FOCUSED SITE INVESTIGATION

FORMER MID-VALLEY WORKSHOP

16700 Highway 99
Amity, Oregon 97101

LUST FACILITY NO. 36-93-4040

Prepared for:

mv advancements

16700 Highway 99
Amity, Oregon 97101

C/O: Daniel F. Mulvihill, CABLE HUSTON
917-658-3906

Issued on:

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Project No. 1867-23001-02

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This

Focused Site Investigation

Report for:

Former Mid-Valley Workshop

16700 S Highway 99
Amity, Oregon 97101
(LUST Facility No. 36-93-4040)

Has been prepared for the sole benefit and use of our Client:

and its assignees

mv advancements

16700 Highway 99
Amity, Oregon 97010

C/O: Daniel F. Mulvihill, Cable Huston
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Issued December 20, 2024 *by:*

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List of Acronyms and Abbreviations

AST	above ground storage tank
bgs	below ground surface
Client	MV Advancements, C/O Cable Huston
DPT	Direct-Push Technology
DRO	diesel-range organics
DU	decision unit
ENW	EVREN Northwest, Inc.
EPA	US Environmental Protection Agency
F&BI	Friedman & Bruya, Inc.
FSI	focused site investigation
GPR	ground-penetrating radar
GRO	gasoline-range organics
ISM	Incremental Sampling Method
ITRC	Interstate Technology Regulatory Council
LUST	Leaking Underground Storage Tank
MRL	method reporting limit
mg/Kg	milligrams per Kilogram
OAR	Oregon Administrative Rules
Obrist	Dan Obrist Trucking and Excavation
ODEQ	Oregon Department of Environmental Quality
PID	photoionization detector
ppmv	parts per million by volume
PVC	polyvinyl chloride
RBCs	risk-based concentrations
RBDM	ODEQ's *Risk-Based Decision Making for the Remediation of Contaminated Sites* guidance document
RRO	residual-range organics
SLRBCs	screening-level risk-based concentrations
SWI	soil-water interface
TPH	total petroleum hydrocarbons
UST	underground storage tank

1.0 Introduction

At the request of MV LLC, in care of Cable Huston (Client), EVREN Northwest, Inc. (ENW) has prepared this report documenting a Focused Site Investigation (FSI) at the Former Mid-Valley Shop facility located at 16700 Highway 99W in Amity, Oregon (the "subject property") (see Figures 1 and 2). This FSI was conducted pursuant to Oregon Department of Environmental Quality's (ODEQ) May 25, 2006, letter request for cleanup status for a release of petroleum hydrocarbons from a former gasoline underground storage tank (UST) system at the subject property. The site is listed on ODEQ's Leaking Underground Storage Tank (LUST) database as Site No. 36-93-4040.

This report presents ENW's understanding of cleanup actions performed by others, data gaps, and the FSI scope of work and findings. A recommendation for a No Further Action is presented based on the findings of this FSI.

2.0 Background

2.1 UST System Description

According to available reports and correspondence in ODEQ files, the subject 1,000-gallon UST is listed in ODEQ records as being installed at the subject property in 1978. The UST is reported to have contained gasoline for fueling onsite vehicles. The UST was located in the southern portion of the subject property on the north side of a former pump house with a single fuel dispenser located inside the pump house or very near the south side of the UST (Figure 2).[1]

2.2 Previous Work By Others

2.2.1 Discovery

Dan Obrist Trucking and Excavation (Obrist) decommissioned by removal the 1,000-gallon gasoline UST at the subject Mid Valley Work Shop property in March 1993, then managed/owned by Sam Gardner. According to a report of tank decommissioning prepared by Obrist, [2] upon removal of the tank, dark petroleum-stained soils were observed in the resulting product line trenches adjacent to the south end of the former tank excavation.

On March 17, 1993, Obrist demolished the adjacent pump house structure and in so doing, encountered a separate area of contaminated surface soil on the floor of the former pump house structure. This separate release was attributed to a former 275-gallon above ground storage tank (AST) containing diesel fuel that had been removed from the pump house prior to Obrist's discovery.

[1] ODEQ, March 4, 1986; Notification for Underground Storage Tanks

[2] Dan Obrist Trucking and Excavation, 1993. Report on UST Removal/Soil Clean Up, Prepared for: Mid Valley Workshop, PO Box 448, Amity, Oregon, dated April 16, 1993.

2.2.2 Cleanup

On March 17, 1993, approximately 72 cubic yards of soil were over-excavated from the former 1,000-gallon gasoline UST cavity, including visibly-impacted surface soils inside the former pump house. The petroleum-impacted soil was stockpiled immediately south of the excavation areas on sheet plastic.

Prior to backfilling the remedial excavations, Obrist reportedly collected two soil samples from the floor of the UST excavation at a depth of 8 feet bgs and a third soil sample was collected at a depth of 2 feet bgs from the former Diesel AST excavation. Soil samples reportedly contained total petroleum hydrocarbons (TPH) as gasoline-range organics (GRO) up to 2,500 milligrams per kilogram (mg/Kg) and as diesel-range organics (DRO) at 1,200 mg/Kg.

On March 18, 1993, Obrist excavated approximately 60 additional cubic yards of contaminated soil which expanded the two initial excavations into one large common excavation measuring a reported 25’ x 35’ x 10’ deep. Obrist reportedly collected seven confirmation soil samples from the expanded excavation margins on March 18, 1993, which laboratory analyses indicated were all non-detect for TPH. The excavation was backfilled on April 2, 1993.

2.2.3 Onsite Treatment of Petroleum Contaminated Soil

Excavated petroleum-contaminated soil was stockpiled for onsite treatment with aeration. Twenty-foot lengths of polyvinyl chloride (PVC) vent pipes were installed within the approximately 50’ long by 20’ wide stockpile (estimated volume of 110 cubic yards) and the stockpile was covered with sheet plastic. Obrist submitted a UST Cleanup Soil Treatment Plan Report Form to ODEQ on May 5, 1993, for on-site treatment of the petroleum contaminated soils. Obrist reportedly received approval to aerate petroleum impacted soils from the ODEQ on April 7, 1993.

During an ODEQ Soil Aeration Field Inspection on May 11, 1993, the petroleum-contaminated soil was observed by an ODEQ inspector to be arranged into two main aeration piles with perforated pipes penetrating the soil pile to facilitate off-gassing of volatile constituents. One smaller pile without pipelines was placed in front of the larger stockpile. The stockpiles were covered, lined, and bermed. During a subsequent ODEQ Soil Aeration Field Inspection on February 11, 1994, the aeration piles were still present. In a February 16, 1994, letter, ODEQ notified Mr. Sam Gardner of their observations and notified Mr. Gardner that the on-site treatment of petroleum contaminated soil had expired as of October 14, 1993, and that a Solid Waste Letter of Authorization would need to be submitted to continue the on-site soil remediation activities.

2.2.4 Final Soil Disposition

On February 28, 1994, Obrist sampled the petroleum-contaminated soil aeration piles in response to ODEQ’s letter. Samples identified as #11 through #16 were collected from stockpiled soil and analyzed for TPH-Gx and TPH-418.1. GRO was not detected above laboratory detection limits in all samples; however, DRO/residua (oil)-range petroleum hydrocarbons (RRO) in soil ranged from 16 mg/Kg to 170 mg/Kg. In a March 15, 1994, letter to ODEQ, Obrist presented the laboratory data and stated that the stockpiled soil would be placed as a landscaping berm for their nursery and covered with 1-foot of compost mulch. In a response letter to Mr. Sam Gardner from ODEQ dated March 31, 1994, ODEQ pointed out that one of the soil samples (sample number #15) contained petroleum at 170 mg/Kg, which is above the required cleanup level of 100 mg/Kg set forth in Obrist’s May 5, 1993, treatment plan.

The next correspondences on file were letters to Mr. Sam Gardner and Mr. Teddi Beard dated April 28, 2006, and May 25, 2006, stating that the UST release at the subject property was still an "open file" and that ODEQ still required the work be performed as requested in ODEQ's March 31, 1994, letter before a formal "No Further Action" designation could be issued.

2.3 Data Gaps and Project Initiation

In a May 25, 2006, letter, ODEQ requested the following information to be submitted as a requirement to close this LUST File:

- Final sampling results were not provided to demonstrate that treated soil met the treatment requirement of 100 mg/Kg TPH,
- Results of field screening were not provided or conducted while spreading out the aerated soil to identify possible pockets of higher contamination,
- Closure sampling of the area beneath the soil aeration piles was not conducted or reported, and
- The owner of the subject property has failed to sign and submit the ODEQ Final Soil Disposition form as required in ODEQ's soil aeration permit.

In 2023, Client retained attorney representation from Cable Huston law firm in preparation of selling the subject property. On September 27, 2023, Cable Huston submitted a Cost Recovery Agreement on client's behalf to initiate site regulatory closure prior to finalizing the pending purchase and sale agreement.

In an October 11, 2024, email correspondence, ODEQ agreed with the following scope of work to finalize cleanup requirements:

- Sample for nature and extent in former gasoline UST area (soil and ground water),
- Sample soil under the likely former aeration stockpile location,
- Sample bermed soil along Highway 99 (possible soil placement area #1), and
- Attempt to sample soil in an area of observed blackberry growth (possible soil placement area #2).

2.4 Authorization

ENW presented a scope of work to finalize the UST cleanup activities to Mr. Daniel Mulvihill of Cable Huston on November 5, 2024. Work was approved by Client on November 6, 2024.

3.0 Scope of Work

The scope of work of this project was developed based on information obtained from previous work by others and ODEQ correspondence. ENW completed the following scope of work for this project:

- Completed a geophysical survey to clear areas of proposed subsurface activities of utilities and to locate/confirm the limits of the former gasoline UST and petroleum-contaminated soil excavation.
- Collected surface soil samples from three decision units (DU01 through DU03) using incremental sampling methodology (ISM) to assess areas of the site where treated soil was potentially placed in 1994.
- Advanced eight temporary soil borings in the vicinity of the former gasoline UST and soil aeration pule using direct-push technology (DPT) and collected discrete soil samples for laboratory analysis of TPH.
- Set temporary well points in borings in the vicinity of the former gasoline UST and collected reconnaissance ground water samples for analysis of GRO.
- Submitted samples to an independent laboratory under chain-of-custody protocols for appropriate analysis.
- Evaluated analytical results with respect to Oregon regulatory standards and ODEQ guidance documents, and.
- Prepared this report documenting site conditions and findings.

4.0 Site Description

The subject site is in a rural agricultural area 1.5 miles north of Amity, Oregon, and five miles south of McMinnville, Oregon. The subject property is identified by the Yamhill County Assessor's Office as Account No. 196665 and described as Township 5S, Range 4W, Section 17, Tax Lot 00300. The subject site occupies an approximate 11.4-acre tract of land along the west side of Pacific Highway West (Hwy 99W) near the intersection with State route 233. The subject property is currently developed with a large warehouse that is surrounded by asphalt pavement. An open, undeveloped area occupies an area northwest of the warehouse building that was formerly occupied by greenhouses but is currently vacant.

The former gasoline UST was located in the southern portion of the site. The 1993 UST Decommissioning Report by Obrist reported a pump house approximately 50 feet east of the western fenceline and 70 feet north of the southern property boundary. The 1,000-gallon gasoline UST was located just north of the pump house and the aeration soil stockpile was placed on the south side of the pump house. These features are presented on Site Plan on Figure 2.

Topography. The subject site is located within the U.S. Geological Survey McMinnville, OR 7.5-minute quadrangle, at an approximate elevation of 165 feet above mean sea level (see Figure 1). The subject property slopes gently downward to the west toward Salt Creek. Regionally, surface topography rises to over 2,000 feet in the Coast Range foothills west of the subject property.

Geologic Setting. The site is located on the east flank of the central Oregon Coast Range, which is a north-trending anticlinal form resulting from the convergence of the Juan de Fuca and North American plates. The McMinnville quadrangle is located within a broad east-west downwarp that crosses the Coast Range and forms an eastward-plunging fold transverse to the Coast Range anticlinal high. The Yamhill Valley and Yamhill River follows this downwarp along most of its length[3]. The site is mapped as Quaternary middle terrace deposits (Qmt), which are up to 150 feet thick and described as mostly poorly sorted, semi-consolidated deposits of clay, silt, sand, and fine to very coarse gravel. Qmt includes 10-50 feet of light brown silt identified as Willamette Silt.[4]

This FSI encountered up to 1.5 feet of ¾ inch minus crushed gravel subgrade beneath the asphalt surfaces of the south yard area where the former gasoline UST was located. Soil borings EB02, EB03, EB04 and EB05 are considered representative of native soil conditions, which generally consisted of dark gray to olive brown fine sand with silt extending from below the gravel subgrade to the maximum depth explored of 20 feet bgs (Appendix A).

Ground Water. During ENW's FSI, ground water was encountered in borings at approximately 15 feet bgs.

