FOCUSED SURFACE MATERIAL INVESTIGATION

Decision Units DU10 and DU10-Plus

Portions of Blocks 3, 9, and 10 of Cathedral Park
W of N Bradford St between N Alta Avenue and
N Philadelphia Avenue
Portland, Oregon

Peninsula Iron Works
ODEQ ECSI#: 6480

Prepared for:

Peninsula Iron Works
PO BOX 83067
Portland, Oregon 97283-0067

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This

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PO Box 83607
Portland, OR 97283-0067

Issued November 25, 2024 *by:*

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List of Acronyms and Abbreviations

amsl	above mean seal level
A-1254	Aroclor 1254
A-1260	Aroclor 1260
bgs	below ground surface
Client	Peninsula Iron Works (PIW)
COIs	constituents of interest
DPT	direct-push technology
DRO	diesel-range organics
ENW	EVREN Northwest, Inc.
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Act
F&BI	Friedman & Bruya, Inc. (laboratory)
FSMI	Focused Surface Material Investigation
GS	grab sample
IS	incremental sample
ISM	Incremental Sampling Methodology
mg/Kg	milligrams per Kilogram
OAR	Oregon Administrative Rules
ODEQ	Oregon Department of Environmental Quality
PCBs	polychlorinated biphenyls
PID	photoionization detector
ppmv	parts per million by volume
QA/QC	quality assurance/quality control
RBCs	risk-based concentrations
RBDM	Risk-Based Decision Making for the Remediation of Contaminated Sites, ODEQ 2003 Guidance Document
ROW	Right-of-Way
RRO	residual (oil)-range organics
UPRR	Union Pacific Railroad

1.0 Introduction

On behalf of Peninsula Iron Works (PIW, client), EVREN Northwest, Inc. (ENW) performed a Focused Surface Material Investigation (FSMI) at portions of Cathedral Park located west of N Bradford Street between N Alta Avenue and N Philadelphia Avenue in Portland, Oregon (subject site; see Figures 1 and 2). PIW conducted the FSMI to further characterize and delineate polychlorinated biphenyl (PCBs) in surface soil in the portion of Cathedral Park west of the Union Pacific Railroad (UPRR) Right-of-Way (ROW), as requested by the Oregon Department of Environmental Quality (ODEQ).[1] The work follows the scope of work and procedures presented in ENW's work plan[2] which was approved by ODEQ prior to commencement of field activities.

This report presents soil sampling methods and results. Descriptions of site development history and previous sampling investigations are provided in previous ENW letters and reports.[3,4] A summary of recent investigations and/or removal actions in areas just east of the subject area is presented as background below. A site plan showing the primary features of the subject portion of Cathedral Park, UPRR ROW, and PIW's property is included in Figure 2.

1.1 Background

Based on prior investigations conducted by PIW, UPRR, the City of Portland, and ODEQ, ODEQ has found that PCBs are present in surface and subsurface soil on and adjacent to the PIW property. ODEQ also found that "bare soil contaminated with PCBs on and adjacent to the PIW property may be migrating offsite through stormwater transport." A State of Oregon Order directs PIW (in part) to conduct a "Soil Removal Action" in accordance with a Scope of Work outlined in Exhibit B to the Order. The Scope of Work includes submission of a "Soil Excavation and/or Capping Work Plan"[2] detailing actions proposed to reduce exposure of workers and community members and to minimize the offsite transport of PCBs in stormwater. The Removal Action areas include (as detailed in Attachment A to Exhibit B of the Order) the portions of the N Bradford St right-of-way (exclusive of the UPRR right-of-way) adjoining the PIW property, a strip of exposed soil immediately southeast of PIW's building, and a nearby portion of Cathedral Park designated by ODEQ as "DU10" (see Figure 3)

ODEQ Soil Sampling. On May 18, 2022, in accordance with ODEQ's *Site-Specific Work Plan*,[5] ODEQ's contractor collected surface soil samples from a depth of 0-2 inches using incremental sampling methodology (ISM) from 11 decision units (DU01-DU08 and DU10-DU12) and one composite sample

[1] ODEQ, October 11, 2021. *Re: PCB Area Wide – N Bradford St. ROW, Portland, Oregon; ECSI ID#6480.*

[2] ENW, July 28, 2023. *Focused Removal Action Work Plan*, N Bradford Street / Union Pacific Railroad Right-of-Way, Portland, Oregon, ODEQ ECSI#: 6480, Prepared For: Peninsula Iron Works, Attn: Dave Johnson, PO Box 83067, Portland, Oregon 97283-0067.

[3] ENW. November 17, 2021. Letter of response to ODEQ. UPRR

[4] ENW, January 10, 2024. *Focused Soil Removal Action and Soil Cap Installation: Decision Unit EDU02*, North Bradford Street / Union Pacific Railroad Right-of-Way, Portland, Oregon, ODEQ ECSI #6480, Prepared for: Peninsula Iron Works, PO Box 83067, Portland, Oregon 97283-0067.

[5] Maul Foster Alongi, May 12, 2022. *Site-Specific Assessment Work Plan, Cathedral Park Site*, DEQ Task Order 73-18-25, Prepared for Oregon Department of Environmental Quality.

(COMP09). Samples were analyzed for diesel-range organics (DRO), residual (oil)-range organics (RRO), and total PCBs (as Aroclors). DRO was only detected in DU01 located northeast of the UPRR ROW and south of the St. Johns Bridge. Reported concentrations of total PCBs [as Aroclor 1254 (A-1254) and Aroclor 1260] ranged from 0.0374 milligrams per Kilogram (mg/Kg) in DU07 to an estimated concentration of 3.45 mg/Kg from DU10 located on the west side of the UPRR ROW and the parking lot north of the bridge and south of PIW's property. Composite sample COMP09 (est. total PCBs of 2.67 mg/Kg) and incremental sample DU10 were the only samples that exceeded ODEQ's recreational use soil risk-based concentration (RBC) of 0.52 mg/Kg for the ingestion, inhalation, and dermal contact pathway. See Figure 3 for PCB totals plotted by decision unit location, and Table 1 (attached) for analytical results.

1.2 Purpose

The purpose of this FSMI was to provide a better understanding of the lateral and vertical distribution of PCB-impacted soils in Decision Units DU10 and DU10-Plus in Cathedral Park.

1.3 Scope

The FSMI scope of work for Action Areas DU10 and DU10-Plus is outlined in ENW's *Focused Removal Action Work Plan*[2] included the following tasks:

- **Land Surveys**. Completed a laser level survey followed by a professional land survey of the subject area (DU10 and DU10-Plus) and adjacent areas (Figure 4). The professional land survey was ordered to confirm and refine the laser level survey upon which the sampling plan was based.
- **Setup Decision Units.** Based on the survey results, divided the unpaved areas comprising DU10 and DU10-Plus into sections based on surface topography, i.e., from areas of higher (DU10-a, DU10-Plus-a, and DU10-Plus-b) to progressively lower elevations (DU10-b through DU10-f) as shown in the sample location diagram in Figure 4.
- **Utility Locates and Boring Clearance.** Called in a public utility locates and ordered a private utility locates to clear unpaved areas of the Cathedral Park Action Area to clear proposed sampling points of subsurface utilities.
- **Initial Sampling Phase (July 24-25, 2024).** Collected incremental surface soil samples from eight decision units, namely DU10-a through DU10-f, DU10-Plus-a, and DU10-Plus-b (Figure 5) using a decontaminated stainless steel push probe and hand auger. Collected 50 soil increments of approximately 40 grams mass each at an initial sampling depth of 0.2-ft below ground surface (bgs).
- **Second Sampling Phase (August 21-22, 2024)**
    - Collected follow-up incremental surface soil samples consisting of 50 increments of 40-grams each from the same eight DUs using a decontaminated stainless-steel spade and hand auger at a sampling depth of 1.0-ft bgs.
    - Collected discrete grab sample GS01 from DU10-Plus-b and discrete grab sample GS02 from DU10-a, with each at a sampling depth of 1.0-ft bgs. Split GS01 and GS02 into fine and coarse fractions, which were analyzed separately.

- **Third Sampling Phase (September 24-25, and 27, 2024)**
    - Collected follow-up incremental surface soil samples consisting of 50 increments of 40-grams each from DU10-a, DU10-b, DU10-Plus-a, and DU10-Plus-b using a decontaminated stainless-steel spade and a 1-inch manual stainless-steel direct-push technology (DPT) push probe at a sampling depth of 2.0-ft bgs.
    - Collected discrete grab samples GS03 and GS04 from DU10-Plus-a, with each at a sampling depth of 2.0-ft bgs.
- **Laboratory Analyses.** Analyzing all ISM and discrete soil samples for total PCBs (as Aroclors) using an Oregon-certified laboratory.
- **Data Evaluation.** Tabulated and validated the laboratory analytical reports. Evaluated analytical results of soil samples as outline in the ODEQ-approved work plan.[2]
- **Report Preparation**. Prepared this report documenting site conditions.

ISM and grab sample locations are shown in Figure 5.

2.0 Site Setting

2.1 Location, Land Use, and Site Description

PIW's property is identified by Multnomah County as Tax Lot 1N1W12BB -5800 (R191830 of Block 3), consisting of about 0.46 acres of industrial land (zoned EG_1, *General Employment)*. West of PIW's property and UPPR's ROW are decision units DU10 and DU10-Plus, located within a portion of Cathedral Park, that sampling of which is the subject of this FSMI.

Nearby surrounding properties have a history of heavy industrial use having more recently transitioned to a mix of open space, commercial, residential, and industrial uses.

2.2 Topography

Decision units DU10 and DU10-Plus in Cathedral Park are located within the U.S. Geological Survey Portland 7.5-minute quadrangle. The ground surface in the subject site vicinity slopes moderately to the southwest from an elevation of approximately 33 ft above mean seal level (amsl) at the western edge of PIW's property to an elevation of approximately 23 ft amsl at the southwest corner of the surveyed area as shown in Figure 4. Regional surface topography drops gradually to an elevation of approximately 10 feet above mean sea level at the Willamette River, located 900 feet west of the subject property.

An oblique aerial photograph from 1964 (Figure 2.1 below) shows that the land area immediately west of N Bradford St that is the subject of this investigation.

Figure 2.1 1964 Historical Oblique Photograph (Showing the Subject Area)

2.3 Geologic Setting

The site is located within the Portland Basin of Oregon. The Portland Basin is a topographic low area around the confluence of the Columbia and Willamette Rivers, between the Cascade Mountains to the east and the Portland Hills and Tualatin Mountains to the west. The Portland Basin is floored by a blanket of sediments deposited by the late Pleistocene catastrophic Missoula Floods and by younger deposits of the active rivers and creeks. Also within the basin are slightly older highlands of basaltic lavas which protrude from below the younger sediments. Geologic mapping shows the site is located on fine-grained facies of the Pleistocene catastrophic flood deposits, which consist of fine sand and silt in this area.

2.4 Hydrogeologic Setting

2.4.1 Surface Water

According to the Federal Emergency Management Act (FEMA) Flood Panel Map 410183, the PIW property lies near the margin of the 100- and 500-year flood plain of the Willamette River. Willamette River flood waters have periodically lapped onto the western part of the subject site according to Sanborn maps and historical aerial photographs.

Storm water periodically settles along the western side of PIW's building in a localized area of topographic relief (Figure 4), as documented in a City of Portland Industrial Source Control Memo to PIW, dated January 19, 2012.

The topographic map in Figure 4 and topographic profiles in Appendix B confirm the topographic low area where storm water collects along the west side of PIW's building. When enough storm water pools to top the slight topographic rise within UPRR's ROW, topography suggests storm water will either follow a westward path south to southwestward of the St. Johns pump station around the pump station. Thus, DU10-a on the southwest side of the City's pump station is not in the flow path of storm water collecting on the west side of PIW's building.

2.4.2 Ground Water

According to nearby water well logs obtained from Oregon Water Resources Department, depth-to-ground water in the vicinity is greater than 30 feet. Based on regional topography, ground-water flow direction should be toward the west or southwest, towards the Willamette River.

3.0 Methods and Procedures

This section describes methods and procedures of the field investigation activities completed during this FSMI of decision units DU10 and DU10-Plus. Field activities were conducted between July 10, 2024, and September 27, 2024. Field work was photographically logged and a photographic log of field activities is presented in Appendix B. Figure 5 presents the action areas sampled, which are spilt into eight decision units.

3.1 Field Preparation

Prior to subsurface field activities, ENW placed a call with One Call Utility Notification Service to identify and locate all public utilities near each of the sampling locations. All workers reviewed the safety procedures and signed the site-specific Health and Safety Plan prior to initiating all field work. Additionally, a permit was acquired from the City of Portland for sampling portions of Cathedral Park.

3.2 Incremental Surface Soil Sampling

ENW used ISM to conduct representative sampling of surface soil within specific exposed landscaped (grass and mulched beds) within portions of Cathedral Park identified as decision units DU10-a, DU10-b, DU10-c, DU10-d, DU10-e, DU10-f, DU10-Plus-a, and DU10-Plus-b. The ISM protocol is described in the ODEQ-approved Work Plan[2] and the locations specified for sampling are illustrated in Figure 5.

Each decision unit was divided into a systematic grid consisting of 50 grid points, upon which the soil incremental sample locations were centered. Soil increments (soil samples of equal mass of approximately 40-grams) were collected from the center node of each grid (grid-center systematic sampling) resulting in the collection of 50 soil increments from each of the eight decision units. Grid locations were distributed evenly within each decision unit to ensure that the entire decision unit was equally represented in the final multi-increment sample.

Phase 1 (0.2-ft sample). Surface grass and bedding mulch was cleared using a stainless-steel spade, and a decontaminated stainless-steel DPT push probe or stainless-steel hand auger was used to collect soil increments of 40-grams mass each from 50 grid-centered locations in each of the eight decision units. All grain sizes were captured to ensure no bias in particle size, except that, per ASTM's ISM guidance, wood debris and larger rocks were removed prior to combining in the sample increments in a labeled laboratory-provided 1-gallon glass sample container with Teflon-lined lid. To obtain meaningful evaluation against previous findings, soil increments from the eight decision units were collected at the same depth of 0 to 0.2 feet as that of previous sampling by the ODEQ.[1]

Phase 2 (1.0-ft ISM sample). After evaluating the analytical results of the 0.2-ft ISM samples, deeper 1.0-foot depth incremental samples were collected from DU10-a, DU10-b, DU10-Plus-a, and DU10-Plus-b, which detected total PCBs at concentrations greater than ODEQ's RBC of 0.52 mg/Kg for recreational user. Deeper 1.0-ft ISM samples were also collected from DU10-c through DU10-f, in which total PCBs concentrations were less than ODEQ's RBC. ENW followed the same general methodology as during the first phase, except that grid-centered sampling locations were off-set slightly from the 0.2-ft sampling event.

- **GS01 (1.0-ft grab sample)**. Discrete grab sample GS01 was collected at 1-ft-depth at the south end of DU10-Plus-b where coarse sand was encountered along with solid waste in the fill soil. Sample GS01 was separated into a fine and coarse fraction using a sieve. The coarse fraction (DU10-Plus-b-GS01-1.0) was submitted separately for analysis from the fine fraction (DU10-Plus-b-GS01-1.0-fines).
- **GS02 (1.0-ft grab sample)**. Discrete grab sample GS02 was collected at 1-ft depth at the east side of DU10-a where a coarse sand, similar to the material at DU10-Plus-b, was encountered in the fill soil. Sample GS02 was run through a sieve. The coarse fraction (DU10-a-GS02-1.0) that was retained by the sieve was submitted separately for analysis from the fine fraction (DU10-a-GS02-1.0-fines) that passed through the sieve.

Phase 3 (2.0-ft ISM sample). After evaluating the analytical results of the 1.0-ft ISM samples, deeper 2.0-ft incremental samples were collected from DU10-a, DU10-b, DU10-Plus-a, and DU10-Plus-b, which detected total PCBs at concentrations greater than ODEQ's recreation user RBC. ENW followed the same general methodology as during the second phase, except that grid-centered sampling locations were off-set slightly from the 0.2- and 1.0-ft sampling event.

- **GS03 (2.0-ft grab sample)**. Discrete grab sample GS03 was collected at 2-ft-depth at the north end of DU10-Plus-a where metal was mixed in with the dark-colored fill soil.
- **GS04 (2.0-ft grab sample)**. Discrete grab sample GS04 was collected at 2-ft depth at the south end of DU10-Plus-a where moist, gray-stained fill soil was encountered.

Incremental samples were labeled using the naming convention:

"DU10-alpha-IS-d-yymmdd", where

"alpha" = letters of the alphabet from "a" to "f"

"IS" = incremental sample

"d" = depth of sampling in feet, e.g., 0.2-ft

"yymmdd" = year, month, and day, e.g., 240725 or July 25, 2024.

"Plus" was added after DU10 for two incremental samples east of DU10-a and DU10-b, e.g., DU10-Plus-a, and DU10-Plus-b. As a note, sampling personnel did not include "IS" in the 1.0- or 2.0-ft incremental samples collected from DU10-Plus-a or DU10-Plus-b, though these samples were collected using ISM methodology.

