



GROUND WATER MONITORING: SECOND QUARTER 2022



FUTURE KIDDIE ACADEMY PROPERTY

8701 Greenwood Avenue North
Seattle, WA 98103

Prepared for:



Attn: Maninder Singh

1260 NE 85th Street

Suite-108

Kirkland, Washington 98033

Issued on:

May 9, 2022

EVREN NORTHWEST, INC.

Project No. 1581-21001-02

Offices in Portland and Bend, OR / San Rafael, CA
P.O. Box 14488, Portland, Oregon 97293
T. 503-452-5561 / E. ENW@EVREN-NW.com

This

GROUND WATER MONITORING SECOND QUARTER 2022

Future Kiddie Academy Property

8701 Greenwood Avenue North
Seattle, Washington 98103

Report for:



Attn: Maninder Singh

12620 NE 85th Street
Suite-108
Kirkland, Washington 98033

and its assignees

Issued May 9, 2022 by:



EVRENNORTHWEST INC.
environmental, natural resource consultants



Lynn D. Green

EXP. 12/14/2022



Erik R.D. Chapman L.G.
Senior Geologist

Erik RD Chapman
EXP 7/26/22

Lynn D. Green, L.E.G.
Principal Engineering Geologist

Table of Contents

1.0	Introduction	1
2.0	Background	1
2.1	Purpose	1
2.2	Scope of Work.....	1
3.0	Site Setting	2
4.0	Additional Work Completed During 2nd Quarter 2022.....	3
5.0	Methods.....	5
5.1	Work Objectives.....	5
5.2	Preparation Activities.....	5
5.1	Ground Water Sample Collection	5
5.2	Waste Management and Disposal	6
5.3	Analytical Methods	6
5.4	Cleanup Standards	6
6.0	Ground Water Monitoring.....	7
6.1.1	<i>Water Level Measurements</i>	7
6.2	Monitoring Well Sampling	7
6.2.1	<i>Water Quality Parameters</i>	8
6.3	Laboratory Analytical Results	8
6.4	Quality Control / Quality Assurance	9
7.0	Discussion of Findings	9
8.0	Proposed Monitoring Activities	9
9.0	Limitations.....	10

List of Tables, Figures and Appendices

Tables

IN TEXT (*labeled by Section – Number*)

4-1 Analytical Methods

AFTER TEXT (*following 'Tables' tab*)

- 1 Summary of Ground Water Elevations
- 2 Summary of Water Quality Parameters
- 3 Summary of Analytical Data, Ground Water Monitoring Wells

Figures

- 1 Site Vicinity Map
- 2 Site Plan
- 3 Ground Water Potentiometric Surface Map – April 21, 2022

Appendices

- A Site Photographs
- B Field Sampling Data Sheets
- C Laboratory Analytical Report

List of Acronyms and Abbreviations

Amsl	above mean sea level
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, xylenes
BTOC	Below Top of Casing
Client	Kiddie Academy
COPCs	constituents of potential concern
CSM	conceptual site model
CUL	cleanup level
cVOC	chlorinated volatile organic constituent
DO	dissolved oxygen
DRO	diesel-range organics
Ecology	Washington Department of Ecology
ENW	EVREN Northwest, Inc.
EPA	US Environmental Protection Agency
F&BI	Friedman and Bruya, Inc.
Ft/ft	feet per foot
GRO	gasoline-related organics
LNAPL	light non-aqueous phase liquid
mg/L	milligrams per liter
mV	millivolts
µg/L	micrograms per liter
µS/cm	microsiemens per centimeter
MTCA	Model Toxics Control Act
ORP	oxidation-reduction potential
PAH	polynuclear aromatic hydrocarbon
PE	polyethylene
PQL	practical quantification limit
RRO	residual(oil)-range organics
SOW	scope of work
TOC	top of casing
TPH	total petroleum hydrocarbons
VOCs	volatile organic constituents
WAC	Washington Administrative Code

1.0 Introduction

At the request of Kiddie Academy (Client), EVREN Northwest, Inc. (ENW) conducted ground-water monitoring at the commercial property located at 8701 Greenwood Avenue North in Seattle, Washington (subject property; see Figures 1 and 2). The scope of work completed during this investigation further assesses the data gaps identified in ENW's Work Plan¹ to fulfill Washington Department of Ecology's (Ecology's) change of use requirements² pursuant to Client's plans to redevelop the subject property as a child daycare facility.

This report summarizes previous environmental work and describes the ground water monitoring scope of work, findings, and conclusions. This work was authorized by Client on December 29, 2021.

2.0 Background

Site background is detailed in ENW's previously submitted work plan.¹ Based on this history, ENW prepared the *Data Gap Investigation Work Plan (Work Plan)*,¹ which is the basis of the scope of work (SOW) outlined in the following section and followed in the ground water sampling activities presented in this report.

2.1 Purpose

The SOW described below was designed to address Ecology's comments as outlined in ENW's *Work Plan*¹ and support state cleanup requirements of Ecology's Model Toxics Control Act (MTCA), Chapter 70.105D RCW, and its implementing regulations, Chapter 173-340 Washington Administrative Code (WAC).

2.2 Scope of Work

This work was performed in accordance with the SOW provided in ENW's proposal dated December 7, 2021.

The SOW included the following tasks:

- Prepared an internal Sample/Analysis Plan for sample collection.
- Gauged water levels in 12 monitoring wells (Well-2 through Well-13) and used low-flow purge and sampling methodology to sample each well.
- Submitted samples to an independent laboratory for analysis.
- Evaluated analytical data against MTCA Method A and B cleanup levels.
- Completed this report describing the above activities and findings.

¹ ENW, December 8, 2021. December 2021 Work Plan for Focused Data Gap Investigation, Future Kiddie Academy, Former Texaco #2111544, 8701 Greenwood Avenue North, Seattle, Washington, Facility/Site ID# 6416: Prepared for Kiddie Academy.

² Ecology, March 8, 2021. Response to Change of Use Request at the Following Cleanup Site: Name: Texaco 211544, Address: 8701 Greenwood Ave N, Seattle, Washington, Facility/Site No.: 63538329, Cleanup Site ID No.: 6416.

Appendix A presents photos of work conducted on site during this SOW.

3.0 Site Setting

A conceptual site model (CSM) is presented in ENW's *Work Plan*.¹ Key elements of the CSM are summarized in this section.

Site and Vicinity General Description. The subject property is located on the northwest corner of the intersection of Greenwood Avenue N and N 87th Street in the Greenwood neighborhood of North Seattle, Washington. The site is located approximately six miles north-northwest of downtown Seattle, Washington and approximately four miles west of Lake Washington. The King County Assessor's Office identifies the site as parcel number 2920700030 and describes the property as rectangular in shape and 32,728 square feet in area.

The subject property is in a mixed residential and commercial area of King County. The site is bordered to the north by single-family residences, west by an alley beyond which are single-family residences, to the east by Greenwood Avenue North, beyond which is a vacant commercial building and parking lot, and to the south by N 87th Avenue, beyond which is a multi-family residential building and street-level retail businesses.

The subject property was developed in 1997 with the current commercial building in the southern portion of the site. Other site improvements include an asphalt-paved parking lot in the northern portion of the site, drainage features and landscaped areas.

Geographic Setting. According to the U.S. Geological Survey Seattle North, Washington 7.5-minute quadrangle (Figure 1), the subject property lies at an approximate elevation of 260 feet above mean sea level (amsl). Topography in the area of the subject property is indicated as sloping gently to the west-southwest.

Geologic Setting. Seattle is within the Puget Lowland, an elongate structural and topographic basin between the Cascade Range and Olympic Mountains. The Seattle area has experienced repeated glacial advancements during the past 2 million years causing cyclic glacial scouring and deposition and later modified by landslides and stream erosion. Seattle is located on a complex succession of glacial and nonglacial deposits that overlie an irregular bedrock surface. According to the Geologic Map of Northeastern Seattle (Part of the Seattle North 7.5' x 15' Quadrangle),³ the upper most geology beneath the site is mapped as Holocene age Peat deposits, which are accumulations of wood and other plant material forming layers of greater than about 1 meter and of mappable extent. These units are gradational within other non-glacial deposits. The mapped stratigraphy underlying these surficial deposits are mapped as Pleistocene age glacial deposits consisting of glacially transported silt, sand and sub-rounded to well-rounded gravel.

Previous investigations have identified a silt and peat layer present between approximately seven and 15 feet bgs that appears to act as a confining layer separating lower saturated soils from the overlying vadose

³ Booth, D.B., Goetz, K., Schimel, S.A., 2009, Geologic Map of Northeastern Seattle (Part of the Seattle North 7.5' x 15' Quadrangle), King County, Washington: U.S. Geological Survey Scientific Investigations Map 3065, Map 1:24,000.

zone. Between 14 and 17 feet below ground surface (bgs) across the site there is a transition to a gray gravel/silt hard pan layer with relatively high density compared to overlying native sediments.

Hydrogeology. No surface water bodies, lagoons, or manmade drainages are located on the subject property. The nearest surface water body is Green Lake, located approximately 0.95 miles southeast of the site. Well log data in the area indicates ground water occurs as shallow as 4 feet bgs. Previous investigations reported first ground water in borings occurring at the site between nine and 17 feet bgs. Shallow ground water has been reported to occur within a silty/sandy layer located directly above a sand and gravel hardpan layer at depth. Shallow ground water within glacial deposits in the Seattle area commonly occurs as a seasonal perched ground water table recharged primarily by infiltrating precipitation during the wet season. At the subject site, first ground water was generally encountered within silts and sands below the overlying peat layer. Ground water has been reported to recharge slowly into existing monitoring wells. Stabilized static ground water levels in monitoring wells have been reported ranging from approximately 0.0 feet bgs to 7 feet bgs.

Constituents of Potential Concern (COPCs). According to ENW's Work Plan,¹

- On-site dry-cleaning-related COPCs include gasoline-range organics (GRO), diesel-range organics (DRO), and chlorinated volatile organic constituents (cVOCs).
- On-site gasoline service station-related COPCs and off-site COPCs from the north-adjointing property include GRO, DRO, residual(oil)-range organics (RRO), volatile organic constituents (VOCs), and polynuclear aromatic hydrocarbons (PAHs).

Nature and Extent and Associated Data Gaps. Data gaps¹ being addressed in this SOW are associated with the nature and extent of petroleum impacts in ground water, ground-water gradient and flow direction, and seasonal effects on ground water constituent concentrations as follows:

- **Ground Water.** Shallow reconnaissance ground water samples reported GRO, benzene and vinyl chloride at concentrations above MTCA Method A cleanup level (CUL) in Partner's boring B2 (proposed outdoor play area). Benzene, DRO and RRO were also present in temporary wells in Partner borings B4 and B5, located at the central portion of the north property boundary and along the west side of the on-site commercial building (Figure 3).
 - Four quarters of ground water monitoring of 12 on-site monitoring wells (Well-2 through Well-13) are proposed to establish a hydraulic gradient and ground water flow direction, and evaluate seasonal effects on dissolved constituent concentrations at the north-adjointing property boundary (Well-6, Well-8, and Well-12), within and downgradient of the proposed play area (Well-4, Well-5, and Well-13), the former dry cleaner area (Well-10 and Well-11), and west and southwest of the on-site commercial building (Well-2 and Well-3).

4.0 Additional Work Completed During 2nd Quarter 2022

The following remedial actions were completed in addition to the quarterly ground water monitoring and sampling activities conducted during the 2nd Quarter 2022.

ROW Investigation (March 2022). Three exploratory soil borings (EB01 through EB03) were installed in the right-of-way (ROW) near the southeast corner of the subject site as one of the components of ENW's

Data Gap Work Plan. The work further investigated the extent of residual soil impacts encountered within a former utility excavation (“Excavation 1B”) in which shallow soils were impacted at concentrations exceeding MTCA Method A cleanup levels.

Boring EB01 was advanced in the zone of highest reported soil impacts within the former excavation footprint, boring EB02 was advanced several feet southeast of EB01, and EB03 was advanced on the south side of N 87th Street, directly south-southeast of EB01.

GRO- and DRO-impacted soils were encountered in boring EB01 at approximately 9 feet bgs, consistent with previous results. GRO and DRO impacts decreased with depth and were absent in a soil sample collected at 14 feet bgs, suggesting the vertical extent of impacts has been delineated beneath the reported zone of greatest impact. Neither GRO nor DRO were detected in borings EB02 or EB03.

Low concentrations of DRO were detected in a reconnaissance ground water sample collected from EB01 but the reported DRO concentration was less than the MTCA Method A CUL. No DRO impacts were reported in reconnaissance ground water samples in the remaining two borings after filtering samples through a silica gel column.

A full description of investigative tasks and results has been submitted to Ecology in a report titled “Focused Right-of-Way Investigation,” dated April 7, 2022. ⁴

Monitoring Well Repair and Redevelopment (Legacy Well MW-8). ENW understands that a monitoring well from previous investigations was left in place as a sentry well in the southwest corner of the subject property. The well has remained in disrepair and has not been included in recent ground water monitoring and sampling.

To rehabilitate the damaged well for possible future sampling, on April 21, 2022, ENW repaired the damaged casing of monitoring well MW-8 and redeveloped the well using a process of surging and pumping. Ground water and total well depths gauged after opening the cap and allowing the well to stabilize were 2.6 feet and 8.8 feet below the repaired top of casing (TOC), respectively. After the well was surged with a 2-inch surge block for 15 minutes, a Waterra pump was used to remove turbid water and sediment. After removing 15 gallons of water, the well went dry and a new total depth was tagged at 18.5 feet below TOC (BTOC). After adding 5 gallons of deionized water to the well, depth to water rose to 11.2 feet BTOC. The well was surged again for 5 minutes, and more water removed from the well. After purging a total of 20 gallons of water over a 90-minute period, discharged water transitioned from a brown, turbid slurry to mostly clear water. Thus, it appeared that these well redevelopment activities successfully removed sediment from this well. Redevelopment measurements are included on the Well Development Measurements form in Appendix B.

