Soil Cleanup Summary Report
Former Monroe Auto Wrecking/River's Edge Site
426 Fremont Street
Monroe, Washington

November 20, 2019

Prepared for

Ms. Rebecca Ralston
On Behalf of River's Edge WA LLLP
Monroe, Washington

LANDAU ASSOCIATES

130 2nd Avenue South
Edmonds, WA 98020
(425) 778-0907

Soil Cleanup Summary Report
Former Monroe Auto Wrecking/River's Edge Site
426 Fremont Street
Monroe, Washington

This document was prepared by, or under the direct supervision of, the undersigned, whose seal is affixed below.

Name: Dylan H. Frazer
State of Washington No. 2986

Date: November 20, 2019

Document prepared by: _____ Dylan H. Frazer, LG
Project Manager

Document reviewed by: _____ Piper M. Roelen, PE
Principal/Quality Reviewer

Date: November 20, 2019
Project No.: 1759001.030
File path: P:\1759\001\R\Soil Cleanup Summary Report\LAI_RE Soil Cleanup Summary Rpt 112019.docx
Project Coordinator: tam

LANDAU ASSOCIATES

This page intentionally left blank.

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

LIST OF ABBREVIATIONS AND ACRONYMS

ALS	ALS Laboratory, Everett, WA
AOC	area of concern
AST	aboveground storage tank
bgs	below ground surface
cleanup report	Soil Cleanup Summary Report
cPAH	carcinogenic polycyclic aromatic hydrocarbons
CULs	cleanup levels
Ecology	Washington State Department of Ecology
EMMP	Excavated Materials Management Plan
EPA	US Environmental Protection Agency
ESA	environmental site assessment
FS	feasibility study
ft	feet
Glacier	Glacier Environmental Services, Inc.
HCID	hydrocarbon identification
LAI	Landau Associates, Inc.
mg/kg	milligrams per kilogram
MTCA	Model Toxics Control Act
NFA	No Further Action
Owner	River's Edge WA LLLP
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyls
PID	photoionization detector
Ppm	parts per million
PVC	polyvinyl chloride
RI	remedial investigation
SIM	select ion monitoring
Site	Former Monroe Auto Wrecking/River's Edge site
sq ft	square feet
TEQ	toxicity equivalent
TPH	total petroleum hydrocarbon
TPH-D	TPH diesel range
TPH-G	TPH gasoline range
TPH-O	TPH oil range
UST	underground storage tank
VOC	volatile organic compound
WAC	Washington Administrative Code

This page intentionally left blank.

1.0 INTRODUCTION AND BACKGROUND

On behalf of River's Edge WA LLLP (owner), Landau Associates Inc. (LAI) prepared this Soil Cleanup Summary Report (cleanup report) to document soil and debris removal and cleanup activities conducted from June to August 2019 at the Former Monroe Auto Wrecking/River's Edge site (Site) located at 426 Fremont Street in Monroe, Washington (Figure 1). This cleanup work was conducted during construction activities at the Site, and followed the outlined approach and procedures presented in the Excavated Materials Management Plan (EMMP; LAI 2018a), which is included in Appendix A, for the Site.

The Site was historically occupied by a lumber mill and an auto wrecking facility. Previous environmental investigations and remedial actions at the Site were conducted beginning in 1990 and were completed in 2000, and resulted in issuance of a no further action (NFA) determination by the Washington State Department of Ecology (Ecology) in 2001 (Ecology 2001a). However, in 2008, Ecology re-evaluated the Site and determined that the remedial action was not sufficient to meet Model Toxics Control Act (MTCA) requirements. The previously issued NFA determination was rescinded due to the presence of TPH, cadmium, and lead left in place at concentrations exceeding cleanup levels (CULs) (Ecology 2008).

1.1 Previous Investigations and Cleanup Actions

The following sections present a summary of the findings and results of the previous investigations, remedial actions, and Ecology determinations through 2008.

1.1.1 1990 Site Investigations

In 1990, Hart Crowser conducted subsurface investigations south of Fremont Street at Ann Street on behalf of Glacier Park Company and detected total petroleum hydrocarbons (TPH), lead, and zinc at concentrations above MTCA soil CULs (Hart Crowser 1990). The contamination covered a surface area of approximately 4,200 square feet (sq ft) to depths of 1 to 2 feet (ft) below ground surface (bgs). Groundwater sampling and analysis conducted in this area of the Site found low levels of dissolved cadmium, chromium, and zinc.

1.1.2 1996/1997 Site Investigation and Independent Remedial Action

Soil and groundwater sampling conducted at the Site by EMCON in 1996 (EMCON 1996a, b) for Ms. Reta Jensen, the owner of the Site at the time, found polychlorinated biphenyls (PCBs) in soil at concentrations exceeding the MTCA Method A CUL near a power pole in the northeastern portion of the Site, and diesel- and oil-range TPH (TPH-D and TPH-O, respectively) in soil at concentrations exceeding the MTCA Method A CULs in several locations at the Site. In 1997, Glacier Environmental Services, Inc. (Glacier) reported the results of an independent remedial action at the Site to remove and dispose approximately 18 tons of PCB-impacted soil identified in 1996. Glacier concluded that the excavation had removed soil containing PCBs above the MTCA Method A CUL (Glacier 1997).

1.1.3 2000 Remedial investigation and Feasibility Study

In February 2000, Farallon conducted a remedial investigation and feasibility study (RI/FS) for the Former Lumber Mill Subarea and Former Salvage Yard Subarea. Farallon collected soil samples from 22 test pits (to an average depth of 15 ft bgs) and three soil borings (greater than 15 ft bgs), and installed two additional groundwater monitoring wells (screened between 15 to 30 ft bgs and 15 to 25 ft bgs). Groundwater samples were collected from the two new monitoring wells and from existing monitoring wells installed during previous investigations (EMCON 1996a; Hart Crowser 1990). Farallon identified TPH-D, TPH-O, lead, and PCBs in soil at concentrations above MTCA Method A CULs. No analytes were identified above MTCA Method A CULs in groundwater (Farallon 2000b).

In July and August 2000, Farallon conducted remedial excavations at eight areas of the Site to remove shallow contaminated soil identified during the RI/FS (Farallon 2000a). Approximately 2,140 tons of soil was excavated and disposed of offsite. Analytical results of confirmation soil samples taken from the sidewalls and floor of the excavations indicated that contamination remained above the MTCA Method B CUL for TPH-D/-O (calculated for the Site using the Interim TPH Guidelines based on residential use), and above the MTCA Method A CUL for cadmium and lead in two areas in the southwestern portion of the Site. Further excavation was not conducted to avoid damage to an existing structure and nearby large trees and vegetation. Farallon requested a NFA determination from Ecology based on the results of the cleanup (Farallon 2000a). In 2001, Ecology granted an NFA determination (Ecology 2001b) for the Site; however, in 2008, Ecology re-evaluated the Site and determined that the remedial action was not sufficient to meet MTCA requirements due to the presence of TPH, cadmium, and lead left in place at concentrations exceeding CULs where excavation was limited by structures and vegetation. Based on this determination, the previously issued NFA determination was rescinded (Ecology 2008).

1.2 2017 Phase I and II Environmental Site Assessments

Following rescission of the NFA determination in 2008, LAI conducted Phase I (LAI 2017a) and Phase II (LAI 2017b) Environmental Site Assessments (ESAs), which are included in Appendix A, at the Site. During the Phase II ESA conducted by LAI in 2017, polycyclic aromatic hydrocarbons (PAHs) were detected in shallow soil at the Site at concentrations that exceeded MTCA Method A, and/or Method B (direct contact unrestricted use) CULs. The groundwater samples from existing well MW-4 showed no detections that exceeded CULs, and no indications of groundwater contamination from offsite fuel operations. The groundwater grab sample contained arsenic and bis[2-ethylhexyl]phthalate at concentrations exceeding CULs, but these detections were qualified based on the sampling methodology and are likely not representative of the Site groundwater conditions.

In addition, a test pit was excavated and sampled in the area of a small fuel release near a former fuel aboveground storage tank (AST). No petroleum hydrocarbons, PAHs, or PCBs were detected in the sample collected.

1.3 Identification of Data Gaps

Based on the information gathered during the 2017 Phase I and Phase II ESAs, LAI developed a list of data gaps in consultation with Ecology (Johnson 2018). These data gaps, as presented in the EMMP, included the following:

1. TPH-D and TPH-O were detected in soil at 15 ft bgs at concentrations of 420 milligrams per kilogram (mg/kg) and 2,050 mg/kg, respectively, in test pit FLM-TP8 to the south of the mill building. The individual detections were at or below the MTCA Method B CUL of 2,050 mg/kg calculated by Farallon, but insufficient data were collected to demonstrate that the detections represented two distinct products. Without such data, the analytical results must be summed together, the result of which would exceed the calculated MTCA Method B CUL.
2. The extent of the debris at the south portion of the Site has not been sufficiently characterized.
3. Potential impacts to groundwater and the surface water of Woods Creek have not been sufficiently characterized.
4. Confirmation samples collected from Farallon remedial excavations EX3 and EX4 (later defined as Area of Concern [AOC] 2), and EX6 (later defined as AOC4) were not analyzed for PCBs; however, PCBs were detected in soil samples collected from those areas prior to excavation at concentrations exceeding the MTCA Method A CUL.
5. PAHs were detected at concentrations above the MTCA Method A CUL in areas adjacent to the mill building during the LAI Phase II ESA, but the extent of contamination was not further evaluated. This area was defined as AOC3, and is shown on Figure 2.
6. Cadmium was detected at concentrations above the MTCA Method A CUL in the south and east sidewall samples collected from Farallon remedial excavation EX1 located at the south end of the Site, but the extent of contamination was not further evaluated. This area was defined as AOC1, and is shown on Figure 2.
7. Cadmium, lead, and TPH-D were detected at concentrations above their respective MTCA Method A CULs in the south sidewall and southeast excavation bottom samples collected from Farallon remedial excavation EX2 at the south end of the Site, but the extent of contamination was not further evaluated. This area was also included in AOC1, and is shown on Figure 2.

1.4 Pre-Cleanup Data Gaps Investigations

Data gaps numbers 1 through 4 listed above were addressed during pre-cleanup data gaps investigations conducted in 2018 and 2019, and are summarized in the following sections.

1.4.1 2018 Supplemental Phase II Environmental Site Assessment

In June through August 2018, LAI conducted a supplemental Phase II ESA (LAI 2018b) for River's Edge that consisted of subsurface investigations and surface water sampling to address data gaps Numbers 1 through 3; a copy of this report is included in Appendix A. This included investigation of the deep (15 ft bgs) TPH-D detection at the south end of the mill building identified in the Final Cleanup Action

Summary report by Farallon (Farallon 2000a); and potential TPH, metals, and PAHs contamination in groundwater that could affect Woods Creek. Surface water samples were also collected from Woods Creek upstream and downstream of the Site as a further check on potential impacts to the creek.

The Supplemental Phase II ESA testing results indicated that:

- The deep TPH-D detection was either anomalous or localized and did not warrant further evaluation.
- Groundwater at the south/southwest end of the Site in the vicinity of the L-shaped storage building is impacted by TPH-O, arsenic, and zinc at concentrations exceeding MTCA Method A and/or B CULs.
- Wood, metal, glass, and paint debris is present in the subsurface at the south end of the Site to depths up to 35 ft bgs.

1.4.2 2019 Supplemental Soil Sampling

Data gap Number 4 was evaluated during supplemental soil sampling activities conducted in December 2018, which is documented in the Supplemental Soil Sampling Results Technical Memorandum (LAI 2019a); a copy of this report is included in Appendix A. This investigation included excavation of test pits at the approximate bottoms and sidewalls of remedial action excavation areas EX3, EX4, and EX6. Confirmation soil samples were collected, and analytical results indicated that no additional remedial excavation was needed at EX3, EX4, and EX6. Results also confirmed the presence of PAHs at concentrations above CULs at AOC3 (data gap number 5).

1.5 Purpose of Cleanup

In addition to addressing unanticipated contamination discovered during construction, cleanup at the Site described in this cleanup summary report was completed to address data gaps numbers 5 through 7 identified in the EMMP.

2.0 SOIL CLEANUP LEVELS

CULs were established for contaminants at the Site for comparison against soil confirmation sample results. Initial CULs were presented in the EMMP. Based on Site history and the future use of the Site as a residential development, the initial CULs consisted of MTCA Method A soil CULs for unrestricted land use for the following chemicals: TPH-D and TPH-O, metals (lead and cadmium), and PAHs. Based on unanticipated contamination discovered during construction activities at the Site, additional CULs were developed for TPH-G, other metals (arsenic, total chromium, and mercury), and PCBs.

Method A soil CULs for unrestricted land use, as presented in the EMMP, are intended to be protective of all receptors and all exposure pathways (including the human direct contact and/or protection of groundwater for drinking water use exposure pathways), and are applicable Site-wide. As described in the following sections, soil cleanup was generally limited to soil above 15 ft bgs; an evaluation of soil below the direct-contact point of compliance of 15 ft bgs will be evaluated following groundwater monitoring conducted separately.

The soil CULS for the Site are the MTCA Method A CULs for unrestricted land use, as follows:

- Total petroleum hydrocarbons:
  - TPH-G: 100 mg/kg (30 mg/kg if benzene is present)
  - TPH-D: 2,000 mg/kg
  - TPH-O: 2,000 mg/kg
- Metals:
  - Arsenic: 20 mg/kg
  - Cadmium: 2 mg/kg
  - Total chromium: 2,000 mg/kg
  - Lead: 250 mg/kg
  - Mercury: 2 mg/kg
- Total PCBs: 1 mg/kg
- PAHs toxicity equivalent (TEQ): 0.1 mg/kg.

3.0 SOIL CLEANUP ACTIVITIES

Soil cleanup activities included remedial excavation in AOC1, AOC3, and in areas of unanticipated contamination encountered during construction, which included the Rinse Tank Area and the Building C Area. Remedial excavation was conducted in accordance with procedures presented in the EMMP. An environmental professional with LAI was onsite during remedial excavation activities, and excavation was guided by the results of field screening and soil confirmation sample results. Groundwater was not encountered during any of the excavation activities.

3.1 Field Screening and Soil Sampling Procedures

During remedial excavation, field screening was used to delineate the extent of the excavation needed to remove contaminated soil. Field screening methods included using a photoionization detector (PID) to test soil headspace for volatile organic compound (VOCs), sheen tests for petroleum hydrocarbons, and visual and olfactory observations.

Characterization and confirmation soil samples were collected at an approximate frequency of 1 sidewall sample per 100 ft of sidewall (minimum one sample per sidewall), and 1 excavation bottom sample per 1,000 sq ft of excavation area. Bottom of excavation samples were collected from surfaces freshly exposed by an excavator bucket. Sidewall samples were also collected using an excavator bucket from a newly exposed sidewall surface. Soil samples were collected from locations and/or depth intervals with the greatest potential contamination as determined by field screening (e.g., samples were collected from the black layer described in Section 3.2). Soil was collected using a decontaminated stainless-steel spoon, placed in a decontaminated stainless-steel bowl, homogenized, and transferred to the appropriate sample containers. Material larger than approximately ¼ inch was removed from the sample prior to placing the soil in the sample container. Soil testing for possible VOC or gasoline-range total petroleum hydrocarbon (TPH-G) contamination was not homogenized, but rather sampled from minimally disturbed soil using US Environmental Protection Agency (EPA) Method 5035 and placed directly into laboratory-provided vials with appropriate preservatives.

Soil samples collected for laboratory analysis were submitted to ALS Laboratories (ALS) in Everett, Washington. Analyses requested were selected on an area by area basis, based on historical data and field observations, and included the following:

- TPH by Hydrocarbon Identification (HCID).
- TPH-G by Method NWTPH-Gx.
- TPH-D and TPH-O by Method NWTPH-Dx.
- Metals (arsenic, cadmium, chromium, lead, and mercury) by Methods 6020/7471B.
- PAHs by Method 8270D Select Ion Monitoring (SIM).
- PCBs by Method 8082A.

3.2 AOC1 Soil Cleanup

Cleanup in the AOC1 area addressed data gaps numbers 6 and 7 (see Section 1.3), plus cleanup of unanticipated contamination encountered during construction activities in the immediate vicinity of AOC1. Remediation in the AOC1 area was completed by excavation of contaminated soil to depths up to 17 ft bgs, and extended as far south as the limits of the clearing area as determined by the existing grading permit for the construction project. The initial excavation area was designed to excavate soil with contaminant concentrations above CULs left in place during the 2000 remedial excavation (see Figure 3), but was expanded based on soil confirmation sample analytical results, the presence of unanticipated contamination, and other indications of potential contamination based on field screening results.

Field screening during excavation in the AOC1 area indicated the presence of two approximately 1-ft-thick black layers consisting of burned wood material, and containing metal debris including car parts, and other materials. The upper black layer was observed at depths between 6.9 ft bgs and 12 ft bgs, and the lower black layer was observed at depths between approximately 11 ft bgs and 17 ft bgs. Both black layers generally sloped downward to the south; the deeper black layer was observed in a portion of the final southern excavation sidewall. The approximate and estimated extent of the black layers is shown on Figure 4.

Soil characterization samples were collected from both black layers: characterization samples collected from the upper black layer included samples SW-17 (12-13) and SW-18 (7-10), and characterization samples from the lower black layer included samples SW-18 (10-11) and SW-19 (10-11.5). Analytical results indicated that some portions of each black layer contained contaminant concentrations above CULs [e.g., cadmium and lead in upper black layer sample SW-17 (12-13) and in lower black layer sample SW-18 (10-11)]; whereas sample results from the same layers at other sample locations indicated contaminant concentrations below CULs. Regardless of individual characterization sample analytical results, both black layers were excavated from the AOC1 area except for material that was present below 15 ft bgs or outside the limits of the clearing area to the south. Confirmation samples were collected at the final southern sidewall for characterization of the black layer left in place above 15 ft bgs; an additional soil boring was also advanced just south of this location to provide additional characterization/confirmation data (see Section 4.2.2).

3.2.1 Initial AOC1 Soil Excavation

Initial soil excavation was conducted in AOC1 on June 24, 2019, in the southern portion of the Site, to remediate material left in place after the historical EX1 and EX2 excavations that contained concentrations of cadmium, lead, and TPH-D. The extent of the initial AOC1 excavation is shown on Figure 3. Prior to this initial excavation, five test pits (TP-1 through TP-5) were completed on June 6, 2019 to collect pre-excavation confirmation soil samples; two depth intervals were sampled and analyzed at each location. Analytical data for these confirmation soil samples indicated contaminant concentrations above CULs below the maximum depth of the test pits at three locations (TP-2, TP-3,

and TP-5); the depth of the initial excavation was increased to include excavation of soil represented by these samples. Initial excavation was completed to depths ranging between 4 ft bgs (in the northern portion of AOC1) to 9 ft bgs (in the southeastern portion of AOC1).

In addition to the 10 initial test pit soil samples, 14 confirmation soil samples were collected on June 24, 2019 from the initial excavation bottom and sidewalls (Figure 3). Test pit and confirmation soil samples were analyzed for TPH-D, TPH-O, and metals (shallow samples were analyzed for arsenic, cadmium, and lead; deeper test pit samples were also analyzed for chromium and mercury; and all the confirmation samples were also analyzed for chromium). Analytical results indicated lead and/or cadmium at concentrations above CULs in remaining soil at bottom sampling locations AOC1-B(8) and AOC1-B(9), and in sidewall sampling locations in the southern portion of the excavation area [AOC1-SW8 (0-6), AOC1-SW7 (0-6), and AOC1-SW11 (6-9)].

Laboratory analytical results are presented in Table 1, and laboratory reports are included in Appendix B.

3.2.2 Additional AOC1 Soil Excavation

Based on confirmation sampling results from the initial excavation, on June 26, 2019 through July 11, 2019, additional excavation of contaminated soil in the AOC1 area was performed that extended the excavation to the south and west. Excavation generally followed the two black layers, which sloped downward to the south; the approximate area of the black layers observed during cleanup and estimated beyond the excavation limits is shown on Figure 4. Also as shown on Figure 4, the final depth of the excavation ranged from 4 ft bgs in the northern portion, to 9.5 ft bgs in the western portion, and 15 ft bgs in the remainder of the AOC1 area. Excavation extended slightly deeper than 15 ft bgs at the eastern and southern margins (16 ft bgs and 17 ft bgs, respectively) in an effort to remove as much of the observed black layer as practicable.

The black layer was observed outside of the final excavation limits in two locations. At the southern edge of the excavation area, the black layer was observed at below 17 ft bgs; further excavation below this depth was not practicable due to the proximity of the slope. A confirmation soil sample was collected to document soil conditions above this layer. At the eastern edge of the excavation, the black layer was observed shallower than 15 ft bgs in the final excavation sidewall; this excavation extended to the limits of the clearing boundary for the construction project. Confirmation soil sample AOC1-SW-17 (12-13) was collected from the black layer in the final sidewall.

Following completion excavation in each area, confirmation soil samples were collected from the bottom and sidewalls at locations shown on Figure 4. Confirmation soil samples were collected from the location or interval with the greatest potential for contamination. In excavation bottom or sidewalls where the black layer was observed, samples were collected from that location or depth interval (e.g., at location AOC1-SW12, a confirmation soil sample was collected from the 12- to 17-ft interval). Where evidence of contamination was not observed or where the black layer was observed

to be present below the maximum depth of the excavation, a composite from the entire sidewall was collected [e.g., at location AOC1-SW-13 (0-17)] or a composite interval or discrete portion of the sidewall with the greatest potential contamination based on field observations was collected [e.g., at locations AOC1-SW15 (0-6) and AOC1-SW21 (9.5)]. At locations where confirmation soil sample analytical data indicated contaminant concentrations above CULs, excavation limits were extended and additional confirmation soil samples were collected until results indicated cleanup was complete. Final confirmation soil sample data indicated contaminant concentrations below the respective CULs at all locations except for sampling locations representing soil below 15 ft bgs [AOC1-B (15) and AOC1-B(17], and at sampling location AOC1-SW17.

A representative photo of the AOC1 soil excavation is provided in Appendix C. Analytical data is presented in Table 1, and laboratory analytical results are provided in Appendix B.

3.2.2.1 Sampling Location AOC1-SW17

At sampling location AOC1-SW17, analytical results for the sample collected from the 12- to 13-ft bgs interval indicated concentrations of cadmium (4.0 mg/kg) and lead (720 mg/kg) above the respective CULs (2 mg/kg and 250 mg/kg). Based on these exceedances, one soil boring (AOC1-DP) was advanced approximately 9 ft to the south to evaluate the extent of any remaining contaminated soil above 15 ft bgs. The soil boring was advanced using direct-push drilling equipment to approximately 32 ft bgs, and soil was sampled continuously to the maximum depth of the boring. A record of the soil conditions observed during drilling, including soil types, evidence of contamination based on field screening, and other pertinent information are provided in the boring log in Appendix D.

As indicated in the boring log, the black layer was observed at soil boring AOC1-DP at approximately 14 to 15 ft bgs. Soil in this interval was collected for laboratory analysis of TPH-D/-O and metals. Analytical results indicate contaminant concentrations below CULs, including both cadmium (1.3 mg/kg) and lead (180 mg/kg). Based on these data, the elevated metals concentrations documented at excavation sidewall sampling location AOC1-SW17 (12-13) (just north of the location of soil boring AOC1-DP) appear to be limited to a relatively small area. Based on the significant depth, and location of this remaining soil, additional excavation was not practicable.

3.3 AOC3 Cleanup

Cleanup in the AOC3 area addressed data gap number 5 (see Section 1.3), and consisted of remaining surface soil with PAH concentrations above CULs between the former mill building and maintenance garage. As shown on Figure 5, existing analytical data presented in the LAI Phase II ESA indicated the maximum extent of AOC3 was bound by clean sampling locations to the north (AOC3-NSW), south, (AOC3-SSW), west (AOC3-WSW), and at a bottom depth of 2 ft bgs (AOC3-NBOT and AOC3-SBOT). One sample location (AOC3-ESW) indicated PAH concentrations above the CUL extended to the western edge of the footprint of the former maintenance garage.

Prior to excavation, shallow test pits were excavated to further characterize surface soil and potential excavation sidewall and base confirmation soil samples around sampling location AOC3-ESW. Soil samples were collected to bound the AOC3-ESW sampling location, including below AOC3-B (2.5), to the northeast [AOC3-SW1 (0-2)], and to the northwest [AOC3-SW2 (0-2)]. Analytical data at these sampling locations indicate PAH concentrations below CULs, effectively limiting the cleanup area to the southern half of AOC3. Additional samples were also collected to the south of AOC3-ESW from the 0- to 2-ft depth interval at sampling location AOC3-SW3, and in surface soil at sampling locations AOC3-SW5 and AOC3-SW6; analytical data at these sampling locations indicate PAH concentrations above CULs. A representative photo of the AOC3 soil excavation is provided in Appendix C. Analytical data is presented in Table 2, and laboratory analytical results are provided in Appendix B.

Excavation was completed to a depth of 2.5 ft bgs in an area bounded by the confirmation sampling locations with PAH concentrations below CULs, as described above, and by the western edge of the former maintenance garage. Field screening did not indicate any additional evidence of contamination during excavation. In addition, the AOC3 excavation area was extended approximately 8 ft to the east and south to allow for construction of a temporary haul road; this area was excavated to 7 ft bgs. The removal of this soil effectively widened the cleanup area by 50 percent. As excavation for the haul road was completed prior to collection of confirmation samples, additional confirmation samples to the east could not be collected other than one sample collected from the 7- to 8-ft depth interval ([AOC3-SW (7-8)]. Analytical results for this sample indicate PAH concentrations below CULs.

3.4 Unanticipated Contamination Cleanup

Unanticipated contamination was discovered during construction activities in the vicinity of future "Building C" in the central portion of the Site ("Building C Excavation Area" shown on Figure 2). Contamination included a small metal "rinse tank" and shallow petroleum-contaminated soil. Characterization and cleanup in these areas followed procedures outlined in the EMMP, and are described in detail below.

3.4.1 Rinse Tank Cleanup

While excavating for Building C's footing on July 1, 2019, an approximately 4-ft by 3-ft by 3-ft deep metal box, labeled as a "rinse tank", was uncovered and removed. The bottom of the rinse tank was approximately 5.5 ft bgs. Extending out of the rinse tank was a 6-inch polyvinyl chloride (PVC) pipe filled with fine, clayey soil with observed staining, sheen, and petroleum-like odor. An excavation of the soil surrounding the rinse tank was performed based on field observations and soil screening. Pre-excavation field screening indicated a slight petroleum odor, but PID soil headspace readings were at background levels (2 parts per million [ppm] or less) and did not indicate the presence of VOCs. In the sidewalls and bottom southeast corner of the rinse tank excavation, staining was observed and sheen tests of the stained soil suggested the presence of TPH-D or TPH-O contamination. These soils were removed during excavation.

3.4.1.1 Confirmation Soil Sampling and Results

Confirmation samples from the rinse tank excavation were collected from two sidewalls [SW1(2.5-5.5) and SW2(2.5-5.5)] and from the bottom [B(5.5)] of the excavation at 5.5 ft bgs, as shown on Figure 6. The soil samples were analyzed for TPH-G, TPH-D, and TPH-O (by HCID); PAHs; PCBs; and MTCA 5 metals. Soil analytical results indicate contaminant concentrations in both sidewalls were below CULs, confirming the lateral extent of the contaminated soil was removed. The bottom sample of the excavation indicated carcinogenic polycyclic aromatic hydrocarbons (cPAHs) concentrations above the CULs. Therefore, an additional 2.5 ft of soil was excavated from the bottom of the rinse tank area and an additional bottom sample was collected [RT-B(7.5)]. Analytical results of this sample indicate concentrations remaining in the rinse tank excavation bottom are below CULs and no additional excavation was warranted.

Rinse tank area characterization and confirmation analytical sample results are presented in Table 3, and analytical lab reports are included in Appendix B. A representative photo of the rinse tank soil excavation is provided in Appendix C.

3.4.2 Building C Area Cleanup

While excavating for Building C's footing on July 2, 2019, construction personnel observed staining and a petroleum-like odor in shallow soil. In accordance with the EMMP, LAI personnel provided oversight, field screening, and oversight of additional excavation in this area. Field screening indicated a slight petroleum odor and staining, but PID readings in soil headspace were at background levels (2 ppm or less) and did not indicate the presence of VOCs. Potentially contaminated soil was excavated in the areas shown on Figure 6 until field screening did not indicate further presence of potentially contaminated soil. The final excavation depths ranged between 2 and 4 ft bgs.

3.4.2.1 Confirmation Soil Sampling and Results

Eight confirmation soil samples were collected from the Building C excavation bottom and sidewalls on July 3, 2019, and were analyzed for TPH-D, TPH-O, and metals (arsenic, cadmium, chromium, and lead). These samples included three bottom samples (ranging from 2.5 to 3.5 bgs) and five sidewall samples. Sampling locations are shown on Figure 6.

Analytical results indicate contaminant concentrations below CULs in all bottom and sidewall samples except for one location [BC-SW3 (0-1.5)] where TPH-O was detected at a concentration (2,200 mg/kg) just above the CUL of 2,000 mg/kg. Additional excavation was conducted in this area and two additional confirmation soil samples [BC-SW6 (4.0) and BC-SW7 (4.0)] were collected on July 11, 2019. Analytical results for these samples indicate TPH concentrations below laboratory reporting limits, and all contaminant concentrations below CULs.

Building C excavation area characterization and confirmation analytical sample results are presented in Table 4, and analytical lab reports are included in Appendix B. A representative photo of the

Building C Soil Excavation is provided in Appendix C. Analytical data is presented in Table 4, and laboratory analytical results are provided in Appendix B.

3.5 Stockpile Characterization and Soil Disposal

Excavated soil from the AOC1, AOC3, Rinse Tank Area, and Building C Area was stockpiled onsite, in accordance with the EMMP, and was characterized using existing sample data collected during excavation (characterization samples indicated by gray text in Tables 1 through Table 4) and additional stockpile sample analytical data collected when additional characterization data was required for waste profiling. Stockpile sampling procedures consisted of homogenizing three discrete samples collected from locations within the soil pile, that were representative of the stockpiled material, to create one composite sample. The number of samples collected per stockpile was guided by stockpile sample requirements presented in Table 0730-1 in Washington Administrative Code (WAC) 173-360A-0730. Stockpile characterization data is presented in Table 5.

Approximately 3,608 tons of contaminated soil was removed from the Site. Exported soil was trucked to the Waste Management Columbia Ridge Landfill for disposal, or the Iron Mountain Quarry in Granite Falls, Washington for thermal remediation and disposal. Documentation of waste disposal is provided in Appendix E.

4.0 UST DECOMMISSIONING

One unknown underground storage tank (UST) was discovered on September 5, 2019 during utility excavation activities at the Site and was subsequently decommissioned by removal. The UST, which was located in the northwestern edge of the Site (Figure 2), had a capacity of approximately 500 gallons. Following discovery, a sample of the liquid product from inside the UST was collected for laboratory analysis to identify the type of petroleum products stored inside the UST. The sample was submitted to ALS in Everett, Washington and analyzed for hydrocarbon identification by Method NWTPH-HCID. Analytical results indicate the presence of both TPH-G and TPH-D. Based on these results, the UST was assumed to have contained both gasoline and diesel products, and UST decommissioning and site assessment was conducted accordingly.

The UST decommissioning and site assessment was conducted on September 16, 2019. The UST was removed from the Site, and the site assessment did not indicate the presence of a release. A UST Decommissioning and Site Assessment Report (LAI 2019b) was prepared and submitted to Ecology, and a copy of this report is included in Appendix A.

5.0 CONCLUSIONS AND RECOMMENDATIONS

This report documents soil cleanup conducted at the Site in 2019 during redevelopment activities. Cleanup was conducted in accordance with the EMMP, and addressed remaining data gaps identified during previous investigations. The results of the soil cleanup include the following:

- In AOC1, cleanup of soil with concentrations of cadmium, lead, and TPH-D above MTCA Method A CULs was completed at the south end of the Site and former remedial excavation locations EX1 and EX2, thus addressing data gaps numbers 6 and 7 (see Section 1.3). Field observations made during excavation in this area also indicated additional contamination associated with two black layers of burned wood material and debris that sloped down to the south. Soil was excavated to a depth of up to 17 ft bgs in this black layer area. Field screening observations and confirmation soil sample analytical data indicate all contaminated soil in the AOC1 area was removed except for in limited areas below 15 ft bgs in the southern and eastern portions of AOC1 [at sampling locations AOC1-B (15) and AOC1-B(17)], and in a 1-ft-thick layer at 14-ft bgs in a narrow area at the southeast edge of the excavation area.
- The two areas of remaining contamination in AOC1 are detailed as follows:
  - Some limited contaminated soil remains below the direct contact point of compliance of 15 ft bgs at sampling locations AOC1-B (15) and AOC1-B(17); compliance with CULs will be evaluated by characterization of groundwater impacts at the Site.
  - A second area, represented by sample AOC1-SW17 (14-15), is located approximately 1 ft above the direct contact point of compliance of 15 ft bgs, but appears to be bounded to the southeast based on results of soil samples collected at soil boring AOC1-DP. The area of contaminated soil appears to be limited to an area less than 10 ft wide. A conservative estimation of the total volume of contaminated soil above 15 ft bgs in this area is less than 3 cubic yards (9 ft wide by 20 ft long by 1 ft thick). Based on the significant depth and location outside of the clearing limit boundary for the construction project, removal of this material is not practicable.
- In AOC3, cleanup of soil with concentrations of PAHs above CULs was completed between the former Mill Building and the Former Maintenance Garage, thus addressing data gap number 5 (see Section 1.3).
- Additional unanticipated contamination, including a metal “rinse tank” and shallow petroleum-contaminated soil, was observed in the Building C excavation area. The “rinse tank” and associated contaminated soil was removed, and field screening and confirmation soil sample analytical data indicate contaminant concentration in soil at the excavation bottom and sidewalls are below CULs.
- A total of 3,608 tons of contaminated soil was excavated from AOC1, AOC3, and the Building C excavation areas and removed from the Site for disposal.
- One previously unknown UST was discovered during utility excavation activities for the redevelopment. This UST was decommissioned by removal and a subsequent UST site assessment was conducted. The UST site assessment did not indicate a presence of a release, and no further cleanup associated with the UST was warranted.

Based on the significant cleanup of the Site described above, soil cleanup activities at the Site are complete.

Additional characterization and confirmation sampling will be conducted to evaluate the potential impacts to groundwater from contaminated soil remaining below 15 ft bgs in the southern and eastern portions of AOC1, and at 14 ft bgs at the southeast edge of the cleanup area, and to further evaluate groundwater analytical results from the 2018 Phase II ESA. Groundwater monitoring will include quarterly groundwater sampling at permanent monitoring wells installed on the upgradient (northwest) and downgradient (southeast) sides of the Site. This groundwater monitoring is currently being conducted, and will be presented to Ecology in a Groundwater Characterization Report following the completion of four quarterly groundwater monitoring events.

6.0 USE OF THIS REPORT

This Soil Cleanup Summary Report has been prepared for the exclusive use of the River's Edge WA LLLP for specific application to the Former Monroe Auto Wrecking/River's Edge Site. Reliance on this report by third parties, or others who do not have a contractual relationship with River's Edge WA LLLP or LAI on this project, is at their sole risk. Further, the reuse of information, conclusions, and recommendations provided herein for extensions of the project or for any other project, without review and authorization by LAI, shall be at the user's sole risk. LAI warrants that within the limitations of scope, schedule, and budget, our services have been provided in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions as this project. We make no other warranty, either express or implied.

7.0 REFERENCES

Ecology. 2001a. Letter: Independent Remedial Action, Monroe Auto Salvage, 426 Fremont Street, Monroe, WA. From Judith M. Aitken, Toxics Cleanup Program, Washington State Department of Ecology, to Ms. Reta Jensen c/o Peter Jewett, Farallon Consulting LLC. February 2.

Ecology. 2001b. Letter: Independent Remedial Action, Monroe Auto Salvage, 426 Fremont Street, Monroe, Washington. From Judith Aitken, to Farallon Consulting LLC. February 2.

Ecology. 2008. Letter: Recission of Previously Issued No Further Action Determination, Monroe Auto Salvage (Snohomish Tax Parcel 27070600300700. From Dale Myers, Site Manager, Toxics Cleanup Program, Northwest Regional Office, Washington State Department of Ecology, to Mr. Wibbelman. June 2.

EMCON. 1996a. Monroe Auto Salvage Groundwater Monitoring - August 1996 Sampling. September 30.

EMCON. 1996b. Monroe Auto Salvage Site Investigation - Additional PCB Sampling. October 25.

Farallon. 2000a. Final Cleanup Action Summary Report, Monroe Auto Salvage, 926 Fremont Street, Monroe, Washington. Farallon Consulting, LLC. November 9.

Farallon. 2000b. Remedial Investigation and Feasibility Study, Former Salvage Yard and Former Lumber Mill Subareas (East Subareas), Monroe Auto Salavage Site, 426 Fremont Street, Monroe, Washington. Farallon Consulting LLC. February 8.

Glacier. 1997. Independent Remedial Action , Monroe Auto Salvage, 426 Fremont Street, Monroe, Washington. Glacier Environmental Services, Inc. April 18.

Hart Crowser. 1990. Subsurface Exploration and Testing, Glacier Park Company Property, Property Sequence No. 114, Monroe, Washington. December 13.

Johnson, Cody. 2018. Undocumented Phone Conversation: "Identification of Data Gaps." From Cody Johnson, Landau Associates, Inc., to Sonia Fernandez, Voluntary Cleanup Program, Washington State Department of Ecology. May.

LAI. 2017a. Draft Phase I Environmental Site Assessment, Monroe-Woods Creek Site C, Snohomish County, Washington. Landau Associates, Inc. April 20.

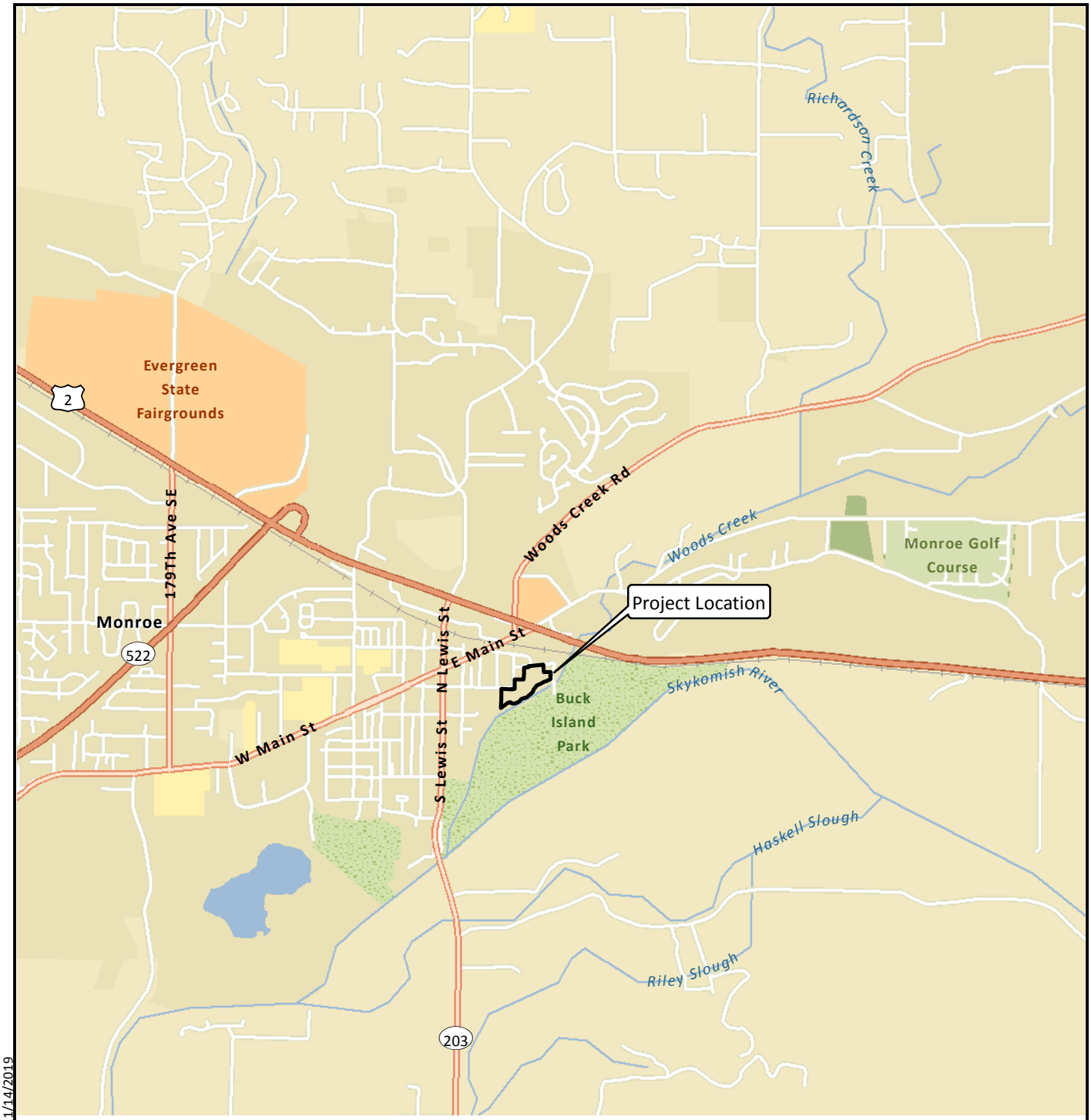
LAI. 2017b. Draft Phase II Environmental Site Assessment Monroe-Woods Creek Site D Ring Bus, Monroe, Washington. Landau Associates, Inc. July 31.

LAI. 2018a. Excavated Materials Management Plan, Former Monroe Auto Wrecking/River's Edge Site, Monroe, Washington. Landau Associates, Inc. December 18.

LAI. 2018b. Supplemental Phase II Environmental Site Assessment, Former Monroe Auto Wrecking Site, Monroe, Washington. Landau Associates, Inc. November 12.

LAI. 2019a. Technical Memorandum: Supplemental Soil Sampling Results, Former Monroe Auto Wrecking Site/River's Edge Site, Monroe, Washington. Landau Associates, Inc. November 14.

LAI. 2019b. Underground Storage Tank Decommissioning and Site Assessment Report, River's Edge Property, Monroe, Washington. Landau Associates, Inc. October 15.



N

0 0.5 1

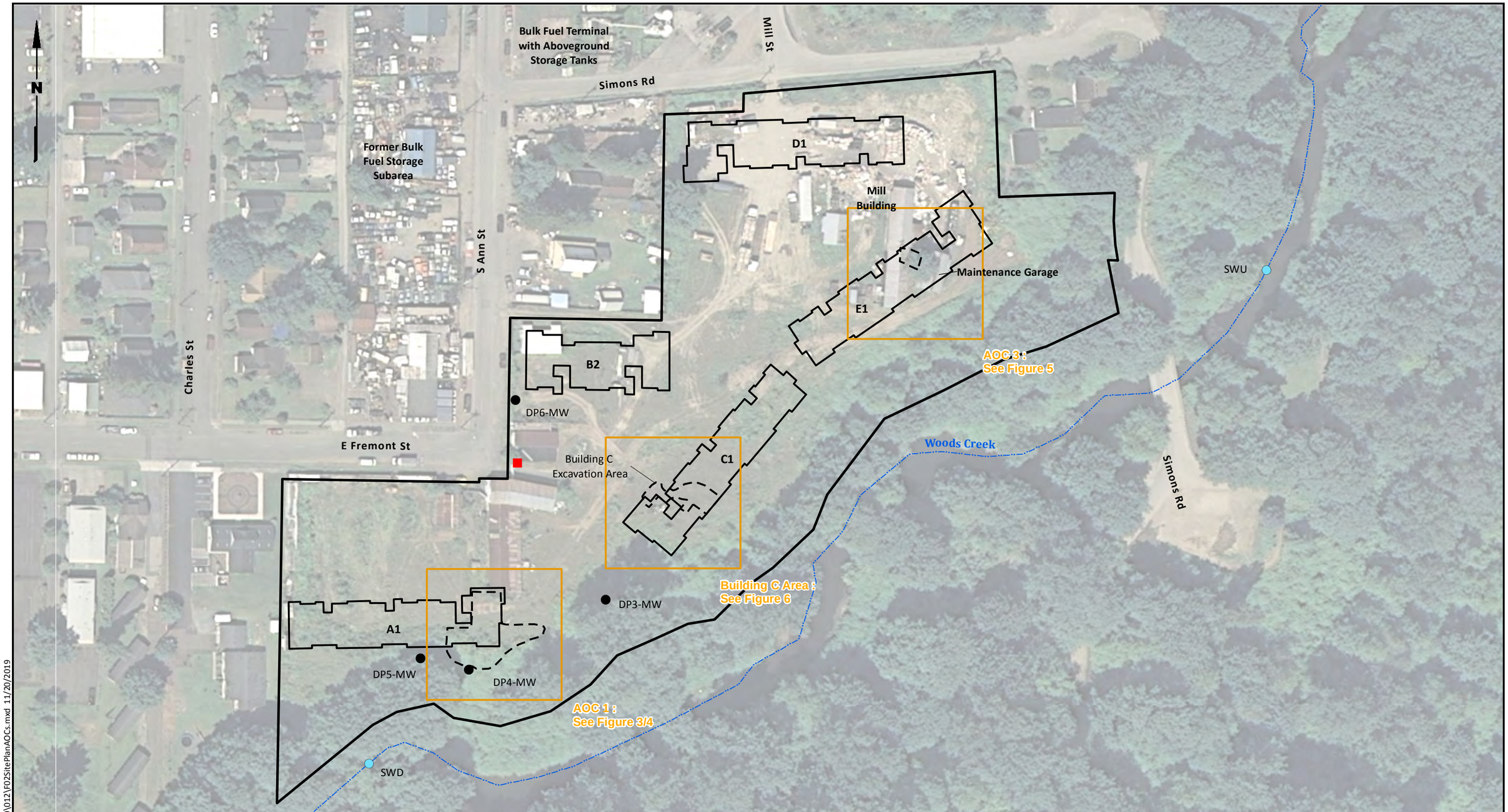
Miles

Data Source: Esri 2012

G:\Projects\1759\001\030\012\F01VicMap.mxd 11/14/2019

LANDAU ASSOCIATES

Former Monroe Auto Wrecking/ River's Edge Site Soil Cleanup Summary Monroe, Washington	**Vicinity Map**	Figure 1



G:\Projects\1759\001\030\012\F02SitePlanAOCs.mxd 11/20/2019

Legend

- Monitoring Well Location
- Surface Water Sampling Location
- Discovered Underground Storage Tank Location
- Site Boundary
- Building
- Excavation Areas

0 100 200

Scale in Feet

Data Source: Snohomish County GIS; Esri Imagery Service.

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

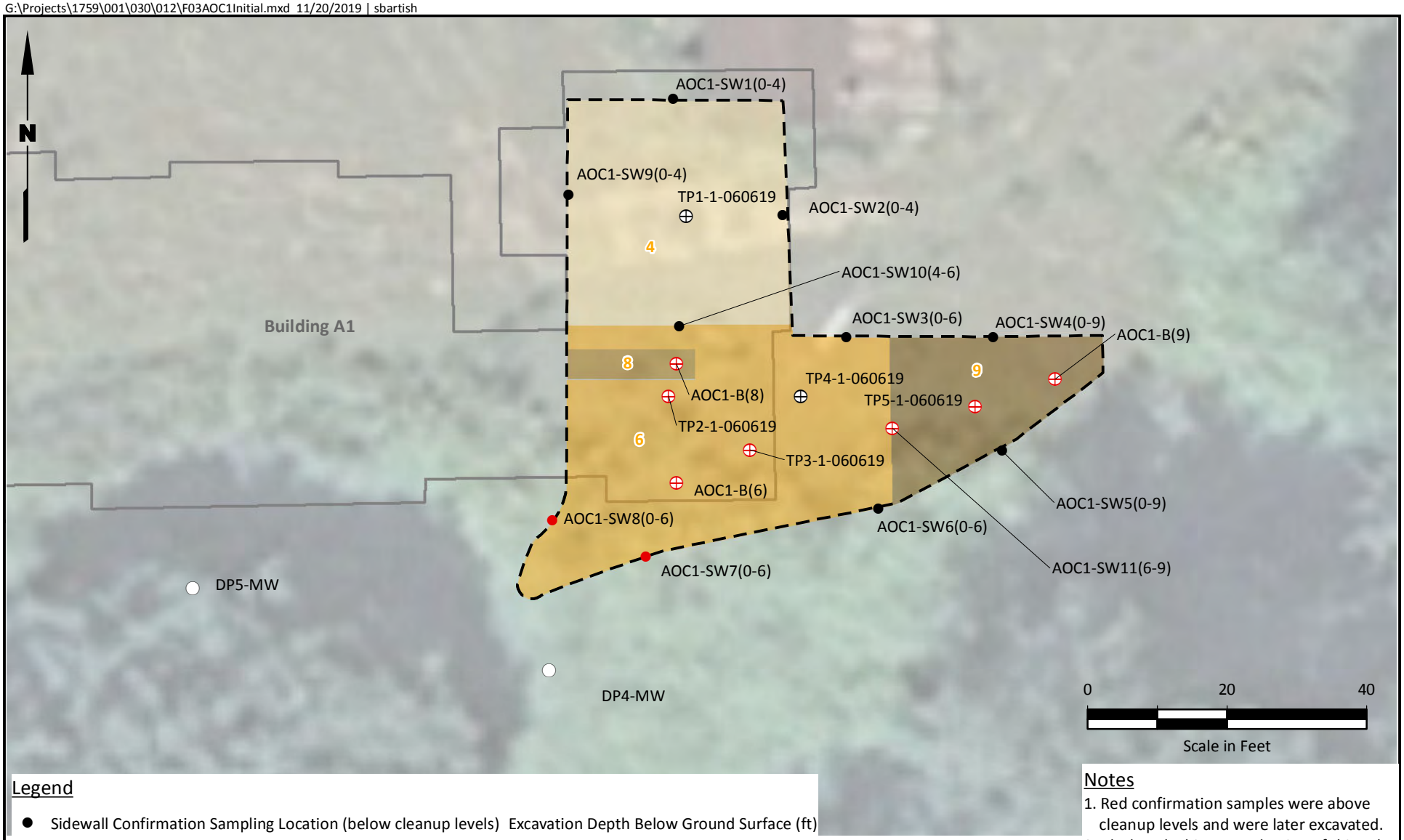
LANDAU ASSOCIATES

Former Monroe Auto Wrecking/ River's Edge Site
Soil Cleanup Summary
Monroe, Washington

Site Plan with Areas of Concern

Figure 2

G:\Projects\1759\001\030\012\F03AOC1Initial.mxd 11/20/2019 | sbartish



Legend

- Sidewall Confirmation Sampling Location (below cleanup levels)
- Bottom Confirmation Sampling Location (below cleanup levels)
- Monitoring Well Location
- Building
- Excavations

Excavation Depth Below Ground Surface (ft)

- 4
- 6
- 8
- 9

Notes

1. Red confirmation samples were above cleanup levels and were later excavated.
2. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Data Source: Snohomish County GIS; Esri Imagery Service; Core Design

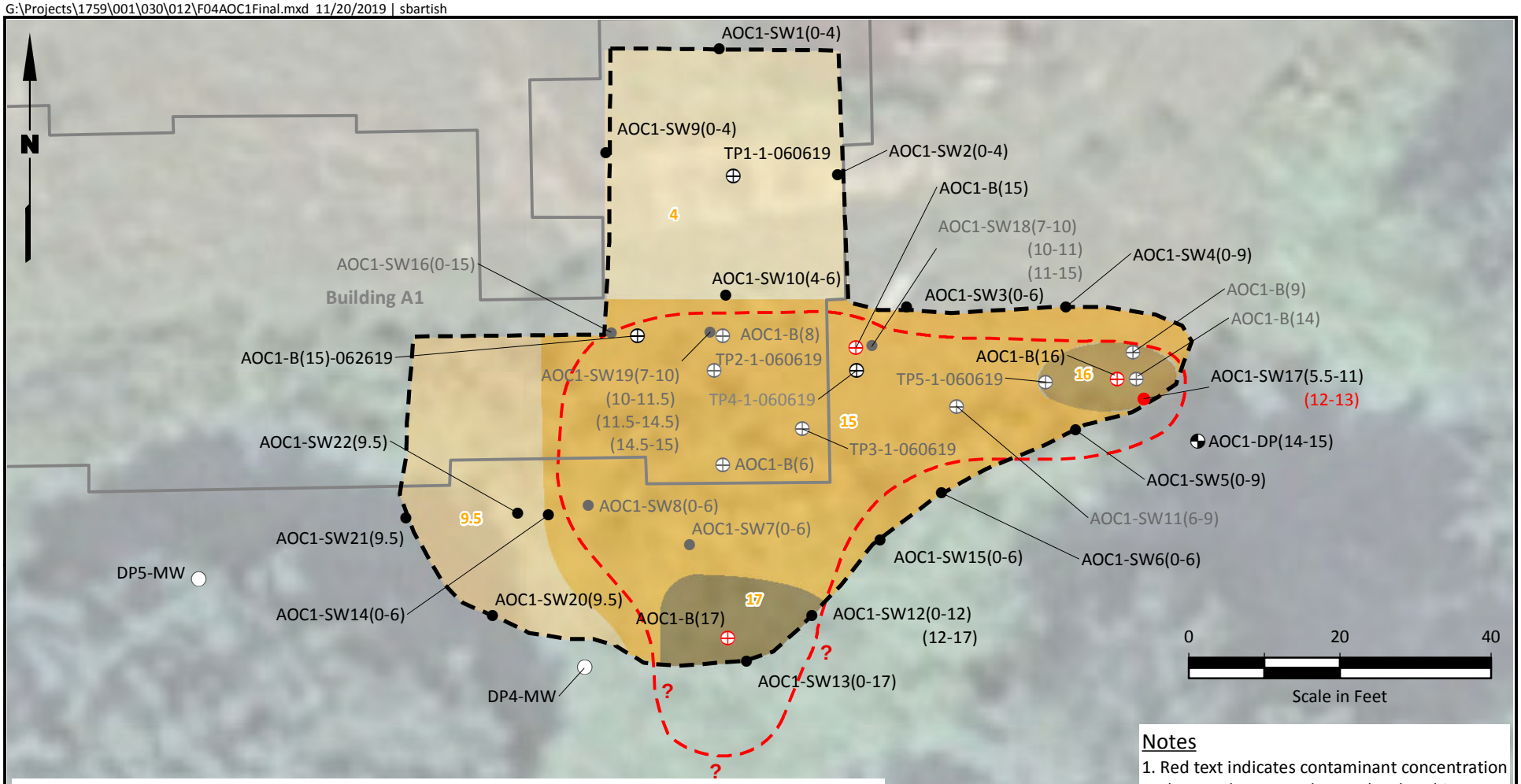
LANDAU ASSOCIATES

Former Monroe Auto Wrecking/
River's Edge Site
Soil Cleanup Summary
Monroe, Washington

AOC1 Initial Excavation

Figure
3

G:\Projects\1759\001\030\012\F04AOC1Final.mxd 11/20/2019 | sbartish



Legend

- Sidewall Confirmation Sampling Location (below cleanup levels)
- Bottom Confirmation Sampling Location (below cleanup levels)
- Monitoring Well Location
- Soil Boring Location
- Building
- Excavations
- Approximate Extent of Observed Black Layer

Excavation Depth Below Ground Surface (ft)

- 4
- 9.5
- 15
- 16
- 17

Notes

1. Red text indicates contaminant concentration above at least one cleanup level at this location.
2. Gray text indicates soil represented by this sample was excavated during the cleanup.
3. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Data Source: Snohomish County GIS; Esri Imagery Service; Core Design

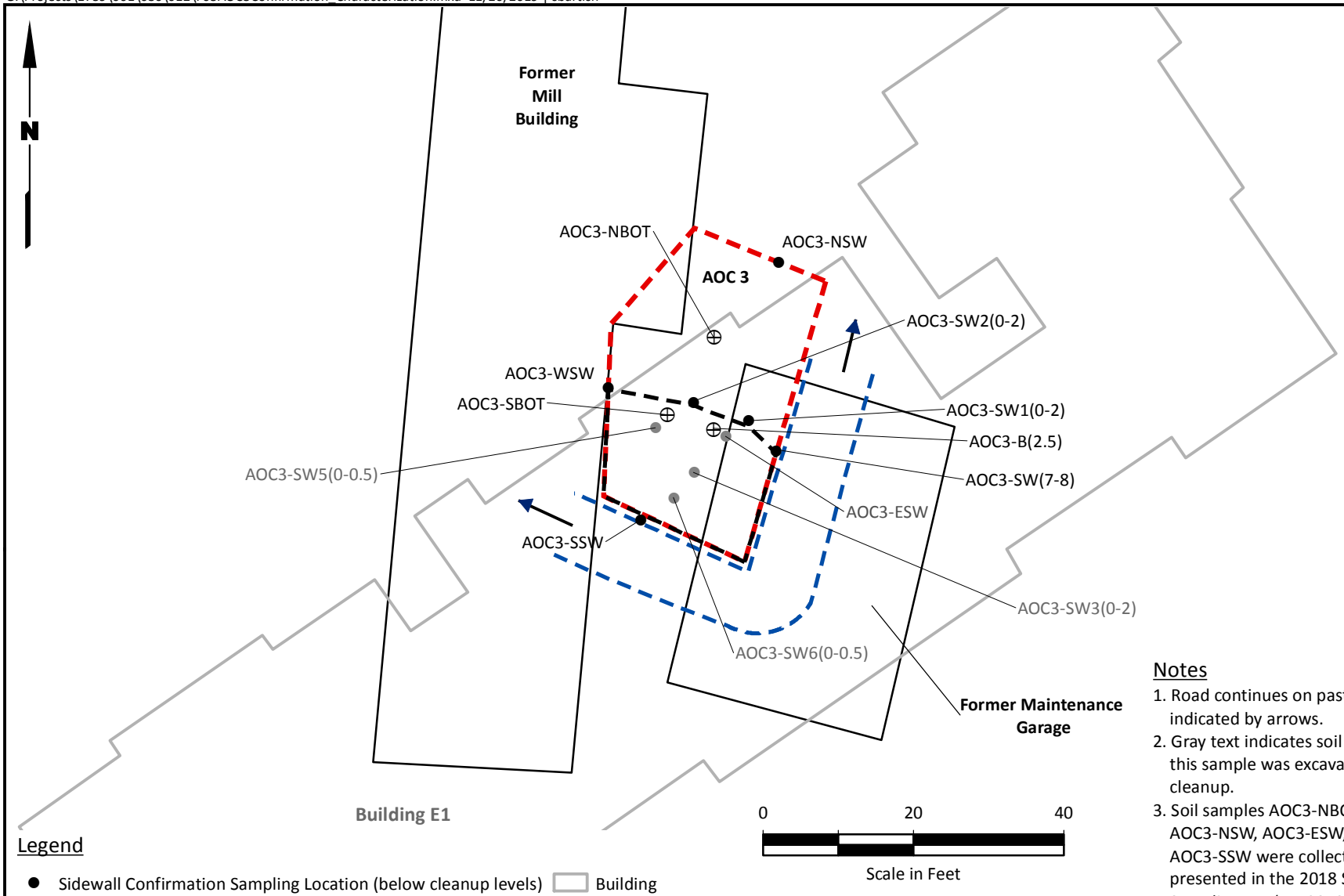
LANDAU ASSOCIATES

Former Monroe Auto Wrecking/
River's Edge Site
Soil Cleanup Summary
Monroe, Washington

AOC1 Final Excavation

Figure
4

G:\Projects\1759\001\030\012\F05AOC3Confirmation_Characterization.mxd 11/20/2019 | sbartish



Legend

- Sidewall Confirmation Sampling Location (below cleanup levels)
- Bottom Confirmation Sampling Location (below cleanup levels)
- Temporary Construction Road (excavated to 7 feet below ground surface)
- Areas of Concern (AOC)
- Building
- Excavations

Notes

1. Road continues on past extent shown as indicated by arrows.
2. Gray text indicates soil represented by this sample was excavated during the cleanup.
3. Soil samples AOC3-NBOT, AOC3-SBOT, AOC3-NSW, AOC3-ESW, AOC3-WSW, and AOC3-SSW were collected and results are presented in the 2018 Supplemental Soil Sampling TM (LAI 2019).
4. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Data Source: Snohomish County GIS; Esri Imagery Service; Core Design

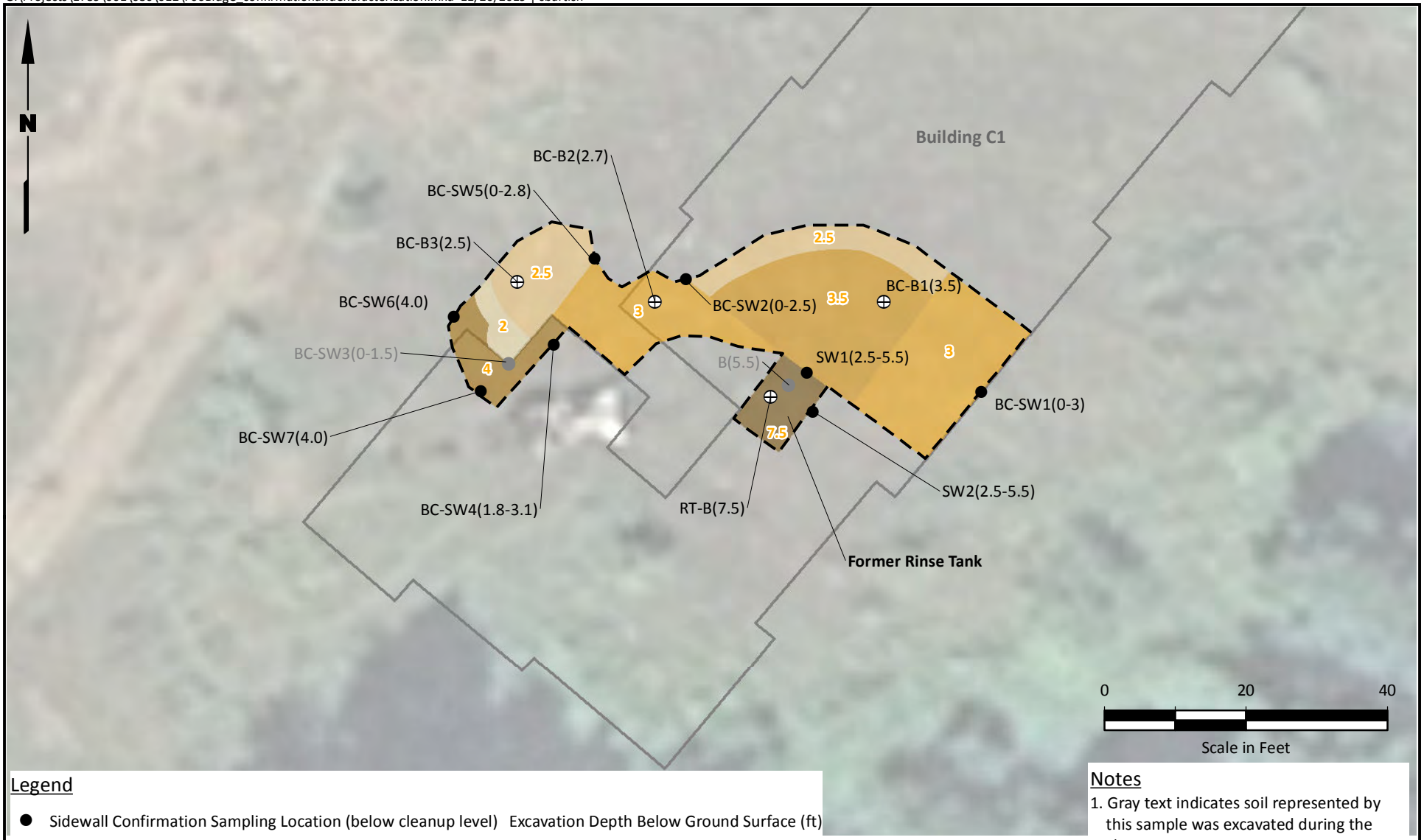
LANDAU ASSOCIATES

Former Monroe Auto Wrecking/
River's Edge Site
Soil Cleanup Summary
Monroe, Washington

AOC3 Confirmation and Characterization Soil Sample Locations

Figure 5

G:\Projects\1759\001\030\012\F06BldgC_confirmationandCharacterization.mxd 11/20/2019 | sbartish



Legend

- Sidewall Confirmation Sampling Location (below cleanup level)
- Bottom Confirmation Sampling Location (below cleanup levels)
- Building
- Excavations

Excavation Depth Below Ground Surface (ft)

- 2
- 2.5
- 3
- 3.5
- 4
- 7.5

Notes

1. Gray text indicates soil represented by this sample was excavated during the cleanup.
2. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Data Source: Snohomish County GIS; Esri Imagery Service; Core Design

LANDAU ASSOCIATES

Former Monroe Auto Wrecking/
River's Edge Site
Soil Cleanup Summary
Monroe, Washington

Building C Confirmation and Characterization Soil Sample Locations

Figure 6

Table 1
AOC1 Soil Analytical Results
Former Monroe Auto Wrecking/River's Edge Site
Monroe, Washington

Analyte	MTCA Method A Unrestricted Uses	TP1-1 TP1-1-060619 EV19060038 6/6/2019	TP1-2 TP1-2-060619 EV19060038 6/6/2019	TP2-1 TP2-1-060619 EV19060038 6/6/2019	TP2-2 TP2-2-060619 EV19060038 6/6/2019	TP3-1 TP3-1-060619 EV19060038 6/6/2019	TP3-2 TP3-2-060619 EV19060038 6/6/2019	TP4-1 TP4-1-060619 EV19060038 6/6/2019	TP4-2 TP4-2-060619 EV19060038 6/6/2019	TP5-1 TP5-1-060619 EV19060038 6/6/2019	TP5-2 TP5-2-060619 EV19060038 6/6/2019
Total Petroleum Hydrocarbons (mg/kg)											
NWTPH-Dx											
Diesel-range Organics	2,000	25 U	25 U	50 U	**67**	**690**	25 U	25 U	25 U	25 U	25 U
Oil-range Organics	2,000	50 U	50 U	**500**	**140**	**2,300**	50 U	50 U	50 U	**430**	50 U
Total Metals (mg/kg; SW-846 6020/7471B)											
Arsenic	20	**5.1**	**4.2**	**6.1**	**5.8**	**13**	**2.5**	**1.8**	**1.9**	**6.5**	**2.0**
Cadmium	2	**0.21**	0.10 U	**2.4**	**0.96**	**9.0**	0.10 U	**0.10**	**0.15**	**3.2**	**0.18**
Chromium, Total	2,000 (a)	--	**33**	--	**35**	--	**29**	--	**24**	--	**25**
Lead	250	**8.7**	**30**	**290**	**120**	**1,100**	**4.2**	**2.7**	**7.3**	**420**	**16**
Mercury	2	--	**0.22**	--	**0.12**	--	**0.026**	--	0.020 U	--	**0.20**
TCLP Metals (mg/L; SW-846 6020A)											
Lead	N/A	--	--	**0.23**	--	**0.66**	--	--	--	**0.67**	--

Table 1
AOC1 Soil Analytical Results
Former Monroe Auto Wrecking/River's Edge Site
Monroe, Washington

Analyte	MTCA Method A Unrestricted Uses	AOC 1 Initial Excavation Confirmation Samples (6/6/19 and 6/24/19)														
		Sample Location, Field Sample ID, Laboratory SDG, Sample Date														
		AOC1-B AOC1-B(6) EV19060172 6/24/2019	AOC1-B AOC1-B(8) EV19060172 6/24/2019	AOC1-B AOC1-B(9) EV19060172 6/24/2019	AOC1-B AOC1-B(14) EV19060192 6/26/2019	AOC1-SW1 AOC1-SW1(0-4) EV19060172 6/24/2019	AOC1-SW2 AOC1-SW2(0-4) EV19060172 6/24/2019	AOC1-SW3 AOC1-SW3(0-6) EV19060172 6/24/2019	AOC1-SW4 AOC1-SW4(0-9) EV19060172 6/24/2019	AOC1-SW5 AOC1-SW5(0-9) EV19060172 6/24/2019	AOC1-SW6 AOC1-SW6(0-6) EV19060172 6/24/2019	AOC1-SW7 AOC1-SW7(0-6) EV19060172 6/24/2019	AOC1-SW8 AOC1-SW8(0-6) EV19060172 6/24/2019	AOC1-SW9 AOC1-SW9(0-4) EV19060172 6/24/2019	AOC1-SW10 AOC1-SW10(4-6) EV19060172 6/24/2019	AOC1-SW11 AOC1-SW11(6-9) EV19060172 6/24/2019
Total Petroleum Hydrocarbons (mg/kg)																
NWTPH-Dx																
Diesel-range Organics	2,000	25 U	25 U	25 U	25 U	25 U	**79**	**71**	50 U	25 U	25 U	50 U	**130**	25 U	25 U	25 U
Oil-range Organics	2,000	**210**	**190**	**220**	**280**	**180**	**220**	**270**	**600**	50 U	50 U	**620**	**600**	50 U	50 U	**400**
Total Metals (mg/kg; SW-846 6020/7471B)																
Arsenic	20	**5.5**	**10**	**5.1**	**11**	**5.4**	**5.3**	**4.0**	**3.5**	**2.4**	**4.0**	**9.8**	**9.4**	**3.7**	**3.7**	**10**
Cadmium	2	**1.8**	**0.94**	**1.0**	**3.9**	**0.59**	**1.0**	**0.87**	**0.58**	**0.14**	**0.11**	**2.7**	**3.6**	**1.4**	0.10 U	**3.8**
Chromium, Total	2,000 (a)	**39**	**33**	**38**	**47**	**29**	**33**	**36**	**34**	**35**	**34**	**46**	**53**	**40**	**29**	**42**
Lead	250	**160**	**470**	**280**	**450**	**65**	**98**	**140**	**79**	**10**	**6.4**	**370**	**330**	**3.7**	**3.4**	**1,400**
Mercury	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TCLP Metals (mg/L; SW-846 6020A)																
Lead	N/A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 1
AOC1 Soil Analytical Results
Former Monroe Auto Wrecking/River's Edge Site
Monroe, Washington

Analyte	MTCA Method A Unrestricted Uses	AOC1 Additional Excavation Characterization/Confirmation Samples												
		Sample Location, Field Sample ID, Laboratory SDG, Sample Date												
		AOC1-B AOC1-B(15) EV19060192 6/26/2019	AOC1-B AOC1-B(17) EV19060192 6/26/2019	AOC1-SW12 AOC1-SW12(0-12) EV19060192 6/26/2019	AOC1-SW12 AOC1-SW12(12-17) EV19060192 6/26/2019	AOC1-SW13 AOC1-SW13(0-17) EV19060192 6/26/2019	AOC1-SW14 AOC1-SW14(0-6) EV19060192 6/26/2019	AOC1-SW15 AOC1-SW15(0-6) EV19060192 6/26/2019	AOC1-SW16 AOC1-SW16(0-15) EV19060192 6/26/2019	AOC1-B AOC1-B(16) EV19060217 6/28/2019	AOC1-SW17 AOC1-SW17(5.5-11) EV19060217 6/28/2019	AOC1-SW17 AOC1-SW17(12-13) EV19060217 6/28/2019	AOC1-SW18 AOC1-SW18(7-10) EV19060217 6/28/2019	AOC1-SW18 AOC1-SW18(10-11) EV19060217 6/28/2019
Total Petroleum Hydrocarbons (mg/kg)														
NWTPH-Dx														
Diesel-range Organics	2,000	25 U	25 U	120 U	25 U	25 U	**95**	25 U	**71**	25 U	25 U	50 U	25 U	50 U
Oil-range Organics	2,000	**84**	**320**	**1,200 J**	**290**	**410**	**420**	**310**	**390**	**140**	50 U	**660**	25 U	**470**
Total Metals (mg/kg; SW-846 6020/7471B)													25 U	
Arsenic	20	**5.0**	**9.4**	**6.9**	**8.3**	**6.5**	**8.3**	**5.6**	**6.7**	**5.6**	**1.9**	**17**	25 U	**11**
Cadmium	2	**0.37**	**0.73**	**1.1**	**0.65**	**0.16**	**1.2**	**2.0**	**0.96**	**0.55**	**0.14**	**4.0**	25 U	**6.2**
Chromium, Total	2,000 (a)	**32**	**39**	**36**	**32**	**35**	**35**	**32**	**31**	**41**	**28**	**43**	25 U	**50**
Lead	250	**40**	**500**	**150**	**110**	**40**	**210**	**70**	**280**	**67**	**5.2**	**720**	25 U	**2200**
Mercury	2	--	--	--	--	--	--	--	--	--	--	--	--	--
TCLP Metals (mg/L; SW-846 6020A)														
Lead	N/A	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 1
AOC1 Soil Analytical Results
Former Monroe Auto Wrecking/River's Edge Site
Monroe, Washington

Analyte	MTCA Method A Unrestricted Uses	AOC1 Additional Excavation Characterization/Confirmation Samples Sample Location, Field Sample ID, Laboratory SDG, Sample Date									
		AOC1-SW18 AOC1-SW18(11-15) EV19060217 6/28/2019	AOC1-SW19 AOC1-SW19(7-10) EV19060217 6/28/2019	AOC1-SW19 AOC1-SW19(10-11.5) EV19060217 6/28/2019	AOC1-SW19 AOC1-SW19(11.5-14.5) EV19060217 6/28/2019	AOC1-SW19 AOC1-SW19(14.5-15) EV19060217 6/28/2019	AOC1-B AOC1-B(15) EV19070037 7/3/2019	AOC1-SW20 AOC1-SW20(9.5) EV19070080 7/11/2019	AOC1-SW21 AOC1-SW21(9.5) EV19070080 7/11/2019	AOC1-SW22 AOC1-SW22(9.5) EV19070080 7/11/2019	AOC1-DP AOC1-DP(14-15) EV19070205 7/29/2019
Total Petroleum Hydrocarbons (mg/kg)											
NWTPH-Dx											
Diesel-range Organics	2,000	25 U	25 U	**250**	**64**	**100**	25 U	**63**	**55**	25 U	25 U
Oil-range Organics	2,000	**75**	**140**	**1,000**	**92**	**270**	**99**	**330**	**440**	**140**	**68**
Total Metals (mg/kg; SW-846 6020/7471B)											
Arsenic	20	**9.7**	**5.6**	**9.6**	**8.1**	**7.4**	**5.4**	**6.7**	**5.2**	**5.5**	**11**
Cadmium	2	**0.89**	**0.62**	**1.5**	**0.50**	**1.9**	**0.24**	**1.8**	**0.25**	**0.63**	**1.3**
Chromium, Total	2,000 (a)	**32**	**39**	**48**	**34**	**35**	**35**	**35**	**32**	**37**	**38**
Lead	250	**260**	**110**	**140**	**74**	**140**	**280**	**110**	**52**	**57**	**180**
Mercury	2	--	--	--	--	--	--	--	--	--	--
TCLP Metals (mg/L; SW-846 6020A)											
Lead	N/A	--	--	--	--	--	--	--	--	--	--

Notes:

(a) MTCA Method A cleanup level for Chromium III.

U = The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

Bold indicates a detected compound

Green Box = reported concentration is greater than the MTCA Method A cleanup level.

Gray text indicates characterization sample data; soil represented by this sample was excavated during the cleanup.

Abbreviations/Acronyms:

AOC = area of concern

ID = identification

mg/kg = milligrams per kilogram

mg/L = milligrams per liter

MTCA = Model Toxics Control Act

N/A = not applicable

-- = not analyzed

SDG = sample delivery group

TP = test pit

TCLP = toxicity characteristic leaching procedure

Table 2
AOC3 Soil Analytical Results
Former Monroe Auto Wrecking/River's Edge Site
Monroe, Washington

Analyte	MTCA Method A Unrestricted Uses	AOC3						
		Sample Location, Field Sample ID, Laboratory SDG, Sample Date						
		AOC3-B AOC3-B(2.5) EV19060217 6/28/2019	AOC3-SW AOC3-SW(7-8) EV19060172 6/24/2019	AOC3-SW1 AOC3-SW1(0-2) EV19060217 6/28/2019	AOC3-SW2 AOC3-SW2(0-2) EV19060217 6/28/2019	AOC3-SW3 AOC3-SW3(0-2) EV19060217 6/28/2019	AOC3-SW5 AOC3-SW5(0-0.5) EV19060217 6/28/2019	AOC3-SW6 AOC3-SW6(0-0.5) EV19060217 6/28/2019
Polycyclic Aromatic Hydrocarbons (µg/kg; SW-846 8270D-SIM)								
1-Methylnaphthalene	5,000 (a)	20 U	20 U	20 U	20 U	20 U	20 U	20 U
2-Methylnaphthalene	5,000 (a)	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Acenaphthene	N/A	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Acenaphthylene	N/A	20 U	20 U	20 U	20 U	**33**	20 U	**29**
Anthracene	N/A	20 U	20 U	20 U	20 U	**96**	20 U	**64**
Benzo(a)anthracene	N/A	20 U	20 U	20 U	20 U	**340**	**74**	**220**
Benzo(a)pyrene	100	20 U	20 U	20 U	20 U	**360**	**81**	**290**
Benzo(b)fluoranthene	N/A	20 U	20 U	**21**	20 U	**400**	**120**	**330**
Benzo(g,h,i)perylene	N/A	20 U	20 U	**21**	20 U	**320**	**110**	**240**
Benzo(k)fluoranthene	N/A	20 U	20 U	20 U	20 U	**150**	**40**	**110**
Chrysene	N/A	20 U	20 U	20 U	20 U	**360**	**86**	**280**
Dibenzo(a,h)anthracene	N/A	20 U	20 U	20 U	20 U	**62**	20 U	**47**
Fluoranthene	N/A	20 U	20 U	20 U	20 U	**700**	**170**	**450**
Fluorene	N/A	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Indeno(1,2,3-cd)pyrene	N/A	20 U	20 U	20 U	20 U	**240**	**59**	**170**
Naphthalene	5,000 (a)	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Phenanthrene	N/A	20 U	20 U	20 U	20 U	**360**	**87**	**280**
Pyrene	N/A	20 U	20 U	20 U	20 U	**700**	**200**	**490**
cPAH TEQ	100	20 U	20 U	**2**	20 U	**483**	**111**	**381**

Notes:

(a) MTCA Method A cleanup level for total naphthalenes.

U = The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

Bold indicates a detected compound.

Green Box = reported concentration is greater than the MTCA Method A cleanup level.

Gray text indicates characterization sample data; soil represented by this sample was excavated during the cleanup

Abbreviations/Acronyms:

AOC = area of concern
cPAH = carcinogenic polycyclic aromatic hydrocarbon
ID = identification
µg/kg = micrograms per kilogram
MTCA = Model Toxics Control Act
N/A = not applicable
SDG = sample delivery group
SIM = selected ion monitoring
TEE = terrestrial ecological evaluation
TEQ = toxicity equivalent

Table 3
Rinse Tank Area Soil Analytical Results
Former Monroe Auto Wrecking/River's Edge Site
Monroe, Washington

Analyte	MTCA Method A Unrestricted Uses	Rinse Tank			
		Sample Location, Field Sample ID, Lab SDG, Sample Date			
		B B(5.5) EV19070012 7/2/2019	SW1 SW1(2.5-5.5) EV19070012 7/2/2019	SW2 SW2(2.5-5.5) EV19070012 7/2/2019	RT-B RT-B(7.5) EV19070072 7/11/2019
Total Petroleum Hydrocarbons (mg/kg)					
NWTPH-HCID					
Gasoline-range Organics	30/100 (a)	40 U	20 U	20 U	--
Diesel-range Organics	2,000	100 U	50 U	50 U	--
Oil-range Organics	2,000	**>200**	**>100**	100 U	--
NWTPH-Dx					
Diesel-range Organics	2,000	--	--	--	25 U
Oil-range Organics	2,000	--	--	--	50 U
Total Metals (mg/kg; SW-846 6020/7471B)					
Arsenic	20	**5.4**	**5.5**	**4.8**	**3.5**
Cadmium	2	**0.73**	**0.19**	**0.12**	0.10 U
Chromium, Total	2,000 (b)	**37**	**37**	**33**	**44**
Lead	250	**53**	**18**	**11**	**3.5**
Mercury	2	**0.12**	**0.079**	**0.046**	**0.062**
Polychlorinated Biphenyls (mg/kg; SW-846 8082A)					
Aroclor 1016	N/A	0.10 U	0.10 U	0.10 U	0.10 U
Aroclor 1221	N/A	0.10 U	0.10 U	0.10 U	0.10 U
Aroclor 1232	N/A	0.10 U	0.10 U	0.10 U	0.10 U
Aroclor 1242	N/A	0.10 U	0.10 U	0.10 U	0.10 U
Aroclor 1248	N/A	0.10 U	0.10 U	0.10 U	0.10 U
Aroclor 1254	N/A	0.10 U	0.10 U	0.10 U	0.10 U
Aroclor 1260	N/A	0.10 U	0.10 U	0.10 U	0.10 U
Aroclor 1268	N/A	0.10 U	0.10 U	0.10 U	0.10 U
Total PCBs	1	0.10 U	0.10 U	0.10 U	0.10 U
Polycyclic Aromatic Hydrocarbons (µg/kg; SW-846 8270D-SIM)					
1-Methylnaphthalene	5,000 (c)	20 U	20 U	20 U	20 U
2-Methylnaphthalene	5,000 (c)	20 U	20 U	20 U	20 U
Acenaphthene	N/A	--	--	--	--
Acenaphthylene	N/A	--	--	--	--
Anthracene	N/A	--	--	--	--
Benzo(a)anthracene	N/A	**50**	**36**	20 U	20 U
Benzo(a)pyrene	100	**89**	**52**	**23**	20 U
Benzo(b)fluoranthene	N/A	**190**	**62**	**34**	20 U
Benzo(g,h,i)perylene	N/A	--	--	--	--

Table 3
Rinse Tank Area Soil Analytical Results
Former Monroe Auto Wrecking/River's Edge Site
Monroe, Washington

Analyte	MTCA Method A Unrestricted Uses	Rinse Tank			
		Sample Location, Field Sample ID, Lab SDG, Sample Date			
		B B(5.5) EV19070012 7/2/2019	SW1 SW1(2.5-5.5) EV19070012 7/2/2019	SW2 SW2(2.5-5.5) EV19070012 7/2/2019	RT-B RT-B(7.5) EV19070072 7/11/2019
Benzo(k)fluoranthene	N/A	**37**	**23**	20 U	20 U
Chrysene	N/A	**72**	**44**	**24**	20 U
Dibenzo(a,h)anthracene	N/A	**51**	20 U	20 U	20 U
Fluoranthene	N/A	--	--	--	--
Fluorene	N/A	--	--	--	--
Indeno(1,2,3-cd)pyrene	N/A	**64**	**36**	20 U	20 U
Naphthalene	5,000 (c)	20 U	20 U	20 U	20 U
Phenanthrene	N/A	--	--	--	--
Pyrene	N/A	--	--	--	--
cPAH TEQ	100	**129**	**68**	**27**	20 U

Abbreviations/Acronyms:

cPAH = carcinogenic polycyclic aromatic hydrocarbon
ID = identification
µg/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
MTCA = Model Toxics Control Act
-- = not analyzed
N/A = not applicable
PCB = polychlorinated biphenyl
SDG = sample delivery group
SIM = selected ion monitoring
TEE = terrestrial ecological evaluation
TEQ = toxicity equivalent

Notes:

(a) MTCA Method A cleanup level is 100 mg/kg if benzene is not present and the total of ethylbenzene, toluene, and xylenes is less than 1% of the gasoline mixture; otherwise the cleanup level is 30 mg/kg.
(b) MTCA cleanup level for Chromium III.
(c) MTCA Method A cleanup level for total naphthalenes.

U = The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

Bold indicates a detected compound
Green Box = reported concentration is greater than the MTCA Method A cleanup level.
Gray text indicates characterization sample data; soil represented by this sample was excavated during the

Table 4
Building C Area Soil Analytical Results
Former Monroe Auto Wrecking/River's Edge Site
Monroe, Washington

Analyte	MTCA Method A Unrestricted Uses	Building C Area									
		Sample Location, Field Sample ID, Lab SDG, Sample Date									
		BC-B1 BC-B1 (3.5) EV19070037 7/3/2019	BC-B2 BC-B2 (2.7) EV19070037 7/3/2019	BC-B3 BC-B3 (2.5) EV19070037 7/3/2019	BC-SW1 BC-SW1 (0-3) EV19070037 7/3/2019	BC-SW2 BC-SW2 (0-2.5) EV19070037 7/3/2019	BC-SW3 BC-SW3 (0-1.5) EV19070037 7/3/2019	BC-SW4 BC-SW4 (1.8-3.1) EV19070037 7/3/2019	BC-SW5 BC-SW5 (0-2.8) EV19070037 7/3/2019	BC-SW6 BC-SW6 (4.0) EV19070072 7/11/2019	BC-SW7 BC-SW7 (4.0) EV19070072 7/11/2019
Total Petroleum Hydrocarbons (mg/kg)											
NWTPH-Dx											
Diesel-range Organics	2,000	25 U	**94 J**	**37**	25 U	**75**	660	**38**	**240**	25 U	25 U
Oil-range Organics	2,000	50 U	**130 J**	**130**	**310**	**290**	2,200	**130**	**760**	50 U	50 U
Total Metals (mg/kg; SW-846 6020/7471B)											
Arsenic	20	**13**	**6.9**	**8.0**	**6.3**	**7.2**	5.7	**6.8**	**4.4**	**4.7**	**4.5**
Cadmium	2	**0.15**	**0.30**	**0.38**	**0.68**	**0.91**	0.48	**0.41**	**0.67**	0.10 U	0.10 U
Chromium, Total	2,000 (a)	**35**	**32**	**33**	**34**	**33**	34	**32**	**28**	**57**	**32**
Lead	250	**9.5**	**46**	**40**	**120**	**87**	39	**46**	**79**	**2.9**	**4.8**

Notes:

(a) MTCA cleanup level for Chromium III.

U = The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

Bold indicates a detected compound

Green Box = reported concentration is greater than the MTCA Method A cleanup level.

Gray text indicates characterization sample data; soil represented by this sample was excavated during the cleanup.

Abbreviations/Acronyms:

ID = identification

mg/kg = milligrams per kilogram

MTCA = Model Toxics Control Act

-- = not analyzed

SDG = sample delivery group

TEE = terrestrial ecological evaluation

Table 5
Stockpile Characterization Analytical Results
Former Monroe Auto Wrecking/River's Edge Site
Monroe, Washington

Analyte	MTCA Method A Unrestricted Uses	Stockpile Characterization															
		Sample Location, Field Sample ID, Lab SDG, Sample Date															
		SP1-1 SP1-1-060619 EV19060038 6/6/2019	SP1-2 SP1-2-060619 EV19060038 6/6/2019	SP1-3 SP1-3-060619 EV19060038 6/6/2019	SP1-4 SP1-4-060619 EV19060038 6/6/2019	SP1-5 SP1-5-060619 EV19060038 6/6/2019	AOC1-SP AOC1-SP EV19070080 7/11/2019	SP2 SP2-1 EV19070012 7/2/2019	SP2 SP2-2 EV19070012 7/2/2019	SP2 SP2-3 EV19070012 7/2/2019	SP3 SP3-1 EV19070107 7/16/2019	SP3 SP3-2 EV19070107 7/16/2019	SP3 SP3-3 EV19070107 7/16/2019	SP4 SP4-1 EV19070176 7/25/2019	SP4 SP4-2 EV19070176 7/25/2019	SP4 SP4-3 EV19070176 7/25/2019	STOCKPILE-1 STOCKPILE-1 EV19070072 7/11/2019
Total Petroleum Hydrocarbons (mg/kg)																	
NWTPH-HCID																	
Gasoline-range Organics	30/100 (a)	--	--	--	--	--	--	20 U	20 U	20 U	--	--	--	--	--	--	--
Diesel-range Organics	2,000	**200**	25 U	**100 J**	25 U	**58**	--	50 U	50 U	50 U	--	--	--	--	--	--	--
Oil-range Organics	2,000	**360**	**95**	**160**	**110**	**230**	--	**>100**	**>100**	**>100**	--	--	--	--	--	--	--
NWTPH-Dx																	
Diesel-range Organics	2,000	**7.1**	**3.9**	**3.7**	**4.3**	**5.1**	**420**	--	--	--	25 U	50 U	50 U	**70**	**76**	**56**	**280**
Oil-range Organics	2,000	**1.8**	**0.13**	**0.37**	**0.32**	**1.4**	**1,200**	--	--	--	**310**	**860**	**680**	**350**	**360**	**270**	**870**
Total Metals (mg/kg; SW-846 6020/7471B)		--	--	--	--	--											
Arsenic	20	**320**	**11**	**40**	**28**	**140**	**11**	--	--	--	**6.5**	**7.5**	**6.1**	**8.6**	**6.7**	**38**	--
Cadmium	2	--	--	--	--	--	**1.9**	--	--	--	**0.79**	**1.4**	**0.56**	**1.2**	**1.0**	**6.4**	--
Chromium, Total	2,000 (b)						**45**	--	--	--	**39**	**40**	**37**	**43**	**40**	**36**	--
Lead	250	**0.56**	--	--	--	**0.20**	**230**	--	--	--	**110**	**230**	**110**	**290**	**190**	**29,000**	--

Notes:

(a) MTCA Method A cleanup level is 100 mg/kg if benzene is not present and the total of ethylbenzene, toluene, and xylenes is less than 1% of the gasoline mixture; otherwise the cleanup level is 30 mg/kg.

(b) MTCA cleanup level for Chromium III.

U = The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

Bold indicates a detected compound.

Green Box = reported concentration is greater than the MTCA Method A cleanup level.

Abbreviations/Acronyms:

AOC = area of concern
ID = identification
mg/kg = milligrams per kilogram
MTCA = Model Toxics Control Act
-- = not analyzed
SDG = sample delivery group

APPENDIX A

2017-2019 Site Reports

Excavated Materials Management Plan

Excavated Materials Management Plan
Former Monroe Auto Wrecking/River's Edge Site
Monroe, Washington

December 18, 2018

Prepared for

Ms. Rebecca Ralston
On Behalf of River's Edge WA LLLP
River's Edge, Washington

LANDAU ASSOCIATES

130 2nd Avenue South
Edmonds, WA 98020
(425) 778-0907

Excavated Materials Management Plan
Former Monroe Auto Wrecking/River's Edge Site
Monroe, Washington

This document was prepared by, or under the direct supervision of, the technical professionals noted below.

Document prepared by: _____ Cody Johnson, PE
Senior Engineer

Document reviewed by: _____ Piper Roelen, PE
Principal

Date: December 18, 2018
Project No.: 1759001.020
File path: \\edmdata01\projects\1759\001\R\EMMP\EMMP 121818.docx
Project Coordinator: tam

LANDAU ASSOCIATES

This page intentionally left blank.

