**Table A.1**  
**Cumulative Analytical Groundwater Results**

Analyte Class	Total Petroleum Hydrocarbons (TPH)						Benzene, Toluene, Ethylbenzene, and Xylenes			
	Gasoline-Range Organics	Diesel-Range Organics	Diesel-Range Organics (Silica Gel)	Oil-Range Organics <sup>(1)</sup>	Oil-Range Organics (Silica Gel)	Total TPH (DRO + ORO)	Benzene	Ethylbenzene	Toluene	Xylene (total)
Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Criteria	800	500	500	500	500	500	51.0	--	--	--
<b>Sample Location and Date</b>										
<b>Other Site Monitoring Wells (cont.)</b>										
<b>PP-35 (Screened Interval 8.5–18.5 ft) (Decommissioned)</b>										
7/28/2016	50.0 U	50.1 U		100 U		100 U	1.00 U	1.00 U	1.00 U	1.00 U
10/27/2016	50.0 U	58.8		169		228	1.00 U	1.00 U	1.00 U	1.00 U
1/26/2017	50.0 U	49.7 U		405		405	1.00 U	1.00 U	1.00 U	1.00 U
4/26/2017	50.0 U	49.9 U		329		329	1.00 U	1.00 U	1.00 U	1.00 U
8/2/2017	50.0 U	49.9 U		99.8 U		99.8 U	1.00 U	1.00 U	1.00 U	1.00 U
<b>PP-36 (Screened Interval 5–15 ft)</b>										
7/27/2016	297	49.8 U		99.7 U		99.7 U	90.6	4.72	1.00 U	3.50
10/26/2016	2,900	49.8 U		622		622	321	246	4.28	9.83
1/25/2017	6,000	255		1,240		1,500	323	355	4.01	15.2
4/25/2017	6,170	282		693		975	530	301	6.95	27.7
8/2/2017 <sup>(3)</sup>	1,320	63.3 <sup>(2)</sup>		374		437	153	39.6	1.64	6.77
11/8/2017	515	229		435		664	153	22.2	1.04	4.38
2/8/2018	5,310	408 <sup>(2)</sup>		497		905	272	348	5.09	17.5
5/3/2018	5,350	274 <sup>(2)</sup>		337 J		611 J	290	346	5.04	19.1
10/25/2018	513	58.9 <sup>(2)</sup>		149		208	23.6	4.13	1.00 U	1.00 U
4/8/2019	4,200	49.5 U		327		327	160	194	3.02	8.51
10/22/2019	1,610	110 J <sup>(2)</sup>		624 J		734 J	37.5	37.9	1.00 U	34.1
4/27/2020	2,910	219 <sup>(2)</sup>		424		643	39.5	72.2	1.13	3.86
10/21/2020	1,970	103 <sup>(2)</sup>		379		482	47.7	42.1	1.42	1.85
4/21/2021	1,520	152 J <sup>(2)</sup>		466 J		618 J	37.6	26.5	0.762	2.78
10/13/2021	898	458		98.1 U		458	5.09	0.928	0.750 U	1.00 U
5/4/2022	2,710 J <sup>(2)</sup>	822 <sup>(2)</sup>	861 <sup>(2)</sup>	93.9 U	93.9 U	822	31.0	19.4	0.750 U	2.80
11/10/2022	1,810	944 J <sup>(2,4)</sup>	490 J <sup>(4)</sup>	93.8 U	93.8 U	944 J	29.6	20.9	1.00 U	3.39
4/19/2023	2,180 <sup>(8)</sup>	1,210 J <sup>(2)</sup>	923 <sup>(4)</sup>	93.3 U	93.3 U	1,210 J	36.9	32.4	1.11	3.76
10/26/2023	833	429 J <sup>(2)</sup>	273	93.5 U	93.5 U	429 J	3.86	1.64	1.00 U	1.00 U
4/18/2024	2,640 <sup>(2)</sup>	1,270 J <sup>(2)</sup>	906 <sup>(4)</sup>	144 U	96.1 U	1,270 J	25.4	28.1	5.00 U	10.0 U
10/10/2024	1,820	878 <sup>(2,4)</sup>	759 <sup>(4)</sup>	143 U	143 U	878 <sup>(2,4)</sup>	16.3	13.9	0.507	2.27
5/2/2025	1,740 <sup>(8)</sup>	1,270 <sup>(2)</sup>	1,020 <sup>(4)</sup>	139 U	139 U	1,270 <sup>(2)</sup>	16.0	12.7	0.619	2.23
10/15/2025	574 <sup>(2)</sup>	411 J <sup>(2)</sup>	190 J <sup>(4)</sup>	147 UJ	147 UJ	411 J	1.37	0.631	0.500 U	1.00 U
<b>PP-37R (Screened Interval 10–20 ft)<sup>(9)</sup></b>										
8/4/2017	3,640	56.9 <sup>(2)</sup>		99.7 U		56.9	1,420	1.00 U	3.97	1.22
11/7/2017	50.0 U	131		339		470	20.1	1.00 U	1.00 U	1.00 U
2/8/2018	50.0 U	50.0 U		123		123	1.00 U	1.00 U	1.00 U	1.00 U