Monitoring well MW-8 will be gauged and sampled during the Third Quarter 2022 ground water monitoring event.

⁴ ENW, April 7, 2022. Focused Right-of-Way Investigation, Future Kiddie Academy, Former Texaco #2111544, 8701 Greenwood Avenue North, Seattle, Washington, Facility/Site ID# 6416: Prepared for Kiddie Academy.

5.0 Methods

This section describes the methods used to conduct the SOW. Field activities for this project are documented in the photographic log included as Appendix A.

5.1 Work Objectives

Field work performed for this project was developed with the following specific objectives:

- To sample and evaluate ground water beneath the subject site from the shallow ground water table.
- To perform ground water monitoring in a safe manner for technical personnel.
- To conduct the work efficiently and cost-effectively, without interfering or otherwise affecting the condition and operation of the property.
- To document information and data generated in a professional manner that is valid for the intended use.

The remainder of this section describes the methods and procedures used for this investigation. A photographic log of all the field work is presented in Appendix A, Field Data Sampling Sheets are included in Appendix B, and laboratory analytical reports are included in Appendix C. Findings are presented in Section 6.

5.2 Preparation Activities

ENW performed or coordinated the following activities prior to conducting site characterization activities:

Plan Preparation. An 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.

5.1 Ground Water Sample Collection

Immediately following purging, ground water samples were collected using clean, dedicated PE tubing connected to a peristaltic pump set at its lowest setting (approximately 0.1 to 0.2 liters per minute), with the exception of Well-4, which had to be pumped at a higher rate to prevent artesian flow into the well monument. Samples were transferred slowly into laboratory-supplied containers minimizing turbulence. Samples for VOC analysis were confirmed to contain no air bubbles within the container before sealing. Each sample container was labeled with the sample identification, date, time, and sampler.

Samples were immediately placed in cooled storage pending delivery to the laboratory under chain-of-custody protocols. All analyses were performed by Friedman & Bruya, Inc. (F&BI), of Seattle, Washington, using the US Environmental Protection Agency (EPA) Methods specified below. The laboratory report and chain-of-custody documents are presented in Appendix C.

5.2 Waste Management and Disposal

Purge and decontaminate water generated during sampling activities were placed into a 55-gallon drum, labeled, and left on-site in a secure location pending receipt of sample laboratory results. Sampling gloves, rags, and tubing were disposed of as solid waste.

5.3 Analytical Methods

Samples were analyzed according to the analytical methods presented in Table 4-1. Samples were analyzed by F&BI of Seattle, Washington. The laboratory analytical reports are included in Appendix C.

Table 4-1. Analytical Methods

Analytical Method	Constituents	Ground Water
NWTPH-Gx	Total Petroleum Hydrocarbons (TPH)–gasoline-range quantification (GRO)	All ground water monitoring wells
NWTPH-Dx	Total Petroleum Hydrocarbons (TPH)–Diesel-range quantification (DRO) and Residual oil-range quantification (RRO)	All ground water monitoring wells
EPA 8260B	Petroleum-related Volatile Organic Compounds (benzene, ethylbenzene, EDB, MTBE, toluene, total xylenes)	All ground water monitoring wells
EPA 8260B	Chlorinated Volatile Organic Compounds	Select ground water monitoring wells (Well-03, -04 and -10)
EPA 8270D SIM	Carcinogenic Polynuclear Aromatic Hydrocarbons (cPAHs)	All ground water monitoring wells
EPA 6020 ⁵	Total lead and cadmium	Select ground water monitoring wells (Well-12)

5.4 Cleanup Standards

The State of Washington MTCA Regulations (Chapter 173-340 WAC) sets numeric cleanup levels for “routine cleanup actions”. “Routine cleanup actions” are defined as those sites where: 1) cleanup standards for each hazardous substance are obvious and undisputed, allowing for an adequate margin of safety for protection of human health and the environment; 2) does not require preparation of an environmental impact statement, and 3) qualifies for an exclusion from conducting a terrestrial ecological evaluation. CULs are defined as the concentration of a hazardous substance in soil, water, air, or sediment that is determined to be protective of human health and the environment under specified exposure conditions. MTCA’s three (3) methods for establishing cleanup levels are briefly described below.

Method A: Method A provides tables of cleanup levels that are protective of human health for the most common hazardous substances found in soil and ground water at sites. Note that these levels were developed by procedures of Method B. The Method A cleanup must meet the concentrations listed in the Method A table and, if not listed in the table, the concentration standards established under applicable state or federal laws. If neither the Method A table nor applicable state and federal laws provide an appropriate cleanup level, then natural background

⁵ Cadmium and lead analysis requested by Ecology in an email dated April 25, 2022. The stated purpose of additional analysis was to characterize ground water contaminants migrating onto the subject site from the SMI cleanup property to the north (up gradient of the subject site).

concentration or the practical quantification limit (PQL) may be used as the cleanup level. Method A is the simplest, most streamlined approach to cleanup, but is meant to be applied with sites that have releases of only a few, common, hazardous substances.

Method B: Method B provides cleanup levels using risk assessment equations developed for various exposure pathways, as well as by using standards specified by applicable state and federal laws. Standard Method B uses generic default assumptions; Modified Method B uses chemical-specific and/or site-specific parameters in calculating the cleanup levels. Natural background concentrations and PQLs are also considered in this method. Method B is considered the universal approach to site closure and is the method most commonly used.

6.0 Ground Water Monitoring

6.1.1 Water Level Measurements

On April 21, 2022:

- All well monuments were opened and well casing expanding plugs removed to allow water levels to equilibrate to ambient barometric pressure.
- Following equilibration, static water levels were measured in each well (prior to sample collection).
 - Depth to water in monitoring wells WELL-1 through WELL-13 ranged from 0.00 feet (Well-4, -5, -7, -11 and -13) to 2.64 feet (Well-2) below TOC.
- Inferred ground water elevation contours (presented on Figure 3) suggest a west-southwesterly ground water flow direction across the site, with flow in the northern portion of the site exhibiting a more westerly flow direction and the southern portion of the site exhibiting a more southwesterly flow direction. The hydraulic gradient across the northern part of the site was estimated at 0.062 vertical feet per lineal foot (ft/ft) and in the southern part of the site was estimate at 0.050 ft/ft, suggesting a fairly consistent flow gradient across the site.

Water level data was recorded onto Ground Water Sampling Field forms included in Appendix B. Table 1 (behind “Tables” tab after text) presents a summary of monitoring well TOC elevations,⁶ depths to ground water, and the calculated water level elevations for previous monitoring events.

6.2 Monitoring Well Sampling

To produce representative samples, the wells were purged using a low-flow peristaltic pump and dedicated polyethylene (PE) tubing, recording various water quality parameters [pH, temperature, oxidation-reduction potential (ORP), dissolved oxygen (DO), turbidity, and conductivity] until stabilized. The results were recorded onto Ground Water Sampling Field Forms which are included in Appendix B.

⁶ The tops of casing of all wells have been surveyed to within 0.01 foot relative to mean sea level established by the City of Seattle benchmark #SNV-7595.

6.2.1 Water Quality Parameters

Table 2 (behind “Tables” tab after text) presents a summary of water quality parameters collected during purging during the second quarter 2022. In general:

- Temperature ranged from 11.12 (Well-2) to 15.59 °C (Well-13).
- Electrical conductivity is a measure of groundwater’s ability to carry an electrical current. Greater conductivity suggests a greater concentration of ions and charged molecules in ground water, including chloride and reduced metals. Conductivity ranged from 279 (WELL-10) to 336 (WELL-2) microsiemens per centimeter (µS/cm).
- DO ranged from 0.12 milligrams per liter (mg/L) in Well-4 to 0.57 mg/L in Well-9.
 - Typically, concentrations of DO greater than 1 mg/L are suggestive of aerobic conditions. None of the monitoring wells are currently aerobic based on DO concentrations.
- pH measurements ranged between 7.09 (WELL-3) and 8.05 (WELL-8), which is at the middle to upper range of pH of natural waters (6 to 9) in Washington.
- ORP ranged from -149 (WELL-7) to 231 (WELL-8) millivolts (mV).
 - Positive ORP readings generally suggest oxidizing conditions, which is conducive to degradation of petroleum hydrocarbons. ORP is currently negative in wells WELL-2, WELL-5, WELL-7, WELL-9, WELL-11, and WELL-13. ORP is difficult to measure in the field and additional data will be needed to determine trends in ORP at each location.

6.3 Laboratory Analytical Results

Table 3 (behind “Tables” tab after text) presents cumulative analytical results for ground water samples collected from WELL-2 through WELL-13, and screens laboratory results against generic MTCAL CULs.

Summary of second quarter 2022 analytical results:

- **Total Petroleum Hydrocarbons (as GRO, DRO and RRO).** DRO and/or RRO were previously detected by others in monitoring wells WELL-2, -3, -5, -7, -8, -9, -10 and -11, of which only the detection of RRO in monitoring well WELL-3 exceeded its respective MTCA Method A CUL. During this current monitoring event only DRO was detected and only in monitoring well WELL-11 in the north-central portion of the subject site and at a concentration below the MTCA Method A CUL. The laboratory reported that the sample chromatogram pattern for this DRO detection does not resemble the fuel standard used for quantitation and that based on further evaluation the chromatogram is suggestive of “typical organics/fuel metabolite pattern and is not indicative of any fuel patterns”, suggesting the detection is likely related to matrix interference. These results are generally consistent with data collected over the previous three quarterly monitoring events and appears to suggest the previous exceedance is a possible outlier.
- **VOCs.** All wells were analyzed for gasoline-related VOCs (BTEX, EDB, EDC, and MTBE) and select wells were analyzed for a broader suite of VOC constituents, including dry-cleaning related halogenated VOCs. Naphthalene was the only VOC detected and only in Well-11 at a concentration less than MCTA Method A and B CULs.

- **PAHs.** Several PAHs were detected, though only one PAH constituent (1-methylnaphthalene) was detected at a concentration exceeding its MTCA Method B CUL. The detection was in monitoring well WELL-11 and is located in the north-central portion of the site. The concentration detected (1.8 µg/L) only slightly exceeded its CUL (1.5 µg/L) and was reported by the laboratory as an estimated concentration. Additional data will be needed to confirm whether 1-methylnaphthalene is present at this location at concentrations above its MTCA Method B CUL.
- **Metals.** The ground water sample from Well-12 was analyzed for cadmium and lead to further assess potential impacts migrating onto the subject property from the adjoining property to the north. Laboratory analysis did not detect either metal constituent above laboratory MRLs.

6.4 Quality Control / Quality Assurance

The laboratory results of quality control samples are presented on Table 3 and summarized below.

- **Trip Bank.** All GRO-related VOCs were “non-detect,” suggesting the samples were not affected by VOCs during storage on the site and during transport to the laboratory.
- **Blind Sample Duplicate.** Laboratory analysis of a blind sample duplicate collected from monitoring well WELL-4 (sample “MWFD”) reflected a relative percent difference (RPD) of up to 15% for all constituents. Generally, an RPD of 20% represents the limit of acceptable variance for duplicate samples. Results of the quality control samples for all constituents suggest that the accuracy and precision of both field and laboratory testing methods are within the data quality objectives.

7.0 Discussion of Findings

Ground Water Plume Delineation. Ground water flow during this event was generally west- to southwesterly beneath the site. No constituents were detected in down gradient wells to the west or southwest of historical source areas on the subject site. Based on currently available data, only one monitoring well location (Well-11) was reported with constituent detections exceeding CULs. During this quarterly monitoring event, 1-methylnaphthalene exceeded its CUL in WELL-11, which is in the central portion of the site. It is possible that the presence of 1-methylnaphthalene and related petroleum constituents is the result of migration of dissolved contaminants in ground water from the north-adjointing cleanup site.

In an email correspondence dated April 25, 2021, Ecology suggested the installation of an additional ground-water monitoring well in the southeast corner of the property. Following discussions with the property owner, ENW plans to install this additional monitoring (concurrent with other additional borings requested by Ecology prior to the third quarter 2022 monitoring event.

8.0 Proposed Monitoring Activities

In consideration of recent ground water monitoring results and Ecology’s suggestions for further investigation, the following activities are proposed for the next quarter:

- Install a permanent monitoring well in the existing area of impacted soil in the southeast corner of the site to help in understanding the ground water gradient and flow direction in this area.
- Install an additional boring on the west side of the site to analyze soil in the vicinity of the former waste oil tank for compounds listed in Table 830.1 of the MTCA Rule and Table 7.2 in the Remediation of Petroleum Contaminated Sites Guidance.
- Install an additional boring along the eastern margin of the site (adjacent to Greenwood Avenue) to better bound the northern and eastern extent of contaminated soil in the loading dock area reported during excavations in 1996.
- Calculate a Method B cleanup level by performing EPH/VPH analyses on soil samples with concentrations TPH-Gx and TPH-Dx above Method A. ENW has requested the lab to run the EPH/VPH analysis on the sample previously collected in EB-1 collected during the right-of-way investigation.
- Based on the results of the Site Hazard Assessment for the SMI, Inc. Trust Site, located north of the subject property, include analysis of dissolved cadmium and lead in Well-12.

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 site closure does not extend to the presence of the following conditions unless they were the express concerns of contacted personnel, report and literature authors or the work scope.

- Naturally occurring toxic or hazardous substances in the subsurface soils, geology, and water,
- Toxicity of substances common in current habitable environments, such as stored chemicals, products, building materials and consumables,
- Contaminants or contaminant concentrations that are not a concern now but may be under future regulatory standards,
- 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 have 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. It is possible, despite the use of reasonable care and interpretation, that ENW may have failed to identify regulation violations related to the presence of hazardous substances other than those specifically mentioned at the closure site. 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.

