

FOCUSED SITE INVESTIGATION

**LAKE SIDE SERVICE STATION
16835 LEWIS RIVER ROAD
COUGAR, WASHINGTON 98616**



Prepared for:

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ENW Project No. 1162-17001-02

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May 22, 2017

CONTENTS

| | |
|---|------------|
| TABLES, FIGURES AND APPENDICES | III |
| ACRONYMS AND ABBREVIATIONS | IV |
| 1.0 INTRODUCTION..... | 1 |
| 1.1 Background | 1 |
| 1.2 Purpose | 1 |
| 1.3 Scope of Work | 1 |
| 2.0 SITE DESCRIPTION AND SETTING | 2 |
| 2.1 Site and Vicinity General Description | 2 |
| 2.2 Geographic Setting | 2 |
| 2.3 Geologic Setting..... | 2 |
| 2.4 Surface Water | 2 |
| 2.5 Ground Water | 3 |
| 3.0 LAND USE AND PREVIOUS INVESTIGATIONS..... | 4 |
| 3.1 Historical and Current Land Use | 4 |
| 3.2 ENW's 2016 Phase I ESA Findings..... | 4 |
| 4.0 FIELD METHODS..... | 5 |
| 4.1 Field Preparation..... | 5 |
| 4.2 Geophysical Survey | 5 |
| 4.3 Soil Borings | 5 |
| 4.4 Laboratory Analysis..... | 7 |
| 4.5 Cleanup Levels | 7 |
| 4.5.1 Model Toxics Control Act (MTCA)..... | 7 |
| 4.5.2 EPA Regional Screening Levels (RSLs) | 8 |
| 5.0 RESULTS | 9 |
| 5.1 Geophysical Survey | 9 |
| 5.2 Soil Boring Locations and General Subsurface Conditions | 9 |
| 5.3 Laboratory Results | 10 |
| 5.3.1 Petroleum Hydrocarbons | 10 |
| 5.3.2 Volatile Organic Constituents..... | 10 |
| 5.3.3 Metals | 10 |
| 6.0 DISCUSSION..... | 11 |
| 7.0 LIMITATIONS | 12 |

TABLES, FIGURES AND APPENDICES

| Table | Location |
|---|--------------------------|
| 4-1 Soil Samples and Locations | Section 4 |
| 4-2 Analytical Plan..... | Section 4 |
| 1 Summary of Analytical Data, Soil..... | Behind Text (Tables Tab) |

| Figure | Figure No. |
|-------------------------------|-------------------|
| Site Vicinity Map | 1 |
| Site Plan | 2 |
| Sample Location Diagram | 3 |

| Appendix | Appendix No. |
|-----------------------------------|---------------------|
| Site Photographs | A |
| Soil Boring Logs..... | B |
| Laboratory Analytical Report..... | C |

ACRONYMS AND ABBREVIATIONS

| | |
|---------|------------------------------------|
| bgs | below ground surface |
| Client | Ed and Ruth Cunliffe |
| CULs | cleanup levels |
| ENW | EVREN Northwest, Inc. |
| EPA | US Environmental Protection Agency |
| ESA | Environmental Site Assessment |
| FSI | Focused Site Investigation |
| GRO | gasoline-range organics |
| GPR | ground-penetrating radar |
| mg/Kg | milligrams per Kilogram |
| PID | photoionization detector |
| PQL | practical quantification limit |
| Ecology | Washington Department of Ecology |
| MTCA | Model Toxics Control Act |
| RSLs | regional screening levels |
| SOW | scope of work |
| USTs | underground storage tanks |
| VOCs | volatile organic constituents |
| WAC | Washington Administrative Code |

1.0 INTRODUCTION

At the request of Ed and Ruth Cunliffe (Client), EVREN Northwest, Inc. (ENW) conducted a Focused Site Investigation (FSI) for the Lakeside Service Station property (Lakeside 24-Hour Fuel, LLC) located at 16835 Lewis River Road Cougar, Washington 98616 (subject property; see Figures 1 and 2). This FSI was conducted to evaluate whether historical land has resulted in adverse environmental conditions on the subject site.

1.1 Background

In March 2017, ENW performed a Phase I Environmental Site Assessment (ESA) at the subject property as part of due diligence on the part of a prospective buyer of the property. The Phase I ESA identified both past and present fuel dispensing systems on the property, including underground storage tanks (USTs) associated with a former gasoline station. The Client elected to assess subsurface conditions beneath the site to investigate the potential for environmental impacts that could pose a human health concern or present a potential cleanup liability.

1.2 Purpose

The purpose of this FSI was to quantitatively assess, through sampling and laboratory analysis, whether petroleum related chemical impacts to soils are present beneath the subject property. ENW understands this information will be used in support of fee title transfer of ownership of the property.

1.3 Scope of Work

ENW conducted the following scope of work (SOW) for this FSI; this work was approved by the Client on March 9, 2017:

- Conducted a geophysical survey of the subject property to clear for utilities near each of the borings and look for other features of environmental concern.
- Prepared an appropriate Sampling and Analysis Plan based on results of the geophysical survey and other available information.
- Advanced eight (8) direct-push borings using a hydraulic direct-push drill rig and collected soil samples using accepted industry standards.
- Analyzed discrete soil samples for the presence of chemical impacts using a Washington-certified laboratory.
- Evaluated analytical results with respect to Washington regulatory standards and Washington Department of Ecology (Ecology) guidance documents.
- Prepared this report documenting site conditions.

2.0 SITE DESCRIPTION AND SETTING

2.1 Site and Vicinity General Description

The 0.36-acre subject property is identified by Cowlitz County Assessor's Office as Tax Identification No. ES3410001, Township 7N, Range 4E, Section 34, and lies near the northwest shore of Yale Lake in Cowlitz County, in the unincorporated community of Cougar, Washington. The rectangular-shaped property is bordered to the northwest by Lewis River Road, to the southwest by Fire Station #2, to the southeast by a vacant lot, and to the northeast by residential property.

The subject property, which is in a commercial and residential section of Cougar, is developed with a card lock and public gasoline station and a single building with a convenience store. Site features are illustrated on the Site Plan on Figure 2.

2.2 Geographic Setting

The subject site is located within the US Geological Survey Cougar, Washington 7.5-minute quadrangle at an approximate elevation of 583 feet above mean sea level (Figure 1). The surface topography of the subject property is generally level. Surface topography near the subject site slopes to the east and south, towards Yale Lake. There is a steep upward rise to the north and west of the subject site.

2.3 Geologic Setting

The subject site is located in Cowlitz County at the foothills of Mt. St. Helens. According to the US Department of Agriculture soil survey of the area, the soil is classified as part of the Solo series, which is a gravelly loamy sand, with 0 to 8 percent slopes. Soils are described as moderately well drained.

Interactive maps produced by the Washington Division of Geology and Earth Resources indicate that the geology of the site is Quaternary fragmental volcanic rocks and deposits from the Quaternary age. These volcanics are dacitic to andesitic pyroclastic flow deposits of the 1980 Mount St. Helens eruptions, which consist mostly of poorly sorted, ash-sized, crudely graded deposits of glass shards, pumice, broken phenocrysts, and lithic fragments and lesser lapilli- to block-sized pumice and lithic fragments.

Soils encountered during this investigation included surface fill materials of gravel and sand overlying sands and gravels of alluvial origin to the maximum depth explored of 20 feet below ground surface (bgs).

2.4 Surface Water

The subject property is generally level. Surface topography in the vicinity of the subject site slopes to the east and south, towards Yale Lake. Consequently, surface drainage in the surrounding areas is expected to be directed southeast. No surface waters are present on site. The nearest surface body of water is Yale Lake, approximately 400 feet to the east.

2.5 Ground Water

Information gathered from Ecology's Water Resources online well log database identifies depth to ground water in the vicinity of the subject site at approximately 105 feet bgs. Ground water was not encountered in borings advanced during this FSI. The direction of ground water flow in the subject area is generally expected to be to the southeast, based on the local topography.

3.0 LAND USE AND PREVIOUS INVESTIGATIONS

Information on the historical use of the subject property and results of previous investigations was gathered during ENW's March 2017 Phase I ESA, which included historical records research, an environmental database search, interviews, and site reconnaissance survey of the property. Although records were reviewed related to the removal of previous USTs at the subject site, the Phase I ESA found no evidence of previous environmental assessment at the site.

3.1 Historical and Current Land Use

The subject property was first developed as a gas station and convenience store in the mid-1960s. Property use has remained the same up to the present time.

3.2 ENW's 2016 Phase I ESA Findings

Based on the findings of ENW's 2017 Phase I ESA, the following evidence of a *recognized environmental condition* was found in connection with the subject property:

Three (3) former USTs at the site were removed from the property in 1996 and replaced with the current 15,000-gallon split UST. No documentation was available to indicate whether soil samples were collected and analyzed for the presence of petroleum hydrocarbon impacts during decommissioning activities and therefore the potential for impacts on site remains. ENW recommends an investigation into subsurface conditions on site in relation to these former USTs.

The scope of work for this FSI was developed based on these findings.

4.0 FIELD METHODS

This section describes the field investigation activities completed during this FSI. Field activities were performed on April 28, 2017, and May 2, 2017. Photos of field work are presented in Appendix A. Figure 2 shows the site plan.

4.1 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.
- Prepared a Sampling and Analysis Plan for the project.

4.2 Geophysical Survey

ENW contracted with GeoPotential of Clackamas, Oregon to conduct a geophysical survey of selected areas of the subject property to: 1) confirm the location of private utilities not covered by One Call; and, 2) scan the perimeter of the site building, UST farm, and pump island for additional buried tanks or other environmental features of concern. The survey was conducted on April 28, 2017, and utilized an Aqua-Tronics Electronic Tracer, magnetometer, and ground penetrating radar (GPR) to identify subsurface “anomalies.” Here are descriptions of each of these instruments used during this survey.

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

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

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

4.3 Soil Borings

ENW contracted with Cascade Drilling (Clackamas, Oregon) to install a total of 8 direct-push borings using a track-mounted GeoProbe rig. The locations of the borings, which were installed on May 2, 2017, are illustrated on Figure 3 and their locations are further described on Table 4-1.