5/2/2018	50.0 U	49.8 U		131		131	15.7	1.00 U	1.00 U	1.00 U
4/8/2019	135	50.1 U		324		324	72.1	1.00 U	1.00 U	1.00 U
10/21/2019 <sup>(3)</sup>	219	49.4 UJ	49.4 UJ	276 J	135 J	276 J	80.6	1.00 U	1.00 U	1.00 U
4/27/2020	50.0 U	49.7 U		401		401	5.50	1.00 U	1.00 U	1.00 U
10/21/2020	221	49.2 U		251		251	100	1.00 U	1.00 U	1.00 U
4/21/2021	177	98.2 U		958		958	89.7	0.400 U	0.750 U	1.00 U
10/13/2021	235	548		98.1 U		548	100	0.400 U	0.750 U	1.00 U
5/4/2022	50.0 U	349 <sup>(2)</sup>	288 <sup>(2)</sup>	94.3 U	94.3 U	349	0.492	0.400 U	0.750 U	1.00 U
11/10/2022	50.0 U	473 J <sup>(2,4)</sup>		98.8 U		473 J	1.16	0.400 U	1.00 U	1.00 U
4/19/2023	167 <sup>(2)</sup>	391 <sup>(2)</sup>	94.6 U	94.6 U	94.6 U	391	110	0.400 U	1.00 U	1.00 U
10/26/2023	94.3	463 J <sup>(2)</sup>	104	94.7 U	94.7 U	463 J	39.7	0.400 U	1.00 U	1.00 U
4/17/2024	50.0 U	488 <sup>(2)</sup>	94.3 U	141 U	94.3 U	488	0.200 U	0.500 U	0.500 U	1.00 U
10/10/2024	50.3	421 <sup>(2)</sup>	93.6 U	140 U	140 U	421 <sup>(2)</sup>	23.1	0.500 U	0.500 U	1.00 U
5/1/2025	50.0 U	644 <sup>(2)</sup>	93.4 U	140 U	140 U	644 <sup>(2)</sup>	0.200 U	0.500 U	0.500 U	1.00 U
10/15/2025	50.0 U	467 J <sup>(2)</sup>	98.4 UJ	148 UJ	148 UJ	467 J	0.873	0.500 U	0.500 U	1.00 U
<b>PZ-12 (Screened Interval 5–15 ft) (Decommissioned)</b>										
3/21/2016 <sup>(3)</sup>	260						85.0	1.00 U	1.20	3.00 U
7/26/2016	50.0 U	49.7 U		99.4 U		99.4 U	37.7	1.00 U	1.00 U	1.00 U
10/27/2016	769	49.5 U		125		125	339	1.10	4.30	3.11
1/26/2017	50.0 U	49.8 U		338		338	1.00 U	1.00 U	1.00 U	1.00 U
4/26/2017	50.0 U	49.8 U		101		101	13.9	1.00 U	1.00 U	1.00 U
<b>PZ-15S (Screened Interval 7–12 ft) (Decommissioned)</b>										
8/3/2017	2,650	260 <sup>(2)</sup>		1,640		1,900	28.1	103	4.79	140
<b>PZ-15D (Screened Interval 13–18 ft) (Decommissioned)</b>										
8/3/2017	50.0 U	49.8 U		99.6 U			2.76	1.00 U	1.00 U	1.00 U
<b>Monitoring Wells Downgradient of Log Pond Area</b>										
<b>PP-21 (Screened Interval 8–18 ft)</b>										
10/26/2023	50.0 U	259 J <sup>(2)</sup>	93.3 U	93.3 U	93.3 U	259 J	0.440 U	0.400 U	1.00 U	1.00 U
<b>PP-22 (Screened Interval 8–18 ft)</b>										
10/26/2023	50.0 U	336 J <sup>(2)</sup>	94.1 U	94.1 U	94.1 U	336 J	0.440 U	0.400 U	1.00 U	1.00 U
<b>Temporary Wells</b>										
<b>GSL-A (Screened Interval 7–12 ft)</b>										
8/4/2017	3,820	362 <sup>(2)</sup>		1,490		1,850	1,250	8.17	10.9	12.2
<b>GSL-B (Screened Interval 7–12 ft)</b>										
8/4/2017	4,230	70.1 <sup>(2)</sup>		106		176	871	14.3	22.2	35.2
<b>GSL-C (Screened Interval 7–12 ft)</b>										
8/4/2017	7,160	295 <sup>(2)</sup>		1,440		1,740	1,180	8.15	6.04	13.2
<b>GSL-D (Screened Interval 7–12 ft)</b>										
8/4/2017	13,900	468 <sup>(2)</sup>		907		1,380	3,340	17.7	25.2	45.7
<b>GSL-E (Screened Interval 7–12 ft)</b>										
8/4/2017	11,800	609 <sup>(2)</sup>		1,210		1,820	4,100	34.4	37.4	37.2
<b>GSL-F (Screened Interval 7.5–12.5 ft)</b>										
8/4/2017	12,100	714 <sup>(2)</sup>		1,780		2,490	2,230	204	11.0	131
<b>GSL-G (Screened Interval 8–13 ft)</b>										
8/4/2017	5,310	786 <sup>(2)</sup>		3,770		4,560	1,490	18.4	13.4	28.2