5.0 Methods and Procedures

This section describes the methods and procedures used during field investigation activities performed November 21 and 25, 2024, and documented in the photographic log included as Appendix B.

5.1 Preparation Activities

ENW performed or coordinated the following activities prior to conducting field activities:

Plan Preparation. In-house Sampling and Analysis Plan was prepared for the project.

One Call Notification. Prior to any subsurface site work, a call was placed with One Call Utility Notification Service to identify and locate all public utilities near each of the proposed sampling locations.

Planning. ENW scheduled and coordinated with the Client to begin site work.

5.2 Geophysical Survey

The geophysical survey and interpretation of the geophysical data was performed on November 21, 2024, by Geopotential, Inc. of Clackamas, Oregon under ENW's oversight. The survey was performed primarily to identify the limits of the former tank/petroleum-contaminated soil excavation. The secondary purpose was to clear boring locations of underground utilities.

The survey utilized geophysical instruments to identify subsurface magnetic "anomalies." Geophysical anomalies result from contrasts of geophysical signatures of subsurface materials but can also result from interference with surface and overhead features. Geophysical characteristics result from a variety of

[3] Baldwin, E.M., 1955. Geology of the Sheridan and McMinnville Quadrangles, Oregon: U.S. Geological Survey Oil and Gas Investigations Map OM 155, scale 1:62,500.

[4] Brownfield, Michael E., Schlicker, H.G., 1981. Preliminary Geologic Map of the McMinnville and Dayton Quadrangles, Oregon: Department of Geology and Mineral Industries Open File Report 0-81-6, scale 1: 24,000.

factors (e.g., density, distribution, porosity, fill placement, contrasts in soil composition, intergranular fluid composition and saturation, contaminant impacts, etc.), as well as buried artifacts, and similar anomalies may be produced by different sources. Except where investigated by excavation, all anomalies and interpretations should be considered (somewhat) speculative.

Multiple instrument types were used during the survey to maximize recognition of contrasting subsurface materials. These included:

Aqua-Tronics Electronic Tracer - electromagnetic sensing equipment designed to identify subsurface anomalies. In the inductive mode, the equipment is used to sense metallic objects in the subsurface. A conductive mode allows for tracing electrical conduit and metallic pipelines.

Schonstedt Gradiometer (Magnetometer) – used as a complement to the Aqua-Tronics instrument, the magnetometer senses horizontal variations in the local magnetic field caused by buried ferrous metal objects such as underground storage tanks (USTs), drums, pipes, and debris-filled trenches. (Magnetic surveys can only detect ferrous metal objects. Interference caused by observed surface metal objects limits the accuracy of the survey. The anomalies produced by fences, power lines, cars, and buildings can easily mask an anomaly caused by an underground target.)

Mala High Dynamic Range (HDR) Ground Penetrating Radar (GPR) - GPR uses short impulses of high-frequency radio waves directed into the ground to acquire information about the subsurface. GPR can be used to accurately locate both metallic and non-metallic objects (e.g., USTs, utilities, and drums) from a few inches below the surface to depths of up to 30 feet. GPR may also be effective at delineating trenches and excavations.

5.3 Incremental Sampling

Based on review of the records/reports of previous cleanup actions, it appears the aerated soils generated at the site were spread out on-site and covered with mulch. Likely locations where soil could have been placed include three historically unpaved areas of the site. These include the large field in the northwest portion of the site that once had greenhouses (possibly prompting Obrist's description as "nursery."), an undeveloped strip of land with trees along the eastern property boundary, and the area in the southern portion of the site immediately adjacent to the soil aeration pile.

ENW assessed surface soils in the three likely areas of aerated soil placement using ISM developed by the Interstate Technology Regulatory Council (ITRC). ISM is a structured composite sampling and processing protocol that provides a reasonably unbiased estimate of the mean contaminant concentration in a volume of soil targeted for sampling (decision unit, or DU). ISM provides representative samples of each DU by collecting numerous increments of soil (typically 30 to 100 increments) that are combined, processed, and subsampled according to specific protocols. ISM sampling has the advantage of reducing heterogeneity in soil (both micro- and macro-scale) to provide an average concentration within the target sample area.

5.3.1 Increment Sampling Locations and Depths (Surface Soil Sampling)

Surface soils were collected from three decision units (DU01 through DU03), encompassing each of the three areas suspected of potentially receiving aerated soils in 1993. Decision units DU01 through DU03 are illustrated on Figure 3.

Soil increments from decision units DU01 through DU03 were collected between approximately 0 and 0.5 feet bgs. Surface soil samples were collected by dividing each DU into a grid pattern with 50 grids. Increments of equal mass were collected from the approximate center node of each increment grid (grid-centered systematic sampling), resulting in collection of 50 soil increments from each DU. Increment locations and depths were distributed evenly within the decision unit to ensure that the entire decision unit population was equally represented in the final multi-increment sample (see Figure 3).

Soil increments were sampled with a decontaminated stainless-steel push probe or hand auger. Wood debris and soil or mineral fragments were removed from each soil increment prior to combining in the laboratory-provided sample container. One dedicated 1-gallon container containing the soil increments from each DU was sealed with a Teflon-lined lid, labeled, and preserved on ice pending transport to the project laboratory.

5.4 Soil Borings

ENW strategically advanced eight (8) soil borings to assess existing subsurface conditions at locations stipulated by ODEQ for site closure purposes. Five borings (B01 through B05) were placed in and around the former remedial excavation boundaries, and three borings (B06 through B08) were placed within the interpreted footprint of the former soil aeration stockpile. All soil borings were advanced on November 25, 2024, using a track mounted GeoProbe® DPT drill rig operated by Anderson Environmental Contractors of Kelso, Washington. Borings were advanced to a maximum depth of 20 feet bgs in locations shown on the Sample Location Diagram on Figure 3.

Field methods are described further in the following paragraphs. The findings of the geophysical survey and results of laboratory analysis of soil and ground water samples are presented in Section 6.0.

Soil Screening and Logging. Soil cores and samples were field screened continuously from the surface to the total depth of each boring for the presence of contaminants. Semi-quantitative headspace screening was also performed on each sample core by placing selected soil samples in a plastic sealed bag, breaking the soil core to expose surface area inside the bag, and inserting a photoionization detector (PID) tip into the top of the bag. Soil cores were logged by an ENW Geologist (Appendix A). Soils were classified using the Unified Soil Classification System and complemented with descriptors such as grain size, moisture content, foreign clasts, and other physical properties to describe underlying stratigraphy.

Soil Sampling. Grab samples were collected from each boring for laboratory analysis from zones indicated to be impacted. In the absence of obvious soil impacts, soil samples near the former UST remedial excavation were collected from immediately above the soil/water interface. Soil samples from borings beneath the reported aeration soil pil were collected at approximately 1-foot and 5-feet bgs. Individual soil samples are designated with the sample's depth appended to the boring number (e.g., B01-11 would indicate a sample collected from 11 feet bgs in boring B01; appended with "SWI" to indicate a soil/water interface sample).

Soil samples were transferred with fresh Nitrile gloves into sample containers provided by the laboratory. The containers were filled to minimize headspace before immediate sealing. The samples were immediately labeled and placed in cooled storage until they were delivered to the laboratory following chain-of-custody protocols.

Reconnaissance Ground Water Sampling. Borings B01 through B05 were advanced approximately five (5) feet below the first observed water-bearing zone. Reconnaissance ground water samples were collected by retrieving the drill stem from the boring and installing a new temporary PVC well screen into the open borehole. The depth to water was measured and then new dedicated low-density polyethylene tubing was inserted into the well screen and attached to a peristaltic pump at the surface. A low flow of approximately 125-200 milliliters per minute was used to perform an initial purge and then collect ground water samples in laboratory-supplied containers. Samples were labeled to indicate the boring number and depth to bottom of screened interval.

Ground water monitoring results were recorded onto Field Sampling Data Sheets included as Appendix C.

Boring Completion. All borings were backfilled with hydrated bentonite chips to just below ground surface, and the asphalt pavement surface was restored.

5.5 Laboratory Analysis

Soil and ground water samples were analyzed by Friedman and Bruya, Inc. (F&BI) of Seattle, Washington. Samples were analyzed according to the analytical plan presented in Table 5-1. Laboratory analytical reports, including quality assurance/quality control (QA/QC) procedures and results are included in Appendix D.

Table 5-1. Analytical Methods Used

Analytical Method	Constituents	Soil	Water
NWTPH-HCID	Northwest Total Petroleum Hydrocarbons Identification (HCID)	All soil samples	---
NWTPH-Gx	Northwest Total Petroleum Hydrocarbons – Gasoline-Range Organics (GRO)	---	All samples
NWTPH-Dx	Northwest Total Petroleum Hydrocarbons – Diesel-Range Organics (DRO) and Residual-Range Organics (RRO)	Select sample indicated to contain DRO and/or RRO by HCID	---

EPA = US Environmental Protection Agency

5.6 Cleanup Standards

The assessment and remediation of hazardous substances in Oregon are conducted according to Oregon Administrative Rule (OAR) 340, Division 122, *Hazardous Substance Remedial Action Rules*. The following cleanup standards and numeric criteria may be applied in evaluating site assessment results.

Soil Matrix. Under the Soil Matrix Cleanup Option (OARs 340-122-0320 through 0360) cleanup standards are determined by assigning site-specific values to environmental parameters (e.g., soil type, depth to ground water, etc.). The Soil Matrix Cleanup Score Sheet is presented in Appendix D. The score calculated for the site is 37, indicating that Soil Matrix Level 2 cleanup standards would apply to the site if closed under Soil Matrix Rules. For purposes of risk-based evaluations of soil, Soil Matrix Cleanup Levels are often used for screening purposes, where potentially significant levels of petroleum contamination may be present if concentrations of total petroleum hydrocarbons in soil exceed their respective soil matrix cleanup level and may require remedial action. Concentrations of total petroleum hydrocarbons lower than their corresponding Soil Matrix Cleanup Level usually do not require any additional cleanup or risk management.

Risk-Based Cleanup. Risk-based cleanup standards are derived in accordance with ODEQ's *Risk-Based Decision Making for the Remediation of Contaminated Sites* (RBDM) guidance document for:

- Underground storage tanks regulated under the Cleanup Rules for Leaking Petroleum Underground Storage Tank Systems (OAR 340-122-0205 through 340-122-0360).
- Other sources of contamination regulated under the Hazardous Substance Remedial Action Rules (OAR 340-122-0010 through 340-122-0115).

RBCs are based on Oregon unacceptable additional risk criteria for cancer occurrence and for non-carcinogenic health impacts. The State of Oregon considers acceptable additional risk of cancer from contact with carcinogenic constituents at less than one in one million incidences, or, for non-carcinogenic constituents, below the constituent threshold concentration at which health impacts would occur. RBCs are generally used to evaluate sampling analytical results as follows:

- ODEQ's lowest RBC for residential receptors is used as an initial 'conservative' screening of a constituent. If a constituent's concentration exceeds its SLRBC, it requires further evaluation. Otherwise, the constituent is considered unlikely to pose unacceptable risk to any human receptor.
- Those constituents identified by initial screening as exceeding their SLRBC should be further evaluated through a risk-based assessment, which evaluates site-specific exposure pathways and receptors against generic ODEQ-provided RBCs.

Should constituents be identified that also exceed their generic, but exposure pathway- and receptor-specific RBCs, then the appropriateness of additional site-specific methods allowed under the RBDM guidance document will be evaluated (e.g., the development of site-specific RBCs, sampling of soil gas and/or vapor, etc.).

5.7 Investigation Derived Waste Disposal

Investigation-derived waste (soil cuttings, purge water, decontamination fluids) were temporarily placed inside Oregon Department of Transportation approved 55-gallon drums and stored on site pending receipt of analytical results.

6.0 Findings

This section describes the findings of site activities. The results of laboratory analysis of the soil and reconnaissance ground water samples are summarized on Table 1 and 2, respectively (following the Tables Tab after text). Copies of soil boring logs are included in Appendix A. Site photographs of field activities are included in Appendix B. Field sampling data sheets are included in Appendix C. Copies of the F&BI Laboratory Reports are included in Appendix E.

6.1 Geophysical Survey

The geophysical survey was completed on November 21, 2024, as described in Section 5.4. The survey was focused in the southern portion of the site. Results of the geophysical survey identified four (4) magnetic anomalies (MA01 through MA04), the locations of which are presented on Figure 3.

As indicated below, three areas of disturbed soil were identified in the general vicinity of the reported former remedial excavation.

- **MA01** – 31’ x 15’; large, disturbed zone-suggestive of a shallow excavation.
- **MA02** – 14.5’ x 10.5’; west of MA01 a disturbed soil zone correlating with the pump house dimension from historical sketch located roughly 70’ east and 50’ north of the fence lines; a power box evident at the surface.
- **MA03** – 15.5’ x 12’; suggestive of the former UST/petroleum-contaminated soil excavation north of MA02; disturbed zone with reflection/density changes down to roughly 10 feet bgs.
- **MA04** – linear object (suggestive of a utility); likely former electrical line from current riser room to MA02 (possible former electrical connection to dispenser formerly located inside pump house)

Boring locations were sited to target the apparent former remedial excavation at MA03 and are presented on Figure 3.