Table 1. Summary of Ground Water Elevations

Monitoring Well Designation	Date	Surveyed Top of Casing (TOC) Elevation (feet AMSL) ¹	Depth to Water (DTW) (feet below TOC)	Relative Elevation (feet)
WELL-2	1/26/2022	255.26	2.78	252.48
	4/21/2022		2.64	252.62
Minimum			2.64	252.48
Maximum			2.78	255.26
WELL-3	1/26/2022	259.53	1.54	257.99
	4/21/2022		1.39	258.14
Minimum			1.39	257.99
Maximum			1.54	259.53
WELL-4	1/26/2022	257.52	0.00	257.52
	4/21/2022		0.00	257.52
Minimum			0.00	257.52
Maximum			0.00	257.52
WELL-5	1/26/2022	258.22	0.02	258.20
	4/21/2022		0.00	255.26
Minimum			0.00	255.26
Maximum			0.02	258.20
WELL-6	1/26/2022	259.31	1.05	258.26
	4/21/2022		0.87	258.44
Minimum			0.87	258.26
Maximum			1.05	259.31
WELL-7	1/26/2022	260.39	0.00	260.39
	4/21/2022		0.00	260.39
Minimum			0.00	260.39
Maximum			0.00	260.39
WELL-8	1/26/2022	263.42	2.31	261.11
	4/21/2022		2.10	261.32
Minimum			2.10	261.11
Maximum			2.31	263.42
WELL-9	1/26/2022	262.74	1.48	261.26
	4/21/2022		1.51	261.23
Minimum			1.48	261.23
Maximum			1.51	262.74
WELL-10	1/26/2022	261.52	0.10	261.42
	4/21/2022		0.35	261.17
Minimum			0.10	261.17
Maximum			0.35	261.52
WELL-11	1/26/2022	261.05	0.05	261.00
	4/21/2022		0.00	261.05
Minimum			0.00	261.00
Maximum			0.05	261.05
WELL-12	1/26/2022	261.11	0.95	260.16
	4/21/2022		0.50	260.61
Minimum			0.50	260.16
Maximum			0.95	261.11
WELL-13	1/26/2022	258.39	0.00	258.39
	4/21/2022		0.00	258.39
Minimum			0.00	258.39
Maximum			0.00	258.39

¹ Survey conducted on March 15, 2022 relative to NAD83 and NAVD88.

TOC = top of casing

Table 2. Summary of Water Quality Parameters

Well ID	Date	Temp (°C)	Specific Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	pH	Oxidation-Reduction Potential (mV)	Turbidity (NTU)
WELL-2	1/26/2022	8.99	317	1.15	6.81	-22	102
	4/21/2022	11.12	336	0.36	7.49	-105	29.2
	Minumum	8.99	317	0.36	6.81	-105	29.2
	Maximum	11.12	336	1.15	7.49	-22	102
WELL-3	1/26/2022	10	277	1.34	7.85	-339	139
	4/21/2022	13.36	280	0.33	7.09	8.3	1.77
	Minumum	10	277	0.33	7.09	-339	1.77
	Maximum	13.36	280	1.34	7.85	8.3	139
WELL-4	1/26/2022	11.68	278	1.22	7.78	-643	139
	4/21/2022	11.93	283	0.12	7.63	1.7	21.01
	Minumum	11.68	278	0.12	7.63	-643	21.01
	Maximum	11.93	283	1.22	7.78	1.7	139
WELL-5	1/26/2022	12.50	278	1.24	7.65	-379	139
	4/21/2022	14.14	291	0.31	7.84	-147	25.4
	Minumum	12.50	278	0.31	7.65	-379	25.4
	Maximum	14.14	291	1.24	7.84	-147	139
WELL-6	1/26/2022	9.19	282	0.88	7.22	72	23.4
	4/21/2022	12.23	284	0.33	7.66	162.9	3.43
	Minumum	9.19	282	0.33	7.22	72	3.43
	Maximum	12.23	284	0.88	7.66	162.9	23.4
WELL-7	1/26/2022	11.69	286	1.38	7.61	-348	143
	4/21/2022	14.35	301	0.40	7.79	-149	23.8
	Minumum	11.69	286	0.40	7.61	-348	23.8
	Maximum	14.35	301	1.38	7.79	-149	143
WELL-8	1/26/2022	10.43	279	0.59	7.23	90	15.9
	4/21/2022	12.15	285	0.30	8.05	231	1
	Minumum	10.43	279	0.30	7.23	90	1
	Maximum	12.15	285	0.59	8.05	231	15.9
WELL-9	1/26/2022	11.00	281	1.33	7.13	-204	140
	4/21/2022	13.12	298	0.57	7.74	-127	19
	Minumum	11.00	281	0.57	7.13	-204	19
	Maximum	13.12	298	1.33	7.74	-127	140
WELL-10	1/26/2022	9.36	282	0.44	7.09	-124	18.1
	4/21/2022	13.75	279	0.19	7.87	57.1	0
	Minumum	9.36	279	0.19	7.09	-124	0
	Maximum	13.75	282	0.44	7.87	57.1	18.1
WELL-11	1/26/2022	9.21	287	0.76	7.05	-142	3.6
	4/21/2022	13.34	285	0.34	7.66	-2.5	0
	Minumum	9.21	285	0.34	7.05	-142	0
	Maximum	13.34	287	0.76	7.66	-2.5	3.6
WELL-12	1/26/2022	9.61	284	0.80	7.21	20	14.5
	4/21/2022	13.05	286	0.26	8.03	106.3	0
	Minumum	9.61	284	0.26	7.21	20	0
	Maximum	13.05	286	0.80	8.03	106.3	14.5
WELL-13	1/26/2022	11.13	277	0.60	7.19	-61	19.6
	4/21/2022	15.59	284	0.33	7.85	-145	6.7
	Minumum	11.13	277	0.33	7.19	-145	6.7
	Maximum	15.59	284	0.60	7.85	-61	19.6
Range of Monitored Geochemistry Parameters within Monitored Area							
	Minumum	8.99	277	0.12	6.81	-643	0.0
	Maximum	15.59	336	1.38	8.05	231	143

°C = degrees Celsius

µS/cm = microsiemens per centimeter

mV = millivolt

NTU = Nephelometric Turbidity Unit

Table 3 - Summary of Analytical Data, Ground Water (Monitoring Wells)

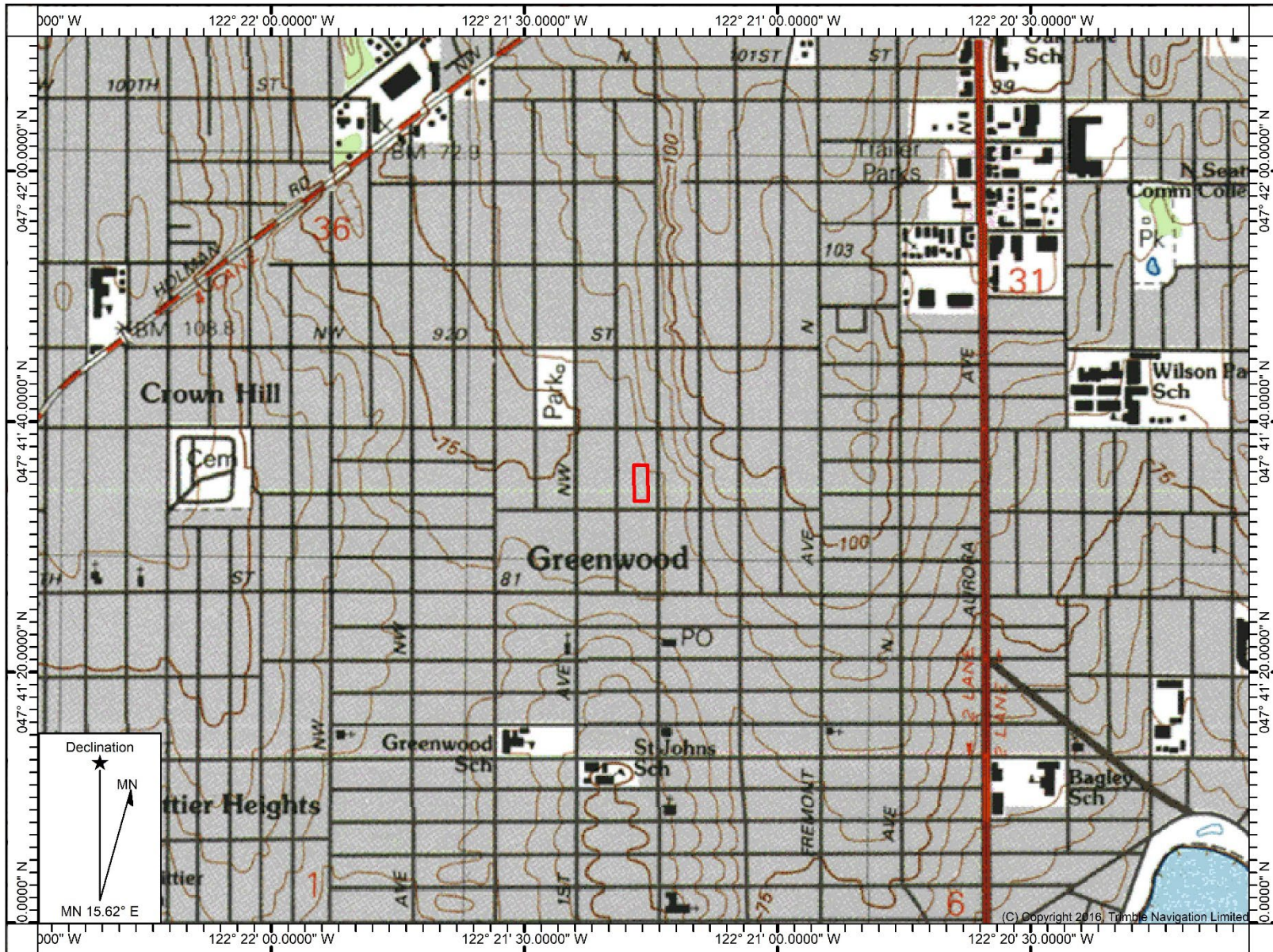
Table with 19 columns for wells (Well-2 to Well-7) and multiple rows for analytes including Volatile Organic Constituents (VOCs), Polyaromatic Hydrocarbons (Carcinogenic), Metals, and Total Petroleum Hydrocarbons. Columns include Location ID, Sample ID, Date Sampled, Sampler, Location, Constituent of Interest, and concentration values in µg/L (ppb).

Notes:
-- = not analyzed or not applicable.
nd = not detected or above the method reporting limit (MRL) or practical
quantitation limit (PQL) shown.
NE = not established.
(Y) indicates analyte not detected, but detection limit is above screening
concentration.
µg/L = micrograms per liter
c = carcinogenic
nc = noncarcinogenic
v = volatile
nv = nonvolatile
GRO = gasoline-range organics.
DRO = diesel-range organics.
RRO = residual-range organics.
Bolded/Shaded concentrations exceed MTCA Method A or B Cleanup
(Y) indicates analyte not detected, but detection limit is above screening
concentration.
J = the identification of the analyte is acceptable; the reported value is an
estimate
** Cleanup level of carcinogenic PAHs based on cleanup
standard for Benzo(a)pyrene
x = the sample chromatogram pattern does not resemble the fuel
standard used for quantitation.

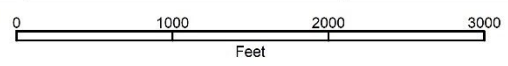
Table 3 - Summary of Analytical Data, Ground Water (Monitoring Wells)