Grab samples (GS) were labeled using the same naming convention, except that "GS##" replaces "IS", and ## is sequential from 01 to 04, e.g., DU10-a-GS02-1.0. "fines" is appended to DU10-Plus-b-GS01-1.0 and DU10-a-GS02-1.0, in which the sample was separated into "fine" and "coarse" fractions and analyzed separately. The fine fraction is appended with "fines", to distinguish it from the coarse fraction which does not include an identifier.

Sampling personnel wore fresh Nitrile gloves, and all sampling equipment was decontaminated to prevent cross-contamination between the eight different decision units comprising DU10.

3.2.1 Field Quality Assurance/Quality Control Samples

Field Quality Assurance/Quality Control (QA/QC) samples were collected from decision units DU10 and DU10-Plus monitor whether equipment decontamination procedures are compromising sample integrity or validity of sample data.

- **Equipment Blanks:** Three equipment blanks were collected during the FSMI to assess the effectiveness of sampling equipment decontamination procedures and determine whether cross-contamination is affecting the integrity of the ISM samples. One equipment blank each was collected randomly during the three ISM sampling phases. After decontaminating the sampling tool, fresh distilled water was trickled over the tool surface, collected in a labeled laboratory provided sample bottle, and submitted to the laboratory for analysis of total PCBs as Aroclors.
- **Laboratory duplicates (ISM samples):** The laboratory analyzed an independent replicate of the processed ISM sample (replicate from the slab cake sample) to test the precision of the laboratory subsampling used for extraction and analysis.

3.2.2 ISM Shallow Borehole Completion and Management of Investigation Derived Waste

The shallow ISM borings were filled with clean sand. The soil cuttings from shallow ISM borings were placed in labeled closed-lid drums inside a locked fenced enclosure pending offsite disposal.

3.3 Analytical Methods

All discrete grab samples, incremental samples, and equipment blank rinsate samples were delivered to Friedman and Bruya, Inc. (F&BI) of Seattle, Washington for laboratory analysis for PCBs (as Aroclors). A copy of the laboratory analytical reports is included in Appendix C. Table 3-1 presents analytical methods used during this assessment.

Table 3-1. Analytical Methods

Analytical Method	Constituents of Interest	Soil	Water
EPA 8082A	Polychlorinated Biphenyls (PCBs)	✓ ISM samples from all sampling depths collected from DU10-a through DU10-f, DU10-Plus-a, and DU10-Plus-b. ✓ Discrete grab samples from all sampling depth collected from DU10-a, DU10-Plus-a, and DU10-Plus-b	✓ All equipment rinsate blanks collected during the three sampling phases

EPA = U.S. Environmental Protection Agency

3.4 Laboratory Sub-Sampling and Compositing

Prior to analysis, all incremental samples from DU10-a through DU10-f, DU10-Plus-a, and DU10-Plus-b were processed by F&BI according to incremental sampling methodology, as outlined in the approved work plan.[2]

3.5 Cleanup Standards and Other Numeric Criteria

Oregon's environmental cleanup rules (Oregon Administrative Rules [OAR] 340-122) establish the standards and procedures for the protection of current and future public health, safety and welfare, and the environment in the event of a release or threat of a release of a hazardous substance. In the event of a release of a hazardous substance, remedial actions shall be implemented to achieve:

- Acceptable risk levels defined in OAR 340-122-0115, as demonstrated by a residual risk assessment; or
- Numeric cleanup standards developed as part of an approved generic remedy identified or developed by the Department under OAR 340-122-0047, if applicable; or
- For areas where hazardous substances occur naturally (e.g., metals, etc.), the background level of the hazardous substances, if higher than those levels specified above.

Acceptable risk levels may be evaluated through conducting a site-specific risk assessment that calculates exposure point concentrations for specific exposure pathway receptor-scenarios or use generic for hazardous substances under ODEQ's Risk-Based Decision Making (RBDM) guideline to streamline the risk assessment process (see below).

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

ODEQ Risk-Based Concentrations. ODEQ has compiled default risk-based screening reference levels (RBDM guidance document) for common exposure-pathway receptor-scenarios that may be utilized in lieu of site-specific risk calculations (OAR 340-122-0115). In particular, the pre-calculated risk-based concentration (RBC) represents the concentration of a constituent of interest (COI) in the impacted medium (e.g., soil, ground water, or air) that potentially represents an unacceptable risk level.

The published RBCs represent a conservative default concentration of a COI in an impacted medium (e.g., soil, ground water, soil gas, or air).

- For carcinogens, the regulatory standard is represented by an excess cancer risk of one in one million ($1x10^{-6}$), and

- For non-carcinogens, this is represented by a Hazard Index of 1.

RBC exceedances typically trigger further investigation and potentially a human health risk assessment. Therefore, RBCs can be applied at sites as generic, conservative cleanup standards and are routinely used by ODEQ to determine if a site requires additional action. Site-specific parameters used in the equations to develop the RBCs are often adjusted to match actual conditions in developing site-specific cleanup levels.

RBCs are generally used to evaluate sampling analytical results as follows:

- Because ODEQ Generic RBCs are based on several conservative assumptions (e.g., duration and type of exposure), exceeding an RBC does not necessarily indicate that additional investigation or remediation is required. Rather, the exceedance of an RBC may indicate that additional investigation and evaluation, including consideration of site-specific information (e.g., current, and future land uses), may be necessary to determine if remediation or other actions are necessary. In many cases, it is not possible to determine whether unacceptable risks to human health and the environment are present, and require further action, until a risk assessment, including evaluation of current and reasonably likely land and water uses, is complete.

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

Site-Specific RBC for the Recreational User. ODEQ considers the recreational user to be at greatest risk of exposure to site contaminants based on current and future land use conditions. ODEQ has not developed generic RBCs recreational users. However, ODEQ staff have calculated a site-specific RBC for the dermal contact pathway using a set of conservative input values using risk equations provided in the OARs. ODEQ provided the RBCs in an email for this project. Based on discussion with ODEQ, the recreational RBC is an appropriate screening level for soil impacts. This investigation screens soils against the calculated dermal RBCs for the recreational user, as well as the generic RBCs for dermal contact by the occupational worker, construction worker, and excavation worker receptors.

4.0 Results

This section describes the results of the FSMI of DU10 and DU10-Plus, which included:

- Incremental surface soil sampling at the 0 to 0.2-ft and 1.0-ft depths from decision units DU10-a through DU10-f, DU10-Plus-a, and DU10-Plus-b.
- Incremental surface soil sampling of the 2.0-ft depth from DU10-ia, DU10-b, DU10-Plus-a, and DU10-Plus-b.
- Discrete grab sampling of soils at 1.0-ft depth from DU10-a and DU10-Plus-b, and discrete grab sampling of soils from DU10-Plus-a at 2.0-ft depth.

The results of laboratory analysis of the soil samples from incremental samples are summarized in Table 1 (following the Tables Tab after text).

4.1 Sample Locations and General Subsurface Conditions

Discrete and incremental samples were collected in November 2022 and January 2023, as summarized in Table 4-1.

Table 4-1. Summary of FSMI Soil Samples

Decision Unit	Date Sampled	Depth Sampled (feet below ground surface)	Location
DU10-a	7/24/2024	0.2	Northwest portion of DU10
	8/20/2024	1	
	9/24/2024	2	Northwest portion of DU10
	8/21/2024	1	Grab sample DU10-a-GS02-1.0 collected at the east side of DU10-a (coarse fraction).
	8/21/2024	1	Grab sample DU10-a-GS02-1.0-fines collected at the east side of DU10-a (fine fraction).
DU10-b	7/24/2024	0.2	East-center portion of DU10
	8/20/2024	1	
	9/24/2024	2	
DU10-c	7/24/2024	0.2	South of DU10-b
	8/21/2024	1	
DU10-d	7/24/2024	0.2	South of DU10-c
	8/21/2024	1	
DU10-e	7/24/2024	0.2	South of DU10-d (southwest most sub-DU in DU10)
	8/22/2024	1	
DU10-f	7/24/2024	0.2	South of DU10-b through DU-e (southern most sub-DU in DU10)
	8/22/2024	1	
DU10-Plus-a	7/25/2024	0.2	Southeast portion of DU10 adjoining railroad ROW
	8/20/2024	1	
	9/25/2024	2	
	9/27/2024	2	Grab sample DU10-Plus-a-GS03-2.0 collected at the north end of DU10-Plus-a
	9/27/2024	2	Grab sample DU10-Plus-a-GS04-2.0 collected at the south end of DU10-Plus-a
DU10-Plus-b	7/25/2024	0.2	Northeast portion of DU10 adjoining railroad ROW
	8/21/2024	1	
	9/23/2024	2	
	8/21/2024	1	Grab sample DU10-Plus-b-GS01-1.0 collected at the south end of DU10-Plus-b (coarse fraction).
	8/21/2024	1	Grab sample DU10-Plus-b-GS01-1.0-fines collected at the south end of DU10-Plus-b (fine fraction).

As per the work plan, ENW collected equipment blank rinsate samples. A list of QA/QC samples and phase of work are listed in Table 4-2.

Table 4-2. Summary of QA/QC Samples

Sample ID	Date Sampled	Depth Sampled (feet)	Location
RINSATE09	7/24/24	---	Equipment Blank from Phase 1
RINSATE10	8/20/24	---	Equipment Blank from Phase 2
RINSATE11	9/24/24	---	Equipment Blank from Phase 3

4.1.1 Surface and Subsurface Conditions

Surfaces of decision units DU10-a through DU10-f, DU10-Plus-a, and DU10-Plus-b consisted mostly of grass- or mulch/wood chipping bedding cover (up to 1.5-ft-thick). No sampling was conducted through asphalt or concrete surfaces. Field data suggest that surface soils (0-2-ft bgs) within the investigation areas DU10 and DU10-Plus consists of 2.0 or more feet of undocumented fill consisting of variable amounts of compacted silt and sand, with some gravel, with some fill material also containing broken concrete and asphalt debris, brick fragments, glass shards, and plastic pieces. Slag-like material up to 2-inches in diameter was recovered along with a dark-colored coarse sand at 1-ft-depth at the south end of DU10-Plus-b (GS01), and similar materials were recovered on the east side of DU10-a (GS02). Gray-stained sand was recovered at 2-ft depth at the north and south ends of DU10-Plus-a. Undocumented fill continued to the maximum depth explored (2.0-ft bgs).

No chemical-like odor or photoionization detector (PID) headspace readings above 0.5 parts per million by volume (ppmv) were detected in field headspace testing of surface soils.

4.2 Laboratory Analytical Results

A summary of the analytical results is provided below. Samples were generally received within required holding times, and analytical methods were performed within acceptable QA/QC criteria.

4.2.1 Polychlorinated Biphenyls

Aroclors are the most common commercial mixes of PCB congeners and were manufactured by Monsanto from about 1930 through 1979. The specific Aroclor name reflects the weight percent of chlorine in the mixture, i.e., A-1260 contains 60 weight percent chlorine in the mixture.

The uses of common Aroclors, i.e., A-1221, A-1232, A-1242, A-1248, A-1254, A-1260, A-1262, and A-1268, are listed in Table A-1 of ODEQ's PCB Fact Sheet.[6] A-1254 uses listed in ODEQ's Fact Sheet include transformers, capacitors, hydraulic fluids, vacuum pumps, synthetic resins, wax extenders, dedusting agents, inks, cutting oils, pesticide extenders, sealants, caulking compounds, polyvinyl chloride secondary plasticizers, styrene-butadiene co-polymers, ethylene vinyl acetate, and chlorinated rubber. A-1260 uses listed in ODEQ's Fact Sheet include transformers, hydraulic fluids, dedusting agents, polyvinyl chloride secondary plasticizers, polyester resins, and varnish. For purposes of comparing to ODEQ RBCs, detections of Aroclors were summed to provide an estimate of total PCBs.

0-0.2-ft Depth

- **Total PCBs**: concentrations range from 23 mg/Kg (DU10-a) to 0.236 mg/Kg (DU10-e). ODEQ's recreational user RBC is exceeded in ISM samples collected from decision units DU10-a, DU10-b, DU10-Plus-a and DU10-Plus-b.

1.0-ft Depth

- **Total PCBs**: concentrations range from 8.6 mg/Kg (DU10-b) to 0.055 mg/Kg (DU10-d). ODEQ's recreational user RBC is exceeded in ISM samples collected from decision units DU10-a, DU10-b,

[6] ODEQ. August 2003. Fact Sheet: Sources of Polychlorinated Biphenyls

DU10-Plus-a, and DU10-Plus-b, and grab samples GS01 (fine and coarse fractions) and GS02 (both fine and coarse fractions).

2.0-ft Depth

- **Total PCBs**: concentrations range from 0.85 mg/Kg (DU10-b) to 0.042 mg/Kg (DU10-Plus-b). ODEQ's recreational user RBC is exceeded in ISM samples collected from decision units DU10-a and DU10-b.

4.3 Quality Control

4.3.1 Standard Quality Assurance/Quality Control (QA/QC) Results

The laboratory data are generally suitable for the intended use of shallow soil delineation. Data validation check sheets are included with the analytical reports in Appendix C.

Quality Control Samples. Table 2 presents results of the equipment blank samples.

- **Equipment Blanks.** Equipment blanks were collected from non-dedicated sampling equipment during each of the three phases of sampling. Laboratory analysis of equipment blanks did not report PCBs in any of the rinsate samples above laboratory MRLs.

MRLs above Screening Levels. There are no instances where a constituent was not detected and its laboratory MRL was greater than the RBC used for screening purposes.

5.0 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.

Tables

Table 1 - Summary of Analytical Data, Surface Soil

Location ID		DU01	DU02	DU03	DU04	DU05	DU06	DU07	DU08	COMP09	DU10	DU11	DU12
Sample ID		GS01-121004-SF-12	GS02-121004-NF-7.5	GS03-121004-WW-8	GS04-121004-EW-7	GS05-121004-SW-8	GS06-121004-NW-7	GS07-121009-SE-13.5	GS08-121009-SW-13.5	GS08-121009-SW-13.5	GS08-121009-SW-13.5	GS08-121009-SW-13.5	GS08-121009-SW-13.5
Date Sampled		5/18/2022	5/18/2022	5/18/2022	5/18/2022	5/18/2022	5/18/2022	5/18/2022	5/18/2022	5/18/2022	5/18/2022	5/18/2022	5/18/2022
Depth Sampled (feet)		0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2
Sample By		MFA (ODEQ)	MFA (ODEQ)	MFA (ODEQ)	MFA (ODEQ)	MFA (ODEQ)	MFA (ODEQ)	MFA (ODEQ)	MFA (ODEQ)	MFA (ODEQ)	MFA (ODEQ)	MFA (ODEQ)	MFA (ODEQ)
Location		NE of railroad ROW, south of St Johns Bridge	East of DU01 and railroad ROW, south of St. Johns Bridge	Area NE of railroad ROW under the St. Johns Bridge	Southern margin of adjacent City parking area	Western margin of adjacent City parking area	NW of railroad ROW, south of St Johns Bridge	West of DU06 and railroad ROW, south of St. Johns Bridge	Area NW of railroad ROW under the St. Johns Bridge	Area NW of railroad ROW and adjacent City parking area	Area west of COMP09 in Cathedral Park	Area north of DU08 in Cathedral Park	Area north of DU11 in Cathedral Park
Constituent of Interest	Note	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)
Polychlorinated Biphenyls (PCBs)													
Aroclor 1016	c, nv	---	---	---	---	---	---	---	---	---	---	---	---
Aroclor 1221	c, nv	---	---	---	---	---	---	---	---	---	---	---	---
Aroclor 1232	c, nv	---	---	---	---	---	---	---	---	---	---	---	---
Aroclor 1242	c, nv	---	---	---	---	---	---	---	---	---	---	---	---
Aroclor 1248	c, nv	---	---	---	---	---	---	---	---	---	---	---	---
Aroclor 1254	nc, nv	---	---	---	---	---	---	---	---	---	---	---	---
Aroclor 1260	c, nv	---	---	---	---	---	---	---	---	---	---	---	---
Aroclor 1262	nc, nv	---	---	---	---	---	---	---	---	---	---	---	---
Aroclor 1268	nc, nv	---	---	---	---	---	---	---	---	---	---	---	---
Total PCBs (total as Aroclors)	c, nv	0.101 J	0.0631 J	0.156 J	0.357	0.452	0.0642 J	0.0374 J	0.295 J	2.67 J	3.45 J	0.0887 J	0.114 J

Notes:

ND = not detected at or above laboratory method reporting limits

— = not analyzed or not applicable.

mk/Kg = milligrams per kilogram

c = carcinogenic

nc = noncarcinogenic

v = volatile

nv = nonvolatile

Shaded concentrations exceed 0.52 mg/Kg (ODEQ RBC based on recreational pathway)