Table 4-1. Soil Samples and Locations

| Sample Location Identification | Sample ID | Media Sampled | Date Sampled | Depth Sampled (feet bgs) | Sampled by: | Location and Comments |
|--------------------------------|------------|---------------|--------------|--------------------------|-------------|---|
| B01 | B01-5 | Soil | 5/2/2017 | 5 | ENW | Former fuel island location |
| | B01-11 | | 5/2/2017 | 11 | ENW | |
| | B01-13.5 | | 5/2/2017 | 13.5 | ENW | |
| B02 | B02-10 | | 5/2/2017 | 10 | ENW | Geophysical Anomaly GA01, possible former UST locations |
| | B02-15 | | 5/2/2017 | 15 | ENW | |
| B03 | B03-6 | | 5/2/2017 | 6 | ENW | |
| | B03-9 | | 5/2/2017 | 9 | ENW | |
| | B03-15 | | 5/2/2017 | 15 | ENW | |
| B04 | B04-6 | | 5/2/2017 | 6 | ENW | Geophysical Anomaly MA01, east of current USTs |
| B05 | B05-ALT-10 | | 5/2/2017 | 10 | ENW | East side of current UST nest |
| | B05-ALT-15 | | 5/2/2017 | 15 | ENW | |
| B06 | B06-10 | | 5/2/2017 | 10 | ENW | Southeast corner of current UST Next |
| | B06-15 | | 5/2/2017 | 15 | ENW | |
| B07 | B07-5 | | 5/2/2017 | 5 | ENW | West of current fuel island |
| B08 | B07-11 | | 5/2/2017 | 11 | ENW | Former Service Bay Location (inferred) |
| | B08-5 | | 5/2/2017 | 5 | ENW | |

Soil borings were advanced to between approximately 13 and 20 feet bgs. During each sampling interval, soil materials recovered from the sample tooling were inspected continuously from the surface to the total depth of the boring for the presence of impacts by visual and olfactory inspection. Subsurface soil samples were periodically field screened using a photoionization detector (PID). Soil lithology, field screening results, and other observations were recorded by a ENW geologist onto soil boring logs presented in Appendix B.

Soils were retained for laboratory analysis from zones where field screening indicated the presence of impacts. In the absence of impacts, at least one soil sample was collected from depths necessary to confirm no release from the adjacent structure of historical feature of concern. Soil samples were transferred directly into laboratory prepared sample containers sealed with a Teflon-lined cap to minimize headspace, uniquely labeled, and preserved on artificial ice in a cooler pending delivery to the laboratory.

Soil samples were labelled by boring number and depth by appending it to the boring number (e.g., B01-5 would indicate a sample collected from 5 feet bgs in boring B01). A complete list of the soil borings and the samples collected is included in Table 4-1, above. Boring log indicates B05 was installed within the tank excavation and encountered pea gravel (no odor). The boring was stepped out to the east and reinstalled as B05-ALT.

Direct-push construction notices (start cards) and reports (well logs) were prepared and submitted to Ecology as required by Washington Administrative Code (WAC) 173-160. On the same day as drilling, each of the direct-push borings was backfilled with bentonite and sealed at the surface using appropriate materials to match existing conditions.

4.4 Laboratory Analysis

A total of 15 soil samples were delivered to Friedman & Bruya, Inc. (F&BI) of Seattle, Washington by courier under chain-of-custody protocol. Laboratory analytical reports and chain-of-custody documents are included in Appendix C. Soil samples were analyzed in accordance with the laboratory analytical plan presented in Table 4-2.

Table 4-2. Analytical Plan

| Analytical Method | Constituents | Soil |
|--|--|--|
| NWTPH-HCID | Total Petroleum Hydrocarbons – Hydrocarbon Identification (semi-quantitative analysis) | Selected samples |
| NWTPH-Gx | Total Petroleum Hydrocarbons – Gasoline-Range Organics (GRO) | Samples with GRO detections by NWTPH-HCID and all soil/water interface soil samples, as applicable |
| NWTPH-Dx | Total Petroleum Hydrocarbons – Diesel-Range and Residual (Oil)-Range Organics (DRO and RRO, respectively) quantification | Samples with DRO/RRO detections by NWTPH-HCID and all soil/water interface samples, as applicable |
| US Environmental Protection Agency (EPA) 8260C | Selected Volatile Organic Constituents (VOCs) | Selected samples with detections of GRO |
| EPA 6020A | Total Lead | Selected samples with detections of GRO |

4.5 Cleanup Levels

4.5.1 Model Toxics Control Act (MTCA)

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

Method A: Method A provides tables of cleanup levels that are protective of human health for the most common hazardous substances found in soil and ground water at sites. Note that these levels were developed by procedures of Method B. The Method A cleanup must meet the concentrations listed in the Method A table and, if not listed in the table, the concentration standards established under applicable state or federal laws. If neither the Method A table nor applicable state and federal laws provide an appropriate cleanup level, then natural background concentration or the practical quantification limit (PQL) may be used as the cleanup level. Method A is the simplest, most streamlined approach to cleanup, but is meant to be applied with sites that have releases of only a few, common, hazardous substances.

Method B: Method B provides cleanup levels using risk assessment equations developed for various exposure pathways, as well as by using standards specified by applicable state and federal laws. Standard Method B uses generic default assumptions; Modified Method B uses

chemical-specific and/or site-specific parameters in calculating the cleanup levels. Natural background concentrations and PQLs are also considered in this method. Method B is considered the universal approach to site closure and is the method most commonly used.

Both Methods A and B do not permit cleanup levels that would allow impacts to ecological receptors unless it can be demonstrated that ecological impacts are not a concern at the site.

Method C: Method C is used at industrial sites with the most complex impacts, and employs less stringent exposure assumptions and less stringent lifetime cancer risks. Although ecological impacts are evaluated, only impacts to wildlife are considered during terrestrial ecological evaluation.

Since the purpose of this FSI is to screen for possible impacts, Method A and B Cleanup levels were used for initial screening of data (MTCA Screening Level).

4.5.2 EPA Regional Screening Levels (RSLs)

For constituents that do not have established MTCA cleanup levels, ENW screened the analytical data against US Environmental Protection Agency (EPA) Regional Screening Levels (RSLs; RSLs calculated using the conservative Total Hazard Quotient value of 0.1 and excess cancer risk of $1\text{E-}6$). The RSLs combine current human health toxicity values with standard exposure factors to estimate contaminant concentrations in environmental media (soil, air, and water) that are considered by Ecology to be health protective of human exposures (including sensitive groups) over a lifetime. The RSLs were developed using the criteria of acceptable additional risk of cancer from exposure with carcinogenic constituents less than one in one million incidences, or for non-carcinogenic constituents, below the constituent threshold concentration at which health impacts would occur (i.e., Hazard Quotient less than 1.0).

5.0 RESULTS

This section describes the results of the FSI. The following supportive information may be referenced during this discussion:

- Site and investigative work photographs (Appendix A).
- Soil sample laboratory analytical results (summarized in Table 1, following the Tables Tab).
- Soil boring logs (Appendix B).

5.1 Geophysical Survey

The geophysical survey was completed on April 28, 2017, as described in Section 4.2. All of the proposed boring locations were cleared of utilities, or relocated to avoid detected utilities as necessary. In addition, selected areas of the site were scanned to identify buried features that could pose a possible environmental concern, the results of which are as follows:

- Magnetic anomalies MA01 and MA02 – located east of the current cardlock pump island, these two anomalies were three feet in diameter with high magnetic response near their perimeters. The apparent “rim” features are interpreted as possible abandoned septic features or vertical drains. Boring B04 was sited equidistant from MA01 and MA02.
- Geophysical anomaly GA01 – located northwest of the convenience store building, this anomaly measuring approximately 22 feet by 23 feet did not have a magnetic response, but did have a GPR response interpreted as a former excavation. Borings B02 and B03 were sited within this anomaly.
- The survey did not identify any evidence of buried USTs, other than the current regulated UST servicing the onsite service station, or other features of potential environmental concern, although not all areas of the site were scanned during the survey.

5.2 Soil Boring Locations and General Subsurface Conditions

Soil borings were completed between 13 and 20 feet bgs to investigate historical features of environmental interest and geophysical/magnetic anomalies. For convenience, Table 4-1 provides soil sample locations.

Soil borings encountered 1 to 3 feet of variable fill at the surface consisting of gravels, sandy cobbles, sandy gravel, silt, and silty sand, with occasional debris materials including concrete, brick, and wood fragments. Below the fill materials the borings generally penetrated brown medium dense to dense sandy gravels, sand, silty sand, and silt. Ground water was not encountered in any of the borings. Boring logs are included in Appendix B.

An oil-like petroleum odor and slightly elevated PID readings were noted in boring B01 (north of the convenience store near a purported former pump island) at the 10 to 11-foot depth interval. The evidence of petroleum quickly subsided in grab samples from the 13-foot and deeper sample intervals.

5.3 Laboratory Results

In Table 1, soil analytical results are screened against conservative Washington MTCA CULs (further discussed in Section 6.0) for soils and, for those constituents where MTCA cleanup standards are not established, against RSLs. As detailed below, the laboratory only detected constituents of interest in one of the soil samples.

5.3.1 Petroleum Hydrocarbons

Gasoline-range petroleum hydrocarbons were detected in one sample from boring B01 at the 11-foot depth. The detected GRO concentration of 620 milligrams per Kilogram (mg/Kg) exceeds the MTCA Method A soil cleanup level of 100 mg/Kg.

A deeper sample from the same boring (collected at 13.5 feet bgs) was analyzed for TPH to determine how deep the petroleum impacted soils extended vertically in B01. Laboratory analysis of sample B01-13.5 did not detect GRO in the sample.

Neither diesel-range organics nor residual-range organics were detected above the laboratory method reporting limit (MRL) in any of the soil samples analyzed.

5.3.2 Volatile Organic Constituents

Since regulated VOC constituents are associated with GRO, further analysis of gasoline-related VOCs was performed on soil sample B01-11 with the following results:

- Ethylbenzene was detected at 0.17 mg/Kg
- Naphthalene was reported with a flagged concentration of 0.022 mg/Kg
- Xylenes were reported at a flagged concentration of 1.1 mg/Kg

None of the detected VOC constituents were above their respective MTCA Method A soil cleanup levels. The results flagged by the laboratory indicate the results are estimates since instrument calibration or internal standards associated with the analyte were outside their respective control limits. Due to their very low concentrations, the flagged results do not alter the findings of this investigation.