Location ID	QA/QC				Maximum Ground Water Concentration (QA/QC not included)	MTCA Method A Cleanup Levels for Ground Water (Unrestricted Land Use)	MTCA Method B Cleanup Levels for Ground Water (lowest)	Constituent of Potential Concern (COPC)? ³	
	Sample ID	WELL-FD-220127	WELL-FD-220127	Trip Blank					Trip Blank
Date Sampled	1/26/2022	4/21/2022	1/26/2022	4/21/2022					
Sampler	ENW	ENW	ENW	ENW					
Location	Field duplicate of Well #10	Field duplicate of Well #4	Trip Blank	Trip Blank					
Constituent of Interest	Note	µg/L (ppb)	µg/L (ppb)	µg/L (ppb)	µg/L (ppb)	µg/L (ppb)	µg/L (ppb)	Y/N	
Volatile Organic Constituents (VOCs)									
Benzene	c, v	<0.35 (ND)	<0.35 (ND)	<0.35 (ND)	<0.35 (ND)	<1 (ND)	5	0.8	(Y)
Ethyl Chloride	c, v	---	<1 (ND)	---	---	<1 (ND)	NE	NE	---
Dichlorobenzene;1,4-	c, v	---	<1 (ND)	---	---	<1 (ND)	NE	8.1	N
Dichloroethylene;1,1-	nc, v	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	NE	400	N
Dichloroethylene;1,2-,cis	nc, v	<1 (ND)	<1 (ND)	---	---	<1 (ND)	NE	16	N
Dichloroethylene;1,2-,trans	nc, v	<1 (ND)	<1 (ND)	---	---	<1 (ND)	NE	160	N
Methylene Chloride	c, v	<5 (ND)	<5 (ND)	---	---	<5 (ND)	5	5.8	N
Ethylene dibromide (EDB)	c, v	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	0.01	0.022	(Y)
Dichloroethane;1,2- (EDC)	c, v	<0.2 (ND)	<0.2 (ND)	<0.2 (ND)	<0.2 (ND)	<1 (ND)	5	0.48	(Y)
Ethylbenzene	c, v	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	700	800	N
Methyl tert-butyl ether (MTBE)	c, v	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	20	24	N
Naphthalene	nc, v	<0.4 (ND)	<1 (ND)	<0.4 (ND)	<0.4 (ND)	39 jl	160	160	N
Cumene	nc, v	---	<1 (ND)	---	---	<1 (ND)	NE	800	N
Propylbenzene, n-	nc, v	---	<1 (ND)	---	---	<1 (ND)	NE	800	N
Tetrachloroethylene (PCE)	c, v	<1 (ND)	<1 (ND)	---	---	<1 (ND)	5	21	N
Toluene	nc, v	<1 (ND)	<1 (ND)	<1 (ND)	<1 (ND)	9.4	1000	640	N
Trichloroethane;1,1,1-	nc, v	<1 (ND)	<1 (ND)	---	---	<1 (ND)	200	16000	N
Trichloroethylene (TCE)	c, v	<0.5 (ND)	<0.5 (ND)	---	---	<1 (ND)	5	0.54	(Y)
Trimethylbenzene;1,2,4-	nc, v	---	<1 (ND)	---	---	<1 (ND)	NE	80	N
Trimethylbenzene;1,3,5-	nc, v	---	<1 (ND)	---	---	<1 (ND)	NE	80	N
Vinyl chloride	c, v	<0.02 (ND)	<0.02 (ND)	---	---	<0.2 (ND)	0.2	0.029	(Y)
Xylenes	nc, v	<3 (ND)	<3 (ND)	<3 (ND)	<3 (ND)	<3 (ND)	1000	1600	N
Polyaromatic Hydrocarbons (Carcinogenic)									
Acenaphthene	nc, v	<0.04 (ND)	1.2	---	---	6.9	NE	480	N
Anthracene	nc, v	<0.04 (ND)	<0.04 (ND)	---	---	<0.04 (ND)	NE	2400	N
Benzo[a]anthracene	c, nv	<0.04 (ND)	<0.04 (ND)	---	---	<0.04 (ND)	**	**	(Y)
Benzo[a]pyrene	c, nv	<0.04 (ND)	<0.04 (ND)	---	---	<0.04 (ND)	0.1 (**)	0.023 (**)	(Y)
Benzo[b]fluoranthene	c, nv	<0.04 (ND)	<0.04 (ND)	---	---	<0.04 (ND)	**	**	(Y)
Benzo[k]fluoranthene	c, nv	<0.04 (ND)	<0.04 (ND)	---	---	<0.04 (ND)	**	**	(Y)
Chrysene	c, nv	<0.04 (ND)	<0.04 (ND)	---	---	<0.04 (ND)	**	**	(Y)
Dibenz[a,h]anthracene	c, nv	<0.04 (ND)	<0.04 (ND)	---	---	<0.04 (ND)	**	**	(Y)
Fluoranthene	nc, nv	<0.04 (ND)	0.052	---	---	<0.05 (ND)	NE	640	N
Fluorene	nc, v	<0.04 (ND)	0.28	---	---	2.3	NE	320	N
Indeno[1,2,3-cd]pyrene	c, nv	<0.04 (ND)	<0.04 (ND)	---	---	<0.04 (ND)	**	**	(Y)
Naphthalene	c, v	<0.4 (ND)	<0.4 (ND)	---	---	26 jl	160	160	N
1-Methylnaphthalene	nc, v	<0.4 (ND)	<0.4 (ND)	---	---	2.8 jl	NE	1.5	Y
2-Methylnaphthalene	nc, v	<0.4 (ND)	<0.4 (ND)	---	---	0.83	NE	32	N
Pyrene	nc, nv	<0.04 (ND)	<0.04 (ND)	---	---	<0.04 (ND)	NE	240	N
Metals									
Cadmium	c, nv	---	---	---	---	<1 (ND)	5	8	N
Total Lead	NA, nv	---	---	---	---	<1 (ND)	15	15	N
Total Petroleum Hydrocarbons									
GRO	nc, v	<100 (ND)	<100 (ND)	---	---	<100 (ND)	800	NE	N
DRO	nc, nv	<50 (ND)	<50 (ND)	---	---	300 x	500	NE	N
RRO	nc, nv	<250 (ND)	<250 (ND)	---	---	510 x	500	NE	Y

Notes:
 --- = not analyzed or not applicable.
 nv = not detected or above the method reporting limit (MRL) or practical quantitation limit (PQL) shown
 NE = not established.
 (Y) indicates analyte not detected, but detection limit is above screening concentration.
 µg/L = micrograms per Liter
 c = carcinogenic
 nc = noncarcinogenic
 v = volatile
 nv = nonvolatile
 GRO = gasoline-range organics.
 DRO = diesel-range organics.
 RRO = residual-range organics.
Bolded/Shaded concentrations exceed MTCA Method A or B Cleanup
 (Y) indicates analyte not detected, but detection limit is above screening concentration.
 J = the identification of the analyte is acceptable; the reported value is an estimate
 ** Cleanup level of carcinogenic PAHs based on cleanup standard for Benzo(a)pyrene
 x = the sample chromatogram pattern does not resemble the fuel standard used for quantitation.



Name: SEATTLE NORTH
Date: 09/20/21



Location: 047° 41' 35.3419\" N, 122° 21' 15.9186\" W
Contour Interval: 16 ft

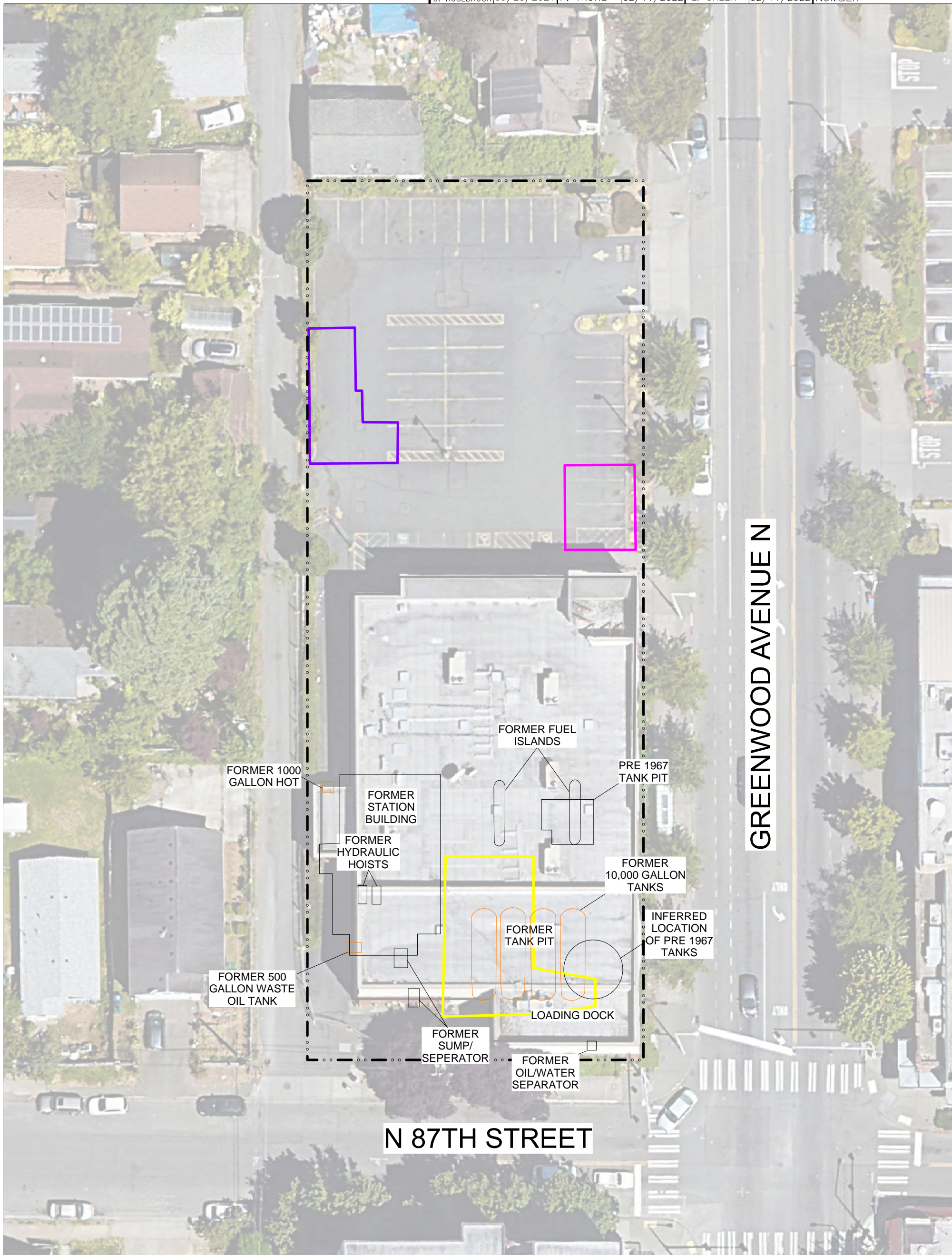


Date Drawn: 2/28/2022
CAD File Name: 1581-21001-01_fig1sv_map.docx
Drawn By: CLR
Approved By: LDG






Future Kiddie Academy Property
8701 Greenwood Avenue N
Seattle, Washington

Site Vicinity Map

Project No.
1581-21001
Figure No.
1



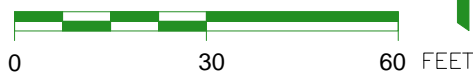
LEGEND:

-  SUBJECT BUILDINGS
 -  SUBJECT PROPERTY BOUNDARIES
 -  FORMER GAS STATION PER 1950 HISTORICAL SANBORN MAP
 -  FORMER VANITY CLEANERS PER CITY DIRECTORY 1951-1955, LOCATION BASED ON 1950-1966 SANBORN MAP
 -  FORMER LAUNDRY PER 1930 HISTORICAL SANBORN MAP
- * FORMER FEATURES PER 1994 EMCON NORTHWEST INC. AND TEXACO 1991 AND ENVIRO. RESOLUTION INC. 1994 AND 1996

NOTES:

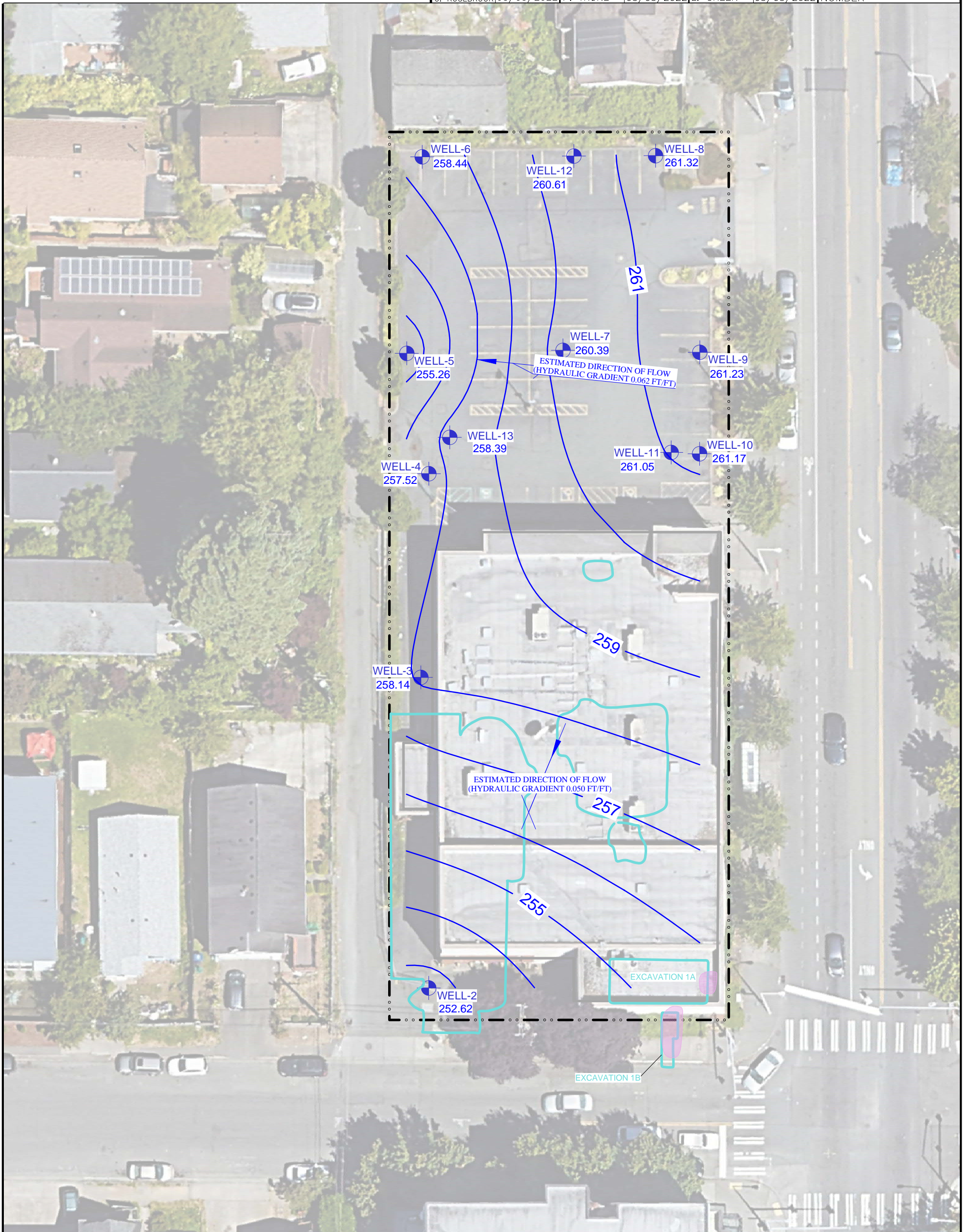
1. BASE MAP DEVELOPED FROM AN AERIAL PHOTOGRAPH MAP DATED 2019 AND ENW FIELD NOTES.
2. ALL BUILDING, STREET, AND FEATURE LOCATIONS ARE APPROXIMATE.
3. SYMBOLS REPRESENT LOCATION AND DO NOT ALWAYS REPRESENT EXACT SHAPE, SIZE, OR ORIENTATION.