**Table A.1  
Cumulative Analytical Groundwater Results**

Analyte Class	Total Petroleum Hydrocarbons (TPH)						Benzene, Toluene, Ethylbenzene, and Xylenes			
	Gasoline-Range Organics	Diesel-Range Organics	Diesel-Range Organics (Silica Gel)	Oil-Range Organics <sup>(1)</sup>	Oil-Range Organics (Silica Gel)	Total TPH (DRO + ORO)	Benzene	Ethylbenzene	Toluene	Xylene (total)
Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Criteria	800	500	500	500	500	500	51.0	--	--	--
<b>Sample Location and Date</b>										
<b>Temporary Wells (cont.)</b>										
<b>GSL-H (Screened Interval 7.5–12.5 ft)</b>										
8/3/2017	<b>1,400</b>	433 <sup>(2)</sup>		<b>2,260</b>		<b>2,690</b>	<b>256</b>	7.07	3.98	12.2
<b>GSL-I (Screened Interval 5–10 ft)</b>										
8/3/2017	<b>1,530</b>	357 <sup>(2)</sup>		<b>1,550</b>		<b>1,910</b>	<b>85.2</b>	72.1	5.54	83.4
<b>GSL-I (Screened Interval 10–15 ft)</b>										
8/3/2017	<b>2,300</b>	453 <sup>(2)</sup>		<b>2,310</b>		<b>2,760</b>	<b>173</b>	27.9	5.07	41.8
<b>GSL-I (Screened Interval 15–20 ft)</b>										
8/3/2017	176	73.0 <sup>(2)</sup>		268		341	14.1	2.07	1.00 U	2.87

Notes:

Blank cells are intentional.  
All results have been rounded to 3 significant figures.  
-- Not available.