TABLE OF CONTENTS

FIGURES

APPENDIX

LIST OF ABBREVIATIONS AND ACRONYMS

AST	aboveground storage tank
bgs	below ground surface
BMPs	best management practices
CFR	Code of Federal Regulations
City	City of Monroe
CUL	cleanup level
Ecology	Washington State Department of Ecology
EMMP	Excavated Materials Management Plan
ESA	environmental site assessment
eV	electron Volt
ft	feet
LAI	Landau Associates, Inc.
mg/kg	milligrams per kilogram
mm	millimeter
NFA	No Further Action
OSHA	Occupational Safety and Health Administration
PAH	polycyclic aromatic hydrocarbons
PCB	polychlorinated biphenyl
PID	photoionization detector
ppm	parts per million
RI/FS	remedial investigation/feasibilitystudy
SAP	Sampling and Analysis Plan
Site	Former Monroe Auto Wrecking/River's Edge
SVOC	semi-volatile organic compound
SWPPP	stormwater pollution prevention plan
TEE	Terrestrial Ecological Evaluation
TPH	total petroleum hydrocarbon
TPH-D	TPH diesel range
TPH-O	TPH oil range
VCP	voluntary cleanup program
VOC	volatile organic compound
WISHA	Washington Industrial Safety and Health Act

1.0 INTRODUCTION

The purpose of this Excavated Materials Management Plan (EMMP) is to outline the approach and procedures for managing unanticipated contaminated soil and wood debris that will potentially be encountered during construction activities at the Former Monroe Auto Wrecking/River's Edge site (Site) located at 426 Fremont Street in Monroe, Washington (Figure 1). This EMMP was developed by Landau Associates, Inc. (LAI) for use by River's Edge WA LLLP (River's Edge, the Owner) and its contractors during construction activities. Areas of known soil contamination that exceed regulatory cleanup levels are expected to be removed in early 2019, prior to construction at the Site. This document addresses recognition of unanticipated contamination and characterization of contamination, as well as issues related to excavated materials and stormwater handling and disposal.

2.0 PREVIOUS ENVIRONMENTAL INVESTIGATIONS

A number of environmental investigations and remedial actions have been conducted to document soil and groundwater conditions at the Site and clean up discrete areas of Site contamination. This section presents a summary of the findings and results of the previous investigations and remedial actions. Previous explorations and remedial excavation areas are shown on Figure 2.

2.1 1990 Site Investigations

In 1990, Hart Crowser conducted two investigations on behalf of Glacier Park Company to evaluate whether historical practices associated with a former mill and auto salvage yard had resulted in contamination of the Site's soil and groundwater. The Hart Crowser investigations included the portion of the Site south of Fremont Street at Ann Street. The investigations also included an area west of the Site, and three additional areas to the north of the Site. Findings from these areas are not discussed in this EMMP.

Subsurface investigations at the southwest end of the Site detected total petroleum hydrocarbons (TPH), lead, and zinc at concentrations above Model Toxics Control Act (MTCA) soil cleanup levels (CULs). The contamination covered a surface area of approximately 4,200 square feet to depths of 1 to 2 feet (ft) below ground surface (bgs). Groundwater sampling and analysis conducted in this area of the Site found low levels of dissolved cadmium, chromium, and zinc. No TPH, volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides, or polychlorinated biphenyls (PCBs) were detected in the groundwater samples collected (Hart Crowser 1990).

2.2 1996 Site Investigation

Soil and groundwater sampling conducted at the Site by EMCON in 1996 (EMCON 1996a, b) for Ms. Reta Jensen, the owner of the Site at the time, found:

- PCBs in soil at concentrations exceeding the MTCA Method A CUL near a power pole, east of the mill building in the northeastern portion of the Site.
- Cadmium, chromium, and lead in soil samples at concentrations below MTCA Method C (cadmium and chromium) or MTCA Method A (lead) industrial CULs at various locations across the Site.
- Diesel- and oil-range TPH (TPH-D and TPH-O, respectively) in soil at concentrations exceeding the MTCA Method A CULs in several locations at the Site.
- TPH-D in groundwater at a concentration below the MTCA Method A CUL in one sample collected from a monitoring well at the southwest end of the Site.

2.3 1997 Independent Remedial Action

In April 1997, Glacier Environmental Services, Inc. (Glacier) reported the results of an independent remedial action at the Site involving the removal and disposal of approximately 18 tons of PCB-impacted soil from the area near a power pole, east of the mill building in the northeastern portion of

the Site (near Area of Concern 3 on Figure 3). Glacier concluded that the excavation had removed soil containing PCBs above the MTCA Method A CUL (Glacier 1997).

2.4 2000 Remedial investigation and Feasibility Study

In February 2000, Farallon conducted a remedial investigation and feasibility study (RI/FS) for the "East Subareas" (the Former Lumber Mill Subarea and Former Salvage Yard Subarea), which are located within the Site boundaries. Farallon excavated 22 test pits (to an average depth of 15 ft bgs), drilled 3 soil borings (greater than 15 ft bgs), and installed 2 additional groundwater monitoring wells (screened between 15 to 30 ft bgs and 15 to 25 ft bgs). Groundwater samples were also collected from existing monitoring wells installed during previous investigations (EMCON 1996a; Hart Crowser 1990)).

Based on the soil and groundwater sampling and analysis conducted for the RI/FS, Farallon identified TPH-D, TPH-O, lead, and PCBs in soil at concentrations above MTCA Method A CULs for unrestricted land uses in areas at the southwest and northeast ends of the Site. No analytes were identified above MTCA Method A CULs in groundwater (Farallon 2000). It should be noted that Farallon uses the term "TPH" in their reports to mean combined TPH-D and TPH-O, which will be referred to for the remainder of this EMMP as TPH-D/-O unless specified otherwise.

In July and August 2000, Farallon conducted remedial excavations at eight areas of the Site to remove shallow contaminated soil identified during the RI/FS (Ex1 through Ex7 and ExWH on Figure 2). Approximately 2,140 tons of soil was excavated and disposed of offsite. Analytical results of confirmation soil samples taken from the sidewalls and floor of the excavations indicated that contamination remained above the MTCA Method B CUL for TPH-D/-O (calculated for the Site using the Interim TPH Guidelines based on residential use), and above the MTCA Method A CUL for cadmium and lead in two areas in the southwestern portion of the Site (identified as Excavation Areas 1 and 2 [Ex1 and EX2 on Figure 2]). Further excavation was not conducted to avoid damage to an existing structure and nearby large trees and vegetation. Farallon requested a No Further Action (NFA) determination from the Washington State Department of Ecology (Ecology) based on the results of the cleanup (Farallon 2000).

In 2001, Ecology granted an NFA determination (Ecology 2001) for the Site; however, in 2008, Ecology re-evaluated the Site and determined that the remedial action was not sufficient to meet MTCA requirements. The previously issued NFA determination was rescinded due to the presence of TPH, cadmium, and lead left in place at concentrations exceeding CULs (Ecology 2008).

2.5 2017 Phase I and II Environmental Site Assessments

In 2017, LAI completed a Phase I environmental site assessment (ESA; LAI 2017a) for the Snohomish County Public Utility District. The Phase I ESA covered all six parcels that comprise the Site. The

Phase I ESA summarized conditions and identified the following recognized environmental conditions for which further evaluation was recommended:

- Subsurface contamination identified at the Site in previous reports as the result of historical Site uses (shingle mill, lumber mill, and automobile salvage yard).
- Cadmium, lead, and petroleum hydrocarbon contamination that exceeds MTCA Method A CULs in the southern portion of the Site that was left in place following remedial excavations.
- Conditions at the reported location of a 500-gallon aboveground storage tank (AST) formerly located at the north end of the Site, reportedly removed along with approximately 20 cubic yards of impacted soil from beneath the AST by the current Site owner (Mr. Lauren Wibbleman). Confirmation soil samples were not collected from the excavation to confirm that all impacted soil exceeding CULs was removed.
- PCB-impacted soil resulting from a release from a burned transformer in an area on the north end of the Site that was reportedly excavated and removed from the Site in 1997.

Additionally, a bulk fuel terminal with three ASTs located north of and upgradient of the Site with no known releases was identified as a potential environmental concern due to its proximity to the Site and upgradient location.

In June 2017, LAI conducted a Phase II ESA (LAI 2017b) for the eastern-most and largest parcel of the Site (Snohomish County tax parcel number 27070600300500) for the District. The purpose of the Phase II ESA was to screen for the presence of soil and groundwater contamination associated with the recognized environmental conditions identified in the Phase I ESA for the parcel in question. The focused Phase II ESA included both soil and groundwater samples for specific targeted analytes. Sampling locations were selected to confirm cleanup sample results reported for the locations of earlier cleanup activities on the parcel (Farallon 2000) and to evaluate potential groundwater contamination associated with the adjacent offsite petroleum storage facility operating hydraulically upgradient to the north of the Site. The area where contamination was left in place following Farallon's remedial excavations in the southwest portion of the Site was not evaluated during the Phase II ESA because it was outside the parcel that was the focus of the investigation.

The results of the Phase II ESA indicate that previous independent remedial excavations on tax parcel number 27070600300500 (Farallon 2000) appear to have successfully met MTCA Method A CULs for the contaminants of concern at the time of excavation.

TPH-D and TPH-O were detected above laboratory reporting limits in soil samples collected from the Site, but at concentrations that did not exceed the MTCA Method A CUL. Additionally, the results of the Phase II ESA identified the following:

- Polycyclic aromatic hydrocarbons (PAHs), which were not analyzed for during the previous investigations, were detected in one shallow (i.e. less than 2 ft bgs) soil sample at concentrations exceeding MTCA Methods A and B CULs.

- No PCBs were detected in the shallow composite soil sample from the area of the earlier PCB cleanup (EMCON 1996c). PAHs, which were not analyzed for during the previous investigations, were detected in the shallow soil below the PCB cleanup area and near previous remedial excavation area EX7 at concentrations exceeding MTCA Method A and B CULs.
- The groundwater sample from existing well MW-4 located near the north end of the Site showed no detections of hazardous substances above laboratory reporting limits. Based on earlier investigation results, well MW-4 is likely to be downgradient (in the direction of groundwater flow) from the existing operating ASTs north of Simons Road.
- A groundwater grab sample was collected from a geotechnical boring near the center of the parcel. Results from that sample showed that only low levels of metals (including an exceedance of the MTCA Method A CUL for total arsenic) and two SVOCs (bis[2-ethylhexyl]-phthalate and naphthalene (including an exceedance of the MTCA Method B CUL for bis[2-ethylhexyl]phthalate) were present in the sample. The detections of metals in the grab sample were attributed to high turbidity (suspended solids) in the sample, and the detection of bis[2-ethylhexyl]phthalate was attributed to new plastics in the temporary well casing or equipment used for groundwater sampling; therefore, these results may not be representative of groundwater.

In summary, PAHs were detected in shallow soil at the Site at concentrations that exceed MTCA Method A, and/or Method B (direct contact unrestricted use) CULs. The groundwater samples from the existing well MW-4 show no detections that exceed cleanup screening levels, and no indications of groundwater contamination from the offsite fuel operations. The groundwater grab sample contained arsenic and bis[2-ethylhexyl]phthalate at concentrations exceeding CULs, but these detections should be qualified based on the sampling methodology and are likely not representative of the Site groundwater conditions.

Based on discussions with the property owner, we understand that a small fuel release prompted limited and informal soil excavation and removal activities near a former fuel AST. These activities reportedly included excavation of approximately 18 cubic yards of soil that was disposed of at a solid waste landfill, but no confirmation soil samples were collected. A test pit was excavated and sampled in this area during the 2017 Phase II ESA and no petroleum hydrocarbons, PAHs, or PCBs were detected in the sample collected.

2.6 2018 Supplemental Phase II Environmental Site Assessment

In June through August 2018, LAI conducted a supplemental Phase II ESA (LAI 2018) for River's Edge that consisted of subsurface investigations and surface water sampling to evaluate potential soil and groundwater contamination that had not been addressed during the previous investigations, which could pose a significant risk to a prospective purchaser. This included investigation of the deep (15 ft bgs) TPH-D detection at the south end of the mill building identified in the Final Cleanup Action Summary report by Farallon (Farallon 2000); and potential TPH, metals, and PAHs contamination in

groundwater that could affect Woods Creek. Surface water samples were also collected from Woods Creek upstream and downstream of the Site as a further check on potential impacts to the creek.

The Phase II ESA testing results indicate that:

- The deep TPH-D detection was either anomalous or localized and did not warrant further evaluation.
- Groundwater at the south/southwest end of the Site in the vicinity of the L-shaped storage building is impacted by TPH-O, arsenic, and zinc at concentrations exceeding MTCA Method A or B CULs.
- Wood, metal, glass, and paint debris is present in the subsurface at the south end of the Site to depths of up to 35 ft bgs.

2.7 Data Gaps

In May 2018, prior to conducting the supplemental Phase II ESA investigations, LAI contacted Ms. Sonia Fernandez of Ecology's Voluntary Cleanup Program (VCP) to discuss rescission of the 2001 NFA. Ms. Fernandez indicated that, beyond the reasons for the rescission indicated in the letter (i.e. contaminated soil left in place in the southwestern portion of the Site following Farallon's remedial excavations), Ecology had concerns that the Site soil and groundwater had not been fully characterized and that debris in the slope leading down to Woods Creek associated with dumping during operation of the former auto wrecking yard could impact the creek. Based on our review of the previously prepared environmental reports and the opinion provided by Ecology, LAI identified the following data gaps requiring additional characterization to evaluate whether residual contamination is present that could affect future Site residents and/or Woods Creek:

1. TPH-D and TPH-O were detected in soil 15 ft bgs at concentrations of 420 milligrams per kilogram (mg/kg) and 2,050 mg/kg, respectively, in test pit FLM-TP8 to the south of the mill building. The individual detections were at or below the MTCA Method B CUL of 2,050 mg/kg calculated by Farallon, but insufficient data were collected to demonstrate that the detections represented two distinct products. Without such data, the analytical results must be summed together, the result of which would exceed the calculated MTCA Method B CUL.
2. The extent of the debris in the slope to Woods Creek has not been well characterized.
3. Potential impacts to groundwater and the surface water of Woods Creek have not been well characterized.
4. Confirmation samples collected from Farallon remedial excavations EX3, EX4, and EX6 were not analyzed for PCBs; however, PCBs were detected in soil samples collected from those areas prior to excavation at concentrations exceeding the MTCA Method A CUL.
5. PAHs were detected at concentrations above the MTCA Method A CUL in areas adjacent to the mill building during the LAI Phase II ESA, but the extent of contamination was not further evaluated.

6. Cadmium was detected at concentrations above the MTCA Method A CUL in the south and east sidewall samples collected from Farallon remedial excavation EX1 located at the south end of the Site, but the extent of contamination was not further evaluated.
7. Cadmium, lead, and TPH-D were detected at concentrations above their respective MTCA Method A CULs in the south sidewall and southeast excavation bottom samples collected from Farallon remedial excavation EX2 at the south end of the Site, but the extent of contamination was not further evaluated.

Data gaps 1 through 3 were evaluated as part of the 2018 Supplemental Phase II ESA. Data gap 4 was evaluated during supplemental soil sampling activities conducted in December 2018, which indicated that no additional remedial excavation was needed at EX3, EX4, and EX6 (LAI Pending). Remedial excavation planned for early 2019 is expected to remove the remaining contaminated soil at the Site exceeding cleanup levels (EX1, EX2, and the mill building), thereby eliminating data gaps 5 through 7.

3.0 CLEANUP LEVELS

Cleanup levels (CULs) need to be established for contaminants at the Site for comparison against confirmation sample results. Farallon developed CULs for the Site as part of their remedial action (Farallon 2000). Farallon used the MTCA Method A Residential Land-Use levels for cadmium and lead of 2 mg/kg and 250 mg/kg, respectively; Farallon derived a MTCA Method B CUL for TPH-D/-O of 2,050 mg/kg that assumed potential impacts to potable water and residential zoning. These CULs were accepted by Ecology, which issued an NFA for the Site based on cleanup to these levels. However, since completion of Farallon's remedial excavations, Ecology promulgated regulations requiring contaminated sites to be evaluated for potential impacts to ecological receptors. This process is call a Terrestrial Ecological Evaluation (TEE). Contaminated sites may qualify for an exclusion to the TEE requirements if the following conditions are satisfied:

- The depth of contamination is greater than 6 ft bgs.
- All contaminated soil at the site is covered with buildings, paved roads, pavement, or other physical barriers that would prevent plants or wildlife from being exposed.
- There is less than 1.5 acres of contiguous undeveloped land on the site, or within 500 ft of any area of the site affected by hazardous substances.
- Concentrations of hazardous substances in the soil are less than or equal to natural background concentrations.

Following removal of soil containing contaminants above MTCA Method A CULs at the northeast and south ends of the site (data gaps 5 through 7), there will be no known contaminated soil left onsite, so the site will qualify for an exclusion to the TEE. The CULS for the Site are, therefore, the MTCA Method A CULs for unrestricted land use:

- Cadmium: 2 mg/kg
- Lead: 250 mg/kg
- TPH-D/-O: 2,000 mg/kg
- PAHs: 0.1 mg/kg.

If previously-unidentified contamination is encountered during construction, it will be excavated to at least 6 ft bgs, otherwise there will be a requirement to conduct a TEE and re-evaluate CULs for the site.

4.0 PRESENCE/CLEANUP OF KNOWN CONTAMINATION

The numerous past environmental investigations have indicated that Site soil and groundwater is or was impacted with a variety of contaminants associated with historical Site usage including: metals, TPH-D, TPH-O, PCBs, and PAHs. The remedial excavations conducted by Farallon in 2000 were successful at removing some of the soil contamination exceeding CULs, and remedial excavations planned for early 2019 will remove the remaining soil known to be contaminated above the MTCA Method A CULs (data gaps 5 through 7). However, soil containing contaminants at concentrations below the MTCA Method A CULs will still be present at the Site. The following sections present a discussion of low-level Site-wide impacts and wood debris that must be considered during excavation at the Site.

4.1 Site-Wide Impacted Soil

The analytical results for samples collected from explorations at the Site indicate that soil containing TPH-D/-O contamination that does not exceed CULs is present throughout much of the Site. Figure 2 shows the locations of past explorations with detectable TPH-D/-O concentrations that are below CULs. This includes the Farallon remedial excavations (Ex1 through Ex7), which typically terminated when confirmation samples showed the soil concentrations were below CULs rather than detection levels. Unless sampled and shown to not contain contaminants, we recommend that all soil in the top 2 ft below the crushed rock/gravel layer covering much of the Site be assumed to contain petroleum hydrocarbons at concentrations below-MTCA Method A CULs.

The presence of soil containing contaminant concentrations below CULs is unlikely to affect Ecology decision making regarding Site status. However, this soil will not be accepted at some landfills. Soil generated by Site grading and excavations for utilities and foundations will need to be stockpiled and sampled for disposal characterization (per Section 8.3.4), so that an appropriate disposal facility can be identified.

4.2 Wood Debris

Buried wood debris has been observed to depths of up to 23 ft bgs at the southeast end of the Site in the vicinity of the old mill building. The approximate extent of the debris is shown on Figure 2. The wood debris is likely associated with the historic mill operations and is not known to be contaminated. However, many landfills will not accept degradable organics such as wood waste, so it will likely require disposal or composting at a special facility permitted to accept it.

5.0 RECOGNIZING CONTAMINATION

While areas of known soil contamination will be addressed prior to construction, construction activities at the Site could result in discovery of previously unknown/undiscovered contamination associated with historical Site usage. Soil at the Site has been found to be contaminated with petroleum hydrocarbons, metals, PCBs, and PAHs. Construction field personnel must be aware of the previously identified contamination associated with the Site and understand how to recognize other potentially contaminated materials at the Site. This EMMP should be implemented during all intrusive work at the Site to maintain work zone health and safety and to mitigate further impact to the environment if known or unanticipated contamination is encountered.

5.1 Unanticipated Contamination

Near-surface soil at the Site has generally been found to be contaminated with petroleum hydrocarbons at levels that do not exceed the MTCA Method A CULs. For the purposes of this EMMP, unanticipated contamination can be identified using physical observations and field screening equipment and procedures. Physical observations include use of the visual and olfactory senses. Field screening equipment may include instrumentation such explosive gas meters, organic vapor meters, and dust meters. Contamination has previously been associated with the following materials and conditions at the Site:

- **Petroleum Hydrocarbons**: Low levels of petroleum hydrocarbon (products such as gasoline, diesel, and motor oil) contamination are known to be present in near-surface soil at the Site. However, hydrocarbon contamination may be present in soil a greater depths than previously encountered, and pockets of gross contamination associated with historic releases or previously unidentified tanks may be present that will require additional characterization and special handling and disposal. Contamination may be present in soil or wood debris and typically exhibits one or more of the following characteristics: iridescent sheen; black, oily, tarry, or greasy appearance; petroleum (gas, diesel, motor oil, kerosene) odor; and dark staining in soil.
- **PCBs**: PCBs vary in appearance from mobile, oily liquids to white, crystalline solids to hard, non-crystalline resins. Based on the historical Site use, if encountered at the Site, they are most likely to be associated with hydraulic oil or insulator oil released from equipment at the Site.
- **PAHs**: PAHs are generated through combustion of organic materials including coal, oil, gasoline, and wood. Soil containing low levels of PAHs is not easily distinguished from otherwise uncontaminated soil. However, materials containing obvious burnt debris (ash, cinders, etc.) should be assumed to contain PAHs above CULs.
- **Solvents**: Industrial or commercial chemical solvents have commonly been used in the past for cleaning and degreasing metal parts. Solvent contamination has not been identified at the Site, but could be encountered in buried containers or discrete pockets of contamination. Solvent contamination may be present in soil or wood debris and typically exhibits the following characteristics: clear liquid with a sweet chemical odor.

- **Buried Debris**: Fill material at the Site contains organic wood debris and inorganic materials such as metals, glass, ceramics, and concrete.
- **Other**: The listed items above are not meant to be exhaustive and construction personnel should be diligent in looking for any materials and excavated materials that may be encountered that appear or behave differently from typical soil and wood debris. If any chemical or other unidentifiable odors, viscous or odd colored liquids, odd appearing or colored powders/dusts/crystals, or discarded industrial-type equipment or containers are encountered, these materials should be assumed to be potentially contaminated and dealt with cautiously and safely.

If the materials or conditions noted above are observed during construction activities, work is to be suspended within the affected area and the Owner and environmental professional shall be notified immediately. Similar procedures are to be followed if other indications of potential contamination, such as material with an unusual appearance or odor, are observed during excavation activities.

6.0 RECOGNIZING POTENTIALLY CONTAMINATED GROUNDWATER AND STORMWATER

Groundwater at the south end of the Site is known to be contaminated with TPH-D and metals. The depth to groundwater is typically greater than 20 ft bgs, so it is unlikely that excavations at the Site will intercept it. If necessary for excavation activities, groundwater control in these areas may be performed through dewatering well points and/or sumps. Groundwater generated through dewatering will likely require treatment prior to discharge to the City of Monroe (City) sanitary or storm sewer system in accordance with applicable permit conditions and requirements.

Stormwater that comes in contact with contaminated soils can become contaminated either by suspension of contaminated particles or by solution of chemicals and, therefore, accumulated or collected stormwater may also be treated as a contaminated material. Procedures for containment, characterization, and disposal of potentially contaminated stormwater will be the same as the procedures listed in Section 7.0 for other potentially contaminated materials.

Implementation of a project-specific stormwater pollution prevention plan (SWPPP) may also be necessary as required under a Construction Stormwater General Permit. Administering stormwater best management practices (BMPs) and erosion and sediment control procedures may be necessary to minimize the accumulation of potentially contaminated stormwater.

7.0 MANAGING KNOWN OR UNANTICIPATED CONTAMINATED MATERIAL

All excavation and associated subsurface activities that place workers in contact with potentially contaminated material should be conducted by workers who have proper Occupational Safety and Health Administration (OSHA) and Washington Industrial Safety and Health Act (WISHA) training and certification for working at a hazardous waste site. All work conducted by the contractor related to the excavation and handling of potentially contaminated materials should be performed under a contractor-prepared Site-specific health and safety plan prepared in accordance with Code of Federal Regulations (CFR) 29.1926.120 and approved by the Owner.

7.1 Unanticipated Contamination

When unanticipated or unidentified contaminated materials (other than near-surface low-level hydrocarbon contamination and wood debris) are encountered, the procedures shown on Figure 3 and detailed below may be used as a guide for decision making:

1) If the material encountered is unanticipated or unidentified, work will cease, as needed, to avoid disturbing the affected material and the construction contractor will notify the appropriate Owner's Representative. The construction contractor will follow the material handling guidelines listed in Section 8.3.

2) If warranted, the Owner will notify LAI of the conditions and, if warranted, an environmental professional from LAI will visit the Site to evaluate the environmental conditions and determine appropriate notification procedures to Ecology or other applicable regulatory agency.

3) Once the nature of the material (e.g., whether it is contaminated by regulated substances) is appropriately identified, the affected material may be stockpiled (if the material is soil and/or wood debris) separately from stockpiles of other excavated materials and tested to determine waste profiling at the direction of the Owner's Representative. Affected stormwater should be contained in place or in appropriate containers to minimize contamination of other clean materials. If applicable, it may also be routed to the dewatering treatment system for appropriate treatment and discharge.

4) As warranted, an LAI environmental professional will conduct material screening and characterization (Section 8.0), and collect samples for waste characterization purposes, as well as possibly delineate the extent of the affected area within the planned limits of the excavation. The material will be analyzed (as necessary) and results will be reported to the Owner in a timely manner to minimize work delays.

5) Material (soil, wood debris, or stormwater) that is determined to be uncontaminated (i.e. contaminant concentrations below regulatory screening levels or limits, or does not otherwise represent a risk to human health or the environment) will be left in place or disposed of along with other like excavated materials.

6) Excavated material and/or containerized water that is determined to be contaminated and requires removal will be profiled by LAI on behalf of the Owner for disposal at an appropriate waste disposal/treatment facility.

7) Once an appropriate disposal method is determined and the waste profile is accepted by the selected waste disposal/treatment facility, the soil or stormwater can be transported to the selected facility for treatment or disposal under appropriate waste hauling bill of lading or manifest. The facility will be notified in advance of the approximate quantity and type of material being transported. All disposal facilities should provide the City with the appropriate paperwork to document the quantity and type of material received and the disposal method.

8) Once the contaminated material is removed, confirmation samples will be collected, if requested by the Owner or Ecology, from the previously affected area by an LAI representative to document the soil quality at the limits of the contaminated material excavation.

9) The Owner will notify the contractor when work can resume in the previously affected area.

8.0 MATERIAL SCREENING AND CHARACTERIZATION

This section describes the procedures that may be used by environmental professionals to field-screen and characterize potentially contaminated materials at the Site.

8.1 Field Screening of Potentially Contaminated Materials

The following field-screening methods may be used by the environmental professional to evaluate potentially contaminated materials:

- Petroleum sheen testing
- Chemical vapor screening with a photoionization detector (PID) or similar equipment
- Comparison of material to previously contaminated materials encountered at the Site, as described in Section 2.0.

Sheen testing can be conducted on material that exhibits evidence of petroleum hydrocarbon contamination, if encountered. The sheen test is conducted by placing a representative sample of the soil in a clear glass jar with tap water. The jar will be agitated and amount of sheen (light, medium, or heavy) will be observed and recorded. The judgment of the environmental professional will be used to determine if suspect soil is likely contaminated with petroleum hydrocarbons based on sheen testing. Materials exhibiting petroleum sheen will be considered contaminated, unless laboratory testing demonstrates otherwise.

If needed, screening with the PID can be conducted on materials exhibiting a petroleum or chemical odor to determine if VOCs are present. Field screening with a PID is conducted by placing a representative sample of the soil in a sealed plastic bag. The bag and soil will be agitated, allowed to stand for 5 minutes, and then a headspace reading will be taken of vapor in the bag using the PID. A sustained reading above background or ambient conditions will be used as a general indication of potential VOC contamination. The PID will be calibrated on a daily basis using a standard of 100 parts per million (ppm) of isobutylene. The PID will be equipped with a 10.6 electron volt (eV) lamp, which is capable of detecting most common aromatic and aliphatic hydrocarbon compounds. Other field screening equipment, such as explosive gas meters or dust meters will be used, as appropriate, depending on the observed nature of the contaminant and/or other field screening results.

Suspect material screening may be conducted in the area of possible unidentified contamination and used to assist in delineating the extent of contamination to the planned limits of the excavations and to inform stockpiling decisions. Should previously unidentified contaminated material be excavated and stockpiled, the screening will generally be conducted for approximately every 20 loose cubic yards of excavated material from the area. The frequency of field screening may be more or less, as needed, depending on the conditions encountered and whether there are varying material types and levels of impact. Field-screening results will be recorded in a field report.

8.2 Potentially Contaminated Material Characterization

After appropriate identification procedures have been performed as identified above, newly discovered contaminated material should be stockpiled separately from other excavated materials (i.e. wood debris and soil) to reduce the potential for cross-contamination. Samples will be collected, as necessary, by the environmental professional to further evaluate and characterize whether potentially contaminated materials (soil and/or water), as identified during field screening, should be classified as contaminated and, if contaminated, to profile and determine appropriate disposition of the contaminated material. Sampling will be conducted in accordance with the SAP.

Characterization samples will be tested consistent with the type of potential contamination recognized in the field (e.g., motor oil-range hydrocarbons, solvents). The testing protocol will be consistent with the requirements of the destination waste disposal/treatment facility.

Sample analytical results will be compared with appropriate regulatory criteria to determine whether a material is contaminated and/or requires special handling and disposal.

8.3 Management of Contaminated or Potentially Contaminated Materials

This section provides information about how excavated soil and wood debris can be handled by the construction contractor. Guidelines and general information about the handling of excavated soil and wood debris are provided in this section.

8.3.1 Plan for Instructing Workers

Excavation supervisors and workers should be provided with training and other information from this EMMP about the nature of hazardous substances in the soil they are excavating and how to identify suspect soil (Section 5.0). These personnel should be provided with the authority to stop excavation operations and request direction and assistance in evaluating materials that appear to be contaminated.

8.3.2 Excavation

Excavation should be conducted with the appropriate hydraulic excavating equipment. A smooth-edged bucket should be used when excavating potentially contaminated materials, as applicable.

8.3.3 Stockpiling

Excavated soil and wood debris may be segregated for waste characterization, as needed, prior to hauling to appropriate disposal facilities. Stockpiled materials from previously unidentified materials that have been determined to be contaminated through field screening or testing, should be placed on minimum 10-millimeter (mm) plastic sheeting and bermed around the edges with sand bags or hay bales to prevent run-on and run-off of stormwater. The stockpiles should also be covered with minimum 6-mm plastic sheeting when not being actively worked or loaded. The cover plastic can be

weighted or secured by appropriate means and seams sealed to prevent tearing or removal by weather. The environmental professional may need access to stockpiles for sampling or other activities. An inventory of stockpiled materials should be kept by the contractor. Soil in stockpiles will be removed and disposed of or reused based on the results of analytical testing, as appropriate. Contaminated soil in stockpiles should be removed from the Site within 90 days of placement.

8.3.4 Waste Characterization

Stockpiled or other potentially contaminated material may need to be sampled for waste characterization analysis in accordance with the SAP and the individual disposal facility acceptance criteria (if different from the SAP) prior to transport and disposal.

8.3.5 Loading

Excavated material will generally be directly loaded into trucks for transport to export destination sites to the extent possible. The moisture and consistency of soil should be monitored to ensure that the loaded soils are in a condition suitable to prevent spills during transit to stockpile locations or other destination areas.

8.3.6 Transport

Excavated material transport to offsite locations should be monitored to ensure that the cargo is fully contained, covered, and protected in transit, in compliance with local, state, and federal transportation requirements. In general, truck and trailer combinations are suitable for this type of hauling operation.

8.3.7 Disposal Facilities

Profiling, manifesting, and testing requirements are generally similar for all solid waste disposal facilities. Sufficient generator information and representative sample analytical data are needed to properly characterize the material. Each facility's permit has site-specific restrictions on the types of waste that can be accepted, which is addressed in the profiling process. Bills of lading are used to document non-dangerous waste disposal. Hazardous waste manifests are used to transport and document dangerous waste disposal.

9.0 NOTIFICATIONS AND REPORTING

If unanticipated environmental conditions are encountered during construction activities, the Owner should be notified by the contractor immediately; and the findings, resulting actions implemented, and remaining Site conditions documented for the project files, and for reporting to the applicable regulatory agencies, if warranted and required under local, state, and federal regulations.[1] The documentation may be prepared in focused technical memoranda, or other appropriate formats, depending on the location of the affected area, the nature and extent of contamination, actions taken, and regulatory requirements.

[1] See spill reporting requirements in Washington: https://ecology.wa.gov/About-us/Get-involved/Report-an-environmental-issue/Report-a-spill.

10.0 USE OF THIS PLAN

This Excavated Materials Management Plan has been prepared for the exclusive use of the River's Edge LLLP for specific application to the Former Monroe Auto Salvage/River's Edge Site. Reliance on this report by third parties, or others who do not have a contractual relationship with River's Edge or LAI on this project, is at their sole risk. Further, the reuse of information, conclusions, and recommendations provided herein for extensions of the project or for any other project, without review and authorization by LAI, shall be at the user's sole risk. LAI warrants that within the limitations of scope, schedule, and budget, our services have been provided in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions as this project. We make no other warranty, either express or implied.

11.0 REFERENCES

Ecology. 2001. Letter: Independent Remedial Action, Monroe Auto Salvage, 426 Fremont Street, Monroe, Washington. From Judith Aitken, to Farallon Consulting LLC. February 2.

Ecology. 2008. Letter: Rescission of Previously Issued No Further Action Determination, Monroe Auto Salvage (Snohomish Tax Parcel 27070600300700). From Dale Myers, to. June 2.

EMCON. 1996a. Monroe Auto Salvage Groundwater Monitoring - August 1996 Sampling. September 30.

EMCON. 1996b. Monroe Auto Salvage Site Investigation. July 26.

EMCON. 1996c. Monroe Auto Salvage Site Investigation - Additional PCB Sampling. October 25.

Farallon. 2000. Final Cleanup Action Summary Report, Monroe Auto Salvage, 926 Fremont Street, Monroe, Washington. Farallon Consulting, LLC. November 9.

Glacier. 1997. Independent Remedial Action , Monroe Auto Salvage, 426 Fremont Street, Monroe, Washington. Glacier Environmental Services, Inc. April 18.

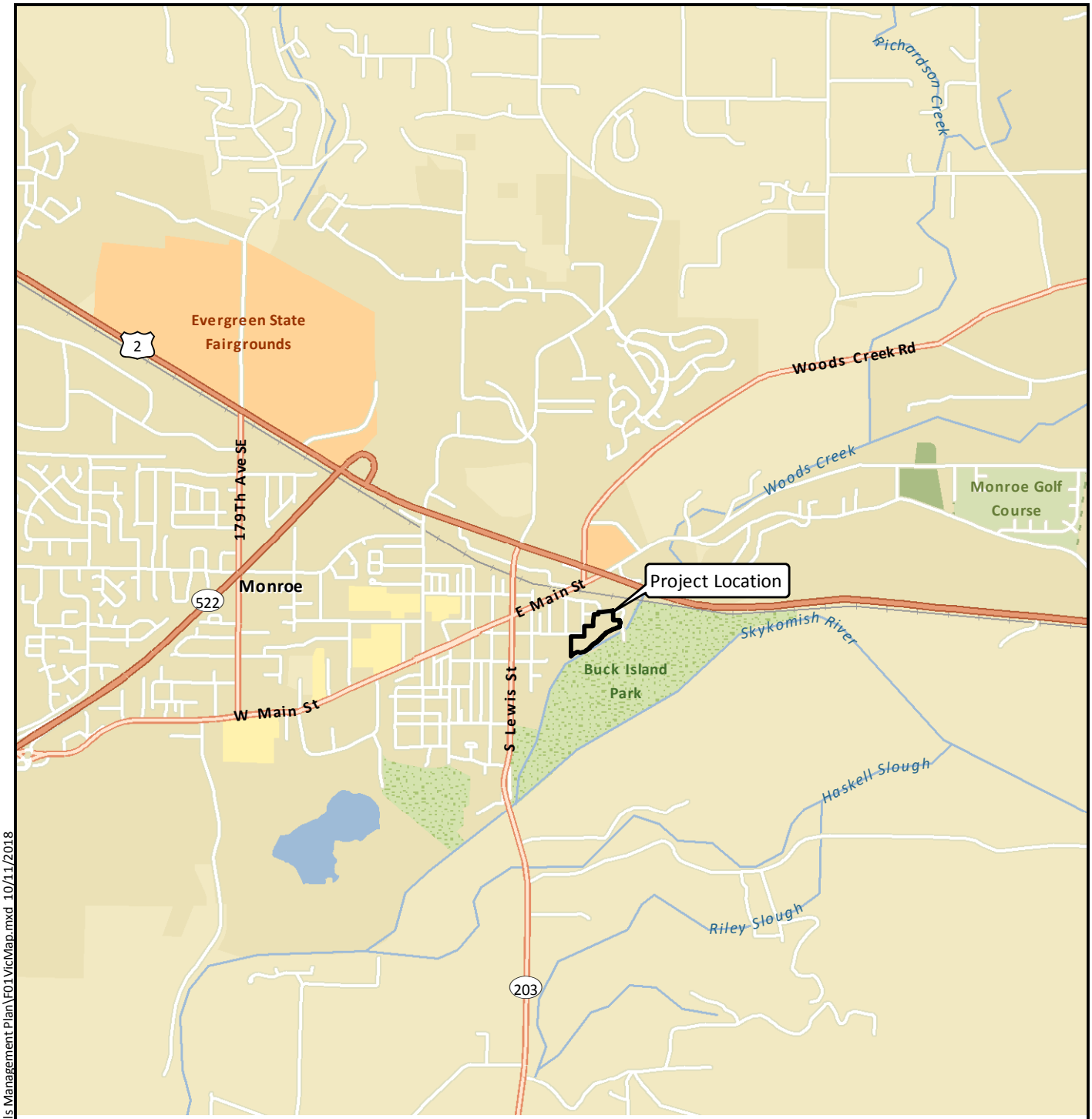
Hart Crowser. 1990. Subsurface Exploration and Testing, Glacier Park Company Property, Property Sequence No. 114, Monroe, Washington. December 13.

LAI. 2017a. Draft Phase I Environmental Site Assessment, Monroe-Woods Creek Site C, Snohomish County, Washington. Landau Associates, Inc. April 20.

LAI. 2017b. Draft Phase II Environmental Site Assessment Monroe-Woods Creek Site D Ring Bus, Monroe, Washington. Landau Associates, Inc. July31.

LAI. 2018. Supplemental Phase II Environmental Site Assessment, Former Monroe Auto Wrecking Site, Monroe, Washington. Landau Associates, Inc. November 12.

LAI. Pending. Technical Memorandum: Supplemental Soil Sampling, Former Monroe Auto Wrecking Site, Monroe, Washington. Landau Associates, Inc.



N

0 0.5 1

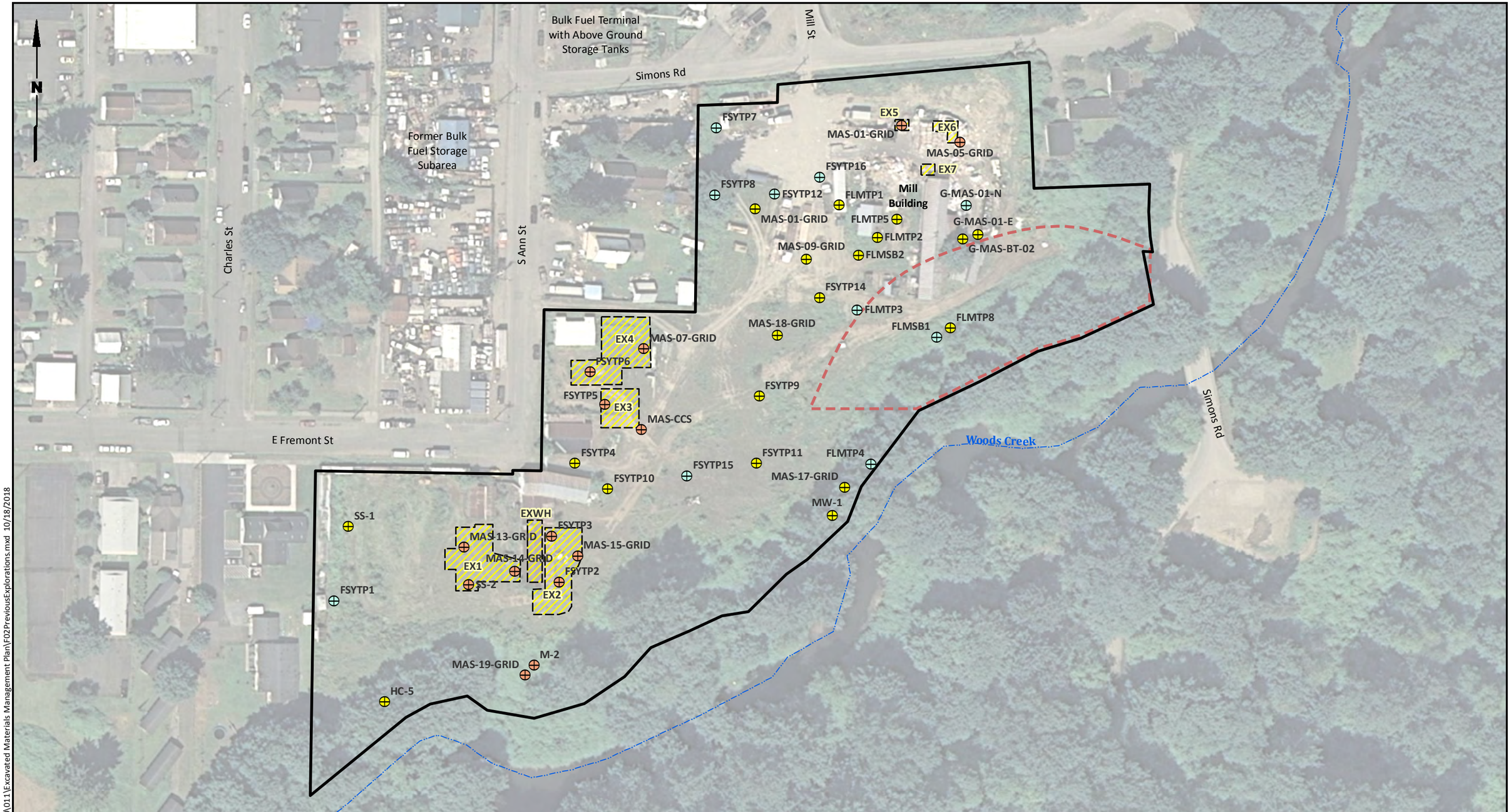
Miles

Data Source: Esri 2012

G:\Projects\1759\001\010\011\Excavated Materials Management Plan\F01VicMap.mxd 10/11/2018

LANDAU ASSOCIATES

Monroe Auto Wrecking Excavated Materials Management Plan Monroe, Washington	**Vicinity Map**	Figure 1



Legend

- Previous Exploration with No Soil Contaminant Detections
- Previous Exploration with Soil Contamination Below MTCA Method A Cleanup Levels
- Previous Exploration with MTCA Level Exceedance
- Previous Excavation Area with Low-level Soil Contamination
- Estimated Extents of Sawdust/Woodwaste Fill
- Site Boundary

0 100 200

Scale in Feet

Data Source: Snohomish County GIS; Esri Imagery Service.

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

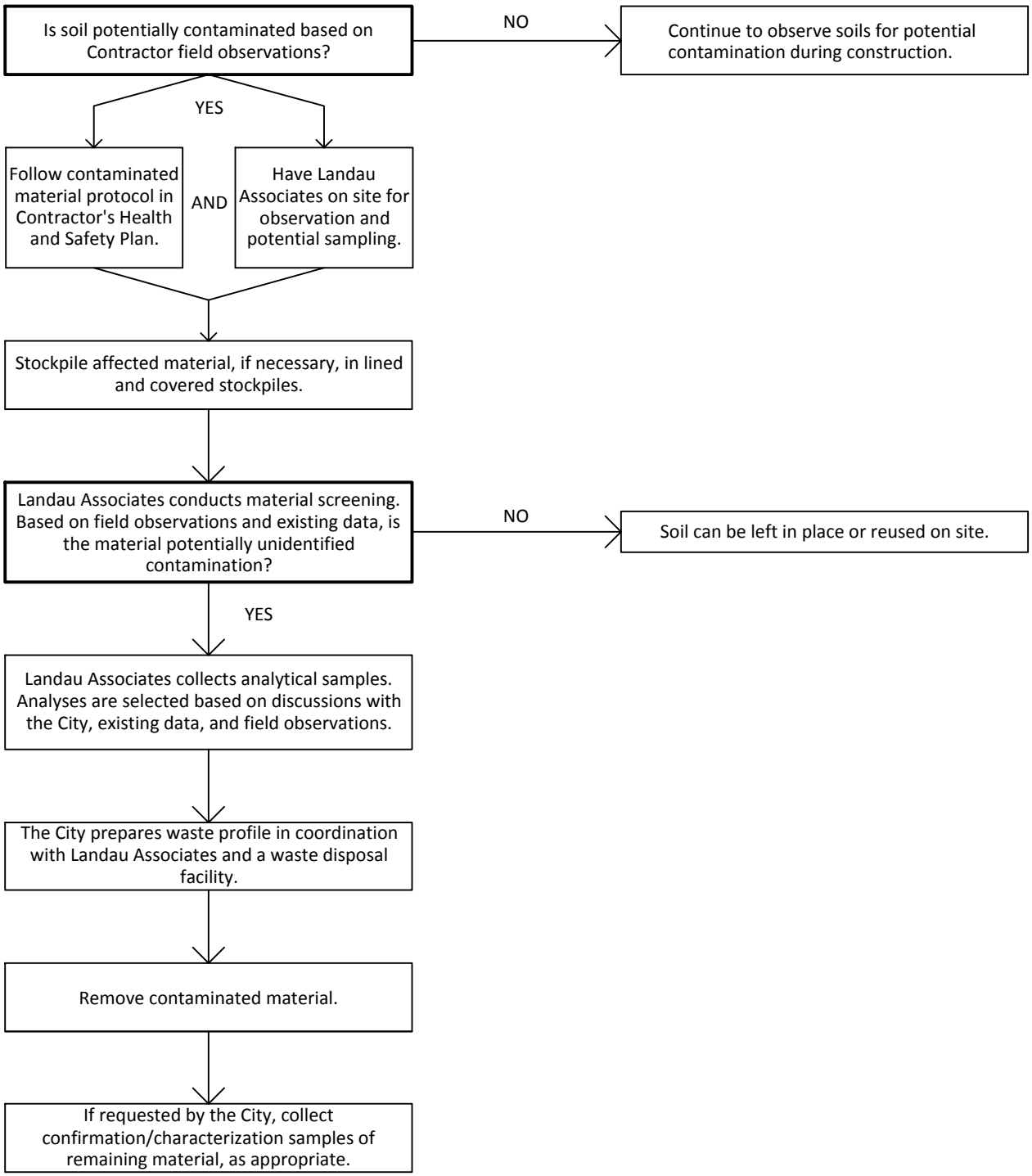
LANDAU ASSOCIATES

Monroe Auto Wrecking
Excavated Materials Management Plan
Monroe, Washington

Site Plan with Previous Explorations

Figure 2

G:\Projects\1759\001\010\011\Excavated Materials Management Plan\F02PreviousExplorations.mxd 10/18/2018



LANDAU ASSOCIATES

Monroe Auto Wrecking
Excavated Materials
Management Plan
Monroe, Washington

Soil Management Decision Logic Flow Chart

Figure
3

APPENDIX A

Sampling and Analysis Plan

Sampling and Analysis Plan
Former Monroe Auto Wrecking/River's Edge Site
Monroe, Washington

December 18, 2018

Prepared for

Ms. Rebecca Ralston
On Behalf of River's Edge WA LLLP
River's Edge, Washington

LANDAU ASSOCIATES

130 2nd Avenue South
Edmonds, WA 98020
(425) 778-0907

Sampling and Analysis Plan
Former Monroe Auto Wrecking/River's Edge Site
Monroe, Washington

This document was prepared by, or under the direct supervision of, the technical professionals noted below.

Document prepared by: _____ Cody Johnson, PE
Senior Engineer

Document reviewed by: _____ Piper Roelen, PE
Principal

Date: December 18, 2018
Project No.: 1759001.020
File path: \\edmdata01\projects\1759\001\R\SAP\SAP 121818.docx
Project Coordinator: LJL

LANDAU ASSOCIATES

This page intentionally left blank.

TABLE OF CONTENTS

LIST OF ABBREVIATIONS AND ACRONYMS

City ..... City of Monroe
CSV ..... comma-separated value
EMMP ..... Excavated Materials Management Plan
EPA ..... US Environmental Protection Agency
LAI ..... Landau Associates, Inc.
LCS/LCSD ..... laboratory control sample/laboratory control sample duplicate
MS/MSD ..... matrix spike/matrix spike duplicate
NWTPH-Dx ..... Northwest total petroleum hydrocarbon diesel-range extended
NWTPH-Gx ..... Northwest total petroleum hydrocarbon gasoline-range extended
PAH ..... polycyclic aromatic hydrocarbons
PCB ..... polychlorinated biphenyl
QA/QC ..... quality assurance/quality control
RCRA ..... Resource Conservation and Recovery Act
RPD ..... relative percent difference
SAP ..... sampling and analysis plan
Site ..... Former Monroe Auto Wrecking/River's Edge
TAT ..... turnaround times
TCLP ..... toxicity characteristic leaching procedure
TPH ..... total petroleum hydrocarbon
VOC ..... volatile organic compound
WAC ..... Washington Administrative Code

1.0 INTRODUCTION

This sampling and analysis plan (SAP) describes the procedures for conducting confirmation and waste characterization sampling field activities during construction activities at the Former Monroe Auto Wrecking/River's Edge site (Site) located at 426 Fremont Street in Monroe, Washington. This SAP was prepared for River's Edge LLLP (the Owner) and is included as an appendix to the Excavated Materials Management Plan (EMMP; LAI 2018) and is intended to be used in conjunction with the EMMP, not as a standalone document.

The primary objective of this SAP is to provide sampling and analysis procedures and methodologies consistent with accepted procedures such that the data collected will be adequate and representative for use in:

- Characterizing for disposal soil and wood debris excavated for construction.
- Confirming that stormwater and groundwater accumulating in excavations that is removed for discharge meets the permitted discharge criteria.

This SAP was prepared consistent with the requirements of Washington Administrative Code (WAC) 173-340-820. It provides field, sampling, and analytical procedures to be used during construction, as needed.

2.0 SAMPLING PROCEDURES

The following sections describe confirmation and disposal characterization sampling procedures to be used during construction at the Site. Waste characterization sampling will be needed to profile for disposal soil generated by excavation, and confirmation sampling will be conducted to evaluate whether soil contaminated at concentrations exceeding cleanup levels (if encountered) has been sufficiently removed from the areas of excavation.

2.1 Waste Characterization

Waste characterization sampling will be needed to properly profile and dispose of potentially contaminated stockpiled soil generated by site grading and utility excavations that encounter low-level contaminated soil present in the near-surface throughout much of the Site and/or previously unknown areas of contaminated soil.

Characterization of stockpiled samples to determine appropriate management and disposition requirements will consist of three-point composite samples collected from locations within the pile that are representative of the stockpiled material. Samples will be collected using hand auguring techniques, and will consist of material from within the interior of the stockpile. A description of the material characteristics will be recorded. Logs and other large pieces of wood debris (if encountered) will be separated out from the stockpile and will not be sampled unless field observations indicate the potential presence of wood preservatives (e.g., creosote or pentachlorophenol).

At each composite sub-sample location, a discrete material sample will be collected from the interior of the stockpile. Larger-sized material (gravel/wood/debris greater than approximately ¼- to ½-inch diameter) will be removed by hand sorting and the samples placed in the appropriate laboratory-supplied containers. Material for samples to be analyzed for non-volatile constituents will be placed in a decontaminated stainless-steel bowl, composited, and homogenized.

The stockpile samples will be labeled using the following format: "stockpile number-date (mmddyy)." For example, a sample taken from stockpile 2 on November 26, 2018 will be labeled "SP2-112618".

The number of samples to be collected from a stockpile for characterization purposes is dependent on the size of the stockpile. Field personnel will map the stockpile and record measurements. The table below will be used as a guide to determine sampling frequency.

Cubic Yards	Number of Samples
0–100	3
101–500	5
501–1,000	7
1,001–2,000	10
>2,000	10, plus 1 for each additional 500 cubic yards

2.2 Confirmation Sample Collection Procedures

For excavations in areas of previously unencountered contaminated soil where contaminant characterization/delineation or confirmation samples need to be taken from within the excavation limits, soil samples will be collected from the base or sidewalls of the excavation at selected locations within the excavation or at the limits of removed material. Confirmation samples will be collected at a rate of 1 sidewall sample per 100 feet of sidewall (at least one sample per sidewall), and 1 excavation bottom sample per 1,000 square feet of excavation area. A shallow hole will be hand-dug at each sample location using decontaminated hand implements, including stainless-steel spoons and steel shovels, picks, and similar equipment. The sidewall surface of the hand-dug hole will be scraped to expose a fresh surface for sample collection. Soil will be collected using a decontaminated stainless-steel spoon, placed in a decontaminated stainless-steel bowl, homogenized, and transferred to the appropriate sample containers. Material larger than approximately ¼ inch will be removed from the sample prior to placing the soil in the sample container. Soil testing for possible volatile organic compound (VOC) or gasoline-range total petroleum hydrocarbon (TPH-G) contamination will not be homogenized, but rather sampled using US Environmental Protection Agency (EPA) Method 5035 and placed directly into laboratory-provided vials with appropriate preservatives.

The samples will be labeled using the following format:

"Approximate coordinates or excavation area-sidewall/bottom-date (mmddyy)"

For example, a confirmation sample collected from the east sidewall of a storm sewer trench on November 26, 2018 will be labeled "SST-ESW-112618."

2.3 Water Sample Collection Procedures

Representative water samples will be collected, as needed, to characterize potentially contaminated water encountered during construction activities (e.g., stormwater or surface water runoff within an excavation, dewatering fluids). Water samples will be collected into the appropriate laboratory-supplied sample containers directly, using a disposable bailer, or using peristaltic pump and disposable polyethylene tubing, as appropriate. Samples from a dewatering fluids treatment system will be collected from a sample port downstream of the final treatment vessel. Samples collected directly from the excavation for metals analyses will be field-filtered using an in-line 0.45 micron filter, and samples collected for TPH, polycyclic aromatic hydrocarbons (PAHs), and/or polychlorinated biphenyls (PCBs) analysis will be centrifuged at the laboratory prior to testing. Samples collected from a dewatering treatment system will not require filtration.

2.4 Laboratory Analysis

Stockpile, confirmation, and water samples (if any) will be sent to a local certified analytical laboratory for analysis.

2.4.1 Waste Characterization Sample Analysis

Stockpile characterization samples will be analyzed for constituents typically required by waste disposal facilities and for analytes detected in samples collected from locations near the excavation in question during previous investigations, where available. Wood debris will generally not be analyzed for waste characterization except if necessary for acceptance by a recycling or disposal facility, when intermingled with soil and/or buried debris, and/or if field observations indicate the presence of wood preservatives (i.e. creosote) or impacts of other contaminants (e.g., petroleum product).

Each waste characterization sample will be analyzed for the following:

- Northwest total petroleum hydrocarbon (NWTPH) diesel-range extended (Dx) method (based on the prevalence of TPH-D (TPH-diesel range) and TPH–O (TPH-oil range) in near-surface soil at the site).
- Toxicity characteristic leaching procedure (TCLP) Resource Conservation and Recovery Act (RCRA) 8 metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver) by EPA Method 6010C/7470A.

Samples displaying indications of contamination based on visual or olfactory field observations and/or samples collected from material excavated from areas previously sampled may be analyzed for one or more of the following, depending on field screening results:

- NWTPH gasoline-range extended (Gx) method
- VOCs by EPA Method 8269
- PAHs by EPA Method 8270
- PCBs by EPA Method 8082.

Samples found to contain oil-range petroleum hydrocarbons through the NWTPH-Dx analysis will also be analyzed for:

- PCBs by EPA Method 8082.

The samples will typically be run on 5-day turnaround times (TATs) given sufficient lay-down area for the stockpiles. Faster TATs may be requested if the stockpile(s) removal needs to be expedited.

2.4.2 Confirmation Sample Analysis

- Confirmation samples collected from excavations within areas of previously unidentified contamination will be analyzed for contaminants detected in samples collected from locations near the excavation in question during previous investigations, where available. Additional analytes may be added based on the results of field screening. .

2.4.3 Stormwater/Dewatering Fluid Laboratory Analysis

If necessary, samples of dewatering fluids collected from the treatment system (if needed) will be analyzed for constituents specified by the appropriate permit, which is likely to include, but may not be limited to:

- Diesel- and oil-range petroleum hydrocarbons by NWTPH-Dx
- Gasoline-range extended petroleum hydrocarbons NWTPH-Gx;
- PCBs by EPA Method 8082
- VOCs by EPA Method 8260.

3.0 QUALITY ASSURANCE AND QUALITY CONTROL

This section describes the quality assurance/quality control (QA/QC) procedures in support of roadway construction. This section describes the project team organization and responsibilities, the QA objectives, laboratory analytical methods, QA/QC requirements, and corrective actions for this project.

3.1 Project Team Organization and Responsibilities

The project team organizational structure was developed based on the requirements of the field and laboratory activities. The key positions/contractors and associated responsibilities are described below.

- Consultant Project Manager (Landau Associates, Inc. [LAI]): Responsible for implementation of all aspects of the project plans. Specific responsibilities include overseeing that all technical procedures are followed, reporting of deviations from the project plans to the Owner, and overseeing that data collected will satisfy the quality assurance objectives.
- Analytical Laboratory: Responsible for providing sample bottles, performing chemical analyses per the SAP, and reporting of data as required by the SAP.
- Field Sampling Personnel (LAI): Responsible for implementing sampling procedures as specified in the project plans, and notifying the consultant project manager of any deviations from the project plans.

3.2 Quality Assurance Objectives

The QA objectives for this project are to develop and implement procedures that will ensure collection of representative data of known, acceptable, and defensible quality. The data quality parameters used to assess the acceptability of the data are representativeness, comparability, precision, accuracy, bias, and completeness, as described below.

- Representativeness expresses the degree to which data accurately and precisely represent an actual condition or characteristic of a population. Representativeness can be achieved by selecting appropriate sampling locations and by using appropriate sampling methods.
- Comparability expresses the confidence with which one data set can be evaluated in relation to another data set. For this work, comparability of data will be established through the use of standard analytical methodologies with analytical limits of quantitation that can meet screening-level criteria to the extent practicable and by using standard reporting formats.
- Precision measures the reproducibility of measurements under a given set of conditions. Specifically, it is a quantitative measure of the variability of a group of measurements compared to their average values. Analytical precision is measured through matrix spike/matrix spike duplicate (MS/MSD) samples and/or through laboratory control sample/laboratory control sample duplicate (LCS/LCSD) samples for organic analysis and through laboratory duplicate samples for inorganic analyses. The quantitative relative percent difference (RPD) for laboratory duplicates, MS/MSD, and field duplicates will be used to assess sampling and analytical precision.

- Accuracy is an expression of the degree to which a measured or computed value represents the true value. Field accuracy is controlled by adherence to sample collection procedures as outlined in this SAP.
- Bias is the systematic or persistent distortion of a measured process that causes errors in one direction. Bias of the laboratory results will be evaluated based on analysis of method blanks and MS samples.
- Completeness is a measure of the proportion of data obtained from a task sampling plan that is determined to be valid. It is calculated as the number of valid data points divided by the total number of data points requested.

3.3 Field and Laboratory Quality Control Procedures

Field and analytical laboratory quality control samples will be collected to evaluate data precision, accuracy, representativeness, completeness, bias, and comparability of the analytical results for the Site characterization. The QC samples and the frequency at which they will be collected and/or analyzed are described below.

3.3.1 Blind Field Duplicates

A blind field duplicate will be collected at a frequency of at least 1 per 20 waste characterization samples per chemical analysis, and not less than one field duplicate. The blind field duplicate will consist of a split sample collected at a single sample location, after homogenization of the sample; blind field duplicates for volatiles samples (if collected) will not be homogenized. Blind field duplicate results will be used to evaluate data precision. Acceptance criteria for blind field duplicate samples are 35 percent RPD for soil.

3.3.2 Field Trip Blanks

A laboratory-supplied trip blank will be analyzed for volatile analyses (if needed) to evaluate whether cross-contamination between samples occurs during sample transport. The trip blank will be stored with all volatile sample containers throughout the field investigation until samples are delivered to the laboratory.

3.3.3 Laboratory Matrix Spike/Matrix Spike Duplicate

A minimum of one laboratory MS/MSD sample will be analyzed per 20 samples, or one MS/MSD sample per batch of samples if fewer than 20 samples will be analyzed. These analyses will be performed to provide information on accuracy and to verify that extraction and concentration levels are acceptable. The laboratory spikes will follow EPA guidance for MS and MSD samples.

3.3.4 Laboratory Duplicates

A minimum of one laboratory duplicate sample per 20 samples, or one laboratory duplicate sample per batch of samples if fewer than 20 samples are contained in a batch, will be analyzed. These analyses will be performed to provide information on the precision of chemical analyses. The laboratory duplicates will follow EPA guidance in the analytical method.

3.3.5 Laboratory Method Blanks

A minimum of one laboratory method blank per 20 samples, one every 12 hours, or one per batch of samples analyzed (if fewer than 20 samples are contained in a batch) will be analyzed for all parameters to assess possible laboratory contamination. Method blanks will contain all reagents used for analysis. The generation and analysis of additional method, reagent, and glassware blanks may be necessary to verify that laboratory procedures do not contaminate samples.

3.3.6 Laboratory Control Sample

A minimum of one LCS per 20 samples, or one LCS per sample batch if fewer than 20 samples are contained in a batch, will be analyzed for all parameters.

3.3.7 Surrogate Spikes

All project samples analyzed for organic compounds will be spiked with appropriate surrogate compounds as defined by the analytical methods.

3.4 Laboratory Quality Assurance/Quality Control

QA/QC for chemical testing includes laboratory instrument and analytical method QA/QC. Instrument QA/QC monitors the performance of the instrument and method QA/QC monitors the performance of sample preparation procedures. The analytical laboratory will be responsible for instrument and method QA/QC.

When an instrument or method control limit is exceeded, the laboratory will contact the project manager immediately. The laboratory will be responsible for correcting the problem and will reanalyze the samples within the sample holding time if sample reanalysis is appropriate.

3.5 Corrective Actions

Corrective actions will be needed for two categories of nonconformance:

- Deviations from the methods or QA requirements established in this document.
- Equipment or analytical malfunctions.

Corrective action procedures to be implemented based on detection of unacceptable data are developed on a case-by-case basis. Such actions may include one or more of the following:

- Altering procedures in the field or laboratory.
- Using a different batch of sample containers.
- Performing an audit of field or laboratory procedures.
- Reanalyzing samples (if holding times allow).
- Resampling and analyzing.

- Evaluating sampling and analytical procedures to determine possible causes of the discrepancies.
- Accepting the data without action, acknowledging the level of uncertainty.
- Rejecting the data as unusable.

During field operations and sampling procedures, the field personnel will be responsible for conducting and reporting required corrective actions. A description of any action taken will be entered in the daily field notebook. The project manager will be consulted immediately if field conditions are such that conformance with this SAP is not possible.

During laboratory analysis, the laboratory QA officer will be responsible for taking required corrective actions in response to equipment malfunctions. If an analysis does not meet the data quality objectives outlined, corrective action will follow the guidelines in the noted EPA analytical methods and the EPA guidelines for data validation for organics and inorganics analyses (EPA 1999, 2004). At a minimum, the laboratory will be responsible for monitoring the following:

- Calibration check compounds must be within performance criteria specified in the EPA method or corrective action must be taken prior to initiation of sample analysis. No analyses may be performed until these criteria are met.
- Before processing any samples, the analyst should demonstrate, through analysis of a reagent blank, that interferences from the analytical system, glassware, and reagents are within acceptable limits. Each time a set of samples is extracted or there is a change in reagents, a reagent blank should be processed as a safeguard against chronic laboratory contamination. The blank samples should be carried through all stages of the sample preparation and measurement steps.
- Method blanks should, in general, be below instrument detection limits. If contaminants are present, then the source of contamination must be investigated, corrective action taken and documented, and all samples associated with a contaminated blank reanalyzed. If, upon reanalysis, blanks do not meet these requirements, LAI will be notified immediately to discuss whether analyses may proceed.
- Surrogate spike analysis must be within the specified range for recovery limits for each analytical method used or corrective action must be taken and documented. Corrective action includes: 1) reviewing calculations, 2) checking surrogate solutions, 3) checking internal standards, and 4) checking instrument performance. Subsequent action could include recalculating the data and/or reanalyzing the sample if any of the above-described checks reveal a problem. If the problem is determined to be caused by matrix interference, reanalysis may be waived if so directed following consultation with LAI. If the problem cannot be corrected through reanalysis, the laboratory will notify LAI prior to data submittal so that additional corrective action can be taken, if appropriate.
- If the recovery of a surrogate compound in the method blank is outside the recovery limits, the blank will be reanalyzed along with all samples associated with that blank. If the surrogate recovery is still outside the limits, LAI will be notified immediately to discuss whether analyses may proceed.

- If quantitation limits or MS control limits cannot be met for a sample, LAI will be notified immediately to discuss the corrective action required.
- If holding times are exceeded, all positive and undetected results may need to be qualified as estimated concentrations. If holding times are grossly exceeded, LAI may determine the data to be unusable.

If analytical conditions are such that nonconformance is indicated, LAI will be notified as soon as possible so that any additional corrective actions can be taken. The laboratory project manager will then document the corrective action by a memorandum submitted to LAI. A narrative describing the anomaly; the steps taken to identify and correct the anomaly; and any recalculation, reanalyses, or re-extractions will be submitted with the data package in the form of a cover letter.

3.6 Data Verification and Validation

All site characterization data will be verified and validated to determine whether the results are acceptable and meet the quality objectives. Prior to submitting a laboratory report, the laboratory will verify that all the data are consistent, correct, and complete, with no errors or omissions.

Validation of the data will be performed by LAI following the guidelines in the appropriate sections of the EPA Contract Laboratory Program National Functional Guidelines for Organic and Inorganic Data Review (EPA 1999, 2004) and will include evaluations of the following:

- Chain-of-custody records
- Holding times
- Laboratory method blanks
- Surrogate recoveries
- Laboratory MS/MSD
- Blank spikes/LCS
- Laboratory duplicates
- Corrective action records
- Completeness
- Overall assessment of data quality.

In the event that a portion of the data is outside the data quality objective limits or the EPA guidance (EPA 1999, 2004), or sample collection and/or documentation practices are deficient, corrective action(s) will be initiated. Corrective action will be determined by the field coordinator and LAI's QA officer in consultation with the LAI project manager and may include any of the following:

- Rejection of the data and resampling
- Qualification of the data
- Modified field and/or laboratory procedures.

Data qualification arising from data validation activities will be described in the data validation report, rather than in individual corrective action reports.

3.7 Data Management Procedures

All laboratory analytical results, including QC data, will be submitted electronically to LAI. Electronic format will include a scanned PDF of the original laboratory data package and comma-separated value (CSV) files that will be downloaded directly to an Excel® spreadsheet and/or to the project database. The laboratory data package should include a case narrative along with analytical and QC results. Following validation of the data, any qualifiers will be added to the Excel spreadsheet and project database. All survey data will be provided electronically in a format that can be downloaded into an Excel spreadsheet. All field data will be entered into an Excel spreadsheet and verified to determine all entered data are correct and without omissions and errors.

4.0 EQUIPMENT DECONTAMINATION

The decontamination procedures described below are to be used by field personnel to clean sampling and related field equipment. Deviation from these procedures will be documented in field records.

4.1 Sampling Equipment

Sampling equipment (e.g., stainless-steel bowls, stainless-steel spoons, hand-auger, etc.) will be cleaned using a three-step process, as follows:

1) Scrub surfaces of equipment that would be in contact with the sample with brushes using an Alconox solution.
2) Rinse and scrub equipment with clean tap water.
3) Rinse equipment a final time with deionized water to remove tap water impurities.

Decontamination of reusable sampling devices will occur between each sample collection.

4.2 Heavy Equipment

Excavation equipment should be “dry broomed” to remove the substantial accumulated debris on the excavation bucket between excavations.

5.0 USE OF THIS PLAN

This sampling and analysis plan has been prepared for the exclusive use of the River's Edge LLLP for specific application to the Former Monroe Auto Wrecking/River's Edge site and in conjunction with the EMMP. Reliance on this report by third parties, or others who do not have a contractual relationship with River's Edge or LAI on this project is at their sole risk. Further, the reuse of information, conclusions, and recommendations provided herein for extensions of the project or for any other project, without review and authorization by LAI, shall be at the user's sole risk. LAI warrants that within the limitations of scope, schedule, and budget, our services have been provided in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions as this project. We make no other warranty, either express or implied.

6.0 REFERENCES

EPA. 1999. USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review. EPA 540/R-99/008. US Environmental Protection Agency. October.

EPA. 2004. Final: USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review. US Environmental Protection Agency. October.

LAI. 2018. Draft Excavated Materials Management Plan, Former Monroe Auto Wrecking/River's Edge Site, Monroe, Washington. Landau Associates, Inc. October 18.

(Draft) Phase I Environmental Site Assessment

(excluding appendices)

Draft
Phase I Environmental Site Assessment
Monroe-Woods Creek Site D
Snohomish County, Washington

April 20, 2017

Prepared for

Snohomish Public Utility District

LANDAU ASSOCIATES

130 2nd Avenue South
Edmonds, WA 98020
(425) 778-0907

Draft Phase I Environmental Site Assessment
Monroe-Woods Creek Site D
Snohomish County, Washington

This document was prepared by, or under the direct supervision of, the technical professionals noted below.

Document prepared by: _____ Amy Maule
Project Scientist

Document reviewed by: _____ Kathryn Hartley
Quality Reviewer

Date: April 20, 2017
Project No.: 0302014.010.011
File path: P:\302\014\WIP\Site D\Ph I ESA sig page.docx
Project Coordinator: Juliann Cooley

LANDAU ASSOCIATES

This page intentionally left blank.

TABLE OF CONTENTS

FIGURES

APPENDICES

LIST OF ABBREVIATIONS AND ACRONYMS

AAI ..... all appropriate inquiry
ALLSITES ..... Ecology's Facility/Site Identification System
AST ..... aboveground storage tank
ASTM ..... ASTM International
bgs ..... below ground surface
CERCLA ..... Comprehensive Environmental Response, Compensation, and Liability Act
CSCSL ..... Ecology's Confirmed and Suspected Contaminated Site List
ECHO ..... Enforcement & Compliance History Information Database
Ecology ..... Washington State Department of Ecology
EDR ..... Environmental Data Resources Inc.
EDR Hist Auto ..... EDR Historic Gasoline Stations Database
EPA ..... US Environmental Protection Agency
ESA ..... environmental site assessment
Finance Assurance ..... Ecology's Financial Assurance Information Listing Database
FINDS ..... Facility Index System/Facility Registry System Database
ft ..... foot/feet
HSL ..... Hazardous Sites List
ICR ..... Independent Cleanup Report
LAI ..... Landau Associates, Inc.
LUST ..... Leaking Underground Storage Tank
MANIFEST ..... Ecology's Hazardous Waste Manifest Data Database
MTCA ..... Model Toxics Control Act
NFA ..... No Further Action
NLR ..... no longer regulated
NonGen ..... Non-Generator of Hazardous Waste
PAH ..... polycyclic aromatic hydrocarbon
PCB ..... polychlorinated biphenyl
RCRA ..... Resource Conservation and Recovery Act
RI/FS ..... remedial investigation/feasibility study
sf ..... square foot
TPH ..... total petroleum hydrocarbon
TPH-D ..... diesel-range total petroleum hydrocarbon
TPH-G ..... gasoline-range total petroleum hydrocarbon
TPH-O ..... oil-range total petroleum hydrocarbon
UST ..... underground storage tank
VCP ..... Ecology's Voluntary Cleanup Program Database

This page intentionally left blank.

1.0 INTRODUCTION

At the request of Snohomish County Public Utility District (District), Landau Associates, Inc. (LAI) conducted a Phase I environmental site assessment (ESA) of the following property (subject property; Figures 1 and 2).

Property name:	Monroe-Woods Creek Site D
Property parcel number(s) and address:	The subject property consists of Snohomish County parcel numbers 27070600300500, 27070600303300, 27070600300700, 27070600300600, 27070600302300, and 00465000001100, located south of Simons Road and East Fremont Street, and northwest of Woods Creek in Monroe, Washington. Based on the Snohomish County Assessor's website (Snohomish County 2017), there are no addresses associated with the subject property; however, the address 426 Fremont Street has been used in previous reports associated with the property (Sections 6.1 and 7.0).
Legal description (or other physical property description):	The legal descriptions of the subject property parcels are as follows: 27070600300500 - Section 06 Township 27 Range 07 Quarter SW BEG SW COR BLK 9 TYE CITY TH S 50FT ALG E LN OF ANN ST THE 160FT TH S 310FT TO ELY EXT OF N MGN OF FREMONT ST TH E ALG SD EXT OF N MGN OF FREMONT ST TOCTR OF WOODS CR TH NLY ALG SD CR CTR TO N LN GOVT LOT 8 TH WLY 843FT M/L TO POB EXC NLY 50FT THOF DEEDED TO TOWN OF MONROE LESS BEG SE CORLOT 9 BLK 1 HANIMAN'S FIRST ADD TO MONROE TH E 570FT TO TPB TH N 60FT TO 50FT ESE OF CITY MONROE TH ELY 320FT FOLG SD ESE TO W BK WOODS CR TH SWLY FOLG SD BK WOODS CR TAP SET 100FT S & 300FT E OF TPB TH W 300FT TH N 100FT TO TPB PER BLA REC UNDER AF NO.8802250257 & LESS ADD'L R/W TO CITY OF MONROE PER WD REC AF NO 9006130180 TGW ALL TH PTN GOVT LOT 6 DAF COM SW COR BLK 9 MAP OF TYE CITY TH S ALG E LN OF ANN ST 50FT TH E 160FT TH S 200FT TO TPB SD PT ALSO BEING SE COR OF TR OF LAND CONVYD BY SNO CO AUD FILE NO. 8605160302 TH CONT S ALG THE SLY EXTOF E LN SD CONVYD TR 110FT TO ELY EXT OFN LN OF FREMONT ST TH W ALG SD EXT OF FREMONT ST TO E LN OFANN ST TH NLY ALG E LN OF ANN ST 110FT M/L TAP WH IS ALSO THE SW COR OF TH TR CONVYD BY SNO CO AUD FILE NO. 8605160302 TH ELY ALG S LN SD TR TO THE TPB 27070600303300 - SEC 06 TWP 27 RGE 07ALL TH PTN GOVT LOTS 6 & 8 DAF COM INT W MGN ANN ST EXT S WITH S MGN FREMONT ST (60FT R/W) TH ELY ALG S MGN FREMONT ST 60FT TO TPB TH S80*29 00E 127.9FT TH S 150FT M/L TO NLYLN SKYKO RIV TH ELY ALG SD RIV LN TO C/LWOODS CR TH NELY ALG SD CR C/L TO ELY EXT OF N MGN FREMONT ST TH WLY ALG SD ELY EXT OF N MGN TAP N OF TPB TH S TOTPB 27070600300700 - SEC 06 TWP 27 RGE 07RT-13B-) FR INT S BDY FREMONT AVE WITH E BDY ANN ST RUN S80*29 00E 127.9FT TH S 150.2FT TH S86*06 00W 126.4FT TH N 180FT POB 27070600300600 - SEC 06 TWP 27 RGE 07RT-13A-) FR INT S BDY FREMONT AVE WITH W BDY ANN ST RUN E 30FT TPB TH E 30FT THS TO MEA LN SKYK RIV TH DOWN STREAM TO PT DUE S OF TPB TH N TO TPB 27070600302300 - Section 06 Township 27 Range 07 Quarter SW - ALL TH PTN GOVT LOT 6 SD SEC 6 DAF BEG INT S BDY OF FREEMONT AVE WITH W BDY ANN ST EXT SLY TH E 30FT TH S TO N MGN SKYKO RIV TH DOWN STREAM TO PT DUE S OF POB TH N ALG E LN LOT 11 PLAT OF HARRIMANS 2ND ADD TO POB EXC N 4FT THOF TO CITY OF MON FOR R/W BY SWD REC UND AFN 201303210541 00465000001100 - Section 06 Township 27 Range 07 Quarter SW HARRIMANS 2ND ADD TO MON BLK 000 D-00 - LOT 11 SD PLAT EXC N 4FT TO CITY OF MON FOR R/W BY SWD REC UND AFN 201303210541

The purpose of this Phase I ESA was to assess and document *recognized environmental conditions, historical recognized environmental conditions,* and *controlled recognized environmental conditions* at the subject property that may pose a potential liability to an owner of the property. We understand that the District has requested this Phase I ESA as part of its pre-acquisition due diligence.

Recognized environmental conditions are defined as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property due to any release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment. The term includes hazardous substances or petroleum products, even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a threat to human health or to the environment and that generally would not be the subject of an enforcement action if brought to the attention of the appropriate government agencies.

A *historical recognized environmental condition* is defined as a past release of any hazardous substances or petroleum products that has occurred in connection with a property that has been addressed to the satisfaction of the applicable regulatory authority or has met unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls.

A *controlled recognized environmental condition* is defined as a *recognized environmental condition* resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.

This assessment also identified, as appropriate, potential environmental concerns, which are conditions that do not meet the definition of *a recognized environmental condition,* but warrant recognition by the user of this report.

This Phase I ESA was conducted by the following professionals:

Project Professionals	
Data Collection , review, and reporting:	Amy Maule, Project Scientist
Site reconnaissance:	Cody Johnson, Senior Engineer (Environmental Professional)
Senior professional and report reviewer:	Kathryn Hartley, Associate (Environmental Professional)

2.0 SCOPE OF SERVICES

The scope of services performed, as established in our scope of work dated July 5, 2016, consisted of a Phase I ESA that included a review of the history of the subject property, a review of agency information, and a site reconnaissance to visually observe current land use activities and environmental conditions.

LAI conducted this Phase I ESA in accordance with the guidelines of ASTM International (ASTM) as identified in its *Standard Practice for Environmental Site Assessment Process, E 1527-13.* This standard, while subject to change (as are all ASTM standards), is recognized as meeting the due diligence provisions of the federal statute (Comprehensive Environmental Response, Compensation, and Liability Act [CERCLA]; 42 USC 9601[35][B]) and the Washington State Department of Ecology's (Ecology's) Model Toxics Control Act (MTCA; Revised Code of Washington 70.105D.040) at the time this report was prepared. ASTM E 1527 13 satisfies the elements of the US Environmental Protection Agency's (EPA's) all appropriate inquiry (AAI) rule, which establishes requirements that purchasers must meet to limit their environmental liability under CERCLA and qualify for liability protections, including the "Innocent Purchaser," "Bona Fide Prospective Purchaser," and "Contiguous Property Owner" liability defenses that are provided by CERCLA.

Elements not included in ASTM E 1527-13 (e.g., identification, sampling, and analysis of asbestos, radon, lead paint, and lead in drinking water and/or wetlands; regulatory compliance; cultural and historic resources; indoor air quality and vapor intrusion, including the potential presence of mold or other biological contaminants; industrial hygiene; health and safety; ecological resources; and endangered species) were also not included in our scope of services.

The Phase I ESA process is not a means of "finding everything there is to know about a property." Rather, it is an effort to evaluate the environmental liabilities associated with a property based on reasonably available documentation (both oral and written) within the budget, schedule, and project-specific limitations, all in accordance with the EPA's AAI rule. Authorization to proceed with these services was provided by the District on July 11, 2016.

2.1 Limitations and Exceptions

The following summarizes exceptions, limitations, and restrictions to the scope of services.

Exceptions to, or deletions from, the above-referenced scope of services:	None.
Weather-related property restrictions:	None.
Property/facility access restrictions:	None.

Data gaps identified during this Phase I ESA are discussed in Section 8.1.

3.0 SITE DESCRIPTION AND SETTING

The subject property is located in the eastern portion of Monroe, Washington, on the north side of Woods Creek. The area to the north and west of the subject property consists of commercial and light industrial properties. The area to the east and south of the subject property, across Woods Creek, is primarily undeveloped park land (Figure 1). The northern and eastern portions of the subject property are located south of Simons Road and east of South Ann Street. The southern and western portions of the property are located south of East Fremont Street. Woods Creek flows to the southwest along the southeastern boundary of the subject property. BNSF railroad tracks run northwest to southeast approximately 230 feet (ft) north of the subject property. State Route 2 (SR-2) runs northwest to southeast approximately 600 ft north of the subject property. Woods Creek flows into the Skykomish River, which flows to the southwest, approximately 1000 ft south of the subject property (Figures 1 and 2).

3.1 Subject Property Description

The subject property is characterized by the following features:

Property description (acreage, structures, roads, and other improvements):	The subject property totals 9.64 acres and includes the following parcels: 27070600300500 – 6.96 acres, containing four permanent structures, several shipping containers or portable structures, and associated gravel-covered access roads and parking areas. The parcel includes a triangular area of wooded land on the east side of Simons Road. 27070600303300 – 1 acre, containing one structure and associated gravel-covered access roads and parking areas. 27070600300700 – 0.48 acre, containing a portion of one structure, which extends into the parcel to the west, and associated gravel-covered access roads and parking areas. 27070600300600 – 0.12 acre, containing a portion of one structure, which extends into the parcel to the east, and associated gravel-covered access roads and parking areas. 27070600302300 – 0.12 acre, containing a driveway and uncovered storage. 00465000001100 – 0.96 acre, containing one structure with associated gravel-covered access roads and parking areas.
Property access:	The subject property is accessible from Simons Road to the north, South Ann Street to the west, and East Fremont Street to the northwest.
Estimated percentage of property covered by buildings and/or pavement:	The subject property is approximately 75 percent covered with structures, gravel roads and parking area. The southeastern portion of the property bordering Woods Creek is covered by vegetation and trees, and sparse vegetation is present around structures.
Property operations:	The subject property is currently used to store vehicles, machinery, and other equipment by the owner, Lauren Wibbleman.
Type of sewage disposal system provider:	The subject property is served by the City of Monroe.

Potable water source/provider:	The subject property is served by the City of Monroe.
Electric utility:	The subject property is served by Snohomish County Public Utility District Number 1.
Natural gas utility:	The subject property is not currently connected to natural gas services. Properties in the vicinity of the subject property are served by Puget Sound Energy.
Stormwater management facilities:	Stormwater infiltrates into vegetated portions of the subject property or flows across the graveled portions of the property toward Woods Creek. A storm drain catch basin inlet was observed approximately 15 ft south of Building D (Figure 3). Storm drains were not observed in the surrounding roadways.

The subject property and properties in the vicinity of the subject property are shown on Figures 2 and 3. Selected site photographs are provided in Appendix A.

3.2 Adjacent Properties

The subject property is located adjacent to the following properties.

North:	To the north, the east side of the subject property is bordered by Simons Road followed by industrial property containing bulk fuel aboveground storage tanks (ASTs) and a vacant lot. A residence is located on a parcel adjacent to the northeast of the subject property. The west side of the subject property is bordered to the north by East Fremont Street followed by an automobile wrecking yard and residences.
South and Southeast:	To the south and southeast, the subject property is bordered by Woods Creek followed by undeveloped forested land that is part of Buck Island Park.
West:	To the west, the northeastern portion of the subject property is bordered by residences, Big C Recycling, and South Ann Street. The southwestern portion of the subject property is bordered by residences and a salon.

3.3 Site Geology and Hydrogeology

The subject property topography, geology, hydrogeology, and surface water are described below.

Topography:	The subject property and surrounding area to the south, east, and west are fairly flat. The southeast side of the subject property slopes downhill toward Woods Creek. Land slopes steeply uphill beginning approximately 1/2 mile north of the subject property.
Geology:	The Puget Sound region is underlain by Quaternary sediments deposited by numerous glacial episodes, the most recent of which is termed Vashon Stade of the Fraser Glaciation. Deposition occurred during a number of glacial advances and retreats. The last cycle of glacial advance and retreat resulted in the present-day topographic expression of the area, many of the near-surface deposits, and existing subsurface conditions. The glacial sediments are made up of interlayered and sequential deposits of glaciomarine drift, glacial recessional outwash, and glacial till. The glacial till has been over consolidated due to the weight of the overriding ice sheets. These glacial sediments are overlain with more recent deposits locally consisting of beach sands and gravels; alluvial silt, sands, and gravels; and/or lake clays, silts, and peat that were deposited following the glacial retreats (Booth et al. 2004).

	Based on the Environmental Data Resources Inc. (EDR) Radius Map for the subject property (Appendix B), the soil in the upland portions of the subject property is Sultan silt loam. The hydrologic group classification of Sultan indicates that this soil type is characterized by slow infiltration rates, layers impeding downward movement of water, and moderately fine or fine textures and is moderately well drained. Soil along Woods Creek is mapped as Pilchuck loamy sand. The hydrologic group classification of Pilchuck indicates that this soil type is characterized by high infiltration rates, deep, well drained to excessively drained sands and gravels. A previous subsurface investigation conducted on the subject property reported encountering artificial fill consisting of slightly silty, gravelly sand and sandy gravel from the surface to between 2 and 5 ft below ground surface (bgs); followed by medium dense to very dense, brown, slightly silty, sandy to very sandy gravel with cobbles to 25 to 30 ft bgs; followed by very stiff to hard, gray, slightly gravelly, slightly sandy silt, to 26 to 34 ft bgs (Hart Crowser 1990b).
Hydrogeology:	Surface water and shallow groundwater at the subject property are anticipated to flow primarily to the south and southeast toward Woods Creek; however, specific site topography observed during the site reconnaissance is described in Section 9.1.1. Based on previous investigations on the subject property, groundwater was encountered at depth ranging from 20 to 26 ft bgs. Groundwater flow was to the south and southwest, toward and parallel to Woods Creek (Farallon 2000a).
Floodplain and Surface Water Features:	Based on EDR's Radius Map (Appendix B), the southeastern portion of the subject property is located within a 100-year flood zone, as defined by the Federal Emergency Management Agency.

4.0 HISTORICAL INFORMATION

Many sources were reviewed to develop the history of the subject and adjacent properties to assess the potential for site contamination. These resources included the following:

- Aerial photographs (EDR 1941, 1948, 1952, 1954, 1968, 1974, 1979, 1983, 1990, 2005, 2006, 2009, 2011; Google Earth 2002, 2016)
- Topographic maps (EDR 1921, 1923, 1953, 1956, 1968, 1973, 1993, 2014)
- City directories (EDR 1982, 1987, 1992, 1995, 1999, 2003, 2008, 2013)
- Sanborn fire insurance maps (EDR 1905, 1908, 1913, 1942).

Copies of the EDR historical aerial photographs, topographic maps, city directory listings, and Sanborn maps are provided in Appendices C, D, E, and F, respectively.

LAI reviewed the historical aerial photographs, topographic maps, and city directories for the years listed above. City directory listings are described where significant findings were present or where they correspond with information from other historical documents. Historically and/or environmentally significant findings from the maps, photographs, and city directory listings are summarized below.

Year	Aerial Photograph	Topographic Map	Sanborn Map	City Directory	Subject Property	Adjacent Properties
1905-1923		X	X		Monroe Mill Company's Shingle Mill is shown on the subject property on the 1905 Sanborn map. A railroad track is shown running north and south across the subject property. The southern portion of the eastern three parcels are shown as developed with at least 15 structures, including two steam dry kilns, shingle sheds, packing, filing, blacksmith shop, buggy shed, engine room, an electric light plant and a city pump station. A feature labeled "bolt elev" is shown extending from a packing and sawing building to Woods Creek. A feature labeled "refuse conveyor" is shown extending northeast from a mill building. A note indicates that fuel refuse is conveyed to the boiler room by automatic feed. The western three parcels are shown as developed with a residence, storage shed, and three additional small structures. In the 1908 Sanborn map, a structure in the northwestern corner of the subject property is labeled "Vac. Warehouse." A residence is shown on the east side of the property near Woods Creek. A structure in the center of the subject	In the 1905 Sanborn map, the properties to the west of the subject property are shown as developed with residences. Properties to the north are not shown. Woods Creek is shown as flowing into the Skykomish River immediately south-southeast of the subject property rather than the current confluence, approximately 1/2 mile south of the subject property. A feature interpreted to be the railroad tracks is visible in the northwest corner of the 1905 Sanborn map and is labeled as such on the 1908 Sanborn map. In the 1913 Sanborn map, residences on the west side of South Ann Street and north of East Fremont Street are no longer shown. A railroad track is shown extending south through that property, across Fremont Street and onto the western portion of the subject property. On the 1921 and 1923 topographic maps, the railroad is shown to the north of the subject property. Woods Creek is shown running along the southeastern boundary of the

Year	Aerial Photograph	Topographic Map	Sanborn Map	City Directory	Subject Property	Adjacent Properties
					property is labeled "Monroe Light & Water Co." A bridge and pipe are shown extending across Woods Creek from the pump station. Monroe Steam Laundry is shown to the south of Ann Street, followed by a small structure labeled P.C.C.M. Co, near the creek. A circle labeled "Gas Mach" is shown to the east of Monroe Steam and Laundry. On the 1913 Sanborn map, a small structure east of the intersection Fremont and Ann appears enlarged and labeled as a garage. A railroad track is shown extending across the western portion of the subject property from the north, paralleling South Ann Street and crossing what was then the Skykomish River. On the 1921 and 1923 topographic maps, structures are shown on the subject property. South Ann Street and East Fremont Street appear to cross the subject property and end at Woods Creek; however, resolution is poor.	subject property, and flows into a bend of the Skykomish River near the southwestern boundary of the subject property.
1941-1956	X	X	X		In the 1941 aerial photograph, the northern portion of the subject property appears cleared of trees but free of structures. The southwestern portion of the subject property appears farmed. The central portion of the subject property appears developed with access roads and structures. The southeastern portion of the subject property, along Woods Creek, appears densely vegetated. On the 1942 Sanborn map, fewer structures are shown on the subject property and the property is labeled as the "J Simon Shingle Co." The Single Mill structures are shown, with "bolt piles" to the west. The Steam Dry Kilns are shown as not in use. A note indicates that the plant operates intermittently, power is from steam, fuel is "waste," lights are electric and water is supplied by the city. Monroe Steam Laundry is still shown south of South Ann Street, and appears to have been expanded. A fuel bin is shown on the east side of the building. No changes are visible in the 1948 aerial photograph; resolution is poor. In the 1952 aerial photograph, areas of the subject property appear to have been redeveloped with multiple structures, access roads, features interpreted to be vehicles, and disturbed ground. No significant changes are	In the 1941 aerial photograph, Simons Road, Ann Street, and East Fremont Street are visible. Structures are visible to the northwest and west of the subject property. On the 1942 Sanborn map, the property located west of Ann Street and north of Fremont street is labeled "The Texas Co" and "Shell Oil Co. Inc." and contains structures labeled as oil warehouses, gasoline tanks, and pump houses. This Bulk Fuel Storage Area is discussed in Section 7.0. A property labeled "Standard Oil Company's Oil Station" is located to the north of the subject property, across the Simons Road, which is not shown on the 1942 Sanborn map. Steel oil and gasoline tanks are shown on the oil station property. In the 1948 aerial photograph, a feature interpreted to be a structure is visible to the east of the northern portion of the subject property; resolution is poor. In the 1952 aerial photograph, additional structures are visible to the east of the northern portion of the subject property. SR-2 is visible to the north of the subject property, and structures and areas of disturbed ground are visible between Simons Road and SR-2. No

Year	Aerial Photograph	Topographic Map	Sanborn Map	City Directory	Subject Property	Adjacent Properties
					visible in the 1954 aerial photograph; resolution is poor. On the 1953 and 1956 topographic maps, the subject property is shaded to indicate development but individual structures are not shown.	significant changes are visible in the 1954 aerial photograph. On the 1953 and 1956 topographic maps, the previously illustrated northward-bend in the Skykomish River is no longer shown; Woods Creek is shown flowing into the Skykomish River approximately 1/2 mile to the southwest, in its current course. Two railroad spurs are shown extending south from the main line, one to the west of South Ann Street, ending north of East Fremont Street, one running following the course of the current Railroad Avenue and ending north of Simons Road. A branch of the main railroad is shown running south-southeast from east of the subject property, crossing Woods Creek and the Skykomish River. Simons Road is shown to the north of the subject property. The area between Simons Road and the railroad tracks is shown as developed. SR-2 is shown in its current location, and structures are shown to the north and south of SR-2.