6.2 Soil Boring Investigation

ENW collected three ISM surface soil samples from three DUs between November 21-25, 2024 and advanced eight (8) soil borings on November 25, 2024. Sample locations are presented on Figure 3 and summarized on Table 6-1.

Table 6-1. Summary of Sampling

Borehole / Location ID	Date Sampled	Depth Sampled (feet)	Sampled By	Location
Soil				
DU01	11/25/2024	0.5	ENW	Southeast portion of site and possible location where treated soil may have been placed
DU02	11/25/2024	0.5	ENW	Southwest portion of site and possible location of former aeration stockpile
DU03	11/21/2024	0.5	ENW	Area north of subject building where Treated Soil May have been placed
B01	11/25/2024	8	ENW	Center of Former UST Remedial Excavation
	11/25/2024	11	ENW	
B02	11/25/2024	10	ENW	West of Former UST Excavation
B03	11/25/2024	11	ENW	East of Former UST Excavation
B04	11/25/2024	13	ENW	North of Former UST Excavation
B05	11/25/2024	13	ENW	South of Former UST Excavation
B06	11/25/2024	1	ENW	Estimated Former Aeration Pile Location
	11/25/2024	5	ENW	
B07	11/25/2024	1	ENW	Estimated Former Aeration Pile Location
	11/25/2024	5	ENW	
B08	11/25/2024	1	ENW	Estimated Former Aeration Pile Location
	11/25/2024	5	ENW	
Reconnaissance Ground Water				
B01	11/25/24	15	ENW	Center of Former UST Remedial Excavation
B02	11/25/24	15	ENW	West of Former UST Excavation
B03	11/25/24	15	ENW	East of Former UST Excavation
B04	11/25/24	15	ENW	North of Former UST Excavation
B05	11/25/24	15	ENW	South of Former UST Excavation

In boring B01 (center of former remedial excavation), crushed rock, extending to nearly 8 feet bgs, was interpreted as the material used to backfill the former UST excavation. Borings B06, B07, and B08, drilled to 5 feet bgs, encountered dark gray to light olive brown fine sand with silt. Field screening of soil during drilling did not suggest evidence of gross soil contamination, with no PID readings reported above 0.0 parts per million by volume (ppmv).

Saturated soils were encountered at 15 feet bgs with ground water stabilizing in temporary well points at depths ranging from 4.2 to 17.6 feet bgs. No visual evidence of vadose zone petroleum impacts was observed in any of the soil borings.

6.3 Laboratory Results – Soil

The results of laboratory analysis for 15 soil samples are presented in Table 1 and summarized below. Boring locations are shown on the Sample Location Diagram on Figure 3.

Fifteen soil samples were analyzed for total petroleum hydrocarbons by NWTPH-HCID, and results are provided in Table 1.

- TPH was not detected in any of the ISM surface soil samples above the laboratory method reporting limit (MRL).

- TPH was not detected in any of the discrete subsurface soil samples above the laboratory MRL, except for the sample collected at boring B01 at 8-feet bgs. DRO was detected in this sample at a concentration of 45 mg/Kg, well below the Soil Matrix cleanup level of 500 mg/Kg and its SLRBC of 1100 mg/Kg. A sample collected from 11 feet bgs in this boring did not suggest DRO at detectable concentrations. Based on the low concentration of DRO below Soil Matrix cleanup levels in soil, and apparent limited extent, further analysis was not warranted.

6.4 Laboratory Results – Reconnaissance Ground Water

The results of laboratory analysis for five (5) reconnaissance ground water samples are presented in Table 2 and summarized below. Boring locations are shown on the Sample Location Diagram on Figure 3. All five reconnaissance ground water samples were analyzed for GRO, and results indicate the following.

- GRO was not detected in any of the samples above the laboratory method reporting limit (MRL)

7.0 Current Understanding of Magnitude and Extent of Contamination

Findings of soil and reconnaissance ground water sampling demonstrate the absence of soil and ground water impacts in areas investigated.

7.1 Former Aeration Soil Stockpile

Surface and subsurface soil sampling (borings B06 through B08) collected for purposes of former aeration soil stockpile closure sampling did not detect TPH above laboratory MRLs in the area where TPH-impacted soils were treated on-site in 1993-1994.

7.2 Final Soil Disposition Screening

Soil sampling at three decision units (DU01 through DU03) did not detect the presence of residual petroleum hydrocarbons within areas where treated-aerated soils may have been placed in 1994, suggesting no pockets of grossly contaminated material remains at these locations.

7.3 Subsurface Soil Assessment (Former UST Excavation)

Soil samples collected from the source area (former gasoline UST/remedial excavation) indicate residual soil impacts were isolated to one location at the soil/water interface at a depth of eight feet bgs, which is estimated to be within 2 feet below the floor of the former UST excavation. Residual concentrations of TPH are below Soil Matrix cleanup levels. The lateral extent of soil impacts is delineated by borings EB02 through EB05, which lie west, north, east, and south of the B01 contaminant source area, respectively.

Based on reconnaissance ground water data collected from borings B01 through B05, ground water has not been impacted by GRO.

8.0 Conclusions and Recommendations

The findings of this investigation has led to the following conclusions:

- Five soil borings were advanced within and around the former gasoline UST/petroleum-contaminated soil excavation and three soil borings were placed in the area where stockpiled TPH-impacted soil was treated by aeration in 1993-94.
- Three surface soil samples assessed possible soil impacts where aerated soil may have been placed in 1994.
- Soil sampling detected DRO in boring B01, located in the center of the former UST excavation, at a depth of 8-feet bgs. The concentration of DRO in this soil sample was below the Soil Matrix Cleanup Level.
- Remaining soil and reconnaissance ground water sampling results showed that no residual TPH impacts remain in surface or subsurface soil within the former soil treatment pile, suspected soil placement areas, or in soil and ground water surrounding the former gasoline UST/petroleum-contaminated soil excavation.

8.1 Recommendations

Based on the above findings and conclusions, ENW recommends the following steps to satisfy ODEQ closure requirements:

- Submit this report to ODEQ and request No Further Action.

We recommend this report is kept as part of the permanent property records.

9.0 Limitations

The scope of this report is limited to observations made during on-site work; interviews with knowledgeable sources; and review of readily available published and unpublished reports and literature. As a result, these conclusions are based on information supplied by others as well as interpretations by qualified parties.

The focus of the work does not extend to the presence of the following conditions:

1. Naturally occurring toxic or hazardous substances in the subsurface soils, geology and water,
2. Toxicity of substances common in current habitable environments, such as stored chemicals, products, building materials and consumables,
3. Contaminants or contaminant concentrations that are not a concern now but may be under future regulatory standards,
4. Unpredictable events that may occur after ENW's site work, such as illegal dumping or accidental spillage.

There is no practice that is thorough enough to absolutely identify the presence of all hazardous substances that may be present at a given site. ENW's investigation has been focused only on the potential for contamination that was specifically identified in the Scope of Work. Therefore, if contamination other than that specifically mentioned is present and not identified as part of a limited Scope of Work, ENW's environmental investigation shall not be construed as a guaranteed absence of such materials. ENW has endeavored to collect representative analytical samples for the locations and depths indicated in this report. However, no sampling program can thoroughly identify all variations in contaminant distribution.

We have performed our services for this project in accordance with our agreement and understanding with the client. This document and the information contained herein have been prepared solely for the use of the client.

ENW performed this study under a limited scope of services per our agreement. ENW assumes no responsibility for conditions that we did not specifically evaluate or conditions that were not generally recognized as environmentally unacceptable at the time this report was prepared.

Tables

Table 1 - Summary of Analytical Data, Soil

Location ID		DU01	DU02	DU03	B01		B02	B03	B04	B05
Sample ID		DU01-241125-IS-0.5	DU02-241125-IS-0.5	DU03-241121-IS-0.5	B01-8-SWI	B01-11	B02-10-SWI	B03-11-SWI	B04-13-SWI	B05-13-SWI
Date Sampled		11/25/2024	11/25/2024	11/21/2024	11/25/2024	11/25/2024	11/25/2024	11/25/2024	11/25/2024	11/25/2024
Depth Sampled (feet)		0.5	0.5	0.5	8	11	10	11	13	13
Sampled By		ENW	ENW	ENW	ENW	ENW	ENW	ENW	ENW	ENW
Location		Southeast portion of site and possible location where treated soil may have been placed	Southwest portion of site and possible location of former aeration stockpile	Area north of subject building where Treated Soil May have been placed	Center of Former UST Excavation		West of Former UST Excavation	`East of Former UST Excavation	North of Former UST Excavation	South of Former UST Excavation
Constituent of Interest	Note	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)
Total Petroleum Hydrocarbons										
Generic Gasoline (GRO)	nc, v	<20 (NP)	<20 (NP)	<20 (NP)	<20 (NP)	<20 (NP)	<20 (NP)	<20 (NP)	<20 (NP)	<20 (NP)
Generic Diesel / Heating Oil (DRO)	nc, v	<50 (NP)	<50 (NP)	<50 (NP)	45	<50 (NP)	<50 (NP)	<50 (NP)	<50 (NP)	<50 (NP)
Generic Mineral Insulating Oil (RRO)	nc, nv	<250 (NP)	<250 (NP)	<250 (NP)	<120 (ND)	<250 (NP)	<250 (NP)	<250 (NP)	<250 (NP)	<250 (NP)

Notes:
mg/Kg = milligram per kilogram or parts per million (ppm).
<# (ND) = not detected at or above the laboratory method reporting limit shown.
NE = not established.
NP = not present at or above the laboratory method reporting limit shown (HCID analysis).
nc = noncarcinogenic
v = volatile
nv = nonvolatile
GRO = gasoline-range organics.
DRO = diesel-range organics.
RRO = residual-range organics.
[1] Lowest Risk-Based Concentration for soil (screening level assumes residential use, from ODEQ RBCs dated May 2018).

Table 1 - Summary of Analytical Data, Soil

Location ID		B06		B07		B08		Maximum Soil Concentration (remaining soil)	Soil Matrix Cleanup Level	ODEQs Screening-Level Risk-Based Concentrations SLRBCs[1] (Soil)	Exceeds ODEQs Screening-Level SLRBCs (Soil) and/or Soil Matrix Cleanup Level
Sample ID		B06-1	B06-5	B07-1	B07-5	B08-1	B08-5				
Date Sampled		11/25/2024	11/25/2024	11/25/2024	11/25/2024	11/25/2024	11/25/2024				
Depth Sampled (feet)		1	5	1	5	1	5				
Sampled By		ENW	ENW	ENW	ENW	ENW	ENW				
Location		Possible Former Aeration Pile Location		Possible Former Aeration Pile Location		Possible Former Aeration Pile Location					TRUE OR Y FALSE OR N
Constituent of Interest	Note	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)			
Total Petroleum Hydrocarbons											
Generic Gasoline (GRO)	nc, v	<20 (NP)	<20 (NP)	<20 (NP)	<20 (NP)	<20 (NP)	<20 (NP)	<20 (NP)	80	31	N
Generic Diesel / Heating Oil (DRO)	nc, v	<50 (NP)	<50 (NP)	<50 (NP)	<50 (NP)	<50 (NP)	<50 (NP)	45	500	1100	N
Generic Mineral Insulating Oil (RRO)	nc, nv	<250 (NP)	<250 (NP)	<250 (NP)	<250 (NP)	<250 (NP)	<250 (NP)	<250 (ND)		2800	N

Notes:
mg/Kg = milligram per kilogram or parts per million (ppm).
<# (ND) = not detected at or above the laboratory method reporting limit shown.
NE = not established.
NP = not present at or above the laboratory method reporting limit shown (HCID analysis).
nc = noncarcinogenic
v = volatile
nv = nonvolatile
GRO = gasoline-range organics.
DRO = diesel-range organics.
RRO = residual-range organics.
[1] Lowest Risk-Based Concentration for soil (screening level assumes residential use, from ODEQ RBCs dated May 2018).

Table 2 - Summary of Analytical Data, Reconnaissance Ground Water

Location ID		B01	B02	B03	B04	B05	Maximum Ground Water Concentration	ODEQs Screening-level Risk-Based Concentrations (SLRBCs) [1]	COPC?
Sample ID		B01-GW-15	B02-GW-15	B03-GW-15	B04-GW-15	B05-GW-15			
Date Sampled		11/25/24	11/25/24	11/25/24	11/25/24	11/25/24			
Depth Sampled (feet)		15	15	15	15	15			
Sampled By		ENW	ENW	ENW	ENW	ENW			
Location		Center of Former UST Remedial Excavation	West of Former UST Excavation	East of Former UST Excavation	North of Former UST Excavation	South of Former UST Excavation			TRUE OR Y FALSE OR N
Constituent of Interest	Note	µg/L (ppb)	µg/L (ppb)	µg/L (ppb)	µg/L (ppb)	µg/L (ppb)	µg/L (ppb)		
Total Petroleum Hydrocarbons									
Generic Gasoline (GRO)	nc, v	<100 (ND)	<100 (ND)	<100 (ND)	<100 (ND)	<100 (ND)	<100 (ND)	110	N

Notes:

ug/L = micrograms per Liter or parts per billion (ppb).