Table 1 - Summary of Analytical Data, Surface Soil

Location ID		DU10-a					DU10-b			DU10-c		DU10-d	
Sample ID		DU10-a-IS-0.2-240724	DU10-a-IS-1.0-240820	DU10-a-GS02-1.0	DU10-a-GS02-1.0-fines	DU10-a-IS-2.0	DU10-b-IS-0.2-240724	DU10-b-IS-1.0-240820	DU10-b-IS-2.0	DU10-c-IS-0.2-240724	DU10-c-IS-1.0-240821	DU10-d-IS-0.2-240724	DU10-d-IS-1.0-240821
Date Sampled		7/24/2024	8/20/2024	8/21/2024	8/21/2024	9/24/2024	7/24/2024	8/20/2024	9/24/2024	7/24/2024	8/21/2024	7/24/2024	8/21/2024
Depth Sampled (feet)		0.2	1	1	1	2	0.2	1	2	0.2	1	0.2	1
Sample By		ENW	ENW	ENW	ENW	ENW	ENW	ENW	ENW	ENW	ENW	ENW	ENW
Location		Northwest portion of DU10		Collected at the east side of DU10-a, just before the pavement. This is a sample of the coarse fraction that was retained by the sieve.	Collected at the east side of DU10-a, just before the pavement. This is a sample of the fine fraction that passed the sieve.	Northwest portion of DU10	East-center portion of DU10			South of DU10-b		South of DU10-c	
Constituent of Interest	Note	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)
Polychlorinated Biphenyls (PCBs)													
Aroclor 1016	c, nv	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)
Aroclor 1221	c, nv	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)
Aroclor 1232	c, nv	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)
Aroclor 1242	c, nv	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)
Aroclor 1248	c, nv	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)
Aroclor 1254	nc, nv	7.0	1.4	0.60	1.0	0.20	4.1	3.1	0.34	0.13	<0.02 (ND)	0.080	<0.02 (ND)
Aroclor 1260	c, nv	16	2.2	1.5	3.0	0.33	8.4	5.5	0.51	0.39	0.14	0.22	0.055
Aroclor 1262	nc, nv	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)
Aroclor 1268	nc, nv	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)
Total PCBs (total as Aroclors)	c, nv	23.0	3.6	2.1	4.0	0.53	12.5	8.6	0.85	0.52	0.14	0.30	0.055

Notes:

ND = not detected at or above laboratory method reporting limits

— = not analyzed or not applicable.

mk/Kg = milligrams per kilogram

c = carcinogenic

nc = noncarcinogenic

v = volatile

nv = nonvolatile

Shaded concentrations exceed 0.52 mg/Kg (ODEQ RBC based on recreational pathway)

Table 1 - Summary of Analytical Data, Surface Soil

Location ID		DU10-e		DU10-f		DU10-Plus-a				
Sample ID		DU10-e-IS-0.2-240724	DU10-e-IS-1.0-240822	DU10-f-IS-0.2-240724	DU10-f-IS-1.0-240822	DU10-Plus-a-IS-0.2-240725	DU10-Plus-a-1.0-240820	DU10-plus-a-2.0-240925	DU10-Plus-a-GS03-2.0	DU10-Plus-a-GS04-2.0
Date Sampled		7/24/2024	8/22/2024	7/24/2024	8/22/2024	7/25/2024	8/20/2024	9/25/2024	9/27/2024	9/27/2024
Depth Sampled (feet)		0.2	1	0.2	1	0.2	1	2	2	2
Sample By		ENW	ENW	ENW	ENW	ENW	ENW	ENW	ENW	ENW
Location		South of DU10-d (southwest most sub-DU in DU10)		South of DU10-b through DU-e (southern most sub-DU in DU10)		Southeast portion of DU10 adjoining railroad ROW			North end of DU10-Plus-a	South end of DU10-Plus-a
Constituent of Interest	Note	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)
Polychlorinated Biphenyls (PCBs)										
Aroclor 1016	c, nv	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)
Aroclor 1221	c, nv	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)
Aroclor 1232	c, nv	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)
Aroclor 1242	c, nv	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)
Aroclor 1248	c, nv	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)
Aroclor 1254	nc, nv	0.056	0.15	0.051	0.034	0.55	0.19	<0.02 (ND)	0.032	<0.02 (ND)
Aroclor 1260	c, nv	0.18	0.14	0.23	0.10	2.3	0.82	0.069	0.11	<0.02 (ND)
Aroclor 1262	nc, nv	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)
Aroclor 1268	nc, nv	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)
Total PCBs (total as Aroclors)	c, nv	0.236	0.29	0.281	0.134	2.85	1.01	0.069	0.142	<0.02 (ND)

Notes:

ND = not detected at or above laboratory method reporting limits

— = not analyzed or not applicable.

mk/Kg = milligrams per kilogram

c = carcinogenic

nc = noncarcinogenic

v = volatile

nv = nonvolatile

Shaded concentrations exceed 0.52 mg/Kg (ODEQ RBC based on recreational pathway)

Table 1 - Summary of Analytical Data, Surface Soil

Location ID		DU10-Plus-b					ODEQ Risk-Based Concentration (Soil Ingestion, Dermal Contact, and Inhalation: Occupational Worker)	ODEQ Risk-Based Concentration (Soil Ingestion, Dermal Contact, and Inhalation: Construction Worker)	ODEQ Risk-Based Concentration (Soil Ingestion, Dermal Contact, and Inhalation: Excavation Worker)	ODEQ Risk-Based Concentration (soil,Recreational User, Dermal Contact, as calculated by ODEQ)
Sample ID		DU10-Plus-b-IS-0.2-240725	DU10-Plus-b-1.0-240821	DU10-Plus-b-IS-2.0	DU10-Plus-b-GS01-1.0	DU10-Plus-b-GS01-1.0-fines				
Date Sampled		7/25/2024	8/21/2024	9/23/2024	8/21/2024	8/21/2024				
Depth Sampled (feet)		0.2	1	2	1	1				
Sample By		ENW	ENW	ENW	ENW	ENW				
Location		Northeast portion of DU10 adjoining railroad ROW			Collected at the south end of DU10-Plus-b, just before the pavement. This is a sample of the coarse fraction.	Collected at the south end of DU10-Plus-b, just before the pavement. This is a sample of the fine fraction.				
Constituent of Interest	Note	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)	mg/Kg (ppm)			
Polychlorinated Biphenyls (PCBs)										
Aroclor 1016	c, nv	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	---	---	---	---
Aroclor 1221	c, nv	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	---	---	---	---
Aroclor 1232	c, nv	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	---	---	---	---
Aroclor 1242	c, nv	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	---	---	---	---
Aroclor 1248	c, nv	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	---	---	---	---
Aroclor 1254	nc, nv	0.78	<0.02 (ND)	<0.02 (ND)	0.25	0.38	---	---	---	---
Aroclor 1260	c, nv	4.0	0.65	0.042	0.86	1.1	---	---	---	---
Aroclor 1262	nc, nv	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	---	---	---	---
Aroclor 1268	nc, nv	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	<0.02 (ND)	---	---	---	---
Total PCBs (total as Aroclors)	c, nv	4.78	0.65	0.042	1.11	1.48	0.59	4.9	140	0.52

Notes:

ND = not detected at or above laboratory method reporting limits

— = not analyzed or not applicable.

mk/Kg = milligrams per kilogram

c = carcinogenic

nc = noncarcinogenic

v = volatile

nv = nonvolatile

Shaded concentrations exceed 0.52 mg/Kg (ODEQ RBC based on recreational pathway)

Table 2 - Summary of Analytical Data, Equipment Blank - Rinsate Water

Sample ID		RINSATE09	RINSATE 10	RINSATE 11
Date Sampled		7/24/24	8/20/24	9/24/24
Depth Sampled (feet)		---	---	---
Sampled By		ENW	ENW	ENW
Location		Equipment Blank from 0.2-ft soils at DU10 and DU10-Plus	Equipment Blank from 1.0-ft soils at DU10 and DU10-Plus	Equipment Blank from 2.0-ft soils at DU10 and DU10-Plus
Constituent of Interest	Note	µg/L (ppb)	µg/L (ppb)	µg/L (ppb)
Aroclor 1016	c, nv	<0.1 (ND)	<0.1 (ND)	<0.4 (ND)
Aroclor 1221	c, nv	<0.1 (ND)	<0.1 (ND)	<0.4 (ND)
Aroclor 1232	c, nv	<0.1 (ND)	<0.1 (ND)	<0.4 (ND)
Aroclor 1242	c, nv	<0.1 (ND)	<0.1 (ND)	<0.4 (ND)
Aroclor 1248	c, nv	<0.1 (ND)	<0.1 (ND)	<0.4 (ND)
Aroclor 1254	c, nv	<0.1 (ND)	<0.1 (ND)	<0.4 (ND)
Aroclor 1260	c, nv	<0.1 (ND)	<0.1 (ND)	<0.4 (ND)
Aroclor 1262	c, nv	<0.1 (ND)	<0.1 (ND)	<0.4 (ND)
Aroclor 1268	c, nv	<0.1 (ND)	<0.1 (ND)	<0.4 (ND)
Polychlorinated biphenyls (Total PCBs)	c, nv	<0.1 (ND)	<0.1 (ND)	<0.4 (ND)

Notes:

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

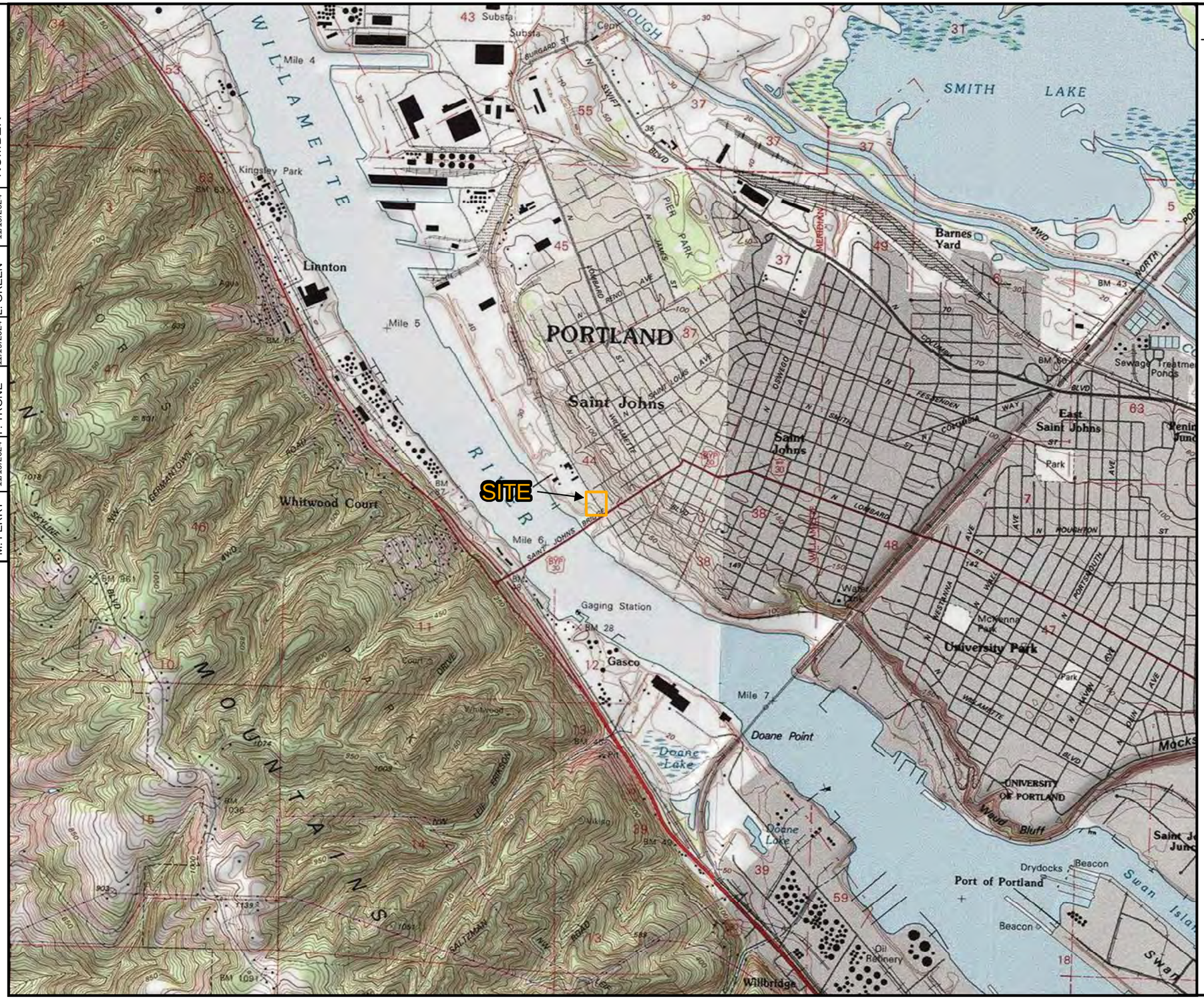
<# (ND) = not detected at or above the laboratory method reporting limit shown.

nc = noncarcinogenic

nv = nonvolatile

Figures

DRAWING NUMBER	1355-21001(V03)
APPROVED BY	L. GREEN 11/19/2024
CHECKED BY	P. TRONE 11/19/2024
DRAWN BY	M. FERRY 11/19/2024



LEGEND:

SURVEY LIMIT

NOTES:

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

0 1,350 2,700 5,400

Feet

N

EVREN NORTHWEST INC.
environmental natural resource consultants

FIGURE 1

SITE VICINITY MAP

PORTION OF CATHEDRAL PARK
WEST OF PENINSULA IRON WORKS
BUILDING 2
6618 N ALTA AVENUE
PORTLAND, OREGON

DRAWING NUMBER	1355-21001(V03)	
APPROVED BY	L. GREEN	11/19/2024
CHECKED BY	P. TRONE	11/19/2024
DRAWN BY	M. FERRY	11/19/2024

LEGEND:

- SUBJECT PROPERTY BOUNDARY
- SUBJECT BUILDING
- SURVEY LIMIT
- RAILROAD
- POLE TRANSFORMER
- CATCH BASIN
- MAN HOLE

NOTES:

1. BASE MAP DEVELOPED FROM AN AERIAL PHOTOGRAPH MAP DATED 2022 AND ENW FIELD NOTES.

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

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

0 40 80 160 Feet

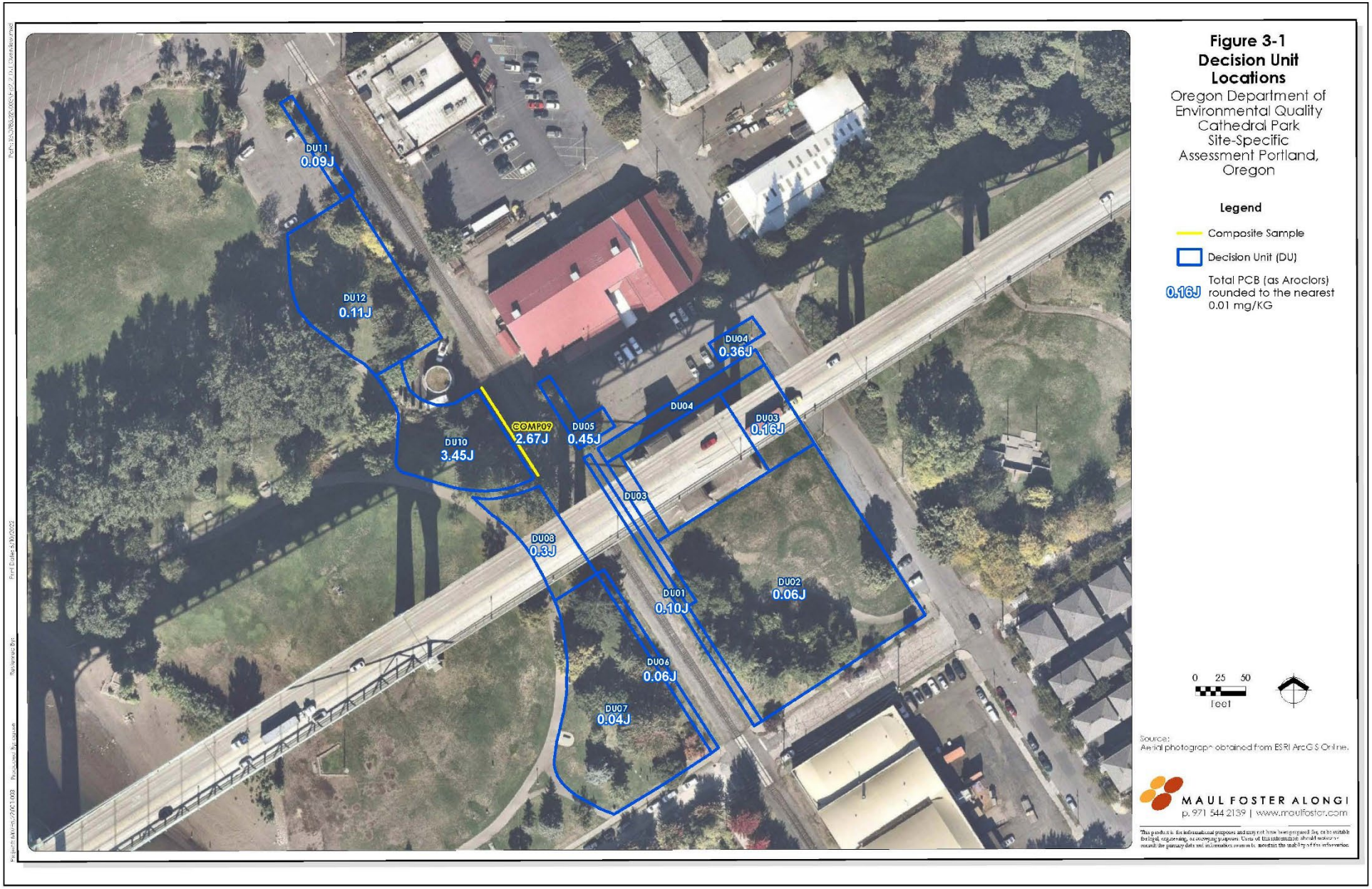
N

EVREN NORTHWEST INC.
environmental natural resource consultants

FIGURE 2

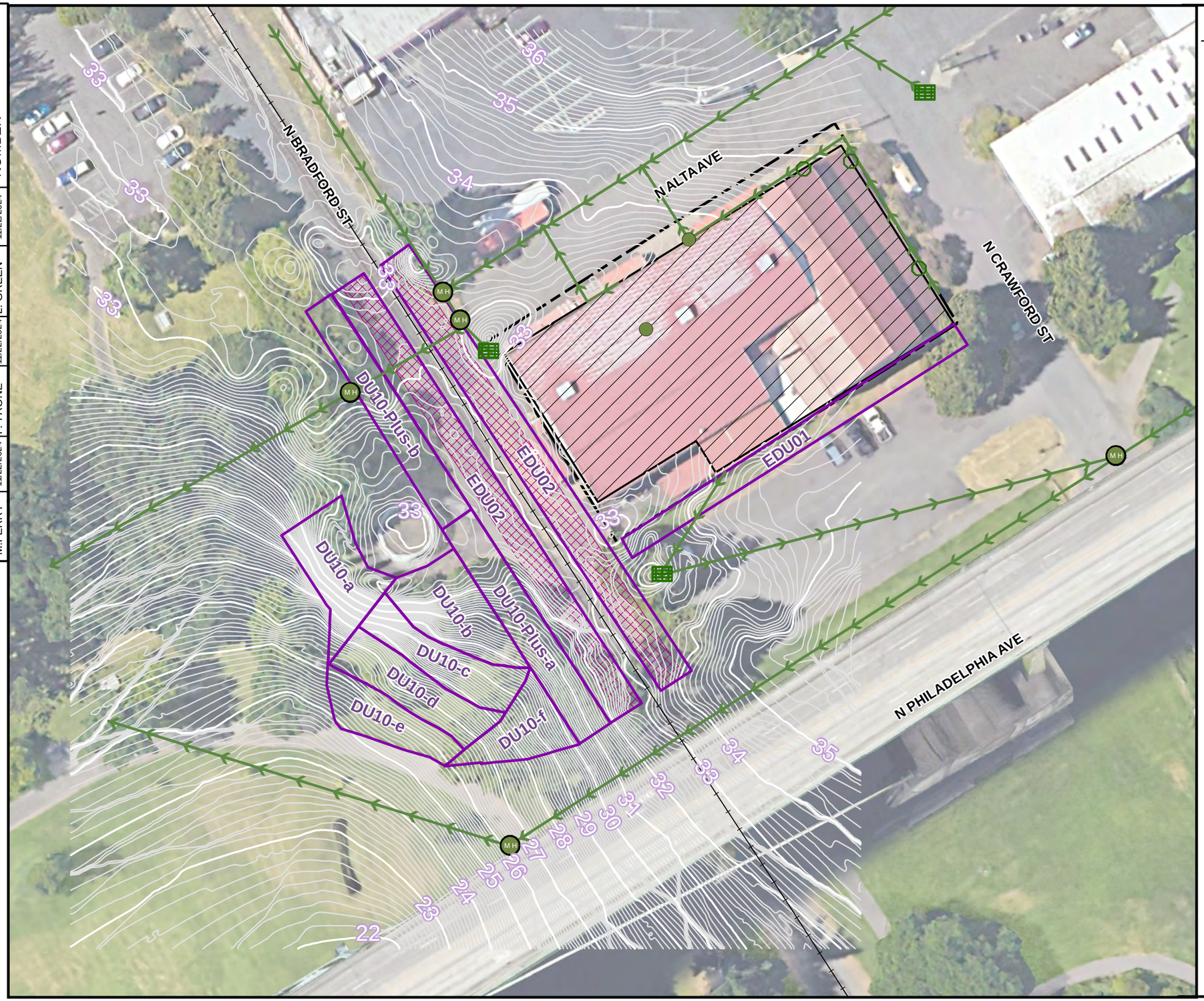
SITE PLAN

**PORTION OF CATHEDRAL PARK
WEST OF PENINSULA IRON WORKS
BUILDING 2
6618 N ALTA AVENUE
PORTLAND, OREGON**



EVREN NORTHWEST INC. environmental natural resource consultants	Date Drawn: 11/19/2024 CAD File Name:PCBSamples Drawn By: CLR Approved By: LDG	Portions of Cathedral Park West of Peninsula Iron Works Building 2 6618 N Alta Avenue Portland, Oregon	**Previous PCB Sample Locations, ODEQ**	Project No. 1355-21001 Figure No. **3**

DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
M.FERRY 11/22/2024	P. TRONE 11/22/2024	L. GREEN 11/22/2024	1355-21001(V07)



LEGEND:

- SUBJECT PROPERTY BOUNDARY
- SUBJECT BUILDING
- TEMPORARY SOIL COVER AREAS
- DECISION UNIT
- RAILROAD
- 1-FOOT CONTOUR (2024)
- 0.1-FOOT CONTOUR (2024)
- STORM SEWER
- STORM SEWER PLUG (PER CITY OF PORTLAND PERMITS)
- CATCH BASIN
- ROOF DOWNSPOUT
- MAN HOLE

NOTES:

1. BASE MAP DEVELOPED FROM AN AERIAL PHOTOGRAPH MAP DATED 2022 AND ENW FIELD NOTES.

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

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

0 30 60 120

Feet

N

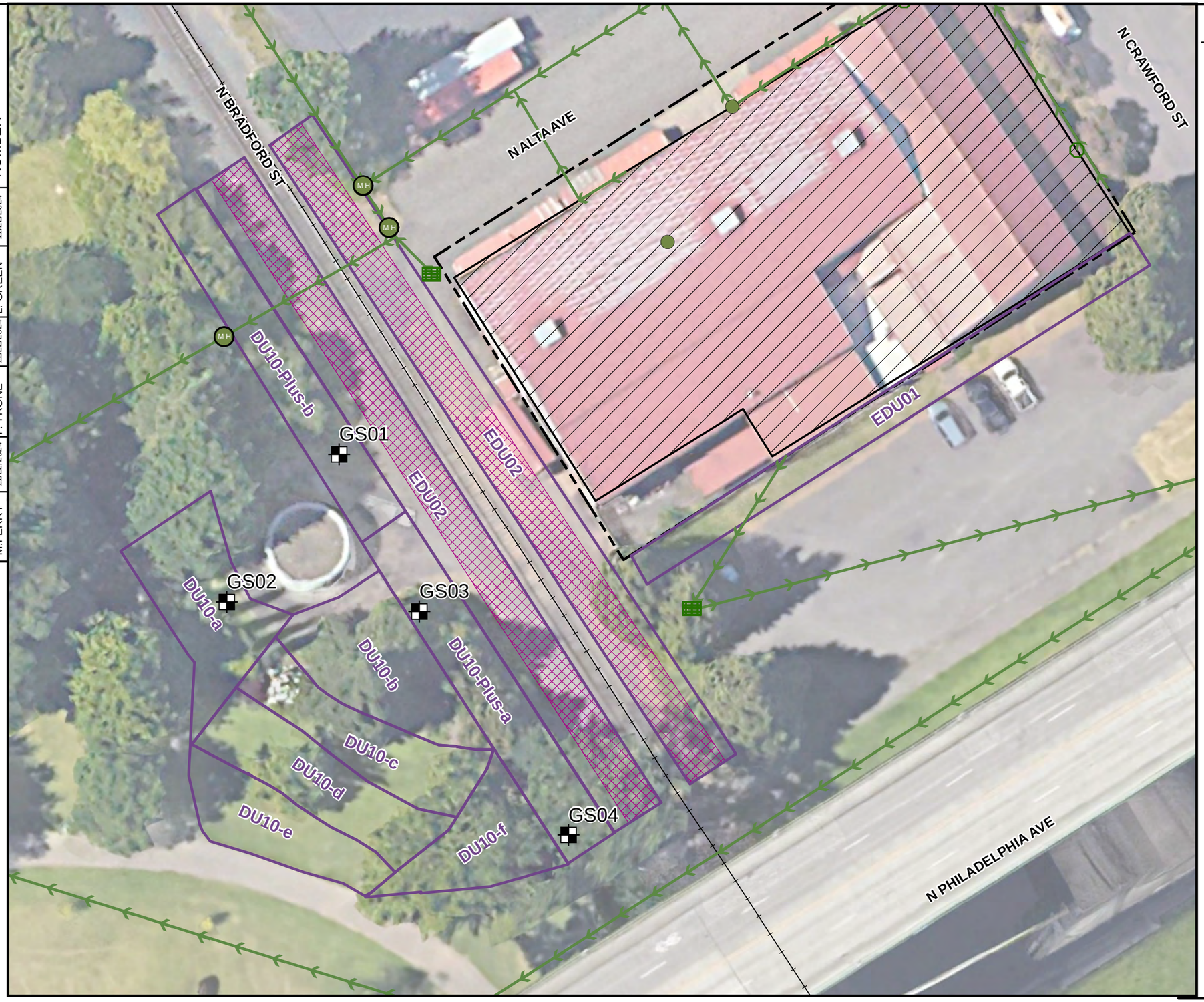
EVREN NORTHWEST INC.
environmental natural resource consultants

FIGURE 4

TOPOGRAPHIC MAP (BASED ON SURVEY)

PORTION OF CATHEDRAL PARK WEST OF PENINSULA IRON WORKS BUILDING 2
6618 N ALTA AVENUE
PORTLAND, OREGON

DRAWING NUMBER	APPROVED BY		CHECKED BY		DRAWN BY	
1355-21001(V04)	L. GREEN	11/22/2024	P. TRONE	11/22/2024	M.FERRY	11/22/2024



LEGEND:

- SUBJECT PROPERTY BOUNDARY
- SUBJECT BUILDING
- DECISION UNIT
- TEMPORARY SOIL COVER AREAS
- RAILROAD
- STORM SEWER
- STORM SEWER PLUG (PER CITY OF PORTLAND PERMITS)
- CATCH BASIN
- ROOF DOWNSPOUT
- MAN HOLE
- DISCRETE GRAB SAMPLE

NOTES:

1. BASE MAP DEVELOPED FROM AN AERIAL PHOTOGRAPH MAP DATED 2022 AND ENW FIELD NOTES.

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

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

0 20 40 80

Feet

N

EVREN NORTHWEST INC.
environmental natural resource consultants

FIGURE 5

DECISION UNITS DU10 AND DU10-PLUS LOCATIONS

PORTION OF CATHEDRAL PARK WEST OF PENINSULA IRON WORKS BUILDING 2
6618 N ALTA AVENUE
PORTLAND, OREGON

Appendix A

Topographic Profiles

TOPOGRAPHIC PROFILES

A PORTION OF
BLOCK 3, CATHEDRAL PARK (PHASE IV)
AND CATHEDRAL PARK
CITY OF PORTLAND
MULTNOMAH COUNTY, OREGON
10/16/2024

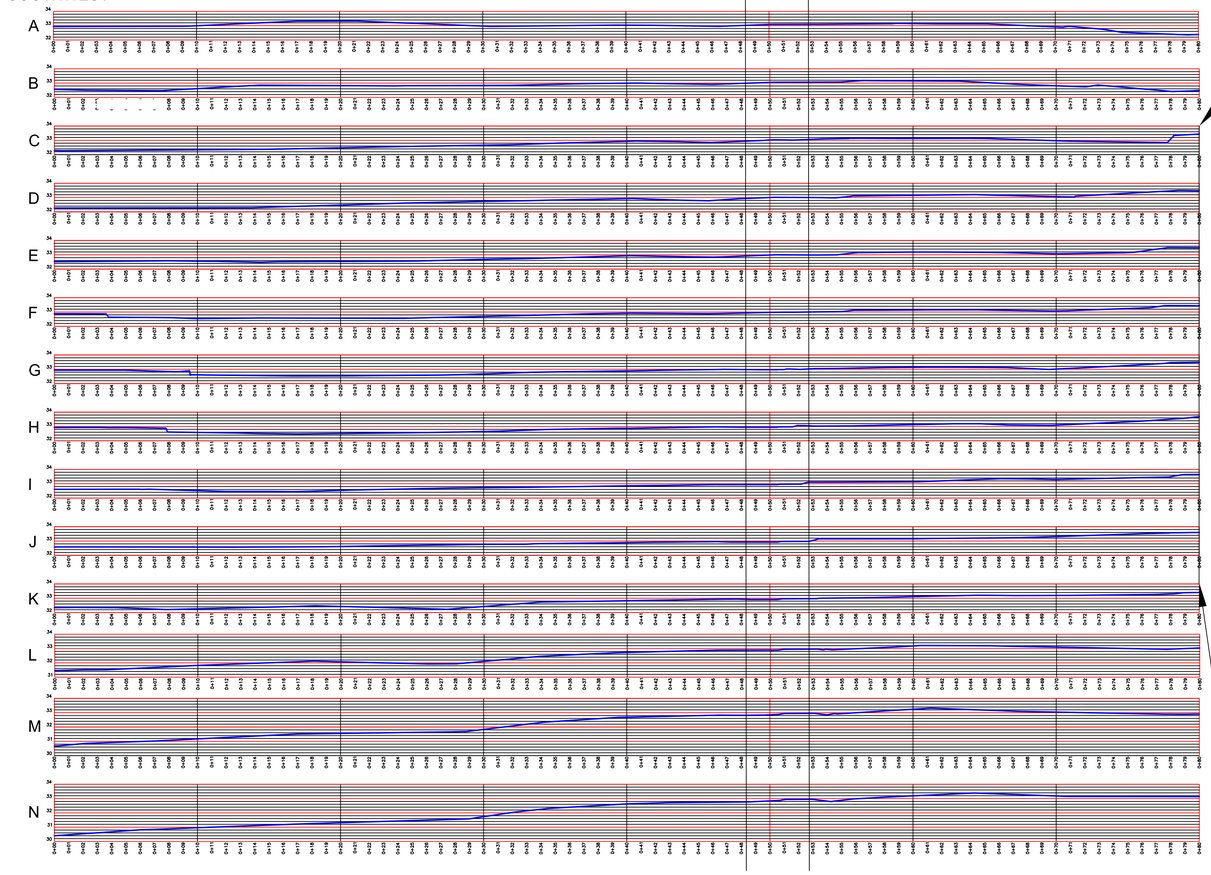
SOUTHWESTERLY TRAIN TRACK

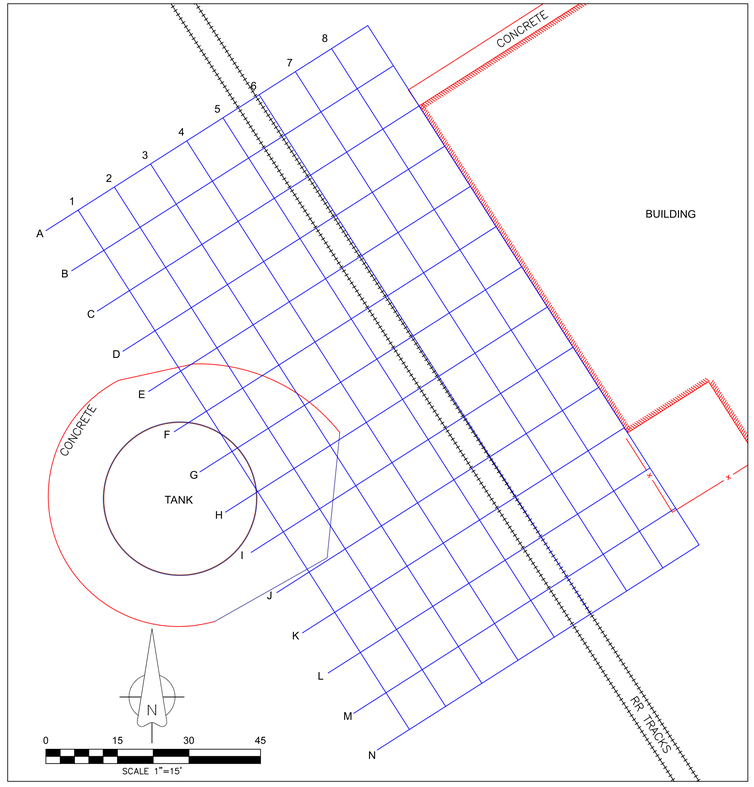
NORTHEASTERLY TRAIN TRACK

SOUTHWEST

NORTHEAST

NORTHWEST CORNER OF BUILDING

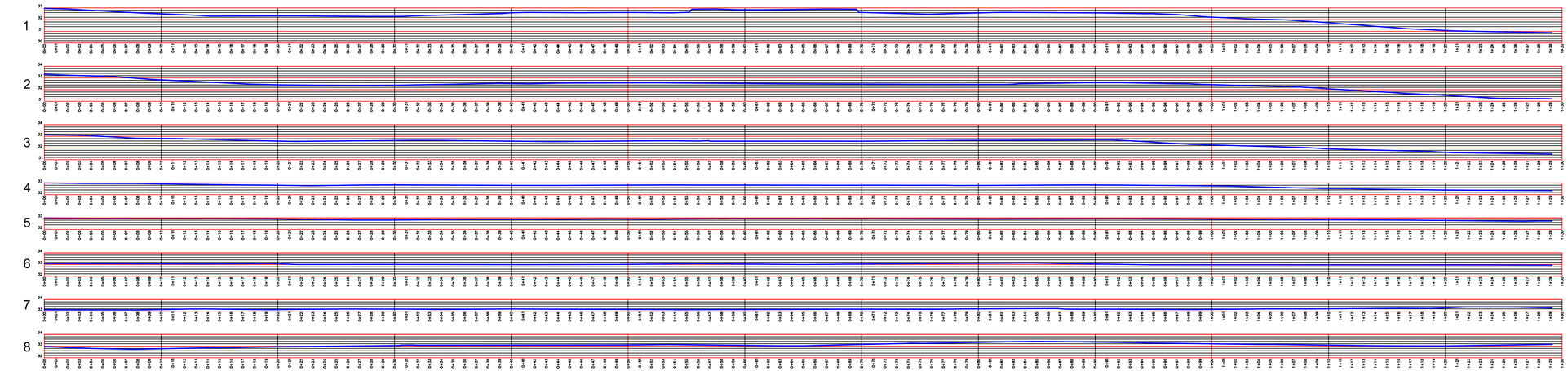


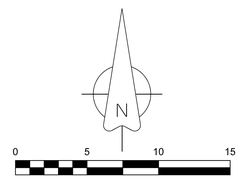


SOUTHHWEST CORNER OF BUILDING

NORTHWEST

SOUTHEAST





SHEET 1 OF 1

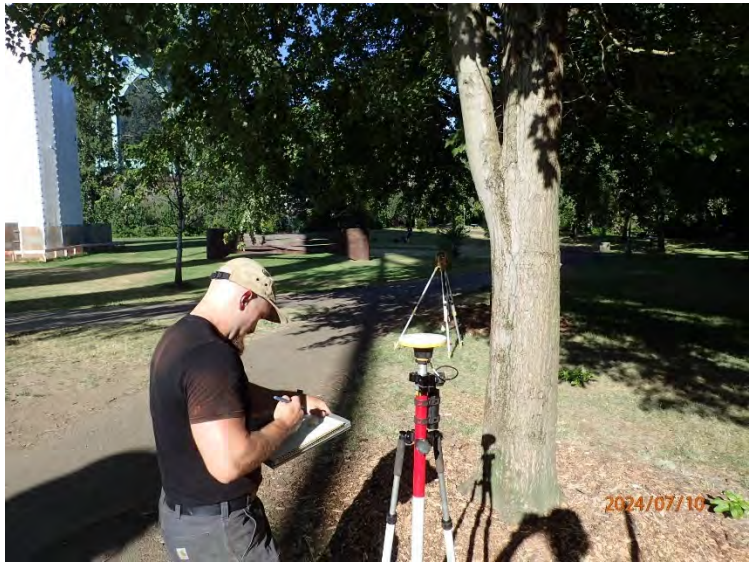
REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
NOVEMBER 9, 2010
JOHN K. LUCEY
78048

RENEWS: 12-31-24

Appendix B

Site Photographs



A laser level survey on 7/10/24 (followed by a professional land survey on 10/16/24).

Collecting a 0.20-ft increment (typ.) from DU10-a - DU10-f, DU10-Plus-A and -B using a decontaminated stainless-steel (SS) push probe or hand auger.

Filling push-probe holes with clean sand.

Acquisition of GPS data at each grid-centered sampling point.

EVREN NORTHWEST INC. environmental natural resource consultants	Peninsula Irons Works 6618 N. Alta Avenue Portland, Oregon	**Site Photographs**	Project No. 1355-21001-11 Appendix **A**

Scraping away landscaping ground cover to facilitate surface soil increment sampling.

Using new nitrile gloves to place soil increments in a labeled laboratory provided 1-gallon sample jar with Teflon-lined lid.

Decontaminating sampling tools between DUs using a three-stage wash.

Using deionized water to collect an equipment rinse blank following the three-stage wash.

EVREN NORTHWEST INC. environmental natural resource consultants	Peninsula Irons Works 6618 N. Alta Avenue Portland, Oregon	**Site Photographs**	Project No. 1355-21001-11 Appendix **A**

Collection of 1.0-ft soil increments in DU10-a next to the City's sewer pump station. Also sampled DU10-b and DU10-Plus-b.

Using a decontaminated SS hand auger to collect 1.0-ft soil increments. One bucket is for the sample jar, and the other bucket is for investigation derived waste (IDW).

Finding solid waste, i.e., glass and plastic, in 1-ft soil samples suggesting prior fill.

Using a pneumatic hammer to drive a stainless-steel push probe for collection of 2.0-ft soil increments from DU10-Plus-b (shown) and DU10-a.

EVREN NORTHWEST INC. environmental natural resource consultants	Peninsula Irons Works 6618 N. Alta Avenue Portland, Oregon	**Site Photographs**	Project No. 1355-21001-11 Appendix **A**

Slag-like material recovered from a 2-ft increment of soil fill.

Using deionized water to collect an equipment rinsate blank from a decontaminated stainless-steel push probe.

Labeled drums stored in a locked enclosure for storing IDW generated during the investigation.

Appendix C

Laboratory Analytical Reports

Summary: DATA VALID? ☒YES

Analytical Laboratory Data Validation Check Sheet

Project Name: PIW-Build 2-6618 N Alta Ave Project Number: 1355-21001-11

Date of Review: 8/6/24 Lab. Name: FB&I Lab Batch ID #: 407361

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

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

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

The value reported fell outside the control limits established for Aroclor 1260. (vo)

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

Comments:

Initial Review By: NB **Final** Review By: _____

Summary: DATA VALID? ☒YES

Analytical Laboratory Data Validation Check Sheet

Project Name: PIW-Build 2-6618 N Alta Ave Project Number: 1355-21001-11

Date of Review: 8/6/24 Lab. Name: FB&I Lab Batch ID #: 407400

Chain of Custody			
1.) Are all requested analyses reported?	☒yes	☐no	
2.) Were the requested methods used?	☒yes	☐no	
3.) Trip blank submitted?	☐yes	☒no	
4.) Field blank submitted?	☐yes	☒no	
Timing			
5.) Samples extracted within holding times?	☒yes	☐no	
If not, are all discrepancies footnoted?	☐yes	☐no	☒NA
6.) Analysis performed within holding times?	☒yes	☐no	
If not, are all discrepancies footnoted?	☐yes	☐no	☒NA
Quality Assurance/Quality Control			
7.) Are the required reporting limits reported? (MRLs vs MDLs/PQLs)	☒yes	☐no	
8.) Are all reported values above either MRL or MDL?	☒yes	☐no	
9.) Are all values between the MDL & PQL tagged as trace?	☐yes	☐no	☐NA
10a.) Are reporting limits raised for other reason besides high analyte conc.?	☐yes	☒no	
10b.) If so, are they footnoted?	☐yes	☐no	☒NA
11.) Lab method blank completed?	☒yes	☐no	
12.) Lab, Field, or Trip Blank(s) report detections?	☐yes	☒no	
If yes, indicate blank type, chemical(s) and concentration(s):			
13.) For inorganics and metals, is there one method blank for each analyte?	☒yes	☐no	☐NA
If not, are all discrepancies footnoted?	☐yes	☐no	
14.) For VOCs, is there one method blank for each day of analysis?	☐yes	☐no	☒NA
If not, are all discrepancies footnoted?	☐yes	☐no	
15.) For SVOC's, is there one method blank for each extraction batch?	☐yes	☐no	☒NA
If not, are all discrepancies footnoted?	☐yes	☐no	
Accuracy			
16.) Is there a surrogate spike recovery for all VOC & SVOC samples?	☐yes	☐no	☒NA
Do all surrogate spike recoveries meet accepted criteria?	☐yes	☐no	
If not, are all discrepancies footnoted?	☐yes	☐no	☒NA
17.) Is there a spike recovery for all Laboratory Control Samples?	☒yes	☐no	☐NA
Do all LCS/LCSD spike recoveries meet accepted criteria?	☒yes	☐no	
If not, are all discrepancies footnoted?	☐yes	☐no	☒NA
18.) Are all LCS/LCSD RPDs within acceptable limits?	☐yes	☐no	☒NA
If not, are all discrepancies footnoted?	☐yes	☐no	☒NA
Precision			
19.) Are all matrix spike/matrix spike duplicate recoveries within acceptable limits?	☐yes	☒no	☐NA
If not, are all discrepancies footnoted?	☒yes	☐no	☐NA

Araclor 1260 was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful. (b)

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

Araclor 1260 was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful. (b)

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

Comments:
All quality control requirements were acceptable.

Initial Review By: NB **Final** Review By: _____

Summary: DATA VALID? ☒YES

Analytical Laboratory Data Validation Check Sheet

Project Name: PIW Build 2 6618 N Alta Ave Project Number: 1355-21001-11

Date of Review: Sept. 5, 2024 Lab. Name: F&BI Lab Batch ID #: 408335

Chain of Custody

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

Timing

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

Quality Assurance/Quality Control

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

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

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

Accuracy

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

Precision

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

Initial Review By: NB **Final** Review By: _____

Summary: DATA VALID? ☒YES

Analytical Laboratory Data Validation Check Sheet

Project Name: PIW Build 2 6618 N Alta Ave Project Number: 1355-21001-11

Date of Review: Sept. 5, 2024 Lab. Name: F&BI Lab Batch ID #: 408388

Chain of Custody

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

Timing

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

Quality Assurance/Quality Control

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

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

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

Accuracy

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

Precision

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

Initial Review By: NB **Final** Review By: _____

Summary: DATA VALID? ☒YES

Analytical Laboratory Data Validation Check Sheet

Project Name: PIW Build 2 6618 N Alta Ave Project Number: 1355-21001-11

Date of Review: Sept. 5, 2024 Lab. Name: F&BI Lab Batch ID #: 408389

Chain of Custody

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

Timing

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

Quality Assurance/Quality Control

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

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

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

Accuracy

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

Precision

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

Recovery for Aroclor 1016 fell outside of control limits due to sample matrix effects. (ip)
Aroclor 1260 was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful. (b)

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

Aroclor 1260 was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful. (b)

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

Initial Review By: NB **Final** Review By:_____

Summary: DATA VALID? ☒YES

Analytical Laboratory Data Validation Check Sheet

Project Name: PIW Build 2 6618 N Alta Ave Project Number: 1355-21001-11

Date of Review: Sept. 5, 2024 Lab. Name: F&BI Lab Batch ID #: 408390

Chain of Custody

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

Timing

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

Quality Assurance/Quality Control

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

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

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

Accuracy

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

Precision

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

Recovery for Aroclor 1016 fell outside of control limits due to sample matrix effects. (ip)
Aroclor 1260 was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful. (b)

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

Aroclor 1260 was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful. (b)

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

Initial Review By: NB **Final** Review By:_____

Summary: DATA VALID? ☒YES

Analytical Laboratory Data Validation Check Sheet

Project Name: PIW-Build 2-6618_N_Alta Project Number: 1355-21001-11

Date of Review: 9/30/24 Lab. Name: F&BI Lab Batch ID #: 409370

Chain of Custody

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

Timing

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

Quality Assurance/Quality Control

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

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

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

Accuracy

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

Precision

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

The value reported fell outside the control limits established for Aroclor 1260. (vo)

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

Comments:
Aroclor 1260 in the 8082A matrix spike and matrix spike duplicate did not meet the acceptance criteria. The laboratory control sample passed the acceptance criteria, therefore the results were due to matrix effect.

All other quality control requirements were acceptable.

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

Summary: DATA VALID? ☐YES

Analytical Laboratory Data Validation Check Sheet

Project Name: PIW-Build 2-6618_N_Alta_Ave Project Number: 1355-21001-11

Date of Review: 10/3/24 Lab. Name: F&BI Lab Batch ID #: 409042

Chain of Custody

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

Timing

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

Quality Assurance/Quality Control

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

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

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

Accuracy

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

Aroclor 1260 response exceeded the valid instrument calibration range. The value reported is an estimate. (vo)

Precision

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

Aroclor 1260 was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

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

Initial Review By: NB **Final** Review By:_____

Summary: DATA VALID? ☒YES

Analytical Laboratory Data Validation Check Sheet

Project Name: PIW Build 2 6618 N Alta Ave Project Number: 1355-21001-11

Date of Review: October 7, 2024 Lab. Name: F&BI Lab Batch ID #: 409449

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

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

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

Comments:

Initial Review By: NB **Final** Review By: _____

Summary: DATA VALID? ☒YES

Analytical Laboratory Data Validation Check Sheet

Project Name: PIW Build 2 6618 N Alta Ave Project Number: 1355-21001-11

Date of Review: October 7, 2024 Lab. Name: F&BI Lab Batch ID #: 409450

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

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

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

Initial Review By: NB **Final** Review By: _____

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Vineta Mills, M.S.
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August 6, 2024

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

Dear Mr Green:

Included are the results from the testing of material submitted on July 25, 2024 from the 1355-22001-11, F&BI 407361 project. There are 13 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
ENW0806R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 25, 2024 by Friedman & Bruya, Inc. from the Evren Northwest 1355-22001-11, F&BI 407361 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Evren Northwest
407361 -01	DU10-a-IS-0.2-240724
407361 -02	DU10-b-IS-0.2-240724
407361 -03	DU10-c-IS-0.2-240724
407361 -04	DU10-d-IS-0.2-240724
407361 -05	DU10-e-IS-0.2-240724
407361 -06	DU10-f-IS-0.2-240724
407361 -07	Rinsate09

The 8082A matrix spike and matrix spike duplicate did not meet the relative percent difference for Aroclor 1260. The laboratory control sample passed the acceptance criteria, therefore the results were due to matrix effect.

All other quality control requirements were acceptable.