Year	Aerial Photograph	Topographic Map	Sanborn Map	City Directory	Subject Property	Adjacent Properties
1968-1995	X	X		X	No significant changes are visible on the 1968, 1974, or 1979 aerial photographs. In the 1982 and 1987 city directories, Monroe Auto Salvage is listed on East Fremont Street (no address). On the 1983 aerial photograph, a new structure is visible south of the intersection of South Ann Street and East Fremont Street. The subject property appears more densely covered with features interpreted to be vehicles and other unidentified materials. In the 1990 aerial photograph, additional vehicles and material storage piles are present across the subject property.	In the 1968 aerial photograph and 1968 topographic map, additional structures are visible between the railroad tracks and SR-2, to the north of the subject property. A bridge is visible crossing Woods Creek to the east of the subject property, interpreted to be the southeast end of Simons Road. No significant changes are visible in the 1974, 1979, or 1983 aerial photographs. In the 1990, the properties to the west of the northern portion of the subject property (on the east and west sides of South Ann Street) appear covered in features interpreted to be vehicles and debris. Features interpreted to be aboveground bulk oil tanks are visible on the property to the northwest of the subject property, across Simons Road. The 1992 city directory lists Ace Towing and Monroe Towing at 117 South Ann Street (northwest of the subject property). The 1995 city directory lists Bills Midnight Towing & Repair at 117 South Ann Street and Skips Monroe Towing at 146 Ann Street (west of the northern portion of the subject property). The 1999 city directory lists Big C Recycling at 135 South Ann Street, Skykomish Automotive Machine at 150 South Ann Street (both west of the subject property) and Patrick's Towing at 415 East Fremont Street (west of the southern portion of the subject property). Towing and recycling companies are listed at 135 South Ann Street and 415 East Fremont Street through 2013.

Year	Aerial Photograph	Topographic Map	Sanborn Map	City Directory	Subject Property	Adjacent Properties
2002-2016	X	X		X	In the 2002 aerial photograph, the trees along the southeast border of the subject property are leafless and the course of Woods Creek is clearly visible along the southeastern side of the subject property. The property appears to have been cleared of most of the vehicles and debris; however, structures and several piles of unknown materials are visible in the center of the property. In the 2005 aerial photograph, the subject property again appears free of most of the vehicles and debris. The southwestern and central portion of the properties appear lightly vegetated. Groups of structures are visible on the northern portion of the property and to the south and east of the intersection of South Ann Street and East Fremont Street. A driveway or trail is visible running north and southwest across the property. In the 2006 aerial photograph, large features interpreted to be truck trailers or shipping containers are visible on the northern portion of the subject property. In the 2008 and 2013 city directories, L. Wibbelman Co. Inc. (Lauren Wibbleman is the current owner of the subject property) is listed at 147 South Ann Street. In the 2009 and 2011 aerial photographs, additional vehicles are visible in the northern and southwestern portions of the subject property. No significant changes to the subject property are shown on the 1968 through 2014 topographic maps. In the 2016 aerial photograph, the subject property looks entirely cleared of vegetation and the areas around the buildings appear to be covered in gravel, with the exception of the heavily vegetated area along Woods Creek. Vehicles are visible on gravel-covered portions of the subject property.	No significant changes are visible in the 2002 aerial photograph. The 2003 city directory lists Midnight Towing & Automotive at 500 Simons Road (northwest of the subject property). Big John's Rain Gutters is listed at 135 South Ann Street. In the 2005 aerial photograph, the properties to the west of the subject property appear to have been cleared of some of the debris; however, in the 2006 through 2016 aerial photographs they appear again covered with vehicles and other materials. Aboveground bulk oil storage tanks are still visible on the property to the northwest of the subject property, across Simons Road. No significant changes are shown on the 1973 through 2014 topographic maps.

Based on the historical records reviewed, the subject property was developed with a shingle mill, electric light plant, and pump station as early as 1905, with a shingle or lumber mill operating into the 1990s. The railroad was present to the north of the subject property and a railroad spur crossed the

subject property as early as 1905. The subject property was historically operated as a steam laundry and auto salvage yard. The southwestern portion of the subject property appears to have been farmed.

The properties to the west of the subject property were developed with residences as early as 1905, but residences to the west of South Ann Street were replaced with a railroad track as early as 1913 and oil facilities by 1942. The railroad track extended across the subject property and what was then the Skykomish River. The property to the northwest of the subject property, across Simons Road, was developed with a Standard Oil station as early as 1942, and currently contains aboveground bulk oil tanks.

Woods Creek flowed into the Skykomish River south of the western portion of the subject property until a meander of the Skykomish was cut off between 1942 and 1953, changing the creek and river to their current courses.

Based on aerial photographs and city directories, the subject property and adjacent properties to the northwest and west have operated as automobile towing, salvage, and recycling facilities from as early as 1982 through the present.

Recognized environmental conditions were identified for the subject property based on the historical site operations. Operations associated with mills, railroad tracks, automobile towing, wrecking, and recycling are potential sources of soil contamination, agricultural use can be associated with pesticide, herbicide, fertilizer and fuel use, and underground or aboveground heating oil tanks could be associated with existing and former structures. Known contamination associated with previous site operations is discussed in Sections 6.0 and 7.0.

5.0 USER-PROVIDED INFORMATION

LAI requested that Jeff Colon, of the District's Substation Engineering department, provide any information based on actual or specialized knowledge or experience regarding the subject property that is or could be relevant to *recognized environmental conditions*. Mr. Colon responded that the District has no knowledge of conditions at the subject property.

User-Provided Information		
	User Response	**User Comments**
Is the *user* aware of any environmental cleanup liens against the subject property that are filed or recorded under federal, tribal, state, or local law?	Yes ☐ No ☒	
Is the *user* aware of any Activity and Use Limitations, such as engineering controls, land use restrictions, or institutional controls, that are in place at the subject property and/or have been filed or recorded in a registry under federal, tribal, state, or local law?	Yes ☐ No ☒	
Does the *user* have any specialized knowledge or experience related to the subject property or nearby properties?	Yes ☐ No ☒	
Does the purchase price being paid for the subject property reasonably reflect the fair market value of the subject property?	Yes ☐ No ☐	The User has no knowledge of conditions at the subject property.
Does the *user* know the past uses of the subject property?	Yes ☐ No ☒	
Does the *user* know of specific chemicals that are present or once were present at the subject property?	Yes ☐ No ☒	
Does the *user* know of spills or other chemical releases that have taken place at the subject property?	Yes ☐ No ☒	
Does the *user* know of any environmental cleanups that have taken place at the subject property?	Yes ☐ No ☒	
Based on the *user's* knowledge and experience related to the subject property, are there any obvious indicators that point to the presence or likely presence of contamination at the subject property?	Yes ☐ No ☐	The User has no knowledge of conditions at the subject property.

6.0 AGENCY RECORDS REVIEW

LAI reviewed information from publicly available environmental databases. LAI also contacted Snohomish County, the Snohomish Health District, and the City of Monroe regarding potential environmental concerns at the subject property. Information collected during the review of agency records is summarized below.

6.1 Environmental Database Report

EDR was subcontracted to conduct a search (as prescribed by ASTM) of publicly available federal, state, and local agency environmental databases. A regulatory agency database report was obtained from EDR, a complete copy of which is provided in Appendix B.

The search focused on sites with known and potential environmental concerns that may present a threat to human health and the environment. EDR conducted its search of listed information using the location of the subject property and identified sites listed in the databases that are located within a 1-mile radius of the subject property's boundaries. Sites identified in the EDR report were evaluated as described in the database assessment criteria included in Appendix B.

Due to the nature of contaminant migration in groundwater, only sites located within 1/4 mile and hydraulically upgradient of the subject property or sites higher than or at equal elevation as the subject property that have activities that may affect groundwater were assumed to have the potential to environmentally impact the subject property. As noted in Section 2.3, surface water in the vicinity of the subject water is anticipated to be to the southeast, toward Woods Creek. Local shallow groundwater flow at the subject property was reported to be primarily to the south and southwest; therefore, sites located to the north, northeast, and northwest are considered potentially upgradient.

6.1.1 Subject Property

The subject property is listed in the following databases:

- **ALLSITES:** Ecology's Facility/Site Identification System
- **CSCSL:** Ecology's Confirmed and Suspected Contaminated Sites List
- **CSCSL NFA:** Ecology's Confirmed and Suspected Contaminated Sites List No Further Action database
- **FINDS:** EPA's Facility Index System/Facility Registry System
- **HSL:** Ecology's Hazardous Sites List
- **ICR:** Ecology's Independent Cleanup Reports database
- **RCRA NonGen/NLR:** EPA's Resource Conservation and Recovery Act Non-Generator of Hazardous Waste/No Longer Regulated database
- **UST:** Ecology's Underground Storage Tank database

- **VCP:** Ecology's Voluntary Cleanup Program sites database.

Regulatory Databases	Facility Name, Address	Potential Environmental Concern (Y/N)	*Recognized Environmental Condition* (Y/N)
ALLSITES, VCP, CSCSL NFA, FINDS, ICR, UST, RCRA NONGEN/NLR, ECHO	Monroe Auto Salvage Monroe Auto Salvage Parcel 6 426 Fremont Street	Y	Y
The ALLSITES database listings indicate interactions with Ecology's Toxics Cleanup Program, related to a Voluntary Cleanup Site (1999 and 2001), State Cleanup Site (1991) and an UST (2001), as well as an interaction with Ecology's Hazardous Waste program as a hazardous waste generator (1997). The VCP and CSCSL NFA database listings indicate that the site received NFA determinations in 2001 and 2003. As discussed in Section 7.0, the NFA determinations were later rescinded by Ecology and residual contamination is present at concentrations greater than the cleanup levels. The ICR database listing indicates that this site submitted interim cleanup reports for spills of metals, polychlorinated biphenyls (PCBs) and petroleum products to soil in 1996, and petroleum products to groundwater in 1996 and 1997. The UST database listing indicates that three USTs on the site are listed as having an unknown status as of 2001. The RCRA NONGEN/NLR database listing indicates that the site was listed as a non-generator of hazardous waste in 1998. The FINDS and ECHO database listings do not provide additional information about releases at the site. These listings indicate the presence of *recognized environmental conditions* at the subject property and are discussed further in Section 7.0.			
Regulatory Databases	**Facility Name, Address**	**Potential Environmental Concern (Y/N)**	***Recognized Environmental Condition* (Y/N)**
ALLSITES, CSCSL, HSL	Parcel 6 Jensen East Fremont Street & South Ann Street	Y	Y
In some reports, Parcel 6 refers to the "Bulk Fuel Storage Area" west of South Ann Street; however, as discussed in Section 7.0, investigation and remediation of the subject property and the Bulk Fuel Storage area have been reported concurrently and this facility name is sometimes used to refer to all or a portion of the subject property. The ALLSITES database listing indicates interactions with Ecology's Toxics program. The CSSCSL and HSL database listings indicate that this site is on Ecology's Hazardous Sites List and awaiting cleanup of non-halogenated solvents and unspecified petroleum products confirmed above cleanup levels in groundwater and soil, metal priority pollutants confirmed above cleanup levels in soil, and base/neutral/acid organics suspected in soil. Given that contamination is present at concentrations greater than the cleanup levels, these listings are considered *recognized environmental conditions* for the subject property. The listings are discussed further in Section 7.0.			

6.1.2 Nearby Properties

Nearby properties were listed in the following databases, in addition to those listed above for the subject property:

- **FINDS:** EPA's Facility Index Tracking System/Facility Registry System
- **LUST:** Ecology's Leaking Underground Storage Tank database
- **ECHO:** EPA's Enforcement & Compliance History Information database.
- **Financial Assurance:** Ecology's Financial Assurance Information Listing database.

- **MANIFEST:** Ecology's Hazardous Waste Manifest Data database
- **EDR Hist Auto:** EDR's Historic Gasoline Stations database

The table below presents a summary of the database findings for the nearby properties:

Regulatory Database	Facility Name, Address	Direction and Distance from Property (ft)	Potential Environmental Concern (Y/N)	*Recognized Environmental Condition* (Y/N)
ALLSITES, UST	Monroe Lumber Company 544 Simon Road	Adjacent, NE	N	N
The ALLSITES database listing indicates interactions with Ecology's Toxics program related to a UST in 1998. The UST database listing indicates that a UST with a capacity between 111 and 1,100 gallons was placed in "removed" status in 1996. Records do not indicate that a release was reported. Due to the absence of a reported release, this site is not considered a *recognized environmental condition* or potential environmental concern for the subject property.				
Regulatory Database	**Facility Name, Address**	**Direction and Distance from Property (ft)**	**Potential Environmental Concern (Y/N)**	***Recognized Environmental Condition* (Y/N)**
EDR Hist Auto, FINDS, ALLSITES, CSCSL, HSL, RCRA NONGEN/NLR, ECHO, ICR	Shultz Distributing Inc. Railroad 523 Railroad Avenue	230 ft, NNW	Y	N
The EDR Hist Auto database listing indicates that Nelsons Petroleum operated a gasoline station at this location in 2007, 2008, and 2009. The ALLSITES database listing indicates interactions with Ecology's Toxics program related to an independent cleanup and Ecology's Hazardous Waste program as a hazardous waste generator. CSCSL, ICR and HSL database listings indicate that this site is awaiting cleanup for non-halogenated solvents and unspecified petroleum products confirmed above cleanup levels in groundwater and soils and suspected in surface water. A Site Hazard Assessment was completed by Ecology in 1996 and the site was ranked 5 (lowest relative risk to human health and the environment). The RCRA NONGEN/NLR database listing indicates that this site was listed as a non-generator of hazardous waste in 2008. The FINDS and ECHO database listings do not provide additional information about releases at the site. The presence of non-halogenated solvents above cleanup levels in groundwater upgradient of the subject property is considered a potential environmental concern for the subject property.				
Regulatory Database	**Facility Name, Address**	**Direction and Distance from Property (ft)**	**Potential Environmental Concern (Y/N)**	***Recognized Environmental Condition* (Y/N)**
RCRA NonGen/NLR, EDR Hist Auto, FINDS, ALLSITES, CSCSL, MANIFEST, LUST, UST, FINANCIAL ASSURANCE, ECHO, ICR	D Eaton Inc Chevron #9 6391 512 East Main Street	400 ft, N	Y	N
The ALLSITES database listing indicates interactions with Ecology's Hazardous Waste program related to hazardous waste generation, management and reporting, Ecology's Toxics program related to an UST, voluntary cleanup site, and LUST facility.				

The CSCSL database listing indicates a status of "cleanup started" for benzene, non-halogenated solvents, diesel, and gasoline confirmed above cleanup levels in groundwater and soil.

The LUST database listing indicates that the site was the location of monitoring related to a LUST as of 2004.

The UST database listing indicates that three USTs were listed as removed in 1996, and two USTs are listed as operational on the site.

The ICR database listing indicates that this site submitted interim cleanup reports to Ecology related to petroleum product contamination in groundwater and soil between 1993 and 2000.

The EDR Hist Auto database listing indicates that this site was a Chevron station in 1999, 2000, 2001, 2002, 2010, and 2011.

The RCRA NonGen/NLR database listing indicates that this site was listed as a non-generator of hazardous waste in 2012 after previously being listed as a conditionally exempt small quantity generator of hazardous waste.

The MANIFEST and FINANCIAL ASSURANCE database listings are related to the site's former hazardous waste generator status and do not indicate a release.

The FINDS and ECHO database listings do not provide additional information about releases at the site.

Due to the presence of benzene, non-halogenated solvents, diesel, and gasoline in groundwater upgradient of the subject property, this site is considered a potential environmental concern for the subject property.

The following sites are located west and northwest of the subject property (potentially upgradient) and are listed as recyclers or historical automobile repair shops. No releases have been reported for these sites:

- Big C Recycling, 135 Ann Street. Recycling facility, adjacent to the subject property to the west and northwest.
- Midnight Towing and Automotive, 500 Simons Road. Historical automobile repair facility, adjacent to the subject property to the west and northwest.
- Skykomish Automotive Machine, 150 South Ann Street. Historical automobile repair facility, adjacent to the subject property (following South Ann Street) to the west and northwest.
- Candidos Auto Repair Inc, 450 Railroad Avenue. Historic automobile repair facility, approximately 240 feet west-northwest of the subject property.

The EDR database records indicated *recognized environmental conditions* and potential environmental concerns for the subject property. Known contamination associated with releases at the subject property are considered *recognized environmental conditions* and are discussed further in Section 7.0. Contamination to soil and groundwater upgradient of the subject property is a potential environmental concern due to potential for migration of contaminants onto the subject property.

6.2 Snohomish County Recording Division

LAI searched the Snohomish County Recorded Documents website (Snohomish County 2017) for records pertaining to the subject property. Records included deeds of trust; notices of sales; quit claim deeds; and a lien by the City of Monroe, related to ownership of the subject property by Ms. Rita Jensen (owner of the subject property and the Monroe Auto Salvage business prior to the Wibblemans' purchase in 2004); purchase of the subject property by Mr. Lloyd Wibbleman in 2004; and transfer to Mr. Lauren Wibbleman (the current owner) in 2014.

No *recognized environmental conditions* or potential environmental concerns were indicated by the records searched.

6.3 Snohomish County Fire Protection District #7

A request for public records was submitted to the Snohomish County Fire Protection District #7 for records pertaining to storage tanks, emergency responses, fires, and hazardous material incidents at the subject property. Mindy Leber, Administrative Secretary of the Fire District provided the following records in an email to Amy Maule of Landau Associates dated March 30, 2017 for adjacent properties:

- February 1, 2007. An outside rubbish, trash, or waste fire was reported at 150 South Ann Street, across South Ann Street to the west of the subject property. The record does not indicate the involvement of hazardous materials in the fire.
- December 13, 2012. A gas smell was reported at 404 East Fremont Street, immediately adjacent to the west of the southwest portion of the subject property. Responders did not notice the smell or identify any potential cause of the reported smell.
- January 22, 2013. An outdoor scrap and rubbish fire was reported at 135 South Ann Street, immediately adjacent to the northwest of the subject property. The record does not indicate the involvement of hazardous materials in the fire.

The Fire District reported that records are accessed by address only. The subject property parcels do not currently have assigned street addresses and no records were found for addresses believed to be associated with the subject property. No *recognized environmental conditions* or potential environmental concerns were indicated by the records searched.

6.4 City of Monroe Community Development and Public Works Departments

A request for public records was submitted to the City of Monroe's Community Development and Public Works Departments. Mark Neumann, Civil Designer of the Public Works Department provided the following records in an email to Amy Maule of Landau Associates dated March 30, 2017 for adjacent properties:

- Renovation and addition plan for Kenneth & Company Salon at 404 East Fremont Street, immediately adjacent to the west of the southwestern portion of the subject property. The plan indicates that something labeled "exist. stor." was removed from the center of the north side of the lot, near an existing structure. Mr. Neumann of the Public Works Department was unable to rule out the possibility that this note referred to a fuel storage tank.

The Community Development Department reported that no responsive records were found for the subject property or adjacent properties.

No *recognized environmental conditions* or potential environmental concerns were indicated by the records searched.

6.5 Snohomish Health District

A request was submitted to the Snohomish Health District for records pertaining to the subject and adjacent properties. The Snohomish Health District provided the following records to LAI by mail on April 17, 2017:

- Site visit records, complaint records, inspection forms, photographs and correspondence between Snohomish Health District or Ecology and Big C Recycling Company, located at 135 South Ann Street, adjacent to the west of the northern portion of the subject property.
- Dates on the documents range between 2005 and 2016.
- Documents indicate that items stored on the Big C Recycling property included the following:
  - Car batteries, air conditioners, washers and dryers, refrigerators, televisions, 5-gallon containers of oil, lawn mowers, tires, crushed and stacked aluminum cans, gas-powered yard equipment, propane tanks (no size indicated), automobile parts, improperly stored household hazardous waste, electronic waste, and paint and stain cans.
  - The site was not licensed to accept refrigerators; however, refrigerators were observed on the site as recently as September 2016.

No records were received for the subject property. An adjacent solid waste recycling facility with a history of improperly stored and unpermitted items is considered a potential environmental concern for the subject property.

6.6 Washington State Department of Ecology

A request was submitted to Ecology for records pertaining to the subject property. Ecology identified records responsive to the request. Records pertaining to previous investigations at the subject property were also obtained from the Ecology website. Ecology records regarding previous investigation and remediation at the subject property are discussed in Section 7.0. *Recognized environmental conditions* were identified for the subject property based on the records reviewed.

7.0 PREVIOUS REPORTS

LAI acquired the following reports from Ecology, related to previously completed investigations and remediation on the subject property:

- March 16, 1990. Preliminary Environmental Assessment, Glacier Park Company Property, Property sequence No. 114 (Hart Crowser 1990a).
- December 13, 1990. Subsurface Exploration and Testing, Glacier Park Company, Property Sequence No. 114 (Hart Crowser 1990b).
- July 26, 1996. Monroe Auto Salvage Site Investigation (EMCON 1996b).
- September 30, 1996. Monroe Auto Salvage Groundwater Monitoring – August 1996 Sampling (EMCON 1996a).
- October 25, 1996. Monroe Auto Salvage Site Investigation – Additional PCB Sampling (EMCON 1996c).
- April 22, 1997. Independent Remedial Action, Monroe Auto Salvage, 426 Fremont Street (Glacier 1997)
- January 23, 1998. Site Hazard Assessment, Parcel 6, Jensen Property (Snohomish Health District 1998).
- February 2, 2000. Remedial Investigation and Feasibility Study, Former Salvage Yard and Former Lumber Mill Subareas (East Subareas), Monroe Auto Salvage Site, 426 Fremont Street (Farallon 2000a).
- November 9, 2000. Final Cleanup Action Summary Report, Monroe Auto Salvage, [426] Fremont Street (Farallon 2000b).
- June 2, 2008. Rescission of previously issued No Further Action determination, Monroe Auto Salvage. Dale Myers, Ecology Toxics Cleanup Program Site Manager (Ecology 2008).

Based on the documents reviewed, LAI has developed the following timeline of previous operations and remediation work at the subject property. Current operations are discussed in Section 8.0.

7.1 Operations

The Monroe Auto Salvage site, as identified in Ecology records, was historically made up of three areas, the “Former Lumber Mill Subarea” the “Former Salvage Yard Subarea” and the “Former Bulk Fuel Storage Subarea” (Figure 4). The first two subareas make up the current subject property. The Former Bulk Fuel Storage Subarea is located across Ann Street to the west of the subject property. A brief timeline of historical operations at the subject property is as follows:

- 1905 through early 1940s – Monroe Mill Company, followed by J. Simon Shingle Company operated a shingle mill on the southern portion of the subject property.
- Mid-1940s through early 1990s – Lumber mill operations moved to the northeastern portion of the subject property, referred to as the Former Lumber Mill Subarea.

- Mid-1950s through 1998 – Monroe Auto Salvage used the western and southern portions of the subject property (Former Salvage Yard Subarea) for dismantling and storing wrecked automobiles and recycling scrap metal. Monroe Auto Salvage expanded their operations to the Former Lumber Mill Subarea after the lumber mill ceased operations in the early 1990s. Salvage operations ceased in 1998 and the area was cleared of automobiles and debris between 1998 and 2000 (Farallon 2000a).
- In 2004, the family of the current owner, Mr. Lauren Wibbelman, purchased the subject property from Ms. Rita Jensen. As discussed further in Section 8, the subject property has been used for storage since that time.

7.2 Investigation and Remediation

In 1990, Hart Crowser conducted two investigations on behalf of Glacier Park Company to evaluate whether historical practices associated with the mill and auto salvage yard had resulted in contamination. The Hart Crowser investigations included the portion of the subject property south of Fremont Street at Ann Street (referred to as "Parcel 3"). The investigations also included the area west of the subject property, referred to as the former bulk fuel area (also called "Parcel 6"[1]), and three additional areas to the north, also not included in the current subject property.

Subsurface investigations on Parcel 3 (the southwest portion of the subject property) detected petroleum hydrocarbons (TPH), total lead, and total zinc at concentrations above MTCA soil cleanup levels (primarily used motor oil containing elevated levels of polycyclic aromatic hydrocarbons (PAHs), total lead, and total zinc). The contamination covered a surface area of approximately 4,200 square feet (sf) to depths of 1 to 2 ft bgs. Groundwater sampling and analysis was also conducted at Parcel 3. TPH, volatile or semivolatile organics, pesticides, and PCBs were not detected in groundwater. Low levels of dissolved cadmium, chromium and zinc were detected in groundwater samples collected from Parcel 3 (Hart Crowser 1990b).

In July 1996, EMCON completed a site investigation of the subject property on behalf of Rita Jensen (owner of the subject property at that time), including sampling and analysis of soil samples for PAHs, PCBs and metals, a groundwater evaluation, and an assessment of stormwater drainage pathways. The findings of this investigation included the following (EMCON 1996b):

- Most runoff generated on the site infiltrates into the ground at naturally occurring low areas. Discharge to Woods Creek does occur in the southern and southwestern portions of the site.
- PCBs were detected below the MTCA Method C (industrial) cleanup levels in soil around a power pole, east of the electrical building in the northeastern portion of the subject property (Figure 4). PCBs were not detected in groundwater samples or sediment samples near Woods Creek.

[1] In some reports, Parcel 6 refers to the former Bulk Fuel Storage area; however, investigation and remediation of the subject property and the Bulk Fuel Storage area have been reported concurrently and this facility name is sometimes used to refer to all or a portion of the subject property.

- Cadmium, chromium and lead concentrations were detected in soil samples below MTCA Method C (cadmium and chromium) or MTCA Method A (lead) industrial cleanup levels. Total metals detected in groundwater were reported to be below MTCA Method C cleanup levels, with the exception of total lead in one sample. Total petroleum hydrocarbons (TPH) were detected in several locations, identified as diesel (TPH-D) and oil (TPH-O) at concentrations greater than MTCA Method A cleanup levels.
- Groundwater sampling results indicated limited transport of TPH contaminants to groundwater. Additional groundwater monitoring was recommended.

In September 1996, EMCON reported the results of additional groundwater monitoring conducted at the subject property. Groundwater was sampled from 4 wells on the property and analyzed for TPH as gasoline (TPH-G), TPH-D, TPH-O, total and dissolved cadmium, chromium and lead, PCBs, and total suspended solids (TSS). TPH-D was detected in one location, at a concentration below MTCA Method A cleanup level. Total and dissolved chromium were detected at concentrations less than the MTCA Method C cleanup level. Total lead was detected in concentrations greater than the MTCA Method A cleanup level in one location; however dissolved lead was not detected in the sample (EMCON 1996a).

In October 1996, EMCON reported the results of additional soil sampling that was completed to determine whether PCB contamination extended beneath the concrete foundation of the electrical building in the northeast portion of the subject property (see Figure 4), to determine the extent of PCBs at previously sampled locations, and to characterize dark-stained soils at the southeast corner of the electrical building. Results of analysis indicated that PCB contamination did not extend beneath the concrete foundation; however, analysis of the dark-stained soils indicated PCB concentrations significantly greater than the MTCA Method C cleanup level (EMCON 1996c).

In April 1997, Glacier Environmental Services, Inc. (Glacier) reported the results of an independent remedial action at the subject property, involving the removal and disposal of approximately 18 tons of PCB-impacted soil. Soil was removed from the south and east sides of the electrical building in the northeastern portion of the subject property, and from an area to the north of the electrical building (Figure 4). Glacier concluded that all soil containing PCBs above the MTCA Method A cleanup level was removed from the areas indicated (Glacier 1997).

In February 2000, Farallon conducted a remedial investigation and feasibility study (RI/FS) for the "East Subareas" (the Former Lumber Mill Subarea and Former Salvage Yard Subarea) of Monroe Auto Salvage, the current subject property. Farallon listed the following potential contaminants of concern, based on previous investigations and operations at the subject property and adjacent properties:

- TPH-G, TPH-D, and TPH-O
- Benzene, ethylbenzene, toluene, and xulenes (BTEX)
- PCBs
- PAHs
- Volatile organic compounds (VOCs)

- Lead, cadmium, and chromium

Farallon excavated 22 test pits (to an average depth of 15 ft bgs), drilled 3 soil borings (greater than 15 ft bgs), and installed 2 groundwater monitoring wells (screened between 15-30 ft bgs and 15-25 ft bgs). Groundwater samples were also collected from existing monitoring wells installed during previous investigations by EMCON, Hart Crowser, and Farallon.

Based on soil and groundwater sampling and analysis, Farallon identified TPH-G, TPH-D, TPH-O, lead, and PCBs in soil at concentrations above MTCA Method A cleanup levels for unrestricted land uses. No analytes were identified above MTCA Method A cleanup levels in groundwater. The RI/FS recommended a cleanup alternative involving excavation and disposal of contaminated soil (Farallon 2000a).

In November 2000, Farallon reported the results of the cleanup action. Approximately 2,140 tons of soil was excavated and disposed of offsite. The locations of excavations are shown on Figure 4. Analytical results of confirmation soil samples taken from the sidewalls and floor of the excavations indicated that contamination remained above the MTCA Method B cleanup level for TPH (calculated for the site using the Interim TPH Guidelines based on residential use), and above the MTCA Method A cleanup level for cadmium and lead in two areas in the southwestern portion of the subject property (EX-1 and EX-2), shown on Figure 4. Further excavation of EX-1 to the east was not completed to avoid damage to an existing structure. Excavation in EX-2 was not extended to the south to avoid damage to large trees and vegetation. Confirmation sampling from EX-3 through EX-7 indicated that all contaminated soil was excavated from those areas. Farallon requested a NFA determination from Ecology based on the results of the cleanup (Farallon 2000b).

Ecology granted a NFA determination for the subject property; however, in 2008 Ecology re-evaluated the site and determined that the remedial action was not sufficient to meet MTCA requirements. The previously issued NFA determination was rescinded due to the presence of TPH, cadmium, and lead in the locations shown on Figure 4. The site was placed back on Ecology's HSL (Ecology 2008).

Kathryn Hartley, Associate of LAI contacted Dale Myers, the listed Ecology Toxics Cleanup Program Site Manager for the subject property on March 1, 2017. Mr. Myers was unable to provide additional information about the NFA letter or rescission due to the length of time since his involvement with the site.

8.0 INTERVIEWS

LAI interviewed Mr. Lauren Wibbleman, the current owner of the subject property, during the site reconnaissance visits on February 17 and April 5, 2017. Mr. Wibbleman reported the following information:

- Mr. Wibbleman has owned the subject property since 2014 when he inherited from his father, who bought it sometime around 2002.
- The north end of the site was formerly used as a Weyerhaeuser-run sawmill from the late 1940s until the early 1990s. He was unsure of the dates, but reported that the south end of the site had been used as an auto towing/wrecking yard.
- He has not added any buildings to the property. He has made the following improvements:
  - Cleaned up the site by removing debris;
  - Regraded the site using imported pit run gravel;
  - Removed a 500-gallon AST formerly located to the west of Building D as well as approximately 20 cubic yards of impacted soil from beneath the AST that he reports was disposed of by Alia Construction.
- He indicated that there is currently an AST on-site near Building C used to store waste oil.
- The property adjacent to the west of the subject property, northwest of the intersection of East Fremont Street and South Ann Street, which the storefront sign indicates is a towing company, has lost its license and is currently used to store auction items purchased by the property owner.
- He indicated that a previous Phase I ESA was prepared for the site, but he could not find a copy of the report.
- There are no permits, licenses, or registrations that apply to the subject property.
- The subject property received an NFA letter from Ecology in 2001 that was rescinded in 2008 because soil containing contamination exceeding the MTCA Method A cleanup levels had been left in place following completion of the remedial excavations. Mr. Wibbleman said that he has had conversations with Ecology personnel who indicated that there are also concerns regarding metal and concrete debris in the slope down to Woods Creek at the south end of the subject property.

9.0 SITE RECONNAISSANCE

Cody Johnson of LAI conducted reconnaissance visits of the subject and adjacent properties on February 17 and April 5, 2017 to visually assess current land use activities and environmental conditions. Observations made during the reconnaissance visits are discussed below, and selected site photographs are provided in Appendix A. The objective of the site reconnaissance was to obtain information regarding potential *recognized environmental conditions* in connection with the subject property. No sampling was conducted during the site reconnaissance.

9.1 Subject Property

LAI used the following methodology to observe the subject property:

- Transected the subject property on foot
- Walked and/or visually observed the perimeter/boundaries of the subject property
- Drove and visually observed the surrounding neighborhood.

9.1.1 General Environmental Conditions

The subject property, with the exception of the portion on the east side of Simmons Road, was used as a storage yard for equipment and machinery associated with cardboard recycling, as well as a number of disused tractor-trailers and storage containers at the time of the site reconnaissance. The portion of the subject property on the east side of Simons Road was vacant and undeveloped.

A majority of the site was unpaved and covered with graded gravel, with a few paved driveways to access a loading ramp at the north end of the site, and Buildings B, C, and D (as shown on Figure 3). The site topography was generally flat with a steep slope down to Woods Creek on the south and east ends of the property. Drainage on the north and west end of the site was towards Simons Road to the north and South Ann Street to the west. Drainage on the south and east ends of the site was generally towards Woods Creek, and was aided by shallow ditches running perpendicular to the slope down to the creek. Concrete, metal, and plastic debris was observed in the slope down to Woods Creek at the south end of the property, south of Building F (discussed below).

Seven buildings were present at the site during the reconnaissance. Each building was entered during the reconnaissance. Observations recorded for each building and their immediate surroundings are provided below and relevant site features are shown on Figure 3.

Building A is an approximately 1,200 sf wood-framed office/shop building located at the west entrance to the subject property on South Ann Street. The building is currently used as office and storage space for the current property owner, Mr. Lauren Wibbleman. Mr. Wibbleman indicated that the building used electric heat. An approximately 80 ft by 80 ft fenced storage yard was located south of this building. A contractor trailer, mobile home trailer, two small storage trailers, and two metal ASTs were stored in the yard. The ASTs were both approximately 500 to 800 gallons in size. One of the

ASTs was stored on concrete blocks and appeared to be empty. The other AST was encased in a concrete containment housing with a metal roof. It was unclear if the second AST was empty. There were no obvious leaks associated with either AST.

Building B is an approximately 900 sf wood-framed garage/shed with a cement floor located at the northwest end of the site in a cluster of three buildings (Buildings B, C, and D) associated with the saw mill formerly located at the site. At the time of the site visit, Building B was being used as an auto repair garage. Several small canisters, typically less than 1 gallon in volume, of paints, primers, gear oil, hydraulic fluid, and other vehicle maintenance chemicals were stored in the building. The concrete floor was lightly stained with motor oil, but was generally in good condition. The building also contained a hydraulic auto lift that appeared to be relatively new with no subsurface components, and a small portable "glove-box" type booth for painting car parts. The building appeared to be unheated. A large air compressor was observed on a concrete pad located outside of the northeast end of the building. Oil drips were observed on the compressor and the concrete pad had some mild staining, but there were no indications of significant releases associated with the compressor. Five truck trailers/storage containers were parked outside on the east and northeast ends of the building. All but one of these were closed and inaccessible. The one open container held storage racks with tools and hardware. Two mostly empty 55-gallon motor oil drums were stored on bare ground alongside the open storage container. The drums appeared to be in relatively good condition with no leaks or signs of releases. There were no obvious signs of ground disturbance between Buildings B and C where an excavation was reportedly conducted to remove PCB-contaminated soil (Section 7.2).

Building C is an approximately 130-ft-long, 20-ft-wide wood-framed barn-like building with a cement floor. The building appeared to be unheated. Five bailing/compacting machines as well as stacks of bailed flattened cardboard boxes and miscellaneous supplies and equipment (forklifts, a riding lawn mower, rolls of plastic sheeting, etc.) were observed inside the building. A few containers of herbicides and motor oil, all less than 5 gallons in volume, were also stored in this building. The floor of the building was concrete and appeared to be in good condition with some minor oil staining. A small metal shed located outside of the northeast corner of the building was found to contain five 5-gallon buckets of hydraulic oil, and an approximately 500-gallon hydraulic oil AST that appeared to be mostly empty. The AST had no secondary containment and the concrete floor of the shed was heavily stained. Cracks at base of the shed walls were observed that would likely allow spilled product to leak out to the surrounding ground surface. However, no obvious staining was observed around the shed. Approximately 10 to 15 bailing/compacting machines were stored outside the southwest end of Building C. This equipment was stored on a cracked concrete pad under a tarp. No concrete staining was observed in this area. Piles of wood and metal debris were observed at the southeast end of this building and south of Building B.

Building D is an approximately 600 sf wood-framed shed building with a cement floor. At the time of the reconnaissance it was being used to store forklifts. Several containers of hydraulic oil, including a 55-gallon plastic drum and a 55-gallon metal drum were stored inside this building. Some of the

containers, including the tote and drum, were situated on a drum pad that provided secondary containment, while others were on the concrete floor of the building, the visible parts of which had some oil staining. A metal hydraulic lift reservoir (not connected to an operating lift) was located within a closet at the southeast end of the building. It was not clear if the reservoir contained any hydraulic fluid at the time. An empty unlabeled metal drum was observed at the exterior northwest corner of the building. A shallow (less than 12-inches-deep) ditch running north-south along the building, and a metal scale pad were also observed on the west side of the building.

Building E is an approximately 1,200 sf dilapidated wood barn with a cement floor located to the south of Building A. It was in poor condition and appeared to have suffered some burn damage. A few piles of wood and metal debris were stored in the building at the time of the reconnaissance.

Building F is an approximately 5,000 sf wood-framed L-shaped building with a cement floor. The northern portion of the building has a second story. At the time of the reconnaissance the building was used for storage and contained various tools and pieces of equipment including compactors, compressors, snowmobiles, old motors, tires, small trailers, and ladders. No chemical storage was observed in the building. Piles of wood and metal debris (old augers, fire hydrants, metal beams, etc.) were stored on the east and west sides of the building.

Building G is an approximately 600 sf wood framed metal shed building with a partial concrete floor. The building was used to store compactors, bailers, and wood debris at the time of the reconnaissance. A dilapidated bus, moving truck, tow truck, and a pile of wood debris were located on the west side of Building G**.** The area of the subject property to the west of Building G was mostly vacant with the exception of several closed roll-off boxes and storage containers located along the property boundary.

LAI made the following observations during the site reconnaissance:

Issue	Comments
Hazardous materials or petroleum products:	Several containers ranging in volume from 1-gallon to 55-gallon drums were observed in and around the various storage buildings on the site, as described above. The containers were observed to generally be in good condition.
Hazardous waste:	None observed.
Solid waste:	Piles of metal and wood debris and equipment were observed throughout the subject property.
Wells:	No wells, including the monitoring wells installed for the previous environmental investigations, were observed at the site. It appears likely that the monitoring wells were covered during site regrading.
Wastewater:	None observed.
Drains, sumps, and drywells:	None observed

Issue	Comments
Evidence of dumping or fill materials:	The site has been graded using gravel. Concrete debris was observed on the south slope down to Woods Creek. There were no indications of the remedial excavations previously conducted at the site between Buildings B and C, and near Building F.
Odors:	None observed.
Stains and/or corrosion:	Stained concrete was observed inside the buildings. The staining was observed to be minor. The cement floor of the metal shed housing an AST at the northeast end of Building C was heavily stained.
Pools of liquid:	None observed.
PCB-containing equipment:	Two pole-mounted transformers were observed near the north entrance to the site on Simons Road, and three were observed at the east end of the site near Building B. They appeared to be in good conditions with no obvious leaks. Labels indicating PCB content were not observed.
Stormwater:	Stormwater infiltrates into the unpaved surface of the subject property. Drainage on the south and east sides of the property is toward Woods Creek. Drainage on the north and west is towards is generally toward Simons Road on the north and South Ann Street on the west. A storm drain catch basin inlet was observed approximately 15 ft south of Building D as well as a shallow ditch running north-south along the west side of Building D. Shallow ditches running perpendicular to the slope down to the creek and were also observed.
Pits, ponds, or lagoons:	None observed.
Stained soil or pavement:	Minor oil staining was observed on the concrete compressor pad outside Building B.
Stressed vegetation:	None observed.
General exterior housekeeping/yardkeeping:	The subject property was cluttered with stored vehicles and equipment. Empty chemical drums were stored on bare ground in some areas.

The presence of an AST without secondary containment and with heavily stained concrete is considered a *recognized environmental condition* for the subject property.

9.1.2 *De Minimis* Conditions

ASTM defines *de minimis* conditions as those that "generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies" (i.e., minor soil staining). The stained concrete in the buildings and the storage of disused vehicles over bare ground were *de minimis* conditions observed at the subject property.

9.2 Surrounding Area

LAI observed adjacent properties from the subject property or from public rights-of-way. The following was observed adjacent to the subject property:

- **North:** The subject property is bordered by Simons Road to the north, followed by a bulk fuel terminal with three ASTs, and a fenced equipment storage yard with a cell phone tower.
- **Northeast:** The subject property is bordered by a single-family residence.

- **Northwest:** The subject property is bordered by a single-family residence and Big C Recycling.
- **South:** The subject property is bordered by Woods Creek on the south, followed by a park.
- **East:** The subject property is bordered by Woods Creek, followed by a park.
- **West:** The north end of the subject property is bordered to the west by South Ann Street, followed by a fenced storage yard that contained vehicles and storage containers at the time of the site reconnaissance. The south end of the subject property is bordered to the west by K&C Salon.

The presence of a bulk fuel storage facility adjacent to the subject property is considered a potential environmental concern for the subject property.

10.0 FINDINGS AND CONCLUSIONS

LAI conducted a Phase I ESA in conformance with the scope and limitations of ASTM E 1527-13 for Snohomish County parcel numbers 27070600300500, 27070600303300, 27070600300700, 27070600300600, 27070600302300, and 00465000001100, located south of Simons Road and Fremont Street, and northwest of Woods Creek in Monroe, WA. The subject property is 9.64 acres, contains seven structures and is currently used to store vehicles, machinery, and other equipment. The subject property was historically operated as a lumber mill and auto salvage yard.

This assessment has revealed the following *recognized environmental conditions* for the subject property:

- The southern portion of the subject property was operated as a shingle mill as early as 1905. The northern portion of the subject property was operated as a lumber mill until 1998. The southwestern portion of the subject property was operated as an automobile salvage yard beginning in the mid-1950s. After 1998 the salvage yard operated on the entire property. Subsurface contamination has been identified at the subject property as the result of historical site uses.
- Investigation and cleanup has been conducted at the subject property and the subject property was issued an NFA determination in 2001; however, in 2008 the NFA was rescinded by Ecology due to cadmium and lead and TPH remaining in the southern portion of the subject property, in EX-1 and EX-2, after the remedial excavation was completed.
- An AST with no secondary containment was observed in a shed near Building C during the site reconnaissance. The floor was observed to be heavily stained and cracks in the floor were visible. No obvious staining was observed on the exterior of the shed.
- Mr. Wibbleman reported removing a 500-gallon AST formerly located to the west of Building D, as well as approximately 20 cubic yards of impacted soil from beneath the AST. Confirmation soil samples were not collected from the excavation to confirm that all impacted soil exceeding cleanup levels was removed from the area of the former AST.

The following *historical recognized environmental conditions* were identified for the subject property

- Excavation of PCB-impacted soil from an area to the east of Building C (also referred to as the electrical building) was completed by Glacier in 1997.
- Excavation of cadmium-, lead- and TPH-impacted soil was completed by Farallon in 2000. Confirmation sampling of excavations 3 and 4, in the center of the subject property, and 5, 6 and 7, in the northern portion of the subject property, indicated that all contaminated soil was removed from those areas. A NFA letter was received in 2001, following this excavation. The NFA rescission issued in 2008 did not identify residual contamination in these areas requiring additional investigation.

No *controlled recognized environmental conditions* were identified. The following potential environmental concerns were identified for the subject property:

- A bulk fuel terminal with three ASTs is located upgradient of the subject property.
- The D Eaton Inc / Chevron #9 6391 site located approximately 400 ft north of the subject property has confirmed contamination of benzene, non-halogenated solvents, diesel and gasoline above cleanup levels in soil and groundwater.
- The Shultz Distributing Inc. Railroad site located approximately 230 ft north-northwest of the subject property has confirmed contamination of non-halogenated solvents above cleanup levels in groundwater.
- The Big C Recycling site, located adjacent to the west of the northern portion of the subject property, has received complaints and notices from the Snohomish Health District regarding storage of unpermitted material and improper storage of hazardous materials.
- Automobile repair shops, recyclers, towing yards and wrecking yards currently and have historically operated adjacent to and upgradient of the subject property.

10.1 Data Gaps

The data gaps identified during our assessment and their potential impact on our findings are as follows:

- Chain-of-Title Search. No chain-of-title was provided for the subject property. Based on available information, the subject property was developed with industrial structures as early as 1905. This data gap is not considered significant to the findings of this Phase I ESA.

11.0 OPINION

Recognized environmental conditions, *historical recognized environmental conditions,* and potential environmental concerns were identified for the subject property. LAI recommends conducting a Phase II investigation to identify potential contamination remaining in the excavation areas identified by Ecology, in the areas of historical mill features not previously investigated, and in areas of potential releases associated with current operations. Investigation of potential contamination migrating onto the subject property from offsite sources is also recommended.

12.0 USE OF THIS REPORT

This Phase I ESA was undertaken and this report prepared for the exclusive use of Snohomish County Public Utility District and their legal representatives (authorized users) for specific application to the subject property. It is intended to provide the authorized users with an understanding of the potential environmental liabilities associated with the property evaluated in this report. Reliance on this report by third parties or others who do not have a contractual relationship with LAI on this project is at the sole risk of the third parties or others.

This report is based on visual observations of the ground surface and information obtained during one visit to the subject property and is based solely on the condition of the property on that day, supplemented with information obtained by LAI and described herein. No subsurface investigations were conducted. In evaluating the site, LAI has relied in good faith on representations and information abstracted from sources noted in this report to the extent that they have not been contradicted by observations during the property reconnaissance or data obtained from other sources. Accordingly, LAI accepts no responsibility for any deficiency, misstatements, omissions, or misrepresentations in the information provided to us.

Determining whether environmental conditions defined in this report indicate the presence of contamination at levels of concern is a matter of judgment. Liabilities associated with contaminated sites are defined in part by CERCLA. The findings and conclusions of this report are based on our evaluation of information obtained and reviewed for this project and reflect our professional judgment with respect to that information.

LAI has performed the services and made the findings in accordance with generally accepted practices for Phase I ESAs in effect in Washington at the time the services were performed. The scope of services for this Phase I ESA was defined in our proposal, and unless specifically included in our scope of services and in this report, this Phase I ESA did not include services related to asbestos, radon, lead paint, lead in drinking water, wetlands, or indoor air quality issues (including the potential presence of mold or other biological contaminants).

This warranty stands in lieu of all other warranties, express or implied. While this report can be used as a guide, it is neither a rejection nor an endorsement of the property. It must also be understood that changing circumstances in the environment and use of the property can alter the conclusions and findings contained in this report.

12.1 Environmental Professional Statement

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10 of 40 Code of Federal Regulations (CFR) 312, and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed all

appropriate inquires in conformance with the standards and practices set forth in 40 CFR 312 and ASTM E 1527-13.

Qualifications of the environmental professionals responsible for the site reconnaissance and generation of this report are provided in Appendix G.

AEM/CMJ/KFH/jrc
[P:\302\014\WIP\SITE D\LAI SNOPUD_SITED PHASE I ESA_DRAFT.DOCX]

13.0 REFERENCES

Booth, D.B., K.G. Troost, J.J. Clague, and R.B. Waitt. 2004. "The Cordilleran Ice Sheet." In *The Quarternary Period in the United States*, edited by A. Gillespie, S.C. Porter, and B. Atwater, 17-43. Amsterdam, The Netherlands: Elsevier Press.

Ecology. 2008. Letter: Rescission of Previously Issued No Further Action Determination, Monroe Auto Salvage (Snohomish Tax Parcel 27070600300700). From Dale Myers, Site Manager, Toxics Cleanup Program, Washington State Department of Ecology, to Mr. Wibbelman, June 2.

EMCON. 1996a. Monroe Auto Salvage Groundwater Monitoring - August 1996 Sampling. September 30.

EMCON. 1996b. Monroe Auto Salvage Site Investigation. July 26.

EMCON. 1996c. Monroe Auto Salvage Site Investigation - Additional PCB Sampling. October 25.

Farallon. 2000a. Draft Work Plan, Remedial Investigation and Feasibility Study, Former Bulk Fuel Storage Subarea, Monroe Auto Salvage Site, 426 Fremont Street, Monroe, Washington. Farallon Consulting. October 26.

Farallon. 2000b. Final Cleanup Action Summary Report, Monroe Auto Salvage, 926 Fremont Street, Monroe, Washington. Farallon Consulting. November 9.

Glacier. 1997. Independent Remedial Action , Monroe Auto Salvage, 426 Fremont Street, Monroe, Washington. Glacier Environmental Services, Inc. April 18.

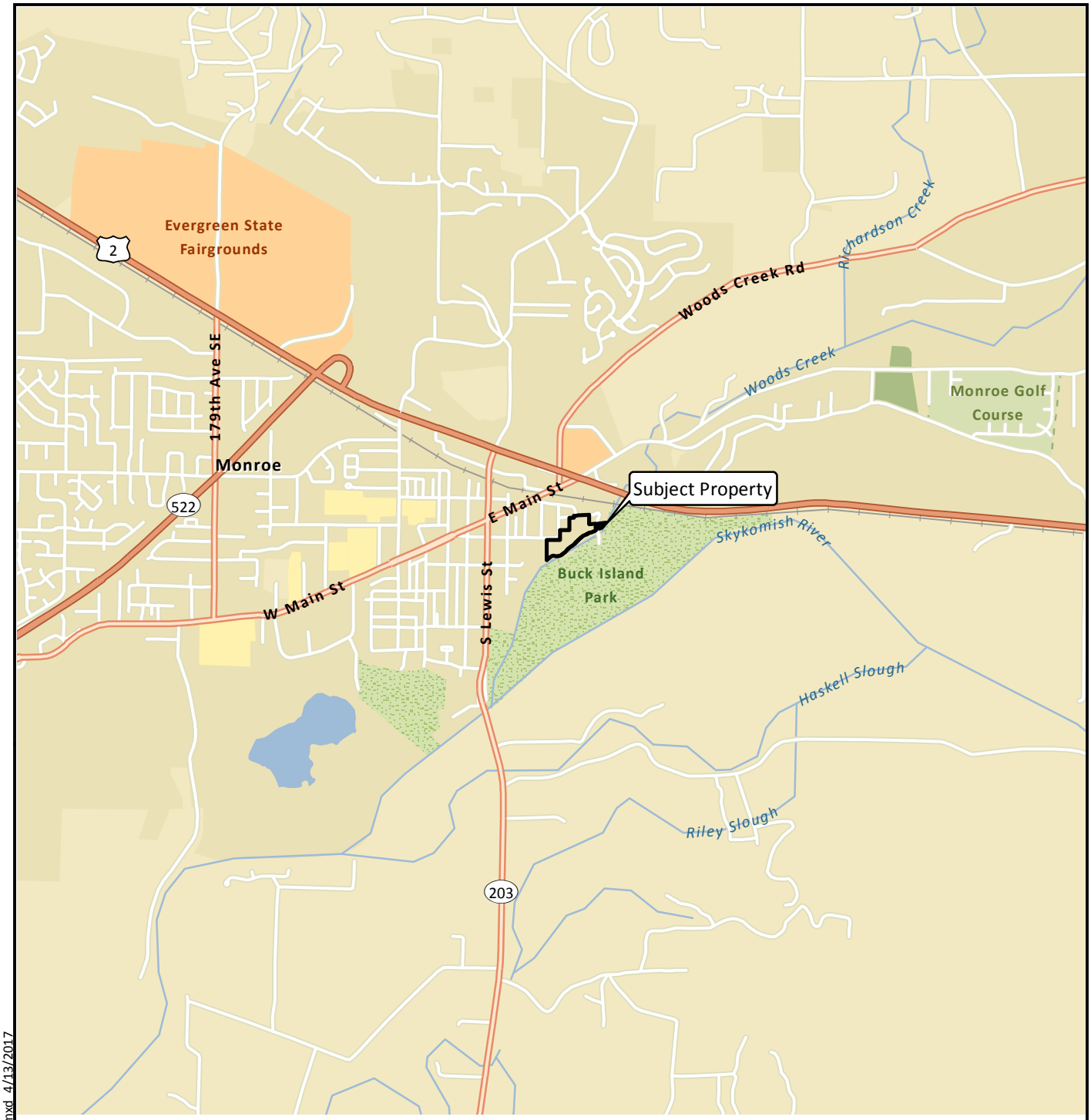
Hart Crowser. 1990a. Preliminary Environmental Assessment, Glacier Park Company Property, Property Sequence No. 114, Monroe, Washington (Minor Properties). March 16.

Hart Crowser. 1990b. Subsurface Exploration and Testing, Glacier Park Company Property, Property Sequence No. 114, Monroe, Washington. December 13.

Snohomish County. "Snohomish County, Washington Assessor." http://www.snohomishcountywa.gov/2934/Assessor.

Snohomish County. "Welcome to Snohomish County's Recorded Document Search Site." Snohomish County. http://www.snoco.org/RecordedDocuments/.

Snohomish Health District. 1998. Letter: Site Hazard Assessment of Parcel 6/Jensen Property. From RS Grary Hanada, Environmental Health Specialist, Snohomish Health District, to Reta Jensen, Monroe Auto Salvage. January 23.



N

0 0.5 1

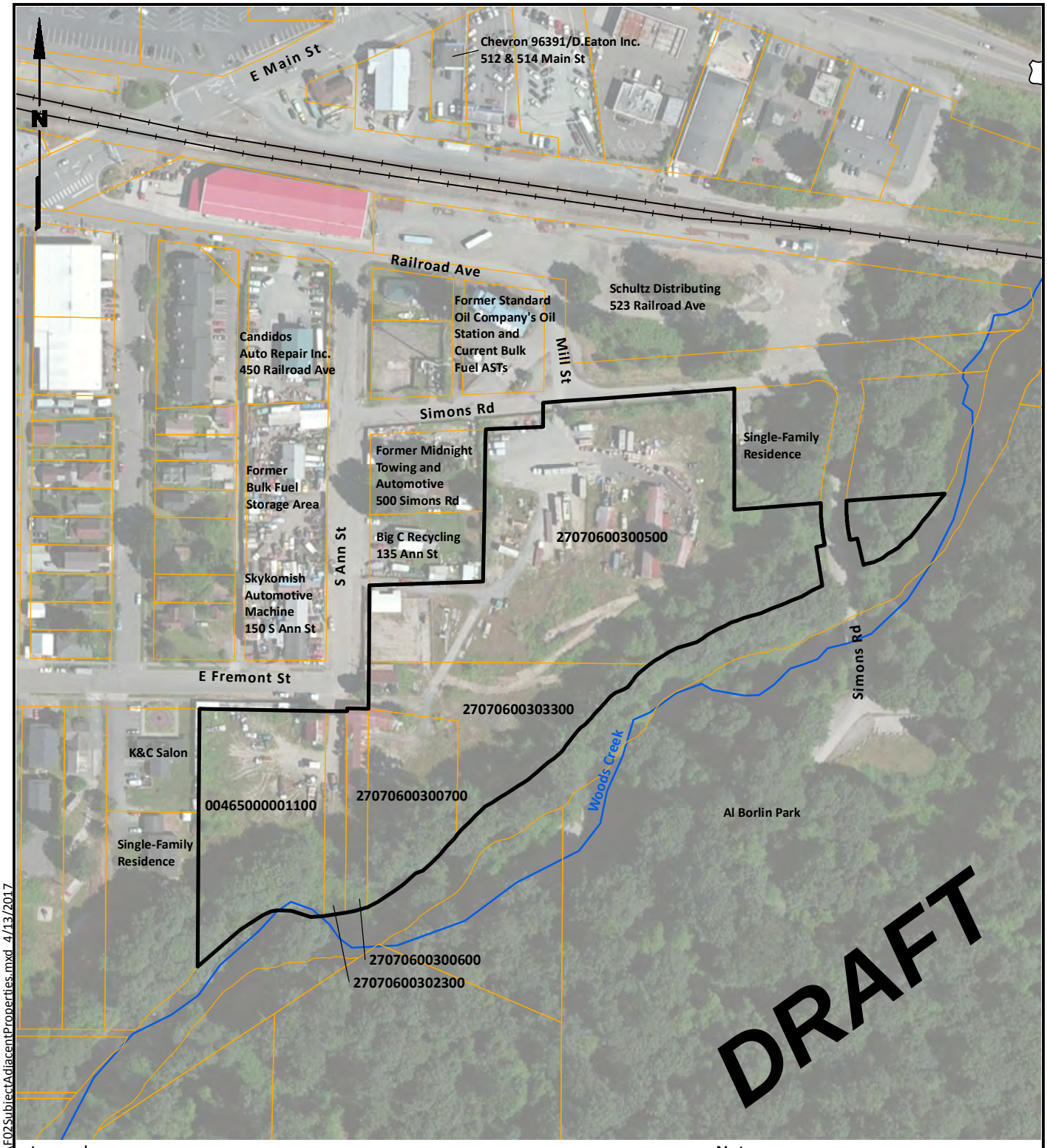
Miles

Data Source: Esri 2012

G:\Projects\302\014\010\001\Site D\FD1VicMap.mxd 4/13/2017

LANDAU ASSOCIATES

Environmental Due Diligence Monroe-Woods Creek Site D Monroe, Washington	**Vicinity Map**	Figure 1



Legend

- Subject Property
- Tax Parcels
- Woods Creek
- Railroad Tracks

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

0 200 400

Scale in Feet

Data Sources: Snohomish County GIS; Esri World Imagery.

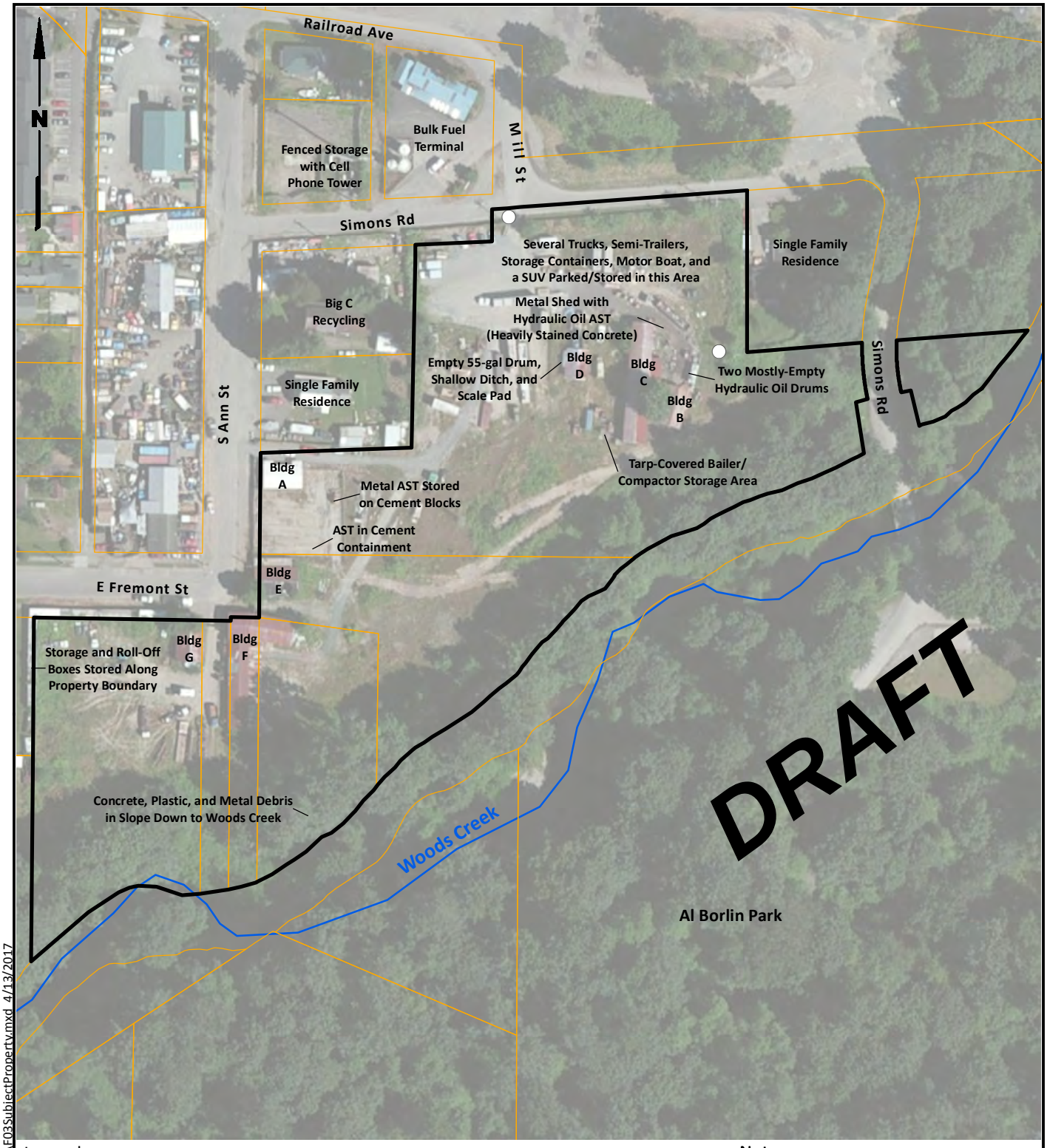
G:\Projects\302\014\010\001\Site D\F02SubjectAdiacentProperties.mxd 4/13/2017

LANDAU ASSOCIATES

Environmental Due Diligence
Monroe-Woods Creek Site D
Monroe, Washington

Subject and Adjacent Properties

Figure 2



Legend

- Pole-Mounted Transformers
- Subject Property
- Tax Parcels
- Railroad Tracks
- Woods Creek

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

0 150 300

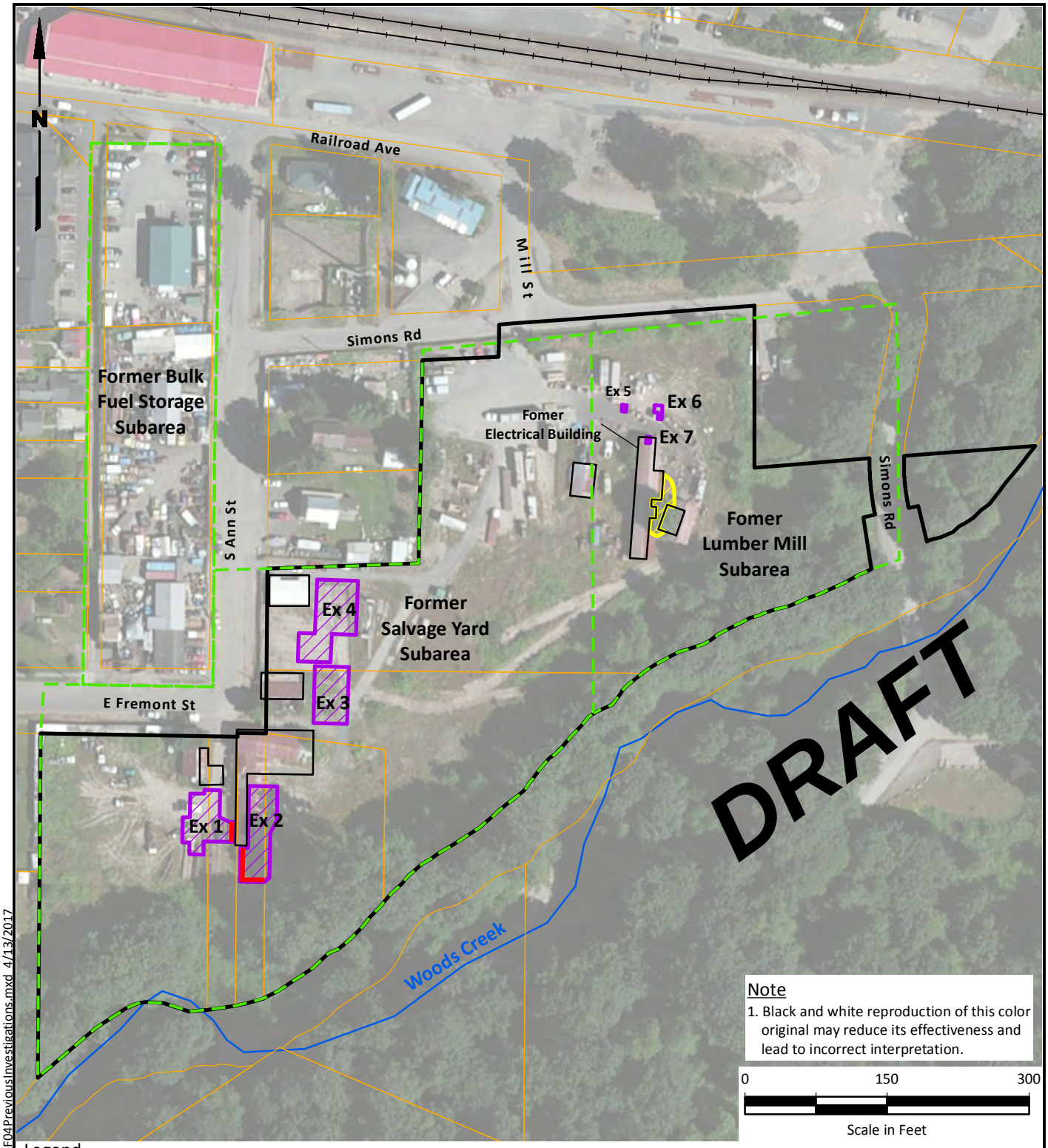
Scale in Feet

Data Sources: Farallon 2000; Glacier 1997; Snohomish County GIS; Esri World Imagery.

G:\Projects\302\014\010\001\Site D\F03SubjectProperty.mxd 4/13/2017

LANDAU ASSOCIATES

Environmental Due Diligence Monroe-Woods Creek Site D Monroe, Washington	**Subject Property**	Figure 3



Legend

- Subject Property
- Tax Parcels
- Railroad Tracks
- Woods Creek
- Approximate Building Location
- Approximate Subarea Boundaries
- Excavation Areas of Cadmium, Lead, and TPH Impacted Soil (Farallon, 2000)
- Excavation Area of PCB Impacted Soil (Glacier, 1997)
- Total Cadmium, Total Lead, or Total Petroleum Concentration above MTCA Method A or B Cleanup Level After Excavation (Farallon, 2000)

Data Sources: Farallon 2000; Glacier 1997; Snohomish County GIS; Esri World Imagery.

G:\Projects\302\014\010\001\Site D\F04PreviousInvestigations.mxd 4/13/2017

LANDAU ASSOCIATES

Environmental Due Diligence Monroe-Woods Creek Site D Monroe, Washington	**Previous Investigation and Remediation**	Figure 4

(Draft) Phase II Environmental Site Assessment

(excluding appendices)

Draft
Phase II Environmental Site Assessment
Monroe-Woods Creek Site D Ring Bus
Monroe, Washington

July 31, 2017

Prepared for

Snohomish County Public Utility District No. 1

LANDAU ASSOCIATES

130 2nd Avenue South
Edmonds, WA 98020
(425) 778-0907

Draft
Phase II Environmental Site Assessment
Monroe-Woods Creek Site D Ring Bus
Monroe, Washington

This document was prepared by, or under the direct supervision of, the technical professionals noted below.

Document prepared by: _____ Cody Johnson
Senior Environmental Engineer

Document reviewed by: _____ Brian Butler
Project Manager

Date: July 31, 2017
Project No.: 0302014.
File path: Document1
Project Coordinator: Juliann Cooley

LANDAU ASSOCIATES

This page intentionally left blank.

EXECUTIVE SUMMARY

Landau Associates, Inc. (LAI) was authorized by the Snohomish County Public Utilities District No. 1 (District) to support due diligence activities by agreement CW 2225768 for acquisition of a property for a future Ring Bus facility in the Woods Creek area of Monroe, Washington. One of the properties, "Site D" is located at 147 South Ann Street in Monroe (Figure 1).

Site History, Previous Cleanup Actions, and Reports. The District authorized due diligence studies, including a Phase I Environmental Site Assessment (ESA), of the six adjacent parcels owned by Mr. Lauren Wibbelman (Figure 2). The Draft Phase I ESA (LAI 2017a) identified a number of *recognized environmental conditions* associated with past industrial activities that have occurred on the site since the early 1900s. These activities include forest products mills, a water power generation operation, and automobile salvaging. Additionally, petroleum hydrocarbon releases were reported from facilities located near the subject property and an operating bulk fuel terminal, located adjacent to the north of the subject property. A cleanup was conducted in 2000 (Farallon 2000) to address releases associated with past activities at the subject property. The results of the cleanup were initially awarded a no further action (NFA) determination letter by the Washington State Department of Ecology (Ecology 2001). Ecology (Ecology 2008) later rescinded the NFA citing exceedances of Model Toxics Control Act (MTCA) cleanup regulation (Washington Administrative Code [WAC] Chapter 173-340) levels for some excavation confirmation samples in the southwest portion of the subject property.

Phase II ESA and Testing. The District authorized a Phase II ESA, which was conducted in general accordance with ASTM International (ASTM) *Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process E1903 - 11* and the District's site-specific directives regarding sample analysis. The purpose of the Phase II ESA was to screen for the presence of soil and groundwater contamination associated with the *recognized environmental conditions* identified in the Phase I ESA, and to offer considerations for development. The largest of the six parcels, tax parcel number 27070600300500, is the focus of the Phase II ESA (Figure 3). The decision to focus efforts on parcel 27070600300500, (referred to in the rest of this report as "the Site"), was made due to:

- Its size (approximately 6 acres - it is large enough to support ring bus development);
- The results of confirmation samples (all below cleanup levels) from the earlier independent soil cleanup (Farallon 2000);
- No concerns about the parcel were raised in the Ecology NFA Rescission letter; and
- The other smaller parcels each had documented environmental liability concerns[1] and/or buried utilities, which would restrict development options and increase costs.

[1] Telephone conversation regarding Site D NFA Rescission letter between Kathryn Hartley, LAI, and Dale Myers, Site Manager, Washington State Department of Ecology, Toxics Cleanup Program on March 1, 2017.

The focused Phase II ESA investigation included both soil and groundwater samples for specific targeted reasons. Sampling locations were selected to confirm cleanup sample results reported for the locations of earlier cleanup activities on the parcel (Farallon 2000) and to update groundwater results because of the adjacent, operating offsite petroleum facility located hydraulically upgradient to the north of the Site. MTCA Method A cleanup levels used in the earlier independent cleanup report and MTCA Method B cleanup levels were used as screening levels for the results.

The Phase II ESA testing results indicated that:

- Previous (Farallon 2000) independent remedial excavations on tax parcel number 27070600300500 appear to have successfully met MTCA Method A cleanup levels for the contaminants of concern at the time of excavation. Polynuclear aromatic hydrocarbons (PAHs), which were not analyzed for during the previous investigations, were detected in one shallow (i.e., less than 2 feet [ft] below ground surface [bgs]) Phase II ESA sample at concentrations exceeding MTCA Methods A and B cleanup levels.
- No polychlorinated biphenyls (PCBs) were detected in the shallow composite soil sample from the areas of the earlier PCB cleanup (EMCON 1996c). PAHs, which were not analyzed for during the previous investigations, were detected in the shallow soil below the PCB cleanup area and near previous remedial excavation area EX-7 at concentrations exceeding MTCA Method A and B cleanup levels.
- The groundwater sample from existing well MW-4 showed no detection of hazardous substances above cleanup levels. Based on earlier investigation results, well MW-4 is likely to be downgradient (in the direction of groundwater flow) from the existing operating aboveground storage tanks (ASTs) north of Simons Road. The groundwater grab sample collected from the geotechnical boring was also tested for the same suite of constituents. Results showed that only low levels of metals (including an exceedance of the MTCA Method A cleanup level for arsenic) and two semi-volatile organic compounds, bis[2-ethylhexyl]-phthalate and naphthalene, (including an exceedance of the MTCA Method B cleanup level for bis[2-ethylhexyl]phthalate) were detected in the two groundwater samples collected from the site. The detections of metals in the grab sample were attributed to high turbidity (suspended solids) in the sample, and the bis[2-ethylhexyl]phthalate from new plastics in the temporary well casing or equipment used for groundwater sampling, and therefore, may not be representative of groundwater.

In summary, some hazardous substances were detected in shallow soil at the site at concentrations that exceed MTCA Method A, and/or Method B (direct contact unrestricted use), cleanup levels. The groundwater samples from the existing well MW-4 shows no detections that exceed cleanup screening levels, and no indications of groundwater contamination from the offsite fuel operations. The groundwater grab sample contained arsenic and bis[2-ethylhexyl]phthalate at concentrations exceeding cleanup levels, but these detections should be qualified based on the sampling methodology and are likely not representative of the Site groundwater conditions.

Considerations for Property Development and Environmental Liability Risk Management.

- **Cleanup.** If the large tax parcel number 27070600300500 is purchased for Ring Bus Development, relatively minor environmental cleanup activities could be accomplished

following property stabilization and before site development to remove potential environmental liability restrictions, and provide the documentation needed for Ecology to approve a NFA for the Site. Cleanup may be achieved by excavation and removal of the contaminated soil, and/or a combination of on-site management, institutional controls, and formal property use restrictions. Based on previous cleanup reports, and the current Phase II ESA sampling, only two relatively small soil areas need to be addressed: the carcinogenic polycyclic aromatic hydrocarbons (cPAHs) in the former PCB cleanup area, and the cPAHs in the vicinity of previous remedial excavation EX-7. We anticipate that the soil removal would be in the range of 170 to 300 cubic yards, and contracted excavation, hauling, and disposal at a licensed facility, confirmation sampling, and reporting could be accomplished for approximately $38,000 to $50,000.

- **Disposal of Excavated Soil.** For development activities that may require excavation and offsite disposal of excess soils, bulk characterization testing of soil is recommended prior to offsite disposal. The recommended testing will serve both prudent risk management and will comply with what we understand will be required in the new WAC Chapter 173-350 requirements for handling soil with detected levels of hazardous substances above background levels. The draft regulations are currently (July 2017) being revised so the final requirements are not known. This expectation is based both on risk management prudence and the documented detections of hazardous substances. While many of these concentrations are below cleanup screening levels for the near surface soil at the Site, any soil excavated during (future) site grading for site preparation, will need documentation to be accepted at clean fill sites and/or at an inert waste landfill. Following promulgation, it will be important to check the revisions to WAC Chapter 173-350 to determine an appropriate testing approach and disposal facility for the soil.
- **Department of Ecology Petition for NFA.** If the large tax parcel number 27070600300500 (the Site) is purchased for Ring Bus Development, and once any additional cleanup actions have been completed on tax parcel number 27070600300500, the District could use assembled documentation to request an NFA determination from Ecology.

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

LIST OF ABBREVIATIONS AND ACRONYMS

AST ..... Aboveground Storage Tank
bgs ..... Below Ground Surface
cPAH ..... Chlorinated Polycyclic Aromatic Hydrocarbon
cy ..... Cubic Yard(s)
District ..... Snohomish Public Utility District No. 1
Ecology ..... Washington State Department of Ecology
EPA ..... US Environmental Protection Agency
ESA ..... Environmental Site Assessment
ft ..... Feet/Foot
LAI ..... Landau Associates, Inc.
µg/L ..... Micrograms per Liter
µg/kg ..... Micrograms per Kilogram
MTCA ..... Model Toxics Control Act
NFA ..... No Further Action
PCB ..... Polychlorinated Biphenyl
PAH ..... Polycyclic Aromatic Hydrocarbon
SVOC ..... Semivolatile Organic Compound
TEE ..... Terrestrial Ecological Evaluation
TEQ ..... Toxic Equivalency Concentration
TPH ..... Total Petroleum Hydrocarbon
TPH-D ..... Diesel-Range Total Petroleum Hydrocarbon
TPH-G ..... Gasoline-Range Total Petroleum Hydrocarbon
TPH-O ..... Oil-Range Total Petroleum Hydrocarbon
RI/FS ..... Remedial Investigation/Feasibility Study
WAC ..... Washington Administrative Code
VCP ..... Voluntary Cleanup Program
VOC ..... Volatile Organic Compound

This page intentionally left blank.

1.0 INTRODUCTION

Landau Associates, Inc. (LAI) has prepared the following Phase II Environmental Site Assessment (ESA) report for the Snohomish County Public Utility District No. 1 (the District) to provide the results of soil and groundwater sampling and analysis and to provide a preliminary considerations for future development of the property located at 147 South Ann Street in Monroe, Washington (Figure 1). The District is considering possible acquisition of land for construction of a Ring Bus in the Woods Creek area of Monroe, and is currently considering siting the project at Site D, which includes six tax parcels (Figure 2). The District's primary interest is in the largest parcel, which is approximately 6 acres, tax parcel number 27070600300500, as shown on Figure 3. Based on direction from the District, our efforts focused on parcel number 27070600300500 (referred to in this report as "the Site") as summarized in this report. The purpose of the Phase II ESA was to screen for the presence of soil and groundwater contamination associated with the *recognized environmental conditions* identified in the Phase I ESA, and to offer considerations for development. The Phase II ESA was conducted in general accordance with ASTM International (ASTM) *Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process E1903 - 11* and the District's site-specific directives regarding sample analysis.

The Site is currently surfaced with gravel and a few paved driveways for buildings access. At the time of the field explorations, five older wood framed buildings and sheds were present on the Site. The property is currently used to store equipment, truck and trailer parking, and incidental automobile and equipment repair. According to the District, a stormwater conveyance pipeline extends from the intersection of Fremont and Ann Streets across one or more of the parcels at the south end of the subject property to an outfall at Woods Creek (Figure 2).

LAI previously completed a Phase I ESA for all six parcels that make up the subject property under our contract with the District (LAI 2017a). The Phase I ESA summarized conditions and identified the following *recognized environmental conditions* (applicable to the subject property comprising all six parcels) needing further evaluation:

1. Subsurface contamination identified at the Site in previous reports as the result of historical site uses (shingle mill, lumber mill, and automobile salvage yard).
2. Cadmium, lead, and petroleum hydrocarbon contamination that exceeds the Washington State Department of Ecology's (Ecology's) Model Toxics Control Act (MTCA) regulation (WAC Chapter 173-340) Method A cleanup levels in the southern portion of the subject property that was left in place following remedial excavations.
3. Conditions at the reported location of a former 500-gallon aboveground storage tank (AST) formerly located at the north end of the site, reportedly removed along with approximately 20 cubic yards (cy)of impacted soil from beneath the AST by the current site owner (Mr. Lauren Wibbleman). Confirmation soil samples were not collected from the excavation to confirm that all impacted soil exceeding cleanup levels was removed.

4. Polychlorinated biphenyl (PCB)-impacted soil resulting from a release from a burned transformer in an area on the north end of the site that was reportedly excavated and removed from the site in 1997.

Additionally, a bulk fuel terminal with three ASTs located north of and upgradient of the Site with no known releases was identified as a potential environmental concern due to its proximity to the site and upgradient location.

2.0 PREVIOUS INVESTIGATIONS

A number of previous environmental investigations have been conducted to document environmental soil and groundwater conditions at the Site. This section presents a summary of the investigations and their findings. This information was used to identify locations for Phase II ESA sampling and analysis. Reports of previous activities are noted in the reference section.

1990 Investigation. In 1990, Hart Crowser conducted two investigations on behalf of Glacier Park Company to evaluate whether historical practices associated with the mill and auto salvage yard had resulted in contamination of the Site's soil and groundwater. The Hart Crowser investigations included the portion of the subject property south of Fremont Street at Ann Street. The investigations also included the area west of the subject property, and three additional areas to the north, also not included in the subject property.

Subsurface investigations at the southwest end of the detected total petroleum hydrocarbons (TPH), lead, and zinc at concentrations above MTCA soil cleanup levels. The contamination covered a surface area of approximately 4,200 square feet to depths of 1 to 2 feet (ft) below ground surface (bgs). Groundwater sampling and analysis conducted at the area of the Site found low levels of dissolved cadmium, chromium, and zinc. No TPH, volatile organic compounds, or semivolatile organic compounds, pesticides, or PCBs were detected in the groundwater (Hart Crowser 1990).

1996 to 1997 Investigation and Cleanup. Soil and groundwater sampling conducted at the Site by EMCON in 1996 (EMCON 1996a, b) found:

- PCBs in soil at concentrations exceeding the MTCA Method A cleanup level near a power pole, east of the electrical building in the northeastern portion of the Site
- Cadmium, chromium, and lead concentrations in soil samples below MTCA Method C (cadmium and chromium) or MTCA Method A (lead) industrial cleanup levels.
- Diesel- and oil-range total petroleum hydrocarbons (TPH-D and TPH-O, respectively) in soil at concentrations exceeding the MTCA Method A cleanup levels in several locations at the site.
- TPH-D in groundwater at a concentration below the MTCA Method A cleanup level in one sample collected from a monitoring well at the southwest end of the Site.

In April 1997, Glacier Environmental Services, Inc. (Glacier) reported the results of an independent remedial action at the Site, involving the removal and disposal of approximately 18 tons of PCB-impacted soil in the area near the power pole identified by EMCON. Glacier concluded that all the excavations had removed soil containing PCBs above the MTCA Method A cleanup level from the areas (Glacier 1997). The approximate area of the PCB soil removal is shown on Figure 2.

2000 Investigation. In February 2000, Farallon conducted a remedial investigation and feasibility study (RI/FS) for the "East Subareas" (the Former Lumber Mill Subarea and Former Salvage Yard Subarea) of Monroe Auto Salvage; the Site. Farallon excavated 22 test pits (to an average depth of 15 ft bgs), drilled 3 soil borings (greater than 15 ft bgs), and installed 2 additional groundwater

monitoring wells (screened between 15 to 30 ft bgs and 15 to 25 ft bgs). Groundwater samples were also collected from existing monitoring wells installed during previous investigations by EMCON (EMCON 1996a), Hart Crowser (Hart Crowser 1990), and Farallon (Farallon 2000).

Based on the soil and groundwater sampling and analysis conducted for the RI/FS, Farallon identified gasoline-range total petroleum hydrocarbons (TPH-G), TPH-D, TPH-O, lead, and PCBs in soil at concentrations above MTCA Method A cleanup levels for unrestricted land uses in areas at the southwest and northeast ends of the Site. No analytes were identified above MTCA Method A cleanup levels in groundwater (Farallon 2000).

In July and August 2000, Farallon conducted remedial excavation at seven areas of the Site to remove shallow contaminated soil identified during the RI/FS. Approximately 2,140 tons of soil was excavated and disposed of offsite. The locations of excavations are shown on Figure 2. Analytical results of confirmation soil samples taken from the sidewalls and floor of the excavations indicated that contamination remained above the MTCA Method B cleanup level for TPH (calculated for the site using the Interim TPH Guidelines based on residential use), and above the MTCA Method A cleanup level for cadmium and lead in two areas in the southwestern portion of the subject property (EX-1 and EX-2), shown on Figure 2. Further excavation of EX-1 to the east was not completed to avoid damage to an existing structure. Excavation in EX-2 was not extended to the south to avoid damage to large trees and vegetation. Confirmation sampling from EX-3 through EX-7 indicated that all contaminated soil was excavated from those areas. Farallon requested an NFA determination from Ecology based on the results of the cleanup (Farallon 2000).

Ecology (Ecology 2001) granted an NFA determination for the subject property; however, in 2008 Ecology re-evaluated the site and determined that the remedial action was not sufficient to meet MTCA requirements. The previously issued NFA determination was rescinded due to the presence of TPH, cadmium, and lead in in the vicinity of EX-1 and EX-2 (Ecology 2008).

Other Actions. Discussions with the property owner identified that indications of a small fuel release prompted limited soil excavation near a former fuel AST (Figure 2) and informal soil removal activities were conducted in the vicinity of a former fuel AST. Based on discussions, we understand that approximately 18 cy of soil was excavated and disposed of at a solid waste landfill, but no confirmation soil samples were collected.

3.0 PHASE II ESA SAMPLING RESULTS AND EVALUATION

Soil and groundwater sampling to support the Phase II ESA evaluation was conducted at the site on June 7 and 13, 2017. The first mobilization included collecting soil and groundwater samples from a soil boring advanced as part of a geotechnical engineering evaluation of the site, and a groundwater sample from the previously installed monitoring well MW-4. The second mobilization included soil sampling from test pits and hand-auger explorations.

The samples were collected to confirm *recognized environmental conditions* from the Phase I ESA, to screen the site for contamination associated with past industrial site uses, and to confirm that the areas of contaminated soil previously reported as cleaned up had been removed. The explorations were limited to parcel 27070600300500.

The approximate exploration locations are shown on Figure 2. The locations of previous explorations are shown in Figures 2 and 3. Logs of previous explorations are included in the Draft Geotechnical Due Diligence Technical Memorandum (LAI 2017b).

3.1 Soil Boring and Groundwater Sampling

On June 7, 2017, Holocene Drilling, Inc. of Puyallup, Washington, under subcontract to LAI advanced one soil boring (LAI-B1) with a truck-mounted drill rig using hollow-stem auger techniques. The boring was located near the center of the site to evaluate general Site geotechnical conditions as documented in LAI's geotechnical due diligence technical memorandum (LAI 2017b). Soil samples were obtained at 2 1/2 and 5 ft intervals to a total depth of 41.5 ft bgs using 1.5-ft-long standard penetration test split-spoon samplers. Samples retrieved in the top 10 ft bgs during boring installation were screened for contamination in the field using visual and olfactory observations, and indications of VOCs using a photoionization detector PID. The boring log is included in Appendix A.

One soil sample was collected below the new gravel surfacing from a depth of approximately 5 to 6.5 ft bgs (Sample B-1@5') for laboratory analysis. Groundwater was encountered during boring installation at approximately 23 ft bgs. When the boring had advanced to approximately 28 ft bgs, drilling was paused, and a temporary well was inserted to allow a groundwater grab sample to be collected from the borehole. A temporary 2-inch diameter PVC well pipe with a 5-ft-long slotted screen was subsequently lowered through the auger flights to approximately 5 ft bgs. A submersible pump was used to flush water with suspended sediment and then to collect a groundwater sample. The planned approach to withdraw water from within the well point (sampling using a peristaltic pump) was attempted, but the depth to water was greater than the peristaltic pump suction limit. Water was sampled using the submersible pump at a lower flow setting following purging. Approximately 10 gallons of groundwater were purged from the well point prior to collecting the sample (Sample B-1@25'). The groundwater turbidity decreased during purging, but the groundwater collected for the sample remained relatively turbid with suspended fine soil, likely due to the use of the temporary well point during hollow-stem auger drilling, lack of a sized sand-pack around the

screen, and no well development. This temporary well sample provides some information but needs to be considered a "reconnaissance grab-sample".

Monitoring well MW-4 is located at the north end of the site. During Phase II ESA exploration planning, MW-4 was thought to have been destroyed or rendered unusable during site regrading. MW-4 was located using metal detecting equipment during pre-exploration utility locating. The well was opened and found to be acceptable for collecting samples. One groundwater sample was collected from MW-4 using low-flow groundwater sampling techniques with a peristaltic pump and dedicated Teflon tubing.

3.2 Shallow Soil Sampling

On June 13, 2017, LAI mobilized to the Site with Northwest Excavating to collect soil samples near areas of previous remedial excavations to confirm that the contaminated soil had been removed.

Previous remedial excavations. Northwest Excavating dug test pits in the footprints of Farallon remedial excavations EX-4, EX-5, EX-6, and EX-7 (Test pits 4 through 7, respectively) as shown on Figures 2 and 3). Since Farallon conducted their remedial excavations, we learned that the current site owner has imported and graded the site with gravel. Therefore, at each location, the gravel was scraped back by the excavator and the excavations were advanced to 0.5 ft below the original remedial excavation depths reported by Farallon. Samples were then collected from the test pit bottoms. Soil was returned to test pits, compacted using the excavator, and the surface gravel was replaced and distributed.

Former AST Location. A test pit was also dug in the vicinity of the AST formerly located on the west side of a former scale building used to store forklifts at the time the explorations were conducted. The sample at this location (Sample F.AST-TP) was collected from approximately 2 ft bgs.

Transformer Cleanup Area. A composite sample was collected by hand auger in the area of the previous pole transformer fire area. Due to the narrow space and excavator access issues, an excavator could not be used for test pits in the previous PCB removal area at the east end of the Site. Three hand-auger borings were advanced to obtain a composite soil sample. The hand auger was advanced to 1.5 ft bgs (approximately 0.5 ft below the bottom of the reported remedial excavation) and the sample was collected from the bottom of the hand auger boring.

3.3 Analytical Results

All of the samples collected from the Phase II ESA explorations were submitted to ALS Environmental in Everett, Washington under standard chain-of-custody procedures. At the District's direction, each soil sample was analyzed for the following constituents:

- TPH-G by gasoline-range extended NWTPH-Gx;

- TPH-D and TPH-O by NWTPH-Dx - analyzed with and without silica gel cleanup;
- PCBs by U.S. Environmental Protection Agency (EPA) Method 8082;
- VOCs by EPA Method 8260;
- SVOCs by EPA Method 8270;
- Resource Conservation and Recovery Act (RCRA) 8 Metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver) by EPA Method 6010/7470;

Each **groundwater** sample was analyzed for the following constituents:

- TPH-G by NWTPH-Gx;
- TPH-D and TPH-O by NWTPH-Dx - analyzed with silica gel cleanup;
- VOCs by EPA Method 8260;
- SVOCs by EPA Method 8270;
- MTCA 5 Metals (arsenic, cadmium, chromium, lead, and mercury) by EPA Method 6010/7470.

The analytical results for the soil and groundwater samples are provided in Tables 1 and 2, respectively.