5.3.3 Metals

Soil sample B01-11 was analyzed for lead since some older gasoline formulations contained lead. Lead was detected at 2.38 mg/Kg, below the MTCA Method A CUL of 250 mg/Kg.

6.0 DISCUSSION

The purpose of the FSI was to evaluate areas of potential environmental concern at the subject property. The geophysical survey identified both an area interpreted as a former UST excavation as well as two proximate magnetic anomalies. Soil borings were installed to investigate the former fuel dispenser location, the presumed former UST excavation, MA01/MA02, the area of the current fueling facilities, and the inferred former service bay.

Only one soil boring (B01 at the former fuel dispenser location) suggested petroleum-impacts based on field observations (odor and elevated PID readings). The low-level petroleum impacts in soil were located beneath a purported former fuel pump in the northeast portion of the property. Soil impacts appeared within a thin lens of fine sands at the 11-foot depth and samples collected from coarser sands and gravels immediately below the impacted zone were not impacted. The petroleum impacts at boring B01 were not identified at the same depth in borings B02 and B03 to the west.

Laboratory reporting confirmed soil in this boring was impacted with gasoline-related constituents; however only the constituent GRO exceeded its (conservative) MTCA Method A CUL. No other soil samples had detections of any of petroleum hydrocarbons, including a sample collected from a depth of 13.5 feet in B01 (providing vertical delineation).

From a human health perspective, the GRO concentration at the 11-foot depth is above the ground water table and the concentration was relatively low (less than one order of magnitude above Ecology's most conservative CUL). VOCs and lead were not detected in the impacted sample above Ecology's most conservative CUL. Based on the low concentration, depth of burial and lack of significant volatiles, the impacted soil would appear to pose little if any human health concern by either direct contact or vapor intrusion.

From a cleanup liability standpoint, it is unclear if this release should be reported to the State of Washington since it is unclear if the release is related to a release from a UST system. The release of GRO in soil poses a low actionable response since little if any human health or ecological risk to current and future site occupants exist. Based on the findings of the FSI, ENW recommends no further investigation.

7.0 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.

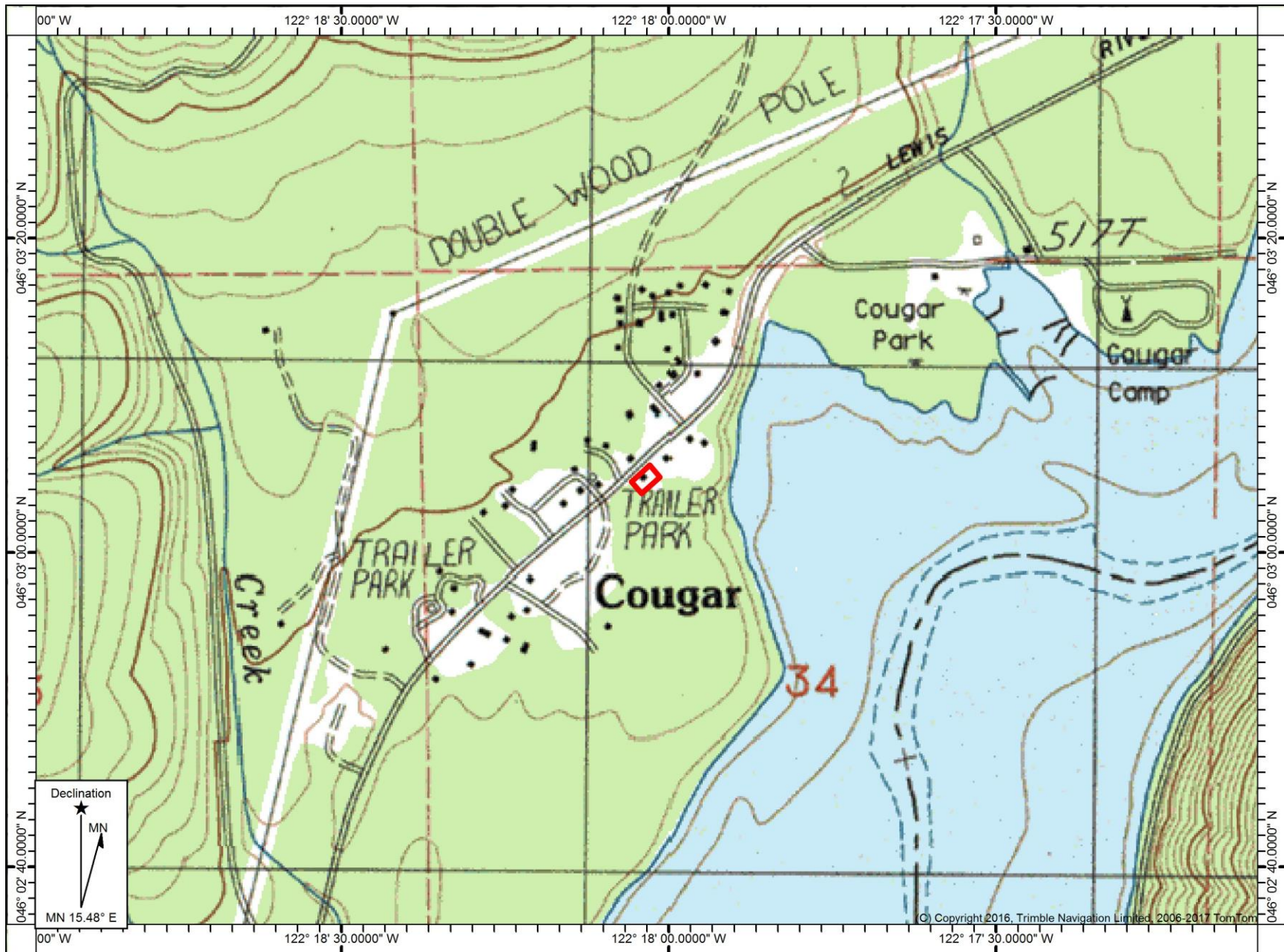
1. Naturally occurring toxic or hazardous substances in the subsurface soils, geology and water,
2. Toxicity of substances common in current habitable environments, such as stored chemicals, products, building materials and consumables,
3. Contaminants or contaminant concentrations that are not a concern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

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

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

ENW performed this study under a limited scope of services per our agreement. 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.

FIGURES



Name: COUGAR
Date: Jan 1, 1983

0 1000 2000
Feet

Location: 046° 03' 04.6401" N, 122° 18' 02.0319" W
Contour Interval: 40 ft



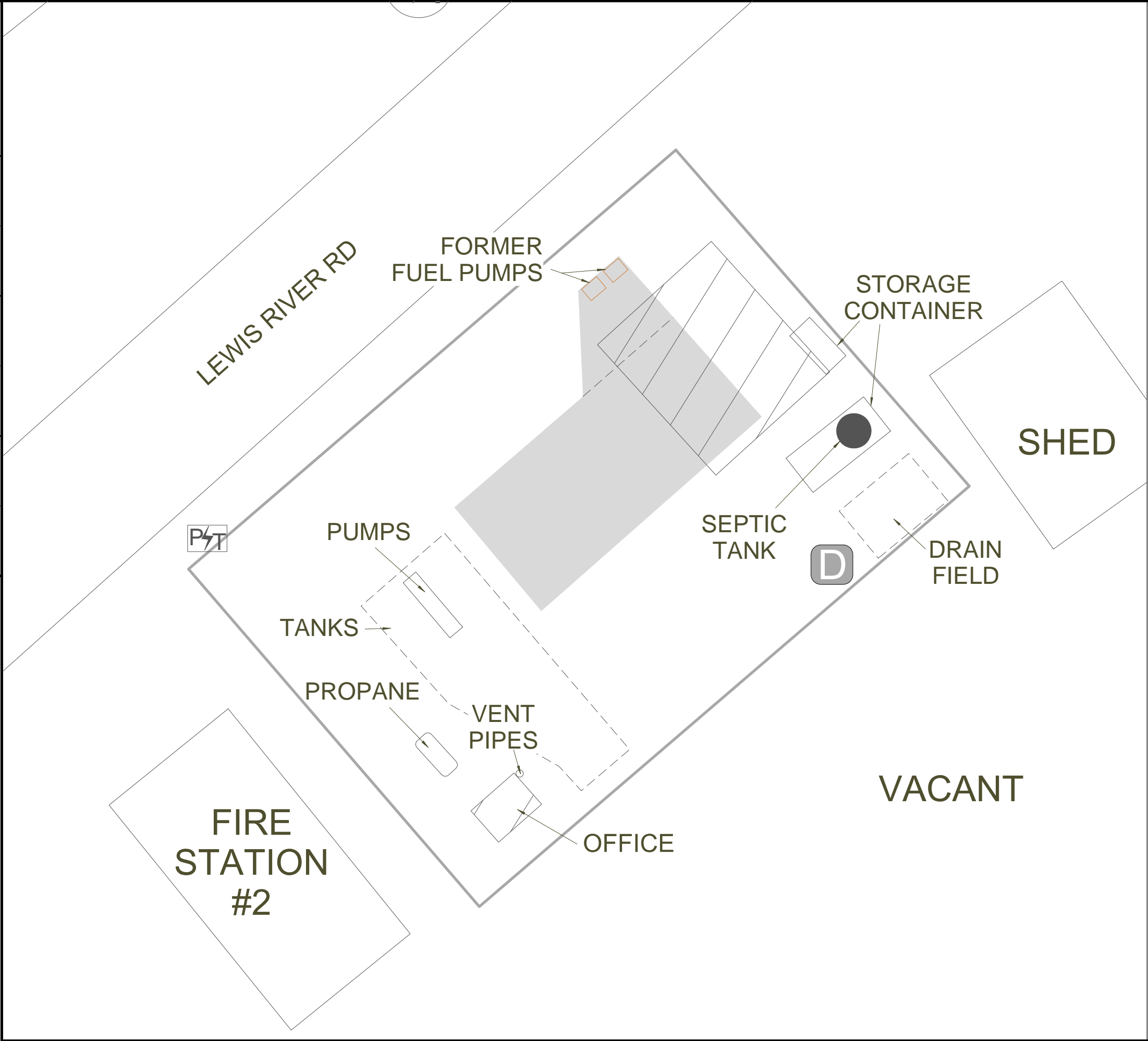
Date Drawn: 5/22/2017
CAD File Name: 1162-17001-02-
fig1sv_map(v01)
Drawn By: JOB
Approved By: LDG

Lakeside Service Station
16835 Lewis River Road
Cougar, WA 98616

Site Vicinity Map

Project No.
1162-17001-02

Figure No.
1



LEGEND:

- SUBJECT BUILDINGS
- SUBJECT PROPERTY BOUNDARIES
- BUILDING LOCATIONS
- FORMER BUILDING LOCATIONS
- PAD TRANSFORMER
- SOLID WASTE RECEPTACLE

- NOTES:
1. BASE MAP DEVELOPED FROM AN AERIAL PHOTOGRAPH MAP DATED 2015 AND ENW FIELD NOTES.
 2. ALL BUILDING, STREET, AND FEATURE LOCATIONS ARE APPROXIMATE.