APPROXIMATE SCALE









PO BOX 14488, PORTLAND, OREGON 97293
P: (503)452-5561, E: ENW@EVREN-NW.COM

FIGURE 2
SITE PLAN WITH HISTORICAL FEATURES OF INTEREST
FUTRUE KIDDIE ACADEMY PROPERTY
8701 GREENWOOD AVENUE N
SEATTLE, WASHINGTON

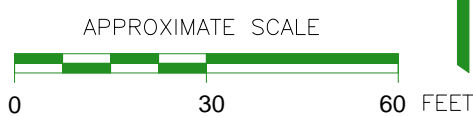


LEGEND:

-  SUBJECT BUILDING
-  SUBJECT PROPERTY BOUNDARIES
-  PRIOR PCS EXCAVATION MARGINS
-  MONITORING WELL LOCATION PER ENVIRONMENTAL SPECIALTIES MAY 2021
-  INFERRED AREA OF RESIDUAL PETROLEUM IMPACTED SOIL EXCEEDING MTCA METHOD A CUL FOR GRO (>30 MG/KG) AND DRO (>2000 MG/KG)
-  GROUND WATER CONTOURS APRIL 2022

NOTES:

1. BASE MAP DEVELOPED FROM AN AERIAL PHOTOGRAPH MAP DATED 2019 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.



PO BOX 14488, PORTLAND, OREGON 97293
P: (503)452-5561, E: ENW@EVREN-NW.COM

FIGURE 3
GROUND WATER POTENTIOMETRIC SURFACE MAP - APRIL 21, 2022

PROPOSED KIDDIE ACADEMY PROPERTY
8701 GREENWOOD AVENUE N
SEATTLE, WASHINGTON

Appendix A

Site Photographs



Gauging Well #10 with a depth to water meter, view looking west.



Low-flow purge and sampling set up on Well #6.



Low-flow purge and sampling set up on Well #12 next to northern site boundary using a peristaltic pump (blue box).



Well #4 near the NW corner of the existing building.



Future Kiddie Academy Property
8701 Greenwood Avenue N
Seattle, Washington

**Site
Photographs**

Project No.
1581-21001-02
Appendix
A



Low-flow purge and sampling of Well #3 – looking south.



Well MW-8 being re-developed.



Sentry well MW-8 being repaired using a cut-off tool to level off the broken portion of the 3-inch casing.



Well purge water was placed in DOT-approved drums pending disposal.



Future Kiddie Academy Property
8701 Greenwood Avenue N
Seattle, Washington

**Site
Photographs**

Project No.
1581-21001-02
Appendix
A

Appendix B

Field Sampling Data Sheets

EVREN Northwest

GROUND WATER FIELD SAMPLING DATA FORM (FIELD)

PROJECT NAME: 8701 Greenwood Avenue N. Seattle

PROJECT NUMBER: 1581-21001-01

Event: Ground Monitoring

Date: 04-21-22

Field Personnel: Dan S. and Bailey F.

Monitoring Well ID: Well-2

Weather Conditions: cloudy 50°

Start Time: 2:32

DTW (prior to purging): 2.64

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)
14:36	2.68	200ml	11.12	.351	0.70	7.52	-28	27.3	.6
14:40	5.56	200ml	11.39	.333	0.48	7.51	-66	32.2	1.6
14:44	5.81	150ml	11.34	.333	0.41	7.52	-79	31.6	2.4
14:48	6.30	150ml	11.17	.335	.42	7.52	-88	31.6	2.8
14:52	6.61	150ml	11.12	.334	.40	7.52	-95	29.7	3.4
14:56	6.95	150ml	11.15	.335	.38	7.56	-700	29.6	4.0
15:00	7.19	150ml	11.12	.336	.36	7.49	-105	29.2	4.6
15:04									

Total Purged:

1.14" ADF

7.14

EVREN Northwest

GROUND WATER FIELD SAMPLING DATA FORM (FIELD)

PROJECT NAME: 8701 Greenwood Avenue N. Seattle
 Event: Ground Monitoring

PROJECT NUMBER: 1581-21001-01
 Date: 04/21/22

Field Personnel: Dan S. and Bailey F.
 Weather Conditions: Sunny 57°F
 DTW (prior to purging): 1.39' bto c

Monitoring Well ID: Well-3
 Start Time: 13:56

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)	
13:57										
13:59	2.10	125	13.11	279.89	0.55	7.90	60.2	0.77	0.4	
14:03	2.30	"	13.20	280.16	0.44	7.71	59.2	0.0	0.9	
14:07	2.80	100	13.48	280.29	0.39	7.74	35.3	6.24	1.4	
14:11	2.96	"	13.7	281.00	0.35	7.85	18.9	0.74	1.80	
14:15	3.06	"	13.87	281.31	0.28	7.87	11.9	5.68	2.20	
14:19	3.15	"	13.36	280.4	0.33	7.89	8.3	1.77	2.60	
				collect sample						

Total Purged: 2.60

EVREN Northwest

GROUND WATER FIELD SAMPLING DATA FORM (FIELD)

PROJECT NAME: 8701 Greenwood Avenue N. Seattle
 Event: Ground Monitoring

PROJECT NUMBER: 1581-21001-01
 Date: 04-21-22

Field Personnel: Dan S. and Bailey F.
 Weather Conditions: cloudy 50°
 DTW (prior to purging): TOP Intake

Monitoring Well ID: Well-5
 Start Time: 12:43

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)
12:47	TOP intake	200ml	13.89	.291	.76	7.84	-109	27.6	.9
12:51	TOP intake	200ml	14.07	.292	.31	7.84	-134	26.0	1.6
12:55	TOP intake	200ml	14.13	.291	.31	7.84	-141	25.7	2.4
12:59	TOP intake	200ml	14.14	.291	.31	7.84	-147	25.4	3.2

Total Purged:

EVREN Northwest GROUND WATER FIELD SAMPLING DATA FORM (FIELD)

PROJECT NAME: 8701 Greenwood Avenue N. Seattle

PROJECT NUMBER: 1581-21001-01

Event: Ground Monitoring

Date: _____

Field Personnel: Dan S. and Bailey F.

Monitoring Well ID: WELL-6

Weather Conditions: Cloudy

Start Time: 10:48

DTW (prior to purging): 0.87' static

WELL PURGING INFORMATION

Time	DTW During Purging (feet)	Pumping Rate (L/min)	Temperature (degree C)	Specific Conductivity (mS/cm), $\pm 3\%$	Dissolved Oxygen (mg/L), $\pm 10\%$	Water pH (S.U.), $\pm 0.1\%$	ORP (mV), ± 10 mV	Turbidity (NTU), $\pm 10\%$	Total Quantity Purged (gallons/liters)
10:49									
10:51	1.25	150	11.89	202.05	0.61	7.61	194.3	16.55	0.20
10:55	—	"	12.07	203.50	0.56	7.38	198.7	6.04	0.80
10:59	—	"	12.37	203.64	0.48	7.59	202.3	1.01	1.40
11:03	1.67	"	12.30	203.61	0.35	7.50	195.9	5.33	2.00
11:07	1.75	"	12.36	203.61	0.39	7.61	177.9	15.00	2.60
11:11	1.80		12.23	203.50	0.33	7.60	162.9	3.43	3.20
collect sample									

Total Purged: 3.20

EVREN Northwest

GROUND WATER FIELD SAMPLING DATA FORM (FIELD)

PROJECT NAME: 8701 Greenwood Avenue N. Seattle

PROJECT NUMBER: 1581-21001-01

Event: Ground Monitoring

Date: 04-21-22

Field Personnel: Dan S. and Bailey F.

Monitoring Well ID: Well 7

Weather Conditions: Cloudy 46°

Start Time: 11:56

DTW (prior to purging): At Surface

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)
<u>12:00</u>	<u>Surface</u>	<u>200ml</u>	<u>14.04</u>	<u>0.299</u>	<u>.63</u>	<u>7.76</u>	<u>-98</u>	<u>23.7</u>	<u>.8</u>
<u>12:04</u>	<u>Top intake</u>	<u>200ml</u>	<u>14.11</u>	<u>0.299</u>	<u>.53</u>	<u>7.77</u>	<u>-113</u>	<u>23.4</u>	<u>1.6</u>
<u>12:08</u>	<u>Top intake</u>	<u>200ml</u>	<u>14.05</u>	<u>0.299</u>	<u>.49</u>	<u>7.77</u>	<u>-127</u>	<u>22.2</u>	<u>2.4</u>
<u>12:12</u>	<u>Top intake</u>	<u>200ml</u>	<u>14.09</u>	<u>0.300</u>	<u>.47</u>	<u>7.76</u>	<u>-134</u>	<u>21.4</u>	<u>3.2</u>
<u>12:16</u>	<u>Top intake</u>	<u>200ml</u>	<u>14.00</u>	<u>0.300</u>	<u>.43</u>	<u>7.79</u>	<u>-144</u>	<u>21.4</u>	<u>4.0</u>
<u>12:20</u>	<u>Top intake</u>	<u>200ml</u>	<u>14.35</u>	<u>0.301</u>	<u>.40</u>	<u>7.79</u>	<u>-149</u>	<u>23.8</u>	<u>4.8</u>

Total Purged:

EVREN Northwest

GROUND WATER FIELD SAMPLING DATA FORM (FIELD)

PROJECT NAME: **8701 Greenwood Avenue N. Seattle**

PROJECT NUMBER: **1581-21001-01**

Event: Ground Monitoring

Date: 04/21/22

Field Personnel: Dan S. and Bailey F.

Monitoring Well ID: WELL-8

Weather Conditions: Partly Cloudy 46°F

Start Time: 9:20

DTW (prior to purging): 2.10' static

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)
9:21									
9:22	2.56	200	12.80	286.03	0.46	8.22	227.2	0.00	0.40
9:26	2.50	200	12.31	284.48	0.39	8.16	230.3	6.00	1.20
9:30	2.50	100	11.99	284.02	0.38	8.11	230.5	0.00	1.00
9:34	2.46	"	11.92	284.47	0.45	8.09	231.0	0.00	2.00
9:38	2.46	"	12.03	284.61	0.37	8.06	230.0	0.00	2.40
9:42	2.46	"	12.15	284.65	0.30	8.05	231.0	1.00	2.80
<i>GW entering in situ collect sample</i>									

Total Purged:

EVREN Northwest

GROUND WATER FIELD SAMPLING DATA FORM (FIELD)

PROJECT NAME: 8701 Greenwood Avenue N. Seattle

PROJECT NUMBER: 1581-21001-01

Event: Ground Monitoring

Date: ~~Well 9~~ 09-21-22

Field Personnel: Dan S. and Bailey F.

Monitoring Well ID: Well-9

Weather Conditions: Cloudy 40°

Start Time: 10:58

DTW (prior to purging): 1.51

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)
11:02	1.95	150	11.45	0.305	0.91	7.69	-25	29.1	0.6
11:06	2.01	150	11.85	0.306	0.71	7.69	-65	28.3	1.2
11:10	2.11	150	12.17	0.304	0.71	7.70	-92	21.1	1.6
11:14	2.11	150	12.39	0.303	0.67	7.70	-105	20.5	2.4
11:18	2.14	150	12.63	0.301	0.64	7.71	-114	20.4	3.0
11:22	2.15	150	12.85	0.300	0.62	7.72	-120	19.7	3.6
11:26	2.19	150	12.98	0.298	0.59	7.73	-124	19.9	4.2
11:30	2.23	150	13.12	0.298	0.57	7.74	-125	19.0	4.8

Total Purged:

EVREN Northwest

GROUND WATER FIELD SAMPLING DATA FORM (FIELD)

PROJECT NAME: 8701 Greenwood Avenue N. Seattle

PROJECT NUMBER: 1581-21001-01

Event: Ground Monitoring

Date: 04/21/22

Field Personnel: Dan S. and Bailey F.

Monitoring Well ID: WELL-10

Weather Conditions: mostly sunny 52°F

Start Time: 11:35

DTW (prior to purging): ~ 0.35' bto c

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)
11:36	0.60	1.25	14.28	270.00	0.89	7.97	145.6	0.01	0.30
11:40	0.65	"	12.92	278.80	0.43	7.75	114.9	0.02	0.80
11:44	0.70	"	13.17	279.61	0.30	7.71	94.4	0.00	1.30
11:48	0.75	"	13.25	278.32	0.24	7.76	82.0	0.00	1.60
11:52	0.75	"	13.40	279.92	0.23	7.80	74.7	0.00	2.30
11:56	0.75	"	13.73	279.81	0.18	7.84	62.4	0.00	2.8
12:00	0.75	"	13.75	278.71	0.19	7.87	57.1	0.00	3.3
— collect sample —									
(In situ wa parameters)									

Total Purged: 3.30

EVREN Northwest

GROUND WATER FIELD SAMPLING DATA FORM (FIELD)

PROJECT NAME: 8701 Greenwood Avenue N. Seattle

PROJECT NUMBER: 1581-21001-01

Event: Ground Monitoring

Date: 04/21/22

Field Personnel: Dan S. and Bailey F.

Monitoring Well ID: WELL-11

Weather Conditions: Cloudy - Breezy 52°F

Start Time: 12:14

DTW (prior to purging): at top of casing - (artesian)

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)
12:15	—	—	entering flow cell				Insitu		
12:16	—	—	discharge				issue with controller	insitu	
12:18	0.70	200	13.00	284.38	0.23	7.76	48.5	0.00	0.60
12:22	1.01	100	13.23	285.36	0.20	7.56	28.6	0.07	1.0
12:26	1.12	"	13.13	285.12	0.44	7.57	17.9	0.00	1.4
12:30	1.22	"	13.27	285.45	0.20	7.62	4.8	0.00	1.8
12:34	1.31		13.34	285.44	0.34	7.66	-7.5	0.00	2.2
			collect sample						

Total Purged: 2.20

EVREN Northwest

GROUND WATER FIELD SAMPLING DATA FORM (FIELD)

PROJECT NAME: 8701 Greenwood Avenue N. Seattle

PROJECT NUMBER: 1581-21001-01

Event: Ground Monitoring

Date: _____

Field Personnel: Dan S. and Bailey F.