<# (ND) = not detected at or above the laboratory method reporting limit shown.

[1] Lowest Risk-Based Concentration for ground water (screening level assumes residential use, from ODEQ RBCs dated May 2018).

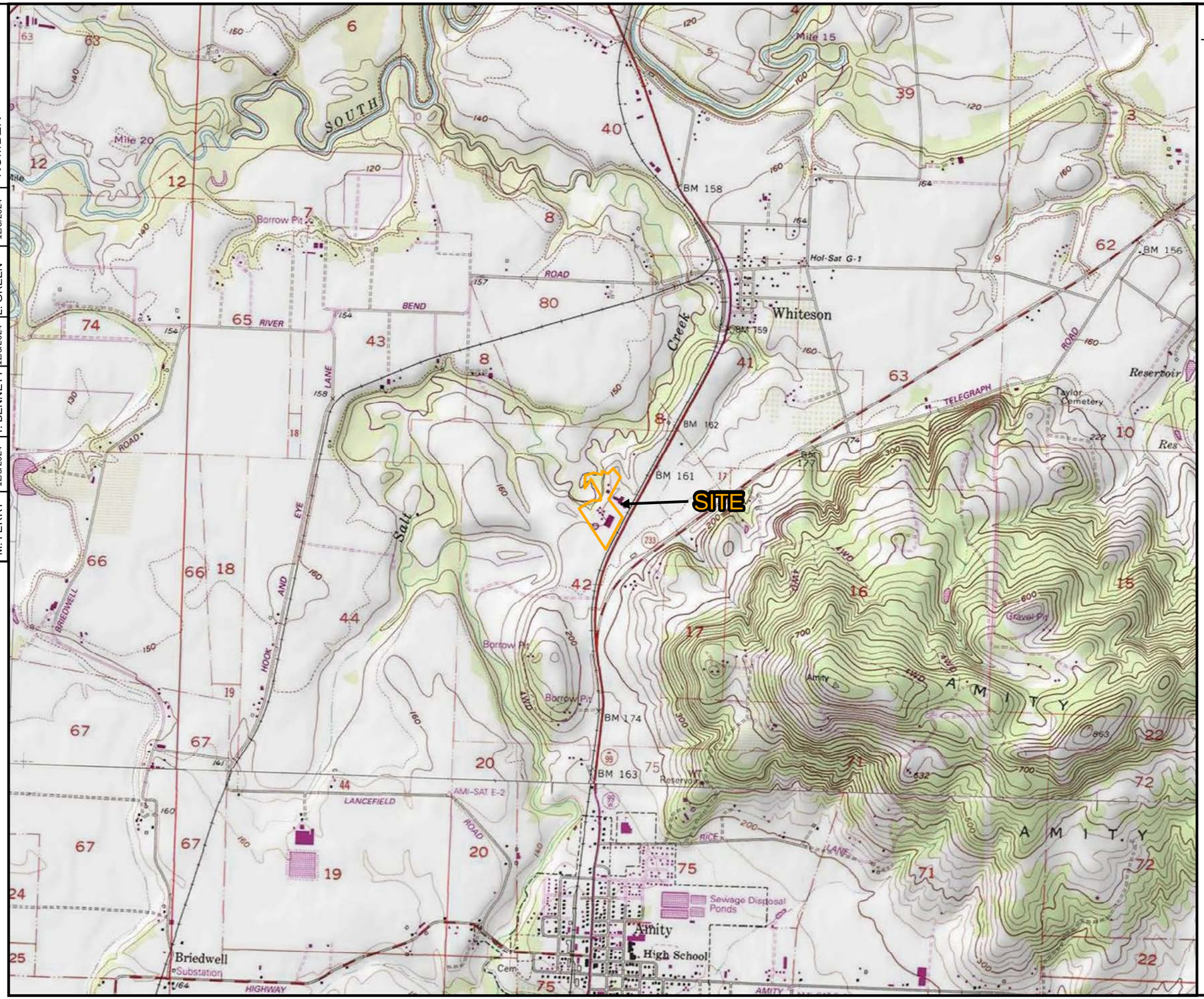
nc = noncarcinogenic

v = volatile

GRO = gasoline-range organics.

Figures

DRAWING NUMBER	APPROVED BY	CHECKED BY	DRAWN BY
1867-23001(V01)	L. GREEN 12/5/2024	T. BENNETT 12/5/2024	M. FERRY 12/5/2024



LEGEND:

SUBJECT PROPERTY BOUNDARY

NOTES:

1. BASE MAP DEVELOPED BY THE USGS (2013).

0 1,350 2,700 5,400

Feet

N

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environmental natural resource consultants

FIGURE 1

SITE VICINITY MAP

16700 HWY 99
AMITY, OREGON

DRAWING NUMBER	APPROVED BY	CHECKED BY	DRAWN BY
1867-23001(V02)	L. GREEN 12/12/2024	T. BENNETT 12/12/2024	M. FERRY 12/12/2024

LEGEND:

- SUBJECT PROPERTY BOUNDARY
- SUBJECT BUILDING
- SAWDUST
- GRAVEL
- FORMER 1,000-GALLON GASOLINE UST
- FORMER AERATION STOCKPILE
- FORMER PUMP HOUSE
- RAILROAD

NOTES:

1. BASE MAP DEVELOPED FROM AN AERIAL PHOTOGRAPH MAP DATED 2023 AND ENW FIELD NOTES.

2. ALL BUILDING, STREET, AND FEATURE LOCATIONS ARE APPROXIMATE.

3. SYMBOLS REPRESENT LOCATION AND DO NOT ALWAYS REPRESENT EXACT SHAPE, SIZE, OR ORIENTATION

0 112.5 225 450

Feet

N

EVREN NORTHWEST INC.
environmental & natural resource consultants

FIGURE 2

SITE PLAN

16700 HWY 99
AMITY, OREGON

DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
M. FERRY 12/17/2024	T. BENNETT 12/17/2024	L. GREEN 12/17/2024	1867-23001(V04)

LEGEND:

- SUBJECT PROPERTY BOUNDARY
- SUBJECT BUILDING
- DECISION UNITS
- FORMER AERATION STOCKPILE
- FORMER PUMP HOUSE
- FORMER UST EXCAVATION
- FORMER 1,000-GALLON GASOLINE UST
- SAWDUST
- GRAVEL
- INFERRED PIPE
- RAILROAD
- MAGNETIC ANOMALIES
- SAMPLES

NOTES:

1. BASE MAP DEVELOPED FROM AN AERIAL PHOTOGRAPH MAP DATED 2023 AND ENW FIELD NOTES.

2. ALL BUILDING, STREET, AND FEATURE LOCATIONS ARE APPROXIMATE.

3. SYMBOLS REPRESENT LOCATION AND DO NOT ALWAYS REPRESENT EXACT SHAPE, SIZE, OR ORIENTATION

0 65 130 260

Feet

N

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environmental & natural resource consultants

FIGURE 3

SAMPLE LOCATION DIAGRAM

16700 HWY 99
AMITY, OREGON

Appendix A

Soil Boring Logs

EVREN Northwest, Inc.

DRILL LOG

PROJECT	PROJECT NO.	BORING NO.
Focused Subsurface Investigation	1867-23001-01	**B01**

SITE	BEGUN	COMPLETED	HOLE SIZE	ANGLE FROM HORIZ.
16700 Highway 99, Amity, Oregon	11/25/24	11/25/24	2	

COORDINATES	DEPTH GROUND WATER	DATE SL	STATIC LEVEL	FIRST WATER	GROUND ELEVATION

DRILLER	CORE RECOVERY (%)	# SAMPLES	# CORE BOXES	DEPTH TOP OF ROCK
Anderson Environmental Contracting, LLC				

DRILL MAKE AND MODEL	LOGGED BY:	DEPTH BOTTOM OF HOLE
	Jordan Morris	15

DEPTH	STRATA ELEVATION/ DEPTH	GRAPHIC LOG	DESCRIPTION	SAMPLE DATA: SAMPLE NO.	SAMPLE DATA: SAMPLE TYPE	SAMPLE DATA: CORE RECOVERY	SAMPLE DATA: MW Const./ Completion	PID/OVM	REMARKS: NOTES ON WATER LEVELS, LOSSES, CAVING, CASING, DEPTH & DRILLING CONDITIONS.
0			Asphalt						
			3/4 minus crushed base rock; gray (2.5Y 4/1); with fine sand and silt; moist; moderately loose; fabric at 1. 5 feet			50			
5									
			Fine SAND and silt with trace gravel (SM); dark gray (5Y 4/ 1); moderately stiff; bluish mottling; micaceous; saturated lens of wood debris	B01-8-SWI	grab	50		0.0	
10			grades to olive brown(2.5Y 4/ 3)	B01-11	grab	100		0.0	
15			End of boring					0.0	
20									
25									
30									
35									

EVREN Northwest, Inc.

DRILL LOG

PROJECT	PROJECT NO.	BORING NO.
Focused Subsurface Investigation	1867-23001-01	**B02**

SITE	BEGUN	COMPLETED	HOLE SIZE	ANGLE FROM HORIZ.
16700 Highway 99, Amity, Oregon	11/25/24	11/25/24	2	

COORDINATES	DEPTH GROUND WATER	DATE SL	STATIC LEVEL	FIRST WATER	GROUND ELEVATION

DRILLER	CORE RECOVERY (%)	# SAMPLES	# CORE BOXES	DEPTH TOP OF ROCK
Anderson Environmental Contracting, LLC				

DRILL MAKE AND MODEL	LOGGED BY:	DEPTH BOTTOM OF HOLE
	Jordan Morris	15

DEPTH	STRATA ELEVATION/ DEPTH	GRAPHIC LOG	DESCRIPTION	SAMPLE DATA: SAMPLE NO.	SAMPLE DATA: SAMPLE TYPE	SAMPLE DATA: CORE RECOVERY	SAMPLE DATA: MW Const./ Completion	PID/OVM	REMARKS: NOTES ON WATER LEVELS, LOSSES, CAVING, CASING, DEPTH & DRILLING CONDITIONS.
0			Asphalt						
			3/4 minus crushed base rock; gray (2.5Y 2.5/1); with fine sand and silt						
			Fine SAND and silt (SM); dark gray (2.5Y 4/1) moderately stiff; micaceous; grades to	B02-2.5	grab	90		0.0	
5			perched zone						
			orange mottling			100			
10			saturated	B02-10-SWI	grab			0.0	
						100			
15			End of boring					0.0	
20									
25									
30									
35									

EVREN Northwest, Inc.

DRILL LOG

PROJECT	PROJECT NO.	BORING NO.
Focused Subsurface Investigation	1867-23001-01	**B03**

SITE	BEGUN	COMPLETED	HOLE SIZE	ANGLE FROM HORIZ.
16700 Highway 99, Amity, Oregon	11/25/24	11/25/24	2	

COORDINATES	DEPTH GROUND WATER	DATE SL	STATIC LEVEL	FIRST WATER	GROUND ELEVATION

DRILLER	CORE RECOVERY (%)	# SAMPLES	# CORE BOXES	DEPTH TOP OF ROCK
Anderson Environmental Contracting, LLC				

DRILL MAKE AND MODEL	LOGGED BY:	DEPTH BOTTOM OF HOLE
	Jordan Morris	15

DEPTH	STRATA ELEVATION/ DEPTH	GRAPHIC LOG	DESCRIPTION	SAMPLE DATA: SAMPLE NO.	SAMPLE DATA: SAMPLE TYPE	SAMPLE DATA: CORE RECOVERY	SAMPLE DATA: MW Const./ Completion	PID/OVM	REMARKS: NOTES ON WATER LEVELS, LOSSES, CAVING, CASING, DEPTH & DRILLING CONDITIONS.
0			Asphalt						
			Angular gravel base rock; dark gray (2.5Y 4/1); with sand and silt; moist; no mica			80		0.0	
			Fine SAND and silt (SM); very dark gray (2.5Y 2.5/1); moderately dense; highly micaceous						
5			grades to light olive brown with orange mottling			100			
10				B03-11.5-SWI	grab	100		0.0	
15			End of boring					0.0	
20									
25									
30									
35									

EVREN Northwest, Inc.