APPROXIMATE SCALE

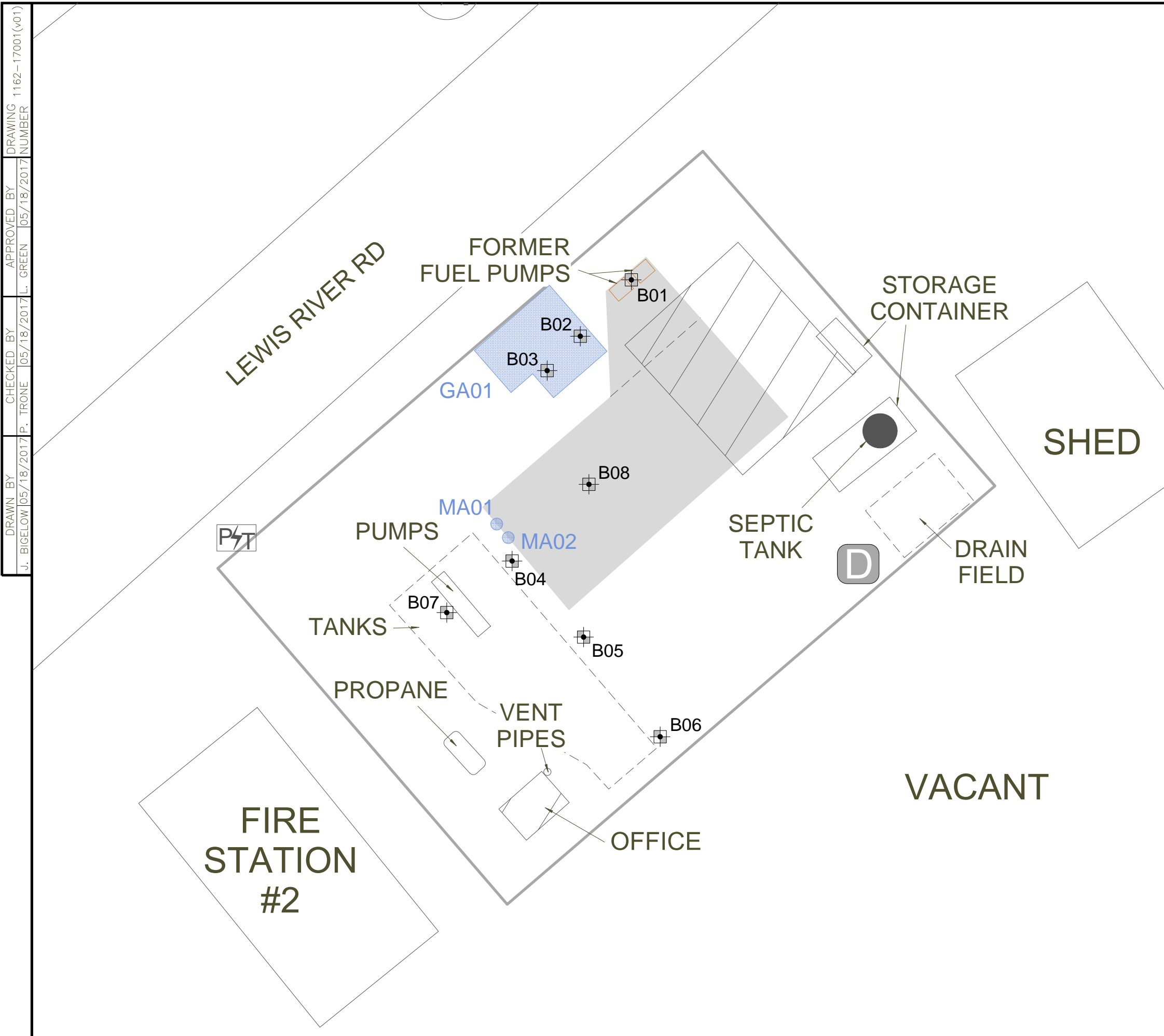
0 25 50 FEET

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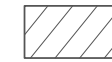
FIGURE 2

SITE PLAN

LAKESIDE SERVICE STATION
16835 LEWIS RIVER ROAD
COUGAR, WASHINGTON



LEGEND:



SUBJECT BUILDINGS



SUBJECT PROPERTY BOUNDARIES



BUILDING LOCATIONS

FORMER BUILDING LOCATIONS



POLE TRANSFORMER



T PAD TRANSFORMER



SOLID WASTE RECEPTACLE



MAGNETIC ANOMALY



GEOPHYSICAL ANOMALY

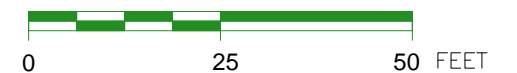


TEMPORARY ENVIRONMENTAL BORING

NOTES:

1. BASE MAP DEVELOPED FROM AN AERIAL PHOTOGRAPH MAP DATED 2015 AND ENW FIELD NOTES.
2. ALL BUILDING, STREET, AND FEATURE LOCATIONS ARE APPROXIMATE.

APPROXIMATE SCALE



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FIGURE 3
SAMPLE LOCATION DIAGRAM

LAKEVIEW SERVICE STATION
16835 LEWIS RIVER ROAD
COUGAR, WASHINGTON

TABLE

Table 1 - Summary of Analytical Data, Soil

| Sample Location | | B01 | | | B02 | | B03 | | B04 | B05 | | B06 | |
|--------------------------------------|--------|-----------------------------|-------------|-------------|---|-------------|-------------|--|-------------|-------------------------------|-------------|--------------------------------------|-------------|
| Sample ID | | B01-5 | B01-11 | B01-13.5 | B02-10 | B02-15 | B03-6 | B03-15 | B04-6 | B05-ALT-10 | B05-ALT-15 | B06-10 | B06-15 |
| Date Sampled | | 5/2/2017 | 5/2/2017 | 5/2/2017 | 5/2/2017 | 5/2/2017 | 5/2/2017 | 5/2/2017 | 5/2/2017 | 5/2/2017 | 5/2/2017 | 5/2/2017 | 5/2/2017 |
| Depth Sampled (feet) | | 5 | 11 | 13.5 | 10 | 15 | 6 | 15 | 6 | 10 | 15 | 10 | 15 |
| Sampled by: | | ENW | ENW | ENW | ENW | ENW | ENW | ENW | ENW | ENW | ENW | ENW | ENW |
| Location | | Former Fuel Island Location | | | Geophysical Anomaly GA01, possible former UST locations | | | Geophysical Anomaly MA01, east of current USTs | | East side of current UST nest | | Southeast corner of current UST Next | |
| 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) |
| Volatile Organic Constituents (VOCs) | | | | | | | | | | | | | |
| Benzene | c, v | --- | <0.003 ND | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| EDB (1,2-dibromoethane) | c, v | --- | <0.005 ND | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| EDC (1,2-dichloroethane) | c, v | --- | <0.005 ND | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ethylbenzene | nc, v | --- | 0.17 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MTBE (methyl t-butyl ether) | c, v | --- | <0.005 ND | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Naphthalene (Method 8260) | c, v | --- | 0.022 J | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Toluene | nc, v | --- | <0.005 ND | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Xylenes | nc, v | --- | 1.1 VE | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Metals | | | | | | | | | | | | | |
| Lead | NA, nv | --- | 2.38 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Total Petroleum Hydrocarbons | | | | | | | | | | | | | |
| GRO | nc, v | <20 (NP) | 620 | <20 (NP) | <20 (NP) | <20 (NP) | <20 (NP) | <20 (NP) | <20 (NP) | <20 (NP) | <20 (NP) | <20 (NP) | <20 (NP) |
| DRO | nc, nv | <50 (NP) | <50 (NP) | <50 (NP) | <50 (NP) | <50 (NP) | <50 (NP) | <50 (NP) | <50 (NP) | <50 (NP) | <50 (NP) | <50 (NP) | <50 (NP) |
| RRO | nc, nv | <250 (NP) | <250 (NP) | <250 (NP) | <250 (NP) | <250 (NP) | <250 (NP) | <250 (NP) | <250 (NP) | <250 (NP) | <250 (NP) | <250 (NP) | <250 (NP) |

Notes:
NP = not present based on NWTPH-HCID (hydrocarbon identification) analysis
ND = not detected at or above laboratory method reporting limits
— = not analyzed or not applicable.
< = not detected at or above the method reporting limit shown.
NE = not established.
mg/Kg = milligram per kilogram.
c = carcinogenic
nc = noncarcinogenic
v = volatile
nv = nonvolatile
J = the internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
VE = the analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
GRO = gasoline-range organics.
DRO = diesel-range organics.
RRO = residual-range organics.
Bolded concentrations exceed either MTCA Cleanup Levels.
(Y) indicates analyte not detected, but detection limit is above