3.3.1 Soil Testing Results

Analytical results for soil are summarized as follows:

- **Metals**. No metals exceed Method A or Method B cleanup screening levels.
- **PCBs**. PCBs were not detected at concentrations greater than the laboratory reporting limits.
- **VOCs.** The only VOC reported was acetone, which was detected in Sample TP-5 at 190 micrograms per kilogram (µg/kg), which is below the MTCA Method B cleanup level of 72,000,000 µg/kg. No other VOCs were detected in any of the other samples analyzed.
- **SVOCs.** Several SVOCs were detected in samples HA-1, TP-5, and TP-7. A summary of the detected concentrations that exceed cleanup screening levels for each sample are provided below. For detected concentrations that exceed the MTCA Methods A or B cleanup level, the cleanup level is provided in **bold** in the table. Note that the individual carcinogenic polynuclear aromatic hydrocarbons (cPAHs) group (benz[a]anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, ideno[1,2,3-cp]pyrene, and dibenzo(a,h)anthracene, are compared to the regulatory limit using a calculated toxic equivalency concentration (TEQ) approach. Even if the individual cPAH did not exceed a limit, the value will contribute to the calculated TEQ value.
  - Sample HA-1 had detections of acenaphthylene (130 µg/kg, acenaphthene (380 µg/kg), phenanthrene (6,600 µg/kg), anthracene (1,200 µg/kg), fluoranthene (6,000 µg/kg), pyrene (6,800 µg/kg), benz[a]anthracene (2,300 µg/kg, **1,400 µg/kg**), chrysene (2,100 µg/kg), benzo(b)fluoranthene (2,100 µg/kg, **1,400 µg/kg**), benzo(k)fluoranthene (550 µg/kg), benzo(a)pyrene (2,000 µg/kg, **100** µg/kg), ideno[1,2,3-cp]pyrene (920 µg/kg), and dibenzo(a,h)anthracene (260 µg/kg, **140 µg/kg**). The TEQ-modified cPAHs concentration of 2,634 µg/kg exceeds the MTCA Method A cleanup screening level of **100** µg/kg.

  - Sample TP-5 had detections fluoranthene (180 µg/kg), pyrene (110 µg/kg), and benzo(b)fluoranthene (110 µg/kg). The TEQ-modified cPAHs concentration did not exceed the MTCA Method A cleanup screening level of 100 µg/kg.
  - Sample TP-7 had detections of phenanthrene (130 µg/kg), fluoranthene (340 µg/kg), pyrene (230 µg/kg), benz[a]anthracene (190 µg/kg), chrysene(220 µg/kg), bis(2-ethylhexyl) phthalate (270 µg/kg), benzo(b)fluoranthene (260 µg/kg), benzo(a)pyrene (200 µg/kg, **100 µg/kg**), ideno[1,2,3-cp]pyrene (110 µg/kg), and benzo(ghi)perylene (140 µg/kg). The TEQ-modified cPAHs concentration of 258 µg/kg exceeds the MTCA Method A cleanup screening level of 100 µg/kg. This shallow test pit was excavated as close to the previous excavation without damaging asphalt pavement that appears to have been placed since the removal action was conducted in 2000. The polycyclic aromatic hydrocarbon (PAH) compounds detected in the shallow excavation may be associated with the paving process (base course compaction, heavy tack-coat oil, and pavement), and may not be associated with a release, accordingly subsequent removal here may not be needed and this location is not included in the estimate.

- **Petroleum Hydrocarbons.** The detected concentrations were all well below the screening levels based on MTCA Method A cleanup levels (2,000 milligrams per kilogram (mg/kg) for both TPH-D and TPH-O).

3.3.2 Groundwater Testing Results

The analytical results for groundwater are summarized as follows:

- MW 4 Results. No metals were detected above the laboratory reporting limits and no results exceed cleanup screening levels in the sample from well MW-4.
- Boring B-1 Groundwater Grab Sample Results:
  - **Metals.** Arsenic (8.7 micrograms per liter [µg/L]), chromium (9.0 µg/L), and lead (5.1 µg/L) were detected in the groundwater grab sample collected from B-1. Naturally occurring metals are typically found in soil and these reported detections are consistent with the moderate turbidity level noted in the temporary well. The detected concentration of arsenic in B-1 exceeded the MTCA Method A cleanup level of 5 µg/L. The result from MW-4, which is a previously developed well with a sand pack resulting in a low-turbidity sample that was collected using low-flow procedures, is likely more representative of the Site's groundwater conditions.
  - **TPH.** TPH-G, TPH-D, and TPH-O were not detected at concentrations greater than the laboratory reporting limits.
  - **VOCs.** Naphthalene was detected in Sample B-1 at 2.7 µg/L, at a level which is below the MTCA Method A cleanup level of 160 µg/L. No other VOCs were detected above the laboratory reporting limits in either of the samples analyzed.
  - **SVOCs.** The SVOC bis(2-ethylhexyl)phthalate was detected in the sample from B-1 at a concentration of 140 µg/L. This compound is typically associated with plastics and is more likely to be associated with the new temporary well screen used to collect the sample. This exceeds the MTCA Method B cleanup level of 6.3 µg/L. No other SVOCs were detected above the laboratory reporting limits in either of the samples analyzed. The result from MW-4, which is a previously developed well with a sand pack showed

no detection of semi-volatile organics and is likely more representative of the Site's groundwater conditions.

3.3.3 Cleanup Screening Levels

Detected concentrations were compared to screening levels based on the Model Toxics Control Act (MTCA) Method A cleanup levels, for unrestricted land uses, where available. For constituents for which Method A cleanup levels are not available (e.g. acetone and anthracene), the detected concentrations were compared to screening levels based on preliminary Method B cleanup levels (for soil the lower of the cleanup level based on direct contact or the cleanup level based on protection of groundwater as drinking water was used). The MTCA levels were used as screening criteria for the purposes of this evaluation to provide a general indication of potential cleanup liability. The MTCA levels are the same as the cleanup levels used for cadmium and lead during the previous remedial excavation conducted by Farallon (Farallon 2000). Farallon derived a MTCA Method B value of 2,050 milligrams per kilogram (mg/kg) for TPH-D and TPH-O for the previous remedial excavations[2].

3.4 Cleanup Options and Cost Considerations for Cleanup to Support No Further Action Determination

If the District purchases the large tax parcel number 27070600300500 for Ring Bus Development, relatively minor environmental cleanup activities may be needed to remove liability concerns and support an Ecology determination for an NFA. Based on previous cleanup reports, and the current Phase II ESA sampling, only two relatively small soil areas - the cPAHs in the former PCB cleanup area and the cPAHs near previous remedial excavation EX-7 - need to be addressed.

Cleanup could be accomplished by:

- Excavation and removal of the contaminated soil,
- A combination of on-site management, containment by the proposed infrastructure development and surfacing, institutional controls, and formal property use restrictions.

Our estimate for the level of effort to address soil conditions includes the assumptions noted below. We anticipate that the soil removal action under Ecology's Voluntary Cleanup Program (VCP) would include:

- A pre-excavation soil investigation once the buildings on-site have been demolished to establish the required extents of excavation prior to conducting soil removal activities. This would likely reduce costs associated with contractor stand-by while waiting for confirmation sample results.

[2] Terrestrial Ecological Evaluation (TEE) screening levels were also considered for the site based on its proximity to Woods Creek and Al Borlin Park. Assuming continued use of the site as for commercial or industrial purposes, only wildlife screening levels would apply for a TEE analysis, based on Ecology guidance. The wildlife screening levels provided in Table 749-2 of Chapter 173-340-7490 of the WAC are all substantially higher than any of the contaminant concentrations detected at the site (presented in Table 1) so the TEE screening levels would not have been exceeded and were dropped from consideration.

- Two days of excavation from the two areas with contaminant concentrations exceeding MTCA Method A cleanup levels. Based on the previous sampling conducted at the Site we anticipate that the volume of soil needing to be removed would be in the range of 170 to 300 cys or less than 500 tons.
- Disposal of the soil at a permitted solid waste disposal facility at approximately $40/ton.

Contracted excavation and disposal at a licensed facility, confirmation sampling, and VCP reporting the removal could be accomplished for approximately $38,000 to $50,000.

The timing of excavation–type cleanup activities could follow property stabilization and precede site development. Cleanup would remove potential environmental liability restrictions, and provide the documentation needed for Ecology to approve an NFA for the property.

4.0 CONCLUSIONS AND RECOMMENDATIONS

The Draft Phase I ESA (LAI 2017a) identified a number of r*ecognized environmental conditions* associated with past industrial activities that have occurred on the site since the early 1900s. These activities include forest products mills, a water power generation operation, and automobile salvaging. Additionally, petroleum hydrocarbon releases were reported from facilities located near the subject property and an operating bulk fuel terminal located adjacent to the north of the subject property. A cleanup was conducted in 2000 (Farallon 2000) to address releases associated with past activities. The results of the cleanup were initially awarded an NFA letter by (Ecology 2001). Ecology (Ecology 2008) later rescinded the NFA citing exceedances of MTCA cleanup regulation (WAC Chapter 173-340) levels for some excavation confirmation samples in the southwest portion of the subject property.

Phase II ESA and Testing. The District authorized a Phase II ESA, which was conducted to screen for the presence of soil and groundwater contamination associated with the RECs identified in the Phase I ESA, and to offer considerations for development. The largest of the six parcels, tax parcel number 27070600300500 is the focus of the Phase II ESA (Figure 3). The decision to focus efforts on parcel 27070600300500 (referred to in the rest of this report as "the Site") was made because at approximately 6 acres in size, it is large enough to support ring bus development; the results of confirmation samples from the earlier independent soil cleanup (Farallon 2000) on the parcel were all below clean up levels; no concerns about the parcel were raised in the Ecology NFA Rescission letter; and the other smaller parcels each had documented environmental liability concerns[3] and/or buried utilities which would restrict development options and increase costs.

The focused Phase II ESA investigation included both soil and groundwater samples for specific targeted reasons. Sampling locations were selected to confirm cleanup sample results reported for the locations of earlier cleanup activities on the parcel (Farallon 2000) and to update groundwater results because of the adjacent, operating offsite petroleum facility located hydraulically upgradient to the north of the Site. MTCA Method A cleanup levels used in the earlier independent cleanup report and Method B cleanup levels were used as screening levels for the results.

The Phase II ESA testing results indicated that:

- Previous (Farallon 2000) independent remedial excavations on tax parcel number 27070600300500 appear to have successfully met MTCA Method A cleanup levels for the contaminants of concern at the time of excavation. PAHs, which were not analyzed for during the previous investigations, were detected in one shallow (i.e., less than 2 ft bgs) Phase II ESA sample at concentrations exceeding MTCA Methods A and B cleanup levels.
- No PCBs were detected in the shallow composite soil sample from the areas of the earlier PCB cleanup (EMCON 1996b, c). PAHs, which were not analyzed for during the previous

[3] Telephone conversation regarding Site D NFA Rescission letter between Kathryn Hartley, LAI, and Dale Myers, Site Manager, Washington State Department of Ecology, Toxics Cleanup Program on March 1, 2017

investigations, were detected in the shallow soil below the PCB cleanup area and near previous remedial excavation area EX-7 at concentrations exceeding MTCA Method A and B cleanup levels.

- The groundwater sample from existing well MW-4 showed no detection of hazardous substances above clean up levels. Based on earlier investigation results, well MW-4 is likely to be downgradient (in the direction of groundwater flow) from the existing operating ASTs north of Simons Road. The groundwater grab sample collected from the geotechnical boring was also tested for the same suite of constituents. Results showed that only low levels of metals (including an exceedance of the MTCA Method A cleanup level for arsenic) and two SVOCs, bis[2-ethylhexyl]phthalate and naphthalene, (including an exceedance of the MTCA Method B cleanup level for bis[2-ethylhexyl]phthalate) were detected in the two groundwater samples collected from the site. The detections of metals in the grab sample were attributed to high turbidity (suspended solids) in the sample, and the bis[2-ethylhexyl]phthalate from new plastics in the temporary well casing or equipment used for groundwater sampling, and therefore may not be representative of groundwater.

In summary, some hazardous substances were detected in shallow soil at the site at concentrations that exceed MTCA Method A, and/or Method B (direct contact unrestricted use), cleanup levels. The groundwater samples from the existing well MW-4 shows no detections that exceed cleanup screening levels, and no indications of groundwater contamination from the offsite fuel operations. The groundwater grab sample contained arsenic and bis[2-ethylhexyl]phthalate at concentrations exceeding cleanup levels, but these detections should be qualified based on the sampling methodology and are likely not representative of the Site groundwater conditions.

Considerations for Property Development and Environmental Liability Risk Management.

- **Cleanup.** If the large tax parcel number 27070600300500 is purchased for Ring Bus Development, relatively minor environmental cleanup activities could be accomplished following property stabilization and before site development to remove potential environmental liability restrictions, and provide the documentation needed for Ecology to approve a NFA for the Site. Cleanup may be achieved by excavation and removal of the contaminated soil, and/or a combination of on-site management, institutional controls, and formal property use restrictions. Based on previous cleanup reports, and the current Phase II ESA sampling, only two relatively small soil areas need to be addressed: the cPAHs in the former PCB cleanup area, and the cPAHs in the vicinity of previous remedial excavation EX-7. We anticipate that the soil removal would be in the range of 170 to 300 cy, and contracted excavation, hauling, and disposal at a licensed facility, confirmation sampling, and reporting could be accomplished for approximately $38,000 to $50,000.
- **Disposal of Excavated Soil.** For development activities that may require excavation and offsite disposal of excess soils, bulk characterization testing of soil is recommended prior to offsite disposal. The recommended testing will serve both prudent risk management and will comply with what we understand will be required in the new WAC Chapter 173-350 requirements for handling soil with detected levels of hazardous substances above background levels. The draft regulations are currently (July 2017) being revised so the final requirements are not known. This expectation is based on both risk management prudence and the documented detections of hazardous substances. While many of these concentrations are below cleanup screening

levels for the near surface soil at the Site, any soil excavated during (future) site grading for site preparation, will need documentation to be accepted at clean fill sites and/or at an inert waste landfill. Following promulgation, it will be important to check the revisions to WAC Chapter 173-350 to determine an appropriate testing approach and disposal facility for the soil.

- **Ecology Petition for NFA.** If the large tax parcel number 27070600300500 (the Site) is purchased for Ring Bus Development and once any additional cleanup actions have been completed on tax parcel number 27070600300500, the District could use assembled documentation to request an NFA determination from Ecology.

5.0 LIMITATIONS

This technical memorandum has been prepared for the exclusive use of the Snohomish Public Utility District No. 1 for specific application to the Monroe/Woods Creek Ring Bus Property Evaluation, Site D. No other party is entitled to rely on the information, conclusions, and recommendations included in this document without the express written consent of the District and LAI. Further, the reuse of information, conclusions, and recommendations provided herein for extensions of the project or for any other project, without review and authorization by LAI, shall be at the user's sole risk. LAI warrants that within the limitations of scope, schedule, and budget, our services have been provided in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions as this project. We make no other warranty, either express or implied.

CMJ/BFB/jrc
P:\302\014\WIP\Site D\Phase II ESA\Draft Report Files\Site D Phase II _Draft.Docx

6.0 REFERENCES

Ecology. 2001. Letter: Independent Remedial Action, Monroe Auto Salvage, 426 Fremont Street, Monroe, Washington. From Judith Aitken, Toxics Cleanup Program, Washington State Department of Ecology, to Reta Jensen c/o Peter Jewett, Farallon Consulting LLC. February 2.

Ecology. 2008. Letter: Rescission of Previously Issued No Further Action Determination, Monroe Auro Salvage (Snohomish Tax Parcel 27070600300700). From Dale Myers, Toxics Cleanup Program, Washington State Department of Ecology, to Mr. Wibbelman, June 2.

EMCON. 1996a. Letter: Monroe Auto Salvage Groundwater Monitoring - August 1996 Sampling. From John VirginLinda Dawson, to Reta Jensen, Monroe Auto Salvage. September 30.

EMCON. 1996b. Letter: Monroe Auto Salvage Site Investigation. From John Virgin and Linda Dawson, to Reta Jensen, Monroe Auto Salvage. July 26.

EMCON. 1996c. Letter: Monroe Auto Salvage Site Investigation - Additional PCB Sampling. From John Virgin and Linda Dawson, to Reta Jensen, Monroe Auto Salvage. October 25.

Farallon. 2000. Final Cleanup Action Summary Report, Monroe Auto Salvage, 926 Fremont Street, Monroe, Washington. Farallon Consulting. November 9.

Glacier. 1997. Independent Remedial Action , Monroe Auto Salvage, 426 Fremont Street, Monroe, Washington. Glacier Environmental Services, Inc. April 18.

Hart Crowser. 1990. Subsurface Exploration and Testing, Glacier Park Company Property, Property Sequence No. 114, Monroe, Washington. December 13.

LAI. 2017a. Draft Phase I Environmental Site Assessment, Monroe-Woods Creek Site C, Snohomish County, Washington. Landau Associates, Inc. April 20.

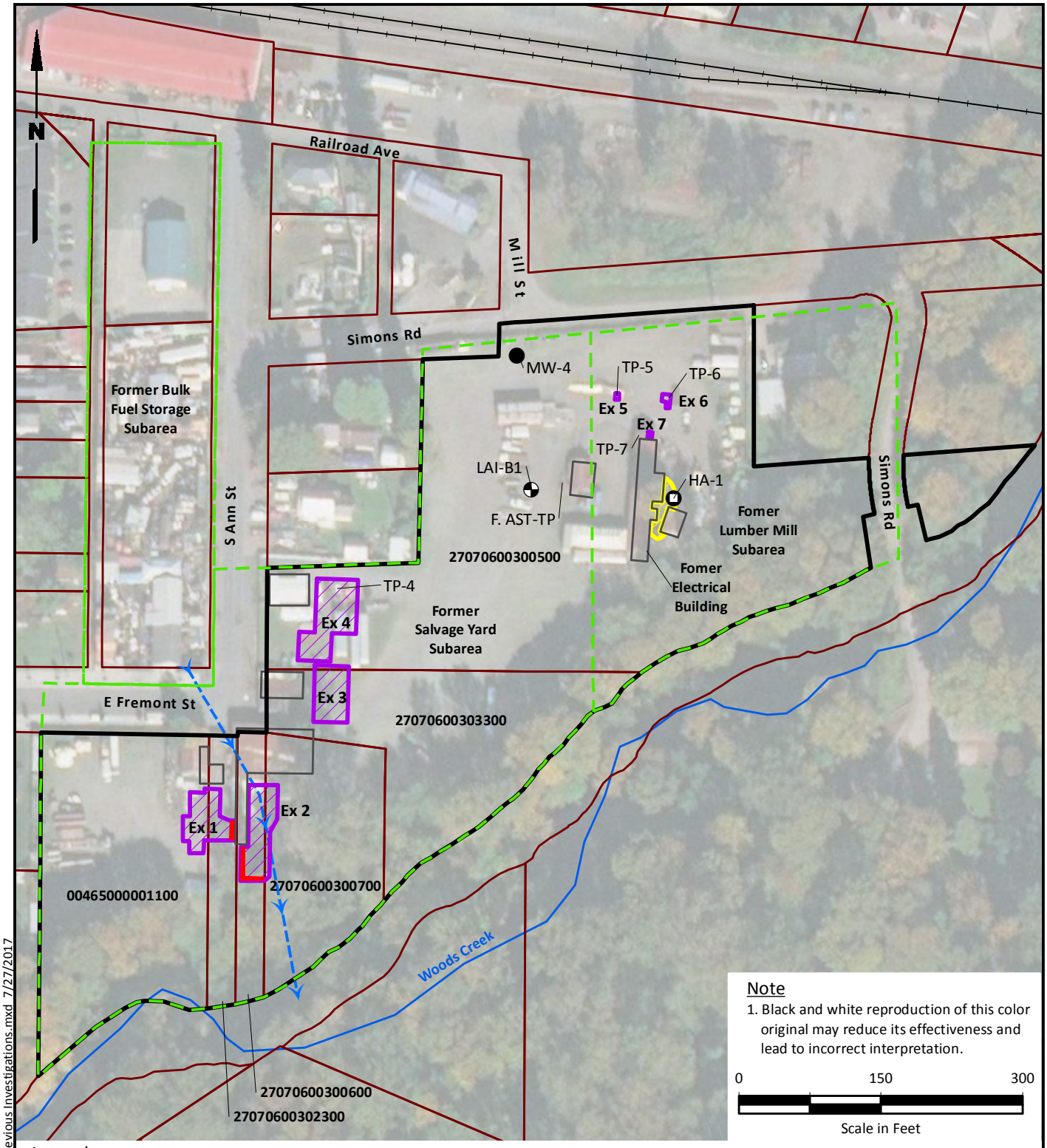
LAI. 2017b. Draft Technical Memorandum: Geotechnical Due Diligence, Woods Creek Site D, Monroe, Washington. Landau Associates, Inc. July 6.

Data Source: Esri 2012

G:\Projects\302\014\010\001\Site D\FD1VicMap.mxd 4/13/2017

LANDAU ASSOCIATES

Environmental Due Diligence Monroe-Woods Creek Site D Monroe, Washington	**Vicinity Map**	Figure 1



Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

0 150 300

Scale in Feet

Legend

- Subject Property
- Approximate Subarea Boundaries
- Tax Parcels
- City Stormwater Outfall
- Railroad Tracks
- Woods Creek
- Approximate Building Location
- Excavation Areas of Cadmium, Lead, and TPH Impacted Soil (Farallon, 2000)
- Excavation Area of PCB Impacted Soil (Glacier, 1997)
- Total Cadmium, Total Lead, or Total Petroleum Concentration above MTCA Method A or B Cleanup Level After Excavation (Farallon, 2000)

DRAFT

Data Sources: Farallon 2000; Glacier 1997; Snohomish County GIS; Esri World Imagery.

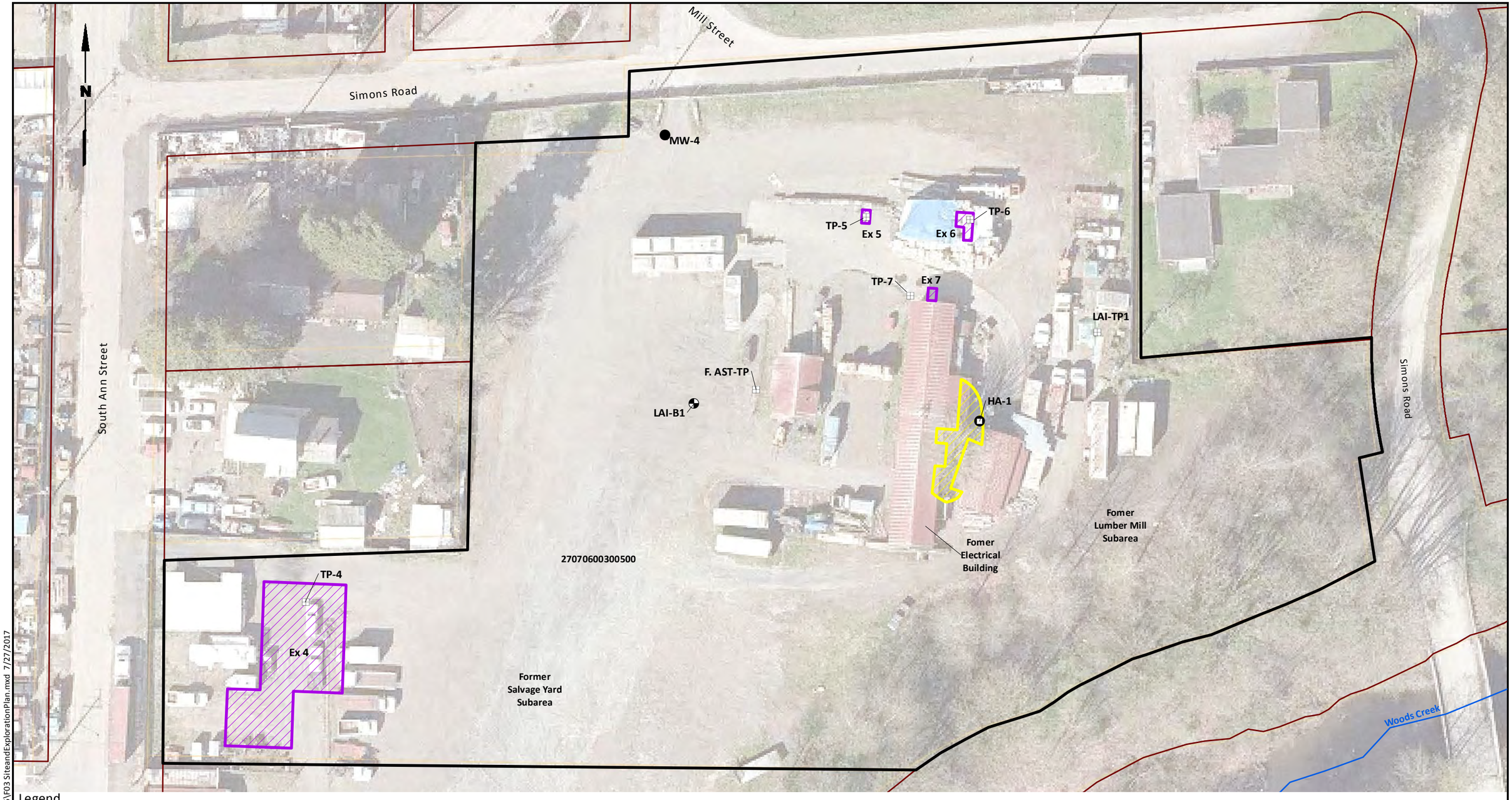
G:\Projects\302\014\010\016\F02 Previous Investigations.mxd 7/27/2017

LANDAU ASSOCIATES

Environmental Due Diligence
Monroe-Woods Creek Site D
Monroe, Washington

Previous Investigation and Remediation

Figure 2



G:\Projects\302\014\010\016\F03 SiteandExplorationPlan.mxd 7/27/2017

Legend

- Approximate Boring Location and Designation
- Approximate Hand Auger Location and Designation
- Approximate Monitoring Well Location and Designation
- Approximate Test Pit Location and Designation
- Tax Lot #: 27070600300500 Boundary (Snohomish County GIS)
- Tax Parcels
- Excavation Areas of Cadmium, Lead, and TPH Impacted Soil (Farallon, 2000)
- Excavation Area of PCB Impacted Soil (Glacier, 1997)

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

DRAFT

Data Sources: Farallon, 2000; Glacier, 1997; Snohomish County GIS, 2017; Esri World Imagery

0 50 100

Scale in Feet

LANDAU ASSOCIATES

Environmental Due Diligence Monroe-Woods Creek Site D Monroe, Washington	**Woods Creek Site D** **Site and Exploration Location Plan**	Figure 3

Table 1
Soil Analytical Results
Snohomish County PUD No. 1 Monroe-Woods Creek Site D
Snohomish County, Washington

Analyte	MTCA Method A/B Preliminary Screening Level[a]	Sample Location and Sample Depth (ft BGS), Laboratory Sample ID, and Sample Date						
		B-1 5 EV17060046-01 6/7/2017	F.AST-TP 2 EV17060078-04 6/13/2017	HA-1 1.5 EV17060078-06 6/13/2017	TP-4 2 EV17060078-05 6/13/2017	TP-5 1.5 EV17060078-02 6/13/2017	TP-6 1.5 EV17060078-01 6/13/2017	TP-7 1 EV17060078-03 6/13/2017
Total Petroleum Hydrocarbons (mg/kg)								
NWTPH-Gx								
Gasoline Range Organics	30/100[c]	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
NWTPH-Dx (with silica gel cleanup)								
Total Petroleum Hydrocarbon – Diesel	2,000/2,050[d]	**28 J**	25 U	25 U	25 U	50 U	25 U	25 U
Total Petroleum Hydrocarbon – Oil	2,000/2,050[d]	**71**	50 U	50 U	50 U	**1,000**	**250**	**430**
NWTPH-Dx (without silica gel cleanup)								
Total Petroleum Hydrocarbon – Diesel	2,000/2,050[d]	**130 J**	25 U	25 U	25 U	45 U	25 U	25 U
Total Petroleum Hydrocarbon – Oil	2,000/2,050[d]	**180**	50 U	50 U	50 U	**1,100**	**220**	**460**
Volatile Organic Compounds (µg/kg; SW8260)								
CFC-12 (Dichlorodifluoromethane)	16,000,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloromethane	--	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl Chloride	240,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromomethane	112,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroethane	--	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon Tetrachloride	14,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
CFC-11 (Trichlorofluoromethane)	24,000,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon Disulfide	8,000,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	72,000,000	50 U	50 U	50 U	50 U	**190**	50 U	50 U
1,1-Dichloroethene	4,000,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene Chloride	20	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Acrylonitrile	1,900	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Methyl t-butyl ether	100	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trans-1,2-Dichloroethene	1,600,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethane	180,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Butanone	48,000,000	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Cis-1,2-Dichloroethene	160,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,2-Dichloropropane	--	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Table 1
Soil Analytical Results
Snohomish County PUD No. 1 Monroe-Woods Creek Site D
Snohomish County, Washington

Analyte	MTCA Method A/B Preliminary Screening Level[a]	Sample Location and Sample Depth (ft BGS), Laboratory Sample ID, and Sample Date						
		B-1 5 EV17060046-01 6/7/2017	F.AST-TP 2 EV17060078-04 6/13/2017	HA-1 1.5 EV17060078-06 6/13/2017	TP-4 2 EV17060078-05 6/13/2017	TP-5 1.5 EV17060078-02 6/13/2017	TP-6 1.5 EV17060078-01 6/13/2017	TP-7 1 EV17060078-03 6/13/2017
Bromochloromethane	--	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	32,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,1-Trichloroethane	2,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloropropene	--	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethane	11,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	30	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	30	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloropropane	28,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibromomethane	--	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichlorobromomethane	16,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trans-1,3-Dichloropropene	--	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl isobutyl ketone	6,400,000	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Toluene	7,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Cis-1,3-Dichloropropene	--	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	18,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	--	50 U	50 U	50 U	50 U	50 U	50 U	50 U
1,3-Dichloropropane	--	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	12,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Ethylene dibromide	5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	1,600,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,1,2-Tetrachloroethane	38,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	6,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
m, p-Xylene	9,000[e]	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Styrene	16,000,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
o-Xylene	9,000[e]	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromoform	130,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Isopropylbenzene (Cumene)	8,000,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Table 1
Soil Analytical Results
Snohomish County PUD No. 1 Monroe-Woods Creek Site D
Snohomish County, Washington

Analyte	MTCA Method A/B Preliminary Screening Level[a]	Sample Location and Sample Depth (ft BGS), Laboratory Sample ID, and Sample Date						
		B-1 5 EV17060046-01 6/7/2017	F.AST-TP 2 EV17060078-04 6/13/2017	HA-1 1.5 EV17060078-06 6/13/2017	TP-4 2 EV17060078-05 6/13/2017	TP-5 1.5 EV17060078-02 6/13/2017	TP-6 1.5 EV17060078-01 6/13/2017	TP-7 1 EV17060078-03 6/13/2017
1,1,2,2-Tetrachloroethane	5,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2,3-Trichloropropane	33	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromobenzene	--	10 U	10 U	10 U	10 U	10 U	10 U	10 U
n-Propylbenzene	8,000,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorotoluene	1,600,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,3,5-Trimethylbenzene	800,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chlorotoluene	--	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Tert-Butylbenzene	8,000,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trimethylbenzene	--	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Sec-Butylbenzene	8,000,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
p-Isopropyltoluene	--	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	--	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	190,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
n-Butylbenzene	--	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	7,200,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dibromo-3-Chloropropane	1,300	50 U	50 U	50 U	50 U	50 U	50 U	50 U
1,2,4-Trichlorobenzene	34,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene	13,000	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	5,000[f]	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2,3-Trichlorobenzene	--	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Semivolatile Organic Compounds (µg/kg; SW8270)								
Pyridine	80,000	200 U	200 U	200 U	200 U	200 U	200 U	200 U
N-Nitrosodimethylamine	20	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Phenol	24,000,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Aniline	180,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Bis(2-Chloroethyl)Ether	909	250 U	250 U	250 U	250 U	250 U	250 U	250 U
2-Chlorophenol	400,000	250 U	250 U	250 U	250 U	250 U	250 U	250 U
1,3-Dichlorobenzene	--	100 U	100 U	100 U	100 U	100 U	100 U	100 U

Table 1
Soil Analytical Results
Snohomish County PUD No. 1 Monroe-Woods Creek Site D
Snohomish County, Washington

Analyte	MTCA Method A/B Preliminary Screening Level[a]	Sample Location and Sample Depth (ft BGS), Laboratory Sample ID, and Sample Date						
		B-1 5 EV17060046-01 6/7/2017	F.AST-TP 2 EV17060078-04 6/13/2017	HA-1 1.5 EV17060078-06 6/13/2017	TP-4 2 EV17060078-05 6/13/2017	TP-5 1.5 EV17060078-02 6/13/2017	TP-6 1.5 EV17060078-01 6/13/2017	TP-7 1 EV17060078-03 6/13/2017
1,4-Dichlorobenzene	190,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Benzyl Alcohol	8,000,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U
1,2-Dichlorobenzene	7,200,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U
o-Cresol	4,000,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Bis(2-chloroisopropyl) ether	--	250 U	250 U	250 U	250 U	250 U	250 U	250 U
m,p-Cresol (2:1 ratio)	4,000,000[g]	100 U	100 U	100 U	100 U	100 U	100 U	100 U
N-Nitrosodi-n-propylamine	140	250 U	250 U	250 U	250 U	250 U	250 U	250 U
Hexachloroethane	25,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Nitrobenzene	160,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Isophorone	1,100,000	130 U	120 U	130 U	100 U	120 U	100 U	110 U
2-Nitrophenol	--	100 U	100 U	100 U	100 U	100 U	100 U	100 U
2,4-Dimethylphenol	1,600,000	120 U	110 U	110 U	100 U	110 U	100 U	100 U
Benzoic Acid	320,000,000	1,300 U	1,200 U	1,300 U	1,000 U	1,200 U	1,000 U	1,200 U
Bis(2-Chloroethoxy)Methane	--	250 U	250 U	250 U	250 U	250 U	250 U	250 U
2,4-Dichlorophenol	240,000	500 U	500 U	500 U	500 U	500 U	500 U	500 U
1,2,4-Trichlorobenzene	--	130 U	120 U	130 U	100 U	120 U	100 U	110 U
Naphthalene	5,000[f]	100 U	100 U	100 U	100 U	100 U	100 U	100 U
4-Chloroaniline	5,000	1,100 U	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U
2,6-Dichlorophenol	--	340 U	310 U	330 U	250 U	310 U	270 U	300 U
Hexachlorobutadiene	13,000	500 U	500 U	500 U	500 U	500 U	500 U	500 U
4-Chloro-3-Methylphenol	--	600 U	550 U	580 U	500 U	550 U	500 U	520 U
2-Methylnaphthalene	5,000[f]	280 U	260 U	270 U	250 U	260 U	250 U	250 U
1-Methylnaphthalene	5,000[f]	330 U	300 U	320 U	250 U	300 U	260 U	290 U
Hexachlorocyclopentadiene	480,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U
2,4,6-Trichlorophenol	80,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U
2,4,5-Trichlorophenol	8,000,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U
2-Chloronaphthalene	--	100 U	100 U	100 U	100 U	100 U	100 U	100 U
2-Nitroaniline	800,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U

Table 1
Soil Analytical Results
Snohomish County PUD No. 1 Monroe-Woods Creek Site D
Snohomish County, Washington

Analyte	MTCA Method A/B Preliminary Screening Level[a]	Sample Location and Sample Depth (ft BGS), Laboratory Sample ID, and Sample Date						
		B-1 5 EV17060046-01 6/7/2017	F.AST-TP 2 EV17060078-04 6/13/2017	HA-1 1.5 EV17060078-06 6/13/2017	TP-4 2 EV17060078-05 6/13/2017	TP-5 1.5 EV17060078-02 6/13/2017	TP-6 1.5 EV17060078-01 6/13/2017	TP-7 1 EV17060078-03 6/13/2017
Acenaphthylene	--	100 U	100 U	**130**	100 U	100 U	100 U	100 U
Dimethyl phthalate	--	100 U	100 U	100 U	100 U	100 U	100 U	100 U
2,6-Dinitrotoluene	670	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Acenaphthene	4,800,000	100 U	100 U	**380**	100 U	100 U	100 U	100 U
m-Nitroaniline	--	1,100 U	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U
2,4-Dinitrophenol	160,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitrophenol	--	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Dibenzofuran	80,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U
2,4-Dinitrotoluene	3,200	100 U	100 U	100 U	100 U	100 U	100 U	100 U
2,3,4,6-Tetrachlorophenol	2,400,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Diethyl phthalate	64,000,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Fluorene	3,200,000	100 U	100 U	**730**	100 U	100 U	100 U	100 U
4-Chlorophenyl-Phenylether	--	100 U	100 U	100 U	100 U	100 U	100 U	100 U
4-Nitroaniline	--	250 U	250 U	250 U	250 U	250 U	250 U	250 U
4,6-Dinitro-2-Methylphenol	--	100 U	100 U	100 U	100 U	100 U	100 U	100 U
N-Nitrosodiphenylamine	204,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Azobenzene	9,100	100 U	100 U	100 U	100 U	100 U	100 U	100 U
4-Bromophenyl phenyl ether	--	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Hexachlorobenzene	630	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Pentachlorophenol	2,500	500 U	500 U	500 U	500 U	500 U	500 U	500 U
Phenanthrene	--	100 U	100 U	**6,600**	100 U	100 U	100 U	**130**
Anthracene	24,000,000	100 U	100 U	**1,200**	100 U	100 U	100 U	100 U
Carbazole	--	250 U	250 U	250 U	250 U	250 U	250 U	250 U
Dibutyl phthalate	8,000,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Fluoranthene	3,200,000	100 U	100 U	**6,000**	100 U	**180**	100 U	**340**
Pyrene	2,400,000	100 U	100 U	**6,800**	100 U	**110**	100 U	**230**
Butyl benzyl phthalate	530,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U
3,3-Dichlorobenzidine	2,200	320 U	290 U	310 U	250 U	290 U	250 U	280 U

Table 1
Soil Analytical Results
Snohomish County PUD No. 1 Monroe-Woods Creek Site D
Snohomish County, Washington

Analyte	MTCA Method A/B Preliminary Screening Level[a]	Sample Location and Sample Depth (ft BGS), Laboratory Sample ID, and Sample Date						
		B-1 5 EV17060046-01 6/7/2017	F.AST-TP 2 EV17060078-04 6/13/2017	HA-1 1.5 EV17060078-06 6/13/2017	TP-4 2 EV17060078-05 6/13/2017	TP-5 1.5 EV17060078-02 6/13/2017	TP-6 1.5 EV17060078-01 6/13/2017	TP-7 1 EV17060078-03 6/13/2017
Benz[a]anthracene	1,400	100 U	100 U	**2,300**	100 U	100 U	100 U	**190**
Chrysene	140,000	100 U	100 U	**2,100**	100 U	100 U	100 U	**220**
Bis(2-Ethylhexyl) Phthalate	71,000	100 U	100 U	100 U	100 U	100 U	100 U	**270**
Di-N-Octyl Phthalate	800,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Benzo(b)fluoranthene	1,400	100 U	100 U	**2,100**	100 U	**110**	100 U	**260**
Benzo(k)fluoranthene	14,000	100 U	100 U	**550**	100 U	100 U	100 U	100 U
Benzo(a)pyrene	100	100 U	100 U	**2,000**	100 U	100 U	100 U	**200**
Indeno(1,2,3-cd)pyrene	1,400	100 U	100 U	**920**	100 U	100 U	100 U	**110**
Dibenzo(a,h)anthracene	140	100 U	100 U	**260**	100 U	100 U	100 U	100 U
Benzo(ghi)perylene	--	100 U	100 U	**1,100**	100 U	100 U	100 U	**140**
cPAH TEF	100	ND	ND	**2,634**	ND	**11**	ND	**258**
Polychlorinated Biphenyls (mg/kg; SW8082)								
PCB-aroclor 1016	5.6	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
PCB-aroclor 1221	--	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
PCB-aroclor 1232	--	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
PCB-aroclor 1242	--	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
PCB-aroclor 1248	--	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
PCB-aroclor 1254	0.5	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
PCB-aroclor 1260	0.5	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
PCB-aroclor 1268	--	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Total PCBs	1	ND	ND	ND	ND	ND	ND	ND
Total Metals (mg/kg; SW6020/7471)								
Mercury	2	**0.059**	**0.059**	**0.11**	**0.021**	**0.041**	**0.037**	**0.068**
Arsenic	20	**6.0**	**3.9**	**4.9**	**2.1**	**1.8**	**3.1**	**4.5**
Barium	16,000	**72**	**91**	**87**	**50**	**62**	**68**	**78**
Cadmium	2	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chromium	2,000[h]	**62**	**32**	**31**	**35**	**16**	**29**	**32**
Lead	250	**8.3**	**6.7**	**28**	**4.8**	**9.6**	**8.6**	**18**

Table 1
Soil Analytical Results
Snohomish County PUD No. 1 Monroe-Woods Creek Site D
Snohomish County, Washington

Analyte	MTCA Method A/B Preliminary Screening Level[a]	Sample Location and Sample Depth (ft BGS), Laboratory Sample ID, and Sample Date						
		B-1 5 EV17060046-01 6/7/2017	F.AST-TP 2 EV17060078-04 6/13/2017	HA-1 1.5 EV17060078-06 6/13/2017	TP-4 2 EV17060078-05 6/13/2017	TP-5 1.5 EV17060078-02 6/13/2017	TP-6 1.5 EV17060078-01 6/13/2017	TP-7 1 EV17060078-03 6/13/2017
Selenium	400	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Silver	400	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U

Notes:

[a] MTCA Method A screening level for unrestricted uses when available; MTCA Method B direct contact screening level if no Method A screening level is available.
[b] MTCA priority contaminants of ecological concern for site that qualified for the simplified terrestrial ecological evaluation, unrestricted land use (WAC 173-340-900, Table 749-2).
[c] Preliminary screening level is 30 mg/kg when benzene is present, 100 mg/kg when benzene is not detectable.
[d] MTCA Method B screening level for TPH-D and TPH-O based on Farallon Final Cleanup Summary Report (Farallon 2000b)
[e] MTCA Method A screening level for xylenes.
[f] MTCA Method A screening level for naphthalenes.
[g] MTCA Method B screening level for m-cresol.
[h] MTCA Method A screening level for Chromium III.
[i] Safe concentration has not yet been established.
[j] Screening level for Arsenic III.
Bold = detected compound
Green Highlight = result is greater than one of the preliminary screening levels.
-- = no screening level available

Abbreviations and Acronyms:

bgs = below ground surface
ft = feet
ID = identification
µg/kg = microgram per kilogram
mg/kg = milligram per kilogram
MTCA = Model Toxics Control Act
ND = not detected
TEQ = toxicity equivalency

Table 2
Groundwater Analytical Results
Snohomish County PUD No. 1 Monroe-Woods Creek Site D
Snohomish County, Washington

Analyte	MTCA Method A Preliminary Screening Level	MTCA Method B Preliminary Screening Level	Sample Location, Laboratory Sample ID, and Sample Date	
			B-1 @ -25' EV17060046-04 6/7/2017	MW-4 EV17060046-05 6/7/2017
Total Petroleum Hydrocarbons (µg/L) NWTPH-Gx				
Gasoline Range Organics	800/1,000[a]	--	50 U	50 U
NWTPH-Dx				
Total Petroleum Hydrocarbon – Diesel	500	--	130 U	130 U
Total Petroleum Hydrocarbon – Oil	500	--	250 U	250 U
Volatile Organic Compounds (µg/L; SW8260)				
CFC-12 (Dichlorodifluoromethane)	--	1,600	2.0 U	2.0 U
Chloromethane	--	--	2.0 U	2.0 U
Vinyl Chloride	0.2	24	0.20 U	0.20 U
Bromomethane	--	11	2.0 U	2.0 U
Chloroethane	--	--	2.0 U	2.0 U
Carbon Tetrachloride	--	0.63	2.0 U	2.0 U
CFC-11 (Trichlorofluoromethane)	--	2,400	2.0 U	2.0 U
Carbon Disulfide	--	800	2.0 U	2.0 U
Acetone	--	7,200	25 U	25 U
1,1-Dichloroethene	--	400	2.0 U	2.0 U
Methylene Chloride	5	22	5.0 U	5.0 U
Acrylonitrile	--	0.08	10 U	10 U
Methyl t-butyl ether	20	24	2.0 U	2.0 U
Trans-1,2-Dichloroethene	--	160	2.0 U	2.0 U
1,1-Dichloroethane	--	7.7	2.0 U	2.0 U
2-Butanone	--	4,800	10 U	10 U
Cis-1,2-Dichloroethene	--	16	2.0 U	2.0 U
2,2-Dichloropropane	--	--	2.0 U	2.0 U
Bromochloromethane	--	--	2.0 U	2.0 U
Chloroform	--	1.4	2.0 U	2.0 U
1,1,1-Trichloroethane	200	16,000	2.0 U	2.0 U
1,1-Dichloropropene	--	--	2.0 U	2.0 U
1,2-Dichloroethane	5	0.48	2.0 U	2.0 U
Benzene	5	0.80	2.0 U	2.0 U
Trichloroethene	5	0.54	2.0 U	2.0 U
1,2-Dichloropropane	--	1.2	2.0 U	2.0 U
Dibromomethane	--	--	2.0 U	2.0 U
Dichlorobromomethane	--	0.71	2.0 U	2.0 U
Trans-1,3-Dichloropropene	--	--	2.0 U	2.0 U
Methyl isobutyl ketone	--	640	10 U	10 U
Toluene	1,000	640	2.0 U	2.0 U
Cis-1,3-Dichloropropene	--	--	2.0 U	2.0 U
1,1,2-Trichloroethane	--	0.77	2.0 U	2.0 U
2-Hexanone	--	--	10 U	10 U
1,3-Dichloropropane	--	--	2.0 U	2.0 U
Tetrachloroethene	5	21	2.0 U	2.0 U
Dibromochloromethane	--	0.52	2.0 U	2.0 U
Ethylene dibromide	0.01	0.022	0.010 U	0.010 U
Chlorobenzene	--	160	2.0 U	2.0 U
1,1,1,2-Tetrachloroethane	--	1.7	2.0 U	2.0 U
Ethylbenzene	700	800	2.0 U	2.0 U
m, p-Xylene	1,000[b]	1,600	4.0 U	4.0 U
Styrene	--	1,600	2.0 U	2.0 U

Table 2
Groundwater Analytical Results
Snohomish County PUD No. 1 Monroe-Woods Creek Site D
Snohomish County, Washington

Analyte	MTCA Method A Preliminary Screening Level	MTCA Method B Preliminary Screening Level	Sample Location, Laboratory Sample ID, and Sample Date	
			B-1 @ -25' EV17060046-04 6/7/2017	MW-4 EV17060046-05 6/7/2017
o-Xylene	1,000[b]	1,600	2.0 U	2.0 U
Bromoform	--	5.5	2.0 U	2.0 U
Isopropylbenzene (Cumene)	--	800	2.0 U	2.0 U
1,1,2,2-Tetrachloroethane	--	0.22	2.0 U	2.0 U
1,2,3-Trichloropropane	--	0.0015	2.0 U	2.0 U
Bromobenzene	--	--	2.0 U	2.0 U
n-Propylbenzene	--	--	2.0 U	2.0 U
2-Chlorotoluene	--	160	2.0 U	2.0 U
1,3,5-Trimethylbenzene	--	80	2.0 U	2.0 U
4-Chlorotoluene	--	--	2.0 U	2.0 U
Tert-Butylbenzene	--	--	2.0 U	2.0 U
1,2,4-Trimethylbenzene	--	--	2.0 U	2.0 U
Sec-Butylbenzene	--	--	2.0 U	2.0 U
p-Isopropyltoluene	--	--	2.0 U	2.0 U
1,3-Dichlorobenzene	--	--	2.0 U	2.0 U
1,4-Dichlorobenzene	--	8.1	2.0 U	2.0 U
n-Butylbenzene	--	--	2.0 U	2.0 U
1,2-Dichlorobenzene	--	720	2.0 U	2.0 U
1,2-Dibromo-3-Chloropropane	--	0.054	10 U	10 U
1,2,4-Trichlorobenzene	--	1.5	2.0 U	2.0 U
Hexachlorobutadiene	--	0.56	2.0 U	2.0 U
Naphthalene	160	160	**2.7**	2.0 U
1,2,3-Trichlorobenzene	--	--	2.0 U	2.0 U
Semivolatile Organic Compounds (µg/L; SW8270)				
Pyridine	--	8	2.0 U	2.0 U
N-Nitrosodimethylamine	--	0.0008	2.0 U	2.0 U
Phenol	--	2,400	2.0 U	2.0 U
Aniline	--	7.7	2.0 U	2.0 U
Bis(2-Chloroethyl)Ether	--	0.040	2.0 U	2.0 U
2-Chlorophenol	--	40	2.0 U	2.0 U
1,3-Dichlorobenzene	--	--	2.0 U	2.0 U
1,4-Dichlorobenzene	--	8.1	2.0 U	2.0 U
Benzyl Alcohol	--	800	2.0 U	2.0 U
1,2-Dichlorobenzene	--	720	2.0 U	2.0 U
o-Cresol	--	400	2.0 U	2.0 U
Bis(2-chloroisopropyl) ether	--	--	2.0 U	2.0 U
m,p-Cresol (2:1 ratio)	--	400[c]	2.0 U	2.0 U
N-Nitrosodi-n-propylamine	--	0.013	2.0 U	2.0 U
Hexachloroethane	--	1.1	2.0 U	2.0 U
Nitrobenzene	--	16	2.0 U	2.0 U
Isophorone	--	46	2.0 U	2.0 U
2-Nitrophenol	--	--	2.0 U	2.0 U
2,4-Dimethylphenol	--	160	2.0 U	2.0 U
Benzoic Acid	--	64,000	10 U	10 U
Bis(2-Chloroethoxy)Methane	--	--	2.0 U	2.0 U
2,4-Dichlorophenol	--	24	2.0 U	2.0 U
1,2,4-Trichlorobenzene	--	1.5	2.0 U	2.0 U
Naphthalene	160	160	2.0 U	2.0 U
4-Chloroaniline	--	0.22	2.0 U	2.0 U
2,6-Dichlorophenol	--	--	2.0 U	2.0 U

Table 2
Groundwater Analytical Results
Snohomish County PUD No. 1 Monroe-Woods Creek Site D
Snohomish County, Washington

Analyte	MTCA Method A Preliminary Screening Level	MTCA Method B Preliminary Screening Level	Sample Location, Laboratory Sample ID, and Sample Date	
			B-1 @ -25' EV17060046-04 6/7/2017	MW-4 EV17060046-05 6/7/2017
Hexachlorobutadiene	--	0.56	2.0 U	2.0 U
4-Chloro-3-Methylphenol	--	--	2.0 U	2.0 U
2-Methylnaphthalene	--	32	2.0 U	2.0 U
1-Methylnaphthalene	--	1.5	2.0 U	2.0 U
Hexachlorocyclopentadiene	--	48	2.0 U	2.0 U
2,4,6-Trichlorophenol	--	4.0	2.0 U	2.0 U
2,4,5-Trichlorophenol	--	800	2.0 U	2.0 U
2-Chloronaphthalene	--	--	2.0 U	2.0 U
2-Nitroaniline	--	160	2.0 U	2.0 U
Acenaphthylene	--	--	2.0 U	2.0 U
Dimethyl phthalate	--	--	2.0 U	2.0 U
2,6-Dinitrotoluene	--	0.058	2.0 U	2.0 U
Acenaphthene	--	960	2.0 U	2.0 U
m-Nitroaniline	--	--	5.0 U	5.0 U
2,4-Dinitrophenol	--	32	10 U	10 U
4-Nitrophenol	--	--	2.0 UJ	2.0 UJ
Dibenzofuran	--	16	2.0 U	2.0 U
2,4-Dinitrotoluene	--	0.28	2.0 U	2.0 U
2,3,4,6-Tetrachlorophenol	--	480	2.0 U	2.0 U
Diethyl phthalate	--	12,800	2.0 U	2.0 U
Fluorene	--	640	2.0 U	2.0 U
4-Chlorophenyl-Phenylether	--	--	2.0 U	2.0 U
4-Nitroaniline	--	--	2.0 U	2.0 U
4,6-Dinitro-2-Methylphenol	--	--	2.0 U	2.0 U
N-Nitrosodiphenylamine	--	18	2.0 U	2.0 U
Azobenzene	--	0.80	2.0 U	2.0 U
4-Bromophenyl phenyl ether	--	--	2.0 U	2.0 U
Hexachlorobenzene	--	0.055	2.0 U	2.0 U
Pentachlorophenol	--	0.22	5.0 U	5.0 U
Phenanthrene	--	--	2.0 U	2.0 U
Anthracene	--	4,800	2.0 U	2.0 U
Carbazole	--	--	2.0 U	2.0 U
Dibutyl phthalate	--	1,600	2.0 U	2.0 U
Fluoranthene	--	640	2.0 U	2.0 U
Pyrene	--	480	2.0 U	2.0 U
Butyl benzyl phthalate	--	46	2.0 U	2.0 U
3,3-Dichlorobenzidine	--	0.19	2.0 U	2.0 U
Benz[a]anthracene	--	0.12	2.0 U	2.0 U
Chrysene	--	12	2.0 U	2.0 U
Bis(2-Ethylhexyl) Phthalate	--	6.3	**140**	2.0 U
Di-N-Octyl Phthalate	--	160	2.0 U	2.0 U
Benzo(b)fluoranthene	--	0.12	2.0 U	2.0 U
Benzo(k)fluoranthene	--	1.2	2.0 U	2.0 U
Benzo(a)pyrene	0.1	0.012	2.0 U	2.0 U
Indeno(1,2,3-cd)pyrene	--	0.12	2.0 U	2.0 U
Dibenzo(a,h)anthracene	--	0.012	2.0 U	2.0 U
Benzo(ghi)perylene	--	--	2.0 U	2.0 U
cPAH TEQ	0.1	--	ND	ND
Total Metals (µg/L; EPA 200.8/SW 245.1)				
Mercury	2	--	0.20 U	0.20 U
Arsenic	5	0.058	**8.7**	1.0 U

Table 2
Groundwater Analytical Results
Snohomish County PUD No. 1 Monroe-Woods Creek Site D
Snohomish County, Washington

Analyte	MTCA Method A Preliminary Screening Level	MTCA Method B Preliminary Screening Level	Sample Location, Laboratory Sample ID, and Sample Date	
			B-1 @ -25' EV17060046-04 6/7/2017	MW-4 EV17060046-05 6/7/2017
Cadmium	5	8	1.0 U	1.0 U
Chromium	50	24,000[d]	**9.0**	2.0 U
Lead	15	--	**5.1**	1.0 U

Notes:

[a] Preliminary screening level is 800 µg/L when benzene is present, 1,000 µg/L when benzene is not detectable.

[b] MTCA Method A screening level for xylenes.

[c] MTCA Method B screening level for m-cresol (more conservative).

[d] MTCA Method B screening level for cadmium III.

Bold = detected compound

Green Highlight = result is greater than preliminary screening level.

-- = no screening level available

Abbreviations and Acronyms:

cPAH = carcinogenic polycyclic aromatic hydrocarbon

ft = feet

ID = identification

µg/L = microgram per liter

MTCA = Model Toxics Control Act

NWTPH = Northwest Total Petroleum Hydrocarbon

ND = not detected

TEQ = toxicity equivalency

Supplemental Phase II Environmental Site Assessment

Supplemental Phase II Environmental Site Assessment
Former Monroe Auto Wrecking Site
Monroe, Washington

November 12, 2018

Prepared for

Ms. Rebecca Ralston
On Behalf of River's Edge WA LLLP
River's Edge, Washington

LANDAU ASSOCIATES

Supplemental Phase II Environmental Site Assessment
Former Monroe Auto Wrecking
Monroe, Washington

This document was prepared by, or under the direct supervision of, the technical professionals noted below.

Document prepared by: _____ Cody M. Johnson, PE
Project Manager

Document reviewed by: _____ Kathryn F. Hartley
Associate; Quality Reviewer

Date: November 12, 2018
Project No.: 1759001.010
File path: P:\1759\001\R\Supplemental PhII ESA\MAW Revised Supple PhII ESA 111218.docx
Project Coordinator: tam

LANDAU ASSOCIATES

This page intentionally left blank.

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

LIST OF ABBREVIATIONS AND ACRONYMS

AST ..... Aboveground Storage Tank
ASTM ..... American Society for Testing and Materials International
bgs ..... Below Ground Surface
cy ..... Cubic Yard(s)
District ..... Snohomish Public Utility District No. 1
Ecology ..... Washington State Department of Ecology
EMMP ..... Excavated Materials Management Plan
EPA ..... US Environmental Protection Agency
ESA ..... Environmental Site Assessment
ESN ..... ESN Northwest
ft ..... Feet/Foot
Glacier ..... Glacier Environmental Services
LAI ..... Landau Associates, Inc.
µg/L ..... Micrograms per Liter
mg/kg ..... milligrams per kilogram
MNA ..... monitored natural attenuation
MTCA ..... Model Toxics Control Act
NFA ..... No Further Action
PCB ..... Polychlorinated Biphenyl
PAH ..... Polycyclic Aromatic Hydrocarbon
PVC ..... polyvinyl chloride
River's Edge ..... River's Edge WA LLLP
TPH ..... Total Petroleum Hydrocarbon
TPH-D ..... Diesel-Range Total Petroleum Hydrocarbon
TPH-G ..... Gasoline-Range Total Petroleum Hydrocarbon
TPH-O ..... Oil-Range Total Petroleum Hydrocarbon
RI/FS ..... Remedial Investigation/Feasibility Study
VCP ..... Voluntary Cleanup Program

1.0 INTRODUCTION

Landau Associates, Inc. (LAI) has prepared the following Supplemental Phase II Environmental Site Assessment (ESA) report for Ms. Rebecca Ralston on behalf of River's Edge WA LLLP (River's Edge) to provide the results of soil, groundwater, and surface water sampling and analysis for the Former Monroe Auto Wrecking site located at 426 Fremont Street in Monroe, Washington (Figure 1). It is our understanding that River's Edge is considering acquiring the property, which includes six tax parcels, for construction of low-income housing.

In 2017, LAI prepared a Phase I ESA for the site for the Snohomish County Public Utility District No. 1 (District) (LAI 2017a). The Phase I ESA included all six parcels that make up the site and identified recognized environmental conditions associated with historical site uses (shingle mill, lumber mill, and automobile salvage yard). A Phase II ESA was subsequently conducted on a portion of the site (parcel 27070600300500) that the District was considering purchasing (LAI 2017b). The findings from these and other previous assessments are discussed in Section 2.0 of this report. This Supplemental Phase II ESA was conducted to evaluate *recognized environmental conditions* that were identified in the 2017 Phase I ESA, but were not assessed during the 2017 Phase II ESA due to the more focused scope of that investigation, and to evaluate potential data gaps from previous investigations that could present significant environmental liability for a prospective purchaser. The Phase II ESA was conducted in general accordance with the American Society for Testing and Materials International (ASTM) *Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process E1903 - 11*, and the scope of work included in our proposal dated May 30, 2018 that was authorized by Ms. Ralston on June 18, 2018.

2.0 PREVIOUS INVESTIGATIONS

A number of previous environmental investigations have been conducted to document soil and groundwater conditions at the Site. This section presents a summary of the findings of the previous investigations. This information was used to develop the scope of work for the Phase II ESA.

1990 Investigation. In 1990, Hart Crowser conducted two investigations on behalf of Glacier Park Company to evaluate whether historical practices associated with a former mill and auto salvage yard had resulted in contamination of the site's soil and groundwater. The Hart Crowser investigations included the portion of the site south of Fremont Street at Ann Street. The investigations also included the area west of the site, and three additional areas to the north of the site. Findings from these areas are not discussed in this report.

Subsurface investigations at the southwest end of the site detected total petroleum hydrocarbons (TPH), lead, and zinc at concentrations above Model Toxics Control Act (MTCA) soil cleanup levels. The contamination covered a surface area of approximately 4,200 square feet to depths of 1 to 2 feet (ft) below ground surface (bgs). Groundwater sampling and analysis conducted in this area of the site found low levels of dissolved cadmium, chromium, and zinc. No TPH, volatile organic compounds, or semivolatile organic compounds, pesticides, or polychlorinated biphenyls (PCBs) were detected in the groundwater samples collected (Hart Crowser 1990).

1996 to 1997 Investigation and Cleanup. Soil and groundwater sampling was conducted at the site by EMCON in 1996 (EMCON 1996a, b) for Ms. Reta Jensen, the owner of the site at the time, found:

- PCBs in soil at concentrations exceeding the MTCA Method A cleanup level near a power pole, east of the mill building in the northeastern portion of the site.
- Cadmium, chromium, and lead in soil samples at concentrations below MTCA Method C (cadmium and chromium) or MTCA Method A (lead) industrial cleanup levels.
- Diesel- and oil-range total petroleum hydrocarbons (TPH-D and TPH-O, respectively) in soil at concentrations exceeding the MTCA Method A cleanup levels in several locations at the site.
- TPH-D in groundwater at a concentration below the MTCA Method A cleanup level in one sample collected from a monitoring well at the southwest end of the site.

In April 1997, Glacier Environmental Services, Inc. (Glacier) reported the results of an independent remedial action at the site involving the removal and disposal of approximately 18 tons of PCB-impacted soil from the area near the power pole identified by EMCON (Figure 2). Glacier concluded that the excavation had removed soil containing PCBs above the MTCA Method A cleanup level (Glacier 1997).

2000 Investigation. In February 2000, Farallon conducted a remedial investigation and feasibility study (RI/FS) for the "East Subareas" (the Former Lumber Mill Subarea and Former Salvage Yard Subarea), which are located within the site boundaries. Farallon excavated 22 test pits (to an average

depth of 15 ft bgs), drilled 3 soil borings (greater than 15 ft bgs), and installed 2 additional groundwater monitoring wells (screened between 15 to 30 ft bgs and 15 to 25 ft bgs). Groundwater samples were also collected from existing monitoring wells installed during previous investigations by EMCON (EMCON 1996a), Hart Crowser (Hart Crowser 1990), and Farallon (Farallon 2000).

Based on the soil and groundwater sampling and analysis conducted for the RI/FS, Farallon identified TPH-D, TPH-O, lead, and PCBs in soil at concentrations above MTCA Method A cleanup levels for unrestricted land uses in areas at the southwest and northeast ends of the Site. No analytes were identified above MTCA Method A cleanup levels in groundwater (Farallon 2000).

In July and August 2000, Farallon conducted remedial excavations at seven areas of the site to remove shallow contaminated soil identified during the RI/FS (Figure 2). Approximately 2,140 tons of soil was excavated and disposed of offsite. Analytical results of confirmation soil samples taken from the sidewalls and floor of the excavations indicated that contamination remained above the MTCA Method B cleanup level for TPH (calculated for the site using the Interim TPH Guidelines based on residential use), and above the MTCA Method A cleanup level for cadmium and lead in two areas in the southwestern portion of the site (identified as Excavation Areas 1 and 2 [Ex-1 and EX-2 on Figure 2]). Further excavation was not conducted to avoid damage to an existing structure and nearby large trees and vegetation. Farallon requested a No Further Action (NFA) determination from the Washington State Department of Ecology (Ecology) based on the results of the cleanup (Farallon 2000).

Ecology (Ecology 2001) granted an NFA determination for the site; however, in 2008, Ecology re-evaluated the site and determined that the remedial action was not sufficient to meet MTCA requirements. The previously issued NFA determination was rescinded due to the presence of TPH, cadmium, and lead left in place at concentrations exceeding cleanup levels (Ecology 2008).

2017 Phase I ESA. LAI's Phase I ESA was completed for all six parcels that comprise the site. The Phase I ESA summarized conditions and identified the following *recognized environmental conditions* for which further evaluation was recommended:

1. Subsurface contamination identified at the site in previous reports as the result of historical site uses (shingle mill, lumber mill, and automobile salvage yard).
2. Cadmium, lead, and petroleum hydrocarbon contamination that exceeds MTCA Method A cleanup levels in the southern portion of the site that was left in place following remedial excavations.
3. Conditions at the reported location of a 500-gallon aboveground storage tank (AST) formerly located at the north end of the site, reportedly removed along with approximately 20 cubic yards (cy) of impacted soil from beneath the AST by the current site owner (Mr. Lauren Wibbleman). Confirmation soil samples were not collected from the excavation to confirm that all impacted soil exceeding cleanup levels was removed.

4. PCB-impacted soil resulting from a release from a burned transformer in an area on the north end of the site that was reportedly excavated and removed from the site in 1997.

Additionally, a bulk fuel terminal with three ASTs located north of and upgradient of the site with no known releases was identified as a potential environmental concern due to its proximity to the site and upgradient location.

2017 Phase II ESA. In June 2017, LAI conducted a Phase II ESA for the eastern-most and largest parcel of the site (Snohomish County tax parcel number 27070600300500) for the District. The purpose of the Phase II ESA was to screen for the presence of soil and groundwater contamination associated with the *recognized environmental conditions* identified in the Phase I ESA for the parcel in question. The focused Phase II ESA investigation included both soil and groundwater samples for specific targeted analytes. Sampling locations were selected to confirm cleanup sample results reported for the locations of earlier cleanup activities on the parcel (Farallon 2000) and to evaluate potential groundwater contamination associated with the adjacent operating offsite petroleum facility located hydraulically upgradient to the north of the Site. The area where contamination was left in place following Farallon's remedial excavations in the southwest portion of the site was not evaluated during the Phase II ESA because it was outside the parcel that was the focus of the investigation.

The Phase II ESA testing results indicated that:

- Previous independent remedial excavations on tax parcel number 27070600300500 (Farallon 2000) appear to have successfully met MTCA Method A cleanup levels for the contaminants of concern at the time of excavation. TPH-D and TPH-O were detected in soil samples collected from that site at concentrations that did not exceed the MTCA Method A cleanup level. Polycyclic aromatic hydrocarbons (PAHs), which were not analyzed for during the previous investigations, were detected in one shallow (i.e. less than 2 ft bgs) Phase II ESA soil sample at concentrations exceeding MTCA Methods A and B cleanup levels.
- No PCBs were detected in the shallow composite soil sample from the area of the earlier PCB cleanup (EMCON 1996c). PAHs, which were not analyzed for during the previous investigations, were detected in the shallow soil below the PCB cleanup area and near previous remedial excavation area EX-7 at concentrations exceeding MTCA Method A and B cleanup levels.
- The groundwater sample from existing well MW-4 located near the north end of the site showed no detections of hazardous substances above detection levels. Based on earlier investigation results, well MW-4 is likely to be downgradient (in the direction of groundwater flow) from the existing operating ASTs north of Simons Road. A groundwater grab sample was collected from a geotechnical boring near the center of the parcel. Results from that sample showed that only low levels of metals (including an exceedance of the MTCA Method A cleanup level for total arsenic) and two semivolatile organic compounds (bis[2-ethylhexyl]-phthalate and naphthalene, including an exceedance of the MTCA Method B cleanup level for bis[2-ethylhexyl]phthalate) were present in the sample. The detections of metals in the grab sample were attributed to high turbidity (suspended solids) in the sample, and the bis[2-ethylhexyl]phthalate from new plastics in the temporary well casing or equipment used for groundwater sampling and, therefore, may not be representative of groundwater.

In summary, PAHs were detected in shallow soil at the site at concentrations that exceed MTCA Method A, and/or Method B (direct contact unrestricted use), cleanup levels. The groundwater samples from the existing well MW-4 show no detections that exceed cleanup screening levels, and no indications of groundwater contamination from the offsite fuel operations. The groundwater grab sample contained arsenic and bis[2-ethylhexyl]phthalate at concentrations exceeding cleanup levels, but these detections should be qualified based on the sampling methodology and are likely not representative of the site groundwater conditions.

Other Actions. Discussions with the property owner identified that indications of a small fuel release prompted limited soil excavation near a former fuel AST and informal soil removal activities were conducted in the vicinity of the AST. Based on discussions, we understand that approximately 18 cy of soil was excavated and disposed of at a solid waste landfill, but no confirmation soil samples were collected. A test pit was excavated and sampled in this area during the 2017 Phase II ESA and no petroleum hydrocarbons, PAHs, or PCBs were detected in the sample collected.

2.1 Data Gaps

In May 2018, LAI contacted Ms. Sonia Fernandez of Ecology's Voluntary Cleanup Program (VCP) to discuss rescission of the 2001 NFA. Ms. Fernandez indicated that, beyond the reasons for the rescission indicated in the letter (i.e. contaminated soil left in place in the southwestern portion of the site following Farallon's remedial excavations), Ecology had concerns that the site soil and groundwater had not been fully characterized and that debris in the slope leading down to Woods Creek associated with dumping during operation of the former auto wrecking yard could impact the creek. Based on our review of the previously prepared environmental reports and the opinion provided by Ecology, LAI identified the following data gaps requiring additional characterization to evaluate whether residual contamination is present that could affect future site residents and/or Woods Creek:

1. TPH-D and TPH-O were detected in soil 15 ft bgs at concentrations of 420 milligrams per kilogram (mg/kg) and 2,050 mg/kg, respectively, in test pit FLM-TP8 to the south of the mill building. The individual detections were at or below the MTCA Method B cleanup level of 2,050 mg/kg calculated by Farallon, but insufficient data were collected to demonstrate that the detections represented two distinct products. Without such data, the analytical results must be summed together, the result of which would exceed the calculated MTCA Method B cleanup level.
2. Cadmium was detected at concentrations above the MTCA Method A cleanup level in the south and east sidewall samples collected from Farallon remedial excavation EX-1 located at the south end of the site, but the extent of contamination was not further evaluated
3. Cadmium, lead, and TPH-D were detected at concentrations above their respective MTCA Method A cleanup levels in the south sidewall and southeast excavation bottom samples collected from Farallon remedial excavation EX-2 at the south end of the site, but the extent of contamination was not further evaluated.

4. Confirmation samples collected from Farallon remedial excavations EX-3, EX-4, and EX-6 were not analyzed for PCBs; however, PCBs were detected in soil samples collected from those areas prior to excavation at concentrations exceeding the MTCA Method A cleanup level.
5. PAHs were detected at concentrations above the MTCA Method A cleanup level in areas adjacent to the mill building during the LAI Phase II ESA, but the extent of contamination was not further evaluated.
6. The extent of the debris in the slope to Woods Creek has not been well characterized.
7. Potential impacts to groundwater and the surface water of Woods Creek have not been well characterized.

Most of the data gaps identified during our review likely represent shallow soil contamination that is unlikely to present a significant additional cost to evaluate and remediate and can be addressed during construction through proper planning, oversight, and documentation. However, the deep diesel contamination (Item 1), the extent of debris in the slope to Woods Creek (Item 6), and the potential for groundwater contamination to be impacting Woods Creek (Item 7) have the potential to significantly impact remediation and redevelopment costs for the site. The purpose of this supplemental Phase II ESA was to further evaluate these issues.

3.0 PHASE II ESA SAMPLING RESULTS AND EVALUATION

Soil, groundwater, and surface water sampling to support the Supplemental Phase II ESA evaluation was conducted at the site on June 19, 2018. Follow-up installation of monitoring wells and subsequent well development and groundwater sampling were conducted between August 10 and 22, 2018.

3.1 Initial Mobilization

On June 29, 2018, ESN Northwest (ESN) of Olympia, Washington, under subcontract to LAI, advanced six direct-push borings with a standard Geoprobe® rig for soil and groundwater sampling, and LAI conducted surface water sampling of Woods Creek. Sampling locations are shown on Figure 3 and are summarized as follows:

- Borings B-1 through B-3 were advanced to approximately 20 ft bgs near the location where TPH soil contamination was detected at concentrations exceeding the MTCA Method A cleanup level at 15 ft bgs to the south of the mill building (former test pit FLM-TP8; Figure 3). Soil samples were collected from two depths at each location: 12 ft bgs and 15-20 ft bgs.
- Borings P-2 through P-5 (boring P-1 was planned, but not conducted due to time constraints) were advanced at least 2 ft past the groundwater interface, which occurred between 24 and 29 ft bgs, at locations along the south property boundary at the top of the slope down to Woods Creek. These borings were advanced to screen for debris associated with the former auto wrecking activities, and to collect groundwater samples to evaluate whether the legacy contamination associated with the auto wrecking activities has impacted groundwater at the site that could discharge into Woods Creek. The borings were advanced to below the depth of the water table so that groundwater samples could be collected at those locations.
- Surface water samples were collected from Woods Creek at a location upstream of the site (SWUP) and downstream (SWD) to screen for potential impacts on the creek associated with the site.

Based on previous investigations, the groundwater flow direction at the site is to the south/southwest toward Wood Creek and along its flow path. Boring locations P-2 through P-5 were selected because of their downgradient position based on the potential groundwater flow direction.

During drilling at each location, continuous soil samples were collected to the maximum depth of the exploration with a 4-ft long, 2-inch-diameter tube sampler with acetate liners. An LAI professional observed the direct-push borings and maintained records of the subsurface soil conditions, obtained representative samples for laboratory analyses, described the soil based on visual and textural examination, and conducted a field assessment for environmental impacts based on visual and olfactory observations. The soil encountered in the borings was screened for contamination using visual and olfactory observations, and described using the Unified Soil Classification System in general accordance with the ASTM D 2488 Standard Recommended Practice for Description of Soil (Visual-Manual Procedures).

Logs of the explorations are provided in Appendix A. These logs represent LAI's interpretation of subsurface conditions identified during the field explorations. The stratigraphic contacts shown on the individual logs represent the approximate boundaries between soil types; actual transitions may be more gradual. Information presented on the summary logs depicts subsurface conditions encountered at the specified location and on the date designated on the log.

Soil samples for laboratory analysis were collected by transferring discreet samples from the acetate liners into laboratory-prepared glassware using disposable stainless-steel spoons. Groundwater samples were collected using a groundwater sampler consisting of a 4-ft long, wire-wrapped, stainless-steel screen (0.010-inch slot size) with a retractable protective steel sheath. The groundwater sampler was advanced to the sample depth and the protective sheath was retracted to expose the stainless-steel screen to the formation. Because the depth to groundwater at each location was outside the suction range of a peristaltic pump, the groundwater samples were collected using a check valve attached to the end of dedicated polyethylene tubing used to collect the samples directly into laboratory-prepared containers. The samples for metals analysis were then filtered at the laboratory using a 0.45-micron filter.

The surface water samples were collected by lowering a decontaminated plastic container into the creek and then filling the laboratory-supplied sample bottles. The samples were collected from as near the approximate centerline of the creek as practical. The sample collection container was decontaminated between samples.

3.1.1 Subsurface Conditions

Subsurface conditions encountered in the soil borings at the site are summarized in the boring logs provided in Appendix A. Observations made during the drilling indicate that subsurface soil at the northeast end of the site in the vicinity of the mill building, as characterized by borings B-1 through B-3, generally consists of silty sand with varying amounts of gravel interbedded with occasional silt layers to 20 ft bgs. The subsurface soil encountered in the explorations along the south property boundary (P-2 through P-5) consists of silts with occasional layers of silty sand. Wood, glass, and metal debris, as well as traces of paint chips, were also observed in samples retrieved from borings P-2 through P-5 as noted below:

- **P-2:** Wood debris was present from approximately 12 to 15 ft bgs.
- **P-3:** Metal and glass debris were present from approximately 15 to 22 ft bgs.
- **P-4**: Metal and glass debris were observed from approximately 17 to 21 ft bgs and wood debris was present from approximately 25 to 35 ft bgs.
- **P-5**: Glass, brick, and plywood debris were present from near the ground surface to approximately 5 ft bgs. Wood and metal debris were noted at approximately 15 to 15.5 ft bgs, and glass debris was observed from approximately 20 to 22 ft bgs and 25 to 25.5 ft bgs.

Groundwater was encountered in P-2 through P-5 at depths of 24 to 29 ft bgs. Groundwater was not observed in B-1 through B-3.

3.1.2 Analytical Results

Samples collected from the Supplemental Phase II ESA explorations were submitted to ALS Environmental (ALS) in Everett, Washington under standard chain-of-custody procedures.

The soil samples collected from borings B-1 through B-2 were analyzed for:

- TPH-D and TPH-O by NWTPH-Dx.

Each groundwater sample collected from borings P-2 through P-5, and both of the surface water samples, were analyzed for the following constituents:

- TPH-D and TPH-O by NWTPH-Dx
- PAHs by US Environmental Protection Agency (EPA) Method 8270
- PCBs by EPA Method 8082
- Dissolved Metals (arsenic, cadmium, chromium, lead, mercury, and zinc) by EPA Method 6010/7470.

The analytical results for the soil, groundwater, and surface water samples are provided in Tables 1 through 3, respectively. The analytical laboratory report is included in Appendix B.

3.1.2.1 Soil Testing Results

Six soil samples from boring B-1, B-2, and B-3 were collected and analyzed for TPH-D and TPH-O Analytical results for soil indicate that TPH-D and TPH-O were not found to be present above the laboratory reporting limit in any of the samples.

3.1.2.2 Groundwater Testing Results

The analytical results for groundwater are summarized below. The sample results were compared against groundwater and surface water regulatory criteria due to the proximity of Woods Creek, as discharge of groundwater to surface water is the most likely exposure pathway.

- **Dissolved Metals.** Dissolved **c**hromium, cadmium, lead, and mercury were not detected in any of the groundwater samples collected above the laboratory detection limit. Arsenic and zinc were detected in multiple samples as follows:
    - Dissolved arsenic was detected in the samples collected from borings P-3, P-4, and P-5 at concentrations of 1.6 micrograms per liter (µg/L), 2.5 µg/L, and 1.1 µg/L, respectively. These concentrations exceed the most restrictive surface water screening criteria of 0.018 µg/L.
    - Zinc was detected in all of the groundwater samples collected at concentrations ranging from 9.3 µg/L to 200 µg/L. The concentrations detected in the samples from P-3 (50 µg/L), P-4 (38 µg/L), and P-5 (200 µg/L) exceeded the most restrictive surface water criteria of 32 µg/L.
- **PAHs.** One or more PAHs including naphthalene; 1-methylnaphthalene; and 2-methylnaphthalene; benzo(g,h,i)perylene; fluoranthene; ideno(1,2,3-cd)pyrene; phenanthrene; and pyrene were detected in each of the groundwater samples analyzed at concentrations well below cleanup levels.

- **PCBs.** PCBs were not detected in any of the groundwater samples analyzed.
- **Petroleum Hydrocarbons.** TPH-D (approximately 230 µg/L) and TPH-O (450 µg/L) were detected in the sample collected from boring P-4. These concentrations are below the MTCA Method A groundwater cleanup level of 500 µg/L for both constituents. A review of the laboratory chromatogram indicates that these detections likely represent two separate petroleum products, so the individual TPH results may be compared against the cleanup criteria rather than summing them together as would be required if only one product was present. There are no surface water criteria for petroleum hydrocarbons.

3.1.2.3 Surface Water Testing Results

The analytical results for the surface water samples are summarized below. The sample results were compared against surface water regulatory criteria.

- **Dissolved Metals.** Dissolved chromium, cadmium, lead, and mercury were not detected in any of the surface water samples collected.
    - Arsenic was detected in both samples at a concentration of 1.8 µg/L. This exceeds the most restrictive surface water criteria of 0.018 µg/L.
    - Zinc was not detected in the upstream sample, but was detected in the downstream sample at a concentration of 2.7 µg/L. This is below the most restrictive surface water criteria of 32 µg/L
- **PAHs.** PAHs were not detected in either of the surface water samples analyzed.
- **PCBs.** PCBs were not detected in either of the surface water samples analyzed.
- **Petroleum Hydrocarbons.** TPH-D and TPH-O were not detected in either of the surface water samples analyzed.

3.1.3 Discussion of Analytical Results

The groundwater sample results indicate that arsenic and zinc are present at concentrations that exceed one or more regulatory screening criteria. The samples were grab samples collected from direct-push explorations and, while they were filtered at the laboratory prior to analysis, were still likely to contain turbidity that could create a high bias in the results due to metals associated with the suspended solids that are not representative of the mobile dissolved fraction. The impact of these contaminants on Woods Creek is difficult to assess based on one sampling event. The surface water results show no detectable increase in the arsenic concentration from upstream to downstream, but did show a slight increase in the zinc concentration from below detection limits to 2.7 µg/L

3.2 Follow-Up Mobilization

The analytical results of the initial mobilization indicated that arsenic and zinc were present in the groundwater samples collected from P-3 through P-5 at concentrations exceeding surface water criteria. Naturally occurring metals are typically found in soil and these reported detections are potentially resulting from the turbidity level associated with samples collected from direct-push explorations rather than permanent, developed monitoring wells. The results may, therefore, not be representative of the actual mobile dissolved fraction in groundwater at the site. Low-turbidity

samples collected from properly developed monitoring wells installed with sand packs will likely result in lower-turbidity samples that are likely more representative of the site's groundwater conditions. A follow-up mobilization was, therefore, conducted to install monitoring wells in the immediate vicinity of P-3 through P-5 in an effort to collect more representative groundwater samples.

3.2.1 Well Installation and Development

On August 10, 2018 ESN, under subcontract to LAI, mobilized to the site to install monitoring wells in the vicinity of direct-push explorations P-3 through P-5 where elevated concentrations of arsenic, zinc, and/or petroleum hydrocarbons were detected during the initial mobilization. The wells were named after the direct-push exploration they were installed near; for example, well P3-MW was installed next to direct-push exploration P-3. Each well was installed using direct-push method with a standard Geoprobe® rig. Each well was installed to 30 ft bgs. Construction details for the wells are as follows.

- Well casings and screens are 1-inch-diameter Schedule 80 polyvinyl chloride (PVC).
- Well screens are 0.010-inch slot size with threaded end cap.
- A 6/9 Colorado sand pack extend from the bottom of the well to 2 ft above the well screen.
- The well seal consists of hydrated bentonite pellets immediately on top of the sand pack with extending to the surface completion.
- The wells are completed in 6-inch-diameter flush-mounted, traffic-rated monuments with gasketed lids and bolts.

Well logs are included in Appendix A.

The wells were developed by LAI personnel on August 13, 2018. Well development was completed to remove fine formation material from the well and sand pack. Developed was conducted using polyethylene tubing fitted with a check-valve and surge block to surge water through the sand pack and purge water from the well to remove the sediment stirred up by surging. This creates a better connection with the surrounding formation and reduces turbidity in the well water.

3.2.2 Groundwater Sampling

Groundwater samples were collected from the three newly installed monitoring wells on August 17 and 22, 2018. The samples were collected using a check valve connected to disposable Teflon tubing because the depth to groundwater was outside the suction limit for the peristaltic pump typically used to sample shallow groundwater. Prior to collecting a sample, three casing volumes were purged from each well to ensure that the sample collected was representative of the surrounding formation water. Following purging, the sample bottles were filled using the check valve and tubing method. The samples for dissolved metals analysis were filtered in the field using disposable 0.45-micron groundwater filters to fill laboratory-supplied sample bottles preserved with nitric acid.

3.2.3 Analytical Results

The groundwater samples were submitted to ALS under standard chain-of-custody procedures. Each sample was analyzed for total and dissolved arsenic and zinc, and the sample from DP4-MW was analyzed for TPH-Dx, to compare against the results from previous samples collected from the direct-push explorations. The sample results for each well are presented below and in Table 2, and the analytical laboratory report is included in Appendix B.

- **P3-MW**: Arsenic was not detected above the detection limit of 1.0 µg/L in either the total or dissolved samples collected from this well. The total and dissolved zinc concentrations were 52 µg/L and 37 µg/L, respectively.
- **P4-MW**: The total and dissolved arsenic concentrations in the sample collected from this well were 15 µg/L and 14 µg/L, respectively. The total and dissolved zinc concentrations were 39 µg/L and 8.2 µg/L, respectively. The total zinc concentration exceeded the screening level of 32 µg/L. TPH-D was not detected in the sample. TPH-O was detected at a concentration of 3,700 µg/L, which exceeds the MTCA Method A cleanup level of 500 µg/L.
- **P5-MW**: The total and dissolved arsenic concentrations in the sample collected from this well were 1.6 µg/L and below the detection limit (1.0 µg/L), respectively. The total and dissolved zinc concentrations were 69 µg/L and 20 µg/L, respectively. The total zinc concentration exceeded the screening level of 32 µg/L

3.2.4 Discussion of Analytical Results

The groundwater sample results indicate that total arsenic was present in two samples and dissolved arsenic in one sample at concentrations exceeding screening levels. Total zinc was present in all three samples at concentrations exceeding screening levels. The dissolved arsenic concentrations were lower than those in the samples collected from the direct-push explorations, except for the sample collected from P4-MW, which, at 14 µg/L, was higher than that collected from P-4 (2.5 µg/L). The small difference in the total and dissolved arsenic concentrations from P4-MW (as well as those collected from the other wells) indicates that arsenic in groundwater at the southern end of the site consists mostly of the dissolved fraction. The higher purge volume from the well sampling activities, as opposed to the direct-push sampling, may have resulted in a more representative sample and the higher concentration in the sample from P4-MW (this is likely the case for the higher TPH result in P4-MW as well). Parameters monitored during sampling indicate a groundwater pH in the wells of approximately 5.5 to 6, and an oxidation/reduction potential around 1,000 millivolts. These conditions are conducive to formation of soluble arsenic species, which may drop out of solution (thus, reducing the dissolved concentration) as the groundwater approaches the more neutral pH conditions of Woods Creek.

The dissolved zinc concentrations were significantly lower in the monitoring well samples compared to the direct-push exploration samples. This likely reflects the added turbidity removal achieved from sampling from wells versus the direct-push explorations.

4.0 CONCLUSIONS

The supplemental Phase 2 ESA explorations were conducted to evaluate the potential for contamination associated with historical site use at the Former Monroe Auto Wrecking site to present significant environmental liability for a prospective purchaser. To that end, LAI evaluated data gaps from previous investigations at the site; conducted subsurface soil and groundwater sampling, as well as surface water sampling, to assess and delineate petroleum hydrocarbon contamination detected near the south end of the mill building on the site, and assessed potential impacts to the adjacent Woods Creek resulting from subsurface contamination at the site and/or debris placed along the slope down to Woods Creek from the site.

Soil sampling conducted at the south end of the mill building found no detectable petroleum hydrocarbons at or near the depths at which it was encountered during the previous explorations conducted by Farallon in 2000. The lack of detections indicates that the previously-detected contamination may have naturally degraded to below-detection limit levels. Further evaluation of this data gap does not appear to be necessary.

Groundwater sampling conducted at the south end of the site indicated that total and dissolved arsenic and zinc are present at concentrations that exceed one or more surface water criteria. In addition, TPH-O was detected in one sample at a concentration exceeding the MTCA Method A cleanup level (surface water cleanup levels to TPH-O have not been published by Ecology). The presence of these contaminants may be associated with the former auto wrecking or mill activities at the site as wood, metal, glass, and paint debris were encountered at depths ranging from within 5 ft of the ground surface to 35 feet bgs in the borings along the south property boundary. This may indicate that wrecking debris or wood debris was dumped at the site, or that fill containing the debris was used to fill the site to its current grade. However, the results of the surface water sampling showed no change in the arsenic concentration, and a slight increase in the zinc concentration, from the upstream to downstream sample locations; petroleum hydrocarbon were not detected. This may indicate that redox conditions between the site and creek are causing the dissolved metals fractions to precipitate out of solution prior to reaching the creek, thus, reducing impacts to surface water. Alternatively, the mass flux of contaminants into the stream may be too low to significantly increase concentrations in the creek. Additional sampling and analysis would be required to confirm these assumptions.

Based on the available data, the contamination detected in the site groundwater appears to be relatively minor and the impact on Woods Creek is uncertain. Due to the cleanup level exceedances, Ecology will likely require additional monitoring of the existing wells and surface water of Woods Creek (in addition to removal and confirmation sampling of the near-surface contamination associated with data gaps 2 through 5 presented in Section 2.1) before granting the site NFA status. Ecology may also require additional explorations to delineate the extent of the petroleum

hydrocarbon contamination detected in the sample collected from P4-MW. LAI recommends that the following steps be taken during site development:

- Follow the guidance provided in the Excavated Materials Management Plan (EMMP; LAI 2018) during construction. The EMMP provides information on areas requiring further remedial excavation and/or confirmation sampling that will need to be conducted during construction.
- Conduct additional explorations to evaluate the extent of the petroleum hydrocarbon contamination detected in P4-MW and to monitor plume conditions. This would likely include direct-push explorations to screen for the extent of contamination with follow-up installation of wells for long-term monitoring of groundwater contaminant conditions. A program of monitored natural attenuation (MNA) may be a feasible remedial alternative for the site if it is found that the plume is stable or shrinking. However, if the plume is found to be expanding or increasing in contaminant concentrations, a more active remedial alternative such as enhanced bioremediation through injection of a terminal electron acceptor solution (oxygen, nitrate, or sulfate depending on plume conditions and local geochemistry) may be necessary.
- Semiannual monitoring of Woods Creek surface water to evaluate the potential long-term impacts associated with the arsenic and zinc contamination detected in the groundwater samples collected at the site.

5.0 LIMITATIONS

This report has been prepared for the exclusive use of River's Edge for specific application to the Former Monroe Auto Wrecking site. No other party is entitled to rely on the information, conclusions, and recommendations included in this document without the express written consent of River's Edge and LAI. Further, the reuse of information, conclusions, and recommendations provided herein for extensions of the project or for any other project, without review and authorization by LAI, shall be at the user's sole risk. LAI warrants that within the limitations of scope, schedule, and budget, our services have been provided in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions as this project. We make no other warranty, either express or implied.

6.0 REFERENCES

Ecology. 2001. Letter: Independent Remedial Action, Monroe Auto Salvage, 426 Fremont Street, Monroe, Washington. From Judith Aitken, to Farallon Consulting LLC. February 2.

Ecology. 2008. Letter: Rescission of Previously Issued No Further Action Determination, Monroe Auro Salvage (Snohomish Tax Parcel 27070600300700). From Dale Myers, to. June 2.

EMCON. 1996a. Letter: Monroe Auto Salvage Groundwater Monitoring - August 1996 Sampling. From John Virgin and Linda Dawson, to Reta Jensen, Monroe Auto Salvage. September 30.

EMCON. 1996b. Letter: Monroe Auto Salvage Site Investigation. From John Virgin and Linda Dawson, to Reta Jensen, Monroe Auto Salvage. July 26.

EMCON. 1996c. Monroe Auto Salvage Site Investigation - Additional PCB Sampling. October 25.

Farallon. 2000. Final Cleanup Action Summary Report, Monroe Auto Salvage, 926 Fremont Street, Monroe, Washington. Farallon Consulting, LLC. November 9.