DRILL LOG

PROJECT	PROJECT NO.	BORING NO.
Focused Subsurface Investigation	1867-23001-01	**B04**

SITE	BEGUN	COMPLETED	HOLE SIZE	ANGLE FROM HORIZ.
16700 Highway 99, Amity, Oregon	11/25/24	11/25/24	2	

COORDINATES	DEPTH GROUND WATER	DATE SL	STATIC LEVEL	FIRST WATER	GROUND ELEVATION

DRILLER	CORE RECOVERY (%)	# SAMPLES	# CORE BOXES	DEPTH TOP OF ROCK
Anderson Environmental Contracting, LLC				

DRILL MAKE AND MODEL	LOGGED BY:	DEPTH BOTTOM OF HOLE
	Jordan Morris	20

DEPTH	STRATA ELEVATION/ DEPTH	GRAPHIC LOG	DESCRIPTION	SAMPLE DATA: SAMPLE NO.	SAMPLE DATA: SAMPLE TYPE	SAMPLE DATA: CORE RECOVERY	SAMPLE DATA: MW Const./ Completion	PID/OVM	REMARKS: NOTES ON WATER LEVELS, LOSSES, CAVING, CASING, DEPTH & DRILLING CONDITIONS.
0			Asphalt						
			3/4 minus crushed rock base; with sand and silt; moist; moderately dense; no mica						
			Fine SAND and silt (SM); very dark gray (2.5Y 3/1); stiff; moist; micaceous			70			
5			grades to light olive brown (2.5Y 5/3)			100			
10						100			
			Saturated	B04-13-SWI	grab			0.0	
15						100		0.0	
20			End of boring						
25									
30									
35									

EVREN Northwest, Inc.

DRILL LOG

PROJECT	PROJECT NO.	BORING NO.
Focused Subsurface Investigation	1867-23001-01	**B05**

SITE	BEGUN	COMPLETED	HOLE SIZE	ANGLE FROM HORIZ.
16700 Highway 99, Amity, Oregon	11/25/24	11/25/24	2	

COORDINATES	DEPTH GROUND WATER	DATE SL	STATIC LEVEL	FIRST WATER	GROUND ELEVATION

DRILLER	CORE RECOVERY (%)	# SAMPLES	# CORE BOXES	DEPTH TOP OF ROCK
Anderson Environmental Contracting, LLC				

DRILL MAKE AND MODEL	LOGGED BY:	DEPTH BOTTOM OF HOLE
	Jordan Morris	20

DEPTH	STRATA ELEVATION/ DEPTH	GRAPHIC LOG	DESCRIPTION	SAMPLE DATA: SAMPLE NO.	SAMPLE DATA: SAMPLE TYPE	SAMPLE DATA: CORE RECOVERY	SAMPLE DATA: MW Const./ Completion	PID/OVM	REMARKS: NOTES ON WATER LEVELS, LOSSES, CAVING, CASING, DEPTH & DRILLING CONDITIONS.
0			Asphalt						
			3/4 minus base rock with sand and silt; moist; no mica						
			SAND and silt (SM); dark gray (5Y 4/1); moist; stiff; micaceous			90			
5			grades to olive brown (2.5Y 4/3); orange mottling			100		0.0	
10						100		0.0	
				B05-13-SWI	grab			0.0	
15						100		0.0	
20			End of boring						
25									
30									
35									

EVREN Northwest, Inc.

DRILL LOG

PROJECT	PROJECT NO.	BORING NO.
Focused Subsurface Investigation	1867-23001-01	**B06**

SITE	BEGUN	COMPLETED	HOLE SIZE	ANGLE FROM HORIZ.
16700 Highway 99, Amity, Oregon	11/25/24	11/25/24	2	

COORDINATES	DEPTH GROUND WATER	DATE SL	STATIC LEVEL	FIRST WATER	GROUND ELEVATION

DRILLER	CORE RECOVERY (%)	# SAMPLES	# CORE BOXES	DEPTH TOP OF ROCK
Anderson Environmental Contracting, LLC				

DRILL MAKE AND MODEL	LOGGED BY:	DEPTH BOTTOM OF HOLE
	Jordan Morris	5

DEPTH	STRATA ELEVATION/ DEPTH	GRAPHIC LOG	DESCRIPTION	SAMPLE DATA: SAMPLE NO.	SAMPLE DATA: SAMPLE TYPE	SAMPLE DATA: CORE RECOVERY	SAMPLE DATA: MW Const./ Completion	PID/OVM	REMARKS: NOTES ON WATER LEVELS, LOSSES, CAVING, CASING, DEPTH & DRILLING CONDITIONS.
0			Fine SAND with silt (SM); dark grayish brown (2.5Y 4/2); moist; root traces; no mica	B06-1	grab	80		0.0	
5			End of boring	B06-5	grab			0.0	
10									
15									
20									
25									
30									
35									

EVREN Northwest, Inc.

DRILL LOG

PROJECT	PROJECT NO.	BORING NO.
Focused Subsurface Investigation	1867-23001-01	**B07**

SITE	BEGUN	COMPLETED	HOLE SIZE	ANGLE FROM HORIZ.
16700 Highway 99, Amity, Oregon	11/25/24	11/25/24	2	

COORDINATES	DEPTH GROUND WATER	DATE SL	STATIC LEVEL	FIRST WATER	GROUND ELEVATION

DRILLER	CORE RECOVERY (%)	# SAMPLES	# CORE BOXES	DEPTH TOP OF ROCK
Anderson Environmental Contracting, LLC				

DRILL MAKE AND MODEL	LOGGED BY:	DEPTH BOTTOM OF HOLE
	Jordan Morris	5

DEPTH	STRATA ELEVATION/ DEPTH	GRAPHIC LOG	DESCRIPTION	SAMPLE DATA: SAMPLE NO.	SAMPLE DATA: SAMPLE TYPE	SAMPLE DATA: CORE RECOVERY	SAMPLE DATA: MW Const./ Completion	PID/OVM	REMARKS: NOTES ON WATER LEVELS, LOSSES, CAVING, CASING, DEPTH & DRILLING CONDITIONS.
0			Fine SAND with silt (SM); very dark gray (2.5Y 3/ 1); trace gravel; moderately stiff; root traces; no mica	B07-1	grab	80		0.0	
			no root traces; no gravel; strongly micaceous; oragne and tan mottling						
			grades to light olive brown (2.5Y 5/3)						
5			End of boring	B07-5	grab			0.0	
10									
15									
20									
25									
30									
35									

EVREN Northwest, Inc.

DRILL LOG

PROJECT	PROJECT NO.	BORING NO.
Focused Subsurface Investigation	1867-23001-01	**B08**

SITE	BEGUN	COMPLETED	HOLE SIZE	ANGLE FROM HORIZ.
16700 Highway 99, Amity, Oregon	11/25/24	11/25/24	2	

COORDINATES	DEPTH GROUND WATER	DATE SL	STATIC LEVEL	FIRST WATER	GROUND ELEVATION

DRILLER	CORE RECOVERY (%)	# SAMPLES	# CORE BOXES	DEPTH TOP OF ROCK
Anderson Environmental Contracting, LLC				

DRILL MAKE AND MODEL	LOGGED BY:	DEPTH BOTTOM OF HOLE
	Jordan Morris	5

DEPTH	STRATA ELEVATION/ DEPTH	GRAPHIC LOG	DESCRIPTION	SAMPLE DATA: SAMPLE NO.	SAMPLE DATA: SAMPLE TYPE	SAMPLE DATA: CORE RECOVERY	SAMPLE DATA: MW Const./ Completion	PID/OVM	REMARKS: NOTES ON WATER LEVELS, LOSSES, CAVING, CASING, DEPTH & DRILLING CONDITIONS.
0			Fine SAND with silt (SM); light olive brown (2.5Y 5/3); moist; moderately stiff; orange mottling	B08-1	grab	100		0.0	
5			End of boring	B08-5	grab			0.0	
10									
15									
20									
25									
30									
35									

Appendix B

Site Photographs

Before drilling, ENW conducted a geophysical survey to clear boring locations of utilities.

ENW used a hand auger to collect surface soil samples using ISM sample methods. Each location was recorded with a GPS instrument (GPS receiver pictured on tripod).

GeoPotential used ground-penetrating radar to locate the boundaries of a former decommissioned underground storage tank excavation (outlined in white paint).

Soil increments were periodically measured for volatile organic compounds using a photoionization detector.

EVREN NORTHWEST INC environmental natural resource consultants	Former Mid Valley Shop 16700 Highway 99W Amity, Oregon 97101	**Site Photographs**	Project No. 1867-23001-01 Appendix **B**

View south along railroad tracks along eastern property boundary, decision unit DU01 on the right side of photo.

View east along southern property boundary showing decision unit DU02.

Fifty individual soil increments were collected from each decision unit, placed in a laboratory-provided sample jar, and preserved for transport to the project laboratory.

Temporary soil borings were advanced using a track-mounted DPT drill rig.

EVREN NORTHWEST INC environmental natural resource consultants	Former Mid Valley Shop 16700 Highway 99W Amity, Oregon 97101	**Site Photographs**	Project No. 1867-23001-01 Appendix **B**

Soil borings were logged and a PID was used for field screening.

View of soil being retrieved in plastic cores, which were cut open and inspected by the ENW geologist.

A peristaltic pump and clean tubing were used to purge and sample ground water from temporary well casings installed in each boring.

Temporary soil borings were sealed with hydrated bentonite and surface restored with cold patch asphalt .

EVREN NORTHWEST INC environmental natural resource consultants	Former Mid Valley Shop 16700 Highway 99W Amity, Oregon 97101	**Site Photographs**	Project No. 1867-23001-01 Appendix **B**

Appendix C

Field Sampling Data Sheets

EVREN Northwest

GROUND WATER FIELD SAMPLING DATA FORM (FIELD)

PROJECT NAME: Mid Valley
Event: GW Delineation

PROJECT NUMBER: 1862-23 ... -01
Date: 11/25/24

Field Personnel: Allen Dan
Weather Conditions: Cloudy, windy 47°F
DTW (prior to purging): 4.32' BGS

Monitoring Well ID: B01
Start Time: 10:13

WELL PURGING INFORMATION

Time	DTW During Purging (feet)	Pumping Rate mL/min)	Temperature (degree C)	Specific Conductivity (mS/cm), ±3%	Dissolved Oxygen (mg/L), ±10%	Water pH (S.U.), , ±0.1%	ORP (mV), , ±10 mV	Turbidity (NTU), , ±10%	Total Quantity Purged (gallons/liters)
10:14		200	Milky slightly turbid						Ø
10:19		11	mostly clear						1.0
10:24			Clear						2.0
			— Begin sampling —						

Total Purged: 2.0

Tubing: 3/8" LDPE
Purge Pumping Rate (approx. L/m): 200 ml/min
Decontamination method:

Well casing (in. diam): 0.75" PVC
Approx. Pump/Intake Depth: 10'

Well Conversion Factors: 2" = 0.17 gal / foot; 5/8" = 0.02 gal/foot

WELL CONDITION

Recommended Well Repairs/Additional Notes: Screened from 5-15'. Location in center of MA03

QA/QC Sample: ☐ Duplicate ☐ Lab QA/QC ☐ Equipment Blank ☒ None

Sampling Method: ☐ Grundfos Pump ☑ Peristaltic Pump ☐ Bladder Pump ☐ Dual Valve

SAMPLE INFORMATION

Analytical Parameters	Destination Laboratory	Preservative	Bottle Size	Number of bottles	Sample ID	Time Sampled
Gx, VOCs	FOB	HCL	40ml	4	B01-GW-15	10:40
PAHs	↓	none	1 liter	1		
Dx		none	500ml	1		
Dissolved Pb		HNO3	250ml	1		

Method of Transportation of samples: FedEx (Courier)

All samples were immediately placed into a cooler and packed with ice or "blue Ice" ☒ Yes ☐ No

Field Observations/Notes of sampling event:

Observe odor on purge water, not a prominent sheen. (petroleum odor)

Signature of Field Personnel: [signature]

EVREN Northwest **GROUND WATER FIELD SAMPLING DATA FORM (FIELD)**

PROJECT NAME: Mid Valley
Event: GW Delineation
PROJECT NUMBER: 1867-23ac1-01
Date: 11-25-24

Field Personnel: Allen Dan
Weather Conditions: cloudy windy 47°F
DTW (prior to purging): 9.76' BGS
Monitoring Well ID: B02
Start Time: 10:48

WELL PURGING INFORMATION

Time	DTW During Purging (feet)	Pumping Rate (mL/min)	Temperature (degree C)	Specific Conductivity (mS/cm), ±3%	Dissolved Oxygen (mg/L), ±10%	Water pH (S.U.), , ±0.1%	ORP (mV), , ±10 mV	Turbidity (NTU), , ±10%	Total Quantity Purged (gallons/liters)
10:59		125	Brown	turbid					0
11:04		125	Brown	Turbid					.75
11:09		125	Brown	Turbid					1.5
11:14		125	Light Brown	Slightly less turbid					2.25
11:18			GW recovering	dry - lower intake					2.85
11:26			well has run	dry - pump off					4.05
11:32		11	Begin sample after well recharge (amber 1st)						
11:36			remains turbid						