Table 1 - Summary of Analytical Data, Soil

| Sample Location | | B07 | | B08 | Maximum Residual Soil Concentration (detected) | MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses ¹ | MTCA Method B Soil Cleanup Levels (if Method A not available) ¹ | Constituent of Potential Concern (COPC, exceeds Method A or B CULs)? | MTCA Method C Soil Cleanup Levels for Industrial Land Uses | Background Concentrations (metals)* |
|--------------------------------------|--------|--------------------------------|--------------------------------|--|---|---|---|--|--|---|
| Sample ID | | B07-5 | B07-11 | B08-5 | | | | | | |
| Date Sampled | | 5/2/2017 | 5/2/2017 | 5/2/2017 | | | | | | |
| Depth Sampled (feet) | | 5 | 11 | 5 | | | | | | |
| Sampled by: | | ENW | ENW | ENW | | | | | | |
| Location | | West of current fuel island | West of current fuel island | Former Service Bay Locaation (inferred) | | | | | | |
| Constituent of Interest | Note | mg/Kg (ppm) | mg/Kg (ppm) | mg/Kg (ppm) | mg/Kg (ppm) | mg/Kg (ppm) | mg/Kg (ppm) | Y / N | mg/Kg (ppm) | mg/Kg (ppm) |
| Volatile Organic Constituents (VOCs) | | | | | | | | | | |
| Benzene | c, v | --- | --- | --- | <0.003 (ND) | 0.03 | 18.2 | N | 2390 | NE |
| EDB (1,2-dibromoethane) | c, v | --- | --- | --- | <0.005 (ND) | 0.005 | 0.5 | N | 0.005 | NE |
| EDC (1,2-dichloroethane) | c, v | --- | --- | --- | <0.005 (ND) | NE | 11 | N | NE | NE |
| Ethylbenzene | nc, v | --- | --- | --- | 0.17 | 6 | 8000 | N | 350000 | NE |
| MTBE (methyl t-butyl ether) | c, v | --- | --- | --- | <0.005 (ND) | 0.1 | 556 | N | 0.1 | NE |
| Naphthalene (Method 8260) | c, v | --- | --- | --- | 0.022 J | 5 | 1600 | N | 70000 | NE |
| Toluene | nc, v | --- | --- | --- | <0.005 (ND) | 7 | 6400 | N | 7 | NE |
| Xylenes | nc, v | --- | --- | --- | 1.1 VE | 9 | 16000 | N | 700000 | NE |
| Metals | | | | | | | | | | |
| Lead | NA, nv | --- | --- | --- | 2.38 | 250 | NE | N | 1000 | 24.02 |
| Total Petroleum Hydrocarbons | | | | | | | | | | |
| GRO | nc, v | <20 (NP) | --- | <20 (NP) | 620 | 100 | NE | Y | CALC | NE |
| DRO | nc, nv | <50 (NP) | --- | <50 (NP) | <50 (NP) | 2000 | NE | N | CALC | NE |
| RRO | nc, nv | <250 (NP) | --- | <250 (NP) | <250 (NP) | 2000 | NE | N | 2000 | NE |

Notes:
NP = not present based on NWTPH-HCID (hydrocarbon identification) analysis
ND = not detected at or above laboratory method reporting limits
— = not analyzed or not applicable.
< = not detected at or above the method reporting limit shown.
NE = not established.
mg/Kg = milligram per kilogram.
c = carcinogenic
nc = noncarcinogenic
v = volatile
nv = nonvolatile
J = the internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
VE = the analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
GRO = gasoline-range organics.
DRO = diesel-range organics.
RRO = residual-range organics.
Bolded concentrations exceed either MTCA Cleanup Levels.
(Y) indicates analyte not detected, but detection limit is above

APPENDIX A SITE PHOTOGRAPHS



A geophysical survey was conducted to clear boring locations and confirm buried historical features.



Magnetic anomalies were marked in white paint, and boring locations were sited in appropriate locations to assess suspect underground features.



One large area at the NW corner of the building was interpreted as a former excavation. An old fuel dispenser was reportedly located further east (behind the black truck).



A GeoProbe drill rig was used to advance eight exploratory borings at selected locations.



Cougar Property
16835, 16840, & 16842 Lewis River Road
Cougar, Washington

**Site
Photographs**

Project No.
1162-17001-02
Appendix
C



A 6-foot tile probe was used to manually clear holes prior to drilling to avoid damaging underground utilities near the existing tanks and pump island.



Continuous soil cores retained within plastic sleeves were inspected from the ground surface to total depth at each boring.



Observations were recorded onto a field notebook and boring log.



Soil samples were placed into laboratory-prepared sample jars for possible analysis.



Cougar Property
16835, 16840, & 16842 Lewis River Road
Cougar, Washington

**Site
Photographs**

Project No.
1162-17001-02
Appendix
C



After drilling and sampling, each boring was backfilled with bentonite chips and sealed at the surface.



Cougar Property
16835, 16840, & 16842 Lewis River Road
Cougar, Washington

**Site
Photographs**












Project No.
1162-17001-02

Appendix
C

APPENDIX B SOIL BORING LOGS



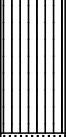


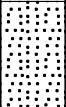




EVREN Northwest, Inc.

| | | | | | |
|----------------------------------|---------|--------------------|---------------|--------------|----------------------|
| DRILL LOG | PROJECT | | PROJECT NO. | | BORING NO. |
| | P2ESA | | 1162-17001-02 | | B01 |
| SITE | | BEGUN | COMPLETED | HOLE SIZE | ANGLE FROM HORIZ. |
| 16835 Lewis River Rd, Cougar, WA | | 5/2/17 | 5/2/17 | 2-inch | |
| COORDINATES | | DEPTH GROUND WATER | DATE SL | STATIC LEVEL | FIRST WATER |
| DRILLER | | CORE RECOVERY (%) | | # SAMPLES | # CORE BOXES |
| Cascade Drilling | | | | | |
| DRILL MAKE AND MODEL | | LOGGED BY: | | | DEPTH BOTTOM OF HOLE |
| | | E. Chapman | | | 20 |

| DEPTH | STRATA ELEVATION/ DEPTH | GRAPHIC LOG | DESCRIPTION | SAMPLE DATA | | | | PID/OVM | REMARKS: NOTES ON WATER LEVELS, LOSSES, CAVING, CASING, DEPTH & DRILLING CONDITIONS. |
|-------|-------------------------|---|---|-------------|-------------|---------------|-----------------------|---------|---|
| | | | | SAMPLE NO. | SAMPLE TYPE | CORE RECOVERY | MW Const./ Completion | | |
| 0 | |  | Asphalt | | | | | 0 | |
| | |  | Fill materials; mostly sand & gravel | | | | | 0 | |
| | |  | Sandy SILT (ML/SM); dark brown; moist; loose. | | | 20 | | | |
| 5 | |  | SAND w/ silt; tannish brown; some coarse rounded gravel; loose; dry; | B01-5 | | | | 0 | |
| | |  | cemented sand layer | | | 45 | | 0 | |
| | |  | SAND; grey brown; medium grained; loose; moist; occasional basalt clasts | | | | | 0 | |
| 10 | |  | lens of very fine sand; greyish pink; petrol odor | B01-11 | | | | 42.5 | |
| | |  | SAND; gray and red; coarse sand w/ fine gravels; moist; loose; no oder at 11.5 | | | 80 | | | |
| | |  | pink cemented sand or sandstone | B01-13.5 | | | | 0 | |
| 15 | |  | Fine to coarse GRAVELS; pinkish gray; clasts/ fragments of basalt up to 1-in dia or larger; hard drilling; dense; moist | | | 85 | | 0 | |
| | |  | Boring terminated. Groundwater not encountered. Boring abandoned | B01-19 | | | | 0 | |
| 20 | | | | | | | | | |
| 25 | | | | | | | | | |
| 30 | | | | | | | | | |
| 35 | | | | | | | | | |











EVREN Northwest, Inc.

| | | | | | |
|----------------------------------|---------|--------------------|---------------|--------------|----------------------|
| DRILL LOG | PROJECT | | PROJECT NO. | | BORING NO. |
| | P2ESA | | 1162-17001-02 | | B02 |
| SITE | | BEGUN | COMPLETED | HOLE SIZE | ANGLE FROM HORIZ. |
| 16835 Lewis River Rd, Cougar, WA | | 5/2/17 | 5/2/17 | 2-inch | |
| COORDINATES | | DEPTH GROUND WATER | DATE SL | STATIC LEVEL | FIRST WATER |
| DRILLER | | CORE RECOVERY (%) | | # SAMPLES | # CORE BOXES |
| Cascade Drilling | | | | | |
| DRILL MAKE AND MODEL | | LOGGED BY: | | | DEPTH BOTTOM OF HOLE |
| | | E. Chapman | | | 20 |

| DEPTH | STRATA ELEVATION/ DEPTH | GRAPHIC LOG | DESCRIPTION | SAMPLE DATA | | | | PID/OVM | REMARKS: NOTES ON WATER LEVELS, LOSSES, CAVING, CASING, DEPTH & DRILLING CONDITIONS. |
|-------|-------------------------|---|--|-------------|-------------|---------------|-----------------------|---------|---|
| | | | | SAMPLE NO. | SAMPLE TYPE | CORE RECOVERY | MW Const./ Completion | | |
| 0 | |  | Asphalt | | | | | 0 | |
| | |  | Fill materials; mostly sand & gravel; dense | | | | | 0 | |
| | |  | SILT (ML); brown; charred woody debris; moist; soft; no odor. | | | 60 | | 0 | |
| 5 | |  | Silty SAND w/ gravel; reddish tan; very fine basalt fragments; no odor | | | 65 | | 0 | |
| | |  | SAND; grey brown; medium grained; loose; moist; | | | | | 0 | |
| 10 | |  | 8-in lens of very fine sand to silty sand; reddish tan w/ grey and tan mottling | B02-10 | | 80 | | 0 | |
| | |  | Sandy GRAVELS; grey; dark red; green; coarse sand; angular gravel up to 1-in dia. hard; dense; moist | | | | | 0 | |
| | |  | SAND; gray and red; coarse sand w/ fine gravels; moist; loose; no oder at 11.5 | | | | | 0 | |
| 15 | |  | 3-in layer cemented black silty sand | B02-15 | | 85 | | 0 | |
| | |  | pink cemented sand or sandstone | | | | | 0 | |
| 20 | | | Boring terminated. Groundwater not encountered. Boring abandoned | | | | | 0 | |
| 25 | | | | | | | | | |
| 30 | | | | | | | | | |
| 35 | | | | | | | | | |






EVREN Northwest, Inc.