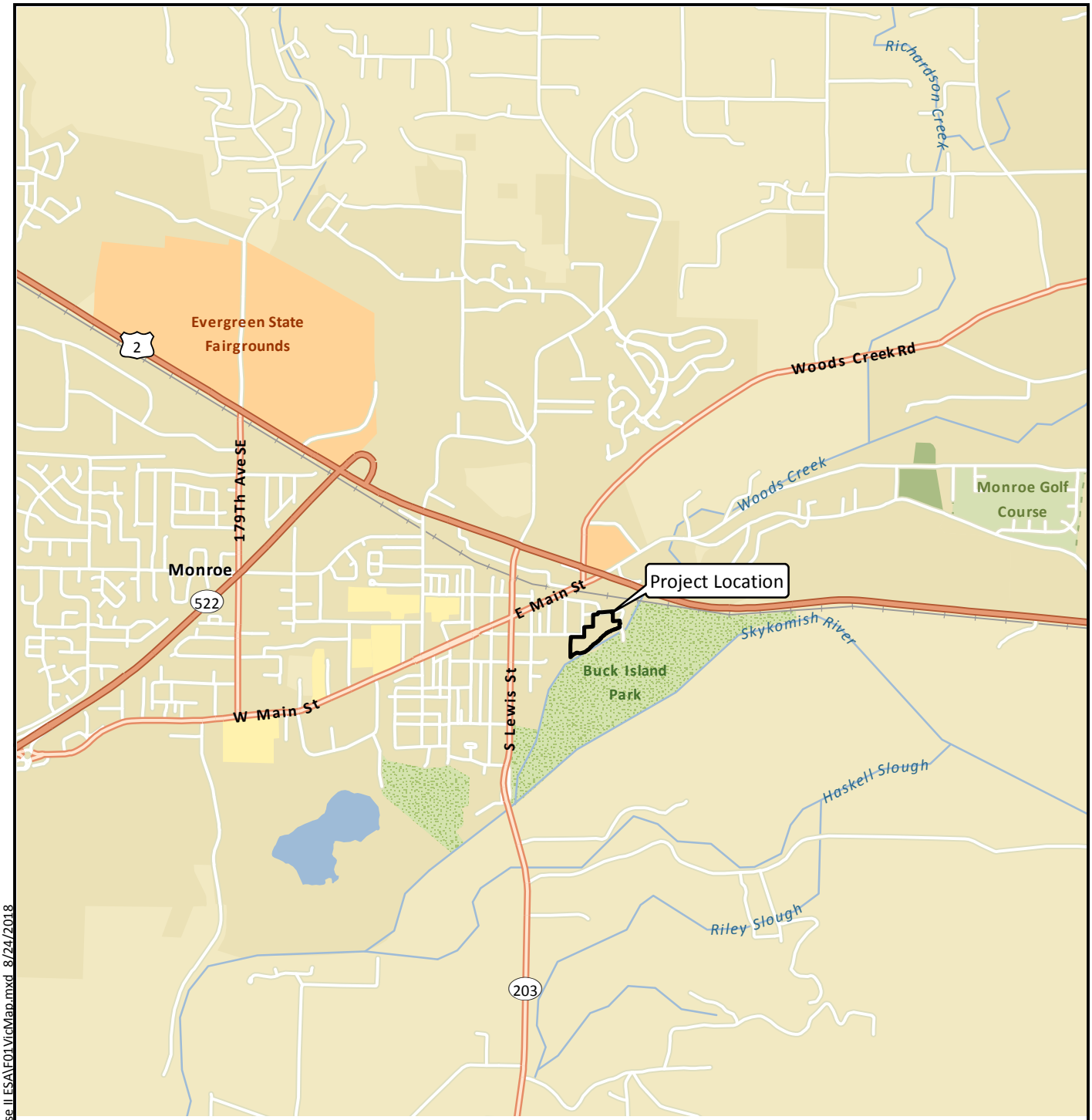
Glacier. 1997. Independent Remedial Action , Monroe Auto Salvage, 426 Fremont Street, Monroe, Washington. Glacier Environmental Services, Inc. April 18.

Hart Crowser. 1990. Subsurface Exploration and Testing, Glacier Park Company Property, Property Sequence No. 114, Monroe, Washington. December 13.

LAI. 2017a. Draft Phase I Environmental Site Assessment, Monroe-Woods Creek Site C, Snohomish County, Washington. Landau Associates, Inc. April 20.

LAI. 2017b. Draft Phase II Environmental Site Assessment Monroe-Woods Creek Site D Ring Bus, Monroe, Washington. Landau Associates, Inc. July31.

LAI. 2018. Excavated Materials Management Plan, Former Monroe Auto Wrecking/River's Edge Site. Landau Associates, Inc. November 7.



N

0 0.5 1

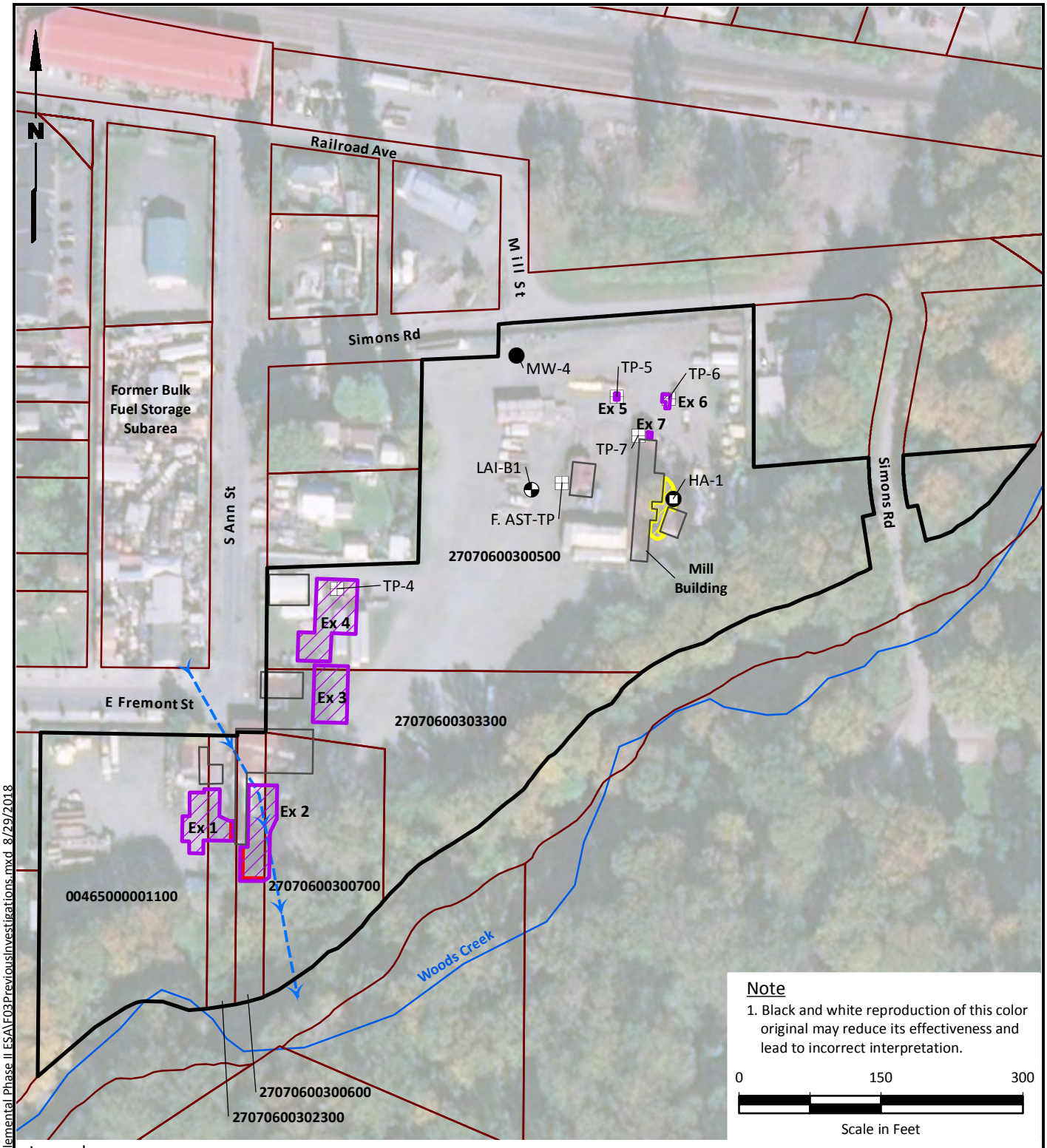
Miles

Data Source: Esri 2012

G:\Projects\1759\001\010\011\Supplemental Phase II ESA\F01VicMap.mxd 8/24/2018

LANDAU ASSOCIATES

Monroe Auto Wrecking Supplemental Phase II ESA Monroe, Washington	**Vicinity Map**	Figure 1



Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

0 150 300

Scale in Feet

Legend

- Boring
- Hand Auger
- MW
- Test Pit
- Site
- Tax Parcels
- City Stormwater Outfall
- Woods Creek
- Approximate Building Location
- Excavation Areas of Cadmium, Lead, and TPH-Impacted Soil (Farallon 2000)
- Excavation Area of PCB Impacted Soil (Glacier 1997)
- Total Cadmium, Total Lead, or Total Petroleum Concentration above MTCA Method A or B Cleanup Level After Excavation (Farallon 2000)

Data Sources: Farallon 2000; Glacier 1997; Snohomish County GIS; Esri World Imagery.

G:\Projects\1759\001\010\011\Supplemental Phase II ESA\F03PreviousInvestigations.mxd 8/29/2018

LANDAU ASSOCIATES

Monroe Auto Wrecking Supplemental Phase II ESA Monroe, Washington	**Previous Investigation and Remediation**	Figure 2

G:\Projects\1759\001\010\011\Supplemental Phase II ESA\F02SiteExplorationPlan.mxd 8/29/2018

Legend

- Monitoring Well
- Soil Boring - Only Soil Collected
- Soil Boring - Soil and Groundwater Collected
- Surface Water Sample
- Approximate Location of Test Pit FLM-TP8 Previous Hydrocarbon Soil Detection
- Railroad Tracks
- Woods Creek
- Site Boundary

0 120 240

Scale in Feet

Data Source: Snohomish County GIS; Esri World Imagery.

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

LANDAU ASSOCIATES

Monroe Auto Wrecking Supplemental Phase II ESA Monroe, Washington	**Site and Exploration Plan**	Figure 3

Table 1
Soil Analytical Results
Monroe Auto Salvage

Analyte	MTCA Method A Cleanup Level Unrestricted Uses	Sample Location, Laboratory Sample ID, Sample Date					
		B-1(12') EV18070006-01 6/29/2018	B-1(15-20') EV18070006-02 6/29/2018	B-2(12') EV18070006-03 6/29/2018	B-2(15-20') EV18070006-04 6/29/2018	B-3(12') EV18070006-05 6/29/2018	B-3(15-20') EV18070006-06 6/29/2018
Total Petroleum Hydrocarbons (mg/kg; NWTPH-Dx)							
Petroleum Hydrocarbons C12-C24	2,000	25 U	25 U	25 U	25 U	25 U	25 U
Petroleum Hydrocarbons C24-C40	2,000	50 U	50 U	50 U	50 U	50 U	50 U

Notes:

U = The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

Abbreviations and Acronyms:

ID = identification
mg/kg = milligrams per kilogram
MTCA = Model Toxics Control Act
NWTPH = Northwest Total Petroleum Hydrocarbon

Table 2
Groundwater Analytical Results
Monroe Auto Salvage

Analyte	Groundwater MTCA Method A Cleanup Level	Surface Water MTCA Method B Cleanup Level		Surface Water Aquatic Life Fresh/Acute 173-201A WAC	Surface Water Aquatic Life Fresh/Chronic 173-201A WAC	Sample Location, Laboratory Sample ID, Sample Date						
		Non-Cancer	Cancer			P-2 EV18070006-10 6/29/2018	P-3 EV18070006-09 6/29/2018	P-4 EV18070006-07 6/29/2018	P-5 EV18070006-08 6/29/2018	P3-MW EV18080123-03 8/22/2018	P4-MW EV18080123-02 8/22/2018	P5-MW EV18080123-01 8/17/2018
Total Petroleum Hydrocarbons (µg/L; NWTPH-Dx)												
Diesel-Range Petroleum Hydrocarbons	500	--	--	--	--	130 U	130 U	**230 J**	130 U	--	130 U	--
Oil-Range Petroleum Hydrocarbons	500	--	--	--	--	250 U	250 U	**450**	250 U	--	**3,700**	--
Polycyclic Aromatic Hydrocarbons (µg/L; SW-846 8270D-SIM)												
1-Methylnaphthalene	--	--	--	--	--	**0.039**	**0.035**	**0.041**	**0.035**	--	--	--
2-Methylnaphthalene	--	--	--	--	--	**0.069**	**0.063**	**0.063**	**0.063**	--	--	--
Acenaphthene	--	650	--	--	--	0.020 U	0.020 U	0.020 U	0.020 U	--	--	--
Acenaphthylene	--	--	--	--	--	0.020 U	0.020 U	0.020 U	0.020 U	--	--	--
Anthracene	--	26,000	--	--	--	0.020 U	0.020 U	0.020 U	0.020 U	--	--	--
Benzo(a)anthracene	--	--	0.30	--	--	0.020 U	0.020 U	0.020 U	0.020 U	--	--	--
Benzo(a)pyrene	0.1	--	0.030	--	--	0.020 U	0.020 U	0.020 U	0.020 U	--	--	--
Benzo(b)fluoranthene	--	--	0.30	--	--	0.020 U	0.020 U	0.020 U	0.020 U	--	--	--
Benzo(g,h,i)perylene	--	--	--	--	--	0.020 U	0.020 U	**0.048**	0.020 U	--	--	--
Benzo(k)fluoranthene	--	--	3.0	--	--	0.020 U	0.020 U	0.020 U	0.020 U	--	--	--
Chrysene	--	--	30	--	--	0.020 U	0.020 U	0.020 U	0.020 U	--	--	--
Dibenzo(a,h)anthracene	--	--	0.030	--	--	0.020 U	0.020 U	0.020 U	0.020 U	--	--	--
Fluoranthene	--	86	--	--	--	0.020 U	0.020 U	**0.056**	0.020 U	--	--	--
Fluorene	--	3,500	--	--	--	0.020 U	0.020 U	0.020 U	0.020 U	--	--	--
Indeno(1,2,3-cd)pyrene	--	--	0.30	--	--	0.020 U	0.020 U	**0.028**	0.020 U	--	--	--
Naphthalene	160	4,700	--	--	--	**0.27**	**0.26**	**0.27**	**0.23**	--	--	--
Phenanthrene	--	--	--	--	--	0.020 U	**0.022**	0.020 U	0.020 U	--	--	--
Pyrene	--	2,600	--	--	--	0.020 U	**0.022**	**0.079**	0.020 U	--	--	--
Polychlorinated Biphenyls (µg/L; SW-846 8082A)												
Aroclor 1016	--	0.006	0.003	--	--	0.10 U	0.10 U	0.10 U	0.10 U	--	--	--
Aroclor 1221	--	--	--	--	--	0.10 U	0.10 U	0.10 U	0.10 U	--	--	--
Aroclor 1232	--	--	--	--	--	0.10 U	0.10 U	0.10 U	0.10 U	--	--	--
Aroclor 1242	--	--	--	--	--	0.10 U	0.10 U	0.10 U	0.10 U	--	--	--
Aroclor 1248	--	--	--	--	--	0.10 U	0.10 U	0.10 U	0.10 U	--	--	--
Aroclor 1254	--	0.002	0.0001	--	--	0.10 U	0.10 U	0.10 U	0.10 U	--	--	--
Aroclor 1260	--	--	--	--	--	0.10 U	0.10 U	0.10 U	0.10 U	--	--	--
Aroclor 1268	--	--	--	--	--	0.10 U	0.10 U	0.10 U	0.10 U	--	--	--
Total PCBs	0.1	--	0.0001	2	0.014	0.10 U	0.10 U	0.10 U	0.10 U	--	--	--
Total Metals (µg/L; EPA 200.8/245.1)												
Arsenic	5	18	0.098	360	190	--	--	--	--	1.0 U	**15**	**1.6**
Zinc	--	17,000	--	35	32	--	--	--	--	**52**	**39**	**69**
Dissolved Metals (µg/L; EPA 200.8/245.1)												
Arsenic	5	18	0.098	360	190	1.0 U	**1.6**	**2.5**	**1.1**	1.0 U	**14**	1.0 U
Cadmium	5	41	--	0.82	0.37	1.0 U	1.0 U	1.0 U	1.0 U	--	--	--
Chromium (a)	50	240,000	--	180	57	2.0 U	2.0 U	2.0 U	2.0 U	--	--	--
Lead	15	--	--	14	0.54	1.0 U	1.0 U	1.0 U	1.0 U	--	--	--
Mercury	2	--	--	2.1	0.012	0.20 U	0.20 U	0.20 U	0.20 U	--	--	--
Zinc	--	17,000	--	35	32	**9.3**	**50**	**38**	**200**	**37**	**8.2**	**20**

Notes:
U = The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
Bold = detected compound
-- = not available
Green Box = detected concentration is greater than one or more cleanup levels

(a) Cleanup levels based on Chromium III.

Abbreviations and Acronyms:
EPA = US Environmental Protection Agency
ID = identification
µg/L = micrograms per liter
MTCA = Model Toxics Control Act
NWTPH = Northwest Total Petroleum Hydrocarbon
PCB = polychlorinated biphenyl
SIM = selected ion monitoring
WAC = Washington Administrative Code

Table 3
Surface Water Analytical Results
Monroe Auto Salvage

Analyte	MTCA Method B Cleanup Level		Surface Water Aquatic Life Fresh/Acute 173-201A WAC	Surface Water Aquatic Life Fresh/Chronic 173-201A WAC	Sample Location, Lab ID, Sample Date	
					SWD EV18070006-11 6/29/2018	SWUP EV18070006-12 6/29/2018
	Non-Cancer	Cancer				
Total Petroleum Hydrocarbons (µg/L; NWTPH-Dx)						
Petroleum Hydrocarbons C12-C24	--	--	--	--	130 U	130 U
Petroleum Hydrocarbons C24-C40	--	--	--	--	250 U	250 U
Polycyclic Aromatic Hydrocarbons (µg/L; SW-846 8270D-SIM)						
1-Methylnaphthalene	--	--	--	--	0.020 U	0.020 U
2-Methylnaphthalene	--	--	--	--	0.020 U	0.020 U
Acenaphthene	650	--	--	--	0.020 U	0.020 U
Acenaphthylene	--	--	--	--	0.020 U	0.020 U
Anthracene	26,000	--	--	--	0.020 U	0.020 U
Benzo(a)anthracene	--	0.30	--	--	0.020 U	0.020 U
Benzo(a)pyrene	--	0.030	--	--	0.020 U	0.020 U
Benzo(b)fluoranthene	--	0.30	--	--	0.020 U	0.020 U
Benzo(g,h,i)perylene	--	--	--	--	0.020 U	0.020 U
Benzo(k)fluoranthene	--	3.0	--	--	0.020 U	0.020 U
Chrysene	--	30	--	--	0.020 U	0.020 U
Dibenzo(a,h)anthracene	--	0.030	--	--	0.020 U	0.020 U
Fluoranthene	86	--	--	--	0.020 U	0.020 U
Fluorene	3,500	--	--	--	0.020 U	0.020 U
Indeno(1,2,3-cd)pyrene	--	0.30	--	--	0.020 U	0.020 U
Naphthalene	4,700	--	--	--	0.020 U	0.020 U
Phenanthrene	--	--	--	--	0.020 U	0.020 U
Pyrene	2,600	--	--	--	0.020 U	0.020 U
Polychlorinated Biphenyls (µg/L; SW-846 8082A)						
Aroclor 1016	0.006	0.003	--	--	0.10 U	0.10 U
Aroclor 1221	--	--	--	--	0.10 U	0.10 U
Aroclor 1232	--	--	--	--	0.10 U	0.10 U
Aroclor 1242	--	--	--	--	0.10 U	0.10 U
Aroclor 1248	--	--	--	--	0.10 U	0.10 U
Aroclor 1254	0.002	0.0001	--	--	0.10 U	0.10 U
Aroclor 1260	--	--	--	--	0.10 U	0.10 U
Aroclor 1268	--	--	--	--	0.10 U	0.10 U
Total PCBs	--	0.0001	2	0.014	0.10 U	0.10 U
Dissolved Metals (µg/L; EPA 200.8)						
Arsenic	18	0.098	360	190	**1.6**	**1.6**
Cadmium	41	--	0.82	0.37	1.0 U	1.0 U
Chromium, Total (a)	240,000	--	180	57	2.0 U	2.0 U
Lead	--	--	14	0.54	1.0 U	1.0 U
Mercury	--	--	2.1	0.012	0.20 U	0.20 U
Zinc	17,000	--	35	32	**2.7**	2.5 U

Notes:

U = The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

Bold = detected compound

-- = not available

Green Box = detected concentration is greater than one or more cleanup levels

(a) Cleanup levels based on Chromium III.

Abbreviations and Acronyms:

EPA = US Environmental Protection Agency
ID = identification
µg/L = micrograms per liter
MTCA = Model Toxics Control Act
NWTPH = Northwest Total Petroleum Hydrocarbon
PCB = polychlorinated biphenyl
SIM = selected ion monitoring
WAC = Washington Administrative Code

APPENDIX A

Field Explorations

Soil Classification System

MAJOR DIVISIONS			GRAPHIC SYMBOL	USCS LETTER SYMBOL[1]	TYPICAL DESCRIPTIONS [2][3]
COARSE-GRAINED SOIL (More than 50% of material is larger than No. 200 sieve size)	GRAVEL AND GRAVELLY SOIL (More than 50% of coarse fraction retained on No. 4 sieve)	CLEAN GRAVEL (Little or no fines)		GW	Well-graded gravel; gravel/sand mixture(s); little or no fines
				GP	Poorly graded gravel; gravel/sand mixture(s); little or no fines
		GRAVEL WITH FINES (Appreciable amount of fines)		GM	Silty gravel; gravel/sand/silt mixture(s)
				GC	Clayey gravel; gravel/sand/clay mixture(s)
	SAND AND SANDY SOIL (More than 50% of coarse fraction passed through No. 4 sieve)	CLEAN SAND (Little or no fines)		SW	Well-graded sand; gravelly sand; little or no fines
				SP	Poorly graded sand; gravelly sand; little or no fines
		SAND WITH FINES (Appreciable amount of fines)		SM	Silty sand; sand/silt mixture(s)
				SC	Clayey sand; sand/clay mixture(s)
FINE-GRAINED SOIL (More than 50% of material is smaller than No. 200 sieve size)	SILT AND CLAY (Liquid limit less than 50)			ML	Inorganic silt and very fine sand; rock flour; silty or clayey fine sand or clayey silt with slight plasticity
				CL	Inorganic clay of low to medium plasticity; gravelly clay; sandy clay; silty clay; lean clay
				OL	Organic silt; organic, silty clay of low plasticity
	SILT AND CLAY (Liquid limit greater than 50)			MH	Inorganic silt; micaceous or diatomaceous fine sand
				CH	Inorganic clay of high plasticity; fat clay
				OH	Organic clay of medium to high plasticity; organic silt
	HIGHLY ORGANIC SOIL			PT	Peat; humus; swamp soil with high organic content

OTHER MATERIALS	GRAPHIC SYMBOL	LETTER SYMBOL	TYPICAL DESCRIPTIONS
PAVEMENT		AC or PC	Asphalt concrete pavement or Portland cement pavement
ROCK		RK	Rock (See Rock Classification)
WOOD		WD	Wood, lumber, wood chips
DEBRIS		DB	Construction debris, garbage

Notes:
1. USCS letter symbols correspond to symbols used by the Unified Soil Classification System and ASTM classification methods. Dual letter symbols (e.g., SP-SM for sand or gravel) indicate soil with an estimated 5-15% fines. Multiple letter symbols (e.g., ML/CL) indicate borderline or multiple soil classifications.
2. Soil descriptions are based on the general approach presented in the Standard Practice for Description and Identification of Soils (Visual-Manual Procedure), outlined in ASTM D 2488. Where laboratory index testing has been conducted, soil classifications are based on the Standard Test Method for Classification of Soils for Engineering Purposes, as outlined in ASTM D 2487.
3. Soil description terminology is based on visual estimates (in the absence of laboratory test data) of the percentages of each soil type and is defined as follows:

Primary Constituent:	> 50%	- "GRAVEL," "SAND," "SILT," "CLAY," etc.
Secondary Constituents:	> 30% and ≤ 50%	- "very gravelly," "very sandy," "very silty," etc.
	> 15% and ≤ 30%	- "gravelly," "sandy," "silty," etc.
Additional Constituents:	> 5% and ≤ 15%	- "with gravel," "with sand," "with silt," etc.
	≤ 5%	- "with trace gravel," "with trace sand," "with trace silt," etc., or not noted.

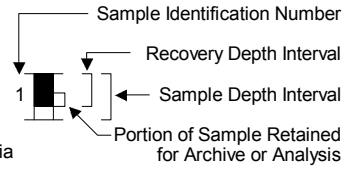
4. Soil density or consistency descriptions are based on judgement using a combination of sampler penetration blow counts, drilling or excavating conditions, field tests, and laboratory tests, as appropriate.

Drilling and Sampling Key

SAMPLER TYPE

Code	Description
a	3.25-inch O.D., 2.42-inch I.D. Split Spoon
b	2.00-inch O.D., 1.50-inch I.D. Split Spoon
c	Shelby Tube
d	Grab Sample
e	Single-Tube Core Barrel
f	Double-Tube Core Barrel
g	2.50-inch O.D., 2.00-inch I.D. WSDOT
h	3.00-inch O.D., 2.375-inch I.D. Mod. California
i	Other - See text if applicable
1	300-lb Hammer, 30-inch Drop
2	140-lb Hammer, 30-inch Drop
3	Pushed
4	Vibrocore (Rotosonic/Geoprobe)
5	Other - See text if applicable

SAMPLE NUMBER & INTERVAL



Field and Lab Test Data

Code	Description
PP = 1.0	Pocket Penetrometer, tsf
TV = 0.5	Torvane, tsf
PID = 100	Photoionization Detector VOC screening, ppm
W = 10	Moisture Content, %
D = 120	Dry Density, pcf
-200 = 60	Material smaller than No. 200 sieve, %
GS	Grain Size - See separate figure for data
AL	Atterberg Limits - See separate figure for data
GT	Other Geotechnical Testing
CA	Chemical Analysis

Groundwater

▽ Approximate water level at time of drilling (ATD)

▼ Approximate water level at time after drilling/excavation/well

LANDAU ASSOCIATES

Monroe Auto Salvage
Monroe, WA

Soil Classification System and Key

Figure
A-1

B-1

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	
0						GP	Gray, coarse GRAVEL (no odor, no sheen) (dense, damp)	Groundwater not encountered.
						ML		
		d3				SM	Red brown, sandy, SILT with organics and trace gravel (no odor, no sheen) (medium stiff, damp to moist)	
						SP-SM	Brown, silty, fine SAND (no odor, no sheen) (medium dense, damp to moist)	
5							Gray, medium SAND with silt and gravel (no odor, no sheen) (medium dense, damp to moist)	
		d3				SM	-decreasing gravel size	
						ML		
						SM	Gray, silty, medium to coarse SAND with gravel (no odor, no sheen) (medium dense, damp to moist)	
10						SM	Light brown, SILT (no odor, no sheen) (stiff, moist)	
	B-1(12') 180629	d3				ML		
						SM	Light brown to gray, silty SAND with gravel (no odor, no sheen) (dense, damp to moist)	
15							Red brown, silty, fine to medium SAND with gravel (no odor, no sheen) (medium dense, moist)	
	B-1(15-20') 180629	d3				SP-SM	Red, sandy SILT with gravel (no odor, no sheen) (medium stiff, wet)	
20							Light brown, silty, fine to coarse SAND with gravel (no odor, no sheen) (medium dense, moist)	
							Gray, fine to medium SAND with silt (medium dense, moist)	
25								
30								
35								
40								

Boring Completed 06/19/18
Total Depth of Boring = 20.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

1759001.010.011 8/29/18 N:\PROJECTS\1759001.010.GPJ SOIL BORING LOG

LANDAU ASSOCIATES

Monroe Auto Salvage Monroe, WA	Log of Boring B-1	Figure A-2

B-2

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	
0						ML	Brown, SILT with sand, organics and gravel (no odor, no sheen) (soft to medium stiff, moist)	Groundwater not encountered.
		d3				SM	Brown, silty, fine to medium SAND with trace gravel (no odor, no sheen) (medium dense, damp to moist)	
5						SP-SM	Gray, gravelly, fine to medium SAND with silt (no odor, no sheen) (dense, damp to moist)	
		d3					grades to medium SAND	
10						SP-SM	Gray, gravelly, fine to medium SAND with silt (no odor, no sheen) (dense, damp to moist)	
	B-2(12') 180629	d3				SM	Dark brown, silty, medium SAND with gravel (no odor, no sheen) (dense, moist)	
15						SM	Red, silty, fine to medium SAND with gravel (no odor, no sheen) (dense, moist)	
	B-2(15-20') 180629	d3				SP-SM	Gray, silty, fine to medium SAND with gravel (no odor, no sheen) (medium dense, damp to moist)	
20							Gray, fine to medium SAND with silt and trace gravel (no odor, no sheen) (dense, moist)	

Boring Completed 06/19/18
Total Depth of Boring = 20.0 ft.

25
30
35
40

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

1759001.010.011 8/29/18 N:\PROJECTS\1759001.010.GPJ SOIL BORING LOG

LANDAU ASSOCIATES

Monroe Auto Salvage
Monroe, WA

Log of Boring B-2

Figure
A-3

B-3

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	
0						ML	Brown to grey, SILT with sand and trace gravel (no odor, no sheen) (soft to medium stiff, moist)	Groundwater not encountered.
						ML		
		d3				SM	Red, SILT with sand and trace gravel (no odor, no sheen) (soft to medium stiff, moist)	
5						SP-SM	Light brown, silty, fine to medium SAND (no odor, no sheen) (medium dense, damp to moist)	
		d3					Grey, medium SAND with silt and gravel (no odor, no sheen) (dense, moist)	
10						SP-SM	Grey, fine to coarse SAND with silt and trace gravel (no odor, no sheen) (dense, damp to moist)	
	B-3(12') 180629	d3				SM	Brown, silty, Medium SAND with gravel (no odor, no sheen) (dense, damp to moist)	
						SP-SM	grades to fine to coarse SAND	
15						SM	Light brown, fine to medium SAND with silt (no odor, no sheen) (dense, damp to moist)	
	B-3(15-20') 180629	d3				SP-SM	Grey, silty, fine to coarse SAND with gravel (no odor, no sheen) (dense, moist)	
20							Gray, fine to medium SAND with silt and trace gravel (no odor, no sheen) (dense, moist)	
							Boring Completed 06/19/18 Total Depth of Boring = 20.0 ft.	
25								
30								
35								
40								

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

1759001.010.011 8/29/18 N:\PROJECTS\1759001.010.GPJ SOIL BORING LOG

LANDAU ASSOCIATES

Monroe Auto Salvage
Monroe, WA

Log of Boring B-3

Figure
A-4

P-2

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	Water Level
0						ML	Gray to light brown, SILT with sand and gravel (no odor, no sheen) (stiff, damp)	
		d3						
5							-increase in gravel content	
		d3						
10								
		d3				ML	Dark brown to black, SILT with wood debris (no odor, no sheen) (stiff, damp to moist)	
15						ML	mottled gray and brown, SILT with sand and gravel (no odor, no sheen) (stiff, damp to moist)	
		d3				SP-SM	light brown, gravelly, fine to medium SAND with silt (no odor, no sheen) (dense, damp to moist)	
20						ML	Mottled grey and dark brown, SILT with sand and gravel (no odor, no sheen) (stiff, moist)	
		d3				SM	Gray to light brown, gravelly, silty, fine to coarse SAND (no odor, no sheen) (dense, wet)	▽ ATD
25								
		d3				ML	Gray, SILT (no odor, no sheen) (stiff, moist)	
30								
35								
40								

Boring Completed 06/19/18
Total Depth of Boring = 30.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

1759001.010.011 8/29/18 N:\PROJECTS\1759001.010.GPJ SOIL BORING LOG

LANDAU ASSOCIATES

Monroe Auto Salvage
Monroe, WA

Log of Boring P-2

Figure
A-5

P-3

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	Water Level
0		d3				ML	Brown, sandy SILT with gravel (no odor, no sheen) (soft to medium stiff, damp to moist)	
5		d3					-increase in gravel content	
10		d3				SP-SM ML	Light brown, gravelly, fine to medium SAND with silt (no odor, no sheen) (medium dense, damp) Dark brown, gravelly SILT with sand (no odor, no sheen) (medium stiff, damp to moist)	
15		d3				SM SP-SM	Light brown, silty, fine to medium SAND with gravel (no odor, no sheen) (medium dense, moist) Dark brown to black, gravelly, medium to coarse SAND with silt (no odor, no sheen) (dense, moist) -with metal and glass debris	
20		d3				ML	Dark brown, SILT with sand (no odor, no sheen) (stiff, moist)	
25		d3				SM ML	Dark brown, silty, fine to medium SAND with gravel (no odor, no sheen) (dense, moist to wet) Light brown, SILT (no odor, no sheen) (hard, damp)	▽ ATD
30								
35								
40								

Boring Completed 06/19/18
Total Depth of Boring = 30.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

1759001.010.011 8/29/18 N:\PROJECTS\1759001.010.GPJ SOIL BORING LOG

LANDAU ASSOCIATES

Monroe Auto Salvage
Monroe, WA

Log of Boring P-3

Figure
A-6

P-4

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	Water Level
0		d3				ML	Dark brown, SILT with gravel and sand (no odor, no sheen) (stiff, moist)	
5		d3					-increase in sand content	
						SM	Black, silty, fine to medium SAND with gravel (no odor, no sheen) (dense, damp)	
						ML	Brown, sandy, SILT with gravel (no odor, no sheen) (stiff, damp to moist)	
10		d3						
15		d3				SM	Grey, silty, medium SAND with gravel (no odor, no sheen) (medium dense, moist)	
						ML		
						GM	Black, sandy, gravelly SILT (no odor, no sheen) (soft, moist)	
20		d3					Black, silty, GRAVEL with sand and wood debris (no odor, no sheen) (dense, moist to wet)	
						SM		
						ML	Dark brown, silty medium SAND with gravel (no odor, no sheen) (medium dense, moist)	
25		d3				GP-GM	Black, SILT with gravel, sand and trace paint chips (no odor, no sheen) (stiff, moist to wet)	
						ML	Grey, sandy, fine GRAVEL with silt (no odor, no sheen) (dense, moist to wet)	
		d3					Dark brown, SILT with sand and gravel and trace wood debris (no odor, no sheen) (stiff, moist to wet)	▽ ATD
30		d3				SM	Black, gravelly, silty, medium SAND with wood debris (no odor, no sheen) (medium dense, wet)	
35								
40								

Boring Completed 06/19/18
Total Depth of Boring = 35.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

1759001.010.011 8/29/18 N:\PROJECTS\1759001.010.GPJ SOIL BORING LOG

LANDAU ASSOCIATES

Monroe Auto Salvage Monroe, WA	Log of Boring P-4	Figure A-7

P-5

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	Water Level
0						ML	Brown, SILT with sand and trace gravel and debris (glass, brick and plywood) (no odor, no sheen) (soft, damp to moist)	
		d3						
5								
		d3						
10						SP-SM	Gray, gravelly, medium SAND with silt (no odor, no sheen) (medium dense, moist)	
		d3						
15						SM	Gray, gravelly, silty, medium SAND (no odor, no sheen) (medium dense, damp to moist)	
						ML		
		d3				SP-SM	Dark brown, SILT with sand, gravel, wood and metal debris (no odor, no sheen) (medium stiff, moist)	
20						ML	Light brown to gray, fine to medium SAND with silt (no odor, no sheen) (dense, moist)	
		d3				SP-SM	Dark brown, gravelly SILT with glass debris (no odor, no sheen) (medium stiff, moist)	▽ ATD
25						ML	Light brown, fine to medium SAND with gravel and silt (no odor, no sheen) (medium dense, moist to wet)	
						SM		
		d3				ML	Dark brown, gravelly, SILT with sand and glass debris (no odor, no sheen) (soft to medium stiff, moist to wet)	
							Light brown, silty, fine to medium SAND (no odor, no sheen) (medium dense, wet)	
30							Brown to orange, sandy, SILT (no odor, no sheen) (hard, moist)	
35								
40								

Boring Completed 06/19/18
Total Depth of Boring = 30.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

1759001.010.011 8/29/18 N:\PROJECTS\1759001.010.GPJ SOIL BORING LOG

LANDAU ASSOCIATES

Monroe Auto Salvage
Monroe, WA

Log of Boring P-5

Figure
A-8

P3-MW

SAMPLE DATA | **SOIL PROFILE** | **GROUNDWATER**

Depth (ft) | Sample Number & Interval | Sampler Type | Blows/Foot | Test Data | Graphic Symbol | USCS Symbol

Drilling Method: Geoprobe™

Ground Elevation (ft): _____

-For approximate lithology see log of P-3

Water Level

ATD

Monitoring Well Detail
(DOE#: BKX 646)

2.25 in

- Flush-mounted monument with locking cap
- 1-inch diameter, Schedule 80, PVC well casing
- Bentonite chips
- 6/9 Colorado sand pack
- 1-inch diameter, Schedule 80, PVC screen (0.010-inch slot size)
- Threaded end cap

0 5 10 15 20 25 30 35 40

Boring Completed 08/10/18
Total Depth of Boring = 35.0 ft.

Monitoring Well Completed 08/10/18

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

1759001.010.011 8/29/18 N:\PROJECTS\1759001.010.GPJ WELL LOG

LANDAU ASSOCIATES

Monroe Auto Salvage Monroe, WA	Log of Monitoring Well P3-MW	Figure A-9

P4-MW

SAMPLE DATA | **SOIL PROFILE** | **GROUNDWATER**

Depth (ft) | Sample Number & Interval | Sampler Type | Blows/Foot | Test Data | Graphic Symbol | USCS Symbol

Drilling Method: Geoprobe™

Ground Elevation (ft): _____

-For approximate lithology see log of P-4

Water Level

Monitoring Well Detail
(DOE#: BKX 645)

2.25 in

Flush-mounted monument with locking cap

1-inch diameter, Schedule 80, PVC well casing

Bentonite chips

6/9 Colorado sand pack

ATD

1-inch diameter, Schedule 80, PVC screen (0.010-inch slot size)

Threaded end cap

0 5 10 15 20 25 30 35 40

Boring Completed 08/10/18
Total Depth of Boring = 35.0 ft.

Monitoring Well Completed 08/10/18

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

1759001.010.011 8/29/18 N:\PROJECTS\1759001.010.GPJ WELL LOG

LANDAU ASSOCIATES

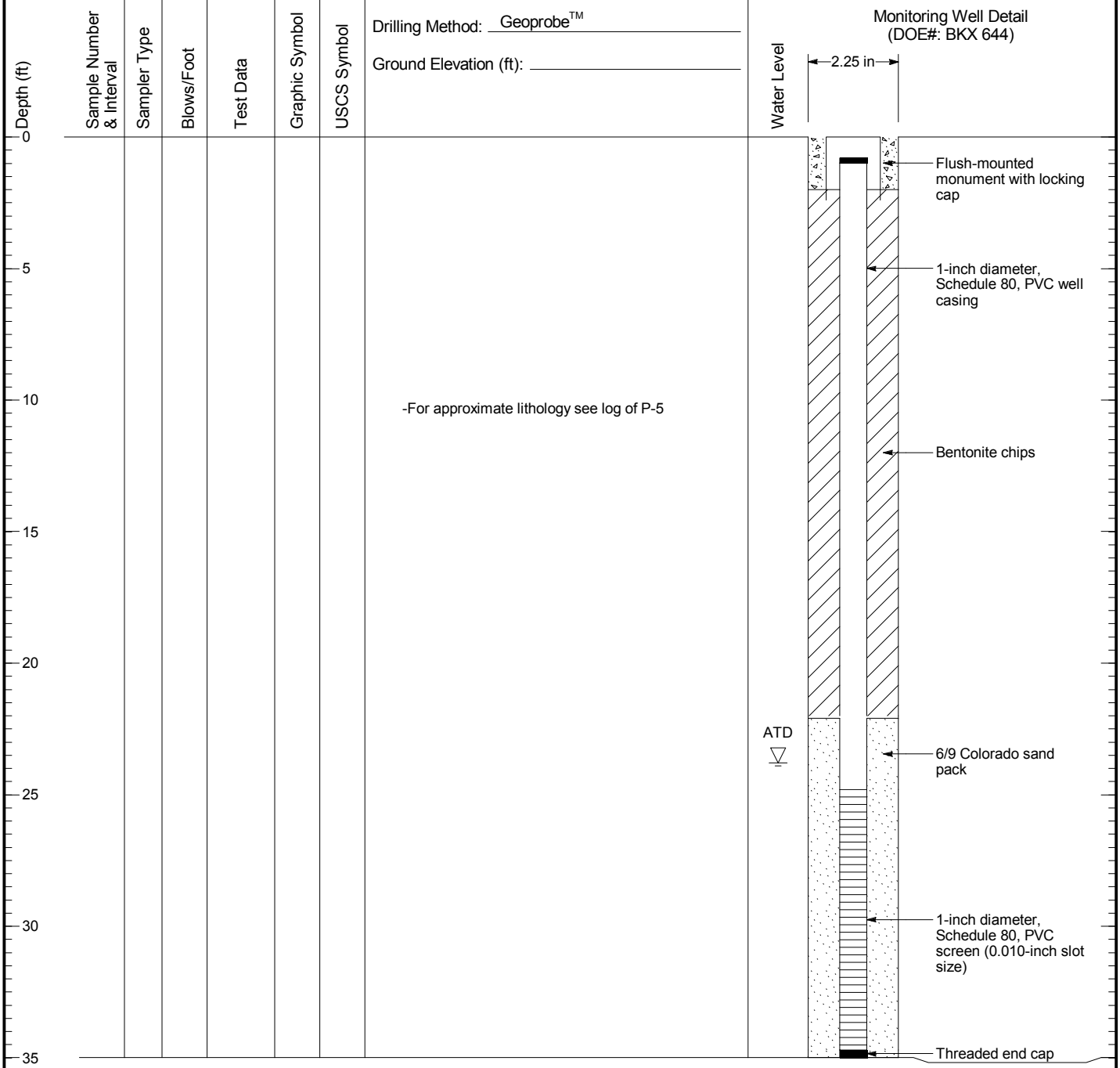
Monroe Auto Salvage
Monroe, WA

Log of Monitoring Well P4-MW

Figure
A-10

P5-MW

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):



Boring Completed 08/10/18
Total Depth of Boring = 35.0 ft.

Monitoring Well Completed 08/10/18

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

1759001.010.011 8/29/18 N:\PROJECTS\1759001.010.GPJ WELL LOG

LANDAU ASSOCIATES

Monroe Auto Salvage
Monroe, WA

Log of Monitoring Well P5-MW

Figure
A-11

APPENDIX B

Analytical Laboratory Reports

August 27, 2018

Mr. Cody Johnson
Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

Dear Mr. Johnson,

On August 22nd, 3 samples were received by our laboratory and assigned our laboratory project number EV18080123. The project was identified as your Monroe Auto Salvage - 1759001.010.011. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	8/27/2018 EV18080123 EV18080123-01
CLIENT CONTACT:	Cody Johnson	DATE RECEIVED:	08/22/2018
CLIENT PROJECT:	Monroe Auto Salvage - 1759001.010.011	COLLECTION DATE:	8/17/2018 3:30:00 PM
CLIENT SAMPLE ID	P-5-180817	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Arsenic	EPA-200.8	**1.6**	1.0	1	UG/L	08/24/2018	RAL
Zinc	EPA-200.8	**69**	2.5	1	UG/L	08/24/2018	RAL
Arsenic (Dissolved)	EPA-200.8	U	1.0	1	UG/L	08/24/2018	RAL
Zinc (Dissolved)	EPA-200.8	**20**	2.5	1	UG/L	08/24/2018	RAL

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	8/27/2018 EV18080123 EV18080123-02
CLIENT CONTACT:	Cody Johnson	DATE RECEIVED:	08/22/2018
CLIENT PROJECT:	Monroe Auto Salvage - 1759001.010.011	COLLECTION DATE:	8/22/2018 11:15:00 AM
CLIENT SAMPLE ID	P-4-180822	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	130	1	UG/L	08/23/2018	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**3700**	250	1	UG/L	08/23/2018	EBS
Arsenic	EPA-200.8	**15**	1.0	1	UG/L	08/24/2018	RAL
Zinc	EPA-200.8	**39**	2.5	1	UG/L	08/24/2018	RAL
Arsenic (Dissolved)	EPA-200.8	**14**	1.0	1	UG/L	08/24/2018	RAL
Zinc (Dissolved)	EPA-200.8	**8.2**	2.5	1	UG/L	08/24/2018	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**122**	08/23/2018	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	8/27/2018 EV18080123 EV18080123-03
CLIENT CONTACT:	Cody Johnson	DATE RECEIVED:	08/22/2018
CLIENT PROJECT:	Monroe Auto Salvage - 1759001.010.011	COLLECTION DATE:	8/22/2018 1:25:00 PM
CLIENT SAMPLE ID	P-3-180822	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Arsenic	EPA-200.8	U	1.0	1	UG/L	08/24/2018	RAL
Zinc	EPA-200.8	**52**	2.5	1	UG/L	08/24/2018	RAL
Arsenic (Dissolved)	EPA-200.8	U	1.0	1	UG/L	08/24/2018	RAL
Zinc (Dissolved)	EPA-200.8	**37**	2.5	1	UG/L	08/24/2018	RAL

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS SDG#: WDOE ACCREDITATION:	8/27/2018 EV18080123 C601
CLIENT CONTACT:	Cody Johnson		
CLIENT PROJECT:	Monroe Auto Salvage - 1759001.010.011		

LABORATORY BLANK RESULTS

MB-082218W - Batch 131813 - Water by NWTPH-DX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	UG/L	130	08/23/2018	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	UG/L	250	08/23/2018	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

MB-082318W - Batch 131809 - Water by EPA-200.8

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Arsenic	EPA-200.8	U	UG/L	1.0	08/24/2018	RAL
Zinc	EPA-200.8	U	UG/L	2.5	08/24/2018	RAL

U - Analyte analyzed for but not detected at level above reporting limit.

MB-082318W - Batch 131869 - Water by EPA-200.8

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Arsenic (Dissolved)	EPA-200.8	U	UG/L	1.0	08/24/2018	RAL
Zinc (Dissolved)	EPA-200.8	U	UG/L	2.5	08/24/2018	RAL

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS SDG#: WDOE ACCREDITATION:	8/27/2018 EV18080123 C601
CLIENT CONTACT:	Cody Johnson		
CLIENT PROJECT:	Monroe Auto Salvage - 1759001.010.011		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 131813 - Water by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24) - BS	NWTPH-DX	**83.7**			67	125.2	08/23/2018	EBS
TPH-Diesel Range (C12-C24) - BSD	NWTPH-DX	**88.3**	**5**		67	125.2	08/23/2018	EBS

ALS Test Batch ID: 131809 - Water by EPA-200.8

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Arsenic - BS	EPA-200.8	**102**			89.1	110	08/24/2018	RAL
Arsenic - BSD	EPA-200.8	**100**	**2**		89.1	110	08/24/2018	RAL
Zinc - BS	EPA-200.8	**105**			88.2	111	08/24/2018	RAL
Zinc - BSD	EPA-200.8	**102**	**3**		88.2	111	08/24/2018	RAL

ALS Test Batch ID: 131869 - Water by EPA-200.8

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Arsenic (Dissolved) - BS	EPA-200.8	**102**			89.1	110	08/24/2018	RAL
Arsenic (Dissolved) - BSD	EPA-200.8	**100**	**2**		89.1	110	08/24/2018	RAL
Zinc (Dissolved) - BS	EPA-200.8	**105**			88.2	111	08/24/2018	RAL
Zinc (Dissolved) - BSD	EPA-200.8	**102**	**3**		88.2	111	08/24/2018	RAL

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS ENVIRONMENTAL

Sample Receiving Checklist

Client: Landau Associates ALS Job #: EV1808O123

Project: Monroe Auto Salvage

Received Date: 8/22/18 Received Time: 1550 By: RB

Type of shipping container: Cooler X Box ___ Other ___

Shipped via: FedEx Ground ___ UPS ___ Mail ___ Courier ___ Hand Delivered X
FedEx Express ___

	Yes	No	N/A
Were custody seals on outside of shipping container?	___	X	___
If yes, how many? ___ Where? ___			
Custody seal date: ___ Seal name: ___			
Was Chain of Custody properly filled out (ink, signed, dated, etc.)?	X	___	___
Did all bottles have labels?	X	___	___
Did all bottle labels and tags agree with Chain of Custody?	X	___	___
Were samples received within hold time?	X	___	___
Did all bottles arrive in good condition (unbroken, etc.)?	X	___	___
Was sufficient amount of sample sent for the tests indicated?	X	___	___
Was correct preservation added to samples?	X	___	___

If no, Sample Control added preservative to the following:

Sample Number	Reagent	Analyte

Were VOA vials checked for absence of air bubbles?	___	___	X
Bubbles present in sample #: ___			

Temperature of cooler upon receipt: 3.9 °C On Ice (Cold) Cool Ambient N/A

Explain any discrepancies: ___

Was client contacted? ___ Who was called? ___ By whom? ___ Date: ___

Outcome of call: ___

LANDAU ASSOCIATES

- [x] **Seattle/Edmonds** (425) 778-0907
- [ ] **Tacoma** (253) 926-2493
- [ ] **Spokane** (509) 327-9737
- [ ] **Portland** (503) 542-1080
- [ ] _____

Chain-of-Custody Record

Date 8/22/18

Page 1 of 1

EV1808O123

Project Name Monroe Auto Salvage Project No. 175901.010.011

Project Location/Event Monroe WA / phase 2 2018

Sampler's Name Melissa DiLoreto

Project Contact Cody Johnson

Send Results To Cody Johnson & Dani Jorgensen

Turnaround Time
- [ ] Standard
- [x] Accelerated — Mon 08/27/18 @ 12:00

	Sample I.D.	Date	Time	Matrix	No. of Containers	NWTPH-Dx	dissolved zinc (200.8) * Arsenic	total zinc (200.8) * Arsenic
1	P-5-180817	8/17/18	1530	AQ	2		X	X
2	P-4-180822	8/22/18	1115	AQ	3	X	X	X
3	P-3-180822	8/22/18	1325	AQ	2		X	X

Observations/Comments

- [x] Allow water samples to settle, collect aliquot from clear portion
- [ ] NWTPH-Dx - run acid wash silica gel cleanup
- [ ] Analyze for EPH if no specific product identified

VOC/BTEX/VPH (soil):
- [ ] non-preserved
- [ ] preserved w/methanol
- [ ] preserved w/sodium bisulfate
- [ ] Freeze upon receipt
- [ ] Dissolved metal water samples field filtered

Other * dissolved zinc FIELD FILTERED, please centrifuge

Cody added Total + dissolved Arsenic on 8/23/18

Special Shipment/Handling or Storage Requirements: on ice

Method of Shipment: delivered to lab

Relinquished by	Received by	Relinquished by	Received by
Signature: Melissa DiLoreto	Signature: Rick Bryan	Signature:	Signature:
Printed Name: Melissa DiLoreto	Printed Name: Rick Bryan	Printed Name:	Printed Name:
Company: Landau Associates	Company: ALS	Company:	Company:
Date: 8/22/18 Time: 1550	Date: 8/22/18 Time: 15:50	Date: Time:	Date: Time:

WHITE COPY - Project File YELLOW COPY - Laboratory PINK COPY - Client Representative

12/2014

Technical Memorandum:
Supplemental Soil Sampling Results

Technical Memorandum

TO: Rebecca Ralston

FROM: Cody Johnson, PE

DATE: November 14, 2019

RE: **Supplemental Soil Sampling Results**
Former Monroe Auto Wrecking Site/River's Edge Site
Monroe, Washington
Project No. 1759001.020.026

Introduction

Landau Associates, Inc. (LAI) has prepared this Technical Memorandum for Ms. Rebecca Ralston on behalf of River's Edge WA LLP (River's Edge) to present the results of soil sampling and analysis for the Former Monroe Auto Wrecking/River's Edge site located at 426 Fremont Street in Monroe, Washington (Figure 1).

The soil sampling was conducted to evaluate the following data gaps identified in the Supplemental Phase II Environmental Site Assessment (ESA) report prepared by LAI for the site in 2018 (LAI 2018):

- Confirmation samples collected from remedial excavations EX-3, EX-4, and EX-6 (Figure 2) conducted by Farallon Consulting LLC (Farallon 2000) were not analyzed for polychlorinated biphenyls (PCBs); however, PCBs were detected in soil samples collected from those areas prior to excavation at concentrations exceeding the Washington State Department of Ecology's (Ecology) Model Toxics Control Act (MTCA) Method A cleanup level (CUL).
- Polycyclic aromatic hydrocarbons (PAHs) were detected at concentrations above the MTCA Method A CUL in an area between the mill building and maintenance garage building during a Phase II ESA conducted at the site by LAI in 2017 (LAI 2017) for the Snohomish County Utility District, but the extent of contamination was not further evaluated.

The supplemental soil sampling was, therefore, conducted to determine whether PCBs were present in EX-3, EX-4, and EX-6, and to evaluate the extent of PAH contamination between the maintenance garage and mill building. These areas are referred to in this technical memorandum as Areas of Concern (AOC) 2, 3, and 4 and are shown on Figure 2. AOC-2 includes the approximate extents of EX-3 and EX-4; AOC-3 covers the estimated extent of PAH contamination between the mill and maintenance garage buildings; and AOC-4 includes the approximate extent of EX-6. AOC-1, shown on Figure 2, was not addressed as part of this supplemental sampling effort. Remedial excavation is planned for AOC-1 in 2019.

Field Activities

Soil sampling field activities were conducted on November 27, 2018. The sample locations shown on Figures 3, 4, and 5 were determined based on figures in Farallon's Final Cleanup Action Summary Report (Farallon 2000) showing the locations of the remedial excavations and by measuring off of existing site features.

The number of samples needed at each AOC was based on the area of excavation and the linear feet (ft) of the excavation sidewall. One bottom sample was collected per 1,000 square ft of excavation bottom and one sidewall sample was collected for every 100 linear ft of sidewall, with a minimum of four sidewall samples (one from each ordinal direction) and one bottom sample. The sample depths were based on the

reported depth of the previous remedial excavations. Additional "step-out" sidewall samples were collected from test pits completed at distances of 10 and 20 ft outside the previous excavation areas. These step-out samples were to be analyzed only if contaminant concentrations in the initial sidewall sample at that location were found to exceed a CUL, in which case the 10-ft step-out sample would be analyzed followed by the 20-ft sample if contaminant concentrations in the 10-ft sample exceeded a CUL. The step-out samples were to be used to define the lateral extent of contamination requiring excavation should the initial sidewall sample results indicate that additional excavation is needed to remove contaminated soil. Similarly, a "step-down" sample was collected from approximately 1 ft below each excavation bottom sample to help define the vertical extent of contamination should contaminant concentrations in one or more bottom samples be found to exceed a CUL. Due to the presence of buildings on the east and west sides of AOC-3, step-out samples were not collected from this AOC.

The sampling was accomplished by excavating shallow (1 to 3 ft deep) test pits at the locations shown on Figures 3 through 5 and collecting samples from what would be the approximate bottoms and sidewalls of the former remedial excavations. The samples were collected directly from the test pits using a clean stainless-steel spoon. Soil collected from the sample location was placed in a clean stainless-steel mixing bowl and composited before placing in laboratory-supplied 4-ounce sample jars. The samples were then placed in a cooler with ice for transport to the analytical laboratory. The spoon and mixing bowl were decontaminated with Alconox and a deionized water rinse between sample locations.

Mr. Lauren Wibbleman, the current property owner, provided and operated the backhoe used to dig the test pits. Prior to beginning excavation activities, LAI notified public utilities, and aboveground and underground utilities were located and identified by the local utility companies, as appropriate. Based on our conversation with Mr. Wibbleman on November 19, 2018, no other utilities were known or suspected to be present in the work area and a private locating service was not needed to locate onsite utilities.

Soil encountered during test pit excavations generally consisted of light gray/light brown sand and gravel fill over brown to dark brown, loose, fine to coarse sand with gravel, and silt. No indications of contamination and no groundwater was encountered in any of the test pits.

Analytical Results

The samples were submitted to ALS Environmental of Everett, Washington using standard chain-of-custody procedures. The samples from AOC-2 and AOC-4 were analyzed for PCBs by US Environmental Protection Agency (EPA) Method 8082. The north sidewall sample from AOC-4 (AOC4-NSW-112718) was also analyzed for diesel- and oil-range petroleum hydrocarbons by the Northwest Total Petroleum Hydrocarbon Method – Diesel-Range Extended (NWTPH-Dx) due to a detection at that location in 2000. The samples from AOC-3 were analyzed for PAHs by EPA Method 8270 selected ion monitoring (SIM). The analytical results are presented in Table 1 and are summarized as follows:

- PCBs were detected at concentrations less than the MTCA Method A CUL in one sample collected from the south sidewall of AOC-2. PCBs were not detected in any of the other samples collected from AOC-2 and AOC-4.
- Petroleum hydrocarbons were not detected in north sidewall sample from AOC-4 (AOC4-NSW-112718).

- PAHs were detected in the east and west sidewall samples collected from AOC-3 (AOC3-ESW-112718 and AOC3-WSW-112718). Analytical results for carcinogenic PAHs (cPAHs) were evaluated using toxicity equivalence factors. Sample AOC3-ESW-112718 contained benzo(a)pyrene and toxicity equivalence factor-modified cPAHs at concentrations of 300 micrograms per kilogram (μg/kg) and 412 μg/kg, respectively, both of which exceed the MTCA Method A CUL of 100 μg/kg. The PAHs detected in AOC3-WSW-112718 did not exceed the Method A CULs and PAHs were not detected in the remaining samples.

Conclusions and Recommendations

Based on the results of our sampling, it appears that the remedial excavations conducted by Farrallon in 2000 were sufficient to remove contamination exceeding CULs in AOC-2 (EX-3 and EX-4), and AOC-4 (EX-6). No further remedial excavation is, therefore, needed in those areas.

PAHs were detected above the MTCA Method A CUL in the east sidewall sample collected from AOC-3. This sample was located adjacent to a building, so a step-out sample was not collected and the extent of contamination in that direction is unknown. The other sidewall and bottom samples collected from AOC-3 did not contain PAHs above the CULs, so the extent of PAH contamination is likely limited laterally and vertically. A limited remedial excavation is recommended in this area following removal of the adjacent building. Collection of sidewall and bottom soil samples following excavation is recommended to confirm that the contamination exceeding CULs has been fully removed.

Limitations

This technical memorandum has been prepared for the exclusive use of River's Edge for specific application to the Former Monroe Auto Wrecking/River's Edge site. No other party is entitled to rely on the information, conclusions, and recommendations included in this document without the express written consent of River's Edge and LAI. Further, the reuse of information, conclusions, and recommendations provided herein for extensions of the project or for any other project, without review and authorization by LAI, shall be at the user's sole risk. LAI warrants that within the limitations of scope, schedule, and budget, our services have been provided in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions as this project. We make no other warranty, either express or implied.

LANDAU ASSOCIATES, INC.

Kathryn F. Hartley

For Cody Johnson, PE
Associate Engineer

CMJ/KFH/tam
P:\1759\001\R\Supplemental Sampling TM\Rivers' Edge Supplemental Soil Sampling TM 111419.docx

Attachments:

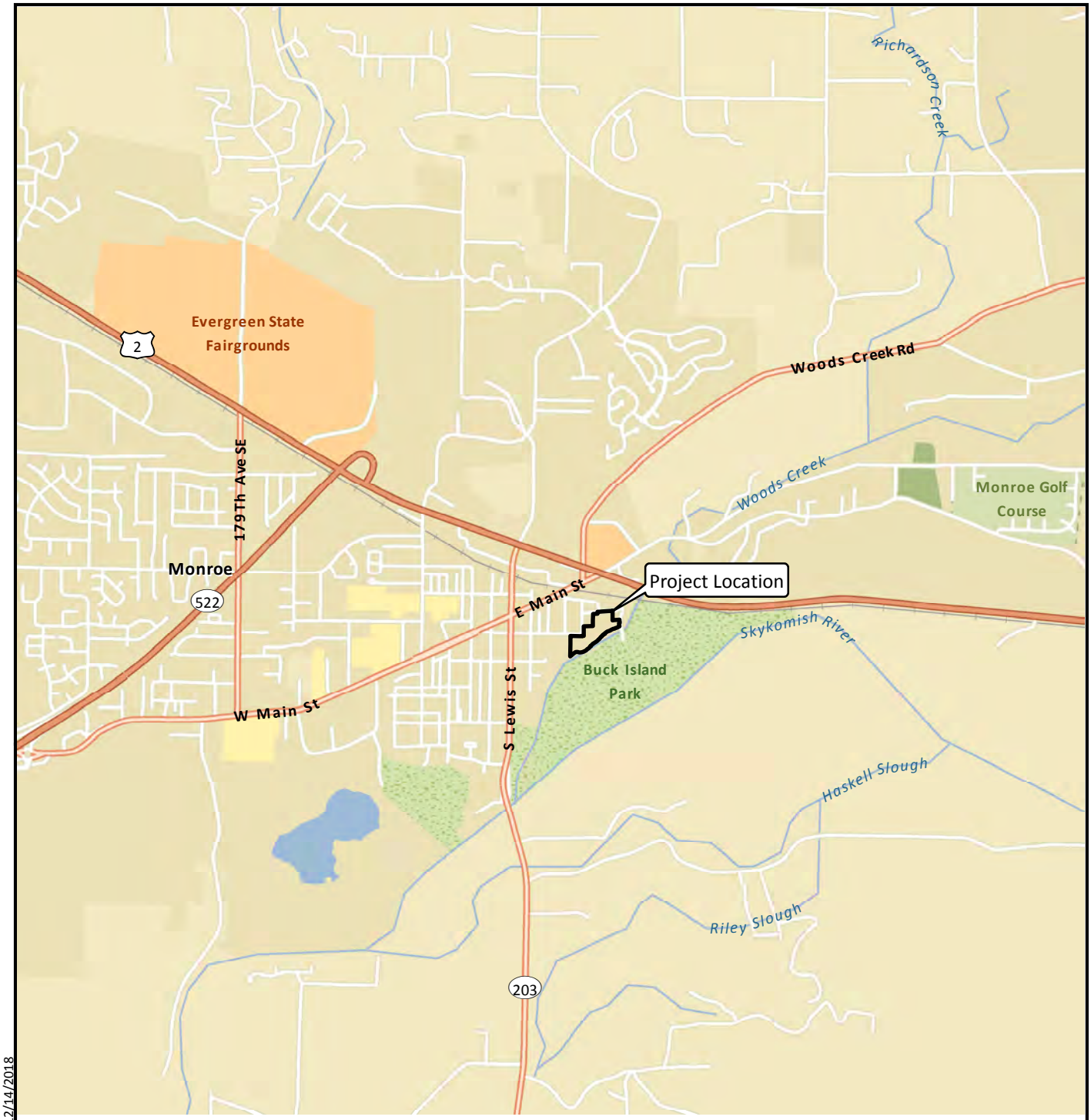
Figure 1 – Vicinity Map
Figure 2 – Site Plan with Areas of Concern
Figure 3 – Area of Concern 2
Figure 4 – Area of Concern 3
Figure 5 – Area of Concern 4
Table 1 - Test Pit Soil Analytical Results

References

Farallon. 2000. Final Cleanup Action Summary Report, Monroe Auto Salvage, 926 Fremont Street, Monroe, Washington. Farallon Consulting, LLC. November 9.

LAI. 2018. Supplemental Phase II Environmental Site Assessment, Former Monroe Auto Wrecking Site, Monroe, Washington. Landau Associates, Inc. November 12.

LAI. 2017. Draft Phase II Environmental Site Assessment Monroe-Woods Creek Site D Ring Bus, Monroe, Washington. Landau Associates, Inc. July 31.



N

0 0.5 1

Miles

Data Source: Esri 2012

G:\Projects\1759\001\020\021\F01VicMap.mxd 12/14/2018

LANDAU ASSOCIATES

Monroe Auto Wrecking Supplemental Soil Sampling Monroe, Washington	**Vicinity Map**	Figure 1

N

Bulk Fuel Terminal with Above Ground Storage Tanks

Mill St

Simons Rd

Former Bulk Fuel Storage Subarea

S Ann St

Charles St

AOC 4

Ex-6

Mill Building

AOC 3

Maintenance Garage

Ex-4

AOC 2

Ex-3

E Fremont St

Woods Creek

Simons Rd

AOC 1

G:\Projects\1759\001\020\021\F02SitePlanAOCs.mxd 2/1/2019

Legend

- Areas of Concern (AOC)
- Excavations
- Site Boundary

0 100 200

Scale in Feet

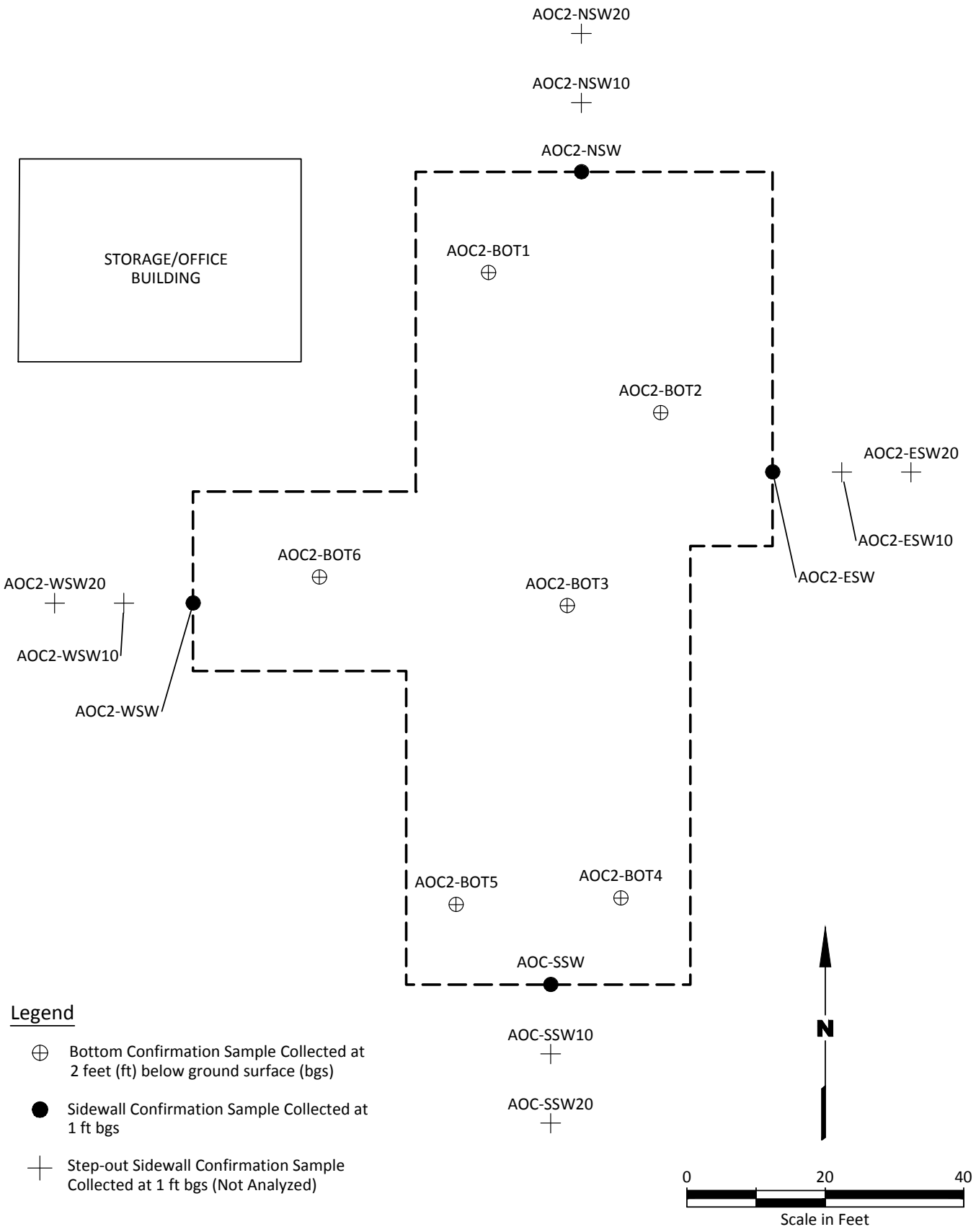
Data Source: Snohomish County GIS; Esri Imagery Service.

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

LANDAU ASSOCIATES

Monroe Auto Wrecking Supplemental Soil Sampling Monroe, Washington	**Site Plan with Areas of Concern**	Figure 2

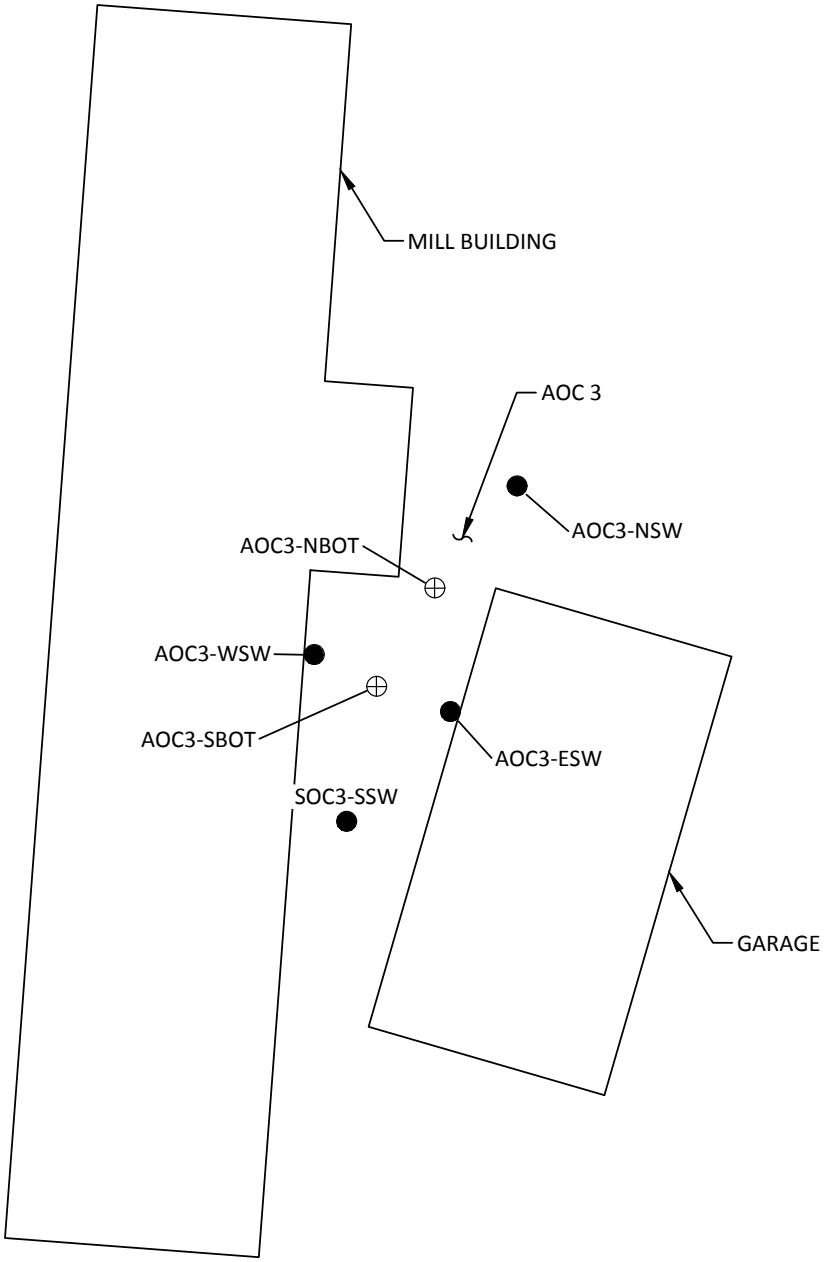


Source: Farallon, 2000

Landau Associates | G:\Projects\1759\001\020\021\F03AOCArea2.dwg | 12/14/2018 3:20 PM

LANDAU ASSOCIATES

Monroe Auto Wrecking Supplemental Soil Sampling Monroe, Washington	**Area of Concern 2**	Figure 3



Legend

⊕ Bottom Confirmation Sample Collected at 2-feet (ft) below ground surface (bgs)

● Sidewall Confirmation Sample Collected at 1 ft bgs

N

0 20 40

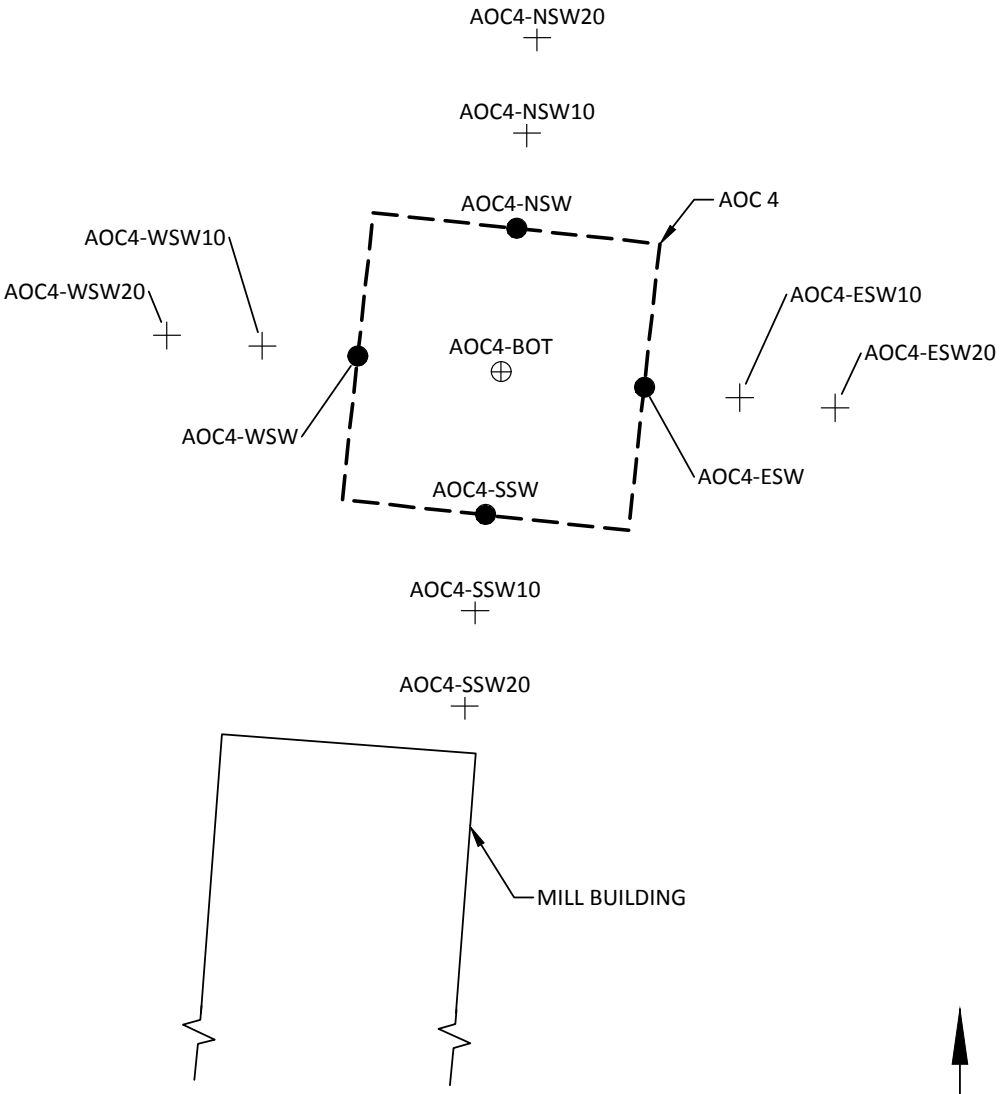
Scale in Feet

Source: Farallon, 2000

Landau Associates | G:\Projects\1759\001\020\021\F04AOCArea3.dwg | 2/1/2019 11:14 AM

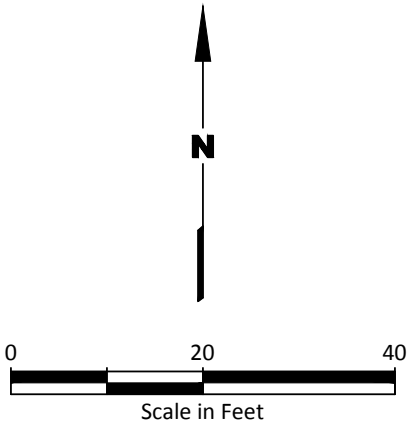
LANDAU ASSOCIATES

Monroe Auto Wrecking Supplemental Soil Sampling Monroe, Washington	**Area of Concern 3**	Figure 4



Legend

- ⊕ Bottom Confirmation Sample Collected at 2 feet (ft) below ground surface (bgs)
- ● Sidewall Confirmation Sample Collected at 1 ft bgs
- ┼ Step-out Sidewall Confirmation Sample Collected at 1 ft bgs (Not Analyzed)



Source: Farallon, 2000

Landau Associates | G:\Projects\1759\001\020\021\F05AOCArea4.dwg | 12/14/2018 3:21 PM

LANDAU ASSOCIATES

Monroe Auto Wrecking Supplemental Soil Sampling Monroe, Washington	**Area of Concern 4**	Figure 5

Table 1
Test Pit Soil Analytical Results
Monroe Auto Wrecking/River's Edge Site
Monroe, Washington

Analyte	MTCA Method A Cleanup Level for Unrestricted Uses	Laboratory Sample	Sample Location, Laboratory Sample ID, Sample Date									
		AOC2-BOT1 EV18110165-21 11/27/2018	AOC3-ESW EV18110165-20 11/27/2018	AOC3-NBOT EV18110165-16 11/27/2018	AOC3-NSW EV18110165-18 11/27/2018	AOC3-SBOT EV18110165-15 11/27/2018	AOC3-SSW EV18110165-17 11/27/2018	AOC3-WSW EV18110165-19 11/27/2018	AOC4-BOT EV18110165-01 11/27/2018	AOC4-ESW EV18110165-02 11/27/2018	AOC4-NSW EV18110165-05 11/27/2018	AOC4-WSW EV18110165-08 11/27/2018
Total Petroleum Hydrocarbons (mg/kg; NWTPH-Dx)												
Diesel-Range Organics (C12-C24)	2,000	--	--	--	--	--	--	--	--	--	25 U	--
Oil-Range Organics (C24-C40)	2,000	--	--	--	--	--	--	--	--	--	50 U	--
Polychlorinated Biphenyls (mg/kg; SW-846 8082A)												
Aroclor 1016	NA	0.10 U	--	--	--	--	--	--	0.10 U	0.10 U	0.10 U	0.10 U
Aroclor 1221	NA	0.10 U	--	--	--	--	--	--	0.10 U	0.10 U	0.10 U	0.10 U
Aroclor 1232	NA	0.10 U	--	--	--	--	--	--	0.10 U	0.10 U	0.10 U	0.10 U
Aroclor 1242	NA	0.10 U	--	--	--	--	--	--	0.10 U	0.10 U	0.10 U	0.10 U
Aroclor 1248	NA	0.10 U	--	--	--	--	--	--	0.10 U	0.10 U	0.10 U	0.10 U
Aroclor 1254	NA	0.10 U	--	--	--	--	--	--	0.10 U	0.10 U	0.10 U	0.10 U
Aroclor 1260	NA	0.10 U	--	--	--	--	--	--	0.10 U	0.10 U	0.10 U	0.10 U
Aroclor 1268	NA	0.10 U	--	--	--	--	--	--	0.10 U	0.10 U	0.10 U	0.10 U
Total PCBs	1.0	0.10 U	--	--	--	--	--	--	0.10 U	0.10 U	0.10 U	0.10 U
Polycyclic Aromatic Hydrocarbons (µg/kg; SW-846 8270D-SIM)												
1-Methylnaphthalene	5,000 (a)	--	20 U	20 U	20 U	20 U	20 U	20 U	--	--	--	--
2-Methylnaphthalene	5,000 (a)	--	20 U	20 U	20 U	20 U	20 U	20 U	--	--	--	--
Acenaphthene	NA	--	20 U	20 U	20 U	20 U	20 U	20 U	--	--	--	--
Acenaphthylene	NA	--	20 U	20 U	20 U	20 U	20 U	20 U	--	--	--	--
Anthracene	NA	--	20 U	20 U	20 U	20 U	20 U	20 U	--	--	--	--
Benzo(a)anthracene	NA	--	**280**	20 U	20 U	20 U	20 U	**47**	--	--	--	--
Benzo(a)pyrene	100	--	**300**	20 U	20 U	20 U	20 U	**48**	--	--	--	--
Benzo(b)fluoranthene	NA	--	**510**	20 U	20 U	20 U	20 U	**63**	--	--	--	--
Benzo(g,h,i)perylene	NA	--	**230**	20 U	20 U	20 U	20 U	**49**	--	--	--	--
Benzo(k)fluoranthene	NA	--	**150**	20 U	20 U	20 U	20 U	**29**	--	--	--	--
Chrysene	NA	--	**260**	20 U	20 U	20 U	20 U	**48**	--	--	--	--
Dibenzo(a,h)anthracene	NA	--	20 U	20 U	20 U	20 U	20 U	20 U	--	--	--	--
Fluoranthene	NA	--	**550**	20 U	20 U	20 U	20 U	**120**	--	--	--	--
Fluorene	NA	--	20 U	20 U	20 U	20 U	20 U	20 U	--	--	--	--
Indeno(1,2,3-cd)pyrene	NA	--	**150**	20 U	20 U	20 U	20 U	**32**	--	--	--	--
Naphthalene	5,000 (a)	--	20 U	20 U	20 U	20 U	20 U	20 U	--	--	--	--
Phenanthrene	NA	--	**190**	20 U	20 U	20 U	20 U	**39**	--	--	--	--
Pyrene	NA	--	**420**	20 U	20 U	20 U	20 U	**130**	--	--	--	--
cPAH TEF	100	--	**412**	20 U	20 U	20 U	20 U	**66**	--	--	--	--

Notes:

U = The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

Bold = detected concentration

Green Box = detected concentration is greater than cleanup level

(a) Cleanup level based on total naphthalenes.

Abbreviations/Acronyms:

cPAH = carcinogenic polycyclic aromatic hydrocarbon
ID = identification
µg/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
MTCA = Model Toxics Control Act
NA = not applicable
NWTPH = Northwest Total Petroleum Hydrocarbon
PCB = polychlorinated biphenyl
SIM = select ion monitoring
TEF = toxicity equivalent factor

Underground Storage Tank Decommissioning and Site Assessment Report

Underground Storage Tank Decommissioning and Site Assessment Report
River's Edge Property
Monroe, Washington

October 15, 2019

Prepared for

River's Edge WA LLLP c/o Rebecca Ralston

LANDAU ASSOCIATES

130 2nd Avenue South
Edmonds, WA 98020
(425) 778-0907

Underground Storage Tank Removal and Site Assessment Report River's Edge Development Monroe, Washington

This document was prepared by, or under the direct supervision of, the technical professionals noted below.

Document prepared by: _____ Brittany McManus
Staff Geologist-in-Training

Document reviewed by: _____ Dylan Frazer
Senior Geologist

Date: October 15, 2019
Project No.: 1759001.040.041
File path: P:\1759\001\R\UST Site Assessment Rpt\LAI_RiversEdge_UST Site Asses Rpt_101519.docx
Project Coordinator: tam

LANDAU ASSOCIATES

This page intentionally left blank.

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

1.0 INTRODUCTION

This underground storage tank (UST) removal and follow-up site assessment report has been prepared on behalf of River's Edge WA LLLP (the Owner) for the removal of a UST associated with the River's Edge development located at 426 East Fremont Street, Monroe, Washington (subject property). Work at the subject property is associated with ongoing construction of a new apartment community. This report documents the procedures utilized to decommission a previously unknown UST discovered during construction, and the subsequent UST decommissioning and site assessment. Figure 1 shows the location of the subject property. Pertinent site features, including the former UST location, are shown on Figure 2.

The UST decommissioning and site assessment work was conducted on behalf of the owner as an independent action consistent with the requirements of the Washington State Department of Ecology (Ecology) Model Toxics Control Act (MTCA) Cleanup Regulation (Chapter 173-340 Washington Administrative Code [WAC]), and the Ecology UST regulations for site assessments and permanent closure (Chapter 173-360A WAC, including WAC 173-360A-730 and WAC 173-360A-810).

1.1 Site Information

The following sections provide information pertaining to the physical, geologic, and hydrogeologic setting of the subject property.

1.1.1 Physical Setting

The subject property is approximately 7 acres in size, and is bordered to the north by East Fremont Street, South Ann Street, Simons Road, and residences; to the east by Simons Road; to the south by Woods Creek and Al Borlin Park; and to the west by a hair salon and residences. Prior to construction associated with the apartment community, the subject property was used as an auto salvage yard and wood mill.

1.1.2 Geologic and Hydrogeologic Setting

A thick layer of fill covers the subject property, increasing in depth closer to Woods Creek. The fill material, consisting of varying amounts of sand, silt, gravels, and manmade debris, has been encountered to depths of 35 feet (ft) below ground surface (bgs) (Farallon Consulting LLC *Draft Work Plan, Remedial Investigation and Feasibility Study, Former Bulk Fuel Storage Subarea, Monroe Auto Salvage Site, 426 Fremont Street, Monroe, Washington* dated October 26, 2000). Underlying the fill are glacial outwash deposits and Skykomish River deposits (Geologic Map of the Monroe 7.5-minute Quadrangle, King and Snohomish Counties, Washington, November 2011).

Groundwater was not encountered during the UST removal. Based on topography at the subject property and existing site data, groundwater is expected to be at approximately 23 ft bgs, which is greater than 15 ft below the bottom of the former UST.

2.0 UNDERGROUND STORAGE TANK DECOMMISSIONING AND REMOVAL

The following sections of this report describe the UST decommissioning and closure methods used at the subject property.

2.1 Site Reconnaissance

The UST was discovered during utility excavation activities on September 5, 2019. Following discovery, an ICC-certified Washington State UST site assessor from LAI visited the subject property on September 6, 2019. Approximately 2 ft of soil had been removed from above the UST prior to arrival. Based on observations made prior to additional excavation, the UST was approximately 5 ft long and 4 ft wide, and the UST was assumed to be approximately 500 gallons in capacity. Three approximately 2-inch-diameter openings were observed on the top of the UST. Upon inspection, approximately 2 inches of product (i.e. residual fuel previously stored in the tank) was observed in the bottom of the UST. No evidence of a release was observed during the site reconnaissance.

During the site reconnaissance, a sample of the product from the liquid inside the UST (UST Product-190906) was collected for laboratory analysis to identify the type of petroleum products stored inside the UST. The sample was submitted to ALS in Everett, Washington and analyzed for hydrocarbon identification by Method NWTPH-HCID. Analytical results indicated the presence of both gasoline-range and diesel-range total petroleum hydrocarbons (TPH-G and TPH-D). Based on these results, the UST was assumed to have contained both gasoline and diesel products, and UST decommissioning and site assessment was conducted accordingly. A copy of the product characterization analytical report is included in Appendix A.

2.2 Underground Storage Tank Information

The approximate location of the UST prior to removal is shown on Figure 2. The UST was located during excavation work associated with construction of the River's Edge development. The capacity and condition of the UST at the time of removal is as follows:

UST ID	Approximate Capacity (gallons)	Contents	Condition
Unknown	500	Gasoline and Diesel	Approximately 2 inches of product in the tank; tank was in good condition with no holes and no evidence of staining in surrounding soil.

2.3 Notifications

Following discovery of and prior to removing the UST from the subject property, the owner submitted a 30-Day Notice of Intent to Decommission USTs to Ecology, as required by WAC 173-360A-810. A waiver of the 30-day period was granted by Ecology on September 12, 2019; a copy of this notice is provided in Appendix B.

2.4 Underground Storage Tank Closure and Removal

River's Edge WA LLLP contracted Wyser Construction Co. Inc. (Wyser) for the UST decommissioning. LAI's field personnel, certified as an ICC-certified Washington State UST Site Assessor, was onsite during the UST decommissioning and removal activities. The UST tank was decommissioned by removal on September 16, 2019. Prior to removal, remaining product in the tank was pumped out, and the tank was cleaned and triple rinsed. Following cleaning, the UST was rendered inert with dry ice, removed from the tank pit, and placed on plastic sheeting for inspection. The tank pit following removal was approximately 8 ft long by 6 ft wide and 6 ft deep. No holes or obvious corrosion was observed in the UST. No fuel dispensers or piping associated with the UST were observed during decommissioning or removal activities. Liquid from the tank, including residual product and rinse water, was disposed of by Marine Vacuum Services, Inc. Decommissioning and waste disposal documents are provided in Appendix C, which include an Ecology Permanent Closure Notice, a pump and rinse certificate, and a cleaning and disposal certificate provided by Wyser. Selected site photographs taken during decommissioning are also provided in Appendix D.

3.0 UST SITE ASSESSMENT

The following sections describe the procedures used for field screening and confirmation soil sampling in the area where the UST was removed.

3.1 Applicable Soil Cleanup Levels

To evaluate the potential presence of petroleum-contaminated soil (PCS), soil analytical results were compared to Ecology MTCA Method A soil cleanup levels (cleanup levels) for unrestricted land uses. Groundwater was not encountered during the excavation activities; therefore, a discussion of groundwater sampling and associated cleanup levels is not warranted.

3.2 Field Screening, Confirmation Sampling, and Analytical Results

The following sections describe field screening during UST removal, and the confirmation soil sampling and analytical results associated with the UST site assessment. UST site assessment activities were performed by an ICC-certified Washington State UST Site Assessor.

3.2.1 Field Screening

During excavation and removal, soil surrounding the UST was observed for physical signs of contamination and monitored for the presence of volatile organic compounds (VOCs) with a photoionization detector (PID). A PID reading of 20 parts per million (ppm) was established as the threshold to identify the excavated soil as likely PCS. Excavated soil with field-screening results greater than 20 ppm or visual indications of contamination was to be segregated as “impacted” soil and temporarily stockpiled on the subject property. Soil with no indications of being impacted by the UST or its contents was temporarily stockpiled on the subject property as “non-impacted” soil for possible future use as “clean” backfill. Field screening did not indicate the presence of PCS in soil around or below the UST. Therefore, excavated soil from above and around the UST was stockpiled in an approximately 5-cubic yard “non-impacted” stockpile to potentially be used as backfill after receipt of the stockpile confirmation sample results, as discussed below.

3.2.2 Confirmation Soil Sampling

Following removal of the UST, confirmation soil samples were collected to document soil quality at the limits of the excavation; evaluate the extent, if any, of PCS; and identify if areas existed where additional excavation would be required to remove PCS with contaminant concentrations greater than the cleanup levels. Confirmation soil samples were collected using an excavator bucket; soil for analysis was collected from the center of the excavator bucket. Confirmation samples for volatile constituents (TPH-G and benzene, toluene, ethylbenzene, and xylenes [BTEX]) were collected using US Environmental Protection Agency (EPA) Method 5035A soil sampling procedures.

One bottom [B(6-7')] and two sidewall [SW-W(5-6') and SW-E(5-6')] confirmation soil samples were collected from the excavation area following tank removal. Also, based on a 5-cubic yard volume of the "non-impacted" soil stockpile, one stockpile confirmation sample was collected (SP-1). As stated above, no piping or dispensers were observed in the area and, thus, no additional confirmation soil samples were collected associated with this infrastructure. Confirmation soil samples were submitted to ALS Laboratory in Everett, Washington for substances specified in Table 830-1 of WAC 173-340-900 for diesel and gasoline product releases, which consist of TPH-G, TPH-D, and oil-range total petroleum hydrocarbons (TPH-O) analysis by Method NWTPH-Gx and NWTPH-Dx, and BTEX analysis by Method 8021. Lead was also analyzed in two samples with the greatest potential contamination, which included the one bottom sample and one sidewall sample.