Monitoring Well ID: WELL-12

Weather Conditions: MOSTLY Sunny 47°F

Start Time: 9:57

DTW (prior to purging): 0.5' below

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)
10:04	0.85	125	12.24	286.62	0.69	8.03	198.2	0.00	0.35
10:05	0.85	"	12.40	286.72	0.27	8.03	176.0	0.00	0.85
10:09	0.87	"	12.69	286.11	0.51	8.01	154.6	0.00	1.40
10:13	0.92	"	12.98	286.51	0.34	8.01	131.1	0.04	1.90
10:17	0.96	"	13.20	286.07	0.47	8.03	114.5	0.00	2.40
10:24	0.98	"	13.05	285.62	0.26	8.03	106.3	0.00	2.90
Collect Sample									

(In situ WA)

Total Purged: 3.0

EVREN Northwest

GROUND WATER FIELD SAMPLING DATA FORM (FIELD)

PROJECT NAME: 8701 Greenwood Avenue N. Seattle
 Event: Ground Monitoring

PROJECT NUMBER: 1581-21001-01
 Date: 04-21-22

Field Personnel: Dan S. and Bailey, F.
 Weather Conditions: Mostly cloudy 50°
 DTW (prior to purging): TOP intake

Monitoring Well ID: Well-13
 Start Time: 13:31

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)
13:35	Top intake	200ml	10.76	.282	.62	7.85	-101	20.3	.8
13:39	Top intake	200ml	15.73	.283	.87	7.85	-103	18.5	1.6
13:44	Top intake	200ml	15.62	.284	.91	7.85	-134	3.2	2.4
13:48	Top intake	200ml	15.52	.284	.31	7.85	-141	3.6	3.2
13:52	Top intake	200ml	15.59	.284	.33	7.85	-145	6.7	4.0

Total Purged:



Well Development Measurements

Site: _____
Monitoring Well: _____

Project No.: _____
Date: _____

Well Information	
Depth to Water: <u>2.6'</u> ft	
Depth to Bottom of Well: <u>8.8'</u> ft	
Height of Water Column: <u>6.2'</u> ft	<u>4" = .65'</u>
Vol. of Water in Well: <u>4.05</u> gal.	Conversion Factor: 2" - 0.164 gal/ft.
Added water during installation? <u>None</u>	How much? _____
Weather: <u>cloudy</u>	

Water Quality Parameters During Development							
Time	Volume of Water Removed	Temperature (°C)	pH	Conduc-tivity (mS/cm)	ORP (± mv)	Dissolved Oxygen (mg/L)	Appearance of Water.
9:52			start pump				
9:54			discharging slowly				(very dark brown water)
			rate @ 0.5 gallon per minute				
9:57			stop pump to inspect foot valve				
10:01			start pump again				
10:06	<u>9.50</u>		very turbid				dark brown
10:12	<u>13.75</u>	<u>11.64</u>	<u>8.44</u>	<u>8.27</u>	<u>227.1</u>	<u>4.21</u>	<u>528 NTU</u> - very brown
10:18			pump off				
10:28	<u>15</u>		water not readily recharging				check draw = 17.5'
11:02	<u>15.82</u>	<u>11</u>	start pump again				1 gal (minute)
11:04		<u>13.59</u>	<u>7.93</u>	<u>56.38</u>	<u>216.0</u>	<u>0.58</u>	<u>781 NTU</u> - Dark brown
11:10			ran dry after 20 gal total				

Meter Calibration			Meter Number: _____
Parameter	Date & Time Calibrated	Calibration Results	
pH			
Conductivity			
ORP			
DO			

Notes: (well condition, nearby activities or changes in land use, odors, problems, deviations from plan, etc.)
Develop by pumping 5 to 10 well volumes out - or until water clears after surging.

Appendix C

Laboratory Analytical Report

Analytical Laboratory Data Validation Check Sheet

Project Name: Kiddie Academy Project Number: 1581-21001-02

Date of Review: 05/05/2022 Lab. Name: F&BI Lab Batch ID #: 204371

Chain of Custody

- | | | |
|--|---|--|
| 1.) Are all requested analyses reported? | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no |
| 2.) Were the requested methods used? | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no |
| 3.) Trip blank submitted? | <input type="checkbox"/> yes | <input checked="" type="checkbox"/> no |
| 4.) Field blank submitted? | <input type="checkbox"/> yes | <input checked="" type="checkbox"/> no |

Timing

- | | | |
|--|---|--|
| 5.) Samples extracted within holding times? | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no |
| If not, are all discrepancies footnoted? | <input type="checkbox"/> yes | <input type="checkbox"/> no <input checked="" type="checkbox"/> NA |
| 6.) Analysis performed within holding times? | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no |
| If not, are all discrepancies footnoted? | <input type="checkbox"/> yes | <input type="checkbox"/> no <input checked="" type="checkbox"/> NA |

Quality Assurance/Quality Control

- | | | |
|--|---|--|
| 7.) Are the required reporting limits reported? (MRLs vs MDLs/PQLs) | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no |
| 8.) Are all reported values above either MRL or MDL? | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no |
| 9.) Are all values between the MDL & PQL tagged as trace? | <input type="checkbox"/> yes | <input type="checkbox"/> no <input checked="" type="checkbox"/> NA |
| 10a.) Are reporting limits raised for other reason besides high analyte conc.? | <input type="checkbox"/> yes | <input checked="" type="checkbox"/> no |
| 10b.) If so, are they footnoted? | <input type="checkbox"/> yes | <input type="checkbox"/> no <input checked="" type="checkbox"/> NA |
| 11.) Lab method blank completed? | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no |
| 12.) Lab, Field, or Trip Blank(s) report detections? | <input type="checkbox"/> yes | <input checked="" type="checkbox"/> no |
- If yes, indicate blank type, chemical(s) and concentration(s): _____

- | | | | |
|---|---|-----------------------------|-----------------------------|
| 13.) For inorganics and metals, is there one method blank for each analyte? | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no | <input type="checkbox"/> NA |
| If not, are all discrepancies footnoted? | <input type="checkbox"/> yes | <input type="checkbox"/> no | |
| 14.) For VOCs, is there one method blank for each day of analysis? | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no | <input type="checkbox"/> NA |
| If not, are all discrepancies footnoted? | <input type="checkbox"/> yes | <input type="checkbox"/> no | |
| 15.) For SVOC's, is there one method blank for each extraction batch? | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no | <input type="checkbox"/> NA |
| If not, are all discrepancies footnoted? | <input type="checkbox"/> yes | <input type="checkbox"/> no | |

Accuracy

- | | | | |
|--|---|-----------------------------|--|
| 16.) Is there a surrogate spike recovery for all VOC & SVOC samples? | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no | <input type="checkbox"/> NA |
| Do all surrogate spike recoveries meet accepted criteria? | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no | |
| If not, are all discrepancies footnoted? | <input type="checkbox"/> yes | <input type="checkbox"/> no | <input checked="" type="checkbox"/> NA |
| 17.) Is there a spike recovery for all Laboratory Control Samples? | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no | <input type="checkbox"/> NA |
| Do all LCS/LCSD spike recoveries meet accepted criteria? | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no | |
| If not, are all discrepancies footnoted? | <input type="checkbox"/> yes | <input type="checkbox"/> no | <input checked="" type="checkbox"/> NA |
| 18.) Are all LCS/LCSD RPDs within acceptable limits? | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no | <input type="checkbox"/> NA |
| If not, are all discrepancies footnoted? | <input type="checkbox"/> yes | <input type="checkbox"/> no | <input checked="" type="checkbox"/> NA |

Precision

- | | | | |
|---|---|-----------------------------|--|
| 19.) Are all matrix spike/matrix spike duplicate recoveries within acceptable limits? | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no | <input type="checkbox"/> NA |
| If not, are all discrepancies footnoted? | <input type="checkbox"/> yes | <input type="checkbox"/> no | <input checked="" type="checkbox"/> NA |
| 20.) Are all matrix spike/matrix spike duplicate RPDs within acceptable limits? | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no | <input type="checkbox"/> NA |
| If not, are all discrepancies footnoted? | <input type="checkbox"/> yes | <input type="checkbox"/> no | <input checked="" type="checkbox"/> NA |
| 21.) Do all RPD calculations for Field Duplicates meet accepted criteria? | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no | <input type="checkbox"/> NA |

Comments: _____

Initial Review By: CR

Final Review By: _____

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.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

May 5, 2022

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 April 22, 2022 from the 1581-21001-02, F&BI 204371 project. There are 43 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
ENW0505R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 22, 2022 by Friedman & Bruya, Inc. from the Evren Northwest 1581-21001-02, F&BI 204371 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Evren Northwest</u>
204371 -01	WELL-2-220421
204371 -02	WELL-3-220421
204371 -03	WELL-4-220421
204371 -04	WELL-5-220421
204371 -05	WELL-6-220421
204371 -06	WELL-7-220421
204371 -07	WELL-8-220421
204371 -08	WELL-9-220421
204371 -09	WELL-10-220421
204371 -10	WELL-11-220421
204371 -11	WELL-12-220421
204371 -12	WELL-13-220421
204371 -13	WELL-FD-220421
204371 -14	Trip Blank-220421

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/05/22
Date Received: 04/22/22
Project: 1581-21001-02, F&BI 204371
Date Extracted: 04/25/22
Date Analyzed: 04/25/22

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
USING METHOD NWTPH-Gx**
Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 51-134)
WELL-2-220421 204371-01	<100	71
WELL-3-220421 204371-02	<100	62
WELL-4-220421 204371-03	<100	66
WELL-5-220421 204371-04	<100	67
WELL-6-220421 204371-05	<100	63
WELL-7-220421 204371-06	<100	62
WELL-8-220421 204371-07	<100	65
WELL-9-220421 204371-08	<100	64
WELL-10-220421 204371-09	<100	68
WELL-11-220421 204371-10	<100	68
WELL-12-220421 204371-11	<100	71

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/05/22
Date Received: 04/22/22
Project: 1581-21001-02, F&BI 204371
Date Extracted: 04/25/22
Date Analyzed: 04/25/22

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
USING METHOD NWTPH-Gx**
Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 51-134)
WELL-13-220421 204371-12	<100	86
WELL-FD-220421 204371-13	<100	89
Method Blank 02-887 MB	<100	69

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/05/22
Date Received: 04/22/22
Project: 1581-21001-02, F&BI 204371
Date Extracted: 04/22/22
Date Analyzed: 04/22/22

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-D_x
Results Reported as ug/L (ppb)**

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 41-152)
WELL-2-220421 204371-01	<50	<250	122
WELL-3-220421 204371-02	<50	<250	122
WELL-4-220421 204371-03	<50	<250	132
WELL-5-220421 204371-04	<50	<250	138
WELL-6-220421 204371-05	<50	<250	129
WELL-7-220421 204371-06	<50	<250	128
WELL-8-220421 204371-07	<50	<250	138
WELL-9-220421 204371-08	<50	<250	129
WELL-10-220421 204371-09	<50	<250	120
WELL-11-220421 204371-10	130 x	<250	141
WELL-12-220421 204371-11	<50	<250	141
WELL-13-220421 204371-12	<50	<250	135

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/05/22
Date Received: 04/22/22
Project: 1581-21001-02, F&BI 204371
Date Extracted: 04/22/22
Date Analyzed: 04/22/22

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-D_x**
Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 41-152)
WELL-FD-220421 204371-13	<50	<250	128
Method Blank 02-983 MB	<50	<250	131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	WELL-12-220421	Client:	Evren Northwest
Date Received:	04/22/22	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/26/22	Lab ID:	204371-11
Date Analyzed:	04/26/22	Data File:	204371-11.047
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Cadmium	<1
Lead	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Evren Northwest
Date Received:	NA	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/26/22	Lab ID:	I2-308 mb2
Date Analyzed:	04/26/22	Data File:	I2-308 mb2.043
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Cadmium	<1
Lead	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	WELL-2-220421	Client:	Evren Northwest
Date Received:	04/22/22	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/25/22	Lab ID:	204371-01
Date Analyzed:	04/25/22	Data File:	042533.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	RF

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	78	126
Toluene-d8	96	84	115
4-Bromofluorobenzene	99	72	130

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
1,2-Dichloroethane (EDC)	<0.2
Benzene	<0.35
Toluene	<1
1,2-Dibromoethane (EDB)	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1
Isopropylbenzene	<1
n-Propylbenzene	<1
1,3,5-Trimethylbenzene	<1
1,2,4-Trimethylbenzene	<1
Naphthalene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	WELL-3-220421	Client:	Evren Northwest
Date Received:	04/22/22	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/25/22	Lab ID:	204371-02
Date Analyzed:	04/26/22	Data File:	042609.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	RF

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	78	126
Toluene-d8	97	84	115
4-Bromofluorobenzene	95	72	130

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.02
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
Methyl t-butyl ether (MTBE)	<1
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<0.2
1,1,1-Trichloroethane	<1
Benzene	<0.35
Trichloroethene	<0.5
Toluene	<1
Tetrachloroethene	<1
1,2-Dibromoethane (EDB)	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1
Isopropylbenzene	<1
n-Propylbenzene	<1
1,3,5-Trimethylbenzene	<1
1,2,4-Trimethylbenzene	<1
Naphthalene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	WELL-4-220421	Client:	Evren Northwest
Date Received:	04/22/22	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/25/22	Lab ID:	204371-03
Date Analyzed:	04/26/22	Data File:	042610.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	RF

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	113	78	126
Toluene-d8	97	84	115
4-Bromofluorobenzene	102	72	130