**RED/BOLD** Detected concentration that exceeds criterion.

- Coordination with laboratory on quantification of DRO versus ORO was conducted between the April and October 2021 monitoring events. Laboratory concluded that overlap of DRO and ORO carbon ranges in a single peak is more indicative of a weathered diesel rather than heavy oil. ORO results reported prior to October 2021 are interpreted as a weathered-diesel product based on laboratory coordination and conceptual site model of residual diesel contamination in soil acting as source to groundwater.
- Chromatogram indicates unresolved compounds not consistent with a petroleum standard; refer to annual reports for laboratory-specific comments.
- A field duplicate was collected. The greatest detected value or lowest non-detected value is reported.
- Detection is due to overlap with gasoline-range material; refer to annual reports for laboratory-specific comments.
- In March 2019, PP-18R was replaced by PP-18R2 approximately 25 feet north.
- Results analyzed by Fremont Analytical (now Alliance Technical Group).
- Split volume analyzed and reported by Friedman & Bruya, Inc.
- Chromatographic pattern indicates weathered gasoline or Stoddard; refer to annual reports for laboratory-specific comments.
- PP-37 was screened 5–15 feet bgs, but in March 2019 was replaced by PP-37R, which is screened 10–20 ft bgs.

Abbreviations:

bgs Below ground surface  
DRO Diesel-range organics  
ft Feet  
µg/L Micrograms per liter  
ORO Oil-range organics

Qualifiers:

- J Concentration is estimated but acceptable for most uses.
- U Analyte is not detected at the associated reporting limit.
- UJ Analyte is not detected at the associated reporting limit, which is considered to be an estimate.