3.2.3 Confirmation Sample Results

The analytical results for the confirmation soil samples indicate TPH-G, TPH-D, TPH-O, and BTEX were not present at concentrations above the laboratory reporting limits in any of the samples, which are also well below the cleanup levels. Lead was detected in the bottom and east side wall samples at concentrations of 3.4 milligrams per kilogram (mg/kg) and 11 mg/kg, respectively, but these concentrations are well below the lead cleanup level of 250 mg/kg. The confirmation soil analytical results are summarized in Table 1. The laboratory data report is provided in Appendix A.

3.3 Waste Disposal

As presented in Section 2.4, the former UST was removed from the subject property and disposed of at Seattle Iron and Metal Recycling in Seattle, Washington. Liquid generated during UST pumping and rinsing was disposed of by Marine Vacuum Services, Inc. Documentation of UST and waste water disposal is provided in Appendix D.

The soil removed from the excavation area was stockpiled as described above, and used onsite as backfill after receipt of confirmation sample analytical results.

3.4 Washington State Department of Ecology Closure Notice and Site Assessment Checklist

The completed Ecology UST Site Assessment Checklist is provided in Appendix E.

4.0 SUMMARY AND CONCLUSIONS

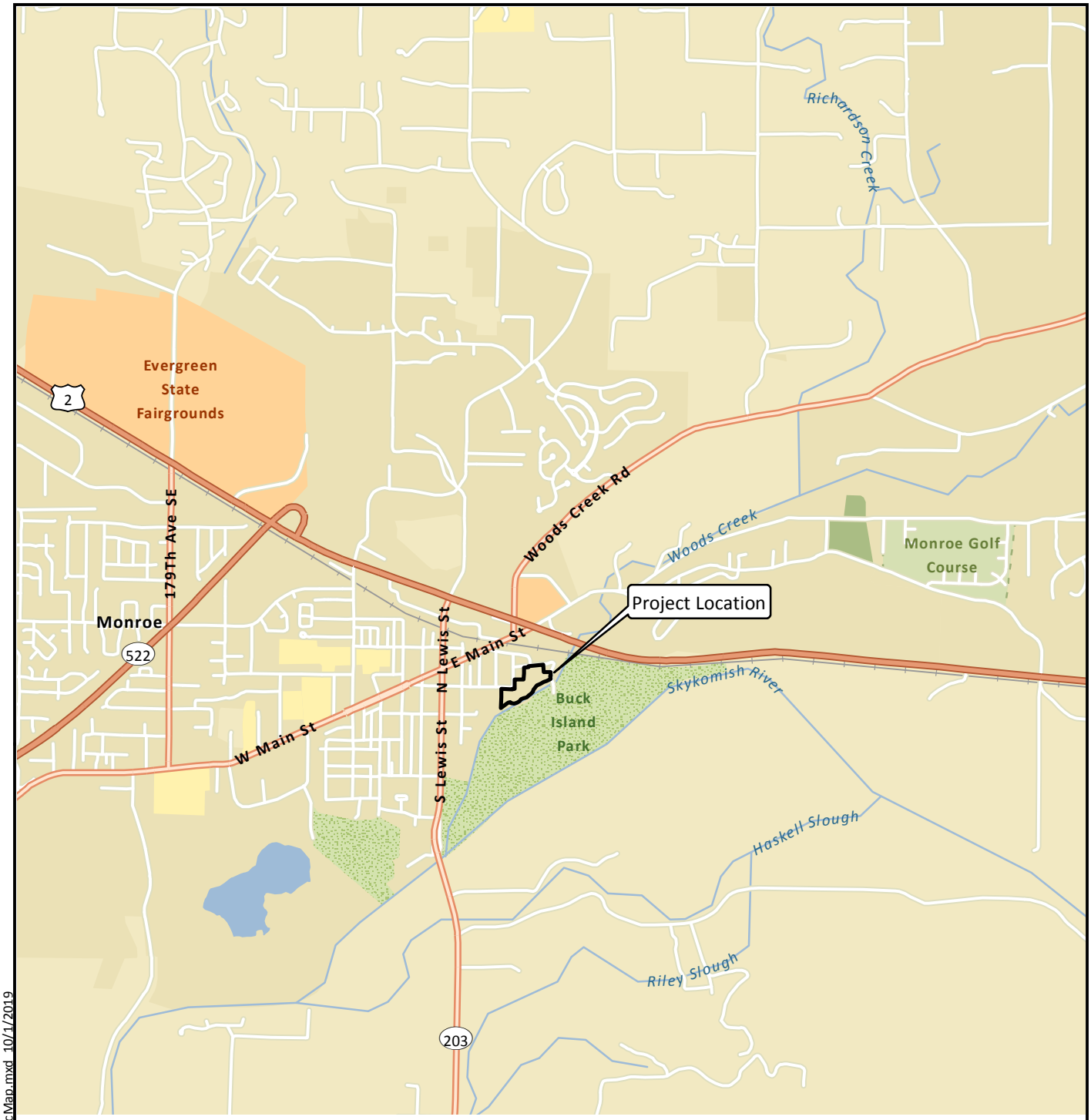
This report documents the decommissioning by removal of one UST from the subject property and subsequent UST site assessment consistent with the requirements of WAC 173-360A-730 and WAC 173-360A-810. The results of the UST removal activities include the following:

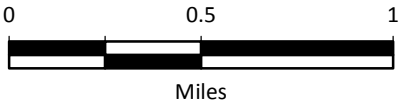
- One UST (formerly containing gasoline and diesel) was removed from the subject property by an ICC-certified UST decommissioner. The UST was in a good condition; no punctures or leakage was observed.
- The subsequent UST site assessment, which was conducted by an ICC-certified Washington State UST site assessor, did not identify a release from the UST. Field screening did not indicate the presence of petroleum-contaminated soil in the area around the former UST, and no contaminants were detected at concentrations greater than the MTCA Method A soil cleanup levels for unrestricted land uses in the final confirmation soil samples collected from the limits of the UST excavation.

The results of the UST decommissioning/removal activities did not indicate the presence of a release associated with the former UST. Therefore, the UST decommissioning and site assessment is complete.

5.0 USE OF THIS REPORT

This UST Site Assessment report has been prepared by Landau Associates for the exclusive use of River's Edge WA LLLP for specific application to the subject property, as that term is defined herein. Services for this project were conducted in accordance with the contract between River's Edge WA LLLP and Landau Associates. Landau Associates has performed these services in accordance with generally accepted engineering and consulting standards for environmental work in Washington State at the time these services were performed. The reuse of the information, conclusions, and recommendations set forth herein by River's Edge WA LLLP or others in connection with any site other than the subject property without Landau Associates' written permission shall be at the sole risk of user and without liability to Landau Associates.





Data Source: Esri 2012

G:\Projects\1759\001\040\041\Rivers Edge\F01VicMap.mxd 10/1/2019

LANDAU ASSOCIATES

River's Edge Development Monroe, Washington	**Vicinity Map**	Figure 1

Legend

- Confirmation Soil Sampling Location
- Approximate UST Tank Pit Extent
- Approximate Former UST Location

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

0 20 40

Scale in Feet

Data Source: Snohomish County GIS
Base Map Source: ©Google Earth Pro, 2019

G:\Projects\1759\001\040\041\Rivers Edge\F02USTConfirmationSoilSamplingLocations.mxd 10/9/2019 | JValluzzi

LANDAU ASSOCIATES

River's Edge Development Monroe, Washington	**UST and Confirmation Soil Sampling Locations**	Figure 2

Table 1
UST Soil Analytical Results
River's Edge Development
Monroe, Washington

Analyte	MTCA Method A Cleanup Level for Unrestricted Uses	Sample Location, Sample ID, Laboratory SDG, Sample Date			
		UST-B B (6-7') EV19090108 9/16/2019	UST-SW-E SW-E (5-6') EV19090108 9/16/2019	UST-SW-W SW-W (5-6') EV19090108 9/16/2019	UST-SP-1 SP-1 EV19090108 9/16/2019
Total Petroleum Hydrocarbons (mg/kg; NWTPH-Dx/-Gx)					
Gasoline-range Organics	30/100 (a)	3.0 U	3.0 U	3.0 U	3.0 U
Diesel-range Organics	2,000	25 U	25 U	25 U	25 U
Oil-range Organics	2,000	50 U	50 U	50 U	50 U
Volatiles (mg/kg; SW-846 8021B)					
Benzene	0.03	0.030 U	0.030 U	0.030 U	0.030 U
Ethylbenzene	6	0.050 U	0.050 U	0.050 U	0.050 U
Toluene	7	0.050 U	0.050 U	0.050 U	0.050 U
Xylenes, Total	9	0.20 U	0.20 U	0.20 U	0.20 U
Total Metals (mg/kg; SW-846 6020)					
Lead	250	**3.4**	**11**	--	--

Notes:

(a) MTCA Method A cleanup level is 100 mg/kg if benzene is not present and the total of ethylbenzene, toluene, and xylenes is less than 1% of the gasoline mixture; otherwise, the cleanup level is 30 mg/kg.

U = The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

Bold indicates a detected compound.

Abbreviations/Acronyms:

ID = identification
mg/kg = milligrams per kilogram
MTCA = Model Toxics Control Act
-- = not analyzed
SDG = sample delivery group
UST = underground storage tank

APPENDIX A

Laboratory Analytical Reports

September 6, 2019

Mr. Dylan Frazer
Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

Dear Mr. Frazer,

On September 6th, 1 sample was received by our laboratory and assigned our laboratory project number EV19090028. The project was identified as your River's Edge - 1759001030.015. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	9/6/2019
		ALS JOB#:	EV19090028
		ALS SAMPLE#:	EV19090028-01
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	09/06/2019
CLIENT PROJECT:	River's Edge - 1759001030.015	COLLECTION DATE:	9/6/2019 6:40:00 AM
CLIENT SAMPLE ID	UST-Product-190906	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
HCID-Gas Range (C7-C12)	NWTPH-HCID	**>13000**	13000	50	MG/KG	09/06/2019	EBS
HCID-Diesel Range (C12-C24)	NWTPH-HCID	**>33000**	33000	50	MG/KG	09/06/2019	EBS
HCID-Oil Range (C24-C40)	NWTPH-HCID	U	67000	50	MG/KG	09/06/2019	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
BCB 50X Dilution	NWTPH-HCID	**559 SUR12**	09/06/2019	EBS
C25 50X Dilution	NWTPH-HCID	**70.6**	09/06/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
SUR12 -Surrogate recoveries were outside of the control limits due to matrix interference.
Chromatogram indicates that it is likely that sample contains an unidentified gasoline range product and an unidentified diesel range product.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS SDG#: WDOE ACCREDITATION:	9/6/2019 EV19090028 C601
CLIENT CONTACT:	Dylan Frazer		
CLIENT PROJECT:	River's Edge - 1759001030.015		

LABORATORY BLANK RESULTS

MB-090619S - Batch 144970 - Soil by NWTPH-HCID

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
HCID-Gas Range (C7-C12)	NWTPH-HCID	U	MG/KG	20	09/06/2019	EBS
HCID-Diesel Range (C12-C24)	NWTPH-HCID	U	MG/KG	50	09/06/2019	EBS
HCID-Oil Range (C24-C40)	NWTPH-HCID	U	MG/KG	100	09/06/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

LANDAU ASSOCIATES

Chain-of-Custody Record

GV190900028

X Seattle/Edmonds (425) 778-0907 ☐ Spokane (509) 327-9737
☐ Tacoma (253) 926-2493 ☐ Portland (503) 542-1080
☐

Date 9/6/19
Page 1 of 1

Turnaround Time:
Standard
Accelerated ASAP

Project Name Rivers Edge Project No. 175900l030.015
Project Location/Event Monroe, WA / UST excavation
Sampler's Name Jeovan Huerta
Project Contact Dylan Frazer
Send Results To Dylan Frazer & Danille Jorgenson

Special Handling Requirements:

Shipment Method: Drop off
Stored on ice: Yes / No

	Sample I.D.	Date	Time	Matrix	No. of Containers	Testing Parameters: TPH-HCID	Observations/Comments
1	UST Product - 190906	9/6/19	640	Other AQ	1	X	

Allow water samples to settle, collect aliquot from clear portion ☐

NWTPH-Dx - Acid wash cleanup ☐
- Silica gel cleanup ☐

Dissolved metal samples were field filtered

Other

Relinquished by	Received by	Relinquished by	Received by
Signature	Signature	Signature	Signature
Printed Name Jeovan Huerta	Printed Name Glen Perry	Printed Name	Printed Name
Company LT	Company ALS	Company	Company
Date 9/6/19 Time 745	Date 9/6/19 Time 7:45AM	Date Time	Date Time

WHITE COPY - Laboratory YELLOW COPY - Project File PINK COPY - Client Representative

10/2018

ALS ENVIRONMENTAL

Sample Receiving Checklist

Client: Landau ALS Job #: EV1909028

Project: Rivers Edge 175901.030.015

Received Date: 9/6/19 Received Time: 7:45 By: JAP

Type of shipping container: Cooler ____ Box ____ Other Hand

Shipped via: FedEx Ground ____ UPS ____ Mail ____ Courier ____ Hand Delivered X
FedEx Express ____

	Yes	No	N/A
Were custody seals on outside of shipping container?	____	X	____
If yes, how many? ____ Where? ____			
Custody seal date: ____ Seal name: ____			
Was Chain of Custody properly filled out (ink, signed, dated, etc.)?	X	____	____
Did all bottles have labels?	X	____	____
Did all bottle labels and tags agree with Chain of Custody?	X	____	____
Were samples received within hold time?	X	____	____
Did all bottles arrive in good condition (unbroken, etc.)?	X	____	____
Was sufficient amount of sample sent for the tests indicated?	X	____	____
Was correct preservation added to samples?	X	____	____

If no, Sample Control added preservative to the following:

Sample Number	Reagent	Analyte

Were VOA vials checked for absence of air bubbles?	____	____	X
Bubbles present in sample #: ____			

Temperature of cooler upon receipt: 18.4°C Cold Cool Ambient N/A

Explain any discrepancies: ____

Was client contacted? ____ Who was called? ____ By whom? ____ Date: ____

Outcome of call: ____

September 18, 2019

Mr. Dylan Frazer
Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

Dear Mr. Frazer,

On September 16th, 4 samples were received by our laboratory and assigned our laboratory project number EV19090108. The project was identified as your River's Edge - 1759001.030.015. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	9/18/2019 EV19090108 EV19090108-01
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	09/16/2019
CLIENT PROJECT:	River's Edge - 1759001.030.015	COLLECTION DATE:	9/16/2019 10:00:00 AM
CLIENT SAMPLE ID	B (6-7')	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range (C5-C12)	NWTPH-GX	U	3.0	1	MG/KG	09/16/2019	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	09/16/2019	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/16/2019	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/16/2019	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/16/2019	KLS
TPH-Diesel Range (C12-C24)	NWTPH-DX w/ SGA	U	25	1	MG/KG	09/16/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX w/ SGA	U	50	1	MG/KG	09/16/2019	EBS
Lead	EPA-6020	**3.4**	0.10	1	MG/KG	09/17/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**84.9**	09/16/2019	KLS
TFT	EPA-8021	**82.4**	09/16/2019	KLS
C25	NWTPH-DX w/ SGA	**85.8**	09/16/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	9/18/2019 EV19090108 EV19090108-02
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	09/16/2019
CLIENT PROJECT:	River's Edge - 1759001.030.015	COLLECTION DATE:	9/16/2019 10:10:00 AM
CLIENT SAMPLE ID	SW-W (5-6')	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range (C5-C12)	NWTPH-GX	U	3.0	1	MG/KG	09/16/2019	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	09/16/2019	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/16/2019	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/16/2019	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/16/2019	KLS
TPH-Diesel Range (C12-C24)	NWTPH-DX w/ SGA	U	25	1	MG/KG	09/16/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX w/ SGA	U	50	1	MG/KG	09/16/2019	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**87.8**	09/16/2019	KLS
TFT	EPA-8021	**107**	09/16/2019	KLS
C25	NWTPH-DX w/ SGA	**90.2**	09/16/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	9/18/2019 EV19090108 EV19090108-03
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	09/16/2019
CLIENT PROJECT:	River's Edge - 1759001.030.015	COLLECTION DATE:	9/16/2019 10:20:00 AM
CLIENT SAMPLE ID	SW-E (5-6')	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range (C5-C12)	NWTPH-GX	U	3.0	1	MG/KG	09/16/2019	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	09/16/2019	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/16/2019	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/16/2019	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/16/2019	KLS
TPH-Diesel Range (C12-C24)	NWTPH-DX w/ SGA	U	25	1	MG/KG	09/16/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX w/ SGA	U	50	1	MG/KG	09/16/2019	EBS
Lead	EPA-6020	**11**	0.10	1	MG/KG	09/17/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**83.8**	09/16/2019	KLS
TFT	EPA-8021	**78.2**	09/16/2019	KLS
C25	NWTPH-DX w/ SGA	**106**	09/16/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	9/18/2019 EV19090108 EV19090108-04
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	09/16/2019
CLIENT PROJECT:	River's Edge - 1759001.030.015	COLLECTION DATE:	9/16/2019 10:30:00 AM
CLIENT SAMPLE ID	SP-1	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range (C5-C12)	NWTPH-GX	U	3.0	1	MG/KG	09/16/2019	KLS
Benzene	EPA-8021	U	0.030	1	MG/KG	09/16/2019	KLS
Toluene	EPA-8021	U	0.050	1	MG/KG	09/16/2019	KLS
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/16/2019	KLS
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/16/2019	KLS
TPH-Diesel Range (C12-C24)	NWTPH-DX w/ SGA	U	25	1	MG/KG	09/16/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX w/ SGA	U	50	1	MG/KG	09/16/2019	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**87.9**	09/16/2019	KLS
TFT	EPA-8021	**86.7**	09/16/2019	KLS
C25	NWTPH-DX w/ SGA	**96.3**	09/16/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

CLIENT CONTACT: Dylan Frazer

CLIENT PROJECT: River's Edge - 1759001.030.015

DATE: 9/18/2019

ALS SDG#: EV19090108

WDOE ACCREDITATION: C601

LABORATORY BLANK RESULTS

MBG-091619S - Batch 145322 - Soil by NWTPH-GX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range (C5-C12)	NWTPH-GX	U	MG/KG	3.0	09/16/2019	KLS

U - Analyte analyzed for but not detected at level above reporting limit.

MB-091619S - Batch 145322 - Soil by EPA-8021

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	MG/KG	0.030	09/16/2019	KLS
Toluene	EPA-8021	U	MG/KG	0.050	09/16/2019	KLS
Ethylbenzene	EPA-8021	U	MG/KG	0.050	09/16/2019	KLS
Xylenes	EPA-8021	U	MG/KG	0.20	09/16/2019	KLS

U - Analyte analyzed for but not detected at level above reporting limit.

MB-091619S2 - Batch 145323 - Soil by NWTPH-DX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	MG/KG	25	09/16/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	MG/KG	50	09/16/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

MB-091719S - Batch 145353 - Soil by EPA-6020

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Lead	EPA-6020	U	MG/KG	0.10	09/17/2019	RAL

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

CLIENT CONTACT: Dylan Frazer

CLIENT PROJECT: River's Edge - 1759001.030.015

DATE: 9/18/2019

ALS SDG#: EV19090108

WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 145322 - Soil by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range (C5-C12) - BS	NWTPH-GX	**97.6**			66.5	122.7	09/16/2019	KLS
TPH-Volatile Range (C5-C12) - BSD	NWTPH-GX	**99.7**	**2**		66.5	122.7	09/16/2019	KLS

ALS Test Batch ID: 145322 - Soil by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Benzene - BS	EPA-8021	**85.0**			67.7	124	09/16/2019	KLS
Benzene - BSD	EPA-8021	**85.4**	**0**		67.7	124	09/16/2019	KLS
Toluene - BS	EPA-8021	**83.9**			71	123	09/16/2019	KLS
Toluene - BSD	EPA-8021	**82.5**	**2**		71	123	09/16/2019	KLS
Ethylbenzene - BS	EPA-8021	**85.9**			69.8	117	09/16/2019	KLS
Ethylbenzene - BSD	EPA-8021	**84.8**	**1**		69.8	117	09/16/2019	KLS
Xylenes - BS	EPA-8021	**87.6**			70	119	09/16/2019	KLS
Xylenes - BSD	EPA-8021	**87.3**	**0**		70	119	09/16/2019	KLS

ALS Test Batch ID: 145323 - Soil by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24) - BS	NWTPH-DX	**89.9**			75.5	122.1	09/16/2019	EBS
TPH-Diesel Range (C12-C24) - BSD	NWTPH-DX	**93.2**	**4**		75.5	122.1	09/16/2019	EBS

ALS Test Batch ID: 145353 - Soil by EPA-6020

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Lead - BS	EPA-6020	**97.0**			80	120	09/17/2019	RAL
Lead - BSD	EPA-6020	**99.5**	**3**		80	120	09/17/2019	RAL

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS ENVIRONMENTAL

Sample Receiving Checklist

Client: Landau Associates ALS Job #: EV1909010 8

Project: Rivers Edge

Received Date: 9/16/19 Received Time: 11:47 By: RB

Type of shipping container: Cooler X Box ___ Other ___

Shipped via: FedEx Ground ___ UPS ___ Mail ___ Courier ___ Hand Delivered X
FedEx Express ___

	Yes	No	N/A
Were custody seals on outside of shipping container?	___	X	___
If yes, how many? ___ Where? ___			
Custody seal date: ___ Seal name: ___			
Was Chain of Custody properly filled out (ink, signed, dated, etc.)?	X	___	___
Did all bottles have labels?	X	___	___
Did all bottle labels and tags agree with Chain of Custody?	X	___	___
Were samples received within hold time?	X	___	___
Did all bottles arrive in good condition (unbroken, etc.)?	X	___	___
Was sufficient amount of sample sent for the tests indicated?	X	___	___
Was correct preservation added to samples?	X	___	___

If no, Sample Control added preservative to the following: Per 5035 high = 4 kits

Sample Number	Reagent	Analyte

Were VOA vials checked for absence of air bubbles? ___ ___ X

Bubbles present in sample #: ___

Temperature of cooler upon receipt: 12.2 °C on Ice Cold (Cool) Ambient N/A

Explain any discrepancies: ___

Was client contacted? ___ Who was called? ___ By whom? ___ Date: ___

Outcome of call: ___

EV19090108

Chain-of-Custody Record

LANDAU ASSOCIATES

☒ Seattle/Edmonds (425) 778-0907	☐ Spokane (509) 327-9737	Date 9/16/19	Turnaround Time:
☐ Tacoma (253) 926-2493	☐ Portland (503) 542-1080	Page 1 of 1	Standard / Accelerated 24-hr

Project Name Rivers Edge Project No. 159001-030-015

Project Location/Event Monroe, WA / UST site assessment

Sampler's Name Jeovani Huerta

Project Contact Dylan Frazer

Send Results To Dylan Frazer & Danielle Jorgensen

Special Handling Requirements:

Shipment Method: Drop off

Stored on ice: Yes / No

Testing Parameters

	Sample I.D.	Date	Time	Matrix	No. of Containers	NWTPH-Dx (Acid/Silica)	NWTPH-Gx	BTEX (8021)	Lead (6010)
1	B(6-7')	9/16/19	1000	Soil	2	X	X	X	X
2	SW-W(5-6')	"	1010	Soil	2	X	X	X	●
3	SW-E(5-6')	"	1020	Soil	2	X	X	X	X
4	SP-1	"	1030	Soil	2	X	X	X	●

Observations/Comments

☐ Allow water samples to settle, collect aliquot from clear portion

☒ NWTPH-Dx - Acid wash cleanup ☐

- Silica gel cleanup ☒

☐ Dissolved metal samples were field filtered

Other

~~X~~ w/ ~~SGC~~ SGC
- TPH-D
- TPH-O

● = held for analysis

Relinquished by	Received by	Relinquished by	Received by
Signature	Signature	Signature	Signature
Printed Name Jeovani Huerta	Printed Name Rick Bryan	Printed Name	Printed Name
Company Landau Associates	Company ALS	Company	Company
Date 9/16/19 Time 1147	Date 9-16-19 Time 11:47	Date Time	Date Time

WHITE COPY - Laboratory YELLOW COPY - Project File PINK COPY - Client Representative

10/2018

APPENDIX B

30-day Notice of Intent to Decommission USTs

DEPARTMENT OF ECOLOGY
State of Washington

30-DAY NOTICE
FOR UNDERGROUND STORAGE TANK SYSTEMS

This form provides Ecology 30-days' advanced notice for projects, as required by Chapter 173-360A WAC. Instructions are on the back page.

UST ID #: _____

County: Snohomish

Please ✓ the appropriate box: ☐ Intent to Install ☒ Intent to Close ☐ Change-in-Service

I. SITE INFORMATION	II. OWNER/OPERATOR INFORMATION
Tag or UBI # (if applicable): n/a	Owner/Operator Name: River's Edge c/o Rebecca Ralston
UST ID # (if applicable): n/a	Business Name: Same
Site Name: River's Edge	Mailing Address: 909 Fifth Ave. Suite 2401
Site Address: 426 E Fremont Street	City: Seattle State: WA Zip: 98164
City: Monroe	Phone: 206-351-9941
Phone: n/a	Email: Rebecca.ralston@outlook.com

III. CERTIFIED SERVICE PROVIDER(S)

Check the appropriate boxes. If more than one service provider is required for this project, fill out both sections.

Note: Individuals performing UST services MUST be ICC-certified or have passed another qualifying exam approved by the Department of Ecology.

1) ☐ Installer ☒ Decommissioner ☐ Site Assessor	
Company Name: Wyser Construction	Certification Type: UST Decommissioner
Service Provider Name: Mike Redford	Cert. No.: 873126 Exp. Date: 3/5/2021
Provider Phone: 424 742 0898	Provider Email: darren@wyserdirt.com

2) ☐ Installer ☐ Decommissioner ☒ Site Assessor	
Company Name: Landau Associates, Inc.	Certification Type: WA UST Site Assessor
Service Provider Name: Andrey J Huerta-Avila	Cert. No.: 8452484-U7 Exp. Date: 4/19/21
Provider Phone: 425-329-0283	Provider Email: jhuerta@landauinc.com

IV. TANK AND/OR PIPING INFORMATION

TANK ID	TANK CAPACITY	SUBSTANCE STORED	PIPING INSTALLATION OR REPLACEMENT ONLY (Y/N)	DATE PROJECT IS EXPECTED TO BEGIN	COMMENTS
Unknown	Approx. 500 gal	Gas/diesel	N	9/16/19	**Earthwork contractor encountered unknown UST during excavation activities on site. Approximately 2" of product was observed in bottom of UST; HCID analysis indicated presence of gasoline and diesel range products**

I, Matt Cook, waive the 30-day wait-time. Please provide at least 3 business days notice for changes to the start date listed.

—, Matt Cook, UST Inspector, DoE

APPENDIX C

UST Decommissioning and Waste Disposal Documentation

DEPARTMENT OF ECOLOGY
State of Washington

PERMANENT CLOSURE NOTICE
FOR UNDERGROUND STORAGE TANKS

This notice certifies that permanent closure activities were performed and conducted in accordance with Chapter 173-360 WAC. Instructions are found on the back page.

UST ID #: _____

County:

I. UST FACILITY			II. OWNER/OPERATOR INFORMATION		
Facility Compliance Tag #: **N/A**			Owner/Operator Name: **Rivers Edge c/o Rebecca Ralston**		
UST ID #: **N/A**			Business Name: Same		
Site Name: **Rivers Edge**			Address: **909 Fifth Ave Suite 2401**		
Site Address: **426 East Fremont St.**			City: **Seattle**	State: **Wa**	Zip: **98164**
City: **Monroe**			Phone: **206-351-9941**		
Phone: **WA**			Email: **Rebecca.ralston@outlook.com**		

III. CERTIFIED UST DECOMMISSIONER					
Company Name: **Wyser Construction Co Inc**			Service Provider Name: **Darren Ness**		
Address: **19015 109th Ave SE**			Certification Type: **UST Decommissioner**		
City: **Snohomish**	State: **WA**	Zip: **98296**	Cert. No.: 352588685	Exp. Date: **4/22/2021**	
Provider Phone: **206-678-5122**			Provider Email: **darren@wyserdirt.com**		
Provider Signature:			***Date:*** **9/16/2019**		

IV. TANK INFORMATION

TANK ID	TANK CAPACITY	LAST SUBSTANCE STORED	CLOSURE METHOD			CLOSURE DATE
			removal	closed-in-place	change-in-service	
Unknown	**500**	**Gas/Diesel**	X	☐	☐	**9/16/2019**
			☐	☐	☐	
			☐	☐	☐	
			☐	☐	☐	
			☐	☐	☐	
			☐	☐	☐	

V. REQUIRED SIGNATURE

Signature acknowledges UST(s) comply with UST regulation WAC 173-360-380 Permanent Closure Requirements.

9/19/19		Dylan Finzer on behalf of Rivers Edge
Date	Signature of Tank Owner/Operator or Authorized Representative	Print or Type Name

ECY 020-94 (July 2014)

Marine Vacuum Service, Inc.

GENERAL CONTRACTOR

CONTRACTORS LICENSE # MARINVS097JA

P0. Box 24263 Seattle, Washington 98124

Telephone (206) 762-0240

FAX (206) 763-8084

1-800-540-7491

AST/UST STORAGE TANK PUMP & RINSE CERTIFICATE

Tank Size: 750 gallon

Last Contents Diesel Coil tank

Tank Location: 500 E Fremont

Monroe, WA

Marine Vacuum Service, Inc. certifies that the above mentioned tank(s) have been triple rinsed in accordance with the industry standard as outlined in 40 CFR PART 280.70, WAC 173-360-380(I), API 1604, API 2015 and that all residual product and rinsate has been disposed of in accordance with Federal, State and Local regulations. Tanks listed above are **NOT GAS FREE** or **NOT SAFE FOR HOT WORK**

Tank Owner: Sierra

Contractor: Wyser Construction

M.V.S. Representative:

Date: 9-16-19

Notes:

STRAIGHT BILL OF LADING

ORIGINAL — NOT NEGOTIABLE

Shipper No. 22071

Carrier No. 025

Page 1 of 4

Marine Vacuum Service Inc.
(Name of carrier) (SCAC)

Date 9-16-19

On Collect on Delivery shipments, the letters "COD" must appear before consignee's name or as otherwise provided in Item 430, Sec.1.

TO:
Consignee Marine Vacuum Service Inc.
Street 1516 South Graham Street
City Seattle State WA Zip Code 98108

FROM:
Shipper Wyser Construction
Street 500 E Fremont
City Monroe State WA Zip Code
24 hr. Emergency Contact Tel. No. ChemTel 1-800-255-3924 Contract MIS3627926

Route

Vehicle Number 025

No. of Units & Container Type	HM	BASIC DESCRIPTION UN or NA Number, Proper Shipping Name, Hazard Class, Packing Group	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
1 TT	X	(DOT Spec Tank Required) UN1863 Fuel, Aviation, Turbin Engine, Class 3, PG I				
1 TT	X	(DOT Spec Tank Required) UN1203 Gasoline, Mixture Class 3, PG II				
1 TT	X	(DOT Spec Tank Required) UN1203 Gasoline, Class 3, PG II				
1 TT	X	NA1993 Diesel Mixture, Class 3, PG III				
1 TT	X	NA1993 Diesel, Class 3, PG III				
1 TT	X	NA1270 Petroleum Oil, Class 3, PG I				
1 TT	X	NA1270 Petroleum Oil, Mixture, Class 3, PG I				
1 TT		Oily Waste Water Non Reg by DOT				
1 TT		Waste Water Non Reg by DOT	25	gallons		
1 TT		Used Oil Non Reg by DOT				
1 TT		Used Coolant Non Reg by DOT				

PLACARDS TENDERED: YES ☐ NO ☒

Note — (1) Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property, as follows: "The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding _____ per _____."
(2) Where the applicable tariff provisions specify a limitation of the carrier's liability absent a release or a value declaration by the shipper and the shipper does not release the carrier's liability or declare a value, the carrier's liability shall be limited to the extent provided by such provisions. See NMFC Item 172.
(3) Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation. See Section 2(e) of item 360, Bills of Lading, Freight Bills and Statements of Charges and Section 1(a) of the Contract Terms and Conditions for a list of such articles.

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

_____ Signature

REMIT C.O.D. TO:
ADDRESS

COD Amt: $

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

TOTAL CHARGES $

FREIGHT CHARGES
FREIGHT PREPAID except when box at right is checked ☐ Check box if charges are to be collect

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

_____ (Signature of Consignor)

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
Shipper hereby certifies that he is familiar with all the lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

SHIPPER	CARRIER Mar Vac
PER X	PER
9-16-19	DATE 9-16-19

Permanent post-office address of shipper.

Marine Vacuum Service
STORAGE TANK
CLEANING & DISPOSAL CERTIFICATE

September 16, 2019

ATTN: Wyser Construction Inc.
19015 109th Ave SE
Snohomish, WA. 98296

TANK OWNER: River Edge LLC
500 East Fremont Street
Monroe, Wa.

TANK CAPACITY: 500 Gallon UST

LAST CONTENTS HELD IN TANK: Heating Oil

Marine Vacuum Service, Inc. certifies that the tank(s) mentioned above have been pumped of all liquid materials and has been triple washed with high pressure washer and soap solution and is certified clean. Inside of tank was inspected and shows no sign failure to the integrity of tank. Mar-vac will not take any responsibility of the inspection and was completed for visual stability only on the safety of our crew. The contents have been disposed in accordance to all Local, State, and Federal Regulations. The tank has been completely cleaned of all residues and disposed at Seattle Iron and Metal Recycling Facility in Seattle, WA.

Thank You
Tom Myler

APPENDIX D

Selected Site Photographs

Excavated area looking east.

Excavated UST looking west.

LANDAU ASSOCIATES

River's Edge Development
Monroe, Washington

Selected Site Photographs

Figure
D-1

UST decommissioning looking south.

UST *in situ* looking west.

LANDAU ASSOCIATES

River's Edge Development
Monroe, Washington

Selected Site Photographs

Figure
D-2

APPENDIX E

UST Site Assessment Checklist

DEPARTMENT OF ECOLOGY
State of Washington

UST ID #: _____

County: Snohomish

SITE CHECK/SITE ASSESSMENT CHECKLIST

FOR UNDERGROUND STORAGE TANKS

This checklist certifies that site check or site assessment activities were performed in accordance with Chapter 173-360A WAC. Instructions are found on the last page.

I. UST FACILITY	II. OWNER/OPERATOR INFORMATION
Facility Compliance Tag #: n/a	Owner/Operator Name: River's Edge c/o Rebecca Ralston
UST ID #: n/a	Business Name: Same
Site Name: River's Edge	Address: 909 Fifth Ave. Suite 2401
Site Address: 426 E Fremont Street	City: Seattle State: WA Zip: 98164
City: Monroe	Phone: 206-351-9941
Phone: n/a	Email: Rebecca.ralston@outlook.com

III. CERTIFIED SITE ASSESSOR

Service Provider Name: Andre J Huerta-Avila		Company Name: WA UST Site Assessor	
Cell Phone: 206-650-1781	Email: jhuerta@landauinc.com	Address: 130 2nd Avenue South	
Certification #: 8452484-U7	Exp. Date: 4/19/2021	City: Edmonds	State: WA Zip: 98020

IV. TANK INFORMATION

TANK ID	TANK CAPACITY	LAST SUBSTANCE STORED	DATE SITE CHECK OR ASSESSMENT CONDUCTED
Unknown	Approx. 500 gal	Gas/Diesel	9/16/2019

V. REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT (check one)

☒ Release investigation following permanent UST system closure (i.e. tank removal or closure-in-place).

☐ Release investigation following a failed tank and/or line tightness test.

☐ Release investigation following discovery of contaminated soil and/or groundwater.

☐ Release investigation directed by Ecology to determine if the UST system is the source of offsite impacts.

☐ UST system is undergoing a "change-in-service", which is changing from storing a regulated substance (e.g. gasoline) to storing a non-regulated substance (e.g. water).

☐ Directed by Ecology for UST system permanently closed or abandoned before 12/22/1988.

☒ Other (describe): Earthwork contractor encountered unknown UST during excavation activities on site.

VI. CHECKLIST

The site assessor must check each of the following items and include it in the report. Sections referenced below can be found in the Ecology publication *Guidance for Site Checks and Site Assessments for Underground Storage Tanks*.	YES	NO
1. The location of the UST site is shown on a vicinity map.	☒	☐
2. A brief summary of information obtained during the site inspection is provided (Section 3.2)	☒	☐
3. A summary of UST system data is provided (Section 3.1)	☒	☐
4. The soils characteristics at the UST site are described. (Section 5.2)	☒	☐
5. Is there any apparent groundwater in the tank excavation?	☐	☒
6. A brief description of the surrounding land use is provided. (Section 3.1)	☒	☐
7. The name and address of the laboratory used to perform analyses is provided. The methods used to collect and analyze the samples, including the number and types of samples collected, are also documented in the report. The data from the laboratory is appended to the report.	☒	☐
8. The following items are provided in one or more sketches:		
• Location and ID number for all field samples collected	☒	☐
• If applicable, groundwater samples are distinguished from soil samples	☒	☐
• Location of samples collected from stockpiled excavated soil	☒	☐
• Tank and piping locations and limits of excavation pit	☒	☐
• Adjacent structures and streets	☒	☐
• Approximate locations of any on-site and nearby utilities	☒	☐
9. If sampling procedures are different from those specified in the guidance, has justification for using these alternative sampling procedures been provided? (Section 3.4)	☒	☐
10. A table is provided showing laboratory results for each sample collected including; sample ID number, constituents analyzed for and corresponding concentration, analytical method, and detection limit for that method. Any sample exceeding MTCA Method A cleanup standards are highlighted or bolded.	☒	☐
11. Any factors that may have compromised the quality of the data or validity of the results are described.	☒	☐
12. The results of this site check/site assessment indicate that a confirmed release of a regulated substance has occurred. The requirements for reporting confirmed releases can be found in WAC 173-360-372.	☐	☒

VII. REQUIRED SIGNATURES

Signature acknowledges the Site Check or Site Assessment complies with UST regulations WAC 173-360A-0730 through 0750.

Andrey J Huerta-Avila	Andrey Huerta	10/11/2019
Print or Type Name	Signature of Certified Site Assessor	Date

APPENDIX B

Laboratory Analytical Reports

June 18, 2019

Mr. Cody Johnson
Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

Dear Mr. Johnson,

On June 7th, 15 samples were received by our laboratory and assigned our laboratory project number EV19060038. The project was identified as your River's Edge. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/18/2019 EV19060038 EV19060038-01
CLIENT CONTACT:	Cody Johnson	DATE RECEIVED:	06/07/2019
CLIENT PROJECT:	River's Edge	COLLECTION DATE:	6/6/2019 9:17:00 AM
CLIENT SAMPLE ID	TP1-1-060619	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	06/08/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	50	1	MG/KG	06/08/2019	EBS
Arsenic	EPA-6020	**5.1**	0.20	1	MG/KG	06/07/2019	RAL
Cadmium	EPA-6020	**0.21**	0.10	1	MG/KG	06/07/2019	RAL
Lead	EPA-6020	**8.7**	0.10	1	MG/KG	06/07/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**98.2**	06/08/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/18/2019 EV19060038 EV19060038-02
CLIENT CONTACT:	Cody Johnson	DATE RECEIVED:	06/07/2019
CLIENT PROJECT:	River's Edge	COLLECTION DATE:	6/6/2019 9:45:00 AM
CLIENT SAMPLE ID	TP1-2-060619	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	06/13/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	50	1	MG/KG	06/13/2019	EBS
Mercury	EPA-7471	**0.22**	0.020	1	MG/KG	06/17/2019	RAL
Arsenic	EPA-6020	**4.2**	0.20	1	MG/KG	06/13/2019	RAL
Cadmium	EPA-6020	U	0.10	1	MG/KG	06/13/2019	RAL
Chromium	EPA-6020	**33**	0.10	1	MG/KG	06/13/2019	RAL
Lead	EPA-6020	**30**	0.10	1	MG/KG	06/13/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**108**	06/13/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/18/2019 EV19060038 EV19060038-03
CLIENT CONTACT:	Cody Johnson	DATE RECEIVED:	06/07/2019
CLIENT PROJECT:	River's Edge	COLLECTION DATE:	6/6/2019 9:31:00 AM
CLIENT SAMPLE ID	TP5-1-060619	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	06/08/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**430**	50	1	MG/KG	06/08/2019	EBS
Arsenic	EPA-6020	**6.5**	0.20	1	MG/KG	06/07/2019	RAL
Cadmium	EPA-6020	**3.2**	0.10	1	MG/KG	06/07/2019	RAL
Lead	EPA-6020	**420**	0.10	1	MG/KG	06/07/2019	RAL
Lead (TCLP)	EPA-6020/1311	**0.67**	0.031	6.25	MG/L	06/14/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**104**	06/08/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/18/2019 EV19060038 EV19060038-04
CLIENT CONTACT:	Cody Johnson	DATE RECEIVED:	06/07/2019
CLIENT PROJECT:	River's Edge	COLLECTION DATE:	6/6/2019 9:40:00 AM
CLIENT SAMPLE ID	TP5-2-060619	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	06/13/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	50	1	MG/KG	06/13/2019	EBS
Mercury	EPA-7471	**0.20**	0.020	1	MG/KG	06/17/2019	RAL
Arsenic	EPA-6020	**2.0**	0.20	1	MG/KG	06/13/2019	RAL
Cadmium	EPA-6020	**0.18**	0.10	1	MG/KG	06/13/2019	RAL
Chromium	EPA-6020	**25**	0.10	1	MG/KG	06/13/2019	RAL
Lead	EPA-6020	**16**	0.10	1	MG/KG	06/13/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**86.6**	06/13/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/18/2019 EV19060038 EV19060038-05
CLIENT CONTACT:	Cody Johnson	DATE RECEIVED:	06/07/2019
CLIENT PROJECT:	River's Edge	COLLECTION DATE:	6/6/2019 9:55:00 AM
CLIENT SAMPLE ID	TP2-1-060619	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	50	2	MG/KG	06/08/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**500**	100	2	MG/KG	06/08/2019	EBS
Arsenic	EPA-6020	**6.1**	0.20	1	MG/KG	06/07/2019	RAL
Cadmium	EPA-6020	**2.4**	0.10	1	MG/KG	06/07/2019	RAL
Lead	EPA-6020	**290**	0.10	1	MG/KG	06/07/2019	RAL
Lead (TCLP)	EPA-6020/1311	**0.23**	0.031	6.25	MG/L	06/14/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25 2X Dilution	NWTPH-DX	**103**	06/08/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/18/2019 EV19060038 EV19060038-06
CLIENT CONTACT:	Cody Johnson	DATE RECEIVED:	06/07/2019
CLIENT PROJECT:	River's Edge	COLLECTION DATE:	6/6/2019 9:59:00 AM
CLIENT SAMPLE ID	TP2-2-060619	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	**67**	25	1	MG/KG	06/13/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**140**	50	1	MG/KG	06/13/2019	EBS
Mercury	EPA-7471	**0.12**	0.020	1	MG/KG	06/17/2019	RAL
Arsenic	EPA-6020	**5.8**	0.20	1	MG/KG	06/13/2019	RAL
Cadmium	EPA-6020	**0.96**	0.10	1	MG/KG	06/13/2019	RAL
Chromium	EPA-6020	**35**	0.10	1	MG/KG	06/13/2019	RAL
Lead	EPA-6020	**120**	0.10	1	MG/KG	06/13/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**129**	06/13/2019	EBS

Chromatogram indicates that it is likely that sample contains an unidentified diesel range product and lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/18/2019 EV19060038 EV19060038-07
CLIENT CONTACT:	Cody Johnson	DATE RECEIVED:	06/07/2019
CLIENT PROJECT:	River's Edge	COLLECTION DATE:	6/6/2019 10:10:00 AM
CLIENT SAMPLE ID	TP3-1-060619	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	**690**	120	5	MG/KG	06/08/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**2300**	250	5	MG/KG	06/08/2019	EBS
Arsenic	EPA-6020	**13**	1.0	5	MG/KG	06/07/2019	RAL
Cadmium	EPA-6020	**9.0**	0.50	5	MG/KG	06/07/2019	RAL
Lead	EPA-6020	**1100**	0.50	5	MG/KG	06/07/2019	RAL
Lead (TCLP)	EPA-6020/1311	**0.66**	0.031	6.25	MG/L	06/14/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25 5X Dilution	NWTPH-DX	**105**	06/08/2019	EBS

Chromatogram indicates that it is likely that sample contains light oil/lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/18/2019 EV19060038 EV19060038-08
CLIENT CONTACT:	Cody Johnson	DATE RECEIVED:	06/07/2019
CLIENT PROJECT:	River's Edge	COLLECTION DATE:	6/6/2019 10:17:00 AM
CLIENT SAMPLE ID	TP3-2-060619	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	06/13/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	50	1	MG/KG	06/13/2019	EBS
Mercury	EPA-7471	**0.026**	0.020	1	MG/KG	06/17/2019	RAL
Arsenic	EPA-6020	**2.5**	0.20	1	MG/KG	06/13/2019	RAL
Cadmium	EPA-6020	U	0.10	1	MG/KG	06/13/2019	RAL
Chromium	EPA-6020	**29**	0.10	1	MG/KG	06/13/2019	RAL
Lead	EPA-6020	**4.2**	0.10	1	MG/KG	06/13/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**103**	06/13/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/18/2019 EV19060038 EV19060038-09
CLIENT CONTACT:	Cody Johnson	DATE RECEIVED:	06/07/2019
CLIENT PROJECT:	River's Edge	COLLECTION DATE:	6/6/2019 10:25:00 AM
CLIENT SAMPLE ID	TP4-1-060619	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	06/08/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	50	1	MG/KG	06/08/2019	EBS
Arsenic	EPA-6020	**1.8**	0.20	1	MG/KG	06/07/2019	RAL
Cadmium	EPA-6020	**0.10**	0.10	1	MG/KG	06/07/2019	RAL
Lead	EPA-6020	**2.7**	0.10	1	MG/KG	06/07/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**98.8**	06/08/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/18/2019 EV19060038 EV19060038-10
CLIENT CONTACT:	Cody Johnson	DATE RECEIVED:	06/07/2019
CLIENT PROJECT:	River's Edge	COLLECTION DATE:	6/6/2019 10:35:00 AM
CLIENT SAMPLE ID	TP4-2-060619	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	06/13/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	50	1	MG/KG	06/13/2019	EBS
Mercury	EPA-7471	U	0.020	1	MG/KG	06/17/2019	RAL
Arsenic	EPA-6020	**1.9**	0.20	1	MG/KG	06/13/2019	RAL
Cadmium	EPA-6020	**0.15**	0.10	1	MG/KG	06/13/2019	RAL
Chromium	EPA-6020	**24**	0.10	1	MG/KG	06/13/2019	RAL
Lead	EPA-6020	**7.3**	0.10	1	MG/KG	06/13/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**113**	06/13/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/18/2019 EV19060038 EV19060038-11
CLIENT CONTACT:	Cody Johnson	DATE RECEIVED:	06/07/2019
CLIENT PROJECT:	River's Edge	COLLECTION DATE:	6/6/2019 10:55:00 AM
CLIENT SAMPLE ID	SP1-1-060619	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	**200**	25	1	MG/KG	06/08/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**360**	50	1	MG/KG	06/08/2019	EBS
Arsenic	EPA-6020	**7.1**	0.20	1	MG/KG	06/07/2019	RAL
Cadmium	EPA-6020	**1.8**	0.10	1	MG/KG	06/07/2019	RAL
Lead	EPA-6020	**320**	0.10	1	MG/KG	06/07/2019	RAL
Lead (TCLP)	EPA-6020/1311	**0.56**	0.031	6.25	MG/L	06/14/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**111**	06/08/2019	EBS

Chromatogram indicates that it is likely that sample contains light oil/lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/18/2019 EV19060038 EV19060038-12
CLIENT CONTACT:	Cody Johnson	DATE RECEIVED:	06/07/2019
CLIENT PROJECT:	River's Edge	COLLECTION DATE:	6/6/2019 11:05:00 AM
CLIENT SAMPLE ID	SP1-2-060619	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	06/08/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**95**	50	1	MG/KG	06/08/2019	EBS
Arsenic	EPA-6020	**3.9**	0.20	1	MG/KG	06/07/2019	RAL
Cadmium	EPA-6020	**0.13**	0.10	1	MG/KG	06/07/2019	RAL
Lead	EPA-6020	**11**	0.10	1	MG/KG	06/07/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**101**	06/08/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/18/2019 EV19060038 EV19060038-13
CLIENT CONTACT:	Cody Johnson	DATE RECEIVED:	06/07/2019
CLIENT PROJECT:	River's Edge	COLLECTION DATE:	6/6/2019 11:15:00 AM
CLIENT SAMPLE ID	SP1-3-060619	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	**100**	25	1	MG/KG	06/08/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**160**	50	1	MG/KG	06/08/2019	EBS
Arsenic	EPA-6020	**3.7**	0.20	1	MG/KG	06/07/2019	RAL
Cadmium	EPA-6020	**0.37**	0.10	1	MG/KG	06/07/2019	RAL
Lead	EPA-6020	**40**	0.10	1	MG/KG	06/07/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**97.0**	06/08/2019	EBS

Chromatogram indicates that it is likely that sample contains an unidentified diesel range product and lube oil.
Diesel range product results biased high due to oil range product overlap.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/18/2019 EV19060038 EV19060038-14
CLIENT CONTACT:	Cody Johnson	DATE RECEIVED:	06/07/2019
CLIENT PROJECT:	River's Edge	COLLECTION DATE:	6/6/2019 11:30:00 AM
CLIENT SAMPLE ID	SP1-4-060619	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	06/08/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**110**	50	1	MG/KG	06/08/2019	EBS
Arsenic	EPA-6020	**4.3**	0.20	1	MG/KG	06/07/2019	RAL
Cadmium	EPA-6020	**0.32**	0.10	1	MG/KG	06/07/2019	RAL
Lead	EPA-6020	**28**	0.10	1	MG/KG	06/07/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**96.7**	06/08/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/18/2019 EV19060038 EV19060038-15
CLIENT CONTACT:	Cody Johnson	DATE RECEIVED:	06/07/2019
CLIENT PROJECT:	River's Edge	COLLECTION DATE:	6/6/2019 11:45:00 AM
CLIENT SAMPLE ID	SP1-5-060619	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	**58**	25	1	MG/KG	06/08/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**230**	50	1	MG/KG	06/08/2019	EBS
Arsenic	EPA-6020	**5.1**	0.20	1	MG/KG	06/07/2019	RAL
Cadmium	EPA-6020	**1.4**	0.10	1	MG/KG	06/07/2019	RAL
Lead	EPA-6020	**140**	0.10	1	MG/KG	06/07/2019	RAL
Lead (TCLP)	EPA-6020/1311	**0.20**	0.031	6.25	MG/L	06/14/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**96.4**	06/08/2019	EBS

Chromatogram indicates that it is likely that sample contains light oil/lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020
CLIENT CONTACT: Cody Johnson
CLIENT PROJECT: River's Edge

DATE: 6/18/2019
ALS SDG#: EV19060038
WDOE ACCREDITATION: C601

LABORATORY BLANK RESULTS

MB-060719S - Batch 141812 - Soil by NWTPH-DX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	MG/KG	25	06/07/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	MG/KG	50	06/07/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

MB-060719S2 - Batch 141813 - Soil by NWTPH-DX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	MG/KG	25	06/08/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	MG/KG	50	06/08/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

MB-061219S - Batch 141993 - Soil by NWTPH-DX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	MG/KG	25	06/13/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	MG/KG	50	06/13/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

MBLK-R340734 - Batch R340734 - Soil by EPA-7471

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Mercury	EPA-7471	U	MG/KG	0.020	06/17/2019	RAL

U - Analyte analyzed for but not detected at level above reporting limit.

MB-060719S - Batch 141759 - Soil by EPA-6020

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Arsenic	EPA-6020	U	MG/KG	0.20	06/07/2019	RAL
Cadmium	EPA-6020	U	MG/KG	0.10	06/07/2019	RAL
Lead	EPA-6020	U	MG/KG	0.10	06/07/2019	RAL

U - Analyte analyzed for but not detected at level above reporting limit.

MB-061219S - Batch 141991 - Soil by EPA-6020

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Arsenic	EPA-6020	U	MG/KG	0.20	06/13/2019	RAL
Cadmium	EPA-6020	U	MG/KG	0.10	06/13/2019	RAL
Chromium	EPA-6020	U	MG/KG	0.10	06/13/2019	RAL

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	6/18/2019
		ALS SDG#:	EV19060038
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Cody Johnson		
CLIENT PROJECT:	River's Edge		

LABORATORY BLANK RESULTS

MB-061219S - Batch 141991 - Soil by EPA-6020

Lead	EPA-6020	U	MG/KG	0.10	06/13/2019	RAL

U - Analyte analyzed for but not detected at level above reporting limit.

MBLK-R340743 - Batch R340743 - TCLP Extract by EPA-6020

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Lead	EPA-6020	U	MG/L	0.0050	06/14/2019	RAL

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020
CLIENT CONTACT: Cody Johnson
CLIENT PROJECT: River's Edge

DATE: 6/18/2019
ALS SDG#: EV19060038
WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 141812 - Soil by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24) - BS	NWTPH-DX	**105**			75.5	122.1	06/08/2019	EBS
TPH-Diesel Range (C12-C24) - BSD	NWTPH-DX	**98.2**	**7**		75.5	122.1	06/08/2019	EBS

ALS Test Batch ID: 141813 - Soil by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24) - BS	NWTPH-DX	**106**			75.5	122.1	06/08/2019	EBS
TPH-Diesel Range (C12-C24) - BSD	NWTPH-DX	**98.7**	**7**		75.5	122.1	06/08/2019	EBS

ALS Test Batch ID: 141993 - Soil by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24) - BS	NWTPH-DX	**93.3**			75.5	122.1	06/13/2019	EBS
TPH-Diesel Range (C12-C24) - BSD	NWTPH-DX	**101**	**8**		75.5	122.1	06/13/2019	EBS

ALS Test Batch ID: R340734 - Soil by EPA-7471

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Mercury - BS	EPA-7471	**106**			81.8	117	06/17/2019	RAL
Mercury - BSD	EPA-7471	**107**	**2**		81.8	117	06/17/2019	RAL

ALS Test Batch ID: 141759 - Soil by EPA-6020

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Arsenic - BS	EPA-6020	**100**			80	120	06/07/2019	RAL
Arsenic - BSD	EPA-6020	**101**	**1**		80	120	06/07/2019	RAL
Cadmium - BS	EPA-6020	**105**			80	120	06/07/2019	RAL
Cadmium - BSD	EPA-6020	**106**	**1**		80	120	06/07/2019	RAL
Lead - BS	EPA-6020	**101**			80	120	06/07/2019	RAL
Lead - BSD	EPA-6020	**99.1**	**2**		80	120	06/07/2019	RAL

ALS Test Batch ID: 141991 - Soil by EPA-6020

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Arsenic - BS	EPA-6020	**98.4**			80	120	06/13/2019	RAL
Arsenic - BSD	EPA-6020	**98.4**	**0**		80	120	06/13/2019	RAL
Cadmium - BS	EPA-6020	**103**			80	120	06/13/2019	RAL
Cadmium - BSD	EPA-6020	**104**	**1**		80	120	06/13/2019	RAL
Chromium - BS	EPA-6020	**98.2**			80	120	06/13/2019	RAL

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020
CLIENT CONTACT: Cody Johnson
CLIENT PROJECT: River's Edge

DATE: 6/18/2019
ALS SDG#: EV19060038
WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Chromium - BSD	EPA-6020	**98.1**	**0**		80	120	06/13/2019	RAL
Lead - BS	EPA-6020	**99.2**			80	120	06/13/2019	RAL
Lead - BSD	EPA-6020	**96.3**	**3**		80	120	06/13/2019	RAL

ALS Test Batch ID: R340743 - TCLP Extract by EPA-6020

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Lead - BS	EPA-6020	**96.0**			87.5	107	06/14/2019	RAL
Lead - BSD	EPA-6020	**96.0**	**0**		87.5	107	06/14/2019	RAL

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental
8620 Holly Drive, Suite 100
Everett, WA 98208
Phone (425) 356-2600
Fax (425) 356-2626
http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only): EV1906038

Date 6/6/19 Page 1 Of 2

PROJECT ID: 175900.020.026 River's Edge
REPORT TO COMPANY: Landau Associates
PROJECT MANAGER: Cody Johnson / Dylan Frazer
ADDRESS:
PHONE: P.O. #: 175900.020.026
E-MAIL: CJohnson@landauinc.com + Dylan Frazer
INVOICE TO COMPANY:
ATTENTION:
ADDRESS:

ANALYSIS REQUESTED

OTHER (Specify)

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA 8021 ☐ BTEX by EPA 8260 ☐	MTBE by EPA 8021 ☐ MTBE by EPA 8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM	PCB by EPA 8082 ☐ Pesticides by EPA 8081 ☐	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify) Lead, Cadmium	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	Lead, Arsenic, Cadmium	TCLP Lead		NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. TP1-1-060619	6/6/19	917	Soil	1		X													X		~~48 hr~~	1	
2. TP1-2-060619	6/6/19	945	Soil	2		⊗												⊗					1	
3. TP5-1-060619	6/6/19	931	Soil	3		X													X	⊗	~~48 hr~~	1	
4. TP5-2-060619	6/6/19	940	Soil	4		⊗												⊗					1	
5. TP2-1-060619	6/6/19	955	Soil	5		X													X	⊗	~~48 hr~~	1	
6. TP2-2-060619	6/6/19	959	Soil	6		⊗												⊗					1	
7. TP3-1-060619	6/6/19	1010	Soil	7		X													X	⊗	~~48 hr~~	1	
8. TP3-2-060619	6/6/19	1017	Soil	8		⊗												⊗					1	
9. TP4-1-060619	6/6/19	1025	Soil	9		X													X		~~48 hr~~	1	
10. TP4-2-060619	6/6/19	1035	Soil	10		⊗												⊗					1	

SPECIAL INSTRUCTIONS: ⊗ Added 6/12/19 per Cody on 3 day TAT – 6/13/19 Cody changed Total metals to MTCA-5

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: 6/7/19 945
   Received By:
2. Relinquished By:
   Received By: Shawn Roberson ALS 6/7/19 11:45 am

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: 10 (Standard) | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis: 5 (Standard) | 3 | 1 | SAME DAY

OTHER: Specify: See above

*Turnaround request less than standard may incur Rush Charges

ALS Environmental
8620 Holly Drive, Suite 100
Everett, WA 98208
Phone (425) 356-2600
Fax (425) 356-2626
http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only): EV1906038

Date 6/6/19 Page 2 Of 2

PROJECT ID: 175900.020.026 Rivers Edge
REPORT TO COMPANY: LAI
PROJECT MANAGER: Cody Johnson
ADDRESS:
PHONE: P.O. #: 175900.020.026
E-MAIL: Cjohnson@landauinc.com
INVOICE TO COMPANY:
ATTENTION:
ADDRESS:

ANALYSIS REQUESTED

OTHER (Specify)

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA 8021 ☐ BTEX by EPA 8260 ☐	MTBE by EPA 8021 ☐ MTBE by EPA 8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM	PCB by EPA 8082 ☐ Pesticides by EPA 8081 ☐	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify) Ar, Cd, Pb	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	TCLP Lead	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. SP1-1-060619	6/6/19	1055	Soil	11		X												X		(X)	1	
2. SP1-2-060619	6/6/19	1105	Soil	12																	1	
3. SP1-3-060619	6/6/19	1115	Soil	13																24-hr TAT		
4. SP1-4-060619	6/6/19	1130	Soil	14																		
5. SP1-5-060619	6/6/19	1145	Soil	15																(X)		
6.																						
7.																						
8.																						
9.																						
10.																						

SPECIAL INSTRUCTIONS (X) Added 6/12/19 per Cody on 3 day TAT

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: 6/7/19 945
Received By:
2. Relinquished By:
Received By: Shawn Rabren ALS 6/7/19 11:45am

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: 10 Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis: 5 Standard | 3 | 1 | SAME DAY

OTHER: Specify: See above

*Turnaround request less than standard may incur Rush Charges

ALS ENVIRONMENTAL

Sample Receiving Checklist

Client: Landau Associates ALS Job #: EV19060038

Project: River's Edge

Received Date: 6/7/19 Received Time: 11:45 am By: SR

Type of shipping container: Cooler X Box ____ Other ____

Shipped via: FedEx Ground ____ UPS ____ Mail ____ Courier ALS Hand Delivered ____
FedEx Express ____

	Yes	No	N/A
Were custody seals on outside of shipping container?	____	X	____
If yes, how many? ____ Where? ____			
Custody seal date: ____ Seal name: ____			
Was Chain of Custody properly filled out (ink, signed, dated, etc.)?	X	____	____
Did all bottles have labels?	X	____	____
Did all bottle labels and tags agree with Chain of Custody?	X	____	____
Were samples received within hold time?	X	____	____
Did all bottles arrive in good condition (unbroken, etc.)?	X	____	____
Was sufficient amount of sample sent for the tests indicated?	X	____	____
Was correct preservation added to samples?	____	____	X

If no, Sample Control added preservative to the following:

Sample Number	Reagent	Analyte

Were VOA vials checked for absence of air bubbles?	____	____	X
Bubbles present in sample #: ____			

Temperature of cooler upon receipt: 7.8° on ice (Cold) Cool Ambient N/A

Explain any discrepancies: ____

Was client contacted? ____ Who was called? ____ By whom? ____ Date: ____

Outcome of call: ____

June 25, 2019

Mr. Dylan Frazer
Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

Dear Mr. Frazer,

On June 24th, 15 samples were received by our laboratory and assigned our laboratory project number EV19060172. The project was identified as your River's Edge - 1759001.020.026. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/25/2019 EV19060172 EV19060172-01
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/24/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/24/2019 10:30:00 AM
CLIENT SAMPLE ID	AOC1-SW1 (0-4)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	06/24/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**180**	50	1	MG/KG	06/24/2019	EBS
Arsenic	EPA-6020	**5.4**	0.20	1	MG/KG	06/25/2019	RAL
Cadmium	EPA-6020	**0.59**	0.10	1	MG/KG	06/25/2019	RAL
Chromium	EPA-6020	**29**	0.10	1	MG/KG	06/25/2019	RAL
Lead	EPA-6020	**65**	0.10	1	MG/KG	06/25/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**103**	06/24/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/25/2019 EV19060172 EV19060172-02
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/24/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/24/2019 10:42:00 AM
CLIENT SAMPLE ID	AOC1-SW9 (0-4)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	06/24/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	50	1	MG/KG	06/24/2019	EBS
Arsenic	EPA-6020	**3.7**	0.20	1	MG/KG	06/25/2019	RAL
Cadmium	EPA-6020	**1.4**	0.10	1	MG/KG	06/25/2019	RAL
Chromium	EPA-6020	**40**	0.10	1	MG/KG	06/25/2019	RAL
Lead	EPA-6020	**3.7**	0.10	1	MG/KG	06/25/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**84.9**	06/24/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/25/2019 EV19060172 EV19060172-03
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/24/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/24/2019 11:46:00 AM
CLIENT SAMPLE ID	AOC1-SW10 (4-6)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	06/24/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	50	1	MG/KG	06/24/2019	EBS
Arsenic	EPA-6020	**3.7**	0.20	1	MG/KG	06/25/2019	RAL
Cadmium	EPA-6020	U	0.10	1	MG/KG	06/25/2019	RAL
Chromium	EPA-6020	**29**	0.10	1	MG/KG	06/25/2019	RAL
Lead	EPA-6020	**3.4**	0.10	1	MG/KG	06/25/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**85.7**	06/24/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/25/2019 EV19060172 EV19060172-04
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/24/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/24/2019 11:40:00 AM
CLIENT SAMPLE ID	AOC1-B (6)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	06/24/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**210**	50	1	MG/KG	06/24/2019	EBS
Arsenic	EPA-6020	**5.5**	0.20	1	MG/KG	06/25/2019	RAL
Cadmium	EPA-6020	**1.8**	0.10	1	MG/KG	06/25/2019	RAL
Chromium	EPA-6020	**39**	0.10	1	MG/KG	06/25/2019	RAL
Lead	EPA-6020	**160**	0.10	1	MG/KG	06/25/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**93.7**	06/24/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/25/2019 EV19060172 EV19060172-05
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/24/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/24/2019 11:34:00 AM
CLIENT SAMPLE ID	AOC1-B (8)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	06/24/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**190**	50	1	MG/KG	06/24/2019	EBS
Arsenic	EPA-6020	**10**	0.20	1	MG/KG	06/25/2019	RAL
Cadmium	EPA-6020	**0.94**	0.10	1	MG/KG	06/25/2019	RAL
Chromium	EPA-6020	**33**	0.10	1	MG/KG	06/25/2019	RAL
Lead	EPA-6020	**470**	0.10	1	MG/KG	06/25/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**102**	06/24/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/25/2019 EV19060172 EV19060172-06
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/24/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/24/2019 12:23:00 PM
CLIENT SAMPLE ID	AOC1-SW8 (0-6)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	**130**	25	1	MG/KG	06/24/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**600**	50	1	MG/KG	06/24/2019	EBS
Arsenic	EPA-6020	**9.4**	0.20	1	MG/KG	06/25/2019	RAL
Cadmium	EPA-6020	**3.6**	0.10	1	MG/KG	06/25/2019	RAL
Chromium	EPA-6020	**53**	0.10	1	MG/KG	06/25/2019	RAL
Lead	EPA-6020	**330**	0.10	1	MG/KG	06/25/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**87.2**	06/24/2019	EBS

Chromatogram indicates that it is likely that sample contains light oil/lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/25/2019 EV19060172 EV19060172-07
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/24/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/24/2019 12:35:00 PM
CLIENT SAMPLE ID	AOC1-B (9)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	06/24/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**220**	50	1	MG/KG	06/24/2019	EBS
Arsenic	EPA-6020	**5.1**	0.20	1	MG/KG	06/25/2019	RAL
Cadmium	EPA-6020	**1.0**	0.10	1	MG/KG	06/25/2019	RAL
Chromium	EPA-6020	**38**	0.10	1	MG/KG	06/25/2019	RAL
Lead	EPA-6020	**280**	0.10	1	MG/KG	06/25/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**107**	06/24/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/25/2019 EV19060172 EV19060172-08
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/24/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/24/2019 12:40:00 PM
CLIENT SAMPLE ID	AOC1-SW5 (0-9)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	06/24/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	50	1	MG/KG	06/24/2019	EBS
Arsenic	EPA-6020	**2.4**	0.20	1	MG/KG	06/25/2019	RAL
Cadmium	EPA-6020	**0.14**	0.10	1	MG/KG	06/25/2019	RAL
Chromium	EPA-6020	**35**	0.10	1	MG/KG	06/25/2019	RAL
Lead	EPA-6020	**10**	0.10	1	MG/KG	06/25/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**90.3**	06/24/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/25/2019 EV19060172 EV19060172-09
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/24/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/24/2019 12:45:00 PM
CLIENT SAMPLE ID	AOC1-SW4 (0-9)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	50	2	MG/KG	06/25/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**600**	100	2	MG/KG	06/25/2019	EBS
Arsenic	EPA-6020	**3.5**	0.20	1	MG/KG	06/25/2019	RAL
Cadmium	EPA-6020	**0.58**	0.10	1	MG/KG	06/25/2019	RAL
Chromium	EPA-6020	**34**	0.10	1	MG/KG	06/25/2019	RAL
Lead	EPA-6020	**79**	0.10	1	MG/KG	06/25/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25 2X Dilution	NWTPH-DX	**91.1**	06/25/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/25/2019 EV19060172 EV19060172-10
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/24/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/24/2019 1:07:00 PM
CLIENT SAMPLE ID	AOC1-SW6 (0-6)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	06/24/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	50	1	MG/KG	06/24/2019	EBS
Arsenic	EPA-6020	**4.0**	0.20	1	MG/KG	06/25/2019	RAL
Cadmium	EPA-6020	**0.11**	0.10	1	MG/KG	06/25/2019	RAL
Chromium	EPA-6020	**34**	0.10	1	MG/KG	06/25/2019	RAL
Lead	EPA-6020	**6.4**	0.10	1	MG/KG	06/25/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**91.0**	06/24/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/25/2019 EV19060172 EV19060172-11
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/24/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/24/2019 1:19:00 PM
CLIENT SAMPLE ID	AOC1-SW3 (0-6)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	**71**	25	1	MG/KG	06/24/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**270**	50	1	MG/KG	06/24/2019	EBS
Arsenic	EPA-6020	**4.0**	0.20	1	MG/KG	06/25/2019	RAL
Cadmium	EPA-6020	**0.87**	0.10	1	MG/KG	06/25/2019	RAL
Chromium	EPA-6020	**36**	0.10	1	MG/KG	06/25/2019	RAL
Lead	EPA-6020	**140**	0.10	1	MG/KG	06/25/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**101**	06/24/2019	EBS

Chromatogram indicates that it is likely that sample contains light oil/lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/25/2019 EV19060172 EV19060172-12
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/24/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/24/2019 1:24:00 PM
CLIENT SAMPLE ID	AOC1-SW11 (6-9)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	06/24/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**400**	50	1	MG/KG	06/24/2019	EBS
Arsenic	EPA-6020	**10**	0.20	1	MG/KG	06/25/2019	RAL
Cadmium	EPA-6020	**3.8**	0.10	1	MG/KG	06/25/2019	RAL
Chromium	EPA-6020	**42**	0.10	1	MG/KG	06/25/2019	RAL
Lead	EPA-6020	**1400**	1.0	10	MG/KG	06/25/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**122**	06/24/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/25/2019 EV19060172 EV19060172-13
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/24/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/24/2019 1:33:00 PM
CLIENT SAMPLE ID	AOC1-SW7 (0-6)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	50	2	MG/KG	06/25/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**620**	100	2	MG/KG	06/25/2019	EBS
Arsenic	EPA-6020	**9.8**	0.20	1	MG/KG	06/25/2019	RAL
Cadmium	EPA-6020	**2.7**	0.10	1	MG/KG	06/25/2019	RAL
Chromium	EPA-6020	**46**	0.10	1	MG/KG	06/25/2019	RAL
Lead	EPA-6020	**370**	0.10	1	MG/KG	06/25/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25 2X Dilution	NWTPH-DX	**92.5**	06/25/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/25/2019 EV19060172 EV19060172-14
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/24/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/24/2019 1:40:00 PM
CLIENT SAMPLE ID	AOC1-SW2 (0-4)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	**79**	25	1	MG/KG	06/24/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**220**	50	1	MG/KG	06/24/2019	EBS
Arsenic	EPA-6020	**5.3**	0.20	1	MG/KG	06/25/2019	RAL
Cadmium	EPA-6020	**1.0**	0.10	1	MG/KG	06/25/2019	RAL
Chromium	EPA-6020	**33**	0.10	1	MG/KG	06/25/2019	RAL
Lead	EPA-6020	**98**	0.10	1	MG/KG	06/25/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**101**	06/24/2019	EBS

Chromatogram indicates that it is likely that sample contains light oil/lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/25/2019 EV19060172 EV19060172-15
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/24/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/24/2019 1:57:00 PM
CLIENT SAMPLE ID	AOC3-SW (7-8)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Naphthalene	EPA-8270 SIM	U	20	1	UG/KG	06/25/2019	JMK
2-Methylnaphthalene	EPA-8270 SIM	U	20	1	UG/KG	06/25/2019	JMK
1-Methylnaphthalene	EPA-8270 SIM	U	20	1	UG/KG	06/25/2019	JMK
Acenaphthylene	EPA-8270 SIM	U	20	1	UG/KG	06/25/2019	JMK
Acenaphthene	EPA-8270 SIM	U	20	1	UG/KG	06/25/2019	JMK
Fluorene	EPA-8270 SIM	U	20	1	UG/KG	06/25/2019	JMK
Phenanthrene	EPA-8270 SIM	U	20	1	UG/KG	06/25/2019	JMK
Anthracene	EPA-8270 SIM	U	20	1	UG/KG	06/25/2019	JMK
Fluoranthene	EPA-8270 SIM	U	20	1	UG/KG	06/25/2019	JMK
Pyrene	EPA-8270 SIM	U	20	1	UG/KG	06/25/2019	JMK
Benzo[A]Anthracene	EPA-8270 SIM	U	20	1	UG/KG	06/25/2019	JMK
Chrysene	EPA-8270 SIM	U	20	1	UG/KG	06/25/2019	JMK
Benzo[B]Fluoranthene	EPA-8270 SIM	U	20	1	UG/KG	06/25/2019	JMK
Benzo[K]Fluoranthene	EPA-8270 SIM	U	20	1	UG/KG	06/25/2019	JMK
Benzo[A]Pyrene	EPA-8270 SIM	U	20	1	UG/KG	06/25/2019	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	U	20	1	UG/KG	06/25/2019	JMK
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	20	1	UG/KG	06/25/2019	JMK
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	20	1	UG/KG	06/25/2019	JMK

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14	EPA-8270 SIM	**146**	06/25/2019	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020
CLIENT CONTACT: Dylan Frazer
CLIENT PROJECT: River's Edge - 1759001.020.026

DATE: 6/25/2019
ALS SDG#: EV19060172
WDOE ACCREDITATION: C601

LABORATORY BLANK RESULTS

MB-062419S - Batch 142420 - Soil by NWTPH-DX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	MG/KG	25	06/24/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	MG/KG	50	06/24/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

MB-062519S - Batch 142398 - Soil by EPA-8270 SIM

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Naphthalene	EPA-8270 SIM	U	UG/KG	20	06/25/2019	JMK
2-Methylnaphthalene	EPA-8270 SIM	U	UG/KG	20	06/25/2019	JMK
1-Methylnaphthalene	EPA-8270 SIM	U	UG/KG	20	06/25/2019	JMK
Acenaphthylene	EPA-8270 SIM	U	UG/KG	20	06/25/2019	JMK
Acenaphthene	EPA-8270 SIM	U	UG/KG	20	06/25/2019	JMK
Fluorene	EPA-8270 SIM	U	UG/KG	20	06/25/2019	JMK
Phenanthrene	EPA-8270 SIM	U	UG/KG	20	06/25/2019	JMK
Anthracene	EPA-8270 SIM	U	UG/KG	20	06/25/2019	JMK
Fluoranthene	EPA-8270 SIM	U	UG/KG	20	06/25/2019	JMK
Pyrene	EPA-8270 SIM	U	UG/KG	20	06/25/2019	JMK
Benzo[A]Anthracene	EPA-8270 SIM	U	UG/KG	20	06/25/2019	JMK
Chrysene	EPA-8270 SIM	U	UG/KG	20	06/25/2019	JMK
Benzo[B]Fluoranthene	EPA-8270 SIM	U	UG/KG	20	06/25/2019	JMK
Benzo[K]Fluoranthene	EPA-8270 SIM	U	UG/KG	20	06/25/2019	JMK
Benzo[A]Pyrene	EPA-8270 SIM	U	UG/KG	20	06/25/2019	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	U	UG/KG	20	06/25/2019	JMK
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	UG/KG	20	06/25/2019	JMK
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	UG/KG	20	06/25/2019	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

MB-062419S - Batch 142405 - Soil by EPA-6020

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Arsenic	EPA-6020	U	MG/KG	0.20	06/25/2019	RAL
Cadmium	EPA-6020	U	MG/KG	0.10	06/25/2019	RAL
Chromium	EPA-6020	U	MG/KG	0.10	06/25/2019	RAL
Lead	EPA-6020	U	MG/KG	0.10	06/25/2019	RAL

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020
CLIENT CONTACT: Dylan Frazer
CLIENT PROJECT: River's Edge - 1759001.020.026

DATE: 6/25/2019
ALS SDG#: EV19060172
WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 142420 - Soil by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24) - BS	NWTPH-DX	**98.8**			75.5	122.1	06/24/2019	EBS
TPH-Diesel Range (C12-C24) - BSD	NWTPH-DX	**98.5**	**0**		75.5	122.1	06/24/2019	EBS

ALS Test Batch ID: 142398 - Soil by EPA-8270 SIM

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Naphthalene - BS	EPA-8270 SIM	**89.0**			20	150	06/25/2019	JMK
Naphthalene - BSD	EPA-8270 SIM	**82.1**	**8**		20	150	06/25/2019	JMK
2-Methylnaphthalene - BS	EPA-8270 SIM	**89.5**			20	150	06/25/2019	JMK
2-Methylnaphthalene - BSD	EPA-8270 SIM	**81.5**	**9**		20	150	06/25/2019	JMK
1-Methylnaphthalene - BS	EPA-8270 SIM	**96.0**			20	150	06/25/2019	JMK
1-Methylnaphthalene - BSD	EPA-8270 SIM	**87.1**	**10**		20	150	06/25/2019	JMK
Acenaphthylene - BS	EPA-8270 SIM	**100**			20	150	06/25/2019	JMK
Acenaphthylene - BSD	EPA-8270 SIM	**91.5**	**9**		20	150	06/25/2019	JMK
Acenaphthene - BS	EPA-8270 SIM	**90.8**			41	107	06/25/2019	JMK
Acenaphthene - BSD	EPA-8270 SIM	**83.0**	**9**		41	107	06/25/2019	JMK
Fluorene - BS	EPA-8270 SIM	**99.2**			20	150	06/25/2019	JMK
Fluorene - BSD	EPA-8270 SIM	**91.3**	**8**		20	150	06/25/2019	JMK
Phenanthrene - BS	EPA-8270 SIM	**96.9**			20	150	06/25/2019	JMK
Phenanthrene - BSD	EPA-8270 SIM	**88.4**	**9**		20	150	06/25/2019	JMK
Anthracene - BS	EPA-8270 SIM	**87.7**			20	150	06/25/2019	JMK
Anthracene - BSD	EPA-8270 SIM	**80.1**	**9**		20	150	06/25/2019	JMK
Fluoranthene - BS	EPA-8270 SIM	**97.2**			20	150	06/25/2019	JMK
Fluoranthene - BSD	EPA-8270 SIM	**88.1**	**10**		20	150	06/25/2019	JMK
Pyrene - BS	EPA-8270 SIM	**89.5**			18	136	06/25/2019	JMK
Pyrene - BSD	EPA-8270 SIM	**80.6**	**10**		18	136	06/25/2019	JMK
Benzo[A]Anthracene - BS	EPA-8270 SIM	**87.7**			20	150	06/25/2019	JMK
Benzo[A]Anthracene - BSD	EPA-8270 SIM	**78.9**	**11**		20	150	06/25/2019	JMK
Chrysene - BS	EPA-8270 SIM	**94.4**			20	150	06/25/2019	JMK
Chrysene - BSD	EPA-8270 SIM	**85.0**	**11**		20	150	06/25/2019	JMK
Benzo[B]Fluoranthene - BS	EPA-8270 SIM	**90.2**			20	150	06/25/2019	JMK
Benzo[B]Fluoranthene - BSD	EPA-8270 SIM	**80.8**	**11**		20	150	06/25/2019	JMK
Benzo[K]Fluoranthene - BS	EPA-8270 SIM	**86.5**			20	150	06/25/2019	JMK
Benzo[K]Fluoranthene - BSD	EPA-8270 SIM	**78.8**	**9**		20	150	06/25/2019	JMK
Benzo[A]Pyrene - BS	EPA-8270 SIM	**79.3**			20	150	06/25/2019	JMK
Benzo[A]Pyrene - BSD	EPA-8270 SIM	**71.8**	**10**		20	150	06/25/2019	JMK
Indeno[1,2,3-Cd]Pyrene - BS	EPA-8270 SIM	**76.2**			20	150	06/25/2019	JMK
Indeno[1,2,3-Cd]Pyrene - BSD	EPA-8270 SIM	**70.6**	**8**		20	150	06/25/2019	JMK
Dibenz[A,H]Anthracene - BS	EPA-8270 SIM	**68.1**			20	150	06/25/2019	JMK

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS SDG#: WDOE ACCREDITATION:	6/25/2019 EV19060172 C601
CLIENT CONTACT:	Dylan Frazer		
CLIENT PROJECT:	River's Edge - 1759001.020.026		

LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Dibenz[A,H]Anthracene - BSD	EPA-8270 SIM	**63.9**	**6**		20	150	06/25/2019	JMK
Benzo[G,H,I]Perylene - BS	EPA-8270 SIM	**67.0**			20	150	06/25/2019	JMK
Benzo[G,H,I]Perylene - BSD	EPA-8270 SIM	**59.9**	**11**		20	150	06/25/2019	JMK

ALS Test Batch ID: 142405 - Soil by EPA-6020

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Arsenic - BS	EPA-6020	**104**			80	120	06/25/2019	RAL
Arsenic - BSD	EPA-6020	**105**	**1**		80	120	06/25/2019	RAL
Cadmium - BS	EPA-6020	**106**			80	120	06/25/2019	RAL
Cadmium - BSD	EPA-6020	**109**	**2**		80	120	06/25/2019	RAL
Chromium - BS	EPA-6020	**103**			80	120	06/25/2019	RAL
Chromium - BSD	EPA-6020	**104**	**1**		80	120	06/25/2019	RAL
Lead - BS	EPA-6020	**100**			80	120	06/25/2019	RAL
Lead - BSD	EPA-6020	**104**	**4**		80	120	06/25/2019	RAL

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

EV19060172

LANDAU ASSOCIATES Chain-of-Custody Record

☒ Seattle/Edmonds (425) 778-0907 ☐ Spokane (509) 327-9737
☐ Tacoma (253) 926-2493 ☐ Portland (503) 542-1080
☐ _____

Date 6/24/19
Page 1 of 1

Turnaround Time:
Standard
(Accelerated) 24 hr.

Project Name River's Edge Project No. 175901.020.026
Project Location/Event 426 Fremont St, Monroe WA
Sampler's Name B. McManus
Project Contact D. Frazer
Send Results To D. Frazer, K. Schultz, D. Jorgensen, B. McManus

Special Handling Requirements: _____
Shipment Method: _____
Stored on ice: (Yes) / No

	Sample I.D.	Date	Time	Matrix	No. of Containers	NWTPH-Dx	6020 *	8270-SIM PAH	Observations/Comments
1	AOC 1 - SW 1 (0-4)	6/24/19	1030	Soil	1	X	X		
2	AOC 1 - SW 9 (0-4)	6/24/19	1042	Soil	1	X	X		
3	AOC 1 - SW 10 (4-6)	6/24/19	1146	Soil	1	X	X		
4	AOC 1 - B (6)	6/24/19	1140	Soil	1	X	X		
5	AOC 1 - B (8)	6/24/19	1134	Soil	1	X	X		
6	AOC 1 - SW 8 (0-6)	6/24/19	1223	Soil	1	X	X		
7	AOC 1 - B (9)	6/24/19	1235	Soil	1	X	X		
8	AOC 1 - SW 5 (0-9)	6/24/19	1240	Soil	1	X	X		
9	AOC 1 - SW 4 (0-9)	6/24/19	1245	Soil	1	X	X		
10	AOC 1 - SW 6 (0-6)	6/24/19	1307	Soil	1	X	X		
11	AOC 1 - SW 3 (0-6)	6/24/19	1319	Soil	1	X	X		
12	AOC 1 - SW 11 (6-9)	6/24/19	1324	Soil	1	X	X		
13	AOC 1 - SW 7 (0-6)	6/24/19	1333	Soil	1	X	X		
14	AOC 1 - SW 2 (0-4)	6/24/19	1340	Soil	1	X	X		
15	AOC 3 - SW (7-8)	6/24/19	1357	Soil	1			X	

Testing Parameters

☐ Allow water samples to settle, collect aliquot from clear portion
☐ NWTPH-Dx - Acid wash cleanup
☐ - Silica gel cleanup
☐ Dissolved metal samples were field filtered

Other
* Metals [arsenic, chromium, cadmium, and lead]

• Priority samples

Relinquished by
Signature _____
Printed Name Bethany McManus
Company Landau Associates
Date 6/24/19 Time 7:55

Received by
Signature _____
Printed Name Rick Bago
Company AZS
Date 6-24-19 Time 2:55

Relinquished by
Signature _____
Printed Name _____
Company _____
Date _____ Time _____

Received by
Signature _____
Printed Name _____
Company _____
Date _____ Time _____

WHITE COPY - Laboratory YELLOW COPY - Project File PINK COPY - Client Representative

10/2018

ALS ENVIRONMENTAL

Sample Receiving Checklist

Client: Landau Associates ALS Job #: EV1906017d

Project: Rivers Edge

Received Date: 6/24/19 Received Time: 2:55 By: RB

Type of shipping container: Cooler X Box ____ Other ____

Shipped via: FedEx Ground ____ UPS ____ Mail ____ Courier ____ Hand Delivered X
FedEx Express ____

	Yes	No	N/A
Were custody seals on outside of shipping container?	____	X	____
If yes, how many? ____ Where? ____			
Custody seal date: ____ Seal name: ____			
Was Chain of Custody properly filled out (ink, signed, dated, etc.)?	X	____	____
Did all bottles have labels?	X	____	____
Did all bottle labels and tags agree with Chain of Custody?	X	____	____
Were samples received within hold time?	X	____	____
Did all bottles arrive in good condition (unbroken, etc.)?	X	____	____
Was sufficient amount of sample sent for the tests indicated?	X	____	____
Was correct preservation added to samples?	____	____	X

If no, Sample Control added preservative to the following:

Sample Number	Reagent	Analyte

Were VOA vials checked for absence of air bubbles?	____	____	X
Bubbles present in sample #: ____			

Temperature of cooler upon receipt: 12.5°C on ice Cold (Cool) Ambient N/A

Explain any discrepancies: ____

Was client contacted? ____ Who was called? ____ By whom? ____ Date: ____

Outcome of call: ____

June 27, 2019

Mr. Dylan Frazer
Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

Dear Mr. Frazer,

On June 26th, 9 samples were received by our laboratory and assigned our laboratory project number EV19060192. The project was identified as your River's Edge - 1759001.020.026. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/27/2019 EV19060192 EV19060192-01
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/26/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/26/2019 9:25:00 AM
CLIENT SAMPLE ID	AOC1-SW12 (0-12)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	120	5	MG/KG	06/26/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**1200**	250	5	MG/KG	06/26/2019	EBS
Arsenic	EPA-6020	**6.9**	0.20	1	MG/KG	06/26/2019	RAL
Cadmium	EPA-6020	**1.1**	0.10	1	MG/KG	06/26/2019	RAL
Chromium	EPA-6020	**36**	0.10	1	MG/KG	06/26/2019	RAL
Lead	EPA-6020	**150**	0.10	1	MG/KG	06/26/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25 5X Dilution	NWTPH-DX	**134 SUR12**	06/26/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
SUR12 -Surrogate recoveries were outside of the control limits due to matrix interference.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/27/2019 EV19060192 EV19060192-02
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/26/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/26/2019 9:15:00 AM
CLIENT SAMPLE ID	AOC1-SW12 (12-17)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	06/27/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**290**	50	1	MG/KG	06/27/2019	EBS
Arsenic	EPA-6020	**8.3**	0.20	1	MG/KG	06/26/2019	RAL
Cadmium	EPA-6020	**0.65**	0.10	1	MG/KG	06/26/2019	RAL
Chromium	EPA-6020	**32**	0.10	1	MG/KG	06/26/2019	RAL
Lead	EPA-6020	**110**	0.10	1	MG/KG	06/26/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**113**	06/27/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/27/2019 EV19060192 EV19060192-03
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/26/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/26/2019 9:10:00 AM
CLIENT SAMPLE ID	AOC1-B (17)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	06/27/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**320**	50	1	MG/KG	06/27/2019	EBS
Arsenic	EPA-6020	**9.4**	0.20	1	MG/KG	06/26/2019	RAL
Cadmium	EPA-6020	**0.73**	0.10	1	MG/KG	06/26/2019	RAL
Chromium	EPA-6020	**39**	0.10	1	MG/KG	06/26/2019	RAL
Lead	EPA-6020	**500**	0.10	1	MG/KG	06/26/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**105**	06/27/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/27/2019 EV19060192 EV19060192-04
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/26/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/26/2019 9:36:00 AM
CLIENT SAMPLE ID	AOC1-SW13 (0-17)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	06/27/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**410**	50	1	MG/KG	06/27/2019	EBS
Arsenic	EPA-6020	**6.5**	0.20	1	MG/KG	06/26/2019	RAL
Cadmium	EPA-6020	**0.16**	0.10	1	MG/KG	06/26/2019	RAL
Chromium	EPA-6020	**35**	0.10	1	MG/KG	06/26/2019	RAL
Lead	EPA-6020	**40**	0.10	1	MG/KG	06/26/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**92.1**	06/27/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/27/2019 EV19060192 EV19060192-05
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/26/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/26/2019 10:21:00 AM
CLIENT SAMPLE ID	AOC1-SW14 (0-6)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	**95**	50	2	MG/KG	06/26/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**420**	100	2	MG/KG	06/26/2019	EBS
Arsenic	EPA-6020	**8.3**	0.20	1	MG/KG	06/26/2019	RAL
Cadmium	EPA-6020	**1.2**	0.10	1	MG/KG	06/26/2019	RAL
Chromium	EPA-6020	**35**	0.10	1	MG/KG	06/26/2019	RAL
Lead	EPA-6020	**210**	0.10	1	MG/KG	06/26/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25 2X Dilution	NWTPH-DX	**105**	06/26/2019	EBS

Chromatogram indicates that it is likely that sample contains light oil.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/27/2019 EV19060192 EV19060192-06
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/26/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/26/2019 10:42:00 AM
CLIENT SAMPLE ID	AOC1-SW15 (0-6)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	06/27/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**310**	50	1	MG/KG	06/27/2019	EBS
Arsenic	EPA-6020	**5.6**	0.20	1	MG/KG	06/26/2019	RAL
Cadmium	EPA-6020	**2.0**	0.10	1	MG/KG	06/26/2019	RAL
Chromium	EPA-6020	**32**	0.10	1	MG/KG	06/26/2019	RAL
Lead	EPA-6020	**70**	0.10	1	MG/KG	06/26/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**109**	06/27/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/27/2019 EV19060192 EV19060192-07
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/26/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/26/2019 12:08:00 PM
CLIENT SAMPLE ID	AOC1-B (15)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	06/26/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**84**	50	1	MG/KG	06/26/2019	EBS
Arsenic	EPA-6020	**5.0**	0.20	1	MG/KG	06/26/2019	RAL
Cadmium	EPA-6020	**0.37**	0.10	1	MG/KG	06/26/2019	RAL
Chromium	EPA-6020	**32**	0.10	1	MG/KG	06/26/2019	RAL
Lead	EPA-6020	**40**	0.10	1	MG/KG	06/26/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**95.3**	06/26/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/27/2019 EV19060192 EV19060192-08
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/26/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/26/2019 12:16:00 PM
CLIENT SAMPLE ID	AOC1-SW16 (0-15)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	**71**	50	2	MG/KG	06/26/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**390**	100	2	MG/KG	06/26/2019	EBS
Arsenic	EPA-6020	**6.7**	0.20	1	MG/KG	06/26/2019	RAL
Cadmium	EPA-6020	**0.96**	0.10	1	MG/KG	06/26/2019	RAL
Chromium	EPA-6020	**31**	0.10	1	MG/KG	06/26/2019	RAL
Lead	EPA-6020	**280**	0.10	1	MG/KG	06/26/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25 2X Dilution	NWTPH-DX	**98.7**	06/26/2019	EBS

Chromatogram indicates that it is likely that sample contains light oil.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	6/27/2019 EV19060192 EV19060192-09
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/26/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/26/2019 12:00:00 PM
CLIENT SAMPLE ID	AOC1-B (14)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	06/27/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**280**	50	1	MG/KG	06/27/2019	EBS
Arsenic	EPA-6020	**11**	0.20	1	MG/KG	06/26/2019	RAL
Cadmium	EPA-6020	**3.9**	0.10	1	MG/KG	06/26/2019	RAL
Chromium	EPA-6020	**47**	0.10	1	MG/KG	06/26/2019	RAL
Lead	EPA-6020	**450**	0.10	1	MG/KG	06/26/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**105**	06/27/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	6/27/2019
		ALS SDG#:	EV19060192
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Dylan Frazer		
CLIENT PROJECT:	River's Edge - 1759001.020.026		

LABORATORY BLANK RESULTS

MB-062619S - Batch 142509 - Soil by NWTPH-DX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	MG/KG	25	06/27/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	MG/KG	50	06/27/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

MB-062619S - Batch 142518 - Soil by EPA-6020

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Arsenic	EPA-6020	U	MG/KG	0.20	06/26/2019	RAL
Cadmium	EPA-6020	U	MG/KG	0.10	06/26/2019	RAL
Chromium	EPA-6020	U	MG/KG	0.10	06/26/2019	RAL
Lead	EPA-6020	U	MG/KG	0.10	06/26/2019	RAL

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020
CLIENT CONTACT: Dylan Frazer
CLIENT PROJECT: River's Edge - 1759001.020.026

DATE: 6/27/2019
ALS SDG#: EV19060192
WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 142509 - Soil by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24) - BS	NWTPH-DX	**102**			75.5	122.1	06/26/2019	EBS
TPH-Diesel Range (C12-C24) - BSD	NWTPH-DX	**101**	**1**		75.5	122.1	06/26/2019	EBS

ALS Test Batch ID: 142518 - Soil by EPA-6020

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Arsenic - BS	EPA-6020	**104**			80	120	06/26/2019	RAL
Arsenic - BSD	EPA-6020	**105**	**2**		80	120	06/26/2019	RAL
Cadmium - BS	EPA-6020	**104**			80	120	06/26/2019	RAL
Cadmium - BSD	EPA-6020	**106**	**2**		80	120	06/26/2019	RAL
Chromium - BS	EPA-6020	**99.8**			80	120	06/26/2019	RAL
Chromium - BSD	EPA-6020	**102**	**3**		80	120	06/26/2019	RAL
Lead - BS	EPA-6020	**103**			80	120	06/26/2019	RAL
Lead - BSD	EPA-6020	**106**	**2**		80	120	06/26/2019	RAL

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

EV190601 192

Chain-of-Custody Record

LANDAU ASSOCIATES

☒ Seattle/Edmonds (425) 778-0907 ☐ Spokane (509) 327-9737
☐ Tacoma (253) 926-2493 ☐ Portland (503) 542-1080
☐ _____

Date 6/26/19
Page 1 of 1

Turnaround Time:
Standard _____
Accelerated 24 hr.