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.02
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
Methyl t-butyl ether (MTBE)	<1
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<0.2
1,1,1-Trichloroethane	<1
Benzene	<0.35
Trichloroethene	<0.5
Toluene	<1
Tetrachloroethene	<1
1,2-Dibromoethane (EDB)	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1
Isopropylbenzene	<1
n-Propylbenzene	<1
1,3,5-Trimethylbenzene	<1
1,2,4-Trimethylbenzene	<1
Naphthalene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	WELL-5-220421	Client:	Evren Northwest
Date Received:	04/22/22	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/25/22	Lab ID:	204371-04
Date Analyzed:	04/29/22	Data File:	042941.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	WE

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	85	117
Toluene-d8	98	88	112
4-Bromofluorobenzene	102	90	111

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
1,2-Dichloroethane (EDC)	<0.2
Benzene	<0.35
Toluene	<1
1,2-Dibromoethane (EDB)	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1
Isopropylbenzene	<1
n-Propylbenzene	<1
1,3,5-Trimethylbenzene	<1
1,2,4-Trimethylbenzene	<1
Naphthalene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	WELL-6-220421	Client:	Evren Northwest
Date Received:	04/22/22	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/25/22	Lab ID:	204371-05
Date Analyzed:	04/25/22	Data File:	042535.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	RF

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	108	78	126
Toluene-d8	94	84	115
4-Bromofluorobenzene	96	72	130

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
1,2-Dichloroethane (EDC)	<0.2
Benzene	<0.35
Toluene	<1
1,2-Dibromoethane (EDB)	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1
Isopropylbenzene	<1
n-Propylbenzene	<1
1,3,5-Trimethylbenzene	<1
1,2,4-Trimethylbenzene	<1
Naphthalene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	WELL-7-220421	Client:	Evren Northwest
Date Received:	04/22/22	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/25/22	Lab ID:	204371-06
Date Analyzed:	04/25/22	Data File:	042536.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	RF

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	105	78	126
Toluene-d8	98	84	115
4-Bromofluorobenzene	96	72	130

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
1,2-Dichloroethane (EDC)	<0.2
Benzene	<0.35
Toluene	<1
1,2-Dibromoethane (EDB)	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1
Isopropylbenzene	<1
n-Propylbenzene	<1
1,3,5-Trimethylbenzene	<1
1,2,4-Trimethylbenzene	<1
Naphthalene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	WELL-8-220421	Client:	Evren Northwest
Date Received:	04/22/22	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/25/22	Lab ID:	204371-07
Date Analyzed:	04/25/22	Data File:	042537.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	RF

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	78	126
Toluene-d8	100	84	115
4-Bromofluorobenzene	101	72	130

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
1,2-Dichloroethane (EDC)	<0.2
Benzene	<0.35
Toluene	<1
1,2-Dibromoethane (EDB)	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1
Isopropylbenzene	<1
n-Propylbenzene	<1
1,3,5-Trimethylbenzene	<1
1,2,4-Trimethylbenzene	<1
Naphthalene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	WELL-9-220421	Client:	Evren Northwest
Date Received:	04/22/22	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/25/22	Lab ID:	204371-08
Date Analyzed:	04/25/22	Data File:	042538.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	RF

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	78	126
Toluene-d8	100	84	115
4-Bromofluorobenzene	102	72	130

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
1,2-Dichloroethane (EDC)	<0.2
Benzene	<0.35
Toluene	<1
1,2-Dibromoethane (EDB)	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1
Isopropylbenzene	<1
n-Propylbenzene	<1
1,3,5-Trimethylbenzene	<1
1,2,4-Trimethylbenzene	<1
Naphthalene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	WELL-10-220421	Client:	Evren Northwest
Date Received:	04/22/22	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/25/22	Lab ID:	204371-09
Date Analyzed:	04/26/22	Data File:	042611.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	RF

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	78	126
Toluene-d8	94	84	115
4-Bromofluorobenzene	86	72	130

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.02
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
Methyl t-butyl ether (MTBE)	<1
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<0.2
1,1,1-Trichloroethane	<1
Benzene	<0.35
Trichloroethene	<0.5
Toluene	<1
Tetrachloroethene	<1
1,2-Dibromoethane (EDB)	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1
Isopropylbenzene	<1
n-Propylbenzene	<1
1,3,5-Trimethylbenzene	<1
1,2,4-Trimethylbenzene	<1
Naphthalene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	WELL-11-220421	Client:	Evren Northwest
Date Received:	04/22/22	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/25/22	Lab ID:	204371-10
Date Analyzed:	04/25/22	Data File:	042539.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	RF

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	112	78	126
Toluene-d8	99	84	115
4-Bromofluorobenzene	97	72	130

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
1,2-Dichloroethane (EDC)	<0.2
Benzene	<0.35
Toluene	<1
1,2-Dibromoethane (EDB)	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1
Isopropylbenzene	<1
n-Propylbenzene	<1
1,3,5-Trimethylbenzene	<1
1,2,4-Trimethylbenzene	<1
Naphthalene	39

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	WELL-12-220421	Client:	Evren Northwest
Date Received:	04/22/22	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/25/22	Lab ID:	204371-11
Date Analyzed:	04/25/22	Data File:	042540.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	RF

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	78	126
Toluene-d8	98	84	115
4-Bromofluorobenzene	96	72	130

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
1,2-Dichloroethane (EDC)	<0.2
Benzene	<0.35
Toluene	<1
1,2-Dibromoethane (EDB)	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1
Isopropylbenzene	<1
n-Propylbenzene	<1
1,3,5-Trimethylbenzene	<1
1,2,4-Trimethylbenzene	<1
Naphthalene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	WELL-13-220421	Client:	Evren Northwest
Date Received:	04/22/22	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/25/22	Lab ID:	204371-12
Date Analyzed:	04/25/22	Data File:	042541.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	RF

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	106	78	126
Toluene-d8	98	84	115
4-Bromofluorobenzene	101	72	130

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
1,2-Dichloroethane (EDC)	<0.2
Benzene	<0.35
Toluene	<1
1,2-Dibromoethane (EDB)	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1
Isopropylbenzene	<1
n-Propylbenzene	<1
1,3,5-Trimethylbenzene	<1
1,2,4-Trimethylbenzene	<1
Naphthalene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	WELL-FD-220421	Client:	Evren Northwest
Date Received:	04/22/22	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/25/22	Lab ID:	204371-13
Date Analyzed:	04/26/22	Data File:	042612.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	RF

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	106	78	126
Toluene-d8	96	84	115
4-Bromofluorobenzene	96	72	130

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.02
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
Methyl t-butyl ether (MTBE)	<1
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<0.2
1,1,1-Trichloroethane	<1
Benzene	<0.35
Trichloroethene	<0.5
Toluene	<1
Tetrachloroethene	<1
1,2-Dibromoethane (EDB)	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1
Isopropylbenzene	<1
n-Propylbenzene	<1
1,3,5-Trimethylbenzene	<1
1,2,4-Trimethylbenzene	<1
Naphthalene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	Trip Blank-220421	Client:	Evren Northwest
Date Received:	04/22/22	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/25/22	Lab ID:	204371-14
Date Analyzed:	04/25/22	Data File:	042542.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	RF

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	107	78	126
Toluene-d8	102	84	115
4-Bromofluorobenzene	98	72	130

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	<1
1,2-Dichloroethane (EDC)	<0.2
Benzene	<0.35
Toluene	<1
1,2-Dibromoethane (EDB)	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1
Isopropylbenzene	<1
n-Propylbenzene	<1
1,3,5-Trimethylbenzene	<1
1,2,4-Trimethylbenzene	<1
Naphthalene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	Method Blank	Client:	Evren Northwest
Date Received:	Not Applicable	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/25/22	Lab ID:	02-984 mb
Date Analyzed:	04/25/22	Data File:	042507.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	RF

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	78	126
Toluene-d8	101	84	115
4-Bromofluorobenzene	101	72	130

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.02
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
Methyl t-butyl ether (MTBE)	<1
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<0.2
1,1,1-Trichloroethane	<1
Benzene	<0.35
Trichloroethene	<0.5
Toluene	<1
Tetrachloroethene	<1
1,2-Dibromoethane (EDB)	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1
Isopropylbenzene	<1
n-Propylbenzene	<1
1,3,5-Trimethylbenzene	<1
1,2,4-Trimethylbenzene	<1
Naphthalene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	WELL-2-220421	Client:	Evren Northwest
Date Received:	04/22/22	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/25/22	Lab ID:	204371-01 1/2
Date Analyzed:	04/26/22	Data File:	042615.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	32	10	60
Phenol-d6	28	10	49
Nitrobenzene-d5	82	15	144
2-Fluorobiphenyl	85	25	128
2,4,6-Tribromophenol	87	10	142
Terphenyl-d14	110	41	138

Compounds:	Concentration ug/L (ppb)
Benz(a)anthracene	<0.04
Chrysene	<0.04
Benzo(a)pyrene	<0.04
Benzo(b)fluoranthene	<0.04
Benzo(k)fluoranthene	<0.04
Indeno(1,2,3-cd)pyrene	<0.04
Dibenz(a,h)anthracene	<0.04

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	WELL-3-220421	Client:	Evren Northwest
Date Received:	04/22/22	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/25/22	Lab ID:	204371-02 1/2
Date Analyzed:	04/26/22	Data File:	042616.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	34	10	60
Phenol-d6	27	10	49
Nitrobenzene-d5	88	15	144
2-Fluorobiphenyl	88	25	128
2,4,6-Tribromophenol	83	10	142
Terphenyl-d14	108	41	138

Compounds:	Concentration ug/L (ppb)
Benz(a)anthracene	<0.04
Chrysene	<0.04
Benzo(a)pyrene	<0.04
Benzo(b)fluoranthene	<0.04
Benzo(k)fluoranthene	<0.04
Indeno(1,2,3-cd)pyrene	<0.04
Dibenz(a,h)anthracene	<0.04

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	WELL-4-220421	Client:	Evren Northwest
Date Received:	04/22/22	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/25/22	Lab ID:	204371-03 1/2
Date Analyzed:	04/26/22	Data File:	042617.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	40	10	60
Phenol-d6	30	10	49
Nitrobenzene-d5	94	15	144
2-Fluorobiphenyl	92	25	128
2,4,6-Tribromophenol	91	10	142
Terphenyl-d14	112	41	138

Compounds:	Concentration ug/L (ppb)
Benz(a)anthracene	<0.04
Chrysene	<0.04
Benzo(a)pyrene	<0.04
Benzo(b)fluoranthene	<0.04
Benzo(k)fluoranthene	<0.04
Indeno(1,2,3-cd)pyrene	<0.04
Dibenz(a,h)anthracene	<0.04

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	WELL-5-220421	Client:	Evren Northwest
Date Received:	04/22/22	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/25/22	Lab ID:	204371-04 1/2
Date Analyzed:	04/26/22	Data File:	042618.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	40	10	60
Phenol-d6	30	10	49
Nitrobenzene-d5	86	15	144
2-Fluorobiphenyl	85	25	128
2,4,6-Tribromophenol	94	10	142
Terphenyl-d14	113	41	138

Compounds:	Concentration ug/L (ppb)
Benz(a)anthracene	<0.04
Chrysene	<0.04
Benzo(a)pyrene	<0.04
Benzo(b)fluoranthene	<0.04
Benzo(k)fluoranthene	<0.04
Indeno(1,2,3-cd)pyrene	<0.04
Dibenz(a,h)anthracene	<0.04

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	WELL-6-220421	Client:	Evren Northwest
Date Received:	04/22/22	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/25/22	Lab ID:	204371-05 1/2
Date Analyzed:	04/26/22	Data File:	042619.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	34	10	60
Phenol-d6	26	10	49
Nitrobenzene-d5	88	15	144
2-Fluorobiphenyl	88	25	128
2,4,6-Tribromophenol	85	10	142
Terphenyl-d14	107	41	138

Compounds:	Concentration ug/L (ppb)
Benz(a)anthracene	<0.04
Chrysene	<0.04
Benzo(a)pyrene	<0.04
Benzo(b)fluoranthene	<0.04
Benzo(k)fluoranthene	<0.04
Indeno(1,2,3-cd)pyrene	<0.04
Dibenz(a,h)anthracene	<0.04

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	WELL-7-220421	Client:	Evren Northwest
Date Received:	04/22/22	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/25/22	Lab ID:	204371-06 1/2
Date Analyzed:	04/26/22	Data File:	042620.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	14	10	60
Phenol-d6	23	10	49
Nitrobenzene-d5	46	15	144
2-Fluorobiphenyl	74	25	128
2,4,6-Tribromophenol	89	10	142
Terphenyl-d14	113	41	138

Compounds:	Concentration ug/L (ppb)
Benz(a)anthracene	<0.04
Chrysene	<0.04
Benzo(a)pyrene	<0.04
Benzo(b)fluoranthene	<0.04
Benzo(k)fluoranthene	<0.04
Indeno(1,2,3-cd)pyrene	<0.04
Dibenz(a,h)anthracene	<0.04

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	WELL-8-220421	Client:	Evren Northwest
Date Received:	04/22/22	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/25/22	Lab ID:	204371-07 1/2
Date Analyzed:	04/26/22	Data File:	042621.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	39	10	60
Phenol-d6	28	10	49
Nitrobenzene-d5	87	15	144
2-Fluorobiphenyl	80	25	128
2,4,6-Tribromophenol	85	10	142
Terphenyl-d14	111	41	138

Compounds:	Concentration ug/L (ppb)
Benz(a)anthracene	<0.04
Chrysene	<0.04
Benzo(a)pyrene	<0.04
Benzo(b)fluoranthene	<0.04
Benzo(k)fluoranthene	<0.04
Indeno(1,2,3-cd)pyrene	<0.04
Dibenz(a,h)anthracene	<0.04

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	WELL-9-220421	Client:	Evren Northwest
Date Received:	04/22/22	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/25/22	Lab ID:	204371-08 1/2
Date Analyzed:	04/26/22	Data File:	042622.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	29	10	60
Phenol-d6	27	10	49
Nitrobenzene-d5	80	15	144
2-Fluorobiphenyl	84	25	128
2,4,6-Tribromophenol	82	10	142
Terphenyl-d14	111	41	138