| | | | | | |
|----------------------------------|---------|--------------------|---------------|--------------|----------------------|
| DRILL LOG | PROJECT | | PROJECT NO. | | BORING NO. |
| | P2ESA | | 1162-17001-02 | | B03 |
| SITE | | BEGUN | COMPLETED | HOLE SIZE | ANGLE FROM HORIZ. |
| 16835 Lewis River Rd, Cougar, WA | | 5/2/17 | 5/2/17 | 2-inch | |
| COORDINATES | | DEPTH GROUND WATER | DATE SL | STATIC LEVEL | FIRST WATER |
| | | | | | |
| DRILLER | | CORE RECOVERY (%) | | # SAMPLES | # CORE BOXES |
| Cascade Drilling | | | | | |
| DRILL MAKE AND MODEL | | LOGGED BY: | | | DEPTH BOTTOM OF HOLE |
| | | E. Chapman | | | 20 |

| DEPTH | STRATA ELEVATION/ DEPTH | GRAPHIC LOG | DESCRIPTION | SAMPLE DATA | | | | PID/OVM | REMARKS: NOTES ON WATER LEVELS, LOSSES, CAVING, CASING, DEPTH & DRILLING CONDITIONS. |
|-------|-------------------------|---|---|-------------|-------------|---------------|-----------------------|---------|---|
| | | | | SAMPLE NO. | SAMPLE TYPE | CORE RECOVERY | MW Const./ Completion | | |
| 0 | |  | Asphalt | | | | | 0 | |
| | |  | Fill materials; mostly sand & gravel; dense | | | | | | |
| | |  | SILT w/ sand (ML/SM); brown; very fine sand; moist; soft; no odor. | | | 60 | | 0 | |
| 5 | |  | woody debris in shoe | | | | | 0 | |
| | |  | Gravelly SAND; reddish brown; dense; sl. moist; no odor | B03-6 | | 65 | | 0.4 | |
| | |  | SAND; reddish brown to grey; medium grained; loose; moist; | B03-9 | | | | 0 | |
| 10 | |  | Fine SAND; trace silt; reddish brown; layer approx 1- in thick of fines; moist; no odor | | | | | 0 | |
| | |  | Coarse sand; black with gravel; dense; moist; no odor; occasssional basalt frags; pink clasts | | | 90 | | 0 | |
| 15 | |  | Very fine SAND; gray brown; moist | B03-15 | | | | 0 | |
| | |  | Alternating sandstone clasts, sands; gravels; dense; moist to very moist | | | 60 | | 0 | |
| 20 | | | Boring terminated. Groundwater not encountered. Boring abandoned | | | | | 0 | |
| 25 | | | | | | | | | |
| 30 | | | | | | | | | |
| 35 | | | | | | | | | |




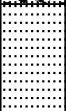



EVREN Northwest, Inc.

| | | | | | |
|----------------------------------|---------|--------------------|---------------|--------------|----------------------|
| DRILL LOG | PROJECT | | PROJECT NO. | | BORING NO. |
| | P2ESA | | 1162-17001-02 | | B04 |
| SITE | | BEGUN | COMPLETED | HOLE SIZE | ANGLE FROM HORIZ. |
| 16835 Lewis River Rd, Cougar, WA | | 5/2/17 | 5/2/17 | 2-inch | |
| COORDINATES | | DEPTH GROUND WATER | DATE SL | STATIC LEVEL | FIRST WATER |
| | | | | | |
| DRILLER | | CORE RECOVERY (%) | | # SAMPLES | # CORE BOXES |
| Cascade Drilling | | | | | |
| DRILL MAKE AND MODEL | | LOGGED BY: | | | DEPTH BOTTOM OF HOLE |
| | | E. Chapman | | | 13 |

| DEPTH | STRATA ELEVATION/ DEPTH | GRAPHIC LOG | DESCRIPTION | SAMPLE DATA | | | | PID/OVM | REMARKS: NOTES ON WATER LEVELS, LOSSES, CAVING, CASING, DEPTH & DRILLING CONDITIONS. |
|-------|-------------------------|---|---|-------------|-------------|---------------|-----------------------|---------|---|
| | | | | SAMPLE NO. | SAMPLE TYPE | CORE RECOVERY | MW Const./ Completion | | |
| 0 | |  | Asphalt | B04-6 | | 60 | | 0 | |
| | |  | Sand and Gravel fill; pinkish gray | | | | | | |
| 5 | |  | Sandy GRAVEL; reddish brown; med sand; fine to crse gravel; loose; sl. moist; no odor | | | 80 | | 0 | |
| | |  | SAND; gray-brown; medium grained sand; wet zone ; loose | | | | | 0 | |
| 10 | |  | Sandy GRAVEL; grey to dk brown; red; pink. | | | 80 | | 0 | |
| 15 | | | Refusal; Boring terminated. Groundwater not encountered. Boring abandoned | | | | | | |
| 20 | | | | | | | | | |
| 25 | | | | | | | | | |
| 30 | | | | | | | | | |
| 35 | | | | | | | | | |



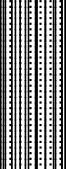

EVREN Northwest, Inc.

| | | | | | |
|----------------------------------|---------|--------------------|---------------|--------------|----------------------|
| DRILL LOG | PROJECT | | PROJECT NO. | | BORING NO. |
| | P2ESA | | 1162-17001-02 | | B05 ALT |
| SITE | | BEGUN | COMPLETED | HOLE SIZE | ANGLE FROM HORIZ. |
| 16835 Lewis River Rd, Cougar, WA | | 5/2/17 | 5/2/17 | 2-inch | |
| COORDINATES | | DEPTH GROUND WATER | DATE SL | STATIC LEVEL | FIRST WATER |
| DRILLER | | CORE RECOVERY (%) | | # SAMPLES | # CORE BOXES |
| Cascade Drilling | | | | | |
| DRILL MAKE AND MODEL | | LOGGED BY: | | | DEPTH BOTTOM OF HOLE |
| | | E. Chapman | | | 15 |

| DEPTH | STRATA ELEVATION/ DEPTH | GRAPHIC LOG | DESCRIPTION | SAMPLE DATA | | | | PID/OVM | REMARKS: NOTES ON WATER LEVELS, LOSSES, CAVING, CASING, DEPTH & DRILLING CONDITIONS. |
|-------|-------------------------|---|---|-------------|-------------|---------------|-----------------------|---------|---|
| | | | | SAMPLE NO. | SAMPLE TYPE | CORE RECOVERY | MW Const./ Completion | | |
| 0 | |  | Asphalt Fill materials; mostly sand & gravel; dense | | | 40 | | 0 | |
| 5 | |  | SAND w/ gravel; reddish brown; no odor; dry; loose | | | | | 0 | |
| | |  | Gravelly SAND; yellow to reddish brown; coarse gravel subangular; mostly fine sand; sl. moist; dense; large gravel fragment in shoe | | | 50 | | 0 | |
| 10 | |  | SAND; reddish brown to grey; medium grained; loose; moist; | B05-ALT-10 | | | | 0 | |
| | |  | Coarse sand; black with gravel; dense; moist | | | | | 0 | |
| | |  | Sandy GRAVEL; grey, red, orange, tank, fine to coarse gravel; medium sand; danse; moist; no odor | | | 100 | | 0 | |
| 15 | |  | 3-in layer cemented black silty sand | B05-ALT-15 | | | | 0 | |
| | | | Refusal; Groundwater not encountered. Boring abandoned | | | | | 0 | |
| 20 | | | | | | | | | |
| 25 | | | | | | | | | |
| 30 | | | | | | | | | |
| 35 | | | | | | | | | |








EVREN Northwest, Inc.

| | | | | | |
|----------------------------------|---------|--------------------|---------------|--------------|----------------------|
| DRILL LOG | PROJECT | | PROJECT NO. | | BORING NO. |
| | P2ESA | | 1162-17001-02 | | B06 |
| SITE | | BEGUN | COMPLETED | HOLE SIZE | ANGLE FROM HORIZ. |
| 16835 Lewis River Rd, Cougar, WA | | 5/2/17 | 5/2/17 | 2-inch | |
| COORDINATES | | DEPTH GROUND WATER | DATE SL | STATIC LEVEL | FIRST WATER |
| DRILLER | | CORE RECOVERY (%) | | # SAMPLES | # CORE BOXES |
| Cascade Drilling | | | | | |
| DRILL MAKE AND MODEL | | LOGGED BY: | | | DEPTH BOTTOM OF HOLE |
| | | E. Chapman | | | 15 |

| DEPTH | STRATA ELEVATION/ DEPTH | GRAPHIC LOG | DESCRIPTION | SAMPLE DATA | | | | PID/OVM | REMARKS: NOTES ON WATER LEVELS, LOSSES, CAVING, CASING, DEPTH & DRILLING CONDITIONS. |
|-------|-------------------------|--|---|-------------|-------------|---------------|-----------------------|---------|---|
| | | | | SAMPLE NO. | SAMPLE TYPE | CORE RECOVERY | MW Const./ Completion | | |
| 0 | |  | Asphalt | | | | | 0 | |
| | |  | Fill materials; mostly sand & gravel; dense | | | | | | |
| | |  | SILT w/ sand (ML/SM); brown; very fine sand; moist; soft; no odor. | | | 35 | | 0 | |
| 5 | | | | | | | | 0 | |
| | |  | Gravelly SAND; gray, rust, buff, black; med to coarse gravel; f-med sand; dense; rock fragments; sl. moist; no odor | B06-10 | | 80 | | 0 | |
| 10 | | | No Recovery - melted liner | | | | | | |
| | | | | B06-15 | | 60 | | 0 | |
| 15 | | | Refusal. Groundwater not encountered. Boring abandoned | | | | | | |
| 20 | | | | | | | | | |
| 25 | | | | | | | | | |
| 30 | | | | | | | | | |
| 35 | | | | | | | | | |



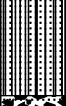






EVREN Northwest, Inc.