Project Name River's Edge Project No. _____
Project Location/Event 426 Fremont St. Monroe, WA
Sampler's Name B. McManus
Project Contact D. Frazer
Send Results To D. Frazer, K. Shultz, D. Jorgensen, B. McManus

Special Handling Requirements: _____
Shipment Method: _____
Stored on ice: (Yes) / No

	Sample I.D.	Date	Time	Matrix	No. of Containers	Testing Parameters: NWTPH-Dx	Testing Parameters: 6020 *
1	AOC1 - SW12 (0-12)	6/26/19	925	Soil	1	X	X
2	AOC1 - SW12 (12-17)	6/26/19	915	Soil	1	X	X
3	AOC1 - B (17)	6/26/19	910	Soil	1	X	X
4	AOC1 - SW13 (0-17)	6/26/19	936	Soil	1	X	X
5	AOC1 - SW14 (0-6)	6/26/19	1021	Soil	1	X	X
6	AOC1 - SW15 (0-6)	6/26/19	1042	Soil	1	X	X
7	AOC1 - B (15)	6/26/19	1208	Soil	1	X	X
8	AOC1 - SW16 (0-15)	6/26/19	1216	Soil	1	X	X
9	AOC1 - B (14)	6/26/19	1200	Soil	1	X	X

Observations/Comments

☐ Allow water samples to settle, collect aliquot from clear portion ☐
☐ NWTPH-Dx - Acid wash cleanup ☐
- Silica gel cleanup ☐
☐ Dissolved metal samples were field filtered

Other
* Metals [arsenic, chromium, cadmium, and lead]

Relinquished by	Received by	Relinquished by	Received by
Signature [signature]	Signature [signature]	Signature	Signature
Printed Name B. McManus	Printed Name Rick Bagon	Printed Name	Printed Name
Company Landau Associates, Inc.	Company ALS	Company	Company
Date 6/26/19 Time 2:40	Date 6/26/19 Time 2:40	Date Time	Date Time

WHITE COPY - Laboratory YELLOW COPY - Project File PINK COPY - Client Representative

10/2018

ALS ENVIRONMENTAL

Sample Receiving Checklist

Client: Landau Associates ALS Job #: ~~EV1906018~~ EV1906019 2 RB

Project: Rivers Edge

Received Date: 6/26/19 Received Time: 2340 By: RB

Type of shipping container: Cooler X Box ____ Other ____

Shipped via: FedEx Ground ____ UPS ____ Mail ____ Courier ____ Hand Delivered X
FedEx Express ____

	Yes	No	N/A
Were custody seals on outside of shipping container?	____	X	____
If yes, how many? ____ Where? ____			
Custody seal date: ____ Seal name: ____			
Was Chain of Custody properly filled out (ink, signed, dated, etc.)?	X	____	____
Did all bottles have labels?	X	____	____
Did all bottle labels and tags agree with Chain of Custody?	X	____	____
Were samples received within hold time?	X	____	____
Did all bottles arrive in good condition (unbroken, etc.)?	X	____	____
Was sufficient amount of sample sent for the tests indicated?	X	____	____
Was correct preservation added to samples?	____	____	X

If no, Sample Control added preservative to the following:

Sample Number	Reagent	Analyte

Were VOA vials checked for absence of air bubbles?	____	____	X
Bubbles present in sample #: ____			

Temperature of cooler upon receipt: 11.3°C on Ice Cold (Cool) Ambient N/A

Explain any discrepancies: ____

Was client contacted? ____ Who was called? ____ By whom? ____ Date: ____

Outcome of call: ____

July 8, 2019

Mr. Dylan Frazer
Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

Dear Mr. Frazer,

On June 28th, 19 samples were received by our laboratory and assigned our laboratory project number EV19060217. The project was identified as your River's Edge - 1759001.020.026. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	7/8/2019
		ALS JOB#:	EV19060217
		ALS SAMPLE#:	EV19060217-01
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/28/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/28/2019 8:06:00 AM
CLIENT SAMPLE ID	AOC3-SW2 (0-2)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Naphthalene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
2-Methylnaphthalene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
1-Methylnaphthalene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Acenaphthylene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Acenaphthene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Fluorene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Phenanthrene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Anthracene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Fluoranthene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Pyrene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Benzo[A]Anthracene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Chrysene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Benzo[B]Fluoranthene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Benzo[K]Fluoranthene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Benzo[A]Pyrene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14	EPA-8270 SIM	**92.2**	07/02/2019	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/8/2019 EV19060217 EV19060217-02
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/28/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/28/2019 8:05:00 AM
CLIENT SAMPLE ID	AOC3-SW1 (0-2)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Naphthalene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
2-Methylnaphthalene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
1-Methylnaphthalene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Acenaphthylene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Acenaphthene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Fluorene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Phenanthrene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Anthracene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Fluoranthene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Pyrene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Benzo[A]Anthracene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Chrysene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Benzo[B]Fluoranthene	EPA-8270 SIM	**21**	20	1	UG/KG	07/02/2019	JMK
Benzo[K]Fluoranthene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Benzo[A]Pyrene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Benzo[G,H,I]Perylene	EPA-8270 SIM	**21**	20	1	UG/KG	07/02/2019	JMK

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14	EPA-8270 SIM	**89.1**	07/02/2019	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/8/2019 EV19060217 EV19060217-03
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/28/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/28/2019 8:20:00 AM
CLIENT SAMPLE ID	AOC3-B (2.5)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Naphthalene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
2-Methylnaphthalene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
1-Methylnaphthalene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Acenaphthylene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Acenaphthene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Fluorene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Phenanthrene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Anthracene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Fluoranthene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Pyrene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Benzo[A]Anthracene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Chrysene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Benzo[B]Fluoranthene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Benzo[K]Fluoranthene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Benzo[A]Pyrene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14	EPA-8270 SIM	**95.5**	07/02/2019	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/8/2019 EV19060217 EV19060217-04
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/28/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/28/2019 8:19:00 AM
CLIENT SAMPLE ID	AOC3-SW3 (0-2)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Naphthalene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
2-Methylnaphthalene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
1-Methylnaphthalene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Acenaphthylene	EPA-8270 SIM	**33**	20	1	UG/KG	07/02/2019	JMK
Acenaphthene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Fluorene	EPA-8270 SIM	U	20	1	UG/KG	07/02/2019	JMK
Phenanthrene	EPA-8270 SIM	**360**	20	1	UG/KG	07/02/2019	JMK
Anthracene	EPA-8270 SIM	**96**	20	1	UG/KG	07/02/2019	JMK
Fluoranthene	EPA-8270 SIM	**700**	20	1	UG/KG	07/02/2019	JMK
Pyrene	EPA-8270 SIM	**700**	20	1	UG/KG	07/02/2019	JMK
Benzo[A]Anthracene	EPA-8270 SIM	**340**	20	1	UG/KG	07/02/2019	JMK
Chrysene	EPA-8270 SIM	**360**	20	1	UG/KG	07/02/2019	JMK
Benzo[B]Fluoranthene	EPA-8270 SIM	**400**	20	1	UG/KG	07/02/2019	JMK
Benzo[K]Fluoranthene	EPA-8270 SIM	**150**	20	1	UG/KG	07/02/2019	JMK
Benzo[A]Pyrene	EPA-8270 SIM	**360**	20	1	UG/KG	07/02/2019	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	**240**	20	1	UG/KG	07/02/2019	JMK
Dibenz[A,H]Anthracene	EPA-8270 SIM	**62**	20	1	UG/KG	07/02/2019	JMK
Benzo[G,H,I]Perylene	EPA-8270 SIM	**320**	20	1	UG/KG	07/02/2019	JMK

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14	EPA-8270 SIM	**127**	07/02/2019	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/8/2019 EV19060217 EV19060217-05
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/28/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/28/2019 8:40:00 AM
CLIENT SAMPLE ID	AOC3-SW5 (0-0.5)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Naphthalene	EPA-8270 SIM	U	20	1	UG/KG	07/08/2019	JMK
2-Methylnaphthalene	EPA-8270 SIM	U	20	1	UG/KG	07/08/2019	JMK
1-Methylnaphthalene	EPA-8270 SIM	U	20	1	UG/KG	07/08/2019	JMK
Acenaphthylene	EPA-8270 SIM	U	20	1	UG/KG	07/08/2019	JMK
Acenaphthene	EPA-8270 SIM	U	20	1	UG/KG	07/08/2019	JMK
Fluorene	EPA-8270 SIM	U	20	1	UG/KG	07/08/2019	JMK
Phenanthrene	EPA-8270 SIM	**87**	20	1	UG/KG	07/08/2019	JMK
Anthracene	EPA-8270 SIM	U	20	1	UG/KG	07/08/2019	JMK
Fluoranthene	EPA-8270 SIM	**170**	20	1	UG/KG	07/08/2019	JMK
Pyrene	EPA-8270 SIM	**200**	20	1	UG/KG	07/08/2019	JMK
Benzo[A]Anthracene	EPA-8270 SIM	**74**	20	1	UG/KG	07/08/2019	JMK
Chrysene	EPA-8270 SIM	**86**	20	1	UG/KG	07/08/2019	JMK
Benzo[B]Fluoranthene	EPA-8270 SIM	**120**	20	1	UG/KG	07/08/2019	JMK
Benzo[K]Fluoranthene	EPA-8270 SIM	**40**	20	1	UG/KG	07/08/2019	JMK
Benzo[A]Pyrene	EPA-8270 SIM	**81**	20	1	UG/KG	07/08/2019	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	**59**	20	1	UG/KG	07/08/2019	JMK
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	20	1	UG/KG	07/08/2019	JMK
Benzo[G,H,I]Perylene	EPA-8270 SIM	**110**	20	1	UG/KG	07/08/2019	JMK

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14	EPA-8270 SIM	**115**	07/08/2019	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/8/2019 EV19060217 EV19060217-07
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/28/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/28/2019 8:49:00 AM
CLIENT SAMPLE ID	AOC3-SW6 (0-0.5)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Naphthalene	EPA-8270 SIM	U	20	1	UG/KG	07/08/2019	JMK
2-Methylnaphthalene	EPA-8270 SIM	U	20	1	UG/KG	07/08/2019	JMK
1-Methylnaphthalene	EPA-8270 SIM	U	20	1	UG/KG	07/08/2019	JMK
Acenaphthylene	EPA-8270 SIM	**29**	20	1	UG/KG	07/08/2019	JMK
Acenaphthene	EPA-8270 SIM	U	20	1	UG/KG	07/08/2019	JMK
Fluorene	EPA-8270 SIM	U	20	1	UG/KG	07/08/2019	JMK
Phenanthrene	EPA-8270 SIM	**280**	20	1	UG/KG	07/08/2019	JMK
Anthracene	EPA-8270 SIM	**64**	20	1	UG/KG	07/08/2019	JMK
Fluoranthene	EPA-8270 SIM	**450**	20	1	UG/KG	07/08/2019	JMK
Pyrene	EPA-8270 SIM	**490**	20	1	UG/KG	07/08/2019	JMK
Benzo[A]Anthracene	EPA-8270 SIM	**220**	20	1	UG/KG	07/08/2019	JMK
Chrysene	EPA-8270 SIM	**280**	20	1	UG/KG	07/08/2019	JMK
Benzo[B]Fluoranthene	EPA-8270 SIM	**330**	20	1	UG/KG	07/08/2019	JMK
Benzo[K]Fluoranthene	EPA-8270 SIM	**110**	20	1	UG/KG	07/08/2019	JMK
Benzo[A]Pyrene	EPA-8270 SIM	**290**	20	1	UG/KG	07/08/2019	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	**170**	20	1	UG/KG	07/08/2019	JMK
Dibenz[A,H]Anthracene	EPA-8270 SIM	**47**	20	1	UG/KG	07/08/2019	JMK
Benzo[G,H,I]Perylene	EPA-8270 SIM	**240**	20	1	UG/KG	07/08/2019	JMK

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14	EPA-8270 SIM	**103**	07/08/2019	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/8/2019 EV19060217 EV19060217-08
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/28/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/28/2019 10:27:00 AM
CLIENT SAMPLE ID	AOC1-B (16)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	07/01/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**140**	50	1	MG/KG	07/01/2019	EBS
Arsenic	EPA-6020	**5.6**	0.20	1	MG/KG	07/02/2019	RAL
Cadmium	EPA-6020	**0.55**	0.10	1	MG/KG	07/02/2019	RAL
Chromium	EPA-6020	**41**	0.10	1	MG/KG	07/02/2019	RAL
Lead	EPA-6020	**67**	0.10	1	MG/KG	07/02/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**79.2**	07/01/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/8/2019 EV19060217 EV19060217-09
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/28/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/28/2019 10:37:00 AM
CLIENT SAMPLE ID	AOC1-SW17 (12-13)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	50	2	MG/KG	07/02/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**660**	100	2	MG/KG	07/02/2019	EBS
Arsenic	EPA-6020	**17**	0.20	1	MG/KG	07/02/2019	RAL
Cadmium	EPA-6020	**4.0**	0.10	1	MG/KG	07/02/2019	RAL
Chromium	EPA-6020	**43**	0.10	1	MG/KG	07/02/2019	RAL
Lead	EPA-6020	**720**	0.10	1	MG/KG	07/02/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25 2X Dilution	NWTPH-DX	**103**	07/02/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	7/8/2019
		ALS JOB#:	EV19060217
		ALS SAMPLE#:	EV19060217-10
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/28/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/28/2019 10:44:00 AM
CLIENT SAMPLE ID	AOC1-SW17 (5.5-11)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	07/01/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	50	1	MG/KG	07/01/2019	EBS
Arsenic	EPA-6020	**1.9**	0.20	1	MG/KG	07/02/2019	RAL
Cadmium	EPA-6020	**0.14**	0.10	1	MG/KG	07/02/2019	RAL
Chromium	EPA-6020	**28**	0.10	1	MG/KG	07/02/2019	RAL
Lead	EPA-6020	**5.2**	0.10	1	MG/KG	07/02/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**86.0**	07/01/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/8/2019 EV19060217 EV19060217-11
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/28/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/28/2019 12:12:00 PM
CLIENT SAMPLE ID	AOC1-SW18 (11-15)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	07/01/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**75**	50	1	MG/KG	07/01/2019	EBS
Arsenic	EPA-6020	**9.7**	0.20	1	MG/KG	07/02/2019	RAL
Cadmium	EPA-6020	**0.89**	0.10	1	MG/KG	07/02/2019	RAL
Chromium	EPA-6020	**32**	0.10	1	MG/KG	07/02/2019	RAL
Lead	EPA-6020	**260**	0.10	1	MG/KG	07/02/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**97.5**	07/01/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/8/2019 EV19060217 EV19060217-12
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/28/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/28/2019 12:20:00 PM
CLIENT SAMPLE ID	AOC1-SW18 (10-11)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	50	2	MG/KG	07/01/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**470**	100	2	MG/KG	07/01/2019	EBS
Arsenic	EPA-6020	**11**	0.20	1	MG/KG	07/02/2019	RAL
Cadmium	EPA-6020	**6.2**	0.10	1	MG/KG	07/02/2019	RAL
Chromium	EPA-6020	**50**	0.10	1	MG/KG	07/02/2019	RAL
Lead	EPA-6020	**2200**	1.0	10	MG/KG	07/02/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25 2X Dilution	NWTPH-DX	**127**	07/01/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/8/2019 EV19060217 EV19060217-13
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/28/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/28/2019 12:39:00 PM
CLIENT SAMPLE ID	AOC1-SW18 (7-10)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	07/01/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**100**	50	1	MG/KG	07/01/2019	EBS
Arsenic	EPA-6020	**6.6**	0.20	1	MG/KG	07/02/2019	RAL
Cadmium	EPA-6020	**0.71**	0.10	1	MG/KG	07/02/2019	RAL
Chromium	EPA-6020	**54**	0.10	1	MG/KG	07/02/2019	RAL
Lead	EPA-6020	**140**	0.10	1	MG/KG	07/02/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**90.5**	07/01/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/8/2019 EV19060217 EV19060217-14
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/28/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/28/2019 12:25:00 PM
CLIENT SAMPLE ID	DPW-1	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	130	1	UG/L	07/01/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	250	1	UG/L	07/01/2019	EBS
Arsenic	EPA-200.8	**120**	1.0	1	UG/L	07/02/2019	RAL
Cadmium	EPA-200.8	U	1.0	1	UG/L	07/02/2019	RAL
Hardness	EPA-200.8	**160**	1.0	1	MG/L	07/02/2019	RAL
Lead	EPA-200.8	**6.5**	1.0	1	UG/L	07/02/2019	RAL
Zinc	EPA-200.8	**57**	2.5	1	UG/L	07/02/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**82.6**	07/01/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/8/2019 EV19060217 EV19060217-15
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/28/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/28/2019 10:25:00 AM
CLIENT SAMPLE ID	P4-MW	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	**420**	130	1	UG/L	07/01/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**800**	250	1	UG/L	07/01/2019	EBS
Arsenic	EPA-200.8	**49**	1.0	1	UG/L	07/02/2019	RAL
Cadmium	EPA-200.8	**6.0**	1.0	1	UG/L	07/02/2019	RAL
Hardness	EPA-200.8	**130**	1.0	1	MG/L	07/02/2019	RAL
Lead	EPA-200.8	**100**	1.0	1	UG/L	07/02/2019	RAL
Zinc	EPA-200.8	**2800**	2.5	1	UG/L	07/02/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**84.8**	07/01/2019	EBS

Chromatogram indicates that it is likely that sample contains an unidentified diesel range product and lube oil.
Diesel range product results biased high due to oil range product overlap.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/8/2019 EV19060217 EV19060217-16
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/28/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/28/2019 1:15:00 PM
CLIENT SAMPLE ID	AOC1-SW19 (14.5-15)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	**100**	25	1	MG/KG	07/01/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**270**	50	1	MG/KG	07/01/2019	EBS
Arsenic	EPA-6020	**7.4**	0.20	1	MG/KG	07/02/2019	RAL
Cadmium	EPA-6020	**1.9**	0.10	1	MG/KG	07/02/2019	RAL
Chromium	EPA-6020	**35**	0.10	1	MG/KG	07/02/2019	RAL
Lead	EPA-6020	**140**	0.10	1	MG/KG	07/02/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**102**	07/01/2019	EBS

Chromatogram indicates that it is likely that sample contains light oil/lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/8/2019 EV19060217 EV19060217-17
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/28/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/28/2019 1:30:00 PM
CLIENT SAMPLE ID	AOC1-SW19 (10-11.5)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	**250**	25	1	MG/KG	07/01/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**1000**	50	1	MG/KG	07/01/2019	EBS
Arsenic	EPA-6020	**9.6**	0.20	1	MG/KG	07/02/2019	RAL
Cadmium	EPA-6020	**1.5**	0.10	1	MG/KG	07/02/2019	RAL
Chromium	EPA-6020	**48**	0.10	1	MG/KG	07/02/2019	RAL
Lead	EPA-6020	**140**	0.10	1	MG/KG	07/02/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**97.1**	07/01/2019	EBS

Chromatogram indicates that it is likely that sample contains light oil/lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/8/2019 EV19060217 EV19060217-18
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/28/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/28/2019 1:27:00 PM
CLIENT SAMPLE ID	AOC1-SW19 (11.5-14.5)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	**64**	25	1	MG/KG	07/01/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**92**	50	1	MG/KG	07/01/2019	EBS
Arsenic	EPA-6020	**8.1**	0.20	1	MG/KG	07/02/2019	RAL
Cadmium	EPA-6020	**0.50**	0.10	1	MG/KG	07/02/2019	RAL
Chromium	EPA-6020	**34**	0.10	1	MG/KG	07/02/2019	RAL
Lead	EPA-6020	**74**	0.10	1	MG/KG	07/02/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**87.4**	07/01/2019	EBS

Chromatogram indicates that it is likely that sample contains highly weathered diesel and lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/8/2019 EV19060217 EV19060217-19
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	06/28/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	6/28/2019 1:38:00 PM
CLIENT SAMPLE ID	AOC1-SW19 (7-10)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	07/01/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**140**	50	1	MG/KG	07/01/2019	EBS
Arsenic	EPA-6020	**5.6**	0.20	1	MG/KG	07/02/2019	RAL
Cadmium	EPA-6020	**0.62**	0.10	1	MG/KG	07/02/2019	RAL
Chromium	EPA-6020	**39**	0.10	1	MG/KG	07/02/2019	RAL
Lead	EPA-6020	**110**	0.10	1	MG/KG	07/02/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**102**	07/01/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

CLIENT CONTACT: Dylan Frazer
CLIENT PROJECT: River's Edge - 1759001.020.026

DATE: 7/8/2019
ALS SDG#: EV19060217
WDOE ACCREDITATION: C601

LABORATORY BLANK RESULTS

MB-063019S - Batch 142646 - Soil by NWTPH-DX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	MG/KG	25	07/01/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	MG/KG	50	07/01/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

MB-070119W - Batch 142676 - Water by NWTPH-DX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	UG/L	130	07/01/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	UG/L	250	07/01/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

MB-070119S - Batch 142657 - Soil by EPA-8270 SIM

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Naphthalene	EPA-8270 SIM	U	UG/KG	20	07/01/2019	JMK
2-Methylnaphthalene	EPA-8270 SIM	U	UG/KG	20	07/01/2019	JMK
1-Methylnaphthalene	EPA-8270 SIM	U	UG/KG	20	07/01/2019	JMK
Acenaphthylene	EPA-8270 SIM	U	UG/KG	20	07/01/2019	JMK
Acenaphthene	EPA-8270 SIM	U	UG/KG	20	07/01/2019	JMK
Fluorene	EPA-8270 SIM	U	UG/KG	20	07/01/2019	JMK
Phenanthrene	EPA-8270 SIM	U	UG/KG	20	07/01/2019	JMK
Anthracene	EPA-8270 SIM	U	UG/KG	20	07/01/2019	JMK
Fluoranthene	EPA-8270 SIM	U	UG/KG	20	07/01/2019	JMK
Pyrene	EPA-8270 SIM	U	UG/KG	20	07/01/2019	JMK
Benzo[A]Anthracene	EPA-8270 SIM	U	UG/KG	20	07/01/2019	JMK
Chrysene	EPA-8270 SIM	U	UG/KG	20	07/01/2019	JMK
Benzo[B]Fluoranthene	EPA-8270 SIM	U	UG/KG	20	07/01/2019	JMK
Benzo[K]Fluoranthene	EPA-8270 SIM	U	UG/KG	20	07/01/2019	JMK
Benzo[A]Pyrene	EPA-8270 SIM	U	UG/KG	20	07/01/2019	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	U	UG/KG	20	07/01/2019	JMK
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	UG/KG	20	07/01/2019	JMK
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	UG/KG	20	07/01/2019	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

MB-070519S - Batch 142818 - Soil by EPA-8270 SIM

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Naphthalene	EPA-8270 SIM	U	UG/KG	20	07/08/2019	JMK

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

CLIENT CONTACT: Dylan Frazer
CLIENT PROJECT: River's Edge - 1759001.020.026

DATE: 7/8/2019
ALS SDG#: EV19060217
WDOE ACCREDITATION: C601

LABORATORY BLANK RESULTS

MB-070519S - Batch 142818 - Soil by EPA-8270 SIM

2-Methylnaphthalene	EPA-8270 SIM	U	UG/KG	20	07/08/2019	JMK
1-Methylnaphthalene	EPA-8270 SIM	U	UG/KG	20	07/08/2019	JMK
Acenaphthylene	EPA-8270 SIM	U	UG/KG	20	07/08/2019	JMK
Acenaphthene	EPA-8270 SIM	U	UG/KG	20	07/08/2019	JMK
Fluorene	EPA-8270 SIM	U	UG/KG	20	07/08/2019	JMK
Phenanthrene	EPA-8270 SIM	U	UG/KG	20	07/08/2019	JMK
Anthracene	EPA-8270 SIM	U	UG/KG	20	07/08/2019	JMK
Fluoranthene	EPA-8270 SIM	U	UG/KG	20	07/08/2019	JMK
Pyrene	EPA-8270 SIM	U	UG/KG	20	07/08/2019	JMK
Benzo[A]Anthracene	EPA-8270 SIM	U	UG/KG	20	07/08/2019	JMK
Chrysene	EPA-8270 SIM	U	UG/KG	20	07/08/2019	JMK
Benzo[B]Fluoranthene	EPA-8270 SIM	U	UG/KG	20	07/08/2019	JMK
Benzo[K]Fluoranthene	EPA-8270 SIM	U	UG/KG	20	07/08/2019	JMK
Benzo[A]Pyrene	EPA-8270 SIM	U	UG/KG	20	07/08/2019	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	U	UG/KG	20	07/08/2019	JMK
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	UG/KG	20	07/08/2019	JMK
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	UG/KG	20	07/08/2019	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

MB-070119S - Batch 142689 - Soil by EPA-6020

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Arsenic	EPA-6020	U	MG/KG	0.20	07/02/2019	RAL
Cadmium	EPA-6020	U	MG/KG	0.10	07/02/2019	RAL
Chromium	EPA-6020	U	MG/KG	0.10	07/02/2019	RAL
Lead	EPA-6020	U	MG/KG	0.10	07/02/2019	RAL

U - Analyte analyzed for but not detected at level above reporting limit.

MB-070119W - Batch 142670 - Water by EPA-200.8

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Arsenic	EPA-200.8	U	UG/L	1.0	07/02/2019	RAL
Cadmium	EPA-200.8	U	UG/L	1.0	07/02/2019	RAL
Hardness	EPA-200.8	U	MG/L	1.0	07/02/2019	RAL
Lead	EPA-200.8	U	UG/L	1.0	07/02/2019	RAL
Zinc	EPA-200.8	U	UG/L	2.5	07/02/2019	RAL

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

CLIENT CONTACT: Dylan Frazer
CLIENT PROJECT: River's Edge - 1759001.020.026

DATE: 7/8/2019
ALS SDG#: EV19060217
WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 142646 - Soil by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24) - BS	NWTPH-DX	**102**			75.5	122.1	07/01/2019	EBS
TPH-Diesel Range (C12-C24) - BSD	NWTPH-DX	**95.2**	**7**		75.5	122.1	07/01/2019	EBS

ALS Test Batch ID: 142676 - Water by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24) - BS	NWTPH-DX	**99.0**			67	125.2	07/01/2019	EBS
TPH-Diesel Range (C12-C24) - BSD	NWTPH-DX	**95.0**	**4**		67	125.2	07/01/2019	EBS

ALS Test Batch ID: 142657 - Soil by EPA-8270 SIM

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Naphthalene - BS	EPA-8270 SIM	**79.2**			20	150	07/01/2019	JMK
Naphthalene - BSD	EPA-8270 SIM	**79.2**	**0**		20	150	07/01/2019	JMK
2-Methylnaphthalene - BS	EPA-8270 SIM	**84.6**			20	150	07/01/2019	JMK
2-Methylnaphthalene - BSD	EPA-8270 SIM	**79.4**	**6**		20	150	07/01/2019	JMK
1-Methylnaphthalene - BS	EPA-8270 SIM	**83.3**			20	150	07/01/2019	JMK
1-Methylnaphthalene - BSD	EPA-8270 SIM	**78.4**	**6**		20	150	07/01/2019	JMK
Acenaphthylene - BS	EPA-8270 SIM	**85.8**			20	150	07/01/2019	JMK
Acenaphthylene - BSD	EPA-8270 SIM	**79.5**	**8**		20	150	07/01/2019	JMK
Acenaphthene - BS	EPA-8270 SIM	**87.4**			41	107	07/01/2019	JMK
Acenaphthene - BSD	EPA-8270 SIM	**80.3**	**8**		41	107	07/01/2019	JMK
Fluorene - BS	EPA-8270 SIM	**87.2**			20	150	07/01/2019	JMK
Fluorene - BSD	EPA-8270 SIM	**79.0**	**10**		20	150	07/01/2019	JMK
Phenanthrene - BS	EPA-8270 SIM	**90.6**			20	150	07/01/2019	JMK
Phenanthrene - BSD	EPA-8270 SIM	**80.3**	**12**		20	150	07/01/2019	JMK
Anthracene - BS	EPA-8270 SIM	**82.3**			20	150	07/01/2019	JMK
Anthracene - BSD	EPA-8270 SIM	**73.5**	**11**		20	150	07/01/2019	JMK
Fluoranthene - BS	EPA-8270 SIM	**86.3**			20	150	07/01/2019	JMK
Fluoranthene - BSD	EPA-8270 SIM	**76.6**	**12**		20	150	07/01/2019	JMK
Pyrene - BS	EPA-8270 SIM	**80.4**			18	136	07/01/2019	JMK
Pyrene - BSD	EPA-8270 SIM	**68.7**	**16**		18	136	07/01/2019	JMK
Benzo[A]Anthracene - BS	EPA-8270 SIM	**82.6**			20	150	07/01/2019	JMK
Benzo[A]Anthracene - BSD	EPA-8270 SIM	**70.5**	**16**		20	150	07/01/2019	JMK
Chrysene - BS	EPA-8270 SIM	**91.0**			20	150	07/01/2019	JMK
Chrysene - BSD	EPA-8270 SIM	**77.8**	**16**		20	150	07/01/2019	JMK
Benzo[B]Fluoranthene - BS	EPA-8270 SIM	**91.2**			20	150	07/01/2019	JMK
Benzo[B]Fluoranthene - BSD	EPA-8270 SIM	**78.2**	**15**		20	150	07/01/2019	JMK
Benzo[K]Fluoranthene - BS	EPA-8270 SIM	**92.4**			20	150	07/01/2019	JMK

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

CLIENT CONTACT: Dylan Frazer
CLIENT PROJECT: River's Edge - 1759001.020.026

DATE: 7/8/2019
ALS SDG#: EV19060217
WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Benzo[K]Fluoranthene - BSD	EPA-8270 SIM	**78.6**	**16**		20	150	07/01/2019	JMK
Benzo[A]Pyrene - BS	EPA-8270 SIM	**91.6**			20	150	07/01/2019	JMK
Benzo[A]Pyrene - BSD	EPA-8270 SIM	**79.1**	**15**		20	150	07/01/2019	JMK
Indeno[1,2,3-Cd]Pyrene - BS	EPA-8270 SIM	**96.7**			20	150	07/01/2019	JMK
Indeno[1,2,3-Cd]Pyrene - BSD	EPA-8270 SIM	**86.5**	**11**		20	150	07/01/2019	JMK
Dibenz[A,H]Anthracene - BS	EPA-8270 SIM	**95.3**			20	150	07/01/2019	JMK
Dibenz[A,H]Anthracene - BSD	EPA-8270 SIM	**85.0**	**11**		20	150	07/01/2019	JMK
Benzo[G,H,I]Perylene - BS	EPA-8270 SIM	**101**			20	150	07/01/2019	JMK
Benzo[G,H,I]Perylene - BSD	EPA-8270 SIM	**90.3**	**11**		20	150	07/01/2019	JMK

ALS Test Batch ID: 142818 - Soil by EPA-8270 SIM

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Naphthalene - BS	EPA-8270 SIM	**63.8**			20	150	07/08/2019	JMK
Naphthalene - BSD	EPA-8270 SIM	**71.5**	**11**		20	150	07/08/2019	JMK
2-Methylnaphthalene - BS	EPA-8270 SIM	**66.3**			20	150	07/08/2019	JMK
2-Methylnaphthalene - BSD	EPA-8270 SIM	**76.2**	**14**		20	150	07/08/2019	JMK
1-Methylnaphthalene - BS	EPA-8270 SIM	**65.8**			20	150	07/08/2019	JMK
1-Methylnaphthalene - BSD	EPA-8270 SIM	**76.0**	**14**		20	150	07/08/2019	JMK
Acenaphthylene - BS	EPA-8270 SIM	**66.0**			20	150	07/08/2019	JMK
Acenaphthylene - BSD	EPA-8270 SIM	**77.4**	**16**		20	150	07/08/2019	JMK
Acenaphthene - BS	EPA-8270 SIM	**66.4**			41	107	07/08/2019	JMK
Acenaphthene - BSD	EPA-8270 SIM	**78.3**	**17**		41	107	07/08/2019	JMK
Fluorene - BS	EPA-8270 SIM	**63.7**			20	150	07/08/2019	JMK
Fluorene - BSD	EPA-8270 SIM	**76.4**	**18**		20	150	07/08/2019	JMK
Phenanthrene - BS	EPA-8270 SIM	**66.6**			20	150	07/08/2019	JMK
Phenanthrene - BSD	EPA-8270 SIM	**79.6**	**18**		20	150	07/08/2019	JMK
Anthracene - BS	EPA-8270 SIM	**59.5**			20	150	07/08/2019	JMK
Anthracene - BSD	EPA-8270 SIM	**71.0**	**18**		20	150	07/08/2019	JMK
Fluoranthene - BS	EPA-8270 SIM	**60.9**			20	150	07/08/2019	JMK
Fluoranthene - BSD	EPA-8270 SIM	**72.1**	**17**		20	150	07/08/2019	JMK
Pyrene - BS	EPA-8270 SIM	**64.4**			18	136	07/08/2019	JMK
Pyrene - BSD	EPA-8270 SIM	**70.6**	**9**		18	136	07/08/2019	JMK
Benzo[A]Anthracene - BS	EPA-8270 SIM	**58.0**			20	150	07/08/2019	JMK
Benzo[A]Anthracene - BSD	EPA-8270 SIM	**63.9**	**10**		20	150	07/08/2019	JMK
Chrysene - BS	EPA-8270 SIM	**66.1**			20	150	07/08/2019	JMK
Chrysene - BSD	EPA-8270 SIM	**70.6**	**7**		20	150	07/08/2019	JMK
Benzo[B]Fluoranthene - BS	EPA-8270 SIM	**64.0**			20	150	07/08/2019	JMK
Benzo[B]Fluoranthene - BSD	EPA-8270 SIM	**69.8**	**9**		20	150	07/08/2019	JMK
Benzo[K]Fluoranthene - BS	EPA-8270 SIM	**67.0**			20	150	07/08/2019	JMK

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 7/8/2019
ALS SDG#: EV19060217
WDOE ACCREDITATION: C601

CLIENT CONTACT: Dylan Frazer
CLIENT PROJECT: River's Edge - 1759001.020.026

LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Benzo[K]Fluoranthene - BSD	EPA-8270 SIM	**72.6**	**8**		20	150	07/08/2019	JMK
Benzo[A]Pyrene - BS	EPA-8270 SIM	**67.3**			20	150	07/08/2019	JMK
Benzo[A]Pyrene - BSD	EPA-8270 SIM	**74.3**	**10**		20	150	07/08/2019	JMK
Indeno[1,2,3-Cd]Pyrene - BS	EPA-8270 SIM	**66.8**			20	150	07/08/2019	JMK
Indeno[1,2,3-Cd]Pyrene - BSD	EPA-8270 SIM	**73.1**	**9**		20	150	07/08/2019	JMK
Dibenz[A,H]Anthracene - BS	EPA-8270 SIM	**62.8**			20	150	07/08/2019	JMK
Dibenz[A,H]Anthracene - BSD	EPA-8270 SIM	**69.2**	**10**		20	150	07/08/2019	JMK
Benzo[G,H,I]Perylene - BS	EPA-8270 SIM	**70.4**			20	150	07/08/2019	JMK
Benzo[G,H,I]Perylene - BSD	EPA-8270 SIM	**77.1**	**9**		20	150	07/08/2019	JMK

ALS Test Batch ID: 142689 - Soil by EPA-6020

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Arsenic - BS	EPA-6020	**104**			80	120	07/02/2019	RAL
Arsenic - BSD	EPA-6020	**105**	**1**		80	120	07/02/2019	RAL
Cadmium - BS	EPA-6020	**106**			80	120	07/02/2019	RAL
Cadmium - BSD	EPA-6020	**109**	**3**		80	120	07/02/2019	RAL
Chromium - BS	EPA-6020	**106**			80	120	07/02/2019	RAL
Chromium - BSD	EPA-6020	**107**	**1**		80	120	07/02/2019	RAL
Lead - BS	EPA-6020	**103**			80	120	07/02/2019	RAL
Lead - BSD	EPA-6020	**106**	**3**		80	120	07/02/2019	RAL

ALS Test Batch ID: 142670 - Water by EPA-200.8

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Arsenic - BS	EPA-200.8	**99.9**			89.1	110	07/02/2019	RAL
Arsenic - BSD	EPA-200.8	**99.5**	**0**		89.1	110	07/02/2019	RAL
Cadmium - BS	EPA-200.8	**103**			89.4	110	07/02/2019	RAL
Cadmium - BSD	EPA-200.8	**104**	**1**		89.4	110	07/02/2019	RAL
Lead - BS	EPA-200.8	**101**			87.5	107	07/02/2019	RAL
Lead - BSD	EPA-200.8	**101**	**0**		87.5	107	07/02/2019	RAL
Zinc - BS	EPA-200.8	**104**			88.2	111	07/02/2019	RAL
Zinc - BSD	EPA-200.8	**103**	**1**		88.2	111	07/02/2019	RAL

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS ENVIRONMENTAL

Sample Receiving Checklist

Client: Landau Associates ALS Job #: EV1906021 7

Project: Rivers Edge

Received Date: 6/26/19 Received Time: 2:30 By: RB

Type of shipping container: Cooler X Box ___ Other ___

Shipped via: FedEx Ground ___ UPS ___ Mail ___ Courier ___ Hand Delivered X
FedEx Express ___

	Yes	No	N/A
Were custody seals on outside of shipping container?	___	X	___
If yes, how many? ___ Where? ___			
Custody seal date: ___ Seal name: ___			
Was Chain of Custody properly filled out (ink, signed, dated, etc.)?	X	___	___
Did all bottles have labels?	X	___	___
Did all bottle labels and tags agree with Chain of Custody?	X	___	___
Were samples received within hold time?	X	___	___
Did all bottles arrive in good condition (unbroken, etc.)?	X	___	___
Was sufficient amount of sample sent for the tests indicated?	X	___	___
Was correct preservation added to samples?	X	___	___

If no, Sample Control added preservative to the following:

Sample Number	Reagent	Analyte

Were VOA vials checked for absence of air bubbles?	___	___	X
Bubbles present in sample #: ___			

Temperature of cooler upon receipt: 11.5°C on ice Cold (Cool) Ambient N/A

Explain any discrepancies: ___

Was client contacted? ___ Who was called? ___ By whom? ___ Date: ___

Outcome of call: ___

EV1906021 7

Chain-of-Custody Record

LANDAU ASSOCIATES

☒ Seattle/Edmonds (425) 778-0907 ☐ Spokane (509) 327-9737
☐ Tacoma (253) 926-2493 ☐ Portland (503) 542-2080
☐ _____

Date 6/28/19
Page 1 of _____

Turnaround Time:
Standard _____
Accelerated 24 hrs

Project Name River's Edge Project No. 1759001.020.026
Project Location/Event 426 Fremont St. Monroe, WA
Sampler's Name BXM JKG
Project Contact D. Frazer
Send Results To D. Frazer, K. Schultz, D. Jorgensen

Special Handling Requirements: _____
Shipment Method: _____
Stored on ice: (Yes) / No

	Sample I.D.	Date	Time	Matrix	No. of Containers	8270-SIM	NWTPH-Dx	6020*	200.8 Hardness	1	Hold Samples	Observations/Comments
1	AOC3 - SW2 (0-2)	6/28/19	806	Soil	1	X						
2	AOC3 - SW1 (0-2)	6/28/19	805	Soil	1	X						
3	AOC3 - B (2.5)	6/28/19	820	Soil	1	X						
4	AOC3 - SW3 (0-2)	6/28/19	819	Soil	1	X						
5	AOC3 - SW5 (0-0.5)	6/28/19	840	Soil	1	⊗					*	
6	AOC3 - SW4 (0-0.5)	6/28/19	842	Soil	1	X					X	
7	AOC3 - SW6 (0-0.5)	6/28/19	849	Soil	1	⊗					*	
8	AOC1 - B (16)	6/28/19	1027	Soil	1		X	X				
9	AOC1 - SW17 (12-13)	6/28/19	1037	Soil	1		X	X				
10	AOC1 - SW17 (5.5-11)	6/28/19	1044	Soil	1		X	X				
11	AOC1 - SW18 (11-15)	6/28/19	1212	Soil	1		X	X				
12	AOC1 - SW18 (10-11)	6/28/19	1220	Soil	1		X	X				
13	AOC1 - SW18 (7-10)	6/28/19	1239	Soil	1		X	X				
14	DPW - 1	6/28/19	1225	Water	2		+		X	X		
15	P4 - MW	6/28/19	1025	Water	2		+		X	X		
16	AOC1 - SW19 (14.5-15)	6/28/19	1315	Soil	1		X	X				
17	AOC1 - SW19 (10-11.5)	6/28/19	1330	Soil	1		X	X				
18	AOC1 - SW19 (11.5-14.5)	6/28/19	1327	Soil	1		X	X				
19	AOC1 - SW19 (7-10)	6/28/19	1338	Soil	1		X	X				

Testing Parameters

☐ Allow water samples to settle, collect aliquot from clear portion
☐ NWTPH-Dx - Acid wash cleanup
☐ - Silica gel cleanup
☐ Dissolved metal samples were field filtered

Other
* Metals [arsenic, chromium, cadmium, and lead]
☒ Hold samples
* Total arsenic, total zinc, Total cadmium, Total lead
⊗ Added 7/3/19 per Dylan on a 2 day TAT Due Monday 7-8

Relinquished by
Signature _____
Printed Name Brittany McManus
Company Landau Associates
Date 6/28/19 Time 2:32

Received by
Signature _____
Printed Name R. De Bagan
Company NLS
Date 6-28-19 Time 2:32

Relinquished by
Signature _____
Printed Name _____
Company _____
Date _____ Time _____

Received by
Signature _____
Printed Name _____
Company _____
Date _____ Time _____

WHITE COPY - Laboratory YELLOW COPY - Project File PINK COPY - Client Representative

10/2018

July 8, 2019

Mr. Dylan Frazer
Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

Dear Mr. Frazer,

On July 2nd, 8 samples were received by our laboratory and assigned our laboratory project number EV19070012. The project was identified as your River's Edge - 1759001.020.026. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/8/2019 EV19070012 EV19070012-01
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/02/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	7/2/2019 9:50:00 AM
CLIENT SAMPLE ID	B (5.5)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
HCID-Gas Range (C7-C12)	NWTPH-HCID	U	40	2	MG/KG	07/08/2019	EBS
HCID-Diesel Range (C12-C24)	NWTPH-HCID	U	100	2	MG/KG	07/08/2019	EBS
HCID-Oil Range (C24-C40)	NWTPH-HCID	**>200**	200	2	MG/KG	07/08/2019	EBS
Naphthalene	EPA-8270 SIM	U	20	1	UG/KG	07/08/2019	JMK
2-Methylnaphthalene	EPA-8270 SIM	U	20	1	UG/KG	07/08/2019	JMK
1-Methylnaphthalene	EPA-8270 SIM	U	20	1	UG/KG	07/08/2019	JMK
Benzo[A]Anthracene	EPA-8270 SIM	**50**	20	1	UG/KG	07/08/2019	JMK
Chrysene	EPA-8270 SIM	**72**	20	1	UG/KG	07/08/2019	JMK
Benzo[B]Fluoranthene	EPA-8270 SIM	**190**	20	1	UG/KG	07/08/2019	JMK
Benzo[K]Fluoranthene	EPA-8270 SIM	**37**	20	1	UG/KG	07/08/2019	JMK
Benzo[A]Pyrene	EPA-8270 SIM	**89**	20	1	UG/KG	07/08/2019	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	**64**	20	1	UG/KG	07/08/2019	JMK
Dibenz[A,H]Anthracene	EPA-8270 SIM	**51**	20	1	UG/KG	07/08/2019	JMK
PCB-1016	EPA-8082	U	0.10	1	MG/KG	07/08/2019	JMK
PCB-1221	EPA-8082	U	0.10	1	MG/KG	07/08/2019	JMK
PCB-1232	EPA-8082	U	0.10	1	MG/KG	07/08/2019	JMK
PCB-1242	EPA-8082	U	0.10	1	MG/KG	07/08/2019	JMK
PCB-1248	EPA-8082	U	0.10	1	MG/KG	07/08/2019	JMK
PCB-1254	EPA-8082	U	0.10	1	MG/KG	07/08/2019	JMK
PCB-1260	EPA-8082	U	0.10	1	MG/KG	07/08/2019	JMK
PCB-1268	EPA-8082	U	0.10	1	MG/KG	07/08/2019	JMK
Mercury	EPA-7471	**0.12**	0.020	1	MG/KG	07/03/2019	RAL
Arsenic	EPA-6020	**5.4**	0.20	1	MG/KG	07/03/2019	RAL
Cadmium	EPA-6020	**0.73**	0.10	1	MG/KG	07/03/2019	RAL
Chromium	EPA-6020	**37**	0.10	1	MG/KG	07/03/2019	RAL
Lead	EPA-6020	**53**	0.10	1	MG/KG	07/03/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
BCB 2X Dilution	NWTPH-HCID	**97.8**	07/08/2019	EBS
C25 2X Dilution	NWTPH-HCID	**112**	07/08/2019	EBS
Terphenyl-d14	EPA-8270 SIM	**108**	07/08/2019	JMK
TCMX	EPA-8082	**57.4**	07/08/2019	JMK
DCB	EPA-8082	**45.7**	07/08/2019	JMK

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/8/2019 EV19070012 EV19070012-02
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/02/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	7/2/2019 10:10:00 AM
CLIENT SAMPLE ID	SW1 (2.5-5.5)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
HCID-Gas Range (C7-C12)	NWTPH-HCID	U	20	1	MG/KG	07/08/2019	EBS
HCID-Diesel Range (C12-C24)	NWTPH-HCID	U	50	1	MG/KG	07/08/2019	EBS
HCID-Oil Range (C24-C40)	NWTPH-HCID	**>100**	100	1	MG/KG	07/08/2019	EBS
Naphthalene	EPA-8270 SIM	U	20	1	UG/KG	07/08/2019	JMK
2-Methylnaphthalene	EPA-8270 SIM	U	20	1	UG/KG	07/08/2019	JMK
1-Methylnaphthalene	EPA-8270 SIM	U	20	1	UG/KG	07/08/2019	JMK
Benzo[A]Anthracene	EPA-8270 SIM	**36**	20	1	UG/KG	07/08/2019	JMK
Chrysene	EPA-8270 SIM	**44**	20	1	UG/KG	07/08/2019	JMK
Benzo[B]Fluoranthene	EPA-8270 SIM	**62**	20	1	UG/KG	07/08/2019	JMK
Benzo[K]Fluoranthene	EPA-8270 SIM	**23**	20	1	UG/KG	07/08/2019	JMK
Benzo[A]Pyrene	EPA-8270 SIM	**52**	20	1	UG/KG	07/08/2019	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	**36**	20	1	UG/KG	07/08/2019	JMK
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	20	1	UG/KG	07/08/2019	JMK
PCB-1016	EPA-8082	U	0.10	1	MG/KG	07/08/2019	JMK
PCB-1221	EPA-8082	U	0.10	1	MG/KG	07/08/2019	JMK
PCB-1232	EPA-8082	U	0.10	1	MG/KG	07/08/2019	JMK
PCB-1242	EPA-8082	U	0.10	1	MG/KG	07/08/2019	JMK
PCB-1248	EPA-8082	U	0.10	1	MG/KG	07/08/2019	JMK
PCB-1254	EPA-8082	U	0.10	1	MG/KG	07/08/2019	JMK
PCB-1260	EPA-8082	U	0.10	1	MG/KG	07/08/2019	JMK
PCB-1268	EPA-8082	U	0.10	1	MG/KG	07/08/2019	JMK
Mercury	EPA-7471	**0.079**	0.020	1	MG/KG	07/03/2019	RAL
Arsenic	EPA-6020	**5.5**	0.20	1	MG/KG	07/03/2019	RAL
Cadmium	EPA-6020	**0.19**	0.10	1	MG/KG	07/03/2019	RAL
Chromium	EPA-6020	**37**	0.10	1	MG/KG	07/03/2019	RAL
Lead	EPA-6020	**18**	0.10	1	MG/KG	07/03/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
BCB	NWTPH-HCID	**101**	07/08/2019	EBS
C25	NWTPH-HCID	**109**	07/08/2019	EBS
Terphenyl-d14	EPA-8270 SIM	**95.9**	07/08/2019	JMK
TCMX	EPA-8082	**68.6**	07/08/2019	JMK
DCB	EPA-8082	**43.6**	07/08/2019	JMK

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains light oil/lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/8/2019 EV19070012 EV19070012-03
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/02/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	7/2/2019 10:35:00 AM
CLIENT SAMPLE ID	SW2 (2.5-5.5)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
HCID-Gas Range (C7-C12)	NWTPH-HCID	U	20	1	MG/KG	07/08/2019	EBS
HCID-Diesel Range (C12-C24)	NWTPH-HCID	U	50	1	MG/KG	07/08/2019	EBS
HCID-Oil Range (C24-C40)	NWTPH-HCID	U	100	1	MG/KG	07/08/2019	EBS
Naphthalene	EPA-8270 SIM	U	20	1	UG/KG	07/08/2019	JMK
2-Methylnaphthalene	EPA-8270 SIM	U	20	1	UG/KG	07/08/2019	JMK
1-Methylnaphthalene	EPA-8270 SIM	U	20	1	UG/KG	07/08/2019	JMK
Benzo[A]Anthracene	EPA-8270 SIM	U	20	1	UG/KG	07/08/2019	JMK
Chrysene	EPA-8270 SIM	**24**	20	1	UG/KG	07/08/2019	JMK
Benzo[B]Fluoranthene	EPA-8270 SIM	**34**	20	1	UG/KG	07/08/2019	JMK
Benzo[K]Fluoranthene	EPA-8270 SIM	U	20	1	UG/KG	07/08/2019	JMK
Benzo[A]Pyrene	EPA-8270 SIM	**23**	20	1	UG/KG	07/08/2019	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	U	20	1	UG/KG	07/08/2019	JMK
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	20	1	UG/KG	07/08/2019	JMK
PCB-1016	EPA-8082	U	0.10	1	MG/KG	07/08/2019	JMK
PCB-1221	EPA-8082	U	0.10	1	MG/KG	07/08/2019	JMK
PCB-1232	EPA-8082	U	0.10	1	MG/KG	07/08/2019	JMK
PCB-1242	EPA-8082	U	0.10	1	MG/KG	07/08/2019	JMK
PCB-1248	EPA-8082	U	0.10	1	MG/KG	07/08/2019	JMK
PCB-1254	EPA-8082	U	0.10	1	MG/KG	07/08/2019	JMK
PCB-1260	EPA-8082	U	0.10	1	MG/KG	07/08/2019	JMK
PCB-1268	EPA-8082	U	0.10	1	MG/KG	07/08/2019	JMK
Mercury	EPA-7471	**0.046**	0.020	1	MG/KG	07/03/2019	RAL
Arsenic	EPA-6020	**4.8**	0.20	1	MG/KG	07/03/2019	RAL
Cadmium	EPA-6020	**0.12**	0.10	1	MG/KG	07/03/2019	RAL
Chromium	EPA-6020	**33**	0.10	1	MG/KG	07/03/2019	RAL
Lead	EPA-6020	**11**	0.10	1	MG/KG	07/03/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
BCB	NWTPH-HCID	**96.6**	07/08/2019	EBS
C25	NWTPH-HCID	**102**	07/08/2019	EBS
Terphenyl-d14	EPA-8270 SIM	**101**	07/08/2019	JMK
TCMX	EPA-8082	**71.2**	07/08/2019	JMK
DCB	EPA-8082	**45.8**	07/08/2019	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	7/8/2019
		ALS JOB#:	EV19070012
		ALS SAMPLE#:	EV19070012-04
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/02/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	7/2/2019 11:05:00 AM
CLIENT SAMPLE ID	SP2-1	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
HCID-Gas Range (C7-C12)	NWTPH-HCID	U	20	1	MG/KG	07/08/2019	EBS
HCID-Diesel Range (C12-C24)	NWTPH-HCID	U	50	1	MG/KG	07/08/2019	EBS
HCID-Oil Range (C24-C40)	NWTPH-HCID	**>100**	100	1	MG/KG	07/08/2019	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
BCB	NWTPH-HCID	**95.8**	07/08/2019	EBS
C25	NWTPH-HCID	**96.9**	07/08/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/8/2019 EV19070012 EV19070012-05
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/02/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	7/2/2019 11:15:00 AM
CLIENT SAMPLE ID	SP2-2	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
HCID-Gas Range (C7-C12)	NWTPH-HCID	U	20	1	MG/KG	07/08/2019	EBS
HCID-Diesel Range (C12-C24)	NWTPH-HCID	U	50	1	MG/KG	07/08/2019	EBS
HCID-Oil Range (C24-C40)	NWTPH-HCID	**>100**	100	1	MG/KG	07/08/2019	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
BCB	NWTPH-HCID	**105**	07/08/2019	EBS
C25	NWTPH-HCID	**109**	07/08/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains light oil/lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	7/8/2019
		ALS JOB#:	EV19070012
		ALS SAMPLE#:	EV19070012-06
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/02/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	7/2/2019 11:25:00 AM
CLIENT SAMPLE ID	SP2-3	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
HCID-Gas Range (C7-C12)	NWTPH-HCID	U	20	1	MG/KG	07/08/2019	EBS
HCID-Diesel Range (C12-C24)	NWTPH-HCID	U	50	1	MG/KG	07/08/2019	EBS
HCID-Oil Range (C24-C40)	NWTPH-HCID	**>100**	100	1	MG/KG	07/08/2019	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
BCB	NWTPH-HCID	**96.2**	07/08/2019	EBS
C25	NWTPH-HCID	**101**	07/08/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains light oil/lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS SDG#: WDOE ACCREDITATION:	7/8/2019 EV19070012 C601
CLIENT CONTACT:	Dylan Frazer		
CLIENT PROJECT:	River's Edge - 1759001.020.026		

LABORATORY BLANK RESULTS

MB-070519S - Batch 142811 - Soil by NWTPH-HCID

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
HCID-Gas Range (C7-C12)	NWTPH-HCID	U	MG/KG	20	07/08/2019	EBS
HCID-Diesel Range (C12-C24)	NWTPH-HCID	U	MG/KG	50	07/08/2019	EBS
HCID-Oil Range (C24-C40)	NWTPH-HCID	U	MG/KG	100	07/08/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

MB-070519S - Batch 142818 - Soil by EPA-8270 SIM

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Naphthalene	EPA-8270 SIM	U	UG/KG	20	07/08/2019	JMK
2-Methylnaphthalene	EPA-8270 SIM	U	UG/KG	20	07/08/2019	JMK
1-Methylnaphthalene	EPA-8270 SIM	U	UG/KG	20	07/08/2019	JMK
Benzo[A]Anthracene	EPA-8270 SIM	U	UG/KG	20	07/08/2019	JMK
Chrysene	EPA-8270 SIM	U	UG/KG	20	07/08/2019	JMK
Benzo[B]Fluoranthene	EPA-8270 SIM	U	UG/KG	20	07/08/2019	JMK
Benzo[K]Fluoranthene	EPA-8270 SIM	U	UG/KG	20	07/08/2019	JMK
Benzo[A]Pyrene	EPA-8270 SIM	U	UG/KG	20	07/08/2019	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	U	UG/KG	20	07/08/2019	JMK
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	UG/KG	20	07/08/2019	JMK
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	UG/KG	20	07/08/2019	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

MB-070519S - Batch 142816 - Soil by EPA-8082

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
PCB-1016	EPA-8082	U	MG/KG	0.10	07/08/2019	JMK
PCB-1260	EPA-8082	U	MG/KG	0.10	07/08/2019	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

MBLK-R341985 - Batch R341985 - Soil by EPA-7471

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Mercury	EPA-7471	U	MG/KG	0.020	07/03/2019	RAL

U - Analyte analyzed for but not detected at level above reporting limit.

MB-070319S - Batch 142742 - Soil by EPA-6020

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Arsenic	EPA-6020	U	MG/KG	0.20	07/03/2019	RAL

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	7/8/2019
		ALS SDG#:	EV19070012
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Dylan Frazer		
CLIENT PROJECT:	River's Edge - 1759001.020.026		

LABORATORY BLANK RESULTS

MB-070319S - Batch 142742 - Soil by EPA-6020

Cadmium	EPA-6020	U	MG/KG	0.10	07/03/2019	RAL
Chromium	EPA-6020	U	MG/KG	0.10	07/03/2019	RAL
Lead	EPA-6020	U	MG/KG	0.10	07/03/2019	RAL

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	7/8/2019
		ALS SDG#:	EV19070012
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Dylan Frazer		
CLIENT PROJECT:	River's Edge - 1759001.020.026		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 142818 - Soil by EPA-8270 SIM

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Naphthalene - BS	EPA-8270 SIM	**63.8**			20	150	07/08/2019	JMK
Naphthalene - BSD	EPA-8270 SIM	**71.5**	**11**		20	150	07/08/2019	JMK
2-Methylnaphthalene - BS	EPA-8270 SIM	**66.3**			20	150	07/08/2019	JMK
2-Methylnaphthalene - BSD	EPA-8270 SIM	**76.2**	**14**		20	150	07/08/2019	JMK
1-Methylnaphthalene - BS	EPA-8270 SIM	**65.8**			20	150	07/08/2019	JMK
1-Methylnaphthalene - BSD	EPA-8270 SIM	**76.0**	**14**		20	150	07/08/2019	JMK
Benzo[A]Anthracene - BS	EPA-8270 SIM	**58.0**			20	150	07/08/2019	JMK
Benzo[A]Anthracene - BSD	EPA-8270 SIM	**63.9**	**10**		20	150	07/08/2019	JMK
Chrysene - BS	EPA-8270 SIM	**66.1**			20	150	07/08/2019	JMK
Chrysene - BSD	EPA-8270 SIM	**70.6**	**7**		20	150	07/08/2019	JMK
Benzo[B]Fluoranthene - BS	EPA-8270 SIM	**64.0**			20	150	07/08/2019	JMK
Benzo[B]Fluoranthene - BSD	EPA-8270 SIM	**69.8**	**9**		20	150	07/08/2019	JMK
Benzo[K]Fluoranthene - BS	EPA-8270 SIM	**67.0**			20	150	07/08/2019	JMK
Benzo[K]Fluoranthene - BSD	EPA-8270 SIM	**72.6**	**8**		20	150	07/08/2019	JMK
Benzo[A]Pyrene - BS	EPA-8270 SIM	**67.3**			20	150	07/08/2019	JMK
Benzo[A]Pyrene - BSD	EPA-8270 SIM	**74.3**	**10**		20	150	07/08/2019	JMK
Indeno[1,2,3-Cd]Pyrene - BS	EPA-8270 SIM	**66.8**			20	150	07/08/2019	JMK
Indeno[1,2,3-Cd]Pyrene - BSD	EPA-8270 SIM	**73.1**	**9**		20	150	07/08/2019	JMK
Dibenz[A,H]Anthracene - BS	EPA-8270 SIM	**62.8**			20	150	07/08/2019	JMK
Dibenz[A,H]Anthracene - BSD	EPA-8270 SIM	**69.2**	**10**		20	150	07/08/2019	JMK
Benzo[G,H,I]Perylene - BS	EPA-8270 SIM	**70.4**			20	150	07/08/2019	JMK
Benzo[G,H,I]Perylene - BSD	EPA-8270 SIM	**77.1**	**9**		20	150	07/08/2019	JMK

ALS Test Batch ID: 142816 - Soil by EPA-8082

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
PCB-1016 - BS	EPA-8082	**86.9**			50	150	07/08/2019	JMK
PCB-1016 - BSD	EPA-8082	**83.2**	**4**		50	150	07/08/2019	JMK
PCB-1260 - BS	EPA-8082	**91.7**			50	150	07/08/2019	JMK
PCB-1260 - BSD	EPA-8082	**87.4**	**5**		50	150	07/08/2019	JMK

ALS Test Batch ID: R341985 - Soil by EPA-7471

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Mercury - BS	EPA-7471	**107**			81.8	117	07/03/2019	RAL
Mercury - BSD	EPA-7471	**109**	**2**		81.8	117	07/03/2019	RAL

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	7/8/2019
		ALS SDG#:	EV19070012
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Dylan Frazer		
CLIENT PROJECT:	River's Edge - 1759001.020.026		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 142742 - Soil by EPA-6020

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Arsenic - BS	EPA-6020	**102**			80	120	07/03/2019	RAL
Arsenic - BSD	EPA-6020	**103**	**0**		80	120	07/03/2019	RAL
Cadmium - BS	EPA-6020	**105**			80	120	07/03/2019	RAL
Cadmium - BSD	EPA-6020	**106**	**1**		80	120	07/03/2019	RAL
Chromium - BS	EPA-6020	**106**			80	120	07/03/2019	RAL
Chromium - BSD	EPA-6020	**105**	**0**		80	120	07/03/2019	RAL
Lead - BS	EPA-6020	**103**			80	120	07/03/2019	RAL
Lead - BSD	EPA-6020	**104**	**0**		80	120	07/03/2019	RAL

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS ENVIRONMENTAL

Sample Receiving Checklist

Client: Landau Associates ALS Job #: EV1907001 2

Project: River's Edge - 175900

Received Date: 7/2/19 Received Time: 12:35 By: SV

Type of shipping container: Cooler X Box ____ Other ____

Shipped via: FedEx Ground ____ UPS ____ Mail ____ Courier ____ Hand Delivered X
FedEx Express ____

	Yes	No	N/A
Were custody seals on outside of shipping container?	____	X	____
If yes, how many? ____ Where? ____			
Custody seal date: ____ Seal name: ____			
Was Chain of Custody properly filled out (ink, signed, dated, etc.)?	X	____	____
Did all bottles have labels?	X	____	____
Did all bottle labels and tags agree with Chain of Custody?	X	____	____
Were samples received within hold time?	X	____	____
Did all bottles arrive in good condition (unbroken, etc.)?	X	____	____
Was sufficient amount of sample sent for the tests indicated?	X	____	____
Was correct preservation added to samples?	X	____	____

If no, Sample Control added preservative to the following: Received 4 - 5035 Low kits

Sample Number	Reagent	Analyte

Were VOA vials checked for absence of air bubbles?	X	____	____
Bubbles present in sample #: Both trip blanks			

Temperature of cooler upon receipt: 14.3°C on ice Cold (Cool) Ambient N/A

Explain any discrepancies: ____

Was client contacted? ____ Who was called? ____ By whom? ____ Date: ____

Outcome of call: ____

EV1907012

Chain-of-Custody Record

LANDAU ASSOCIATES

☒ Seattle/Edmonds (425) 778-0907 ☐ Spokane (509) 327-9737
☐ Tacoma (253) 926-2493 ☐ Portland (503) 542-1080
☐ _____

Date 7/2/19
Page 1 of _____

Turnaround Time:
Standard _____
Accelerated 24hr TAT

Project Name River's Edge Project No. 1759001.020.026
Project Location/Event 426 Fremont St Monroe, WA
Sampler's Name B. McManus
Project Contact D. Frazer
Send Results To D. Frazer, K. Schultz, D. Jorgwen

Special Handling Requirements: _____
Shipment Method: _____
Stored on ice: (Yes) / No

	Sample I.D.	Date	Time	Matrix	No. of Containers	HCID	PAHs *	PCBs	MTCA 5 Metals							HOLD
1	B(5.5)	7/2/19	950	Soil	5	X	X	X	X							
2	SW1 (2.5-5.5)	7/2/19	1010	Soil	5	X	X	X	X							
3	SW2 (2.5-5.5)	7/2/19	1035	Soil	5	X	X	X	X							
4	SP2-1	7/2/19	1105	Soil	1	X										
5	SP2-2	7/2/19	1115	Soil	1	X										
6	SP2-3	7/2/19	1125	Soil	1	X										
7	SP2-4	7/2/19	1130	Soil	4											X
8	TripBlank070219	~~7/2/19~~		Water	2											X

Observations/Comments

☐ Allow water samples to settle, collect aliquot from clear portion
☐ NWTPH-Dx - Acid wash cleanup
☐ - Silica gel cleanup
☐ Dissolved metal samples were field filtered

Other * cPAHs + Naphthalenes

Relinquished by	Received by	Relinquished by	Received by
Signature	Signature	Signature	Signature
Printed Name Brittany McManus	Printed Name Rick Bagan	Printed Name	Printed Name
Company Landau Associates	Company ALS	Company	Company
Date 7/2/19 Time	Date 7-2-19 Time 12:35	Date Time	Date Time

WHITE COPY - Laboratory YELLOW COPY - Project File PINK COPY - Client Representative

10/2018

July 9, 2019

Mr. Dylan Frazer
Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

Dear Mr. Frazer,

On July 3rd, 9 samples were received by our laboratory and assigned our laboratory project number EV19070037. The project was identified as your River's Edge - 1759001.020.026. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/9/2019 EV19070037 EV19070037-01
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/03/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	7/3/2019 10:50:00 AM
CLIENT SAMPLE ID	BC-SW1 (0-3)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	07/09/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**310**	50	1	MG/KG	07/09/2019	EBS
Arsenic	EPA-6020	**6.3**	0.20	1	MG/KG	07/05/2019	RAL
Cadmium	EPA-6020	**0.68**	0.10	1	MG/KG	07/05/2019	RAL
Chromium	EPA-6020	**34**	0.10	1	MG/KG	07/05/2019	RAL
Lead	EPA-6020	**120**	0.10	1	MG/KG	07/05/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**108**	07/09/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/9/2019 EV19070037 EV19070037-02
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/03/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	7/3/2019 11:13:00 AM
CLIENT SAMPLE ID	BC-B1 (3.5)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	07/09/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	50	1	MG/KG	07/09/2019	EBS
Arsenic	EPA-6020	**13**	0.20	1	MG/KG	07/05/2019	RAL
Cadmium	EPA-6020	**0.15**	0.10	1	MG/KG	07/05/2019	RAL
Chromium	EPA-6020	**35**	0.10	1	MG/KG	07/05/2019	RAL
Lead	EPA-6020	**9.5**	0.10	1	MG/KG	07/05/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**103**	07/09/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/9/2019 EV19070037 EV19070037-03
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/03/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	7/3/2019 12:27:00 PM
CLIENT SAMPLE ID	BC-B2 (2.7)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	**94**	25	1	MG/KG	07/09/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**130**	50	1	MG/KG	07/09/2019	EBS
Arsenic	EPA-6020	**6.9**	0.20	1	MG/KG	07/05/2019	RAL
Cadmium	EPA-6020	**0.30**	0.10	1	MG/KG	07/05/2019	RAL
Chromium	EPA-6020	**32**	0.10	1	MG/KG	07/05/2019	RAL
Lead	EPA-6020	**46**	0.10	1	MG/KG	07/05/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**144 SUR12**	07/09/2019	EBS

SUR12 -Surrogate recoveries were outside of the control limits due to matrix interference.
Chromatogram indicates that it is likely that sample contains an unidentified diesel range product and lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/9/2019 EV19070037 EV19070037-04
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/03/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	7/3/2019 12:38:00 PM
CLIENT SAMPLE ID	BC-SW2 (0-2.5)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	**75**	25	1	MG/KG	07/09/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**290**	50	1	MG/KG	07/09/2019	EBS
Arsenic	EPA-6020	**7.2**	0.20	1	MG/KG	07/05/2019	RAL
Cadmium	EPA-6020	**0.91**	0.10	1	MG/KG	07/05/2019	RAL
Chromium	EPA-6020	**33**	0.10	1	MG/KG	07/05/2019	RAL
Lead	EPA-6020	**87**	0.10	1	MG/KG	07/05/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**105**	07/09/2019	EBS

Chromatogram indicates that it is likely that sample contains light oil/lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/9/2019 EV19070037 EV19070037-05
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/03/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	7/3/2019 12:50:00 PM
CLIENT SAMPLE ID	BC-SW3 (0-1.5)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	**660**	250	10	MG/KG	07/09/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**2200**	500	10	MG/KG	07/09/2019	EBS
Arsenic	EPA-6020	**5.7**	0.20	1	MG/KG	07/05/2019	RAL
Cadmium	EPA-6020	**0.48**	0.10	1	MG/KG	07/05/2019	RAL
Chromium	EPA-6020	**34**	0.10	1	MG/KG	07/05/2019	RAL
Lead	EPA-6020	**39**	0.10	1	MG/KG	07/05/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25 10X Dilution	NWTPH-DX	**98.2**	07/09/2019	EBS

Chromatogram indicates that it is likely that sample contains light oil/lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/9/2019 EV19070037 EV19070037-06
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/03/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	7/3/2019 12:58:00 PM
CLIENT SAMPLE ID	BC-B3 (2.5)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	**37**	25	1	MG/KG	07/09/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**130**	50	1	MG/KG	07/09/2019	EBS
Arsenic	EPA-6020	**8.0**	0.20	1	MG/KG	07/05/2019	RAL
Cadmium	EPA-6020	**0.38**	0.10	1	MG/KG	07/05/2019	RAL
Chromium	EPA-6020	**33**	0.10	1	MG/KG	07/05/2019	RAL
Lead	EPA-6020	**40**	0.10	1	MG/KG	07/05/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**126**	07/09/2019	EBS

Chromatogram indicates that it is likely that sample contains light oil/lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/9/2019 EV19070037 EV19070037-07
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/03/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	7/3/2019 1:16:00 PM
CLIENT SAMPLE ID	BC-SW4 (1.8-3.1)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	**38**	25	1	MG/KG	07/09/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**130**	50	1	MG/KG	07/09/2019	EBS
Arsenic	EPA-6020	**6.8**	0.20	1	MG/KG	07/05/2019	RAL
Cadmium	EPA-6020	**0.41**	0.10	1	MG/KG	07/05/2019	RAL
Chromium	EPA-6020	**32**	0.10	1	MG/KG	07/05/2019	RAL
Lead	EPA-6020	**46**	0.10	1	MG/KG	07/05/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**118**	07/09/2019	EBS

Chromatogram indicates that it is likely that sample contains light oil/lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/9/2019 EV19070037 EV19070037-08
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/03/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	7/3/2019 1:24:00 PM
CLIENT SAMPLE ID	BC-SW5 (0-2.8)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	**240**	50	2	MG/KG	07/09/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**760**	100	2	MG/KG	07/09/2019	EBS
Arsenic	EPA-6020	**4.4**	0.20	1	MG/KG	07/05/2019	RAL
Cadmium	EPA-6020	**0.67**	0.10	1	MG/KG	07/05/2019	RAL
Chromium	EPA-6020	**28**	0.10	1	MG/KG	07/05/2019	RAL
Lead	EPA-6020	**79**	0.10	1	MG/KG	07/05/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25 2X Dilution	NWTPH-DX	**116**	07/09/2019	EBS

Chromatogram indicates that it is likely that sample contains light oil/lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/9/2019 EV19070037 EV19070037-09
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/03/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	7/3/2019 1:39:00 PM
CLIENT SAMPLE ID	AOC1-B (15)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	07/09/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**99**	50	1	MG/KG	07/09/2019	EBS
Arsenic	EPA-6020	**5.4**	0.20	1	MG/KG	07/05/2019	RAL
Cadmium	EPA-6020	**0.24**	0.10	1	MG/KG	07/05/2019	RAL
Chromium	EPA-6020	**35**	0.10	1	MG/KG	07/05/2019	RAL
Lead	EPA-6020	**280**	0.10	1	MG/KG	07/05/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**99.1**	07/09/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	7/9/2019
		ALS SDG#:	EV19070037
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Dylan Frazer		
CLIENT PROJECT:	River's Edge - 1759001.020.026		

LABORATORY BLANK RESULTS

MB-070519S - Batch 142839 - Soil by NWTPH-DX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	MG/KG	25	07/09/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	MG/KG	50	07/09/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

MB-070519S - Batch 142778 - Soil by EPA-6020

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Arsenic	EPA-6020	U	MG/KG	0.20	07/05/2019	RAL
Cadmium	EPA-6020	U	MG/KG	0.10	07/05/2019	RAL
Chromium	EPA-6020	U	MG/KG	0.10	07/05/2019	RAL
Lead	EPA-6020	U	MG/KG	0.10	07/05/2019	RAL

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	7/9/2019
		ALS SDG#:	EV19070037
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Dylan Frazer		
CLIENT PROJECT:	River's Edge - 1759001.020.026		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 142839 - Soil by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24) - BS	NWTPH-DX	**95.8**			75.5	122.1	07/09/2019	EBS
TPH-Diesel Range (C12-C24) - BSD	NWTPH-DX	**98.8**	**3**		75.5	122.1	07/09/2019	EBS

ALS Test Batch ID: 142778 - Soil by EPA-6020

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Arsenic - BS	EPA-6020	**103**			80	120	07/05/2019	RAL
Arsenic - BSD	EPA-6020	**102**	**1**		80	120	07/05/2019	RAL
Cadmium - BS	EPA-6020	**107**			80	120	07/05/2019	RAL
Cadmium - BSD	EPA-6020	**106**	**0**		80	120	07/05/2019	RAL
Chromium - BS	EPA-6020	**106**			80	120	07/05/2019	RAL
Chromium - BSD	EPA-6020	**104**	**2**		80	120	07/05/2019	RAL
Lead - BS	EPA-6020	**104**			80	120	07/05/2019	RAL
Lead - BSD	EPA-6020	**102**	**1**		80	120	07/05/2019	RAL

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS ENVIRONMENTAL

Sample Receiving Checklist

Client: Landau Associates ALS Job #: EV1907 0037

Project: 1759061.020.026

Received Date: 7-3-19 Received Time: 1514 By: [signature]

Type of shipping container: Cooler ✓ Box ____ Other ____

Shipped via: FedEx Ground ____ UPS ____ Mail ____ Courier ✓ Hand Delivered ____
FedEx Express ____ ALS

	Yes	No	N/A
Were custody seals on outside of shipping container?	____	X	____
If yes, how many? ____ Where? ____			
Custody seal date: ____ Seal name: ____			
Was Chain of Custody properly filled out (ink, signed, dated, etc.)?	X	____	____
Did all bottles have labels?	X	____	____
Did all bottle labels and tags agree with Chain of Custody?	X	____	____
Were samples received within hold time?	X	____	____
Did all bottles arrive in good condition (unbroken, etc.)?	X	____	____
Was sufficient amount of sample sent for the tests indicated?	X	____	____
Was correct preservation added to samples?	____	____	✓

If no, Sample Control added preservative to the following:

Sample Number	Reagent	Analyte

Were VOA vials checked for absence of air bubbles?	____	____	X
Bubbles present in sample #: ____			

Temperature of cooler upon receipt: 13.6°C Cold (Cool) Ambient N/A
on ice

Explain any discrepancies: ____

Was client contacted? ____ Who was called? ____ By whom? ____ Date: ____

Outcome of call: ____

EV1907O037

Landau Associates — Chain-of-Custody Record

☒ Seattle/Edmonds (425) 778-0907 ☐ Spokane (509) 327-9737
☐ Tacoma (253) 926-2493 ☐ Portland (503) 542-1080
☐ _____

Date 7/3/19
Page 1 of 1

Turnaround Time:
Standard _____
Accelerated 24 hrs

Project Name River's Edge Project No. 1759001.020.026
Project Location/Event _____
Sampler's Name B. McManus
Project Contact D. Frazer
Send Results To D. Frazer, K. Shultz, D. Jorgensen

Special Handling Requirements: _____
Shipment Method: _____
Stored on ice: (Yes) / No

	Sample I.D.	Date	Time	Matrix	No. of Containers	Testing Parameters: NWTPH-Dx	Testing Parameters: 6020 *	Observations/Comments
1	BC-SW1 (0-3)	7/3/19	1050	Soil	1	X	X	
2	BC-B1 (3.5)	7/3/19	1113	Soil	1	X	X	
3	BC-B2 (2.7)	7/3/19	1227	Soil	1	X	X	
4	BC-SW2 (0-2.5)	7/3/19	1238	Soil	1	X	X	
5	BC-SW3 (0-1.5)	7/3/19	1250	Soil	1	X	X	
6	BC-B3 (2.5)	7/3/19	1258	Soil	1	X	X	
7	BC-SW4 (1.8-3.1)	7/3/19	1316	Soil	1	X	X	
8	BC-SW5 (0-2.8)	7/3/19	1324	Soil	1	X	X	
9	AOC1-B (15)	7/3/19	1339	Soil	1	X	X	

☐ Allow water samples to settle, collect aliquot from clear portion ☐
☐ NWTPH-Dx - Acid wash cleanup ☐
- Silica gel cleanup ☐
☐ Dissolved metal samples were field filtered

Other
* Metals [arsenic, chromium, cadmium, and lead]

Relinquished by	Received by	Relinquished by	Received by
Signature [signature]	Signature [signature]	Signature	Signature
Printed Name Brittany McManus	Printed Name Rick Bagan	Printed Name	Printed Name
Company Landau Associates	Company RLS	Company	Company
Date 7/3/19 Time 2:34	Date 7-3-19 Time 2:30	Date Time	Date Time

WHITE COPY - Laboratory YELLOW COPY - Project File PINK COPY - Client Representative

10/2018

July 12, 2019

Mr. Dylan Frazer
Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

Dear Mr. Frazer,

On July 11th, 4 samples were received by our laboratory and assigned our laboratory project number EV19070072. The project was identified as your River's Edge - 1759001.020.026. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/12/2019 EV19070072 EV19070072-01
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/11/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	7/11/2019 8:55:00 AM
CLIENT SAMPLE ID	RT-B (7.5)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	07/11/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	50	1	MG/KG	07/11/2019	EBS
Naphthalene	EPA-8270 SIM	U	20	1	UG/KG	07/11/2019	JMK
2-Methylnaphthalene	EPA-8270 SIM	U	20	1	UG/KG	07/11/2019	JMK
1-Methylnaphthalene	EPA-8270 SIM	U	20	1	UG/KG	07/11/2019	JMK
Benzo[A]Anthracene	EPA-8270 SIM	U	20	1	UG/KG	07/11/2019	JMK
Chrysene	EPA-8270 SIM	U	20	1	UG/KG	07/11/2019	JMK
Benzo[B]Fluoranthene	EPA-8270 SIM	U	20	1	UG/KG	07/11/2019	JMK
Benzo[K]Fluoranthene	EPA-8270 SIM	U	20	1	UG/KG	07/11/2019	JMK
Benzo[A]Pyrene	EPA-8270 SIM	U	20	1	UG/KG	07/11/2019	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	U	20	1	UG/KG	07/11/2019	JMK
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	20	1	UG/KG	07/11/2019	JMK
PCB-1016	EPA-8082	U	0.10	1	MG/KG	07/11/2019	JMK
PCB-1221	EPA-8082	U	0.10	1	MG/KG	07/11/2019	JMK
PCB-1232	EPA-8082	U	0.10	1	MG/KG	07/11/2019	JMK
PCB-1242	EPA-8082	U	0.10	1	MG/KG	07/11/2019	JMK
PCB-1248	EPA-8082	U	0.10	1	MG/KG	07/11/2019	JMK
PCB-1254	EPA-8082	U	0.10	1	MG/KG	07/11/2019	JMK
PCB-1260	EPA-8082	U	0.10	1	MG/KG	07/11/2019	JMK
PCB-1268	EPA-8082	U	0.10	1	MG/KG	07/11/2019	JMK
Mercury	EPA-7471	**0.062**	0.020	1	MG/KG	07/11/2019	RAL
Arsenic	EPA-6020	**3.5**	0.20	1	MG/KG	07/11/2019	RAL
Cadmium	EPA-6020	U	0.10	1	MG/KG	07/11/2019	RAL
Chromium	EPA-6020	**44**	0.10	1	MG/KG	07/11/2019	RAL
Lead	EPA-6020	**3.5**	0.10	1	MG/KG	07/11/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**88.8**	07/11/2019	EBS
Terphenyl-d14	EPA-8270 SIM	**89.1**	07/11/2019	JMK
TCMX	EPA-8082	**87.8**	07/11/2019	JMK
DCB	EPA-8082	**80.6**	07/11/2019	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/12/2019 EV19070072 EV19070072-02
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/11/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	7/11/2019 9:55:00 AM
CLIENT SAMPLE ID	BC-SW7 (4.0)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	07/11/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	50	1	MG/KG	07/11/2019	EBS
Arsenic	EPA-6020	**4.5**	0.20	1	MG/KG	07/11/2019	RAL
Cadmium	EPA-6020	U	0.10	1	MG/KG	07/11/2019	RAL
Chromium	EPA-6020	**32**	0.10	1	MG/KG	07/11/2019	RAL
Lead	EPA-6020	**4.8**	0.10	1	MG/KG	07/11/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**79.9**	07/11/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/12/2019 EV19070072 EV19070072-03
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/11/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	7/11/2019 9:25:00 AM
CLIENT SAMPLE ID	BC-SW6 (4.0)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	07/11/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	50	1	MG/KG	07/11/2019	EBS
Arsenic	EPA-6020	**4.7**	0.20	1	MG/KG	07/11/2019	RAL
Cadmium	EPA-6020	U	0.10	1	MG/KG	07/11/2019	RAL
Chromium	EPA-6020	**57**	0.10	1	MG/KG	07/11/2019	RAL
Lead	EPA-6020	**2.9**	0.10	1	MG/KG	07/11/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**84.7**	07/11/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/12/2019 EV19070072 EV19070072-04
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/11/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	7/11/2019 11:11:00 AM
CLIENT SAMPLE ID	Stockpile-1-071119	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	**280**	25	1	MG/KG	07/11/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**870**	50	1	MG/KG	07/11/2019	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**102**	07/11/2019	EBS

Chromatogram indicates that it is likely that sample contains light oil/lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020
CLIENT CONTACT: Dylan Frazer
CLIENT PROJECT: River's Edge - 1759001.020.026

DATE: 7/12/2019
ALS SDG#: EV19070072
WDOE ACCREDITATION: C601

LABORATORY BLANK RESULTS

MB-071119S - Batch 142954 - Soil by NWTPH-DX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	MG/KG	25	07/11/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	MG/KG	50	07/11/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

MB-071119S - Batch 142986 - Soil by EPA-8270 SIM

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Naphthalene	EPA-8270 SIM	U	UG/KG	20	07/11/2019	JMK
2-Methylnaphthalene	EPA-8270 SIM	U	UG/KG	20	07/11/2019	JMK
1-Methylnaphthalene	EPA-8270 SIM	U	UG/KG	20	07/11/2019	JMK
Benzo[A]Anthracene	EPA-8270 SIM	U	UG/KG	20	07/11/2019	JMK
Chrysene	EPA-8270 SIM	U	UG/KG	20	07/11/2019	JMK
Benzo[B]Fluoranthene	EPA-8270 SIM	U	UG/KG	20	07/11/2019	JMK
Benzo[K]Fluoranthene	EPA-8270 SIM	U	UG/KG	20	07/11/2019	JMK
Benzo[A]Pyrene	EPA-8270 SIM	U	UG/KG	20	07/11/2019	JMK
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	U	UG/KG	20	07/11/2019	JMK
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	UG/KG	20	07/11/2019	JMK
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	UG/KG	20	07/11/2019	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

MB-071119S - Batch 142949 - Soil by EPA-8082

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
PCB-1016	EPA-8082	U	MG/KG	0.10	07/11/2019	JMK
PCB-1221	EPA-8082	U	MG/KG	0.10	07/11/2019	JMK
PCB-1232	EPA-8082	U	MG/KG	0.10	07/11/2019	JMK
PCB-1242	EPA-8082	U	MG/KG	0.10	07/11/2019	JMK
PCB-1248	EPA-8082	U	MG/KG	0.10	07/11/2019	JMK
PCB-1254	EPA-8082	U	MG/KG	0.10	07/11/2019	JMK
PCB-1260	EPA-8082	U	MG/KG	0.10	07/11/2019	JMK
PCB-1268	EPA-8082	U	MG/KG	0.10	07/11/2019	JMK

U - Analyte analyzed for but not detected at level above reporting limit.

MBLK-R342296 - Batch R342296 - Soil by EPA-7471

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Mercury	EPA-7471	U	MG/KG	0.020	07/11/2019	RAL

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS SDG#: WDOE ACCREDITATION:	7/12/2019 EV19070072 C601
CLIENT CONTACT:	Dylan Frazer		
CLIENT PROJECT:	River's Edge - 1759001.020.026		

LABORATORY BLANK RESULTS

MBLK-R342296 - Batch R342296 - Soil by EPA-7471

U - Analyte analyzed for but not detected at level above reporting limit.