**Table A.2**  
**Groundwater Analytical Results: Geochemical Parameters**

Analyte	Conventionals						Metals			Field Parameters	
	Biochemical Oxygen Demand	Chemical Oxygen Demand	Bromide	Methane	Nitrate (as Nitrogen)	Sulfate	Iron, Dissolved	Iron, Total	Manganese, Total	Dissolved Oxygen	Oxidation-Reduction Potential
Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	mg/L	mV
Sample Location and Date <sup>(1)</sup>											
<b>Conditional Point of Compliance Monitoring Wells</b>											
<b>PP-17 (Screened Interval 5–15 ft)</b>											
7/27/2016	5.64	57.7	--	0.00500 U	--	--	617	835	--	NM	NM
10/27/2016	11.2	--	--	0.193	--	--	592	1,020	--	0	-75.0
1/26/2017	6.57	--	--	0.229	--	570	213	444	--	0.72	-94.0
4/26/2017	--	--	--	--	--	110	--	--	--	0.78	-165.0
11/7/2017	--	--	--	--	--	39.7	--	--	--	0	57.0
2/8/2018	--	--	--	0.279	--	257	--	--	--	0	-147.0
05/2/2018 <sup>(2)</sup>	--	--	2.18	--	--	191	--	--	--	0	-143.0
10/25/2018	--	--	3.84 JQ	--	--	161	--	--	--	0	-134.0
4/8/2019	--	--	--	--	--	243	--	--	--	3.36	-108.7
10/22/2019	--	--	77.0 J	--	--	1,410 J	--	--	--	0.23	-207.0
04/27/2020 <sup>(2)</sup>	--	--	--	--	--	144	--	--	--	0	-180.9
10/21/2020	--	--	--	--	--	114	--	--	--	0.75	-98.7
4/21/2021	--	--	--	--	--	89.5	--	--	--	0.50	0
10/13/2021	--	--	--	--	--	92.5	--	--	--	1.15	108.0
5/4/2022 <sup>(2)</sup>	--	--	--	--	--	--	--	--	--	0.66	96.0
11/10/2022	--	--	--	--	--	--	--	--	--	6.23	-164.9
4/19/2023	--	--	--	--	--	--	--	--	--	0	-116.5
10/26/2023	--	--	--	--	--	--	--	--	--	0.30	-35.5
4/17/2024	--	--	--	--	--	--	--	--	--	0.35	-296.6
10/10/2024	--	--	--	--	--	98.9	--	--	--	0.37	-248.9
5/1/2025	--	--	--	--	--	--	--	--	--	1.33	221.7
10/15/2025	--	--	--	--	--	--	--	--	--	1.15	-223.7
<b>PP-18R2 <sup>(3)</sup> (Screened Interval 10–20 ft)</b>											
7/28/2016	15.2	38.5	--	5.48 J	--	--	100 U	676	--	NM	NM
10/27/2016	20.3	--	--	0.117	--	--	100 U	100 U	--	0	-244.0
1/26/2017	11.6	--	--	0.259	--	41.0	100 U	101	--	0.66	-192.0
4/26/2017	--	--	--	--	--	44.2	--	--	--	0.96	-180.0
11/7/2017	--	--	--	--	--	45.9	--	--	--	0	2.0
2/8/2018	--	--	--	0.381	--	97.8	--	--	--	0	-184.0
5/2/2018	--	--	0.361	--	--	62.0	--	--	--	0	-226.0
04/8/2019 <sup>(2)</sup>	--	--	--	--	--	130	--	--	--	0.63	-83.0
10/22/2019	--	--	16.4 J	--	--	266 J	--	--	--	0.53	-61.0
4/27/2020	--	--	2.98	--	--	148	--	--	--	0.11	-93.0
10/21/2020	--	--	--	--	--	300	--	--	--	0.76	-66.6
4/21/2021	--	--	--	--	--	163	--	--	--	0.63	24.7
10/13/2021	--	--	--	--	--	286	--	--	--	1.07	74.7
5/4/2022	--	--	--	--	--	--	--	--	--	2.27	127.5
11/10/2022	--	--	--	--	--	--	--	--	--	5.79	-143.2
4/19/2023	--	--	--	--	--	--	--	--	--	1.64	-19.0
10/26/2023	--	--	--	--	--	--	--	--	--	1.55	-42.1
4/17/2024	--	--	--	--	--	--	--	--	--	0.93	-158.1
10/10/2024	--	--	--	--	--	140	--	--	--	0.41	-48.6
5/1/2025	--	--	--	--	--	--	--	--	--	3.44	224.0
10/15/2025	--	--	--	--	--	--	--	--	--	1.05	124.6
<b>PP-19 (Screened Interval 5–15 ft)</b>											
7/27/2016	2.00 U	80.9	--	0.00696	--	--	100 U	100 U	--	NM	NM
10/27/2016	2.00 U	--	--	0.00500 U	--	--	500 U	500 U	--	3.01	49.0
1/26/2017	2.00 U	--	--	0.00509	--	610	100 U	291	--	4.50	105.0
4/26/2017	--	--	--	--	--	518	--	--	--	4.00	154.0
10/22/2019	--	--	--	--	--	740 J	--	--	--	2.39	0.5
4/27/2020	--	--	--	--	--	274	--	--	--	1.38	58.5
10/21/2020	--	--	--	--	--	1,010	--	--	--	1.64	176.5
4/20/2021	--	--	--	--	--	210	--	--	--	1.26	102.1
10/13/2021	--	--	--	--	--	1,170	--	--	--	3.16	154.5
5/4/2022	--	--	--	--	--	--	--	--	--	8.60 <sup>(4)</sup>	107.1
11/10/2022	--	--	--	--	--	--	--	--	--	2.64	22.2
4/19/2023	--	--	--	--	--	--	--	--	--	3.58	63.4
10/26/2023	--	--	--	--	--	--	--	--	--	2.44	172.1
4/17/2024	--	--	--	--	--	--	--	--	--	1.25	134.9
10/10/2024	--	--	--	--	--	--	--	--	--	0.75	125.8
5/1/2025	--	--	--	--	--	--	--	--	--	6.06	190.7
10/15/2025	--	--	--	--	--	--	--	--	--	3.67	149.5
<b>PP-34 (Screened Interval 8–18 ft)</b>											
7/28/2016	10.8	53.1	--	1.03	--	--	100 U	422	--	NM	NM
10/27/2016	8.26	--	--	0.0795	--	--	100 U	771	--	0	-178.0
1/26/2017	7.16	--	--	0.838	--	38.6	100 U	134	--	0.78	-244.0
4/26/2017	--	--	--	--	--	47.8	--	--	--	0.76	-143.0
11/07/2017 <sup>(2)</sup>	--	--	--	--	--	41.8	--	--	--	0	-3.0
2/8/2018	--	--	--	0.197	--	106	--	--	--	0	-186.0
5/2/2018	--	--	0.410	--	--	63.0	--	--	--	1.24	103.0
10/25/2018	--	--	1.49 JQ	--	--	53.5	--	--	--	0	-211.0
4/8/2019	--	--	--	--	--	101	--	--	--	0.44	-94.0
10/22/2019	--	--	24.9 J	--	--	403 J	--	--	--	0.21	-232.0
4/27/2020	--	--	3.31	--	--	60.6	--	--	--	0.03	-104.0
10/21/2020	--	--	--	--	--	51.0	--	--	--	0.70	-264.0
4/21/2021 <sup>(2)</sup>	--	--	--	--	--	40.4	--	--	--	0.57	-6.8
10/13/2021	--	--	--	--	--	35.4	--	--	--	0.74	17.3
5/4/2022	--	--	--	--	--	--	--	--	--	0.75	141.2
11/10/2022	--	--	--	--	--	--	--	--	--	5.66	-656.9
4/19/2023	--	--	--	--	--	--	--	--	--	0	-113.4
10/26/2023	--	--	--	--	--	--	--	--	--	0.28	-178.2
4/17/2024	--	--	--	--	--	--	--	--	--	0.36	-247.6
10/10/2024	--	--	--	--	--	40.0	--	--	--	0.37	-241.2
5/1/2025	--	--	--	--	--	--	--	--	--	1.18	220.9
10/15/2025	--	--	--	--	--	--	--	--	--	0.97	-65.5