Total Purged: 4.05

Tubing: 3/8" LDPE
Purge Pumping Rate (approx. L/m): 125 ml/min
Decontamination method:
Well casing (in. diam): .75" PVC
Approx. Pump/Intake Depth: 12.5'

Well Conversion Factors: 2" = 0.17 gal / foot; 5/8" = 0.02 gal/foot

WELL CONDITION

Recommended Well Repairs/Additional Notes: screened from 9-15'

QA/QC Sample: ☐ Duplicate ☐ Lab QA/QC ☐ Equipment Blank ☑ None
Sampling Method: ☐ Grundfos Pump ☑ Peristaltic Pump ☐ Bladder Pump ☐ Dual Valve

SAMPLE INFORMATION

Analytical Parameters	Destination Laboratory	Preservative	Bottle Size	Number of bottles	Sample ID	Time Sampled
Gx VOCs	F&B	HCl	40ml	4	B02-GW-15	11:38
PAHs		None	1L	1		11:38
Dx		~~None~~	~~500mL~~	~~1~~		
Dissolved Pb		~~HNO3~~	~~250 mL~~	~~1~~		

Method of Transportation of samples: FedEx Courier
All samples were immediately placed into a cooler and packed with ice or "blue Ice" ☑ Yes ☐ No

Field Observations/Notes of sampling event:

Signature of Field Personnel:

EVREN Northwest GROUND WATER FIELD SAMPLING DATA FORM (FIELD)

PROJECT NAME: Mid Valley PROJECT NUMBER: 1867-23001-01

Event: GW Delineation Date: 11/25/24

Field Personnel: Dan Sayko / Allen Haller Monitoring Well ID: B03

Weather Conditions: Partly Sunny / windy Start Time: 11:24

DTW (prior to purging): 11.78' bgs

WELL PURGING INFORMATION

Time	DTW During Purging (feet)	Pumping Rate (L/min)	Temperature (degree C)	Specific Conductivity (mS/cm), ±3%	Dissolved Oxygen (mg/L), ±10%	Water pH (S.U.), , ±0.1%	ORP (mV), , ±10 mV	Turbidity (NTU), , ±10%	Total Quantity Purged (gallons/liters)
11:25		200	GW discharging						
11:26		"	Dark Brown & very turbid						0.20
11:29		150	lower flow rate						0.80
11:34		"	running dry	lower tubing full depth					1.55
11:37			well recovered	dry - pump off					2.00

Total Purged:

Tubing: 3/8" LDPE

Purge Pumping Rate (approx. L/m): 200 ml/min Well casing (in. diam): 0.75" PVC

Decontamination method: Approx. Pump/Intake Depth: ~ 13'

Well Conversion Factors: 2" = 0.17 gal / foot; 5/8" = 0.02 gal/foot

WELL CONDITION

Recommended Well Repairs/Additional Notes:

Screened from 0-15'

QA/QC Sample: ☐ Duplicate ☐ Lab QA/QC ☐ Equipment Blank ☒ None

Sampling Method: ☐ Grundfos Pump ☒ Peristaltic Pump ☐ Bladder Pump ☐ Dual Valve

SAMPLE INFORMATION

Analytical Parameters	Destination Laboratory	Preservative	Bottle Size	Number of bottles	Sample ID	Time Sampled
GX, VOCs	Test	HCl	40 ml	4		12:27
PAHs	↓	None	1 liter	1		12:22
Dx		none	~~500 ml~~	+	B03-GW-15	
dissolved Pb		HNO3	~~250 ml~~	+		

Method of Transportation of samples: FedEx Courier

All samples were immediately placed into a cooler and packed with ice or "blue Ice" ☒ Yes ☐ No

Field Observations/Notes of sampling event:

Located east of MA03 / B01

Signature of Field Personnel:

EVREN Northwest GROUND WATER FIELD SAMPLING DATA FORM (FIELD)

PROJECT NAME: Mid Valley
PROJECT NUMBER: 18CR-23WW-01
Event: GW Delineation
Date: 11-25-24

Field Personnel: Allen Hiller Dan Saiko
Monitoring Well ID: BO4
Weather Conditions: Partly Sunny / windy
Start Time: 12:14
DTW (prior to purging): 13.02' bgs

WELL PURGING INFORMATION

Time	DTW During Purging (feet)	Pumping Rate (ml/min)	Temperature (degree C)	Specific Conductivity (mS/cm), ±3%	Dissolved Oxygen (mg/L), ±10%	Water pH (S.U.), , ±0.1%	ORP (mV), , ±10 mV	Turbidity (NTU), , ±10%	Total Quantity Purged (gallons/liters)
12:16		150	Brown Turbid						0
12:21		150	Brown Turbid						.75
12:26		150	Light Brown slightly less turbid						1.5
12:31		150	Light Brown slightly turbid						2.25
12:36		150	Lighter Brown Slightly turbid						3
~~12:37~~									
12:37			Begin sampling -						

Total Purged:

Tubing: 3/8" LDPE
Purge Pumping Rate (approx. L/m): 150 mL/min
Well casing (in. diam): 0.75" PVC
Decontamination method:
Approx. Pump/Intake Depth: 16.5'

Well Conversion Factors: 2" = 0.17 gal / foot; 5/8" = 0.02 gal/foot

WELL CONDITION

Recommended Well Repairs/Additional Notes:
Screened from 10-20'

QA/QC Sample: ☐ Duplicate ☐ Lab QA/QC ☐ Equipment Blank ☑ None
Sampling Method: ☐ Grundfos Pump ☑ Peristaltic Pump ☐ Bladder Pump ☐ Dual Valve

SAMPLE INFORMATION

Analytical Parameters	Destination Laboratory	Preservative	Bottle Size	Number of bottles	Sample ID	Time Sampled
Gx VOCs	F&B	HCl	40ml	4	BO4-GW-15	13:05
PAHs		None	1L	1		13:05
Dx		None	500ml	1		13:05
Dissolved Pb		HNO3	250ml	1		13:05

Method of Transportation of samples: FedEx Courier
All samples were immediately placed into a cooler and packed with ice or "blue Ice" ☑ Yes ☐ No

Field Observations/Notes of sampling event:

Signature of Field Personnel:

EVREN Northwest GROUND WATER FIELD SAMPLING DATA FORM (FIELD)

PROJECT NAME: Mid Valley PROJECT NUMBER: 1867-23001-01

Event: GW Delineation Date: 11-25-24

Field Personnel: Allen Heller Dan Sarko Monitoring Well ID: BOS

Weather Conditions: partly sunny windy Start Time: 13:03

DTW (prior to purging): 17.6' BGS

WELL PURGING INFORMATION

Time	DTW During Purging (feet)	Pumping Rate (mL/min)	Temperature (degree C)	Specific Conductivity (mS/cm), ±3%	Dissolved Oxygen (mg/L) ±10%	Water pH (S.U.), ±0.1%	ORP (mV), , ±10 mV	Turbidity (NTU), , ±10%	Total Quantity Purged (gallons/liters)
1307		150	Brown	very turbid	turbid (mud)				
13:13			Lets		decreasing flow				0.8
13:14			stop	pump					
								Total Purged:	

Tubing: 3/8" LDPE

Purge Pumping Rate (approx. L/m): 150ml

Well casing (in. diam): 0.75" PVC

Decontamination method:

Approx. Pump/Intake Depth: 19.5'

Well Conversion Factors: 2" = 0.17 gal / foot; 5/8" = 0.02 gal/foot

WELL CONDITION

Recommended Well Repairs/Additional Notes: screened from

QA/QC Sample: ☐ Duplicate ☐ Lab QA/QC ☐ Equipment Blank ☐ None

Sampling Method: ☐ Grundfos Pump ☐ Peristaltic Pump ☐ Bladder Pump ☐ Dual Valve

SAMPLE INFORMATION

Analytical Parameters	Destination Laboratory	Preservative	Bottle Size	Number of bottles	Sample ID	Time Sampled
Gx VOCs	FEB	HCl	40ml	4		14:03
PAHs	↓	None	1L	1	BOS-GW-15	14:03
Dx		None	500ml	1		14:03
Dissolved Pb		HNO3	250ml	1		14:03

Method of Transportation of samples: FedEx (Courier)

All samples were immediately placed into a cooler and packed with ice or "blue Ice" ☑ Yes ☐ No

Field Observations/Notes of sampling event:

Signature of Field Personnel: [signature]

Appendix D

ODEQ Soil Matrix Cleanup Scoresheet

Soil Matrix Scoresheet

Depth to Ground Water < 25 feet (10) 25 – 50 feet (7) 51 – 100 feet (4) > 100 feet (1)	10
Mean Annual Precipitation > 45 inches (10) 20 – 45 inches (5) < 20 inches (1)	10
Native Soil Types Coarse sands, gravels (10) Silts, fine sands (5) Clays (1)	5
Sensitivity of uppermost Aquifer Sole Source (10) Current Potable (7) Future Potable (4) Non-potable (1)	7
Potential Receptors Many, near (10) Medium (5) Few, far (1)	5
TOTAL SCORE =	**37**

Matrix Score	Cleanup level in ppm TPH	
	Gasoline	Diesel
Level 1: > 40 pts.	40	100
Level 2: 25 - 40 pts.	**80**	**500**
Level 3: < 25 pts.	130	1000

Appendix E

Laboratory Analytical Results

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Vineta Mills, M.S.
Eric Young, B.S.

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

November 27, 2024

Lynn Green, Project Manager
Evren Northwest, Inc.
PO Box 14488
Portland, OR 97293

Dear Mr Green:

Included are the results from the testing of material submitted on November 22, 2024 from the 1867-23001-01, F&BI 411381 project. There are 3 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Neil Woller, Paul Trone, Evan Bruggeman
ENW1127R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on November 22, 2024 by Friedman & Bruya, Inc. from the Evren Northwest 1867-23001-01, F&BI 411381 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Evren Northwest
411381 -01	DU03-241121-IS-0.5

All quality control requirements were acceptable.

Date of Report: 11/27/24
Date Received: 11/22/24
Project: 1867-23001-01, F&BI 411381
Date Extracted: 11/25/24
Date Analyzed: 11/25/24

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR GASOLINE, DIESEL AND HEAVY OIL BY NWTPH-HCID

Results Reported on a Dry Weight Basis
Results Reported as Not Detected (ND) or Detected (D)

THE DATA PROVIDED BELOW WAS PERFORMED PER THE GUIDELINES ESTABLISHED BY THE WASHINGTON DEPARTMENT OF ECOLOGY AND WERE NOT DESIGNED TO PROVIDE INFORMATION WITH REGARDS TO THE ACTUAL IDENTIFICATION OF ANY MATERIAL PRESENT

Sample ID Laboratory ID	Gasoline	Diesel	Heavy Oil	Surrogate (% Recovery) (Limit 50-150)
DU03-241121-IS-0.5 411381-01	ND	ND	ND	85
Method Blank 04-2894 MB	ND	ND	ND	82

ND - Material not detected at or above 20 mg/kg gas, 50 mg/kg diesel and 250 mg/kg heavy oil.

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht – The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported between the method detection limit and the lowest calibration point. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

k – The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

411381

SAMPLE CHAIN OF CUSTODY

11/22/24 ISM/FI

Report To Lynn Green
Company Euren North West
Address Po Box 14488
City, State, ZIP Portland, OR, 97293
Phone 503-452-5561 Email Lynng@euren-nw.com

SAMPLERS (*signature*) Allen Haller

PROJECT NAME: 1867-23001-01

PO #:

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

TURNAROUND TIME
☒ Standard turnaround
☐ RUSH
Rush charges authorized by:

SAMPLE DISPOSAL
☐ Archive samples
☐ Other
Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082					Notes
						ANALYSES REQUESTED											
OU03-241121-IS-0.5	01	11-21-24	13:24	Soil	1				X								
									Samples received at 4 °C								

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Allen Haller	Allen Haller	ENW	11-21-24	18:00
Received by:	Anh Phan	FBI	11/22/24	11:05
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
5500 4th Ave S.
Seattle WA 98108
(206) 285-8282
office@friedmanandbruya.com

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 411381 CLIENT Evren INITIALS/ DATE: AP 11/22/24

If custody seals are present on cooler, are they intact? ☑ NA ☐ YES ☐ NO

Cooler/Sample temperature 4 °C
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? ☑ YES ☐ NO

How did samples arrive?
☐ Over the Counter ☐ Picked up by F&BI ☑ FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? ☑ YES ☐ NO Initials/ Date: AP 11/22/24
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory 1 days

Are the samples clearly identified? (explain "no" answer below) ☑ YES ☐ NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) ☑ YES ☐ NO

Were appropriate sample containers used? ☑ YES ☐ NO ☐ Unknown

If custody seals are present on samples, are they intact? ☑ NA ☐ YES ☐ NO

Are samples requiring no headspace, headspace free? ☑ NA ☐ YES ☐ NO

Is the following information provided on the COC, and does it match the sample label?
(explain "no" answer below)

Sample ID's	☑ Yes ☐ No	☐ Not on COC/label
Date Sampled	☑ Yes ☐ No	☐ Not on COC/label
Time Sampled	☑ Yes ☐ No	☐ Not on COC/label
# of Containers	☑ Yes ☐ No	
Relinquished	☑ Yes ☐ No	
Requested analysis	☑ Yes ☐ On Hold	

Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? ☑ NA ☐ YES ☐ NO

Number of unused TO15 canisters _____ **Number of unused TO17 tubes** _____

GLS.