| | | | | | |
|----------------------------------|---------|--------------------|---------------|--------------|----------------------|
| DRILL LOG | PROJECT | | PROJECT NO. | | BORING NO. |
| | P2ESA | | 1162-17001-02 | | B07 |
| SITE | | BEGUN | COMPLETED | HOLE SIZE | ANGLE FROM HORIZ. |
| 16835 Lewis River Rd, Cougar, WA | | 5/2/17 | 5/2/17 | 2-inch | |
| COORDINATES | | DEPTH GROUND WATER | DATE SL | STATIC LEVEL | FIRST WATER |
| DRILLER | | CORE RECOVERY (%) | | # SAMPLES | # CORE BOXES |
| Cascade Drilling | | | | | |
| DRILL MAKE AND MODEL | | LOGGED BY: | | | DEPTH BOTTOM OF HOLE |
| | | E. Chapman | | | 15 |

| DEPTH | STRATA ELEVATION/ DEPTH | GRAPHIC LOG | DESCRIPTION | SAMPLE DATA | | | | PID/OVM | REMARKS: NOTES ON WATER LEVELS, LOSSES, CAVING, CASING, DEPTH & DRILLING CONDITIONS. |
|-------|-------------------------|--|---|-------------|-------------|---------------|-----------------------|---------|---|
| | | | | SAMPLE NO. | SAMPLE TYPE | CORE RECOVERY | MW Const./ Completion | | |
| 0 | |  | Asphalt | | | | | 0 | |
| | |  | Fill materials; mostly sand & gravel; dense | | | | | 0 | |
| | |  | SILT w/ sand (ML/SM); brown; very fine sand; moist; soft; no odor. | | | 60 | | 0 | |
| 5 | | | | B07-5 | | | | 0 | |
| | |  | Gravelly SAND w/ gravel; reddish brown; dense; sl. moist; no odor | | | 80 | | 0 | |
| | |  | SAND; reddish brown to grey; medium grained; loose; moist; | | | | | 0 | |
| 10 | |  | SAND; gray; f-med sand; rust colored; weathered rinds; moist to wet; hard drilling 9'-14' | | | | | 0 | |
| | |  | Coarse gravelly SAND; gray, rust, yellow, buff; coarse gravels; med sand; dense; moist; no odor | B07-11 | | 80 | | 0 | |
| 15 | | | Refusal. Abandon boring. Groundwater not encountered | | | | | 0 | |
| 20 | | | | | | | | | |
| 25 | | | | | | | | | |
| 30 | | | | | | | | | |
| 35 | | | | | | | | | |

EVREN Northwest, Inc.

| | | | | | |
|----------------------------------|---------|--------------------|---------------|--------------|----------------------|
| DRILL LOG | PROJECT | | PROJECT NO. | | BORING NO. |
| | P2ESA | | 1162-17001-02 | | B08 |
| SITE | | BEGUN | COMPLETED | HOLE SIZE | ANGLE FROM HORIZ. |
| 16835 Lewis River Rd, Cougar, WA | | 5/2/17 | 5/2/17 | 2-inch | |
| COORDINATES | | DEPTH GROUND WATER | DATE SL | STATIC LEVEL | FIRST WATER |
| DRILLER | | CORE RECOVERY (%) | | # SAMPLES | # CORE BOXES |
| Cascade Drilling | | | | | |
| DRILL MAKE AND MODEL | | LOGGED BY: | | | DEPTH BOTTOM OF HOLE |
| | | E. Chapman | | | 20 |

| DEPTH | STRATA ELEVATION/ DEPTH | GRAPHIC LOG | DESCRIPTION | SAMPLE DATA | | | | PID/OVM | REMARKS: NOTES ON WATER LEVELS, LOSSES, CAVING, CASING, DEPTH & DRILLING CONDITIONS. |
|-------|-------------------------|---|---|-------------|-------------|---------------|-----------------------|---------|---|
| | | | | SAMPLE NO. | SAMPLE TYPE | CORE RECOVERY | MW Const./ Completion | | |
| 0 | |  | Asphalt | | | | | | |
| | |  | Fill materials; mostly sand & gravel; dense | | | | | | |
| | |  | SILT w/ sand (ML/SM); brown; very fine sand; moist; soft; no odor. | | | 35 | | 0 | |
| 5 | |  | Gravelly SAND w/ gravel; reddish brown; dense; sl. moist; no odor | B08-5 | | | | 0 | |
| | |  | SAND; reddish brown to grey; medium grained; loose; moist; | | | 60 | | 0 | |
| 10 | |  | SAND; med grained; gray; dense; moist; no odors | | | | | 0 | |
| | |  | Sands and Gravels; gray, red, brown; dense; moist; fragments of sandstone | | | 90 | | 0 | |
| 15 | |  | | | | | | 0 | |
| | |  | | | | 80 | | | |
| 20 | | | Boring terminated. Groundwater not encountered. Boring abandoned | | | | | | |
| | | | | | | | | | |
| 25 | | | | | | | | | |
| | | | | | | | | | |
| 30 | | | | | | | | | |
| | | | | | | | | | |
| 35 | | | | | | | | | |

APPENDIX C LABORATORY ANALYTICAL REPORT

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

May 15, 2017

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 May 3, 2017 from the 1162-17001-02, F&BI 705047 project. There are 12 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. 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
ENW0515R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on May 3, 2017 by Friedman & Bruya, Inc. from the Evren Northwest 1162-17001-02, F&BI 705047 project. Samples were logged in under the laboratory ID's listed below.

| <u>Laboratory ID</u> | <u>Evren Northwest</u> |
|----------------------|------------------------|
| 705047 -01 | B01-5 |
| 705047 -02 | B01-11 |
| 705047 -03 | B01-13.5 |
| 705047 -04 | B01-19 |
| 705047 -05 | B02-10 |
| 705047 -06 | B02-15 |
| 705047 -07 | B03-6 |
| 705047 -08 | B03-9 |
| 705047 -09 | B03-15 |
| 705047 -10 | B04-6 |
| 705047 -11 | B05-ALT-10 |
| 705047 -12 | B05-ALT-15 |
| 705047 -13 | B06-10 |
| 705047 -14 | B06-15 |
| 705047 -15 | B07-5 |
| 705047 -16 | B07-11 |
| 705047 -17 | B08-5 |

A 8260C internal standard failed the acceptance criteria for sample B01-11 due to matrix interferences. The data were flagged accordingly. In addition, the m,p-xylene and o-xylene concentrations exceeded the calibration range of the instrument. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/15/17

Date Received: 05/03/17

Project: 1162-17001-02, F&BI 705047

Date Extracted: 05/03/17

Date Analyzed: 05/03/17

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

Results Reported on a Dry Weight Basis

Results Reported as Not Detected (ND) or Detected (D)

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

| <u>Sample ID</u> Laboratory ID | <u>Gasoline</u> | <u>Diesel</u> | <u>Heavy Oil</u> | <u>Surrogate</u> <u>(% Recovery)</u> (Limit 53-144) |
|-----------------------------------|-----------------|---------------|------------------|---|
| B01-5 705047-01 | ND | ND | ND | 107 |
| B01-11 705047-02 | D | ND | ND | 116 |
| B01-13.5 705047-03 | ND | ND | ND | 100 |
| B02-10 705047-05 | ND | ND | ND | 101 |
| B02-15 705047-06 | ND | ND | ND | 99 |
| B03-6 705047-07 | ND | ND | ND | 101 |
| B03-15 705047-09 | ND | ND | ND | 101 |
| B04-6 705047-10 | ND | ND | ND | 112 |
| B05-ALT-10 705047-11 | ND | ND | ND | 91 |
| B05-ALT-15 705047-12 | ND | ND | ND | 106 |

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/15/17

Date Received: 05/03/17

Project: 1162-17001-02, F&BI 705047

Date Extracted: 05/03/17

Date Analyzed: 05/03/17

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

Results Reported on a Dry Weight Basis

Results Reported as Not Detected (ND) or Detected (D)

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

| <u>Sample ID</u> Laboratory ID | <u>Gasoline</u> | <u>Diesel</u> | <u>Heavy Oil</u> | <u>Surrogate</u> <u>(% Recovery)</u> (Limit 53-144) |
|-----------------------------------|-----------------|---------------|------------------|---|
| B06-10 705047-13 | ND | ND | ND | 118 |
| B06-15 705047-14 | ND | ND | ND | 97 |
| B07-5 705047-15 | ND | ND | ND | 98 |
| B08-5 705047-17 | ND | ND | ND | 96 |
| Method Blank 07-955 MB | ND | ND | ND | 103 |

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/15/17

Date Received: 05/03/17

Project: 1162-17001-02, F&BI 705047

Date Extracted: 05/05/17

Date Analyzed: 05/05/17

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

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

| <u>Sample ID</u> | <u>Gasoline Range</u> | Surrogate (% Recovery) |
|------------------|-----------------------|---------------------------|
| Laboratory ID | | (Limit 50-150) |
| B01-11 | 620 | 137 |
| 705047-02 1/20 | | |
| Method Blank | <2 | 110 |
| 07-968 MB | | |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C Direct Sparge

| | | | |
|-------------------|------------------------|-------------|----------------------------|
| Client Sample ID: | B01-11 | Client: | Evren Northwest |
| Date Received: | 05/03/17 | Project: | 1162-17001-02, F&BI 705047 |
| Date Extracted: | 05/08/17 | Lab ID: | 705047-02 |
| Date Analyzed: | 05/08/17 | Data File: | 050832.D |
| Matrix: | Soil | Instrument: | GCMS4 |
| Units: | mg/kg (ppm) Dry Weight | Operator: | JS |

| Surrogates: | % Recovery: | Lower Limit: | Upper Limit: |
|-----------------------|-------------|--------------|--------------|
| 1,2-Dichloroethane-d4 | 114 | 50 | 150 |
| Toluene-d8 | 109 | 50 | 150 |
| 4-Bromofluorobenzene | 208 vo J | 50 | 150 |

| Compounds: | Concentration mg/kg (ppm) |
|-----------------------------|------------------------------|
| Hexane | 0.14 |
| Methyl t-butyl ether (MTBE) | <0.005 |
| 1,2-Dichloroethane (EDC) | <0.005 |
| Benzene | <0.003 |
| Toluene | <0.005 |
| 1,2-Dibromoethane (EDB) | <0.005 |
| Ethylbenzene | 0.17 |
| m,p-Xylene | 0.85 ve |
| o-Xylene | 0.25 ve |
| Naphthalene | 0.022 J |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C Direct Sparge

| | | | |
|-------------------|------------------------|-------------|----------------------------|
| Client Sample ID: | Method Blank | Client: | Evren Northwest |
| Date Received: | Not Applicable | Project: | 1162-17001-02, F&BI 705047 |
| Date Extracted: | 05/08/17 | Lab ID: | 07-931 mb |
| Date Analyzed: | 05/08/17 | Data File: | 050828.D |
| Matrix: | Soil | Instrument: | GCMS4 |
| Units: | mg/kg (ppm) Dry Weight | Operator: | JS |