Compounds:	Concentration ug/L (ppb)
Benz(a)anthracene	<0.04
Chrysene	<0.04
Benzo(a)pyrene	<0.04
Benzo(b)fluoranthene	<0.04
Benzo(k)fluoranthene	<0.04
Indeno(1,2,3-cd)pyrene	<0.04
Dibenz(a,h)anthracene	<0.04

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	WELL-10-220421	Client:	Evren Northwest
Date Received:	04/22/22	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/25/22	Lab ID:	204371-09 1/2
Date Analyzed:	04/26/22	Data File:	042623.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	24	10	60
Phenol-d6	22	10	49
Nitrobenzene-d5	69	15	144
2-Fluorobiphenyl	76	25	128
2,4,6-Tribromophenol	82	10	142
Terphenyl-d14	108	41	138

Compounds:	Concentration ug/L (ppb)
Benz(a)anthracene	<0.04
Chrysene	<0.04
Benzo(a)pyrene	<0.04
Benzo(b)fluoranthene	<0.04
Benzo(k)fluoranthene	<0.04
Indeno(1,2,3-cd)pyrene	<0.04
Dibenz(a,h)anthracene	<0.04

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	WELL-11-220421	Client:	Evren Northwest
Date Received:	04/22/22	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/25/22	Lab ID:	204371-10 1/2
Date Analyzed:	04/26/22	Data File:	042624.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	21	10	60
Phenol-d6	21	10	49
Nitrobenzene-d5	72	15	144
2-Fluorobiphenyl	73	25	128
2,4,6-Tribromophenol	88	10	142
Terphenyl-d14	111	41	138

Compounds:	Concentration ug/L (ppb)
Benz(a)anthracene	<0.04
Chrysene	<0.04
Benzo(a)pyrene	<0.04
Benzo(b)fluoranthene	<0.04
Benzo(k)fluoranthene	<0.04
Indeno(1,2,3-cd)pyrene	<0.04
Dibenz(a,h)anthracene	<0.04

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	WELL-12-220421	Client:	Evren Northwest
Date Received:	04/22/22	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/25/22	Lab ID:	204371-11 1/2
Date Analyzed:	04/26/22	Data File:	042610.D
Matrix:	Water	Instrument:	GCMS12
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	17	11	65
Phenol-d6	17	11	65
Nitrobenzene-d5	52	50	150
2-Fluorobiphenyl	64	44	108
2,4,6-Tribromophenol	65	10	140
Terphenyl-d14	101	50	150

Compounds:	Concentration ug/L (ppb)
Benz(a)anthracene	<0.04
Chrysene	<0.04
Benzo(a)pyrene	<0.04
Benzo(b)fluoranthene	<0.04
Benzo(k)fluoranthene	<0.04
Indeno(1,2,3-cd)pyrene	<0.04
Dibenz(a,h)anthracene	<0.04

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	WELL-13-220421	Client:	Evren Northwest
Date Received:	04/22/22	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/25/22	Lab ID:	204371-12 1/2
Date Analyzed:	04/26/22	Data File:	042611.D
Matrix:	Water	Instrument:	GCMS12
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	43	11	65
Phenol-d6	33	11	65
Nitrobenzene-d5	83	50	150
2-Fluorobiphenyl	88	44	108
2,4,6-Tribromophenol	85	10	140
Terphenyl-d14	103	50	150

Compounds:	Concentration ug/L (ppb)
Benz(a)anthracene	<0.04
Chrysene	<0.04
Benzo(a)pyrene	<0.04
Benzo(b)fluoranthene	<0.04
Benzo(k)fluoranthene	<0.04
Indeno(1,2,3-cd)pyrene	<0.04
Dibenz(a,h)anthracene	<0.04

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	WELL-FD-220421	Client:	Evren Northwest
Date Received:	04/22/22	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/25/22	Lab ID:	204371-13 1/2
Date Analyzed:	04/26/22	Data File:	042612.D
Matrix:	Water	Instrument:	GCMS12
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	20	11	65
Phenol-d6	20	11	65
Nitrobenzene-d5	62	50	150
2-Fluorobiphenyl	76	44	108
2,4,6-Tribromophenol	73	10	140
Terphenyl-d14	102	50	150

Compounds:	Concentration ug/L (ppb)
Benz(a)anthracene	<0.04
Chrysene	<0.04
Benzo(a)pyrene	<0.04
Benzo(b)fluoranthene	<0.04
Benzo(k)fluoranthene	<0.04
Indeno(1,2,3-cd)pyrene	<0.04
Dibenz(a,h)anthracene	<0.04

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	Method Blank	Client:	Evren Northwest
Date Received:	Not Applicable	Project:	1581-21001-02, F&BI 204371
Date Extracted:	04/25/22	Lab ID:	02-1025 mb
Date Analyzed:	04/26/22	Data File:	042609.D
Matrix:	Water	Instrument:	GCMS12
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	21	11	65
Phenol-d6	14	11	65
Nitrobenzene-d5	87	50	150
2-Fluorobiphenyl	90	44	108
2,4,6-Tribromophenol	80	10	140
Terphenyl-d14	108	50	150

Compounds:	Concentration ug/L (ppb)
Benz(a)anthracene	<0.04
Chrysene	<0.04
Benzo(a)pyrene	<0.04
Benzo(b)fluoranthene	<0.04
Benzo(k)fluoranthene	<0.04
Indeno(1,2,3-cd)pyrene	<0.04
Dibenz(a,h)anthracene	<0.04

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/05/22

Date Received: 04/22/22

Project: 1581-21001-02, F&BI 204371

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

Laboratory Code: 204371-01 (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	80	69-134

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/05/22

Date Received: 04/22/22

Project: 1581-21001-02, F&BI 204371

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-D_x**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	96	96	63-142	0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/05/22

Date Received: 04/22/22

Project: 1581-21001-02, F&BI 204371

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES
FOR TOTAL METALS USING EPA METHOD 6020B**

Laboratory Code: 204333-02 x10 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Cadmium	ug/L (ppb)	5	<10	83	96	75-125	15
Lead	ug/L (ppb)	10	<10	78	87	75-125	11

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Cadmium	ug/L (ppb)	5	96	80-120
Lead	ug/L (ppb)	10	93	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/05/22

Date Received: 04/22/22

Project: 1581-21001-02, F&BI 204371

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR VOLATILES BY EPA METHOD 8260D**

Laboratory Code: 204374-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent	Acceptance Criteria
				Recovery MS	
Vinyl chloride	ug/L (ppb)	10	0.021	105	50-150
Chloroethane	ug/L (ppb)	10	<1	95	50-150
1,1-Dichloroethene	ug/L (ppb)	10	<1	112	50-150
Methylene chloride	ug/L (ppb)	10	<5	148	50-150
trans-1,2-Dichloroethene	ug/L (ppb)	10	<1	137	50-150
1,1-Dichloroethane	ug/L (ppb)	10	<1	98	50-150
cis-1,2-Dichloroethene	ug/L (ppb)	10	<1	95	50-150
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	<0.2	101	50-150
1,1,1-Trichloroethane	ug/L (ppb)	10	<1	95	50-150
Trichloroethene	ug/L (ppb)	10	<0.5	100	50-150
Tetrachloroethene	ug/L (ppb)	10	<1	101	50-150
Methyl t-butyl ether (MTBE)	ug/L (ppb)	10	<1	129	50-150
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	<0.2	101	50-150
Benzene	ug/L (ppb)	10	<0.35	98	50-150
Toluene	ug/L (ppb)	10	<1	97	50-150
1,2-Dibromoethane (EDB)	ug/L (ppb)	10	<1	102	50-150
Ethylbenzene	ug/L (ppb)	10	<1	98	50-150
m,p-Xylene	ug/L (ppb)	20	<2	97	50-150
o-Xylene	ug/L (ppb)	10	<1	96	50-150
Isopropylbenzene	ug/L (ppb)	10	<1	97	50-150
n-Propylbenzene	ug/L (ppb)	10	<1	100	50-150
1,3,5-Trimethylbenzene	ug/L (ppb)	10	<1	97	50-150
1,2,4-Trimethylbenzene	ug/L (ppb)	10	<1	100	50-150
Naphthalene	ug/L (ppb)	10	<1	109	50-150

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/05/22

Date Received: 04/22/22

Project: 1581-21001-02, F&BI 204371

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR VOLATILES BY EPA METHOD 8260D**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	ug/L (ppb)	10	109	107	70-130	2
Chloroethane	ug/L (ppb)	10	89	99	70-130	11
1,1-Dichloroethene	ug/L (ppb)	10	109	108	70-130	1
Methylene chloride	ug/L (ppb)	10	107	105	43-134	2
trans-1,2-Dichloroethene	ug/L (ppb)	10	97	96	70-130	1
1,1-Dichloroethane	ug/L (ppb)	10	98	98	70-130	0
cis-1,2-Dichloroethene	ug/L (ppb)	10	96	95	70-130	1
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	99	99	70-130	0
1,1,1-Trichloroethane	ug/L (ppb)	10	99	97	70-130	2
Trichloroethene	ug/L (ppb)	10	97	95	70-130	2
Tetrachloroethene	ug/L (ppb)	10	98	97	70-130	1
Methyl t-butyl ether (MTBE)	ug/L (ppb)	10	95	94	70-130	1
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	99	99	70-130	0
Benzene	ug/L (ppb)	10	94	93	70-130	1
Toluene	ug/L (ppb)	10	95	95	70-130	0
1,2-Dibromoethane (EDB)	ug/L (ppb)	10	100	101	70-130	1
Ethylbenzene	ug/L (ppb)	10	98	98	70-130	0
m,p-Xylene	ug/L (ppb)	20	97	96	70-130	1
o-Xylene	ug/L (ppb)	10	98	97	70-130	1
Isopropylbenzene	ug/L (ppb)	10	99	99	70-130	0
n-Propylbenzene	ug/L (ppb)	10	99	99	70-130	0
1,3,5-Trimethylbenzene	ug/L (ppb)	10	101	97	70-130	4
1,2,4-Trimethylbenzene	ug/L (ppb)	10	102	100	70-130	2
Naphthalene	ug/L (ppb)	10	103	114	70-130	10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/05/22

Date Received: 04/22/22

Project: 1581-21001-02, F&BI 204371

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270E**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Benz(a)anthracene	ug/L (ppb)	5	97	99	70-130	2
Chrysene	ug/L (ppb)	5	99	99	70-130	0
Benzo(a)pyrene	ug/L (ppb)	5	105	106	70-130	1
Benzo(b)fluoranthene	ug/L (ppb)	5	103	105	70-130	2
Benzo(k)fluoranthene	ug/L (ppb)	5	103	102	70-130	1
Indeno(1,2,3-cd)pyrene	ug/L (ppb)	5	105	108	70-130	3
Dibenz(a,h)anthracene	ug/L (ppb)	5	111	112	70-130	1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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. 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 below the lowest calibration standard. 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.

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.

204371

SAMPLE CHAIN OF CUSTODY

04/22/22

AF V65

Report To Furven Northwest

Company Furven Northwest

Address Po Box 14488

City, State, ZIP Portland OR 97243

Phone 503 452-5561 Email lynn@furvennw.com

SAMPLERS (signature)

PROJECT NAME

1501-21001-02

PO #

INVOICE TO

REMARKS
* RSDM vials
*~~CAVANOX~~ PAMs
Project specific RIs? Yes / No

Page # _____ of _____

E04

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							Notes		
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082			
WELL-2-220421	01A-H	04/21/22	14:55 14:30	GW	8	X	X			X	X				
WELL-3-220421			14:30		8	X	X			X	X				
WELL-4-220421			13:30		8	X	X			X	X				
WELL-5-220421			13:00		8	X	X			X	X				
WELL-6-220421			11:19		8	X	X			X	X				
WELL-7-220421			12:24		8	X	X			X	X				
WELL-8-220421			9:55		8	X	X			X	X				
WELL-9-220421			11:35		8	X	X			X	X				
WELL-10-220421			12:07		8	X	X			X	X				
WELL-11-220421			12:45		8	X	X			X	X				

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by:

Dan Saylor

ENR

04/22/22

8:00

Received by:

Dhan Khan

FLBT

04/22/22

08:00

Relinquished by:

Dhan Khan

FLBT

04/22/22

08:00

Received by:

Dhan Khan

FLBT

04/22/22

08:00

Friedman & Bruya, Inc.
Ph. (206) 385-8282

Received by:

Dhan Khan

FLBT

04/22/22

08:00

mm

204371
Report to

Company EVEN NORTHWEST, INC

Address

City, State, ZIP

Phone _____ Email _____

SAMPLE CHAIN OF CUSTODY 04/22/22

Page # 2 of 2 For WIS

TURNAROUND TIME

Standard turnaround
 RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

Archive samples
 Other _____

Default: Dispose after 30 days

SAMPLERS (signature)

PO #

PROJECT NAME
1581-21001-02

REMARKS

INVOICE TO

Project specific RIs? - Yes / No

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes			
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082		C-Vocs	Total Cd+Pb	
WELL-12-220421	11A-4	04/21/22	10:26	GW	8	X	X		X	X						(P) per LG
WELL-13-220421	12		13:55	GW	8	X	X		X	X						4/25/22
WELL-EP-220421	13		8:50	GW	8	X	X		X	X						
Tr-p Blank-220421	14A-B			water	2				X							

Friedman & Bruya, Inc.
Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
	<u>Dan Sogka</u>	<u>ENW</u>	<u>04/22/21</u>	<u>8:00</u>
Relinquished by:				
Received by:	<u>John Pham</u>	<u>FB I</u>	<u>04/22/21</u>	<u>0800</u>
Relinquished by:				
Received by:				<u>400</u>