**Table A.2**  
**Groundwater Analytical Results: Geochemical Parameters**

Analyte Units	Conventionals						Metals			Field Parameters	
	Biochemical Oxygen Demand mg/L	Chemical Oxygen Demand mg/L	Bromide mg/L	Methane mg/L	Nitrate (as Nitrogen) mg/L	Sulfate mg/L	Iron, Dissolved µg/L	Iron, Total µg/L	Manganese, Total µg/L	Dissolved Oxygen mg/L	Oxidation- Reduction Potential mV
<b>Sample Location and Date <sup>(1)</sup></b>											
<b>Other Site Monitoring Wells</b>											
<b>PP-13R (Screened Interval 5–15 ft)</b>											
7/28/2016	32.9	51.7	--	12.1 J	--	--	152	1,470	--	NM	NM
10/27/2016	30.7	--	--	1.74	--	--	259	427	--	0	-110.0
1/25/2017	2.00 U	--	--	0.0915	--	164	100 U	100 U	--	0	-208.0
4/25/2017	--	--	--	--	--	54.9	--	--	--	0.61	-207.0
11/7/2017	--	--	--	--	--	5.07	--	--	--	0	-68.0
2/8/2018	--	--	--	0.308	--	148	--	--	--	0	-226.0
5/2/2018	--	--	--	--	--	208	--	--	--	0	-192.0
10/25/2018 <sup>(2)</sup>	--	--	1.88	--	--	14.7	--	--	--	0.17	-159.0
4/8/2019	--	--	--	--	--	129	--	--	--	0.38	-191.0
10/21/2019	--	--	6.36 J	--	--	74.0 J	--	--	--	0.42	-135.0
4/27/2020	--	--	--	--	--	91.4	--	--	--	0.29	-176.6
10/21/2020	--	--	--	--	--	49.9	--	--	--	0.80	28.8
4/21/2021	--	--	--	--	--	108	--	--	--	0.52	48.9
10/13/2021	--	--	--	--	--	64.2	--	--	--	1.53	-213.2
5/4/2022	--	--	--	--	--	--	--	--	--	7.34 <sup>(4)</sup>	-85.1
11/10/2022	--	--	--	--	--	--	--	--	--	2.02	-150.9
4/19/2023	--	--	--	--	--	--	--	--	--	0.18	-60.2
10/26/2023	--	--	--	--	--	--	--	--	--	0.28	53.1
4/17/2024	--	--	--	--	--	--	--	--	--	0	-63.6
10/10/2024	--	--	--	--	--	112	--	--	--	0.26	-49.5
5/1/2025	--	--	--	--	--	--	--	--	--	0.49	79.2
10/15/2025	--	--	--	--	--	--	--	--	--	1.03	-171.6
<b>PP-14R (Screened Interval 5–15 ft)</b>											
7/28/2016	25.5	35.9	--	8.28 J	--	--	100 U	287	--	NM	NM
10/27/2016	35.5	--	--	2.23	--	--	100 U	206	--	0	-110.0
1/25/2017	12.0	--	--	6.80 J	--	221	100 U	100 U	--	0.54	-208.0
4/25/2017	--	--	--	--	--	231	--	--	--	0.60	-151.0
11/7/2017	--	--	--	--	--	11.0	--	--	--	0	-78.0
2/8/2018	--	--	--	0.911	--	337	--	--	--	0	-157.0
5/2/2018	--	--	--	--	--	155	--	--	--	0	-87.0
10/25/2018	--	--	1.32	--	--	30.4	--	--	--	0.22	-155.0
4/8/2019	--	--	--	--	--	334	--	--	--	0.41	-140.0
10/21/2019	--	--	--	--	--	1,060 J	--	--	--	0.18	-247.0
4/27/2020	--	--	--	--	--	264	--	--	--	0.33	-151.4
10/21/2020	--	--	--	--	--	58.4	--	--	--	0.21	-203.1
4/20/2021	--	--	--	--	--	201	--	--	--	0.61	56.4
10/13/2021 <sup>(2)</sup>	--	--	--	--	--	178	--	--	--	0.77	20.6
5/4/2022	--	--	--	--	--	--	--	--	--	7.02 <sup>(4)</sup>	-125.6
11/10/2022	--	--	--	--	--	--	--	--	--	1.93	-80.6
4/19/2023	--	--	--	--	--	--	--	--	--	0.16	-43.2
10/26/2023	--	--	--	--	--	--	--	--	--	0.31	4.8
4/17/2024	--	--	--	--	0.20 U	139	--	30.0 U	11.0	0.0	-71.1
10/10/2024	--	--	--	--	--	207	--	--	--	0.23	-66.1
5/1/2025	--	--	--	--	--	--	--	--	--	0.45	71.0
10/15/2025	--	--	--	--	--	--	--	--	--	0.69	-53.1
<b>PP-15R2 (Screened Interval 5–15 ft)</b>											
7/27/2016	30.9	70.9	--	7.40 J	--	--	212	1,670	--	NM	NM
10/26/2016	39.6	--	--	1.05	--	--	1,950	2,210	--	0.81	-130.0
01/25/2017 <sup>(2)</sup>	21.6	--	--	5.34	--	225	535	1,100	--	0.60	-166.0
4/25/2017	--	--	--	--	--	181	--	--	--	0.62	-152.0
11/8/2017	--	--	--	--	--	7.70	--	--	--	0	-56.0
2/8/2018	--	--	--	1.54	--	68.8	--	--	--	0.16	-199.6
5/2/2018	--	--	--	--	--	11.8	--	--	--	0	-165.0
10/25/2018	--	--	1.13	--	--	0.780	--	--	--	0.22	-127.0
4/8/2019	--	--	--	--	--	14.9	--	--	--	0.45	-146.0
10/21/2019	--	--	--	--	--	4.78 J	--	--	--	0.18	-240.0
4/27/2020	--	--	3.34	--	--	45.0	--	--	--	0.22	-282.5
10/21/2020	--	--	--	--	--	3.00 U	--	--	--	0.29	-110.8
4/20/2021	--	--	--	--	--	0.864	--	--	--	0.41	-129.3
10/13/2021	--	--	--	--	--	6.00 U	--	--	--	0.60	-21.8
5/4/2022	--	--	--	--	--	--	--	--	--	0.53	-6.5
11/11/2022	--	--	--	--	--	--	--	--	--	1.82	-120.9
4/19/2023	--	--	--	--	--	--	--	--	--	0.19	-45.8
10/27/2023	--	--	--	--	--	--	--	--	--	0.29	0.7
4/17/2024	--	--	--	--	1.00 U	18.2	--	446	239	0.0	-150.9
10/10/2024	--	--	--	--	--	3.66	--	--	--	0.23	-112.3
5/2/2025	--	--	--	--	--	--	--	--	--	0.43	51.7
10/15/2025	--	--	--	--	--	--	--	--	--	0.99	-179.4
<b>PP-27 (Screened Interval 5–15 ft)</b>											
7/27/2016	10.4	54.4	--	3.51	--	--	199	20,100	--	NM	NM
10/26/2016	8.23	--	--	0.111	--	--	100 U	4,090	--	0	-192.0
1/25/2017	17.7	--	--	1.11	--	18.8	100 U	1,520	--	0.70	-139.0
4/25/2017	--	--	--	--	--	31.0	--	--	--	0.77	-210.0
11/8/2017	--	--	--	--	--	16.4	--	--	--	0.15	-193.0
2/8/2018	--	--	--	1.14	--	52.6	--	--	--	0.60	-177.0
5/3/2018	--	--	--	--	--	124	--	--	--	1.25	74.0
10/25/2018	--	--	0.838	--	--	0.714	--	--	--	0.23	-158.0
4/8/2019	--	--	--	--	--	118	--	--	--	3.80	27.4
10/21/2019	--	--	--	--	--	42.5 J	--	--	--	0.14	-385.0
4/27/2020	--	--	--	--	--	16.4	--	--	--	0	-143.2
10/21/2020	--	--	--	--	--	6.74	--	--	--	0.64	-156.0
4/20/2021	--	--	--	--	--	6.69	--	--	--	0.50	110.8
10/13/2021	--	--	--	--	--	2.21	--	--	--	1.44	-364.4
5/4/2022	--	--	--	--	--	--	--	--	--	0.60	91.9
11/11/2022	--	--	--	--	--	--	--	--	--	6.66	-193.8
4/19/2023	--	--	--	--	--	--	--	--	--	0.23	-134.4
10/27/2023	--	--	--	--	--	--	--	--	--	0.16	-141.1
4/17/2024	--	--	--	--	--	--	--	--	--	0.42	-284.9
10/10/2024	--	--	--	--	--	--	--	--	--	0.28	-233.7
5/1/2025	--	--	--	--	--	--	--	--	--	0.43	41.6
10/15/2025	--	--	--	--	--	--	--	--	--	0.94	-142.9