800-322-5555
www.gls-us.com

Ship From:
EVREN
DAN SAJKKO
40 SE 24TH AVE SUITE A
PORTLAND, OR 97214

Ship To:
FRIEDMAN & BRUYA, INC.
SAMPLE RECEIVING
5500 4TH AVENUE SOUTH
SEATTLE, WA, 98108

COD: $0.00
Weight: 0 lb(s)
Dimensions:
Reference:
Delivery Instructions:
Signature Type: NOT REQUIRED

Tracking #: 562171559

PDS

SEATTLE

S06437C

18396898

KNT WA980-7C0

Print Date : 10/24/24 15:40 PM

1 of 25

Summary: DATA VALID? ☒YES

Analytical Laboratory Data Validation Check Sheet

Project Name: 16700 Hwy 99, Amity Project Number: 1867-23001-01

Date of Review: Nov 27, 2024 Lab. Name: F&BI Lab Batch ID #: 411381

Chain of Custody			
1.) Are all requested analyses reported?	☒yes	☐no	
2.) Were the requested methods used?	☒yes	☐no	
3.) Trip blank submitted?	☐yes	☒no	
4.) Field blank submitted?	☐yes	☒no	
Timing			
5.) Samples extracted within holding times?	☒yes	☐no	
If not, are all discrepancies footnoted?	☐yes	☐no	☒NA
6.) Analysis performed within holding times?	☒yes	☐no	
If not, are all discrepancies footnoted?	☐yes	☐no	☒NA
Quality Assurance/Quality Control			
7.) Are the required reporting limits reported? (MRLs vs MDLs/PQLs)	☒yes	☐no	
8.) Are all reported values above either MRL or MDL?	☒yes	☐no	
9.) Are all values between the MDL & PQL tagged as trace?	☐yes	☐no	☒NA
10a.) Are reporting limits raised for other reason besides high analyte conc.?	☐yes	☒no	
10b.) If so, are they footnoted?	☐yes	☐no	☒NA
11.) Lab method blank completed?	☒yes	☐no	
12.) Lab, Field, or Trip Blank(s) report detections?	☐yes	☒no	

If yes, indicate blank type, chemical(s) and concentration(s): _____

13.) For inorganics and metals, is there one method blank for each analyte?	☐yes	☐no	☒NA
If not, are all discrepancies footnoted?	☐yes	☐no	
14.) For VOCs, is there one method blank for each day of analysis?	☒yes	☐no	☐NA
If not, are all discrepancies footnoted?	☐yes	☐no	
15.) For SVOC's, is there one method blank for each extraction batch?	☐yes	☐no	☒NA
If not, are all discrepancies footnoted?	☐yes	☐no	
Accuracy			
16.) Is there a surrogate spike recovery for all VOC & SVOC samples?	☒yes	☐no	☐NA
Do all surrogate spike recoveries meet accepted criteria?	☒yes	☐no	
If not, are all discrepancies footnoted?	☐yes	☐no	☒NA
17.) Is there a spike recovery for all Laboratory Control Samples?	☐yes	☐no	☒NA
Do all LCS/LCSD spike recoveries meet accepted criteria?	☐yes	☐no	
If not, are all discrepancies footnoted?	☐yes	☐no	☒NA
18.) Are all LCS/LCSD RPDs within acceptable limits?	☐yes	☐no	☒NA
If not, are all discrepancies footnoted?	☐yes	☐no	☒NA
Precision			
19.) Are all matrix spike/matrix spike duplicate recoveries within acceptable limits?	☐yes	☐no	☒NA
If not, are all discrepancies footnoted?	☐yes	☐no	☒NA
20.) Are all matrix spike/matrix spike duplicate RPDs within acceptable limits?	☐yes	☐no	☒NA
If not, are all discrepancies footnoted?	☐yes	☐no	☒NA
21.) Do all RPD calculations for Field Duplicates meet accepted criteria?	☐yes	☐no	☒NA

Initial Review By: NB **Final** Review By: EB

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Vineta Mills, M.S.
Eric Young, B.S.

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

December 6, 2024

Lynn Green, Project Manager
Evren Northwest, Inc.
PO Box 14488
Portland, OR 97293

Dear Mr Green:

Included are the results from the testing of material submitted on November 26, 2024 from the 1867-23001-01, F&BI 411425 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Neil Woller, Paul Trone, Evan Bruggeman
ENW1206R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on November 26, 2024 by Friedman & Bruya, Inc. from the Evren Northwest 1867-23001-01, F&BI 411425 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Evren Northwest
411425 -01	B01-8-SWI
411425 -02	B01-11
411425 -03	B02-2.5
411425 -04	B02-10-SWI
411425 -05	B03-11-SWI
411425 -06	B04-13-SWI
411425 -07	B05-13-SWI
411425 -08	B06-1
411425 -09	B06-5
411425 -10	B07-1
411425 -11	B07-5
411425 -12	B08-1
411425 -13	B08-5
411425 -14	DU01-241125-IS-0.5
411425 -15	DU02-241125-IS-0.5

All quality control requirements were acceptable.

Date of Report: 12/06/24
Date Received: 11/26/24
Project: 1867-23001-01, F&BI 411425
Date Extracted: 11/26/24 and 11/27/24
Date Analyzed: 11/26/24 and 11/27/24

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR GASOLINE, DIESEL AND HEAVY OIL BY NWTPH-HCID GC10

Results Reported on a Dry Weight Basis
Results Reported as Not Detected (ND) or Detected (D)

THE DATA PROVIDED BELOW WAS PERFORMED PER THE GUIDELINES ESTABLISHED BY THE WASHINGTON DEPARTMENT OF ECOLOGY AND WERE NOT DESIGNED TO PROVIDE INFORMATION WITH REGARDS TO THE ACTUAL IDENTIFICATION OF ANY MATERIAL PRESENT

Sample ID Laboratory ID	Gasoline	Diesel	Heavy Oil	Surrogate (% Recovery) (Limit 50-150)
B01-8-SWI 411425-01	ND	D	ND	84
B01-11 411425-02	ND	ND	ND	83
B02-10-SWI 411425-04	ND	ND	ND	79
B03-11-SWI 411425-05	ND	ND	ND	81
B04-13-SWI 411425-06	ND	ND	ND	76
B05-13-SWI 411425-07	ND	ND	ND	72
B06-1 411425-08	ND	ND	ND	78
B06-5 411425-09	ND	ND	ND	78
B07-1 411425-10	ND	ND	ND	77
B07-5 411425-11	ND	ND	ND	76
B08-1 411425-12	ND	ND	ND	75

ND - Material not detected at or above 20 mg/kg gas, 50 mg/kg diesel and 250 mg/kg heavy oil.

Date of Report: 12/06/24
Date Received: 11/26/24
Project: 1867-23001-01, F&BI 411425
Date Extracted: 11/26/24 and 11/27/24
Date Analyzed: 11/26/24 and 11/27/24

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR GASOLINE, DIESEL AND HEAVY OIL BY NWTPH-HCID GC10

Results Reported on a Dry Weight Basis
Results Reported as Not Detected (ND) or Detected (D)

THE DATA PROVIDED BELOW WAS PERFORMED PER THE GUIDELINES ESTABLISHED BY THE WASHINGTON DEPARTMENT OF ECOLOGY AND WERE NOT DESIGNED TO PROVIDE INFORMATION WITH REGARDS TO THE ACTUAL IDENTIFICATION OF ANY MATERIAL PRESENT

Sample ID Laboratory ID	Gasoline	Diesel	Heavy Oil	Surrogate (% Recovery) (Limit 50-150)
B08-5 411425-13	ND	ND	ND	81
DU01-241125-IS-0.5 411425-14	ND	ND	ND	95
DU02-241125-IS-0.5 411425-15	ND	ND	ND	97
Method Blank 04-2912 MB	ND	ND	ND	77
Method Blank 04-2912 MB2	ND	ND	ND	92

ND - Material not detected at or above 20 mg/kg gas, 50 mg/kg diesel and 250 mg/kg heavy oil.

Date of Report: 12/06/24
Date Received: 11/26/24
Project: 1867-23001-01, F&BI 411425
Date Extracted: 12/02/24
Date Analyzed: 12/02/24

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND RESIDUAL RANGE USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Residual Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
B01-8-SWI 411425-01	45	<120	84
Method Blank 04-2922 MB	<25	<120	74

Date of Report: 12/06/24
Date Received: 11/26/24
Project: 1867-23001-01, F&BI 411425

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 411425-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	2,500	50	100	99	63-146	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	2,500	87	77-123

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht – The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported between the method detection limit and the lowest calibration point. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

k – The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

411425

SAMPLE CHAIN OF CUSTODY

11/26/24

ISM/FI/N2/E2

Page # 1 of 2

Report To Lynn Green

Company Even Northwest

Address P.O. Box 14488

City, State, ZIP Portland, OR 97293

Phone (503) 452-5561 Email lynn@even-nw.com

SAMPLERS (*signature*)

PROJECT NAME 1867-DRO HCID

PO #

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

TURNAROUND TIME
- ☑ Standard turnaround
- ☐ RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Archive samples
- ☐ Other
- Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082					Notes
						ANALYSES REQUESTED											A-per EB 11/27/24 ME
B01-8-SWI	01 A-E	11-25-24	9:50	Soil	5	A			X								
B01-11	02	11-25-24	10:10	Soil	5				X								
B02-2.5	03	11-25-24	10:20	Soil	5												Hold
B02-10-SWI	04	11-25-24	10:35	Soil	5				X								
B03-11-SWI	05	11-25-24	11:15	Soil	5				X								labeled B03-11.5-SWI AP 11/26
B04-13-SWI	06	11-25-24	11:40	Soil	5				X								
B05-8-SWI	07	11-25-24	12:20	Soil	5				X								
B06-1	08	11-25-24	12:55	Soil	1				X								
B06-5	09	11-25-24	12:50	Soil	1				X								
B07-1	10	11-25-24	13:10	Soil	1				X								

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Jaeden Morris	Even Northwest	11-25-24	6:00
Received by:	Ann W Bruya	FSB	11/26/24	1159
Relinquished by:		Samples received at 6 °C		
Received by:				

Friedman & Bruya, Inc.
5500 4th Ave S.
Seattle WA 98108
(206) 285-8282
office@friedmanandbruya.com

411425

SAMPLE CHAIN OF CUSTODY

11/26/24 ISM/FI/N12/E2

Page # 2 of 2

Report To Lynn Green
Company Even Northwest
Address P.O. Box 14488
City, State, ZIP Portland, OR 97293
Phone (503) 452-5501 Email lynng@even-nw.com

SAMPLERS (*signature*) Jordan Mavis
PROJECT NAME 1867-2301-01
PO #
REMARKS
Project specific RLs? - Yes / No
INVOICE TO

TURNAROUND TIME
☑ Standard turnaround
☐ RUSH
Rush charges authorized by:

SAMPLE DISPOSAL
☐ Archive samples
☐ Other
Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082					Notes
BOT-5	11	11-25-24	13:05	Soil	1				X								
BOB-1	12	11-25-24	13:20	Soil	1				X								
BOB-5	13	11-25-24	13:15	Soil	1				X								
DU01-241125-IS-0.5	14	11-25-24	14:05	Soil	1				X								
DU02-241125-IS-0.5	15	11-25-24	8:15	Soil	1				X								

ANALYSES REQUESTED

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Jordan Mavis	Even Northwest	11-25-24	16:00
Received by:	Anna Bruya	FBB	11/26/24	1159
Relinquished by:		Samples received at 6 °C		
Received by:				

Friedman & Bruya, Inc.
5500 4th Ave S.
Seattle WA 98108
(206) 285-8282
office@friedmanandbruya.com

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 411425 CLIENT ENW INITIALS/DATE: AWB 11/26

If custody seals are present on cooler, are they intact? ☑ NA ☐ YES ☐ NO

Cooler/Sample temperature 6 °C
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? ☑ YES ☐ NO

How did samples arrive?
☐ Over the Counter ☐ Picked up by F&BI ☑ FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? ☑ YES ☐ NO Initials/Date: AWB 11/26
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory 1 days

Are the samples clearly identified? (explain "no" answer below) ☑ YES AP ☑ NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) ☑ YES ☐ NO

Were appropriate sample containers used? ☑ YES ☐ NO ☐ Unknown

If custody seals are present on samples, are they intact? ☑ NA ☐ YES ☐ NO

Are samples requiring no headspace, headspace free? ☑ NA ☐ YES ☐ NO

Is the following information provided on the COC, and does it match the sample label?
(explain "no" answer below)

Sample ID's	☐ Yes ☑ No	Labeled B03-11.5-SWI (05A-E)	☐ Not on COC/label
Date Sampled	☑ Yes ☐ No		☐ Not on COC/label
Time Sampled	☑ Yes ☐ No		☐ Not on COC/label
# of Containers	☑ Yes ☐ No		
Relinquished	☑ Yes ☐ No		
Requested analysis	☑ Yes ☐ On Hold		

Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? ☑ NA ☐ YES ☐ NO

Number of unused TO15 canisters _____ Number of unused TO17 tubes _____

GLS.