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Rinsate09	Client:	Evren Northwest
Date Received:	07/25/24	Project:	1355-22001-11, F&BI 407361
Date Extracted:	07/25/24	Lab ID:	407361-07
Date Analyzed:	07/26/24	Data File:	072624.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	58	11	96
Decachlorobiphenyl	36	13	65

Compounds:	Concentration ug/L (ppb)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1
Aroclor 1262	<0.1
Aroclor 1268	<0.1

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Method Blank	Client:	Evren Northwest
Date Received:	Not Applicable	Project:	1355-22001-11, F&BI 407361
Date Extracted:	07/25/24	Lab ID:	04-1709 mb
Date Analyzed:	07/26/24	Data File:	072604.D
Matrix:	Water	Instrument:	GC9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	57	11	96
Decachlorobiphenyl	25	13	65

Compounds:	Concentration ug/L (ppb)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1
Aroclor 1262	<0.1
Aroclor 1268	<0.1

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	DU10-a-IS-0.2-240724	Client:	Evren Northwest
Date Received:	07/25/24	Project:	1355-22001-11, F&BI 407361
Date Extracted:	07/26/24	Lab ID:	407361-01 1/30 and 407361-01 1/3000
Date Analyzed:	07/26/24 and 07/29/24	Data File:	072628.D and 072917.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	73	11	184
Decachlorobiphenyl	84	25	127

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	7.0
Aroclor 1260	16
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	DU10-b-IS-0.2-240724	Client:	Evren Northwest
Date Received:	07/25/24	Project:	1355-22001-11, F&BI 407361
Date Extracted:	07/26/24	Lab ID:	407361-02 1/30 and 407361-02 1/1500
Date Analyzed:	07/26/24 and 07/29/24	Data File:	072629.D and 072916.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	89	11	184
Decachlorobiphenyl	91	25	127

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	4.1
Aroclor 1260	8.4
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	DU10-c-IS-0.2-240724	Client:	Evren Northwest
Date Received:	07/25/24	Project:	1355-22001-11, F&BI 407361
Date Extracted:	07/26/24	Lab ID:	407361-03 1/30
Date Analyzed:	07/29/24	Data File:	072913.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	79	11	184
Decachlorobiphenyl	83	25	127

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	0.13
Aroclor 1260	0.39
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	DU10-d-IS-0.2-240724	Client:	Evren Northwest
Date Received:	07/25/24	Project:	1355-22001-11, F&BI 407361
Date Extracted:	07/26/24	Lab ID:	407361-04 1/30
Date Analyzed:	07/29/24	Data File:	072914.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	87	11	184
Decachlorobiphenyl	94	25	127

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	0.080
Aroclor 1260	0.22
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	DU10-e-IS-0.2-240724	Client:	Evren Northwest
Date Received:	07/25/24	Project:	1355-22001-11, F&BI 407361
Date Extracted:	07/26/24	Lab ID:	407361-05 1/30
Date Analyzed:	07/29/24	Data File:	072915.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	96	11	184
Decachlorobiphenyl	111	25	127

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	0.056
Aroclor 1260	0.18
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	DU10-f-IS-0.2-240724	Client:	Evren Northwest
Date Received:	07/25/24	Project:	1355-22001-11, F&BI 407361
Date Extracted:	07/26/24	Lab ID:	407361-06 1/30
Date Analyzed:	07/26/24	Data File:	072636.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	68	11	184
Decachlorobiphenyl	87	25	127

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	0.051
Aroclor 1260	0.23
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Method Blank	Client:	Evren Northwest
Date Received:	Not Applicable	Project:	1355-22001-11, F&BI 407361
Date Extracted:	07/26/24	Lab ID:	04-1713 mb2 1/30
Date Analyzed:	07/26/24	Data File:	072626.D
Matrix:	Soil	Instrument:	GC9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	97	11	184
Decachlorobiphenyl	111	25	127

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	<0.02
Aroclor 1260	<0.02
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Date of Report: 08/06/24
Date Received: 07/25/24
Project: 1355-22001-11, F&BI 407361

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR POLYCHLORINATED BIPHENYLS AS AROCLOR 1016/1260 BY EPA METHOD 8082A

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Aroclor 1016	ug/L (ppb)	0.25	54	56	10-119	4
Aroclor 1260	ug/L (ppb)	0.25	64	57	10-144	12

Date of Report: 08/06/24
Date Received: 07/25/24
Project: 1355-22001-11, F&BI 407361

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR POLYCHLORINATED BIPHENYLS AS AROCLOR 1016/1260 BY EPA METHOD 8082A

Laboratory Code: 407161-04 1/30 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Control Limits	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	0.25	<0.02	79	77	24-163	3
Aroclor 1260	mg/kg (ppm)	0.25	<0.02	90	70	10-194	25 vo

Laboratory Code: Laboratory Control Sample 1/30

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Aroclor 1016	mg/kg (ppm)	0.25	101	47-158
Aroclor 1260	mg/kg (ppm)	0.25	108	69-141

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the standard reporting limit. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

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

407361

SAMPLE CHAIN OF CUSTODY

07/25/24 ISM/F21/C2

Page # _____ of _____

Report To Lynn Green

Company Even Northwest

Address P.O. Box 14488

City, State, ZIP Portland, OR 97293

Phone (503) 452-5501 Email lynng@even-nw.com

SAMPLERS (*signature*) Jordan Morris

PROJECT NAME 1355-22001-11

PO #

REMARKS *As Aroclors

Project Specific RLs - Yes / No

INVOICE TO

TURNAROUND TIME

✓ Standard Turnaround

RUSH _____

Rush charges authorized by: _____

SAMPLE DISPOSAL

Dispose after 30 days

Archive Samples

Other _____

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082*						Notes
DU10-a-IS-0.2-240724	01	07-24-24	9:35	Soil	1						X						
DU10-b-IS-0.2-240724	02	07-24-24	10:35	Soil	1						X						
DU10-c-IS-0.2-240724	03	07-24-24	11:20	Soil	1						X						
DU10-d-IS-0.2-240724	04	07-24-24	12:05	Soil	1						X						
DU10-e-IS-0.2-240724	05	07-24-24	13:00	Soil	1						X						
DU10-f-IS-0.2-240724	06	07-24-24	13:45	Soil	1						X						
RINSATE09	07	07-24-24	8:48	Water	1						X						
											Samples received at 2 °C						

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Jordan Morris	Jordan Morris	Even Northwest	07-24-24	18:00
Received by: Nhan Pham	Nhan Pham	FEBI	07/25/24	1020
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
5500 4th Avenue S
Seattle, WA 98108
Ph. (206) 285-8282

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 407361 CLIENT Evren INITIALS/DATE: (NP) 7/25/24

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

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

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

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

Is there a Chain-of-Custody* (COC)? ☑ YES ☐ NO Initials/Date: AP 07/25/24
*or other representative documents, letters, and/or shipping memos

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

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

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

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

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

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

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

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

Other comments (use a separate page if needed)

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

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

GLS.

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

Ship From
EVREN NW
DAN SAJKO
40 SE 24TH AVE
PORTLAND, OR 97214

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

COD: $0.00
Weight: 0 lb(s)
Reference:

Delivery Instructions:

Signature Type: NOT REQUIRED

Tracking #: 561732666

PDS

SEATTLE

S06437C

12802404

KNT WA980-7C0

Print Date: 7/22/2024 9:17 AM

7/22/24, 9:17 AM about:blank

GLS.

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

Ship From
EVREN NW
DAN SAJKO
40 SE 24TH AVE
PORTLAND, OR 97214

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

COD: $0.00
Weight: 0 lb(s)
Reference:

Delivery Instructions:

Signature Type: NOT REQUIRED

Tracking #: 561732665

PDS

SEATTLE

S06437C

12802403

KNT WA980-7C0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

August 6, 2024

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

Dear Mr Green:

Included are the results from the testing of material submitted on July 26, 2024 from the 1355-21001-11, F&BI 407400 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Neil Woller, Paul Trone, Evan Bruggeman
ENW0806R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 26, 2024 by Friedman & Bruya, Inc. from the Evren Northwest 1355-21001-11, F&BI 407400 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Evren Northwest
407400 -01	DU-10-Plus-a-IS-0.2-240725
407400 -02	DU-10-Plus-b-IS-0.2-240725

All quality control requirements were acceptable.

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	DU-10-Plus-a-IS-0.2-240725	Client:	Evren Northwest
Date Received:	07/26/24	Project:	1355-21001-11, F&BI 407400
Date Extracted:	07/29/24	Lab ID:	407400-01 1/30 and 407400-01 1/300
Date Analyzed:	07/30/24 and 07/31/24	Data File:	073010.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	80	11	162
Decachlorobiphenyl	78	11	152

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	0.55
Aroclor 1260	2.3
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	DU-10-Plus-b-IS-0.2-240725	Client:	Evren Northwest
Date Received:	07/26/24	Project:	1355-21001-11, F&BI 407400
Date Extracted:	07/29/24	Lab ID:	407400-02 1/30 and 407400-02 1/1500
Date Analyzed:	07/30/24 and 07/31/24	Data File:	073008.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	81	11	162
Decachlorobiphenyl	77	11	152

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	0.78
Aroclor 1260	4.0
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Method Blank	Client:	Evren Northwest
Date Received:	Not Applicable	Project:	1355-21001-11, F&BI 407400
Date Extracted:	07/29/24	Lab ID:	04-1781 mb 1/30
Date Analyzed:	07/30/24	Data File:	073006.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	102	11	162
Decachlorobiphenyl	102	11	152

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	<0.02
Aroclor 1260	<0.02
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Date of Report: 08/06/24
Date Received: 07/26/24
Project: 1355-21001-11, F&BI 407400

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR POLYCHLORINATED BIPHENYLS AS AROCLOR 1016/1260 BY EPA METHOD 8082A

Laboratory Code: 407400-01 1/30 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Control Limits	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	0.25	<0.02	85	80	29-125	6
Aroclor 1260	mg/kg (ppm)	0.25	1.5	730 b	650 b	12-177	12 b

Laboratory Code: Laboratory Control Sample 1/30

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Aroclor 1016	mg/kg (ppm)	0.25	86	55-137
Aroclor 1260	mg/kg (ppm)	0.25	86	51-150

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the standard reporting limit. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

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

407400

SAMPLE CHAIN OF CUSTODY

07/26/24

1 / ISM

Page # 1 of 1

Report To Lynn Green

Company Evren Northwest

Address P.O. Box 14488

City, State, ZIP Portland, OR 97293

Phone (503) 452-5561 Email lynng@evren-nw.com

SAMPLERS (*signature*) Jordan Morris

PROJECT NAME 1355-21001-11

PO #

REMARKS *As Aroclors

Project Specific RLs - Yes / No

INVOICE TO

TURNAROUND TIME

✓ Standard Turnaround

RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Archive Samples

Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	VOCs EPA 8260	PAHs EPA 8270	* PCBs EPA 8082						Notes
DU-10-plus-a-IS-0.2-240725	01	07-25-24	9:10	Soil	1						X						
DU-10-Plus-b-IS-0.2-240725	02	07-25-24	10:15	Soil	1						X						

Samples received at 3 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Jordan Morris	Jordan Morris	Evren Northwest	07-25-24	18:00
Received by:	Anh Phan	FBI	07/26/24	10:05
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
5500 4th Avenue S
Seattle, WA 98108
Ph. (206) 285-8282

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 407400 CLIENT Evren INITIALS/ DATE: AP 07/26/24

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

Cooler/Sample temperature 3 °C
Thermometer ID: Fluke 96312917

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

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

Is there a Chain-of-Custody* (COC)? ☑ YES ☐ NO Initials/ Date: NA 7/26
*or other representative documents, letters, and/or shipping memos

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

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

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

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

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

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

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

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

Other comments (use a separate page if needed)

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

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

GLS.

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

Ship From
EVREN NW
DAN SAJKO
40 SE 24TH AVE
PORTLAND, OR 97214

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

COD: $0.00
Weight: 0 lb(s)
Reference:

Delivery Instructions:

Signature Type: NOT REQUIRED

Tracking #: 561732667

PDS

SEATTLE

S06437C

12803405

KNT WA980-7C0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

September 4, 2024

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

Dear Mr Green:

Included are the results from the testing of material submitted on August 21, 2024 from the 1355-22001-11, F&BI 408335 project. There are 10 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
ENW0904R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on August 21, 2024 by Friedman & Bruya, Inc. from the Evren Northwest 1355-22001-11, F&BI 408335 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Evren Northwest
408335 -01	DU10-a-IS-1.0-240820
408335 -02	DU10-b-IS-1.0-240820
408335 -03	DU10-Plus-a-1.0-240820
408335 -04	Rinsate 10

All quality control requirements were acceptable.

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Rinsate 10	Client:	Evren Northwest
Date Received:	08/21/24	Project:	1355-22001-11, F&BI 408335
Date Extracted:	08/19/24	Lab ID:	408335-04
Date Analyzed:	08/21/24	Data File:	082106.D
Matrix:	Water	Instrument:	GC12
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	46	24	79
Decachlorobiphenyl	50	12	82

Compounds:	Concentration ug/L (ppb)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1
Aroclor 1262	<0.1
Aroclor 1268	<0.1

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Method Blank	Client:	Evren Northwest
Date Received:	Not Applicable	Project:	1355-22001-11, F&BI 408335
Date Extracted:	08/21/24	Lab ID:	04-1936 mb2
Date Analyzed:	08/21/24	Data File:	082105.D
Matrix:	Water	Instrument:	GC12
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	45	24	79
Decachlorobiphenyl	48	12	82

Compounds:	Concentration ug/L (ppb)
Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1
Aroclor 1262	<0.1
Aroclor 1268	<0.1

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	DU10-a-IS-1.0-240820	Client:	Evren Northwest
Date Received:	08/21/24	Project:	1355-22001-11, F&BI 408335
Date Extracted:	08/22/24	Lab ID:	408335-01 1/30 and 408335-01 1/300
Date Analyzed:	08/23/24 and 08/26/24	Data File:	082225.D and 082630.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	70	11	162
Decachlorobiphenyl	72	11	152

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	1.4
Aroclor 1260	2.2
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	DU10-b-IS-1.0-240820	Client:	Evren Northwest
Date Received:	08/21/24	Project:	1355-22001-11, F&BI 408335
Date Extracted:	08/22/24	Lab ID:	408335-02 1/30 and 408335-02 1/600
Date Analyzed:	08/23/24 and 08/26/24	Data File:	082226.D and 082631.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	85	11	162
Decachlorobiphenyl	81	11	152

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	3.1
Aroclor 1260	5.5
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	DU10-Plus-a-1.0-240820	Client:	Evren Northwest
Date Received:	08/21/24	Project:	1355-22001-11, F&BI 408335
Date Extracted:	08/22/24	Lab ID:	408335-03 1/30
Date Analyzed:	08/23/24	Data File:	082227.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	80	11	162
Decachlorobiphenyl	81	11	152

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	0.19
Aroclor 1260	0.82
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Method Blank	Client:	Evren Northwest
Date Received:	Not Applicable	Project:	1355-22001-11, F&BI 408335
Date Extracted:	08/22/24	Lab ID:	04-2056 mb3 1/30
Date Analyzed:	08/22/24	Data File:	082206.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	98	11	162
Decachlorobiphenyl	106	11	152

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	<0.02
Aroclor 1260	<0.02
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Date of Report: 09/04/24
Date Received: 08/21/24
Project: 1355-22001-11, F&BI 408335

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR POLYCHLORINATED BIPHENYLS AS AROCLOR 1016/1260 BY EPA METHOD 8082A

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Aroclor 1016	ug/L (ppb)	0.25	59	62	31-105	5
Aroclor 1260	ug/L (ppb)	0.25	71	75	44-110	5

Date of Report: 09/04/24
Date Received: 08/21/24
Project: 1355-22001-11, F&BI 408335

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR POLYCHLORINATED BIPHENYLS AS AROCLOR 1016/1260 BY EPA METHOD 8082A

Laboratory Code: 408303-04 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Control Limits	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	0.25	<0.004	86	102	29-125	17
Aroclor 1260	mg/kg (ppm)	0.25	0.010	76	90	12-177	17

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Aroclor 1016	mg/kg (ppm)	0.25	108	55-137
Aroclor 1260	mg/kg (ppm)	0.25	112	51-150

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the standard reporting limit. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

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

408335

SAMPLE CHAIN OF CUSTODY

08/21/24

ISM/F1/F2

Page # 1 of 1

Report To Lynn Green

Company Evren Northwest

Address PO Box 14488

City, State, ZIP Portland OR 97293

Phone 503 452-5561 Email Lynng@evren-nw.com

SAMPLERS (signature)

PROJECT NAME: 1355-22001-11

PO #

REMARKS: (*) PCBs as aroclors

Project specific RLs? - Yes / No

INVOICE TO

TURNAROUND TIME
- [x] Standard turnaround
- [ ] RUSH
- Rush charges authorized by:

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

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082 (*)	ISM Prep				Notes
						ANALYSES REQUESTED											(NW) 8/21
DU10-a-IS-1.0-240820	01	08/20/24	11:06	Soil	1							X	X				Label DU01_a_1.0_IS_240820
DU10-b-IS-1.0-240820	02	08/20/24	13:40	Soil	1							X	X				
DU10-Plus-a-1.0-240820	03	8/20/24	1530	Soil	1							X	X				
Rinsate 10	04	8/20/24	912	W	1							X					
													Samples received at 3 oC				

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Dan Sytko	EVN	8/21/24	1600
Received by:	Nhan Phan	FEBI	8/21/24	1030
Relinquished by:				
Received by:				

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

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 408335 CLIENT Evren INITIALS/ DATE: NP 8/21/24

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

Cooler/Sample temperature 3 °C
Thermometer ID: Fluke 96312917

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

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

Is there a Chain-of-Custody* (COC)? ☑ YES ☐ NO Initials/ Date: NP 8/21
*or other representative documents, letters, and/or shipping memos

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

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

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

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

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

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

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

Sample ID's	☐ Yes ☑ No	(-01) ID on label: SM01-a-1.0-240820 ☐ Not on COC/label
Date Sampled	☑ Yes ☐ No	☐ Not on COC/label
Time Sampled	☑ Yes ☐ No	☐ Not on COC/label
# of Containers	☑ Yes ☐ No	
Relinquished	☑ Yes ☐ No	
Requested analysis	☑ Yes ☐ On Hold	

Other comments (use a separate page if needed)

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

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

GLS.