**Table A.2**  
**Groundwater Analytical Results: Geochemical Parameters**

Analyte	Conventionals						Metals			Field Parameters	
	Biochemical Oxygen Demand	Chemical Oxygen Demand	Bromide	Methane	Nitrate (as Nitrogen)	Sulfate	Iron, Dissolved	Iron, Total	Manganese, Total	Dissolved Oxygen	Oxidation-Reduction Potential
Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	mg/L	mV
Sample Location and Date <sup>(1)</sup>											
<b>Other Site Monitoring Wells (cont.)</b>											
<b>PP-29 (Screened Interval 5–15 ft)</b>											
7/28/2016	20.3	69.6	--	3.34	--	--	100 U	1,750	--	NM	NM
10/26/2016	37.9	--	--	1.70	--	--	100 U	811	--	0	-101.0
1/25/2017	15.6	--	--	2.45	--	152	100 U	100 U	--	1.11	-104.0
04/25/2017 <sup>(2)</sup>	--	--	--	--	--	123	--	--	--	0.60	-173.0
11/8/2017	--	--	--	--	--	6.90	--	--	--	0	-47.0
2/8/2018	--	--	--	0.227	--	279	--	--	--	2.75	-16.7
5/3/2018	--	--	--	--	--	163	--	--	--	0.07	-49.0
10/25/2018	--	--	0.790	--	--	2.21	--	--	--	0	-77.0
4/8/2019	--	--	--	--	--	264	--	--	--	3.56	14.7
10/21/2019	--	--	--	--	--	27.4 J	--	--	--	0.36	-106.0
4/27/2020	--	--	4.12	--	--	126	--	--	--	1.80	-106.0
10/21/2020 <sup>(2)</sup>	--	--	--	--	--	26.0	--	--	--	0.74	-67.1
4/20/2021	--	--	--	--	--	35.8	--	--	--	2.93	60.1
10/13/2021	--	--	--	--	--	3.80 JQ	--	--	--	1.39	-104.5
5/4/2022	--	--	--	--	--	--	--	--	--	0.84	46.1
11/11/2022 <sup>(2)</sup>	--	--	--	--	--	--	--	--	--	7.59 <sup>(4)</sup>	-42.1
4/19/2023	--	--	--	--	--	--	--	--	--	2.58	58.0
10/27/2023	--	--	--	--	--	--	--	--	--	0.30	55.8
4/17/2024	--	--	--	--	--	--	--	--	--	0.74	-160.7
10/10/2024	--	--	--	--	--	--	--	--	--	0.33	-98.4
5/2/2025	--	--	--	--	--	--	--	--	--	1.01	234.6
10/15/2025	--	--	--	--	--	--	--	--	--	0.82	7.10
<b>PP-30 (Screened Interval 5–15 ft)</b>											
7/28/2016	13.0	91.5	--	3.34	--	--	100 U	287	--	NM	NM
10/27/2016	11.3	--	--	2.14	--	--	163	267	--	0	-171.0
1/25/2017	21.0	--	--	2.10	--	43.2	100 U	339	--	0.55	-278.0
4/25/2017	--	--	--	--	--	59.8	--	--	--	0.60	-272.0
11/7/2017	--	--	--	--	--	25.1	--	--	--	0	-155.0
2/8/2018	--	--	--	0.210	--	60.0	--	--	--	0	-277.0
5/2/2018	--	--	--	--	--	108	--	--	--	0	-221.0
10/25/2018	--	--	0.702	--	--	15.3	--	--	--	0	-221.0
4/8/2019	--	--	--	--	--	130	--	--	--	4.16	-90.4
10/22/2019	--	--	--	--	--	199 J	--	--	--	0.42	-205.0
4/27/2020	--	--	2.56	--	--	90.0	--	--	--	0.01	-126.3
10/21/2020	--	--	--	--	--	54.8	--	--	--	0.29	-21.0
4/21/2021	--	--	--	--	--	66.2	--	--	--	0.50	-3.6
10/13/2021	--	--	--	--	--	15.6	--	--	--	0.71	20.5
5/4/2022	--	--	--	--	--	--	--	--	--	7.00 <sup>(4)</sup>	-209.6
11/10/2022	--	--	--	--	--	--	--	--	--	1.91	-153.9
4/19/2023	--	--	--	--	--	--	--	--	--	0.17	-101.8
10/26/2023	--	--	--	--	--	--	--	--	--	0.18	-145.6
4/17/2024	--	--	--	--	--	--	--	--	--	0.30	-289.9
10/10/2024	--	--	--	--	--	--	--	--	--	0.22	-46.6
5/1/2025	--	--	--	--	--	--	--	--	--	1.21	231.3
10/15/2025	--	--	--	--	--	--	--	--	--	0.71	-180.7
<b>PP-32 (Screened Interval 8–18 ft)</b>											
7/28/2016	22.4	54.4	--	7.63 J	--	--	503	2,290	--	NM	NM
10/27/2016	33.2	--	--	2.14	--	--	466	672	--	0	-107.0
1/26/2017	34.6	--	--	10.0 J	--	16.6	1,390	1,820	--	0.55	-173.0
4/26/2017	--	--	--	--	--	67.6	--	--	--	0.65	-148.0
4/8/2019	--	--	--	--	--	81.3	--	--	--	0.40	-156.0
10/22/2019	--	--	--	--	--	3.45 J	--	--	--	0.15	-248.0
4/27/2020	--	--	--	--	--	161	--	--	--	0.45	-160.6
10/21/2020	--	--	--	--	--	4.21	--	--	--	0.27	25.2
4/20/2021	--	--	--	--	--	140	--	--	--	0.68	77.2
10/13/2021	--	--	--	--	--	1.25	--	--	--	1.46	-199.6
5/4/2022	--	--	--	--	--	--	--	--	--	7.53 <sup>(4)</sup>	-37.2
11/10/2022	--	--	--	--	--	--	--	--	--	6.39	-142.7
4/19/2023	--	--	--	--	--	--	--	--	--	0.04	-137.5
10/27/2023	--	--	--	--	--	--	--	--	--	0.16	-148.5
4/18/2024	--	--	--	--	--	--	--	--	--	0	-108.5
10/10/2024	--	--	--	--	--	--	--	--	--	0.19	-153.4
5/1/2025	--	--	--	--	--	--	--	--	--	1.42	189.6
10/15/2025	--	--	--	--	--	--	--	--	--	0.67	-75.2
<b>PP-33 (Screened Interval 5–15 ft)</b>											
7/28/2016	21.0	48.4	--	5.67 J	--	--	609	2,530	--	NM	NM
10/26/2016 <sup>(2)</sup>	26.0	--	--	1.07	--	--	1,820	2,030	--	0.07	-127.0
1/25/2017	11.8	--	--	2.71	--	135	588	1,710	--	0.55	-135.0
4/25/2017	--	--	--	--	--	109	--	--	--	0.66	-138.0
11/7/2017	--	--	--	--	--	5.64	--	--	--	0	-86.0
02/08/2018 <sup>(2)</sup>	--	--	--	0.798	--	192	--	--	--	0.24	-167.0
5/3/2018	--	--	--	--	--	49.1	--	--	--	1.05	52.0
10/25/2018	--	--	0.936	--	--	11.6	--	--	--	0.19	-143.0
4/8/2019	--	--	--	--	--	265	--	--	--	0.39	-136.0
10/21/2019	--	--	--	--	--	26.4 J	--	--	--	0.39	-130.0
4/27/2020	--	--	--	--	--	138	--	--	--	0.69	-146.7
10/21/2020	--	--	--	--	--	16.2	--	--	--	0.27	-104.5
4/20/2021	--	--	--	--	--	108	--	--	--	0.53	77.8
10/13/2021	--	--	--	--	--	14.2	--	--	--	0.72	-5.9
5/4/2022	--	--	--	--	--	--	--	--	--	7.08 <sup>(4)</sup>	-7.9
11/11/2022	--	--	--	--	--	--	--	--	--	2.10	-86.5
4/19/2023	--	--	--	--	--	--	--	--	--	0.22	-76.8
10/26/2023	--	--	--	--	--	--	--	--	--	0.31	-0.6
4/17/2024 <sup>(2)</sup>	--	--	--	--	--	--	--	--	--	1.06	-86.5
10/10/2024	--	--	--	--	--	--	--	--	--	0.23	-112.3
5/1/2025	--	--	--	--	--	--	--	--	--	0.79	41.7
10/15/2025	--	--	--	--	--	--	--	--	--	1.12	-160.2