| Surrogates: | % Recovery: | Lower Limit: | Upper Limit: |
|-----------------------|-------------|--------------|--------------|
| 1,2-Dichloroethane-d4 | 97 | 50 | 150 |
| Toluene-d8 | 95 | 50 | 150 |
| 4-Bromofluorobenzene | 97 | 50 | 150 |

| Compounds: | Concentration mg/kg (ppm) |
|-----------------------------|------------------------------|
| Hexane | <0.025 |
| Methyl t-butyl ether (MTBE) | <0.005 |
| 1,2-Dichloroethane (EDC) | <0.005 |
| Benzene | <0.003 |
| Toluene | <0.005 |
| 1,2-Dibromoethane (EDB) | <0.005 |
| Ethylbenzene | <0.005 |
| m,p-Xylene | <0.01 |
| o-Xylene | <0.005 |
| Naphthalene | <0.005 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020A

| | | | |
|-----------------|------------------------|-------------|----------------------------|
| Client ID: | B01-11 | Client: | Evren Northwest |
| Date Received: | 05/03/17 | Project: | 1162-17001-02, F&BI 705047 |
| Date Extracted: | 05/08/17 | Lab ID: | 705047-02 |
| Date Analyzed: | 05/09/17 | Data File: | 705047-02.043 |
| Matrix: | Soil | Instrument: | ICPMS2 |
| Units: | mg/kg (ppm) Dry Weight | Operator: | SP |

| Analyte: | Concentration mg/kg (ppm) |
|----------|------------------------------|
|----------|------------------------------|

| | |
|------|------|
| Lead | 2.38 |
|------|------|

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020A

| | | | |
|-----------------|------------------------|-------------|----------------------------|
| Client ID: | Method Blank | Client: | Evren Northwest |
| Date Received: | NA | Project: | 1162-17001-02, F&BI 705047 |
| Date Extracted: | 05/08/17 | Lab ID: | I7-248 mb |
| Date Analyzed: | 05/08/17 | Data File: | I7-248 mb.120 |
| Matrix: | Soil | Instrument: | ICPMS2 |
| Units: | mg/kg (ppm) Dry Weight | Operator: | SP |

| Analyte: | Concentration mg/kg (ppm) |
|----------|------------------------------|
|----------|------------------------------|

| | |
|------|----|
| Lead | <1 |
|------|----|

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/15/17

Date Received: 05/03/17

Project: 1162-17001-02, F&BI 705047

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

Laboratory Code: 705115-01 (Duplicate)

| Analyte | Reporting Units | Sample Result (Wet Wt) | Duplicate Result (Wet Wt) | RPD (Limit 20) |
|----------|-----------------|------------------------------|---------------------------------|-------------------|
| Gasoline | mg/kg (ppm) | <2 | <2 | nm |

Laboratory Code: Laboratory Control Sample

| Analyte | Reporting Units | Spike Level | Percent Recovery LCS | Acceptance Criteria |
|----------|-----------------|----------------|----------------------------|------------------------|
| Gasoline | mg/kg (ppm) | 20 | 95 | 71-131 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/15/17

Date Received: 05/03/17

Project: 1162-17001-02, F&BI 705047

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR VOLATILES BY EPA METHOD 8260C DIRECT SPARGE**

Laboratory Code: 705109-09 (Duplicate)

| Analyte | Reporting Units | Sample Result (Wet wt) | Duplicate Result (Wet wt) | RPD (Limit 20) |
|-----------------------------|--------------------|------------------------------|---------------------------------|-------------------|
| Hexane | mg/kg (ppm) | <0.025 | <0.025 | nm |
| Methyl t-butyl ether (MTBE) | mg/kg (ppm) | <0.005 | <0.005 | nm |
| 1,2-Dichloroethane (EDC) | mg/kg (ppm) | <0.005 | <0.005 | nm |
| Benzene | mg/kg (ppm) | <0.003 | <0.003 | nm |
| Toluene | mg/kg (ppm) | <0.005 | <0.005 | nm |
| 1,2-Dibromoethane (EDB) | mg/kg (ppm) | <0.005 | <0.005 | nm |
| Ethylbenzene | mg/kg (ppm) | <0.005 | <0.005 | nm |
| m,p-Xylene | mg/kg (ppm) | <0.01 | <0.01 | nm |
| o-Xylene | mg/kg (ppm) | <0.005 | <0.005 | nm |
| Naphthalene | mg/kg (ppm) | <0.005 | <0.005 | nm |

Laboratory Code: Laboratory Control Sample

| Analyte | Reporting Units | Spike Level | Percent Recovery LCS | Percent Recovery LCSD | Acceptance Criteria | RPD (Limit 20) |
|-----------------------------|--------------------|----------------|----------------------------|-----------------------------|------------------------|-------------------|
| Hexane | mg/kg (ppm) | 0.05 | 90 | 91 | 70-130 | 1 |
| Methyl t-butyl ether (MTBE) | mg/kg (ppm) | 0.05 | 90 | 91 | 49-148 | 1 |
| 1,2-Dichloroethane (EDC) | mg/kg (ppm) | 0.05 | 81 | 81 | 69-137 | 0 |
| Benzene | mg/kg (ppm) | 0.05 | 90 | 90 | 67-138 | 0 |
| Toluene | mg/kg (ppm) | 0.05 | 97 | 98 | 12-185 | 1 |
| 1,2-Dibromoethane (EDB) | mg/kg (ppm) | 0.05 | 90 | 95 | 70-130 | 5 |
| Ethylbenzene | mg/kg (ppm) | 0.05 | 101 | 101 | 70-130 | 0 |
| m,p-Xylene | mg/kg (ppm) | 0.1 | 102 | 102 | 70-130 | 0 |
| o-Xylene | mg/kg (ppm) | 0.05 | 100 | 101 | 70-130 | 1 |
| Naphthalene | mg/kg (ppm) | 0.05 | 88 | 87 | 70-130 | 1 |

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/15/17

Date Received: 05/03/17

Project: 1162-17001-02, F&BI 705047

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 6020A**

Laboratory Code: 705108-01 (Matrix Spike)

| Analyte | Reporting Units | Spike Level | Sample Result (Wet wt) | Percent Recovery MS | Percent Recovery MSD | Acceptance Criteria | RPD (Limit 20) |
|---------|--------------------|----------------|------------------------------|---------------------------|----------------------------|------------------------|-------------------|
| Lead | mg/kg (ppm) | 50 | 1.37 | 81 | 77 | 75-125 | 5 |

Laboratory Code: Laboratory Control Sample

| Analyte | Reporting Units | Spike Level | Percent Recovery LCS | Acceptance Criteria |
|---------|--------------------|----------------|----------------------------|------------------------|
| Lead | mg/kg (ppm) | 50 | 101 | 80-120 |

Data Qualifiers & Definitions

- a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.
- c - The presence of the analyte may be due to carryover from previous sample injections.
- cf - The sample was centrifuged prior to analysis.
- d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dv - Insufficient sample volume was available to achieve normal reporting limits.
- f - The sample was laboratory filtered prior to analysis.
- fb - The analyte was detected in the method blank.
- fc - The compound 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. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.
- J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc - The presence of the analyte is likely due to laboratory contamination.
- L - The reported concentration was generated from a library search.
- nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo - The value reported fell outside the control limits established for this analyte.
- x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

705047

SAMPLE CHAIN OF CUSTODY

ME 05/03/17

Page # 1 of 2

Send Report To Lyman Center
Company EUREKA
Address PO Box 14488
City, State, ZIP Portland, OR 97223
Phone # 503 452-5821 Fax #

| | | |
|--|--------------------------|---|
| SAMPLERS (signature) <u>Elaine</u> | | TURNAROUND TIME <input checked="" type="checkbox"/> Standard (2 Weeks) <input type="checkbox"/> RUSH Rush charges authorized by _____ |
| PROJECT NAME/NO. <u>1162-17021-02</u> | PO# <u>1162-17021</u> | SAMPLE DISPOSAL <input checked="" type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Return samples <input type="checkbox"/> Will call with instructions |
| REMARKS | | |

| Sample ID | Lab ID | Date Sampled | Time Sampled | Sample Type | # of containers | ANALYSES REQUESTED | | | | | | | Notes |
|-----------|--------|--------------|--------------|-------------|-----------------|--------------------|--------------|---------------|--------------|---------------|-----|-----------|---------------------|
| | | | | | | TPH-Diesel | TPH-Gasoline | BTEX by 8021B | VOCs by 8260 | SVOCs by 8270 | HFS | NWTPH HCL | |
| B01-5 | 01 | 5/2/17 | 0835 | 5 | 1 | | | | | | | X | |
| B01-11 | 02 | | 0900 | 5 | 5 | (X) | | | | | | (X) (X) | 4 - pe ll 5/2/17 |
| B01-13.5 | 03 | | 0905 | 5 | 1 | | | | | | | X | |
| B01-19 | 04 | | 0910 | 5 | 1 | | | | | | | | AK |
| B02-10 | 05 | | 0925 | 5 | 1 | | | | | | | X | |
| B02-15 | 06 | | 0930 | 5 | 1 | | | | | | | X | |
| B03-6 | 07 | | 0940 | 5 | 1 | | | | | | | X | |
| B03-9 | 08 | | 0945 | 5 | 1 | | | | | | | | |
| B03-15 | 09 | | 0950 | 5 | 1 | | | | | | | X | |
| B04-6 | 10 | | 1005 | 5 | 1 | | | | | | | X | |

| | | | | | | | |
|--------------------------|--|------------|--|---------------------|--|--------|-------|
| SIGNATURE | | PRINT NAME | | COMPANY | | DATE | TIME |
| Relinquished by: _____ | | EUREKA | | EUREKA | | 5/2/17 | 16:15 |
| Received by: <u>PHAM</u> | | PHAM | | FBI | | 5/3/17 | 0800 |
| Relinquished by: _____ | | | | | | | |
| Received by: _____ | | | | Samples received at | | 3 | |

Doc/

5

TURNAROUND TIME
☒ Standard (2 Weeks)
☐ RUSH _____
 Rush charges authorized by _____

SAMPLE DISPOSAL
☒ Dispose after 30 days
☐ Return samples
☐ Will call with instructions

[illegible]

TIME

117

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