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

Ship From
EVREN NW
DAN SAJKO
40 SE 24TH AVE
PORTLAND, OR 97214

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

COD: $0.00
Weight: 0 lb(s)
Reference:

Delivery Instructions:

Signature Type: NOT REQUIRED

Tracking #: 561732686

PDS

SEATTLE

S06437C

12802424

KNT WA980-7C0

Print Date: 7/22/2024 9:17 AM

Package 24 of 25

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

September 4, 2024

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

Dear Mr Green:

Included are the results from the testing of material submitted on August 23, 2024 from the 1355-21001-11, F&BI 408388 project. There are 7 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
ENW0904R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on August 23, 2024 by Friedman & Bruya, Inc. from the Evren Northwest 1355-21001-11, F&BI 408388 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Evren Northwest
408388 -01	DU10-plus-b-1.0-240821
408388 -02	DU10-c-IS-1.0-240821
408388 -03	DU10-d-IS-1.0-240821

All quality control requirements were acceptable.

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	DU10-plus-b-1.0-240821	Client:	Evren Northwest
Date Received:	08/23/24	Project:	1355-21001-11, F&BI 408388
Date Extracted:	08/26/24	Lab ID:	408388-01 1/30
Date Analyzed:	08/26/24	Data File:	082634.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	68	11	162
Decachlorobiphenyl	77	11	152

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	<0.02
Aroclor 1260	0.65
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	DU10-c-IS-1.0-240821	Client:	Evren Northwest
Date Received:	08/23/24	Project:	1355-21001-11, F&BI 408388
Date Extracted:	08/26/24	Lab ID:	408388-02 1/30
Date Analyzed:	08/26/24	Data File:	082635.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	80	11	162
Decachlorobiphenyl	82	11	152

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	<0.02
Aroclor 1260	0.14
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	DU10-d-IS-1.0-240821	Client:	Evren Northwest
Date Received:	08/23/24	Project:	1355-21001-11, F&BI 408388
Date Extracted:	08/26/24	Lab ID:	408388-03 1/30
Date Analyzed:	08/27/24	Data File:	082636.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	68	11	162
Decachlorobiphenyl	79	11	152

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	<0.02
Aroclor 1260	0.055
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Method Blank	Client:	Evren Northwest
Date Received:	Not Applicable	Project:	1355-21001-11, F&BI 408388
Date Extracted:	08/26/24	Lab ID:	04-2071 mb 1/30
Date Analyzed:	08/26/24	Data File:	082607.D
Matrix:	Soil	Instrument:	GC7
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	96	11	162
Decachlorobiphenyl	96	11	152

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	<0.02
Aroclor 1260	<0.02
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Date of Report: 09/04/24
Date Received: 08/23/24
Project: 1355-21001-11, F&BI 408388

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR POLYCHLORINATED BIPHENYLS AS AROCLOR 1016/1260 BY EPA METHOD 8082A

Laboratory Code: 408408-01 1/30 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Control Limits	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	0.25	<0.02	73	78	29-125	7
Aroclor 1260	mg/kg (ppm)	0.25	<0.02	72	74	12-177	3

Laboratory Code: Laboratory Control Sample 1/30

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Aroclor 1016	mg/kg (ppm)	0.25	88	55-137
Aroclor 1260	mg/kg (ppm)	0.25	90	51-150

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the standard reporting limit. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

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

408388

SAMPLE CHAIN OF CUSTODY

08/23/24 ISM/FI

Report To Lynn Green
Company Ever Northwest
Address PO Box 14488
City, State, ZIP Portland OR 97293
Phone 503 452-5561 Email lynn@ever-nw.com

SAMPLERS (*signature*)

PROJECT NAME: 1355-21001-11

PO #

REMARKS: *PCBs as aroclors

Project specific RLs? - Yes / No

INVOICE TO

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

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

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082 *	ISM Prep				Notes
DU10-plus-b-1.0-240821	01	8/21/24	11:40	Soil	1							X	X				
DU10-C-IS-1.0-240821	02	8/21/24	14:16	Soil	1							X	X				
DU10-d-IS-1.0-240821	03	8/21/24	16:45	Soil	1							X	X				
							Samples received at						2	°C			

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Dan Saylo	ENW	8/22/24	1830
Received by:	Anh Phan	FBI	08/23/24	10:41
Relinquished by:				
Received by:				

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

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 408388 CLIENT Evren INITIALS/ DATE: AP 08/23/24

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

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

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

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

Is there a Chain-of-Custody* (COC)? ☑ YES ☐ NO Initials/ Date: AP 08/23/24
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory 2 days

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

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

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

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

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

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

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

Other comments (use a separate page if needed)

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

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

8/21/24, 7:55 AM about:blank

GLS.

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

Ship From
EVREN NW
DAN SAJKO
40 SE 24TH AVE.
PORTLAND, OR 97214

Ship To
FRIEDMAN & BRUYA, INC
SAMPLE RECEIVING
5500 4TH AVE S
SEATTLE, WA 98108

COD: $0.00
Weight: 0 lb(s)
Reference:

Delivery Instructions:

Signature Type: NOT REQUIRED

Tracking #: 561874395

PDS

SEATTLE

S06437C

14528316

KNT WA980-7C0

Print Date: 8/21/2024 7:54 AM

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

September 4, 2024

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

Dear Mr Green:

Included are the results from the testing of material submitted on August 23, 2024 from the 1355-21001-11, F&BI 408389 project. There are 8 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
ENW0904R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on August 23, 2024 by Friedman & Bruya, Inc. from the Evren Northwest 1355-21001-11, F&BI 408389 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Evren Northwest
408389 -01	DU10-plus-b-GS01-1.0
408389 -02	DU10-plus-b-GS01-1.0-fines
408389 -03	DU10-a-GS02-1.0
408389 -04	DU10-a-GS02-1.0-fines

All quality control requirements were acceptable.

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	DU10-plus-b-GS01-1.0	Client:	Evren Northwest
Date Received:	08/23/24	Project:	1355-21001-11, F&BI 408389
Date Extracted:	08/27/24	Lab ID:	408389-01 1/30
Date Analyzed:	08/27/24	Data File:	082722.D
Matrix:	Soil	Instrument:	GC12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	70	41	139
Decachlorobiphenyl	68	48	145

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	0.25
Aroclor 1260	0.86
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	DU10-plus-b-GS01-1.0-fines	Client:	Evren Northwest
Date Received:	08/23/24	Project:	1355-21001-11, F&BI 408389
Date Extracted:	08/27/24	Lab ID:	408389-02 1/30
Date Analyzed:	08/27/24	Data File:	082723.D
Matrix:	Soil	Instrument:	GC12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	77	41	139
Decachlorobiphenyl	79	48	145

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	0.38
Aroclor 1260	1.1
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	DU10-a-GS02-1.0	Client:	Evren Northwest
Date Received:	08/23/24	Project:	1355-21001-11, F&BI 408389
Date Extracted:	08/27/24	Lab ID:	408389-03 1/30 and 408389-03 1/300
Date Analyzed:	08/27/24 and 08/28/24	Data File:	082724.D
Matrix:	Soil	Instrument:	GC12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	77	41	139
Decachlorobiphenyl	73	48	145

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	0.60
Aroclor 1260	1.5
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	DU10-a-GS02-1.0-fines	Client:	Evren Northwest
Date Received:	08/23/24	Project:	1355-21001-11, F&BI 408389
Date Extracted:	08/27/24	Lab ID:	408389-04 1/30 and 408389-04 1/300
Date Analyzed:	08/27/24 and 08/28/24	Data File:	082725.D
Matrix:	Soil	Instrument:	GC12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	77	41	139
Decachlorobiphenyl	73	48	145

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	1.0
Aroclor 1260	3.0
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Method Blank	Client:	Evren Northwest
Date Received:	Not Applicable	Project:	1355-21001-11, F&BI 408389
Date Extracted:	08/27/24	Lab ID:	04-2073 mb3 1/30
Date Analyzed:	08/27/24	Data File:	082705.D
Matrix:	Soil	Instrument:	GC12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	92	41	139
Decachlorobiphenyl	104	48	145

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	<0.02
Aroclor 1260	<0.02
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Date of Report: 09/04/24
Date Received: 08/23/24
Project: 1355-21001-11, F&BI 408389

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR POLYCHLORINATED BIPHENYLS AS AROCLOR 1016/1260 BY EPA METHOD 8082A

Laboratory Code: 408384-07 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Control Limits	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	0.25	<0.002	887 ip	1,019 ip	50-150	14
Aroclor 1260	mg/kg (ppm)	0.25	0.52 ve	1,558 b	1,718 b	50-150	10 b

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Aroclor 1016	mg/kg (ppm)	0.25	73	50-138
Aroclor 1260	mg/kg (ppm)	0.25	88	54-146

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the standard reporting limit. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

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

408389

SAMPLE CHAIN OF CUSTODY

08/23/24 E1

Page # 1 of 1

Report To Lynn Green
Company Ecovan Northwest
Address PO Box 14488
City, State, ZIP Portland OR 97293
Phone 503 452-5561 Email Lynn@ecovan-nw.com

SAMPLERS (*signature*)

PROJECT NAME: 1355-21001-11

PO #

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

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

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

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082					Notes
DU10-plus-b-G501-1.0	01	8/21/24	11:40	Soil	1							X					
DU10-plus-b-G501-1.0-fines	02	8/21/24	11:42	Soil	1							X					
DU10-a-G502-1.0	03	8/22/24	13:00	Soil	1							X					
DU10-a-G502-1.0-fines	04	8/22/24	13:06	Soil	1							X					
						Samples received at							2	°C			

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Dan Sajko	EDW	8/22/24	18:00
Received by:	Anh Phan	FBI	08/23/24	10:41
Relinquished by:				
Received by:				

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

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 408389 CLIENT Evren INITIALS/ DATE: AP 08/23/24

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

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

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

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

Is there a Chain-of-Custody* (COC)? ☑ YES ☐ NO Initials/ Date: AP 08/23/24
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory 1-2 days

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

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

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

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

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

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

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

Other comments (use a separate page if needed)
Time on label | 11:42 for labID -01
12:26 for labID -02

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

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

GLS.

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

PDS

Ship From
EVREN NW
DAN SAJKO
40 SE 24TH AVE
PORTLAND, OR 97214

Tracking #: 561874396

Ship To
FRIEDMAN & BRUYA, INC.
SAMPLE RECEIVING
5500 4TH AVE S
SEATTLE, WA 98108

SEATTLE

S06437C

COD: $0.00
Weight: 0 lb(s)
Reference:

Delivery Instructions:

Signature Type: NOT REQUIRED

14528317

KNT WA980-7C0

Print Date: 8/21/2024 7:54 AM

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

September 4, 2024

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

Dear Mr Green:

Included are the results from the testing of material submitted on August 23, 2024 from the 1355-21001-11, F&BI 408390 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Neil Woller, Paul Trone, Evan Bruggeman
ENW0904R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on August 23, 2024 by Friedman & Bruya, Inc. from the Evren Northwest 1355-21001-11, F&BI 408390 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Evren Northwest
408390 -01	DU10-e-IS-1.0-240822
408390 -02	DU10-f-IS-1.0-240822

All quality control requirements were acceptable.

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	DU10-e-IS-1.0-240822	Client:	Evren Northwest
Date Received:	08/23/24	Project:	1355-21001-11, F&BI 408390
Date Extracted:	08/27/24	Lab ID:	408390-01 1/30
Date Analyzed:	08/27/24	Data File:	082712.D
Matrix:	Soil	Instrument:	GC12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	74	41	139
Decachlorobiphenyl	72	48	145

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	0.15
Aroclor 1260	0.14
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	DU10-f-IS-1.0-240822	Client:	Evren Northwest
Date Received:	08/23/24	Project:	1355-21001-11, F&BI 408390
Date Extracted:	08/27/24	Lab ID:	408390-02 1/30
Date Analyzed:	08/27/24	Data File:	082713.D
Matrix:	Soil	Instrument:	GC12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	78	41	139
Decachlorobiphenyl	79	48	145

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	0.034
Aroclor 1260	0.10
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Method Blank	Client:	Evren Northwest
Date Received:	Not Applicable	Project:	1355-21001-11, F&BI 408390
Date Extracted:	08/27/24	Lab ID:	04-2073 mb3 1/30
Date Analyzed:	08/27/24	Data File:	082705.D
Matrix:	Soil	Instrument:	GC12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	92	41	139
Decachlorobiphenyl	104	48	145

Compounds:	Concentration mg/kg (ppm) Dry Weigh
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	<0.02
Aroclor 1260	<0.02
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Date of Report: 09/04/24
Date Received: 08/23/24
Project: 1355-21001-11, F&BI 408390

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR POLYCHLORINATED BIPHENYLS AS AROCLOR 1016/1260 BY EPA METHOD 8082A

Laboratory Code: 408384-07 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Control Limits	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	0.25	<0.002	887 ip	1019 ip	50-150	14
Aroclor 1260	mg/kg (ppm)	0.25	0.52	1558 b	1718 b	50-150	10 b

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Aroclor 1016	mg/kg (ppm)	0.25	73	50-138
Aroclor 1260	mg/kg (ppm)	0.25	88	54-146

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the standard reporting limit. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

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

408390

SAMPLE CHAIN OF CUSTODY 08/23/24 ISM/FI

Page # 1 of 1

Report To Lynn Green
Company Even Northwest
Address P.O. Box 14488
City, State, ZIP Portland OR 97293
Phone (503) 452-5514 Email lynng@even-nw.com

SAMPLERS (*signature*) Jordan Morris

PROJECT NAME: 1355-21001-11
PO #:

REMARKS: *PCBs as Aroclors
Project specific RLs? - Yes / No

INVOICE TO:

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

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

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs* EPA 8082	TSM prep				Notes
DUB-E-IS-1.0-240822	01	08-22-24	11:45	Soil	1							X	X				
DUB-F-IS-1.0-240822	02	08-22-24	12:30	Soil	1							X	X				
							Samples received at 2 °C										

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Jordan Morris	Jordan Morris	Even Northwest	08-22-24	18:00
Received by:	Anh Phan	FBI	08/23/24	10:41
Relinquished by:				
Received by:				

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

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 408390 CLIENT Evren INITIALS/ DATE: AP 08/23/24

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

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

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

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

Is there a Chain-of-Custody* (COC)? ☑ YES ☐ NO Initials/ Date: AP 08/23/24
*or other representative documents, letters, and/or shipping memos

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

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

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

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

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

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

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

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

Other comments (use a separate page if needed)

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

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

GLS.

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

PDS

Ship From
EVREN NW
DAN SAJKO
40 SE 24TH AVE
PORTLAND, OR 97214

Ship To
FRIEDMAN & BRUYA, INC
SAMPLE RECEIVING
5500 4TH AVE S
SEATTLE, WA 98108

COD: $0.00
Weight: 0 lb(s)
Reference:

Delivery Instructions:

Signature Type: NOT REQUIRED

Tracking #: 561874396

SEATTLE

S06437C

14528317

KNT WA980-7C0

Print Date: 8/21/2024 7:54 AM

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

September 30, 2024

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

Dear Mr Green:

Included are the results from the testing of material submitted on September 24, 2024 from the 1355-21001-11, F&BI 409370 project. There are 5 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
ENW0930R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on September 24, 2024 by Friedman & Bruya, Inc. from the Evren Northwest 1355-21001-11, F&BI 409370 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Evren Northwest
409370 -01	DU10-bplus-IS-2.0

Aroclor 1260 in the 8082A matrix spike and matrix spike duplicate did not meet the acceptance criteria. The laboratory control sample passed the acceptance criteria, therefore the results were due to matrix effect.

All other quality control requirements were acceptable.

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	DU10-bplus-IS-2.0	Client:	Evren Northwest
Date Received:	09/24/24	Project:	1355-21001-11, F&BI 409370
Date Extracted:	09/24/24	Lab ID:	409370-01 1/30
Date Analyzed:	09/24/24	Data File:	092407.D
Matrix:	Soil	Instrument:	GC12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	83	41	139
Decachlorobiphenyl	104	48	145

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	<0.02
Aroclor 1260	0.042
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Method Blank	Client:	Evren Northwest
Date Received:	Not Applicable	Project:	1355-21001-11, F&BI 409370
Date Extracted:	09/24/24	Lab ID:	04-2306 mb2 1/30
Date Analyzed:	09/24/24	Data File:	092405.D
Matrix:	Soil	Instrument:	GC12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	95	41	139
Decachlorobiphenyl	111	48	145

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	<0.02
Aroclor 1260	<0.02
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Date of Report: 09/30/24
Date Received: 09/24/24
Project: 1355-21001-11, F&BI 409370

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR POLYCHLORINATED BIPHENYLS AS AROCLOR 1016/1260 BY EPA METHOD 8082A

Laboratory Code: 409306-08 1/30 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Control Limits	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	0.25	<0.02	56	54	50-150	4
Aroclor 1260	mg/kg (ppm)	0.25	<0.02	44 vo	43 vo	50-150	2

Laboratory Code: Laboratory Control Sample 1/30

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Aroclor 1016	mg/kg (ppm)	0.25	94	50-138
Aroclor 1260	mg/kg (ppm)	0.25	100	54-146

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the standard reporting limit. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

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

409370

SAMPLE CHAIN OF CUSTODY

09/24/24

Page # 1 of 1 ISM

Report To Lynn Green

Company Evan Northwest

Address P.O. Box 11100

City, State, ZIP Portland OR 97293

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

SAMPLERS (*signature*)

PROJECT NAME 1355-2100L11

PO #

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

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

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

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	ISM Prep				Notes
DU10-bplus-IS-2.0	01	09-23-24	12:30	Soil	1							X	X				

Samples received at 3 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Jordan Harris	EVN	09-23-24	18:00
Received by:	Michael Eadie	PSDn	9/24/24	1005
Relinquished by:				
Received by:				

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

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 409370 CLIENT ENW INITIALS/ DATE: MG 9/24/24

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

Cooler/Sample temperature 3 °C
Thermometer ID: Fluke 96312917

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

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

Is there a Chain-of-Custody* (COC)? ☒ YES ☐ NO Initials/ Date: AWB 9/24
*or other representative documents, letters, and/or shipping memos

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

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

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

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

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

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

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

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

Other comments (use a separate page if needed)

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

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

GLS.