**Table A.2**  
**Groundwater Analytical Results: Geochemical Parameters**

Analyte	Conventionals						Metals			Field Parameters	
	Biochemical Oxygen Demand	Chemical Oxygen Demand	Bromide	Methane	Nitrate (as Nitrogen)	Sulfate	Iron, Dissolved	Iron, Total	Manganese, Total	Dissolved Oxygen	Oxidation-Reduction Potential
Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	mg/L	mV
Sample Location and Date <sup>(1)</sup>											
<b>Other Site Monitoring Wells (cont.)</b>											
<b>PP-36 (Screened Interval 5–15 ft)</b>											
7/27/2016	11.0	30.6	--	2.80	--	--	100 U	10,600	--	NM	NM
10/26/2016	10.1	--	--	0.128	--	--	100 U	12,100	--	0	-112.0
1/25/2017	14.2	--	--	1.41	--	113	507	1,560	--	0.60	-173.0
4/25/2017	--	--	--	--	--	49.0	--	--	--	0.63	-207.0
11/8/2017	--	--	--	--	--	33.8	--	--	--	0	-94.0
2/8/2018	--	--	--	0.211	--	148	--	--	--	0.16	-236.5
5/3/2018	--	--	--	--	--	131	--	--	--	1.49	32.0
10/25/2018	--	--	0.403	--	--	2.50	--	--	--	0.22	-130.0
4/8/2019	--	--	--	--	--	68.5	--	--	--	3.82	-72.6
10/22/2019	--	--	--	--	--	40.1 J	--	--	--	0.20	-199.0
4/27/2020	--	--	2.00 U	--	--	30.1	--	--	--	0.29	-186.5
10/21/2020	--	--	--	--	--	10.1	--	--	--	0.27	-108.1
4/21/2021	--	--	--	--	--	12.0	--	--	--	0.53	15.2
10/2/2021	--	--	--	--	--	0.600 U	--	--	--	1.49	-185.3
5/4/2022	--	--	--	--	--	--	--	--	--	6.78 <sup>(4)</sup>	-164.4
11/10/2022	--	--	--	--	--	--	--	--	--	5.73	-209.1
4/19/2023	--	--	--	--	--	--	--	--	--	0.03	-126.6
10/26/2023	--	--	--	--	--	--	--	--	--	0.22	-127.2
4/18/2024	--	--	--	--	--	--	--	--	--	0.36	-286.6
10/10/2024	--	--	--	--	--	--	--	--	--	0.41	-203.6
5/2/2025	--	--	--	--	--	--	--	--	--	1.18	238.6
10/15/2025	--	--	--	--	--	--	--	--	--	1.14	-186.3
<b>PP-37R <sup>(5)</sup> (Screened Interval 10–20 ft)</b>											
11/8/2017	--	--	--	--	--	7.02	--	--	--	0.13	-4.0
2/8/2018	--	--	--	0.0218	--	148	--	--	--	1.80	9.2
5/2/2018	--	--	--	--	--	131	--	--	--	1.20	66.0
4/8/2019	--	--	--	--	--	12.8	--	--	--	3.40	-12.7
10/21/2019 <sup>(2)</sup>	--	--	1.92 J	--	--	42.0 J	--	--	--	0.18	-242.0
4/27/2020	--	--	--	--	--	80.2	--	--	--	0.06	-67.3
10/21/2020	--	--	--	--	--	31.7	--	--	--	0.71	-68.1
4/21/2021	--	--	--	--	--	50.0	--	--	--	0.62	15.2
10/13/2021	--	--	--	--	--	4.43 JQ	--	--	--	1.87	-196.8
5/4/2022	--	--	--	--	--	--	--	--	--	0.74	136.9
11/10/2022	--	--	--	--	--	--	--	--	--	1.80	-121.9
4/19/2023	--	--	--	--	--	--	--	--	--	0.01	-130.4
10/26/2023	--	--	--	--	--	--	--	--	--	0.35	-7.3
4/17/2024	--	--	--	--	1.00 U	12.5	--	506	48.8	0.01	-99.8
10/10/2024	--	--	--	--	--	6.17	--	--	--	0.36	-164.9
5/1/2025	--	--	--	--	--	--	--	--	--	0.51	120.7
10/15/2025	--	--	--	--	--	--	--	--	--	1.08	-185.4
<b>Monitoring Wells Downgradient of Log Pond Area</b>											
<b>PP-21 (Screened Interval 8–18 ft)</b>											
10/26/2023	--	--	--	--	--	--	--	--	--	0.18	-42.0
<b>PP-22 (Screened Interval 8–18 ft)</b>											
10/26/2023	--	--	--	--	--	--	--	--	--	0.21	-100.7

Notes:

- Not analyzed or not available.
- 1 No geochemical parameters were analyzed during the August 2017 sampling event.
- 2 A field duplicate was collected. The greatest detected value or lowest non-detect value is reported.
- 3 In March 2019, PP-18R was replaced by PP-18R2 approximately 25 feet north.
- 4 Field reading biased because of equipment/sensor error.
- 5 PP-37 was screened 5–15 ft bgs but in March 2019 was replaced by PP-37R, which is screened 10–20 ft bgs.

Abbreviations:

- bgs Below ground surface
- ft Feet
- µg/L Micrograms per liter
- mg/L Milligrams per liter
- mV Millivolts
- NM Not measured

Qualifiers:

- J Concentration is estimated but acceptable for most uses.
- JQ Concentration is reported between the method detection limit and reporting limit and is considered an estimate.
- U Analyte is not detected at the associated reporting limit.