800-322-5555
www.gls-us.com

Ship From:
EVREN
DAN SAJKKO
40 SE 24TH AVE SUITE A
PORTLAND, OR 97214

Ship To:
FRIEDMAN & BRUYA, INC.
SAMPLE RECEIVING
5500 4TH AVENUE SOUTH
SEATTLE, WA, 98108

COD: $0.00
Weight: 0 lb(s)
Dimensions:
Reference:
Delivery Instructions:
Signature Type: NOT REQUIRED

Tracking #: 562171561

PDS

SEATTLE

S06437C

18396900

KNT WA980-7C0

Print Date : 10/24/24 15:40 PM

Summary: DATA VALID? ☒YES

Analytical Laboratory Data Validation Check Sheet

Project Name: 16700 Hwy 99 Amity OR Project Number: 1867-23001-01

Date of Review: Dec 6, 2024 Lab. Name: F&BI Lab Batch ID #: 411425

Chain of Custody

1.) Are all requested analyses reported?	☒yes	☐no	
2.) Were the requested methods used?	☒yes	☐no	
3.) Trip blank submitted?	☐yes	☒no	
4.) Field blank submitted?	☐yes	☒no	

Timing

5.) Samples extracted within holding times?	☒yes	☐no	
If not, are all discrepancies footnoted?	☐yes	☐no	☒NA
6.) Analysis performed within holding times?	☒yes	☐no	
If not, are all discrepancies footnoted?	☐yes	☐no	☒NA

Quality Assurance/Quality Control

7.) Are the required reporting limits reported? (MRLs vs MDLs/PQLs)	☒yes	☐no	
8.) Are all reported values above either MRL or MDL?	☒yes	☐no	
9.) Are all values between the MDL & PQL tagged as trace?	☐yes	☐no	☒NA
10a.) Are reporting limits raised for other reason besides high analyte conc.?	☐yes	☒no	
10b.) If so, are they footnoted?	☐yes	☐no	☒NA
11.) Lab method blank completed?	☒yes	☐no	
12.) Lab, Field, or Trip Blank(s) report detections?	☐yes	☒no	

If yes, indicate blank type, chemical(s) and concentration(s): _____

13.) For inorganics and metals, is there one method blank for each analyte?	☒yes	☐no	☐NA
If not, are all discrepancies footnoted?	☐yes	☐no	
14.) For VOCs, is there one method blank for each day of analysis?	☒yes	☐no	☐NA
If not, are all discrepancies footnoted?	☐yes	☐no	
15.) For SVOC's, is there one method blank for each extraction batch?	☒yes	☐no	☐NA
If not, are all discrepancies footnoted?	☐yes	☐no	

Accuracy

16.) Is there a surrogate spike recovery for all VOC & SVOC samples?	☒yes	☐no	☐NA
Do all surrogate spike recoveries meet accepted criteria?	☒yes	☐no	
If not, are all discrepancies footnoted?	☐yes	☐no	☒NA
17.) Is there a spike recovery for all Laboratory Control Samples?	☒yes	☐no	☐NA
Do all LCS/LCSD spike recoveries meet accepted criteria?	☒yes	☐no	
If not, are all discrepancies footnoted?	☐yes	☐no	☒NA
18.) Are all LCS/LCSD RPDs within acceptable limits?	☐yes	☐no	☒NA
If not, are all discrepancies footnoted?	☐yes	☐no	☒NA

Precision

19.) Are all matrix spike/matrix spike duplicate recoveries within acceptable limits?	☒yes	☐no	☐NA
If not, are all discrepancies footnoted?	☐yes	☐no	☒NA
20.) Are all matrix spike/matrix spike duplicate RPDs within acceptable limits?	☒yes	☐no	☐NA
If not, are all discrepancies footnoted?	☐yes	☐no	☒NA
21.) Do all RPD calculations for Field Duplicates meet accepted criteria?	☐yes	☐no	☒NA

Initial Review By: NB **Final** Review By: EB

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Vineta Mills, M.S.
Eric Young, B.S.

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

December 6, 2024

Lynn Green, Project Manager
Evren Northwest, Inc.
PO Box 14488
Portland, OR 97293

Dear Mr Green:

Included are the results from the testing of material submitted on November 26, 2024 from the 1867-23001-01, F&BI 411426 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Neil Woller, Paul Trone, Evan Bruggeman
ENW1206R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on November 26, 2024 by Friedman & Bruya, Inc. from the Evren Northwest 1867-23001-01, F&BI 411426 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Evren Northwest
411426 -01	B01-GW-15
411426 -02	B02-GW-15
411426 -03	B03-GW-15
411426 -04	B04-GW-15
411426 -05	B05-GW-15

All quality control requirements were acceptable.

Date of Report: 12/06/24
Date Received: 11/26/24
Project: 1867-23001-01, F&BI 411426
Date Extracted: 11/27/24
Date Analyzed: 11/27/24

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE USING METHOD NWTPH-Gx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
B01-GW-15 411426-01	<100	106
B02-GW-15 411426-02	<100	102
B03-GW-15 411426-03	<100	106
B04-GW-15 411426-04	<100	107
B05-GW-15 411426-05	<100	97
Method Blank 04-2731 MB	<100	107

Date of Report: 12/06/24
Date Received: 11/26/24
Project: 1867-23001-01, F&BI 411426

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TPH AS GASOLINE USING METHOD NWTPH-Gx

Laboratory Code: 411389-04 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	ug/L (ppb)	1,000	93	70-130

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht – The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported between the method detection limit and the lowest calibration point. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

k – The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

411426

SAMPLE CHAIN OF CUSTODY

11/26/24

F4|K1|VW2

Page # 1 of 1

Report To Lynn Green

Company Ensen Northwest

Address P.O. Box 14488

City, State, ZIP Portland, OR 97243

Phone 503-452-5561 Email lynng@ensen-nw.com

SAMPLERS (*signature*) Allen Heller

PROJECT NAME 1867-23001-01

PO #

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

TURNAROUND TIME
☑ Standard turnaround
☐ RUSH
Rush charges authorized by:

SAMPLE DISPOSAL
☐ Archive samples
☐ Other
Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082					Notes
B01-GW-15	01A-G	11-25-24	10:40	GW	7		X										
B02-GW-15	02A-E	11-25-24	11:58	GW	5		X										
B03-GW-15	03 ↓	11-25-24	12:27	GW	5		X										
B04-GW-15	04 A-G	11-25-24	13:05	GW	7		X										
B05-GW-15	05 ↓	11-25-24	14:03	GW	7		X										
									Samples received at 2 °C								

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Allen Heller	Allen Heller	Ensen Northwest	11-25-24	18:00
Received by:	Andy Bruya	FBI	11/26/24	11:59
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
5500 4th Ave S.
Seattle WA 98108
(206) 285-8282
office@friedmanandbruya.com

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 411426 CLIENT Evren INITIALS/ DATE: AP 11/26/24

If custody seals are present on cooler, are they intact? ☑ NA ☐ YES ☐ NO

Cooler/Sample temperature 2 °C
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? ☑ YES ☐ NO

How did samples arrive?
☐ Over the Counter ☐ Picked up by F&BI ☑ FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? ☑ YES ☐ NO Initials/ Date: AUB 11/26
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory 1 days

Are the samples clearly identified? (explain "no" answer below) ☑ YES ☐ NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) ☑ YES ☐ NO

Were appropriate sample containers used? ☑ YES ☐ NO ☐ Unknown

If custody seals are present on samples, are they intact? ☑ NA ☐ YES ☐ NO

Are samples requiring no headspace, headspace free? ☐ NA ☑ YES ☐ NO

Is the following information provided on the COC, and does it match the sample label?
(explain "no" answer below)

Sample ID's	☑ Yes ☐ No	☐ Not on COC/label
Date Sampled	☑ Yes ☐ No	☐ Not on COC/label
Time Sampled	☑ Yes ☐ No	☐ Not on COC/label
# of Containers	☑ Yes ☐ No	
Relinquished	☑ Yes ☐ No	
Requested analysis	☑ Yes ☐ On Hold	

Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? ☑ NA ☐ YES ☐ NO

Number of unused TO15 canisters _____ **Number of unused TO17 tubes** _____

GLS.

800-322-5555
www.gls-us.com

Ship From:
EVREN
DAN SAJKKO
40 SE 24TH AVE SUITE A
PORTLAND, OR 97214

Ship To:
FRIEDMAN & BRUYA, INC.
SAMPLE RECEIVING
5500 4TH AVENUE SOUTH
SEATTLE, WA, 98108

Tracking #: 562171560

PDS

SEATTLE

S06437C

COD: $0.00
Weight: 0 lb(s)
Dimensions:
Reference:
Delivery Instructions:
Signature Type: NOT REQUIRED

18396899

KNT WA980-7C0

Print Date : 10/24/24 15:40 PM

Summary: DATA VALID? ☒YES

Analytical Laboratory Data Validation Check Sheet

Project Name: 16700 Hwy 99 Amity OR Project Number: 1867-23001-01

Date of Review: Dec 6, 2024 Lab. Name: F&BI Lab Batch ID #: 411426

Chain of Custody

1.) Are all requested analyses reported?	☒yes	☐no	
2.) Were the requested methods used?	☒yes	☐no	
3.) Trip blank submitted?	☐yes	☒no	
4.) Field blank submitted?	☐yes	☒no	

Timing

5.) Samples extracted within holding times?	☒yes	☐no	
If not, are all discrepancies footnoted?	☐yes	☐no	☒NA
6.) Analysis performed within holding times?	☒yes	☐no	
If not, are all discrepancies footnoted?	☐yes	☐no	☒NA

Quality Assurance/Quality Control

7.) Are the required reporting limits reported? (MRLs vs MDLs/PQLs)	☒yes	☐no	
8.) Are all reported values above either MRL or MDL?	☒yes	☐no	
9.) Are all values between the MDL & PQL tagged as trace?	☐yes	☐no	☒NA
10a.) Are reporting limits raised for other reason besides high analyte conc.?	☐yes	☒no	
10b.) If so, are they footnoted?	☐yes	☐no	☒NA
11.) Lab method blank completed?	☒yes	☐no	
12.) Lab, Field, or Trip Blank(s) report detections?	☐yes	☒no	

If yes, indicate blank type, chemical(s) and concentration(s):

13.) For inorganics and metals, is there one method blank for each analyte?	☒yes	☐no	☐NA
If not, are all discrepancies footnoted?	☐yes	☐no	
14.) For VOCs, is there one method blank for each day of analysis?	☒yes	☐no	☐NA
If not, are all discrepancies footnoted?	☐yes	☐no	
15.) For SVOC's, is there one method blank for each extraction batch?	☒yes	☐no	☐NA
If not, are all discrepancies footnoted?	☐yes	☐no	

Accuracy

16.) Is there a surrogate spike recovery for all VOC & SVOC samples?	☒yes	☐no	☐NA
Do all surrogate spike recoveries meet accepted criteria?	☒yes	☐no	
If not, are all discrepancies footnoted?	☐yes	☐no	☒NA
17.) Is there a spike recovery for all Laboratory Control Samples?	☒yes	☐no	☐NA
Do all LCS/LCSD spike recoveries meet accepted criteria?	☒yes	☐no	
If not, are all discrepancies footnoted?	☐yes	☐no	☒NA
18.) Are all LCS/LCSD RPDs within acceptable limits?	☐yes	☐no	☒NA
If not, are all discrepancies footnoted?	☐yes	☐no	☒NA

Precision

19.) Are all matrix spike/matrix spike duplicate recoveries within acceptable limits?	☒yes	☐no	☐NA
If not, are all discrepancies footnoted?	☐yes	☐no	☐NA
20.) Are all matrix spike/matrix spike duplicate RPDs within acceptable limits?	☒yes	☐no	☐NA
If not, are all discrepancies footnoted?	☒yes	☐no	☐NA

Gasoline was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable. (nm)

21.) Do all RPD calculations for Field Duplicates meet accepted criteria?	☐yes	☐no	☒NA

Initial Review By: NB **Final** Review By: EB