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

Ship From
EVREN NW
DAN SAJKO
40 SE 24TH AVE
PORTLAND, OR 97214

Ship To
FRIEDMAN & BRUYA, INC
SAMPLE RECEIVING
5500 4TH AVE S
SEATTLE, WA 98108

COD: $0.00
Weight: 0 lb(s)
Reference:

Delivery Instructions:

Signature Type: NOT REQUIRED

Tracking #: 561874415

PDS

SEATTLE

S06437C

14528336

KNT WA980-7C0

Print Date: 8/21/2024 7:54 AM

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

October 3, 2024

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

Dear Mr Green:

Included are the results from the testing of material submitted on September 25, 2024 from the 1355-21001-11, F&BI 409402 project. There are 9 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
ENW1003R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on September 25, 2024 by Friedman & Bruya, Inc. from the Evren Northwest 1355-21001-11, F&BI 409402 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Evren Northwest
409402 -01	DU10-b-IS-2.0
409402 -02	DU10-a-IS-2.0
409402 -03	Rinsate 11

The 8082 water laboratory control sample and laboratory control sample duplicate did not meet the relative percent difference acceptance criteria. PCBs were not detected therefore the data were acceptable.

All other quality control requirements were acceptable.

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Rinsate 11	Client:	Evren Northwest
Date Received:	09/25/24	Project:	1355-21001-11, F&BI 409402
Date Extracted:	09/27/24	Lab ID:	409402-03
Date Analyzed:	09/30/24	Data File:	093009.D
Matrix:	Water	Instrument:	GC7
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	36	24	127
Decachlorobiphenyl	24	10	89

Compounds:	Concentration ug/L (ppb)
Aroclor 1221	<0.4
Aroclor 1232	<0.4
Aroclor 1016	<0.4
Aroclor 1242	<0.4
Aroclor 1248	<0.4
Aroclor 1254	<0.4
Aroclor 1260	<0.4
Aroclor 1262	<0.4
Aroclor 1268	<0.4

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Method Blank	Client:	Evren Northwest
Date Received:	Not Applicable	Project:	1355-21001-11, F&BI 409402
Date Extracted:	09/27/24	Lab ID:	04-2340 mb
Date Analyzed:	09/30/24	Data File:	093005.D
Matrix:	Water	Instrument:	GC7
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	38	24	127
Decachlorobiphenyl	57	10	89

Compounds:	Concentration ug/L (ppb)
Aroclor 1221	<0.4
Aroclor 1232	<0.4
Aroclor 1016	<0.4
Aroclor 1242	<0.4
Aroclor 1248	<0.4
Aroclor 1254	<0.4
Aroclor 1260	<0.4
Aroclor 1262	<0.4
Aroclor 1268	<0.4

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	DU10-b-IS-2.0	Client:	Evren Northwest
Date Received:	09/25/24	Project:	1355-21001-11, F&BI 409402
Date Extracted:	09/26/24	Lab ID:	409402-01 1/30
Date Analyzed:	09/27/24	Data File:	092708.D
Matrix:	Soil	Instrument:	GC12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	67	41	139
Decachlorobiphenyl	60	48	145

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	0.34
Aroclor 1260	0.51
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	DU10-a-IS-2.0	Client:	Evren Northwest
Date Received:	09/25/24	Project:	1355-21001-11, F&BI 409402
Date Extracted:	09/26/24	Lab ID:	409402-02 1/30
Date Analyzed:	09/27/24	Data File:	092709.D
Matrix:	Soil	Instrument:	GC12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	62	41	139
Decachlorobiphenyl	62	48	145

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	0.20
Aroclor 1260	0.33
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Method Blank	Client:	Evren Northwest
Date Received:	Not Applicable	Project:	1355-21001-11, F&BI 409402
Date Extracted:	09/26/24	Lab ID:	04-2326 mb 1/30
Date Analyzed:	09/27/24	Data File:	092704.D
Matrix:	Soil	Instrument:	GC12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	96	41	139
Decachlorobiphenyl	107	48	145

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	<0.02
Aroclor 1260	<0.02
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Date of Report: 10/03/24
Date Received: 09/25/24
Project: 1355-21001-11, F&BI 409402

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR POLYCHLORINATED BIPHENYLS AS AROCLOR 1016/1260 BY EPA METHOD 8082A

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Aroclor 1016	ug/L (ppb)	0.25	52	54	20-94	4
Aroclor 1260	ug/L (ppb)	0.25	118	72	23-123	48 vo

Date of Report: 10/03/24
Date Received: 09/25/24
Project: 1355-21001-11, F&BI 409402

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR POLYCHLORINATED BIPHENYLS AS AROCLOR 1016/1260 BY EPA METHOD 8082A

Laboratory Code: 409402-02 1/30 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Control Limits	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	0.25	<0.02	86	91	50-150	6
Aroclor 1260	mg/kg (ppm)	0.25	0.31	115 b	104 b	50-150	10 b

Laboratory Code: Laboratory Control Sample 1/30

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Aroclor 1016	mg/kg (ppm)	0.25	104	50-138
Aroclor 1260	mg/kg (ppm)	0.25	111	54-146

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the standard reporting limit. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

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

409402

SAMPLE CHAIN OF CUSTODY

09/25/24

Page # 1 of 1

Report To Lynn Green

Company Evren Northwest

Address P.O. Box 14488

City, State, ZIP Portland, OR 97293

Phone (503) 452-5561 Email lynng@evren-nw.com

SAMPLERS (*signature*) Jordan Mans

PROJECT NAME 1355-2001-01

PO #

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

TURNAROUND TIME

☑ Standard turnaround

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Archive samples

☐ Other

Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Issue Pyr				Notes
DU10-b-IS-2.0	01	09-24-24	11:30	Soil	1							X	X				
DU10-9-IS-2.0	02	09-24-24	13:20	Soil	1							X	X				
RINSATE 11	03A-B	09-24-24	11:38	Water	2							X					

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Jordan Mans	Jordan Mans	Evren Northwest	09.24.24	18:00
Received by: Nhan Pham	Nhan Pham	FEBI	9/25/24	11:15
Relinquished by:				
Received by:		Samples received at 4 °C		

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

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 409402 CLIENT Evren INITIALS/DATE: NP 9/25/24

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

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

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

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

Is there a Chain-of-Custody* (COC)? ☑ YES ☐ NO Initials/Date: MB 9/25
*or other representative documents, letters, and/or shipping memos

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

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

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

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

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

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

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

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

Other comments (use a separate page if needed)

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

Number of unused TO15 canisters** _____ **Number of unused TO17 tubes** _____
**Fill out Green manifolds billing sheet

GLS.

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

Ship From
EVREN NW
DAN SAJKO
40 SE 24TH AVE
PORTLAND, OR 97214

Ship To
FRIEDMAN & BRUYA, INC
SAMPLE RECEIVING
5500 4TH AVE S
SEATTLE, WA 98108

COD: $0.00
Weight: 0 lb(s)
Reference:

Delivery Instructions:

Signature Type: NOT REQUIRED

Tracking #: 561874416

PDS

SEATTLE

S06437C

14528337

KNT WA980-7C0

Print Date: 8/21/2024 7:54 AM

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

November 19, 2024

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

Dear Mr Green:

Included is the amended report from the testing of material submitted on September 27, 2024 from the 1355-21001-11, F&BI 409449 project. Per your request, the sample ID has been updated.

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
ENW1007R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

October 7, 2024

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

Dear Mr Green:

Included are the results from the testing of material submitted on September 27, 2024 from the 1355-21001-11, F&BI 409449 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Neil Woller, Paul Trone, Evan Bruggeman
ENW1007R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on September 27, 2024 by Friedman & Bruya, Inc. from the Evren Northwest 1355-21001-11, F&BI 409449 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Evren Northwest
409449 -01	DU10-plus-a-GS03-2.0
409449 -02	DU10-plus-a-GS04-2.0

All quality control requirements were acceptable.

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	DU10-plus-a-GS03-2.0	Client:	Evren Northwest
Date Received:	09/27/24	Project:	1355-21001-11, F&BI 409449
Date Extracted:	10/02/24	Lab ID:	409449-01 1/30
Date Analyzed:	10/02/24	Data File:	100226.D
Matrix:	Soil	Instrument:	GC12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	70	41	139
Decachlorobiphenyl	80	48	145

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	0.032
Aroclor 1260	0.11
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	DU10-plus-a-GS04-2.0	Client:	Evren Northwest
Date Received:	09/27/24	Project:	1355-21001-11, F&BI 409449
Date Extracted:	10/02/24	Lab ID:	409449-02 1/30
Date Analyzed:	10/02/24	Data File:	100227.D
Matrix:	Soil	Instrument:	GC12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	67	41	139
Decachlorobiphenyl	82	48	145

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	<0.02
Aroclor 1260	<0.02
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Method Blank	Client:	Evren Northwest
Date Received:	Not Applicable	Project:	1355-21001-11, F&BI 409449
Date Extracted:	10/01/24	Lab ID:	04-2376 mb2 1/30
Date Analyzed:	10/02/24	Data File:	100224.D
Matrix:	Soil	Instrument:	GC12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	75	41	139
Decachlorobiphenyl	105	48	145

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	<0.02
Aroclor 1260	<0.02
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Date of Report: 10/07/24
Date Received: 09/27/24
Project: 1355-21001-11, F&BI 409449

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR POLYCHLORINATED BIPHENYLS AS AROCLOR 1016/1260 BY EPA METHOD 8082A

Laboratory Code: 409433-07 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Control Limits	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	0.042	<0.004	70	70	50-150	0
Aroclor 1260	mg/kg (ppm)	0.042	0.0089	74	76	50-150	3

Laboratory Code: Laboratory Control Sample 1/30

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Aroclor 1016	mg/kg (ppm)	0.042	86	50-138
Aroclor 1260	mg/kg (ppm)	0.042	104	54-146

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the standard reporting limit. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

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

409449

SAMPLE CHAIN OF CUSTODY 09/27/24 H1

Report To Lynn Green
Company Evren Northwest
Address PO Box 14608
City, State, ZIP Portland OR 97214
Phone 503 452-5561 Email lynng@evrennw.com

SAMPLERS (*signature*)

PROJECT NAME: 1355-21001-11 | PO #

REMARKS: * as aroclors
Project specific RLs? - Yes / No

INVOICE TO

Page # 1 of 1

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

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

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082 *					Notes
DUP-plus-a-GS03-2.0	01	9/25/24	930	Soil	1							X					
DUP-plus-a-GS04-2.0	02	9/25/24	1040	Soil	1							X					
IDs updated per DS 11/18/24 ME																	
							Samples received at 5 °C										

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Dan Sayko	ENW	9/26/24	10:00
Received by:	Anh Phan	FBI	09/27/24	10:33
Relinquished by:				
Received by:				

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

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 409449 CLIENT Evren INITIALS/ AP DATE: 09/27/24

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

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

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

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

Is there a Chain-of-Custody* (COC)? ☑ YES ☐ NO Initials/ AP
*or other representative documents, letters, and/or shipping memos Date: 09/27/24

Number of days samples have been sitting prior to receipt at laboratory 2 days

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

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

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

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

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

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

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

Other comments (use a separate page if needed)

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

Number of unused TO15 canisters** _____ **Number of unused TO17 tubes** _____
**Fill out Green manifolds billing sheet

GLS.

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

Ship From
EVREN NW
DAN SAJKO
40 SE 24TH AVE
PORTLAND, OR 97214

Ship To
FRIEDMAN & BRUYA, INC
SAMPLE RECEIVING
5500 4TH AVE S
SEATTLE, WA 98108

COD: $0.00
Weight: 0 lb(s)
Reference:

Delivery Instructions:

Signature Type: NOT REQUIRED

Tracking #: 561874418

PDS

SEATTLE

S06437C

14528339

KNT WA980-7C0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

November 19, 2024

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

Dear Mr Green:

Included is the amended report from the testing of material submitted on September 27, 2024 from the 1355-21001-11, F&BI 409450 project. Per your request, the sample ID has been updated.

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
ENW1007R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

October 7, 2024

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

Dear Mr Green:

Included are the results from the testing of material submitted on September 27, 2024 from the 1355-21001-11, F&BI 409450 project. There are 5 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
ENW1007R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on September 27, 2024 by Friedman & Bruya, Inc. from the Evren Northwest 1355-21001-11, F&BI 409450 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Evren Northwest
409450 -01	DU10-plus-a-IS-2.0-240925

All quality control requirements were acceptable.

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	DU10- plus-a-IS -2.0-240925	Client:	Evren Northwest
Date Received:	09/27/24	Project:	1355-21001-11, F&BI 409450
Date Extracted:	10/02/24	Lab ID:	409450-01 1/30
Date Analyzed:	10/02/24	Data File:	100225.D
Matrix:	Soil	Instrument:	GC12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	69	41	139
Decachlorobiphenyl	79	48	145

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	<0.02
Aroclor 1260	0.069
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Method Blank	Client:	Evren Northwest
Date Received:	Not Applicable	Project:	1355-21001-11, F&BI 409450
Date Extracted:	10/01/24	Lab ID:	04-2376 mb2 1/30
Date Analyzed:	10/02/24	Data File:	100224.D
Matrix:	Soil	Instrument:	GC12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	75	41	139
Decachlorobiphenyl	105	48	145

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	<0.02
Aroclor 1260	<0.02
Aroclor 1262	<0.02
Aroclor 1268	<0.02

Date of Report: 10/07/24
Date Received: 09/27/24
Project: 1355-21001-11, F&BI 409450

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR POLYCHLORINATED BIPHENYLS AS AROCLOR 1016/1260 BY EPA METHOD 8082A

Laboratory Code: 409433-07 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Control Limits	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	0.25	<0.004	70	70	50-150	0
Aroclor 1260	mg/kg (ppm)	0.25	0.0089	74	76	50-150	3

Laboratory Code: Laboratory Control Sample 1/30

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Aroclor 1016	mg/kg (ppm)	0.25	86	50-138
Aroclor 1260	mg/kg (ppm)	0.25	104	54-146

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the standard reporting limit. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

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

409450

SAMPLE CHAIN OF CUSTODY

09/27/24 ISM/FI

Page # 1 of 1

Report To Lynn Green

Company Evren Northwest

Address Po Box 14484

City, State, ZIP Portland OR 97214

Phone 503 452-5361 Email Lynn@evren-nw.com

SAMPLERS (*signature*)

PROJECT NAME: 1355-21001-11

PO #

REMARKS: * PCBs as aroclors

Project specific RLs? - Yes / No

INVOICE TO

TURNAROUND TIME

☒ Standard turnaround

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Archive samples

☐ Other

Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	* PCBs EPA 8082					Notes
~~DU10-plus-b-2.0-240925~~ DU10-plus-a-IS-2.0-240925 per DS 11/18/24 ME	01	9/25/24	11:15	Soil	1							X	X				

Samples received at 3 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Dan Sykes	EVN	9/26/24	18:00
Received by:	Anh Phan	FBI	09/27/24	10:33
Relinquished by:				
Received by:				

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

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 409450 CLIENT Evren INITIALS/ AP DATE: 09/27/24

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

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

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

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

Is there a Chain-of-Custody* (COC)? ☑ YES ☐ NO Initials/ AP
*or other representative documents, letters, and/or shipping memos Date: 09/27/24

Number of days samples have been sitting prior to receipt at laboratory 2 days

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

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

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

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

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

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

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

Other comments (use a separate page if needed)

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

Number of unused TO15 canisters** _____ **Number of unused TO17 tubes** _____
**Fill out Green manifolds billing sheet

GLS.

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

Ship From
EVREN NW
DAN SAJKO
40 SE 24TH AVE
PORTLAND, OR 97214

Ship To
FRIEDMAN & BRUYA, INC
SAMPLE RECEIVING
5500 4TH AVE S
SEATTLE, WA 98108

COD: $0.00
Weight: 0 lb(s)
Reference:

Delivery Instructions:

Signature Type: NOT REQUIRED

Tracking #: 561874418

PDS

SEATTLE

S06437C

14528339

KNT WA980-7C0