MB-071119S - Batch 142970 - Soil by EPA-6020

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Arsenic	EPA-6020	U	MG/KG	0.20	07/11/2019	RAL
Cadmium	EPA-6020	U	MG/KG	0.10	07/11/2019	RAL
Chromium	EPA-6020	U	MG/KG	0.10	07/11/2019	RAL
Lead	EPA-6020	U	MG/KG	0.10	07/11/2019	RAL

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020
CLIENT CONTACT: Dylan Frazer
CLIENT PROJECT: River's Edge - 1759001.020.026

DATE: 7/12/2019
ALS SDG#: EV19070072
WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 142954 - Soil by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24) - BS	NWTPH-DX	**100**			75.5	122.1	07/11/2019	EBS
TPH-Diesel Range (C12-C24) - BSD	NWTPH-DX	**88.5**	**12**		75.5	122.1	07/11/2019	EBS

ALS Test Batch ID: 142986 - Soil by EPA-8270 SIM

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Naphthalene - BS	EPA-8270 SIM	**84.2**			20	150	07/11/2019	JMK
Naphthalene - BSD	EPA-8270 SIM	**95.7**	**13**		20	150	07/11/2019	JMK
2-Methylnaphthalene - BS	EPA-8270 SIM	**84.6**			20	150	07/11/2019	JMK
2-Methylnaphthalene - BSD	EPA-8270 SIM	**101**	**18**		20	150	07/11/2019	JMK
1-Methylnaphthalene - BS	EPA-8270 SIM	**83.6**			20	150	07/11/2019	JMK
1-Methylnaphthalene - BSD	EPA-8270 SIM	**100**	**18**		20	150	07/11/2019	JMK
Benzo[A]Anthracene - BS	EPA-8270 SIM	**69.7**			20	150	07/11/2019	JMK
Benzo[A]Anthracene - BSD	EPA-8270 SIM	**95.2**	**31**		20	150	07/11/2019	JMK
Chrysene - BS	EPA-8270 SIM	**89.4**			20	150	07/11/2019	JMK
Chrysene - BSD	EPA-8270 SIM	**113**	**23**		20	150	07/11/2019	JMK
Benzo[B]Fluoranthene - BS	EPA-8270 SIM	**86.5**			20	150	07/11/2019	JMK
Benzo[B]Fluoranthene - BSD	EPA-8270 SIM	**114**	**27**		20	150	07/11/2019	JMK
Benzo[K]Fluoranthene - BS	EPA-8270 SIM	**97.7**			20	150	07/11/2019	JMK
Benzo[K]Fluoranthene - BSD	EPA-8270 SIM	**120**	**20**		20	150	07/11/2019	JMK
Benzo[A]Pyrene - BS	EPA-8270 SIM	**90.1**			20	150	07/11/2019	JMK
Benzo[A]Pyrene - BSD	EPA-8270 SIM	**128**	**35**		20	150	07/11/2019	JMK
Indeno[1,2,3-Cd]Pyrene - BS	EPA-8270 SIM	**95.9**			20	150	07/11/2019	JMK
Indeno[1,2,3-Cd]Pyrene - BSD	EPA-8270 SIM	**123**	**25**		20	150	07/11/2019	JMK
Dibenz[A,H]Anthracene - BS	EPA-8270 SIM	**86.0**			20	150	07/11/2019	JMK
Dibenz[A,H]Anthracene - BSD	EPA-8270 SIM	**114**	**28**		20	150	07/11/2019	JMK
Benzo[G,H,I]Perylene - BS	EPA-8270 SIM	**109**			20	150	07/11/2019	JMK
Benzo[G,H,I]Perylene - BSD	EPA-8270 SIM	**137**	**23**		20	150	07/11/2019	JMK

ALS Test Batch ID: 142949 - Soil by EPA-8082

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
PCB-1016 - BS	EPA-8082	**104**			50	150	07/11/2019	JMK
PCB-1016 - BSD	EPA-8082	**111**	**7**		50	150	07/11/2019	JMK
PCB-1260 - BS	EPA-8082	**112**			50	150	07/11/2019	JMK
PCB-1260 - BSD	EPA-8082	**121**	**8**		50	150	07/11/2019	JMK

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020
CLIENT CONTACT: Dylan Frazer
CLIENT PROJECT: River's Edge - 1759001.020.026

DATE: 7/12/2019
ALS SDG#: EV19070072
WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: R342296 - Soil by EPA-7471

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Mercury - BS	EPA-7471	**109**			81.8	117	07/11/2019	RAL
Mercury - BSD	EPA-7471	**109**	**0**		81.8	117	07/11/2019	RAL

ALS Test Batch ID: 142970 - Soil by EPA-6020

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Arsenic - BS	EPA-6020	**103**			80	120	07/11/2019	RAL
Arsenic - BSD	EPA-6020	**102**	**1**		80	120	07/11/2019	RAL
Cadmium - BS	EPA-6020	**109**			80	120	07/11/2019	RAL
Cadmium - BSD	EPA-6020	**108**	**1**		80	120	07/11/2019	RAL
Chromium - BS	EPA-6020	**100**			80	120	07/11/2019	RAL
Chromium - BSD	EPA-6020	**99.6**	**1**		80	120	07/11/2019	RAL
Lead - BS	EPA-6020	**99.4**			80	120	07/11/2019	RAL
Lead - BSD	EPA-6020	**100**	**1**		80	120	07/11/2019	RAL

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

EV1907007 2

Chain-of-Custody Record

LANDAU ASSOCIATES

☒ Seattle/Edmonds (425) 778-0907 ☐ Spokane (509) 327-9737
☐ Tacoma (253) 926-2493 ☐ Portland (503) 542-1080
☐ _____

Date 7/11/19
Page 1 of 1

Turnaround Time:
Standard _____
(Accelerated) 24-HR

Project Name RIVER'S EDGE Project No. 1759001.020.026
Project Location/Event MONROE, WA / CPRD / AUST TANK FOLLOW UP
Sampler's Name KEN BROWN
Project Contact D FRAZER
Send Results To D FRAZER, K SCHULTZ, D JOHNSON

Special Handling Requirements:
ON ICE
Shipment Method: _____
Stored on ice: Yes / No

Sample I.D.	Date	Time	Matrix	No. of Containers	TPH-D/D (NWTPH-Dx)	PAHs * (8270 SIM)	BCBs (8082)	MTCA 5 METALS	As, Cd, Cr, Pb only	Observations/Comments
RT-B (7.5)	7/11/19	0955	SOIL	2	X	X	X	X		
BC-SW7 (1.0)	7/11/19	0955	↓	1	X				X	
BC-SW6 (2.0)	7/11/19	0925	↓	1	X				X	
STOCKPILE-1-071119	7/11/19	11.11	SOIL	1	X					

Testing Parameters

__ Allow water samples to settle, collect aliquot from clear portion ☐

__ NWTPH-Dx - Acid wash cleanup ☐
- Silica gel cleanup ☐

__ Dissolved metal samples were field filtered

Other
* cPAH + NAPHTHALENES

Relinquished by	Received by	Relinquished by	Received by
Signature	Signature	Signature	Signature
Printed Name KEN BROWN	Printed Name R. A. Bayn	Printed Name	Printed Name
Company LANDAU	Company ALS	Company	Company
Date 7-11-19 Time 12:05	Date 7/11/19 Time 1205	Date Time	Date Time

WHITE COPY - Laboratory YELLOW COPY - Project File PINK COPY - Client Representative

10/2018

ALS ENVIRONMENTAL

Sample Receiving Checklist

Client: Landau Associates ALS Job #: EV1907 0072

Project: Rivers Edge

Received Date: 7/11/19 Received Time: 12:05 By: RB

Type of shipping container: Cooler X Box ____ Other ____

Shipped via: FedEx Ground ____ UPS ____ Mail ____ Courier ____ Hand Delivered X
FedEx Express ____

	Yes	No	N/A
Were custody seals on outside of shipping container?	____	X	____
If yes, how many? ____ Where? ____			
Custody seal date: ____ Seal name: ____			
Was Chain of Custody properly filled out (ink, signed, dated, etc.)?	X	____	____
Did all bottles have labels?	X	____	____
Did all bottle labels and tags agree with Chain of Custody?	X	____	____
Were samples received within hold time?	X	____	____
Did all bottles arrive in good condition (unbroken, etc.)?	X	____	____
Was sufficient amount of sample sent for the tests indicated?	X	____	____
Was correct preservation added to samples?	____	____	X

If no, Sample Control added preservative to the following:

Sample Number	Reagent	Analyte

Were VOA vials checked for absence of air bubbles?	____	____	____
Bubbles present in sample #: ____			

Temperature of cooler upon receipt: 12.9°C on Ice Cold (Cool) Ambient N/A

Explain any discrepancies: ____

Was client contacted? ____ Who was called? ____ By whom? ____ Date: ____

Outcome of call: ____

July 16, 2019

Mr. Dylan Frazer
Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

Dear Mr. Frazer,

On July 11th, 4 samples were received by our laboratory and assigned our laboratory project number EV19070080. The project was identified as your River's Edge - 1759001.020.026. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/16/2019 EV19070080 EV19070080-01
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/11/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	7/11/2019 1:30:00 PM
CLIENT SAMPLE ID	AOC1-SP-071119	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	**420**	50	2	MG/KG	07/11/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**1200**	100	2	MG/KG	07/11/2019	EBS
Arsenic	EPA-6020	**11**	0.20	1	MG/KG	07/15/2019	RAL
Cadmium	EPA-6020	**1.9**	0.10	1	MG/KG	07/15/2019	RAL
Chromium	EPA-6020	**45**	0.10	1	MG/KG	07/15/2019	RAL
Lead	EPA-6020	**230**	0.10	1	MG/KG	07/15/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25 2X Dilution	NWTPH-DX	**104**	07/11/2019	EBS

Chromatogram indicates that it is likely that sample contains light oil/lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/16/2019 EV19070080 EV19070080-02
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/11/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	7/11/2019 3:10:00 PM
CLIENT SAMPLE ID	AOC1-SW20 (9.5 071119)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	**63**	25	1	MG/KG	07/11/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**330**	50	1	MG/KG	07/11/2019	EBS
Arsenic	EPA-6020	**6.7**	0.20	1	MG/KG	07/15/2019	RAL
Cadmium	EPA-6020	**1.8**	0.10	1	MG/KG	07/15/2019	RAL
Chromium	EPA-6020	**35**	0.10	1	MG/KG	07/15/2019	RAL
Lead	EPA-6020	**110**	0.10	1	MG/KG	07/15/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**85.7**	07/11/2019	EBS

Chromatogram indicates that it is likely that sample contains light oil/lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/16/2019 EV19070080 EV19070080-03
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/11/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	7/11/2019 3:25:00 PM
CLIENT SAMPLE ID	AOC1-SW21 (9.5 071119)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	**55**	50	2	MG/KG	07/11/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**440**	100	2	MG/KG	07/11/2019	EBS
Arsenic	EPA-6020	**5.2**	0.20	1	MG/KG	07/15/2019	RAL
Cadmium	EPA-6020	**0.25**	0.10	1	MG/KG	07/15/2019	RAL
Chromium	EPA-6020	**32**	0.10	1	MG/KG	07/15/2019	RAL
Lead	EPA-6020	**52**	0.10	1	MG/KG	07/15/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25 2X Dilution	NWTPH-DX	**87.1**	07/11/2019	EBS

Chromatogram indicates that it is likely that sample contains light oil/lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/16/2019 EV19070080 EV19070080-04
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/11/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	7/11/2019 3:40:00 PM
CLIENT SAMPLE ID	AOC1-SW22 (9.5 071119)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	07/11/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**140**	50	1	MG/KG	07/11/2019	EBS
Arsenic	EPA-6020	**5.5**	0.20	1	MG/KG	07/15/2019	RAL
Cadmium	EPA-6020	**0.63**	0.10	1	MG/KG	07/15/2019	RAL
Chromium	EPA-6020	**37**	0.10	1	MG/KG	07/15/2019	RAL
Lead	EPA-6020	**57**	0.10	1	MG/KG	07/15/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**88.2**	07/11/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	7/16/2019
		ALS SDG#:	EV19070080
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Dylan Frazer		
CLIENT PROJECT:	River's Edge - 1759001.020.026		

LABORATORY BLANK RESULTS

MB-071119S - Batch 142954 - Soil by NWTPH-DX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	MG/KG	25	07/11/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	MG/KG	50	07/11/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

MB-071519S - Batch 143035 - Soil by EPA-6020

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Arsenic	EPA-6020	U	MG/KG	0.20	07/15/2019	RAL
Cadmium	EPA-6020	U	MG/KG	0.10	07/15/2019	RAL
Chromium	EPA-6020	U	MG/KG	0.10	07/15/2019	RAL
Lead	EPA-6020	U	MG/KG	0.10	07/15/2019	RAL

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020
CLIENT CONTACT: Dylan Frazer
CLIENT PROJECT: River's Edge - 1759001.020.026

DATE: 7/16/2019
ALS SDG#: EV19070080
WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 142954 - Soil by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24) - BS	NWTPH-DX	**100**			75.5	122.1	07/11/2019	EBS
TPH-Diesel Range (C12-C24) - BSD	NWTPH-DX	**88.5**	**12**		75.5	122.1	07/11/2019	EBS

ALS Test Batch ID: 143035 - Soil by EPA-6020

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Arsenic - BS	EPA-6020	**104**			80	120	07/15/2019	RAL
Arsenic - BSD	EPA-6020	**105**	**0**		80	120	07/15/2019	RAL
Cadmium - BS	EPA-6020	**109**			80	120	07/15/2019	RAL
Cadmium - BSD	EPA-6020	**110**	**1**		80	120	07/15/2019	RAL
Chromium - BS	EPA-6020	**103**			80	120	07/15/2019	RAL
Chromium - BSD	EPA-6020	**104**	**0**		80	120	07/15/2019	RAL
Lead - BS	EPA-6020	**105**			80	120	07/15/2019	RAL
Lead - BSD	EPA-6020	**104**	**1**		80	120	07/15/2019	RAL

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental
8620 Holly Drive, Suite 100
Everett, WA 98208
Phone (425) 356-2600
Fax (425) 356-2626
http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only): EV1907 0080

175 4007.020.026 Rivers Edge

Date 7/11/19 Page 1 Of

PROJECT ID: ~~175 4007.020.026~~
REPORT TO COMPANY: LAI
PROJECT MANAGER: D. FRAZER
ADDRESS: Project location/AOC1 STORM EXCAVATION
PHONE: P.O. #:
E-MAIL:
INVOICE TO COMPANY:
ATTENTION:
ADDRESS:

ANALYSIS REQUESTED

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-Dx (cPH-D/O)	NWTPH-GX	BTEX by EPA 8021 ☐	BTEX by EPA 8260 ☐	MTBE by EPA 8021 ☐	MTBE by EPA 8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM	PCB by EPA 8082 ☐	Pesticides by EPA 8081 ☐	Metals-MTCA-5 ☐	RCRA-8 ☐	Pri Pol ☐	TAL ☐	Metals Other (Specify) (PAS, cD, CR, Pb)	TCLP-Metals ☐	VOA ☐	Semi-Vol ☐	Pest ☐	Herbs ☐	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. AOC1 - SP-0711R	7-11-19	13.30	soil	1		X																		X						1	
2. ~~AOC1-B(C)-0711R~~	~~7-11-19~~		~~soil~~			X																		X						1	
3. AOC1-SW20(9.5)0711R	7-11-19	15:10	soil	2		X																		X						1	
4. AOC1-SW21(9.5)0711R	7/11/19	15:25	soil	3		X																		X						1	
5. AOC1-SW22(9.5)0711R	7/11/19	15:40	soil	4		X																		X						1	
6.																															
7.																															
8.																															
9.																															
10.																															

OTHER (Specify)

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: LAI - 7-11-19 - 4:05
   Received By: ALS 7/11/19 4:05
2. Relinquished By:
   Received By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis (metals)

10 Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis

5 Standard | 3 | 2 | SAME DAY

OTHER:

Specify: ASAP

*Turnaround request less than standard may incur Rush Charges

ALS ENVIRONMENTAL

Sample Receiving Checklist

Client: Landau Associates ALS Job #: EV1907 0080

Project: Rivers Edge

Received Date: 7/11/19 Received Time: 4:00 By: RB

Type of shipping container: Cooler X Box ____ Other ____

Shipped via: FedEx Ground ____ UPS ____ Mail ____ Courier ____ Hand Delivered X
FedEx Express ____

	Yes	No	N/A
Were custody seals on outside of shipping container?	____	X	____
If yes, how many? ____ Where? ____			
Custody seal date: ____ Seal name: ____			
Was Chain of Custody properly filled out (ink, signed, dated, etc.)?	X	____	____
Did all bottles have labels?	X	____	____
Did all bottle labels and tags agree with Chain of Custody?	X	____	____
Were samples received within hold time?	X	____	____
Did all bottles arrive in good condition (unbroken, etc.)?	X	____	____
Was sufficient amount of sample sent for the tests indicated?	X	____	____
Was correct preservation added to samples?	____	____	X

If no, Sample Control added preservative to the following:

Sample Number	Reagent	Analyte

Were VOA vials checked for absence of air bubbles?	____	____	X
Bubbles present in sample #: ____			

Temperature of cooler upon receipt: 19.6°C on Ice Cold Cool (Ambient) N/A

Explain any discrepancies: ____

Was client contacted? ____ Who was called? ____ By whom? ____ Date: ____

Outcome of call: ____

July 17, 2019

Mr. Dylan Frazer
Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

Dear Mr. Frazer,

On July 16th, 3 samples were received by our laboratory and assigned our laboratory project number EV19070107. The project was identified as your River's Edge - 1759001.020.026. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/17/2019 EV19070107 EV19070107-01
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/16/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	7/16/2019 9:20:00 AM
CLIENT SAMPLE ID	SP3-3	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	50	2	MG/KG	07/17/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**680**	100	2	MG/KG	07/17/2019	EBS
Arsenic	EPA-6020	**6.1**	0.20	1	MG/KG	07/17/2019	RAL
Cadmium	EPA-6020	**0.56**	0.10	1	MG/KG	07/17/2019	RAL
Chromium	EPA-6020	**37**	0.10	1	MG/KG	07/17/2019	RAL
Lead	EPA-6020	**110**	0.10	1	MG/KG	07/17/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25 2X Dilution	NWTPH-DX	**108**	07/17/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/17/2019 EV19070107 EV19070107-02
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/16/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	7/16/2019 9:10:00 AM
CLIENT SAMPLE ID	SP3-2	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	50	2	MG/KG	07/17/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**860**	100	2	MG/KG	07/17/2019	EBS
Arsenic	EPA-6020	**7.5**	0.20	1	MG/KG	07/17/2019	RAL
Cadmium	EPA-6020	**1.4**	0.10	1	MG/KG	07/17/2019	RAL
Chromium	EPA-6020	**40**	0.10	1	MG/KG	07/17/2019	RAL
Lead	EPA-6020	**230**	0.10	1	MG/KG	07/17/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25 2X Dilution	NWTPH-DX	**103**	07/17/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/17/2019 EV19070107 EV19070107-03
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/16/2019
CLIENT PROJECT:	River's Edge - 1759001.020.026	COLLECTION DATE:	7/16/2019 9:00:00 AM
CLIENT SAMPLE ID	SP3-1	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	07/17/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**310**	50	1	MG/KG	07/17/2019	EBS
Arsenic	EPA-6020	**6.5**	0.20	1	MG/KG	07/17/2019	RAL
Cadmium	EPA-6020	**0.79**	0.10	1	MG/KG	07/17/2019	RAL
Chromium	EPA-6020	**39**	0.10	1	MG/KG	07/17/2019	RAL
Lead	EPA-6020	**110**	0.10	1	MG/KG	07/17/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**105**	07/17/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	7/17/2019
		ALS SDG#:	EV19070107
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Dylan Frazer		
CLIENT PROJECT:	River's Edge - 1759001.020.026		

LABORATORY BLANK RESULTS

MB-071619S2 - Batch 143107 - Soil by NWTPH-DX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	MG/KG	25	07/16/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	MG/KG	50	07/16/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

MB-071719S - Batch 143106 - Soil by EPA-6020

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Arsenic	EPA-6020	U	MG/KG	0.20	07/17/2019	RAL
Cadmium	EPA-6020	U	MG/KG	0.10	07/17/2019	RAL
Chromium	EPA-6020	U	MG/KG	0.10	07/17/2019	RAL
Lead	EPA-6020	U	MG/KG	0.10	07/17/2019	RAL

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	7/17/2019
		ALS SDG#:	EV19070107
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Dylan Frazer		
CLIENT PROJECT:	River's Edge - 1759001.020.026		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 143107 - Soil by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24) - BS	NWTPH-DX	**106**			75.5	122.1	07/16/2019	EBS
TPH-Diesel Range (C12-C24) - BSD	NWTPH-DX	**96.6**	**9**		75.5	122.1	07/16/2019	EBS

ALS Test Batch ID: 143106 - Soil by EPA-6020

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Arsenic - BS	EPA-6020	**106**			80	120	07/17/2019	RAL
Arsenic - BSD	EPA-6020	**106**	**0**		80	120	07/17/2019	RAL
Cadmium - BS	EPA-6020	**111**			80	120	07/17/2019	RAL
Cadmium - BSD	EPA-6020	**112**	**1**		80	120	07/17/2019	RAL
Chromium - BS	EPA-6020	**105**			80	120	07/17/2019	RAL
Chromium - BSD	EPA-6020	**105**	**0**		80	120	07/17/2019	RAL
Lead - BS	EPA-6020	**107**			80	120	07/17/2019	RAL
Lead - BSD	EPA-6020	**106**	**1**		80	120	07/17/2019	RAL

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS ENVIRONMENTAL

Sample Receiving Checklist

Client: Landau Associates ALS Job #: EV1907007

Project: River's Edge - 175901.020.026

Received Date: 7/16/19 Received Time: 12:25pm By: S

Type of shipping container: Cooler X Box ____ Other ____

Shipped via: FedEx Ground ____ UPS ____ Mail ____ Courier ____ Hand Delivered X
FedEx Express ____

	Yes	No	N/A
Were custody seals on outside of shipping container?	____	X	____
If yes, how many? ____ Where? ____			
Custody seal date: ____ Seal name: ____			
Was Chain of Custody properly filled out (ink, signed, dated, etc.)?	X	____	____
Did all bottles have labels?	X	____	____
Did all bottle labels and tags agree with Chain of Custody?	X	____	____
Were samples received within hold time?	X	____	____
Did all bottles arrive in good condition (unbroken, etc.)?	X	____	____
Was sufficient amount of sample sent for the tests indicated?	X	____	____
Was correct preservation added to samples?	____	____	X

If no, Sample Control added preservative to the following:

Sample Number	Reagent	Analyte

Were VOA vials checked for absence of air bubbles?	____	____	X
Bubbles present in sample #: ____			

Temperature of cooler upon receipt: 10.0°C on ice (Cold) Cool Ambient N/A

Explain any discrepancies: ____

Was client contacted? ____ Who was called? ____ By whom? ____ Date: ____

Outcome of call: ____

EV1907017

Chain-of-Custody Record

LANDAU ASSOCIATES

☒ Seattle/Edmonds (425) 778-0907 ☐ Spokane (509) 327-9737
☐ Tacoma (253) 926-2493 ☐ Portland (503) 542-1080
☐ _____

Date 7/16/19
Page 1 of 1

Turnaround Time:
Standard _____
Accelerated 24 hr.

Project Name River's Edge Project No. 1759001.020.026
Project Location/Event 426 Fremont St. Monroe, WA
Sampler's Name BXM
Project Contact D. Frazer
Send Results To D. Frazer, K. Schultz, D. Jorgensen

Special Handling Requirements: _____
Shipment Method: _____
Stored on ice: (Yes) / No

	Sample I.D.	Date	Time	Matrix	No. of Containers	Testing Parameters: TPH-D/O [NWTPH-Dx]	Testing Parameters: 6020*	Observations/Comments
1	~~SB~~ SP3-3	7/16/19	920	Soil	1	X	X	
2	SP3-2	7/16/19	910	Soil	1	X	X	
3	SP3-1	7/16/19	900	Soil	1	X	X	

Observations/Comments:
- ___ Allow water samples to settle, collect aliquot from clear portion ☐
- ___ NWTPH-Dx - Acid wash cleanup ☐
  - Silica gel cleanup ☐
- ___ Dissolved metal samples were field filtered

Other
* Metals [arsenic, Chromium, Cadmium, and Lead]

Relinquished by	Received by	Relinquished by	Received by
Signature B. McManus	Signature R. Bagan	Signature	Signature
Printed Name B. McManus	Printed Name R. Bagan	Printed Name	Printed Name
Company Landau Associates, Inc.	Company ALS	Company	Company
Date 7/16/19 Time 1225	Date 7-16-19 Time 12:25	Date Time	Date Time

WHITE COPY - Laboratory YELLOW COPY - Project File PINK COPY - Client Representative

10/2018

July 26, 2019

Mr. Dylan Frazer
Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

Dear Mr. Frazer,

On July 25th, 5 samples were received by our laboratory and assigned our laboratory project number EV19070176. The project was identified as your River's Edge - 1759001.030.015. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/26/2019 EV19070176 EV19070176-01
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/25/2019
CLIENT PROJECT:	River's Edge - 1759001.030.015	COLLECTION DATE:	7/25/2019 9:00:00 AM
CLIENT SAMPLE ID	SP4-1	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	**70**	25	1	MG/KG	07/25/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**350**	50	1	MG/KG	07/25/2019	EBS
Arsenic	EPA-6020	**8.6**	0.20	1	MG/KG	07/26/2019	RAL
Cadmium	EPA-6020	**1.2**	0.10	1	MG/KG	07/26/2019	RAL
Chromium	EPA-6020	**43**	0.10	1	MG/KG	07/26/2019	RAL
Lead	EPA-6020	**290**	0.10	1	MG/KG	07/26/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**89.1**	07/25/2019	EBS

Chromatogram indicates that it is likely that sample contains light oil/lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/26/2019 EV19070176 EV19070176-02
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/25/2019
CLIENT PROJECT:	River's Edge - 1759001.030.015	COLLECTION DATE:	7/25/2019 9:05:00 AM
CLIENT SAMPLE ID	SP4-2	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	**76**	25	1	MG/KG	07/25/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**360**	50	1	MG/KG	07/25/2019	EBS
Arsenic	EPA-6020	**6.7**	0.20	1	MG/KG	07/26/2019	RAL
Cadmium	EPA-6020	**1.0**	0.10	1	MG/KG	07/26/2019	RAL
Chromium	EPA-6020	**40**	0.10	1	MG/KG	07/26/2019	RAL
Lead	EPA-6020	**190**	0.10	1	MG/KG	07/26/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**86.3**	07/25/2019	EBS

Chromatogram indicates that it is likely that sample contains light oil/lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	7/26/2019 EV19070176 EV19070176-03
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/25/2019
CLIENT PROJECT:	River's Edge - 1759001.030.015	COLLECTION DATE:	7/25/2019 9:10:00 AM
CLIENT SAMPLE ID	SP4-3	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	**56**	25	1	MG/KG	07/25/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**270**	50	1	MG/KG	07/25/2019	EBS
Arsenic	EPA-6020	**38**	0.20	1	MG/KG	07/26/2019	RAL
Cadmium	EPA-6020	**6.4**	0.10	1	MG/KG	07/26/2019	RAL
Chromium	EPA-6020	**36**	0.10	1	MG/KG	07/26/2019	RAL
Lead	EPA-6020	**29000**	5.0	50	MG/KG	07/26/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**86.9**	07/25/2019	EBS

Chromatogram indicates that it is likely that sample contains light oil/lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE:	7/26/2019
		ALS SDG#:	EV19070176
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Dylan Frazer		
CLIENT PROJECT:	River's Edge - 1759001.030.015		

LABORATORY BLANK RESULTS

MB-072519S - Batch 143472 - Soil by NWTPH-DX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	MG/KG	25	07/26/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	MG/KG	50	07/26/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

MB-072619S - Batch 143483 - Soil by EPA-6020

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Arsenic	EPA-6020	U	MG/KG	0.20	07/26/2019	RAL
Cadmium	EPA-6020	U	MG/KG	0.10	07/26/2019	RAL
Chromium	EPA-6020	U	MG/KG	0.10	07/26/2019	RAL
Lead	EPA-6020	U	MG/KG	0.10	07/26/2019	RAL

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS SDG#: WDOE ACCREDITATION:	7/26/2019 EV19070176 C601
CLIENT CONTACT:	Dylan Frazer		
CLIENT PROJECT:	River's Edge - 1759001.030.015		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 143472 - Soil by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24) - BS	NWTPH-DX	**98.6**			75.5	122.1	07/26/2019	EBS
TPH-Diesel Range (C12-C24) - BSD	NWTPH-DX	**101**	**2**		75.5	122.1	07/26/2019	EBS

ALS Test Batch ID: 143483 - Soil by EPA-6020

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Arsenic - BS	EPA-6020	**107**			80	120	07/26/2019	RAL
Arsenic - BSD	EPA-6020	**105**	**2**		80	120	07/26/2019	RAL
Cadmium - BS	EPA-6020	**110**			80	120	07/26/2019	RAL
Cadmium - BSD	EPA-6020	**109**	**2**		80	120	07/26/2019	RAL
Chromium - BS	EPA-6020	**107**			80	120	07/26/2019	RAL
Chromium - BSD	EPA-6020	**105**	**3**		80	120	07/26/2019	RAL
Lead - BS	EPA-6020	**110**			80	120	07/26/2019	RAL
Lead - BSD	EPA-6020	**108**	**3**		80	120	07/26/2019	RAL

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

EV1907o176

LANDAU ASSOCIATES — Chain-of-Custody Record

☒ Seattle/Edmonds (425) 778-0907 ☐ Spokane (509) 327-9737
☐ Tacoma (253) 926-2493 ☐ Portland (503) 542-1080
☐ _____

Date 7/25/19
Page 1 of 1

Turnaround Time:
Standard _____
Accelerated 24 HR

Project Name RIVER'S EDGE Project No. 1759001.030.015
Project Location/Event MONROE, WA / AOC1 CHARACTERIZATION
Sampler's Name DEVAN BRANDT
Project Contact D FRAZER
Send Results To D FRAZER, K SCHULTZ, D JOHNSON

Special Handling Requirements: —
Shipment Method: DELIVER TO ALS
Stored on ice: (Yes) / No

Sample I.D.	Date	Time	Matrix	No. of Containers	TPH-D/O (NWTPH-Dx)	METALS (As, Cr, Cd, Pb)	Observations/Comments
SP4-1	7/25/19	0900	Soil	1	X	X	
SP4-2		0905		1	X	X	
SP4-3		0910		1	X	X	
AOC1-SW23 (14-15')		0845		1			
AOC1-SW23 (16-17')	7/25/19	0850	Soil	1			

Testing Parameters

☐ Allow water samples to settle, collect aliquot from clear portion ☐
☐ NWTPH-Dx - Acid wash cleanup ☐
- Silica gel cleanup ☐
☐ Dissolved metal samples were field filtered

Other
HOLD AOC1-SW23 (14-15') & AOC1-SW23 (16-17')

Relinquished by	Received by	Relinquished by	Received by
Signature	Signature Shawn Robinson	Signature	Signature
Printed Name Devon Brandt	Printed Name Shawn Robinson	Printed Name	Printed Name
Company LAI	Company ALS	Company	Company
Date 7/25/19 Time 1011	Date 7/25/19 Time 1011	Date Time	Date Time

WHITE COPY - Laboratory YELLOW COPY - Project File PINK COPY - Client Representative

10/2018

ALS ENVIRONMENTAL

Sample Receiving Checklist

Client: Landau Associates ALS Job #: EV1907017G

Project: River's Edge - 175900/.030.015

Received Date: 7/25/19 Received Time: 1011 By: SM

Type of shipping container: Cooler X Box ____ Other ____

Shipped via: FedEx Ground ____ UPS ____ Mail ____ Courier ____ Hand Delivered X
FedEx Express ____

	Yes	No	N/A
Were custody seals on outside of shipping container?	____	X	____
If yes, how many? ____ Where? ____			
Custody seal date: ____ Seal name: ____			
Was Chain of Custody properly filled out (ink, signed, dated, etc.)?	X	____	____
Did all bottles have labels?	X	____	____
Did all bottle labels and tags agree with Chain of Custody?	X	____	____
Were samples received within hold time?	X	____	____
Did all bottles arrive in good condition (unbroken, etc.)?	X	____	____
Was sufficient amount of sample sent for the tests indicated?	X	____	____
Was correct preservation added to samples?	____	____	X

If no, Sample Control added preservative to the following:

Sample Number	Reagent	Analyte

Were VOA vials checked for absence of air bubbles?	____	____	X
Bubbles present in sample #: ____			

Temperature of cooler upon receipt: 7.3°C on ice (Cold) Cool Ambient N/A

Explain any discrepancies: ____

Was client contacted? ____ Who was called? ____ By whom? ____ Date: ____

Outcome of call: ____

August 5, 2019

Mr. Dylan Frazer
Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

Dear Mr. Frazer,

On July 29th, 4 samples were received by our laboratory and assigned our laboratory project number EV19070205. The project was identified as your River's Edge - 1759001.030.014. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	8/5/2019 EV19070205 EV19070205-01
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/29/2019
CLIENT PROJECT:	River's Edge - 1759001.030.014	COLLECTION DATE:	7/29/2019 10:15:00 AM
CLIENT SAMPLE ID	MW-6-Waste	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	07/30/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	50	1	MG/KG	07/30/2019	EBS
Mercury	EPA-7471	**0.031**	0.020	1	MG/KG	08/01/2019	RAL
Arsenic	EPA-6020	**4.2**	0.20	1	MG/KG	07/31/2019	RAL
Barium	EPA-6020	**70**	0.10	1	MG/KG	07/31/2019	RAL
Cadmium	EPA-6020	U	0.10	1	MG/KG	07/31/2019	RAL
Chromium	EPA-6020	**38**	0.10	1	MG/KG	07/31/2019	RAL
Lead	EPA-6020	**3.8**	0.10	1	MG/KG	07/31/2019	RAL
Selenium	EPA-6020	U	1.0	1	MG/KG	07/31/2019	RAL
Silver	EPA-6020	U	0.10	1	MG/KG	07/31/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**93.1**	07/30/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS JOB#: ALS SAMPLE#:	8/5/2019 EV19070205 EV19070205-02
CLIENT CONTACT:	Dylan Frazer	DATE RECEIVED:	07/29/2019
CLIENT PROJECT:	River's Edge - 1759001.030.014	COLLECTION DATE:	7/29/2019 2:52:00 PM
CLIENT SAMPLE ID	AOC1-DP (14-15)	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	25	1	MG/KG	07/30/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	**68**	50	1	MG/KG	07/30/2019	EBS
Arsenic	EPA-6020	**11**	0.20	1	MG/KG	07/31/2019	RAL
Cadmium	EPA-6020	**1.3**	0.10	1	MG/KG	07/31/2019	RAL
Chromium	EPA-6020	**38**	0.10	1	MG/KG	07/31/2019	RAL
Lead	EPA-6020	**180**	0.10	1	MG/KG	07/31/2019	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
C25	NWTPH-DX	**87.5**	07/30/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains lube oil.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Landau Associates, Inc. 130 - 2nd Ave. S. Edmonds, WA 98020	DATE: ALS SDG#: WDOE ACCREDITATION:	8/5/2019 EV19070205 C601
CLIENT CONTACT:	Dylan Frazer		
CLIENT PROJECT:	River's Edge - 1759001.030.014		

LABORATORY BLANK RESULTS

MB-072919S2 - Batch 143565 - Soil by NWTPH-DX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24)	NWTPH-DX	U	MG/KG	25	07/30/2019	EBS
TPH-Oil Range (C24-C40)	NWTPH-DX	U	MG/KG	50	07/30/2019	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

MBLK-343655 - Batch R343655 - Soil by EPA-7471

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Mercury	EPA-7471	U	MG/KG	0.020	08/01/2019	RAL

U - Analyte analyzed for but not detected at level above reporting limit.

MB-073119S - Batch 143627 - Soil by EPA-6020

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Arsenic	EPA-6020	U	MG/KG	0.20	07/31/2019	RAL
Barium	EPA-6020	U	MG/KG	0.12	07/31/2019	RAL
Cadmium	EPA-6020	U	MG/KG	0.10	07/31/2019	RAL
Chromium	EPA-6020	U	MG/KG	0.10	07/31/2019	RAL
Lead	EPA-6020	U	MG/KG	0.10	07/31/2019	RAL
Selenium	EPA-6020	U	MG/KG	1.0	07/31/2019	RAL
Silver	EPA-6020	U	MG/KG	0.10	07/31/2019	RAL

U - Analyte analyzed for but not detected at level above reporting limit.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

CLIENT CONTACT: Dylan Frazer

CLIENT PROJECT: River's Edge - 1759001.030.014

DATE: 8/5/2019

ALS SDG#: EV19070205

WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 143565 - Soil by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range (C12-C24) - BS	NWTPH-DX	**99.8**			75.5	122.1	07/29/2019	EBS
TPH-Diesel Range (C12-C24) - BSD	NWTPH-DX	**98.7**	**1**		75.5	122.1	07/29/2019	EBS

ALS Test Batch ID: R343655 - Soil by EPA-7471

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Mercury - BS	EPA-7471	**85.0**			81.8	117	08/01/2019	RAL
Mercury - BSD	EPA-7471	**87.0**	**2**		81.8	117	08/01/2019	RAL

ALS Test Batch ID: 143627 - Soil by EPA-6020

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS MIN	LIMITS MAX	ANALYSIS DATE	ANALYSIS BY
Arsenic - BS	EPA-6020	**103**			80	120	07/31/2019	RAL
Arsenic - BSD	EPA-6020	**106**	**4**		80	120	07/31/2019	RAL
Barium - BS	EPA-6020	**104**			80	120	07/31/2019	RAL
Barium - BSD	EPA-6020	**105**	**1**		80	120	07/31/2019	RAL
Cadmium - BS	EPA-6020	**104**			80	120	07/31/2019	RAL
Cadmium - BSD	EPA-6020	**109**	**5**		80	120	07/31/2019	RAL
Chromium - BS	EPA-6020	**102**			80	120	07/31/2019	RAL
Chromium - BSD	EPA-6020	**106**	**4**		80	120	07/31/2019	RAL
Lead - BS	EPA-6020	**105**			80	120	07/31/2019	RAL
Lead - BSD	EPA-6020	**105**	**0**		80	120	07/31/2019	RAL
Selenium - BS	EPA-6020	**103**			80	120	07/31/2019	RAL
Selenium - BSD	EPA-6020	**106**	**3**		80	120	07/31/2019	RAL
Silver - BS	EPA-6020	**107**			80	120	07/31/2019	RAL
Silver - BSD	EPA-6020	**112**	**5**		80	120	07/31/2019	RAL

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS ENVIRONMENTAL

Sample Receiving Checklist

Client: Landau Assoc ALS Job #: EV1907O205

Project: River's Edge

Received Date: 7/29/19 Received Time: 4:15 By: RB

Type of shipping container: Cooler X Box ____ Other ____

Shipped via: FedEx Ground ____ UPS ____ Mail ____ Courier ____ Hand Delivered X
FedEx Express ____

	Yes	No	N/A
Were custody seals on outside of shipping container?	____	X	____
If yes, how many? ____ Where? ____			
Custody seal date: ____ Seal name: ____			
Was Chain of Custody properly filled out (ink, signed, dated, etc.)?	X	____	____
Did all bottles have labels?	X	____	____
Did all bottle labels and tags agree with Chain of Custody?	X	____	____
Were samples received within hold time?	X	____	____
Did all bottles arrive in good condition (unbroken, etc.)?	X	____	____
Was sufficient amount of sample sent for the tests indicated?	X	____	____
Was correct preservation added to samples?	____	____	X

If no, Sample Control added preservative to the following:

Sample Number	Reagent	Analyte

Were VOA vials checked for absence of air bubbles?	____	____	1
Bubbles present in sample #: ____			

Temperature of cooler upon receipt: 4.4°C on Ice (Cold) Cool Ambient N/A

Explain any discrepancies: ____

Was client contacted? ____ Who was called? ____ By whom? ____ Date: ____

Outcome of call: ____

EV19070205

Chain-of-Custody Record

LANDAU ASSOCIATES

☒ Seattle/Edmonds (425) 778-0907 ☐ Spokane (509) 327-9737
☐ Tacoma (253) 926-2493 ☐ Portland (503) 542-1080
☐ _____

Date 7/29/19
Page 1 of 1

Turnaround Time:
(Standard) / Accelerated

Project Name River's Edge Project No. 1759001.030.014
Project Location/Event Monroe, WA
Sampler's Name BXM
Project Contact D. Frazer, K. Schultz, D. Jorgensen
Send Results To D. Frazer

Special Handling Requirements:

Shipment Method:
Stored on ice: (Yes) / No

	Sample I.D.	Date	Time	Matrix	No. of Containers	NWTPH-Dx	TPH-Dx Silica Gel Cleanup	RCRA 8 Metals	6020*							Hold	Observations/Comments
1	MW-6-waste	7/29/19	10:15	Soil	1	X	X	X									
2	AOC 1 - DP(14-15)	7/29/19	14:52	Soil	1	X			X								
3	AOC 1- DP(13-14)	7/29/19	14:55	Soil	1											X	
4	AOC 1- DP(9-10)	7/29/19	15:00	Soil	1											X	

__ Allow water samples to settle, collect aliquot from clear portion ☐
__ NWTPH-Dx - Acid wash cleanup ☐
- Silica gel cleanup ☐
__ Dissolved metal samples were field filtered

Other
* Metals [arsenic, chromium, cadmium, and lead]

Relinquished by	Received by	Relinquished by	Received by
Signature	Signature	Signature	Signature
Printed Name Brittany McManus	Printed Name Rick Boyer	Printed Name	Printed Name
Company Landau Associates, Inc	Company ALS	Company	Company
Date 7/29/19 Time 16:15	Date 72919 Time 1675	Date Time	Date Time

WHITE COPY - Laboratory YELLOW COPY - Project File PINK COPY - Client Representative

10/2018

APPENDIX C

Photos of Excavation Areas

1. AOC1-SW13 with black layer and buried debris visible.

2. AOC3 initial excavation and sidewall sampling location.

LANDAU ASSOCIATES

Former Monroe Auto Wrecking/ River's Edge Site Soil Cleanup Summary Monroe, Washington	**Selected Site Photographs**	Figure C-1

3. Building C and rinse tank area after excavation.

4. Looking south at AOC1 area before excavation.

LANDAU ASSOCIATES

Former Monroe Auto Wrecking/ River's Edge Site Soil Cleanup Summary Monroe, Washington	**Selected Site Photographs**	Figure C-2

5. Looking south at AOC3 before excavation and with temporary construction road in the background.

6. Looking south at Building C and rinse tank excavation.

LANDAU ASSOCIATES

Former Monroe Auto Wrecking/ River's Edge Site Soil Cleanup Summary Monroe, Washington	**Selected Site Photographs**	Figure C-3

7. South sidewall of AOC1, with AOC1-SW17 on left and AOC1-SW-18 on right.

8. Removed rinse tank from Building C area.

LANDAU ASSOCIATES

Former Monroe Auto Wrecking/
River's Edge Site
Soil Cleanup Summary
Monroe, Washington

Selected Site Photographs

Figure
C-4

APPENDIX D

Boring Log

AOC1-DP

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	
0						ML	Brown, sandy, SILT with gravel and organics (loose, damp)	Groundwater not encountered.
2		d3						
4							No recovery	
						SM	Brown, gravelly, silty, fine to medium SAND (loose, dry to damp)	
6								
8		d3						
	AOC1-DP(9-10)					SM	Dark brown, silty, fine to medium SAND with gravel and trace glass and plastic pieces (loose, dry to damp)	
10						SM	Brown, silty, fine to medium SAND with gravel (loose, dry to damp)	
12		d3						
	AOC1-DP(13-14)					SM	Brown, silty, fine to medium SAND with gravel (loose, dry to damp)	
14	AOC1-DP(14-15)					SM	Dark brown to black, silty, fine to medium SAND with gravel and burned material and glass (loose, dry to damp)	
16							Boring Completed 07/29/19 Total Depth of Boring = 15.0 ft.	
18								

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

1759001.010.011 11/15/19 N:\PROJECTS\1759001.010.GPJ SOIL BORING LOG

LANDAU ASSOCIATES

Former Monroe Auto Wrecking/River's Edge Site
Soil Cleanup Summary
Monroe, Washington

Log of Boring AOC1-DP

Figure D-1

APPENDIX E

Waste Disposal Documentation

Included on Appendix B DVD

Total Ticket

WASTE MANAGEMENT

Signature

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31071

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 06/24/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H5237
Container
Driver ARNE WILEN
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	06/24/2019 09:48:28	Scale 1	kfunk2		Gross	105020 lb
Out	06/24/2019 09:58:11	Scale 1	kfunk2		Tare	43860 lb
					Net	61160 lb
					Tons	30.58

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	30.58	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	30.58	Tons				SNOHOMISH

203WM

Total Ticket

Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31086

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 06/24/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H1820
Container
Driver TOM BEATY
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	06/24/2019 13:13:29	Scale 1	kfunk2		Gross	103020 lb
Out	06/24/2019 13:13:29		kfunk2		Tare	43600 lb
					Net	59420 lb
					Tons	29.71

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	29.71	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	29.71	Tons				SNOHOMISH

203WM

Total Tax

HOS BROS. CONSTRUCTION, INC.

406401

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: June 24 2019
S (M) T W TH F S

Driver's Name (Please print): Anthony Mangold Emp.# 2320

Start 655 (AM) PM

Truck No. 1838 Trailer No. 2150

Finished 244 AM (PM)

During the time period covered on this time card, I (check one) ☐ Did ☒ Did Not

1/2 Hour lunch Yes ☐ No ☒ Glen Franklin

Experience a job-related injury Tony [signature] Signature

Driver's Time

Remarks

Equip. Time

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
655	n/a	Pretrip	398	398	705			
715		8161	Cal Port	1948	849			
856		Contaminated Soil	1948	W.Mgt.	1019			
1139		Gravel Borrow	WCI	1948	1204			
1205		Contaminated Soil	1948	W.mgt.	118			
226		Preload 8161	Cal Port	398	238			
238		Post Trip	398	398	244			
		8100 8:51 - 2:26	5.58					
			0.5 OT					

FORM HB 631 12/13

OFFICE COPY

HOS BROS. CONSTRUCTION, INC.

406025

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 6-24-19
S M T W TH F S

Driver's Name (Please print): Harold L Jackson
Emp.#: 2500

Start: 7 15 AM PM
Truck No.: 1820
Trailer No.: 2132

Finished: 247 AM PM

During the time period covered on this time card, I (check one) ❒ Did ☒ Did Not

1/2 Hour lunch Yes ❒ No ☒

Experience a job-related injury ______ Signature

Driver's Time ______

Remarks ______

Equip. Time ______

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
715	TNT	Per Trip			725			
736	"	8161	CAL Portland	1948	850			
855	"	Cont Dirt	1948	WM	1025			
1136	"	Gravel Barrow	WIC	1948	1205			
1208	"	Cont Dirt	1948	WM	124			
225	"	8161 Per Load	CAL Portland	398	237			
237		Post Trip			247			
		8:55- 2:25	5.5					
			↳7.5	OT				

403314

HOS BROS. CONSTRUCTION, INC.

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 6-24-19
S (M) T W TH F S

Start 700 (AM) PM

Finished 240 AM (PM)

1/2 Hour lunch Yes ☐ No ☒ Glen Franklin

Driver's Time 7.66

Equip. Time 7.66

Job 1948

Driver's Name (Please print) Kim Crossler Emp.# 1988

Truck No. 5009 Trailer No. 5009

During the time period covered on this time card, I (check one)
☐ Did ☒ Did Not
Experience a job-related injury Kim Crossler Signature

Remarks F 166818
S 166701

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
700	TNT	Pre Trerck	398	—				
		½ load + Scrape	—	380	730			
754		8161	Cal Port	1948	902			
903		Export Contaminate	1948	WM	1029			
1143		Gravel Base	Wetlands	1948	1210			
1211		Export Contaminate	1948	WM	129			
203		8161	Cal Port	—				
		Travel Post		398	240			
		9:03 - 2:18	5.25					
			0.5 OT					

FORM HB 631 12/13

OFFICE COPY

HOS BROS. CONSTRUCTION, INC.

352060

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 06-24-19
S (M) T W TH F S

Start 7:10 (AM) PM

Finished 2:04 AM (PM)

1/2 Hour lunch Yes ☐ No ☒

Driver's Time ______

Equip. Time ______

Driver's Name (Please print): Tracy Olson

Emp.# 1974

Truck No. 1818 Trailer No. 2130

During the time period covered on this time card, I (check one)
☐ Did ☒ Did Not

Experience a job-related injury — Signature: [signature]

Remarks: END: 242184
START: 241997
TOTAL 187

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use
7:10		PRE-TRIP	1114	398	7:14	
7:14		TRAVEL	398	CALPORT SNOQUALMIE	7:17	
7:34	3 AXEL	PRODUCT CODE 81161	CALPORT	1948	8:42	
8:44	|	LF02 CONTAMINATED	1948	WASTE MANAGEMENT	9:58	
11:08	|	~~[illegible]~~ GRAVEL BARROW	WCI	1948	11:41	
11:45	|	CONTAMINATED	1948	W.M.I.	1:01	
1:05		TRAVEL	WMI	398	1:54	
1:54		POST-TRIP		398	2:04	
		8:44 - 2:04	6.33			
			.5	OT		

FORM HB 631 12/13

OFFICE COPY

HOS BROS. CONSTRUCTION, INC.

397465

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 6-24-19
S M T W TH F S

Driver's Name (Please print) ARNE Wilen

Emp.# 242

Start 650 AM PM

Truck No. 5237 Trailer No. 5237

Finished 220 AM PM

During the time period covered on this time card, I (check one)
☐ Did ☒ Did Not

1/2 Hour lunch Yes ☐ No ☒ Okd By Glenn Franklin

Experience a job-related injury _____ Signature

Driver's Time _____

Remarks 4614.6 miles

Equip. Time 4427.2 - 4614.6 187.4 hrs

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
650	8wh	Travel	398	Portland	715			
715	"	#8161	Cathedral	19-2	835			
835	"	Dirt "Contaminated"	1948	WM	1000			
1115	"	6/8	wetlands	1948	1140			
1140	"	Dirt "Contaminated"	1948	W.M.	100			
200	"	#8161 "preload"	Cathedral	1948	220			
		8:36 - 2:00	5.4					
		t.	0.5 or					

FORM HB 631 12/13

OFFICE COPY

HOS BROS. CONSTRUCTION, INC.

404729

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 6-24-14
S (M) T W TH F S

Start 700 AM PM

Finished 4:00 AM PM

1/2 Hour lunch Yes ☐ No ☑

Driver's Time _____

Equip. Time _____

Driver's Name (Please print) [illegible] Emp.# 2275

Truck No. 5067 Trailer No. 5065

During the time period covered on this time card, I (check one)
☐ Did ☑ Did Not

Experience a job-related injury _____
Signature

Remarks [illegible]

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
701	TT	[illegible]	[illegible]	—	705			
734	TT	[illegible]	5161	1248	830			
830	TT	[illegible]	[illegible]	[illegible]	[illegible]			
115	TT	[illegible]	[illegible]	1248	1145			
1152	TT	[illegible]	[illegible]	[illegible]	130			
130		[illegible]	[illegible]	395	330			
330	TT	[illegible]	330	—	400			
		7:00 - 4:00						
		8:50 - 4:01	7.68 → 1.51 OT					

FORM HB 631 12/13

OFFICE COPY

0788

BEST PARKING LOT CLEANING INC
2412 INTER AVE
PUYALLUP, WA 98372

Voice: 800-310-7406
Fax: 253-770-0724

Invoice Number: **180569**

Invoice Date: Jun 25, 2019

Invoice

Page: 1

Bill To: **HOS BROTHERS CONSTRUCTION**
P.O. BOX 1788
WOODINVILLE, WA 98072-1788

Job Site: **JOB 1948** MONROE

POSTED
JUN 27 2019

Customer ID	Customer PO	Payment Terms	Due Date
HOSBRO19	109839-JUNE	Net 30 Days	7/25/19

Job Slip # / Description		Hours	Price	Net
TRUCK JOB SLIP #11412 06/24/2019	.	4.25	105.00	446.25

DW

RECEIVED HBCI
POST DATE: _____ APPVD
JUN 27 2019
CODE: 1948-10883
COMMENTS: CONTAMINATED

Pat

Dillon

Subtotal	446.25
Sales Tax	
Total Invoice Amount	446.25
Payment/Credit Applied	
TOTAL	**446.25**

TERMS: NET 30 DAYS MONTHLY FIN CHRG = 1.75%

PLEASE SHOW INVOICE NUMBER WITH YOUR PAYMENT

ALL INVOICE DISPUTES MUST BE SUBMITTED
IN WRITING PRIOR TO INVOICE DUE DATE

MONROE EX 0.00

TIME AND MATERIALS FIELD WORK AUTHORIZATION

HOS BROS. CONSTRUCTION, INC.
P.O. Box 1788, Woodinville, WA 98072-1788
(425) 481-5569 Fax (425) 485-6634 hbci@hosbros.com

JOB: 1948 IMPACTED SOIL EXCAVATION Date 6/25/19 Day: M (T) W TH F S Su

ITEM NO.	PM NO.	DESCRIPTION OF WORK PERFORMED	EQUIPMENT / LABOR	HOURS Regular	HOURS OT	UNIT Hrs/Ea/Day
1		LOAD EXPORT IMPACTED SOIL	PC400 #3135	8		HR
			OPERATOR	8		HR
			G.E.	8		HR
			SWEEPER	2		HR

MATERIALS USED: (Concrete, Sand, Pipe, Fittings, - etc.)	VENDOR	QUANTITY	UNIT
1			

RENTAL EQUIPMENT: (Small Tools, Compressor, Pumps, - etc.)	VENDOR	QUANTITY	UNIT
1			

Hos Bros. Construction, Inc. _____ SIGNATURE _____ TITLE Supt

Contractor / Owner Representative _____ SIGNATURE _____ TITLE

All above work and materials subject to audit and verification by HOS Project Accounting

FORM HB805 5/13

Total Ticket

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31119
Ph: 206-694-0600

Customer Name	HOS BROS CONSTRUCTION INC HOS	Carrier	SELF SELF		
Ticket Date	06/25/2019	Vehicle#	H1826	Volume	
Payment Type	Credit Account	Container			
Manual Ticket#		Driver	KEN MOORE		
Route		Check#			
Hauling Ticket#		Billing#	0000121		
Destination		Grid			
PO#	114448WAD				

	Time	Scale	Operator	Inbound		
In	06/25/2019 10:22:10	Scale 1	kfunk2		Gross	105940 lb
Out	06/25/2019 10:37:31	Scale 1	kfunk2		Tare	42820 lb
					Net	63120 lb
					Tons	31.56

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	31.56	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	31.56	Tons				SNOHOMISH

203WM

Total Tax

Driver's Signature

Total Ticket

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31116

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 06/25/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H1817
Container
Driver ERIC STONE
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound
In	06/25/2019 10:05:34	Scale 1	kfunk2	
Out	06/25/2019 10:18:06	Scale 1	kfunk2	

Gross	108820 lb
Tare	44900 lb
Net	63920 lb
Tons	31.96

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	31.96	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	31.96	Tons				

203WM

Total Tax

Driver's Signature

Total Ticket

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31114

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 06/25/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H1823
Container
Driver TRACY OLSON
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	06/25/2019 10:01:08	Scale 1	kfunk2		Gross	104320 lb
Out	06/25/2019 10:16:29	Scale 1	kfunk2		Tare	44120 lb
					Net	60200 lb
					Tons	30.10

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	30.10	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	30.10	Tons				

203WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31129

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 06/25/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H5009
Container
Driver KIM CROSSLER
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound
In	06/25/2019 12:07:15	Scale 1	kfunk2	
Out	06/25/2019 12:07:15		kfunk2	

Gross	106060 lb
Tare	44640 lb
Net	61420 lb
Tons	30.71

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	30.71	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	30.71	Tons				

Total Tax

203WM

Total Ticket

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31105

Ph: 206-694-0600

Customer Name	HOS BROS CONSTRUCTION INC HOS	Carrier	SELF SELF		
Ticket Date	06/25/2019	Vehicle#	H5009	Volume	
Payment Type	Credit Account	Container			
Manual Ticket#		Driver	KIM CROSSLER		
Route		Check#			
Hauling Ticket#		Billing#	0000121		
Destination		Grid			
PO#	114448WAD				

	Time	Scale	Operator	Inbound		
In	06/25/2019 09:03:33	Scale 1	kfunk2		Gross	104160 lb
Out	06/25/2019 09:03:33		kfunk2		Tare	44640 lb
					Net	59520 lb
					Tons	29.76

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	29.76	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	29.76	Tons				

203WM

Total Tax

Total Ticket

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31104

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 06/25/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H5237
Container
Driver ARNE WILEN
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	06/25/2019 09:00:48	Scale 1	kfunk2		Gross	104760 lb
Out	06/25/2019 09:00:48		kfunk2		Tare	43860 lb
					Net	60900 lb
					Tons	30.45

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	30.45	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	30.45	Tons				SNOHOMISH

203WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31127

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 06/25/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H5237
Container
Driver ARNE WILEN
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	06/25/2019 11:56:34	Scale 1	kfunk2		Gross	105780 lb
Out	06/25/2019 11:56:34		kfunk2		Tare	43860 lb
					Net	61920 lb
					Tons	30.96

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	30.96	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	30.96	Tons				

203WM

Total Tax

Total Ticket

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31106

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 06/25/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H1820
Container
Driver HAROLD JACKSON
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound
In	06/25/2019 09:07:05	Scale 1	kfunk2	
Out	06/25/2019 09:07:05		kfunk2	

Gross	103200 lb
Tare	43600 lb
Net	59600 lb
Tons	29.80

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	29.80	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	29.80	Tons				

203WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31128

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 06/25/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H1820
Container
Driver HAROLD JACKSON
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	06/25/2019 12:04:25	Scale 1	kfunk2		Gross	109020 lb
Out	06/25/2019 12:04:25		kfunk2		Tare	43600 lb
					Net	65420 lb
					Tons	32.71

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	32.71	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	32.71	Tons				

203WM

Total Tax

Signature

Total Ticket

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31107

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 06/25/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H1838
Container
Driver TONY MANGOLD
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator			
In	06/25/2019 09:10:17	Scale 1	kfunk2	Inbound	Gross	106240 lb
Out	06/25/2019 09:10:17		kfunk2		Tare	47100 lb
					Net	59140 lb
					Tons	29.57

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	29.57	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	29.57	Tons				

203WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31130

Ph: 206-694-0600

Customer Name	HOS BROS CONSTRUCTION INC HOS	Carrier	SELF SELF
Ticket Date	06/25/2019	Vehicle#	H1838
Payment Type	Credit Account	Container	
Manual Ticket#		Driver	TONY MANGOLD
Route		Check#	
Hauling Ticket#		Billing#	0000121
Destination		Grid	
PO#	114448WAD		

Volume

	Time	Scale	Operator	Inbound		
In	06/25/2019 12:22:54	Scale 1	kfunk2		Gross	106120 lb
Out	06/25/2019 12:22:54		kfunk2		Tare	47100 lb
					Net	59020 lb
					Tons	29.51

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	29.51	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	29.51	Tons				

203WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31136

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 06/25/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H1817
Container
Driver ~~TOM OWENS~~ Eric Stone
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	06/25/2019 13:06:38	Scale 1	kfunk2		Gross	110860 lb
Out	06/25/2019 13:06:38		kfunk2		Tare	44900 lb
					Net	65960 lb
					Tons	32.98

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	32.98	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	32.98	Tons				

203WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31134

Ph: 206-694-0600

Customer Name	HOS BROS CONSTRUCTION INC HOS	Carrier	SELF SELF		
Ticket Date	06/25/2019	Vehicle#	H1823	Volume	
Payment Type	Credit Account	Container			
Manual Ticket#		Driver	TRACY OLSON		
Route		Check#			
Hauling Ticket#		Billing#	0000121		
Destination		Grid			
PO#	114448WAD				

	Time	Scale	Operator	Inbound		
In	06/25/2019 12:56:42	Scale 1	kfunk2		Gross	105260 lb
Out	06/25/2019 12:56:42		kfunk2		Tare	44120 lb
					Net	61140 lb
					Tons	30.57

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	30.57	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	30.57	Tons				

203WM

Total Tax

Total Ticket

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31138

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 06/25/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H1826
Container
Driver KEN MOORE
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	06/25/2019 13:32:21	Scale 1	kfunk2		Gross	109700 lb
Out	06/25/2019 13:32:21		kfunk2		Tare	42820 lb
					Net	66880 lb
					Tons	33.44

Comments HOS - HM

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	33.44	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	33.44	Tons				

203WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31141

Ph: 206-694-0600

Customer Name	HOS BROS CONSTRUCTION INC HOS	Carrier	SELF SELF		
Ticket Date	06/25/2019	Vehicle#	H1820	Volume	
Payment Type	Credit Account	Container			
Manual Ticket#		Driver	HAROLD JACKSON		
Route		Check#			
Hauling Ticket#		Billing#	0000121		
Destination		Grid			
PO#	114448WAD				

	Time	Scale	Operator	Inbound		
In	06/25/2019 14:29:35	Scale 1	kfunk2		Gross	107900 lb
Out	06/25/2019 14:29:35		kfunk2		Tare	43600 lb
					Net	64300 lb
					Tons	32.15

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	32.15	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	32.15	Tons				

203WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Ph: 206-694-0600

Reprint
Ticket# 31139

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 06/25/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H5237
Container
Driver ARNE WILEN
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	06/25/2019 14:22:51	Scale 1	kfunk2		Gross	111720 lb
Out	06/25/2019 14:22:51		kfunk2		Tare	43860 lb
					Net	67860 lb
					Tons	33.93

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	33.93	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	33.93	Tons				

17 -total - 308.07

278.01

Total Tax

203WM

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31140

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 06/25/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H5009
Container
Driver KIM CROSSLER
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	06/25/2019 14:25:49	Scale 1	kfunk2		Gross	108660 lb
Out	06/25/2019 14:25:49		kfunk2		Tare	44640 lb
					Net	64020 lb
					Tons	32.01

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	32.01	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	32.01	Tons				

203WM

Total Tax

HOS BROS. CONSTRUCTION, INC.

397466

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 6-25-19

S M T W TH F S

Driver's Name (Please print) ARNE Wilen Emp.# 348

Start 620 AM PM

Truck No. 5237 Trailer No. 5237

Finished 350 AM PM

During the time period covered on this time card, I (check one)
☐ Did ☑ Did Not

1/2 Hour lunch Yes ☐ No ☐ Worked By Brian Franklin

Experience a job-related injury _____ Signature

Driver's Time _____

Equip. Time _____

Remarks 4825.5 miles
186.9 hrs

4825.5

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
620	8Axle	#8161 1" overload	398	1948	720			
720	"	Dirt "Contaminated"	1948	W. m.	915			
1030	"	Sand	Wetlands	1948	1055			
1055	"	Dirt "Contaminated"	1948	W. m.	1215			
120	"	"	"	"	240			
240	"	Travel	W. m.	398	350			
			9.00	1.50T				

OFFICE COPY

HOS BROS. CONSTRUCTION, INC. 383976

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 10-25-19
S M T W TH F S

Start 7:20 AM PM

Finished 2:24 AM PM

1/2 Hour lunch Yes ☐ No ☒

Driver's Time _____

Equip. Time _____

Eric Stone
Driver's Name (Please print)

1940
Emp.#

Truck No. 1817

Trailer No. 2129

During the time period covered on this time card, I (check one)
☐ Did ☒ Did Not

Experience a job-related injury Eric Stone
Signature

Remarks NO lunch Clean

Start 244697
End: 244881
187.3

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
7:20	T-T	Am Pre Trip / 8161	Calbag	1948	7:30			
7:30	T-T	8161	Calbag	1948	8:45			
8:45	T-T	Contaminated Dirt	1948	W.M.	10:00			
11:30	T-T	Riverbed Gravel	Wetlands	1948	11:50			
12:10	T-T	Contaminated Dirt	1948	W.M	1:05			
1:15	T-T	PM Travel / Post Trip	W.M	398	2:24			
		7:20 - 2:20	7.07	+ .50T				

FORM HB 631 12/13

OFFICE COPY

HOS BROS. CONSTRUCTION, INC.

406407

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: June 25 2019

S M T W TH F S

Driver's Name (Please print) Anthony Mangold

Emp.# 2320

Start 635 AM PM

Finished 138 AM PM

Truck No. 1535

Trailer No. 2150

1/2 Hour lunch Yes ☐ No ☑

During the time period covered on this time card, I (check one)

☐ Did ☐ Did Not

Experience a job-related injury [signature] Benjamin Franklin

Signature

Driver's Time

Equip. Time

Remarks

Please print firmly – 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
635	AHL	Pretrip	398	398	645			
645		8161 preload	398	398	732			
734		Contaminated Soil	1948	W. Mgt.	913			
1035		Gravel Borrow	WC1	1948	1115			
1120		Contaminated Soil	1948	W Mgt.	1229			
		~~Backhaul~~	~~WC1~~	~~1948~~				
1232		Travel	W. Mgt.	398	131			
131		Post Trip	398	398	138			
			7.05	+ .5 OT				

FORM HB 631 12/13

OFFICE COPY

HOS BROS. CONSTRUCTION, INC.

352061

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 06-25-19

S M (T) W TH F S

Start 7:15 (AM) PM

Finished 2:20 AM (PM)

1/2 Hour lunch Yes ☐ No ☒

Driver's Time _____

Equip. Time _____

Tracy Olson
Driver's Name (Please print)

Emp.# 197

Truck No. 823 Trailer No. 2135

During the time period covered on this time card, I (check one)
☐ Did ☒ Did Not

Experience a job-related injury _____ Tracy Olson
Signature

Remarks EXP 208822
START 208637
TOTAL 185

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
7:15		PRE TRIP		398	7:19			
7:19		TRAVEL	398	CAL-PORT SAND LOADING	7:31			
7:38	SDMP	SCREENED PETRUM	CAL-PORT	1948	8:36			
8:41	↓	CONTAMINATED	1948	WMI	10:10			
11:25		RIVER BANK SAND	W.C.I.	1948	11:50			
11:51	↓	CONTAMINATED	1948	WMI	1:08			
1:12		TRAVEL	WMI	398	2:10			
2:10		POST TRIP		398	2:20			
			7.08	+ .5 OT				

FORM HB 631 12/13

OFFICE COPY

404730

HOS BROS. CONSTRUCTION, INC.

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 6-25-19

S M (T) W TH F S

Start 6:55 (AM) PM

Finished 3:31 AM (PM)

1/2 Hour lunch Yes ☐ No ☐

Driver's Time ____________

Equip. Time ____________

Driver's Name (Please print): Kenneth Maire Emp.#: 2276

Truck No. 1826 Trailer No: 2138

During the time period covered on this time card, I (check one) ☐ Did ☑ Did Not

Experience a job-related injury Kenneth Maire

Signature

Remarks ____________

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
658	TT	PRE TRIP	358	-	709			
809	TT	PRELOAD [illegible]	[illegible]	[illegible]	902			
930	TT	EXPORT	1948	WM	1032			
1202	TT	EXPORT	WCJ	1948	12:12			
1220	TT	EXPORT	1948	WM	143			
143	TT	TIPPING	WM	3[illegible]	248			
250	TT	PRELOAD	358	358	320			
320	TT	POST TRIP	358	-	331			
			8.56	1.06	OT			

FORM HB 631 12/13

OFFICE COPY

407076

HOS BROS. CONSTRUCTION, INC.

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 6-25-19
S M T W TH F S

Start 640 AM PM

Finished 354 AM (PM)

1/2 Hour lunch Yes ☐ No ☒

Driver's Time ______

Equip. Time ______

Driver's Name (Please print) Harold L Jackson Emp.# 2500

Truck No. 1820 Trailer No. 2132

During the time period covered on this time card, I (check one) ☐ Did ☒ Did Not

Experience a job-related injury [signature] Signature

Remarks ______

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
640	TxT	Pre Trip			650			
650	"	8161 Pit	Cal Portland	1948	739			
742	"	Cont Dirt	1948	WM	917			
1033	"	Gravel Borrow	WCI	1948	1100			
1103	"	Cont Dirt	1948	WM	1215			
121	"	" "	"	"	238			
239		Back To Yard			342			
344		Post Trip			354			
			9.22	1.72	OT			

FORM HB 631 12/13

OFFICE COPY

403315

HOS BROS. CONSTRUCTION, INC.

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 6-25-19
S M (T) W TH F S

Start 630 (AM) PM

Finished 353 AM (PM)

1/2 Hour lunch Yes ☐ No ☒

Driver's Time 9.4

Equip. Time 9.4

Job 1948 (17.04)

Kim Crossler
Driver's Name (Please print)

1988
Emp.#

Truck No. 5009

Trailer No. 5009

During the time period covered on this time card, I (check one)
☐ Did ☒ Did Not
Experience a job-related injury

Signature

Remarks F 167159
S 166898

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
630	TNT	Pre Travel	398	—				
		Preload 8161	—	1948	727			
727		Export Contaminate	1948	WM	914			
1040		Gravel Borrow	Wellwood	1948	1109			
1110		Export Contaminate	1948	WM	1216			
119		" "	"	"	234			
		Travel / Post	WM	398	353			
			4.38	1.88	OT			

FORM HB 631 12/13

OFFICE COPY

0967

BEST PARKING LOT CLEANING INC
2412 INTER AVE
PUYALLUP, WA 98372

Invoice Number: **180638**

Invoice Date: Jun 26, 2019

Voice: 800-310-7406
Fax: 253-770-0724

Invoice

Page: 1

Bill To: **HOS BROTHERS CONSTRUCTION**
P.O. BOX 1788
WOODINVILLE, WA 98072-1788

Job Site: **JOB 1948**
MONROE

POSTED
JUL 09 2019

Customer ID	Customer PO	Payment Terms	Due Date
HOSBRO19	109839-JUNE	Net 30 Days	7/26/19

Job Slip # / Description		Hours	Price	Net
TRUCK JOB SLIP #11459 06/25/2019	.	5.25	105.00	551.25
TRUCK JOB SLIP #11420 06/26/2019	.	2.00	105.00	210.00

Pat

DW

RECEIVED HBCI
POST DATE: APP
JUL 03 2019
CODE: 1948 2082-3
COMMENTS: PM03

Subtotal	761.25
Sales Tax	
Total Invoice Amount	761.25
Payment/Credit Applied	
TOTAL	**761.25**

TERMS: NET 30 DAYS MONTHLY FIN CHRG = 1.75%

PLEASE SHOW INVOICE NUMBER WITH YOUR PAYMENT

ALL INVOICE DISPUTES MUST BE SUBMITTED
IN WRITING PRIOR TO INVOICE DUE DATE

MONROE EX 0.00

TIME AND MATERIALS FIELD WORK AUTHORIZATION

HOS BROS. CONSTRUCTION, INC.
P.O. Box 1788, Woodinville, WA 98072-1788
(425) 481-5569 Fax (425) 485-6634 hbci@hosbros.com

JOB: 1948 IMPACTED SOIL EXCAVATION Date 6/26/19 Day: M T (W) TH F S Su

ITEM NO.	PM NO.	DESCRIPTION OF WORK PERFORMED	EQUIPMENT / LABOR	HOURS Regular	HOURS OT	UNIT Hrs/Ea/Day
1		EXCAVATE AND REMOVE MATERIAL	P.C. 400 #3135	8		HR
		THAT WAS TESTED. CHASE IMPACTED	OPERATOR	8		HR
		SOIL PER LANDAU DIRECTION IN	G.E.	8		HR
		AREAS THAT TESTED POSITIVE				
		MAPPED AND SHOT ELEVATIONS				
		IN EXCAVATION AREA.				
			SWEEPER	2		HR
			MINI 305 #2906	2		HR

MATERIALS USED: (Concrete, Sand, Pipe, Fittings, - etc.)	VENDOR	QUANTITY	UNIT
1			

RENTAL EQUIPMENT: (Small Tools, Compressor, Pumps, - etc.)	VENDOR	QUANTITY	UNIT
1			

Hos Bros. Construction, Inc. _____ SIGNATURE Supt TITLE

Contractor / Owner Representative _____ SIGNATURE _____ TITLE

All above work and materials subject to audit and verification by HOS Project Accounting

FORM HB805 5/13

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Ph: 206-694-0600

Reprint
Ticket# 31159

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 06/26/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H5237
Container
Driver ARNE WILEN
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound
In	06/26/2019 13:03:03	Scale 1	kfunk2	
Out	06/26/2019 13:03:03		kfunk2	

Gross	104540 lb
Tare	43860 lb
Net	60680 lb
Tons	30.34

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	30.34	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	30.34	Tons				SNOHOMISH

203WM

Total Tax

Total Ticket

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31148

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 06/26/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H5237
Container
Driver ARNE WILEN
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	06/26/2019 09:51:51	Scale 1	kfunk2		Gross	101480 lb
Out	06/26/2019 09:51:51		kfunk2		Tare	43860 lb
					Net	57620 lb
					Tons	28.81

Comments HOS - HM

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	28.81	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	28.81	Tons				

203WM

Total Tax

HOS BROS. CONSTRUCTION, INC.

397467

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 6-26-19
S M T W TH F S

Driver's Name (Please print) ARNE Wilen

Emp.# 398

Start 650 AM PM

Truck No. 5237

Trailer No. 5237

Finished 220 AM PM

During the time period covered on this time card, I (check one)
☐ Did ☒ Did Not

1/2 Hour lunch Yes ☐ No ☐

Experience a job-related injury _____ Signature

Driver's Time _____

Equip. Time _____

Remarks 5056.0 miles

4875.5 - 5056.0 180.5 hrs

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
650	80th	Travel	398	Cathedral	710			
710	"	#8161 1"	Cathedral	1948	830			
830	"	Dirt "Contaminated"	1948	W. M.	1010			
1200	"	"	"	"	120			
120	"	Travel	W. M.	398	220			
		6:50 - 2:20	7 hrs					

FORM HB 631 12/13

OFFICE COPY

TIME AND MATERIALS FIELD WORK AUTHORIZATION

HOS BROS. CONSTRUCTION, INC.
P.O. Box 1788, Woodinville, WA 98072-1788
(425) 481-5569 Fax (425) 485-6634 hbci@hosbros.com

JOB: 1948 IMPACTED DIRT EXPORT Date 6/27/19 Day: M T W (TH) F S Su

ITEM NO.	PM NO.	DESCRIPTION OF WORK PERFORMED	EQUIPMENT / LABOR	HOURS Regular	HOURS OT	UNIT Hrs/Ea/Day
1		EXPORT) LOAD TRUCKS	RX460 #3135	8		HR
			OPERATOR	8		HR
			G.E.	5		HR
			SWEEPER	2		HR
		15 LOADS EXPORT				
		(NOT ALL TICKETS COLLECTED)	450 IN?			

MATERIALS USED: (Concrete, Sand, Pipe, Fittings, - etc.)	VENDOR	QUANTITY	UNIT
1			

RENTAL EQUIPMENT: (Small Tools, Compressor, Pumps, - etc.)	VENDOR	QUANTITY	UNIT
1			

Hos Bros. Construction, Inc. _____ SIGNATURE _____ Supt TITLE

Contractor / Owner Representative _____ SIGNATURE _____ TITLE

All above work and materials subject to audit and verification by HOS Project Accounting

FORM HB805 5/13

Total Ticket

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31205

Ph: 206-694-0600

Customer Name	HOS BROS CONSTRUCTION INC HOS	Carrier	SELF SELF
Ticket Date	06/27/2019	Vehicle#	H6086
Payment Type	Credit Account	Container	
Manual Ticket#		Driver	GINA AVERSANO
Route		Check#	
Hauling Ticket#		Billing#	0000121
Destination		Grid	
PO#	114448WAD		

Volume

	Time	Scale	Operator	Inbound		
In	06/27/2019 14:39:01	Scale 1	kfunk2		Gross	100640 lb
Out	06/27/2019 14:39:01		kfunk2		Tare	43540 lb
					Net	57100 lb
					Tons	28.55

Comments HOS - HM

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	28.55	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	28.55	Tons				

03WM

Total Ticket

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31201

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 06/27/2019
Payment Type Credit Account
Manual Ticket# 10508
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H1818
Container
Driver TRACY OLSON
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	06/27/2019 09:54:07	Scale 1	kfunk2		Gross	104020 lb*
Out	06/27/2019 09:54:07		kfunk2		Tare	43420 lb*
			* Manual Weight		Net	60600 lb
					Tons	30.30

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	30.30	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	30.30	Tons				

203WM

Total Tax

Total Tickets

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31198

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 06/27/2019
Payment Type Credit Account
Manual Ticket# 10514
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H1818
Container
Driver TRACY OLSON
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	06/27/2019 12:58:27	Scale 1	kfunk2		Gross	110860 lb*
Out	06/27/2019 12:58:27		kfunk2		Tare	43420 lb*
			* Manual Weight		Net	67440 lb
					Tons	33.72

Comments HOS - HM

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	33.72	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	33.72	Tons				

203WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31204

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 06/27/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H6082
Container
Driver JIM CHARLES
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	06/27/2019 14:36:32	Scale 1	kfunk2		Gross	100860 lb
Out	06/27/2019 14:36:32		kfunk2		Tare	44740 lb
					Net	56120 lb
					Tons	28.06

Comments HOS - HM

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	28.06	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	28.06	Tons				

203WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31190

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 06/27/2019
Payment Type Credit Account
Manual Ticket# 10504
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H6080
Container
Driver CINDY MACLINE
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	06/27/2019 09:20:03	Scale 1	kfunk2		Gross	102880 lb*
Out	06/27/2019 09:20:03		kfunk2		Tare	44860 lb*
			* Manual Weight		Net	58020 lb
					Tons	29.01

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	29.01	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	29.01	Tons				

203WM

Total Tax

Total Ticket

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31199
Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 06/27/2019
Payment Type Credit Account
Manual Ticket# 10513
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H5063
Container
Driver TIM GRIMM
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	06/27/2019 13:00:16	Scale 1	kfunk2		Gross	111780 lb*
Out	06/27/2019 13:00:16		kfunk2		Tare	44340 lb*
			* Manual Weight		Net	67440 lb
					Tons	33.72

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	33.72	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	33.72	Tons				

203WM

Total Tax

Total Ticket

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31197

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 06/27/2019
Payment Type Credit Account
Manual Ticket# 10509
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H5237
Container
Driver ARNE WILEN
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound	Gross	109200 lb*
In	06/27/2019 12:28:06	Scale 1	kfunk2		Tare	43860 lb*
Out	06/27/2019 12:28:06		kfunk2		Net	65340 lb
			* Manual Weight		Tons	32.67

Comments HOS - HM

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	32.67	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	32.67	Tons				

203WM

Total Tax

Total Ticket

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31196

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 06/27/2019
Payment Type Credit Account
Manual Ticket# 10512
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H6082
Container
Driver JIM CHARLES
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	06/27/2019 12:21:28	Scale 1	kfunk2		Gross	106260 lb*
Out	06/27/2019 12:21:28		kfunk2		Tare	44740 lb*
			* Manual Weight		Net	61520 lb
					Tons	30.76

Comments HOS - HM

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	30.76	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	30.76	Tons				

203WM

Total Tax

Total Ticket

Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31195

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 06/27/2019
Payment Type Credit Account
Manual Ticket# 10511
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H6086
Container
Driver GINA AVERSANO
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	06/27/2019 12:19:33	Scale 1	kfunk2		Gross	105900 lb*
Out	06/27/2019 12:19:33		kfunk2		Tare	43540 lb*
			* Manual Weight		Net	62360 lb
					Tons	31.18

Comments HOS - HM

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	31.18	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	31.18	Tons				

203WM

Total Tax

Total Ticket

Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31194

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 06/27/2019
Payment Type Credit Account
Manual Ticket# 10510
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H6080
Container
Driver CINDY MACLINE
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	06/27/2019 12:17:19	Scale 1	kfunk2		Gross	109200 lb*
Out	06/27/2019 12:17:19		kfunk2		Tare	44860 lb*
			* Manual Weight		Net	64340 lb
					Tons	32.17

Comments HOS - HM

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	32.17	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	32.17	Tons				

203WM

Total Tax

Total Ticket

Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31191

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 06/27/2019
Payment Type Credit Account
Manual Ticket# 10505
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H6086
Container
Driver GINA AVERSANO
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	06/27/2019 09:23:30	Scale 1	kfunk2		Gross	103800 lb*
Out	06/27/2019 09:23:30		kfunk2		Tare	43540 lb*
			* Manual Weight		Net	60260 lb
					Tons	30.13

Comments HOS - HM

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	30.13	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	30.13	Tons				

203WM

Total Tax

Total Ticket

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31193
Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 06/27/2019
Payment Type Credit Account
Manual Ticket# 10507
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H5063
Container
Driver TIM GRIMM
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	06/27/2019 09:53:50	Scale 1	kfunk2		Gross	102700 lb*
Out	06/27/2019 09:53:50		kfunk2		Tare	44340 lb*
			* Manual Weight		Net	58360 lb
					Tons	29.18

Comments HOS - HM

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	29.18	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	29.18	Tons				

203WM

Total Tax

Total Ticket

Customer's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31192
Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 06/27/2019
Payment Type Credit Account
Manual Ticket# 10506
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H6082
Container
Driver JIM CHARLES
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	06/27/2019 09:25:57	Scale 1	kfunk2		Gross	99760 lb*
Out	06/27/2019 09:25:57		kfunk2		Tare	44740 lb*
			* Manual Weight		Net	55020 lb
					Tons	27.51

Comments HOS - HM

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	27.51	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	27.51	Tons				SNOHOMISH

203WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31203

Ph: 206-694-0600

Customer Name	HOS BROS CONSTRUCTION INC HOS	Carrier	SELF SELF
Ticket Date	06/27/2019	Vehicle#	H6080
Payment Type	Credit Account	Container	
Manual Ticket#		Driver	CINDY MACLINE
Route		Check#	
Hauling Ticket#		Billing#	0000121
Destination		Grid	
PO#	114448WAD		

Volume

	Time	Scale	Operator	Inbound		
In	06/27/2019 14:30:57	Scale 1	kfunk2		Gross	99520 lb
Out	06/27/2019 14:30:57		kfunk2		Tare	44860 lb
					Net	54660 lb
					Tons	27.33

Comments HOS - HM

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	27.33	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	27.33	Tons				

203WM

Total Tax

Total Ticket

WASTE MANAGEMENT

Signature

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31180

Ph: 206-694-0600

Customer Name	HOS BROS CONSTRUCTION INC HOS	Carrier	SELF SELF		
Ticket Date	06/27/2019	Vehicle#	H5237	Volume	
Payment Type	Credit Account	Container			
Manual Ticket#		Driver	ARNE WILEN		
Route		Check#			
Hauling Ticket#		Billing#	0000121		
Destination		Grid			
PO#	114448WAD				

	Time	Scale	Operator	Inbound		
In	06/27/2019 09:17:31	Scale 1	kfunk2		Gross	102040 lb
Out	06/27/2019 09:17:31		kfunk2		Tare	43860 lb
					Net	58180 lb
					Tons	29.09

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	29.09	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	29.09	Tons				SNOHOMISH

203WM

Total Tax

HOS BROS. CONSTRUCTION, INC.

391019

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485-6634

TEAMSTER TIME TICKET

Date: 6-27-2019
S M T W (TH) F S

Start 6:50 (AM) PM

Finished 3:45 AM (PM)

1/2 Hour lunch Yes [X] No ☐

Driver's Time

Equip. Time

Gina Aversano
Driver's Name (Please print)

Emp.# 1919

Truck No. 6086 Trailer No. 6086

During the time period covered on this time card, I (check one)
☐ Did [X] Did Not
Experience a job-related injury Gina Aversano
Signature

Remarks

182681 182941

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
650	T+T	Pre trip	398	1948	7:40			
				monroe				
742	"	Exp't Contamd	1948	Wast Mng	931			
1049	"	Lunch	——	——	1120			
1120	"	Exp't Contamd	1948	WasteMng	12:28			
128	"	Exp't Contamd	1948	Wast Mng	2 46			
	"	Post trip	398	——	3:45			
			8.42	WM	X3			
			→ 7	0.42 OT				

FORM HB 631 12/13

OFFICE COPY

5237 U

HOS BROS. CONSTRUCTION, INC. 400884

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 6/27/19

S M T W (TH) F S

Start 6:40 (AM) PM

Finished 3:44 AM (PM)

1/2 Hour lunch Yes ☒ No ☐

Driver's Time _____

Equip. Time _____

Cynthia Maclin — Driver's Name (Please print) — 1853 Emp.#

Truck No. 6080 — Trailer No. _____

During the time period covered on this time card, I (check one)
☐ Did ☒ Did Not

Experience a job-related injury Cynthia Maclin Signature

Remarks ending 234,551
Starting 234,291

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
6:40	T	Pre-trip, travel	398	1948				
7:36	"	export / contamined	1948	waste management	9:27			
		Lunch 9:44-10:14						
11:17	"	" "	"	"	12:23			
1:25	"	" "	"	"	2:37			
		Post trip, travel			3:44			
			8.57	WM	X3			
			LY	0.57 OT				

FORM HB 631 12/13

OFFICE COPY

HOS BROS. CONSTRUCTION, INC.

403432

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 6-27-19

S M T W **(TH)** F S

Start 6:50 **(AM)** PM

Finished 3:35 AM **(PM)**

1/2 Hour lunch Yes ☒ No ☐

Driver's Time 8.25

Equip. Time ______

Driver's Name (Please print): James Clarke Emp.# 1178

Truck No. 6082 Trailer No. 6082

During the time period covered on this time card, I (check one) ☐ Did ☒ Did Not

Experience a job-related injury ______ Signature

Remarks Exhibit# 220732

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
6:50	[illegible]	Pretrip/Travel	398	1942	7:10			
7:10	"	Export Contaminated	1942	WM Seattle	9:30	—		
11:20	"	" "	"	"	12:30	—		
1:30	"	" "	"	"	2:40	—		
	"	Travel/Posttrip	WM Seattle	398				
			8.29	wpm	x3			
			L7	0.29 OT				

FORM HB 631 12/13

OFFICE COPY

HOS BROS. CONSTRUCTION, INC.

352063

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 06-27-19

S M T W TH F S

Start 6:40 AM PM

Finished 2:21 AM PM

1/2 Hour lunch Yes ☐ No ☐

Driver's Time _____

Equip. Time _____

Driver's Name (Please print) TRACY OLSON

Emp.# 1974

Truck No. 1813 Trailer No. 2130

During the time period covered on this time card, I (check one)
☐ Did ☑ Did Not

Experience a job-related injury _____ Signature

Remarks END 242388
START 242224
TOTAL 164

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
6:40		SHUTTLE	398 4	OSW	7:50			
7:50		PRE-TRIP/HOOK TRL	1962	OSW	8:05			
8:05		TRAVEL	OSW	1948	8:26			
8:27	8 YARD	CONTAMINATED	1948	W.M.I	10:02	—		
11:45	↓	↓	↓	↓	1:07	—		
1:12		TRAVEL	WMI	3988	2:11			
2:21		POST TRIP		398				
			7.19	WM	X2			

FORM HB 631 12/13

OFFICE COPY

HOS BROS. CONSTRUCTION, INC. 384014

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 6-27-2019

S M T W (TH) F S

Start 6 40 (AM) PM

Finished 2 20 AM (PM)

1/2 Hour lunch Yes ☒ No ☐

Driver's Time

Equip. Time

Driver's Name (Please print): Tim Grimm Emp.# 536

Truck No. 5063 Trailer No. —

During the time period covered on this time card, I (check one) ☐ Did ☒ Did Not

Experience a job-related injury Tim Grimm Signature

Remarks

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
6 40	8Axle	Shuttle Tracey O	398 WCL	OSW	7 53			
7 53	8Axle	Travel	OSW	1948	8 20			
8 25	8Axle	Export/Contaminated	1948	WM	10 08			
11 51	8Axle	Contaminated	1948	WM	1 15			
1 15	8Axle	Travel/Post trip	WM	398	2 20			
			7.17	WM	X2			

FORM HB 631 12/13

OFFICE COPY

HOS BROS. CONSTRUCTION, INC.

397468

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 6-27-19
S M T W TH F S

Driver's Name (Please print) ARNE Wilen Emp.# 398

Start 630 AM PM

Truck No. 5237 Trailer No. 5237

Finished 145 AM PM

During the time period covered on this time card, I (check one)
☐ Did ☒ Did Not

1/2 Hour lunch Yes ☒ No ☐

Experience a job-related injury _____ Signature

Driver's Time _____

Remarks _____

Equip. Time _____

5234.7 miles

5256.0 - 5234.7 = 21.3 Hrs

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
630	8AXL	TRAVEL	398	1948	730			
730	"	DIRT "CONTAMINATED"	1948	W.M.	930			
1125	"	"	"	"	1245			
1245	"	TRAVEL	W.M.	398	145			
			6.75	WM	X2			

FORM HB 631 12/13

OFFICE COPY

0972

Invoice Number:
180689

Invoice Date:
Jun 27, 2019

BEST PARKING LOT CLEANING INC
2412 INTER AVE
PUYALLUP, WA 98372

Voice: 800-310-7406
Fax: 253-770-0724

Invoice

Page: 1

Bill To: HOS BROTHERS CONSTRUCTION
P.O. BOX 1788
WOODINVILLE, WA 98072-1788

Job Site: JOB 1948
MONROE

POSTED
JUL 09 2019

Customer ID	Customer PO	Payment Terms	Due Date
HOSBRO19	109839-JUNE	Net 30 Days	7/27/19

Job Slip # / Description		Hours	Price	Net
TRUCK JOB SLIP #11422 06/27/2019		2.00	105.00	210.00

DW

Pat

RECEIVED HBC
POST DATE: _____ APPR
JUL 03 2019
CODE: 1948-10983
COMMENTS: PM03

Dillon

Subtotal	210.00
Sales Tax	
Total Invoice Amount	210.00
Payment/Credit Applied	
TOTAL	**210.00**

TERMS: NET 30 DAYS MONTHLY FIN CHRG = 1.75%

PLEASE SHOW INVOICE NUMBER WITH YOUR PAYMENT

ALL INVOICE DISPUTES MUST BE SUBMITTED
IN WRITING PRIOR TO INVOICE DUE DATE

MONROE EX 0.00

TIME AND MATERIALS FIELD WORK AUTHORIZATION

HOS BROS. CONSTRUCTION, INC.
P.O. Box 1788, Woodinville, WA 98072-1788
(425) 481-5569 Fax (425) 485-6634 hbci@hosbros.com

JOB: 1948 Impacted Soil Date 6/28/19 Day: M T W TH (F) S Su

ITEM NO.	PM NO.	DESCRIPTION OF WORK PERFORMED	EQUIPMENT / LABOR	HOURS Regular	HOURS OT	UNIT Hrs/Ea/Day
1		Work with Landau and Assoc.	PC400 # 3135	7		AR
		with Excavation and Samples	Operator	7		AR
		Remove and Stockpile Impacted	G.C.	8		AR
		Soil. Building A.				
		Excavate Test Holes and Samples				
		Pits Building E.				
		Check and Shoot Elev. at Sample				
		Areas for Depths.				

MATERIALS USED: (Concrete, Sand, Pipe, Fittings, - etc.)			VENDOR	QUANTITY	UNIT
1					

RENTAL EQUIPMENT: (Small Tools, Compressor, Pumps, - etc.)			VENDOR	QUANTITY	UNIT
1					

Hos Bros. Construction, Inc. _____ SIGNATURE Supt TITLE

Contractor / Owner Representative _____ SIGNATURE _____ TITLE

All above work and materials subject to audit and verification by HOS Project Accounting

FORM HB805 5/13

TIME AND MATERIALS FIELD WORK AUTHORIZATION

HOS BROS. CONSTRUCTION, INC.
P.O. Box 1788, Woodinville, WA 98072-1788
(425) 481-5569 Fax (425) 485-6634 hbci@hosbros.com

JOB: # #1948 PM#3 Date 7/1/19 Day: (M) T W TH F S Su

ITEM NO.	PM NO.	DESCRIPTION OF WORK PERFORMED	EQUIPMENT / LABOR	HOURS Regular	HOURS OT	UNIT Hrs/Ea/Day
1		REMOVE POSSIBLE CONTAMINATED DIRT FROM UKNOWN TANK LOCATION TO STOCKPILE FOR TESTING.	PC400 #3135	1		
			OPERATOR	1		

MATERIALS USED: (Concrete, Sand, Pipe, Fittings, - etc.)	VENDOR	QUANTITY	UNIT
1			

RENTAL EQUIPMENT: (Small Tools, Compressor, Pumps, - etc.)	VENDOR	QUANTITY	UNIT
1			

Hos Bros. Construction, Inc. _____ SIGNATURE _____ TITLE

Contractor / Owner Representative _____ SIGNATURE _____ TITLE

All above work and materials subject to audit and verification by HOS Project Accounting

FORM HB805 5/13

TIME AND MATERIALS FIELD WORK AUTHORIZATION

HOS BROS. CONSTRUCTION, INC.
P.O. Box 1788, Woodinville, WA 98072-1788
(425) 481-5569 Fax (425) 485-6634 hbci@hosbros.com

JOB: 1948 #9002 Date 7/1/19 Day: (M) T W TH F S Su

ITEM NO.	PM NO.	DESCRIPTION OF WORK PERFORMED	EQUIPMENT / LABOR	HOURS Regular	HOURS OT	UNIT Hrs/Ea/Day
1		REMOVE UKNOWN TANK AND DEBRI	PC 400 #3135	1		HR
		FROM FOOTING EXCAVATION	OPERATOR	1		HR
		REMOVE CONCRETE AND METAL DEBRI	MINI #2906	8		HR
		FROM FOOTING EX DIRT, BEFORE	OPERATOR	8		HR
		ENTERING STOCKPILE.				

MATERIALS USED: (Concrete, Sand, Pipe, Fittings, - etc.)			VENDOR	QUANTITY	UNIT
1					

RENTAL EQUIPMENT: (Small Tools, Compressor, Pumps, - etc.)			VENDOR	QUANTITY	UNIT
1					

Hos Bros. Construction, Inc. _____ SIGNATURE _____ TITLE

Contractor / Owner Representative _____ SIGNATURE _____ TITLE

All above work and materials subject to audit and verification by HOS Project Accounting

FORM HB805 5/13

TIME AND MATERIALS FIELD WORK AUTHORIZATION

HOS BROS. CONSTRUCTION, INC.
P.O. Box 1788, Woodinville, WA 98072-1788
(425) 481-5569 Fax (425) 485-6634 hbci@hosbros.com

JOB: 1948 PM #2 Date 7/2/19 Day: M (T) W TH F S Su

ITEM NO.	PM NO.	DESCRIPTION OF WORK PERFORMED	EQUIPMENT / LABOR	HOURS Regular	HOURS OT	UNIT Hrs/Ea/Day
1		BREAK UP AND LOAD CONCRETE FOR EXPORT - FROM PAD C FOOTING EXCAVATION.	PC400 # 3135	1		
			Sioscamp #1764	(TBD)		

MATERIALS USED: (Concrete, Sand, Pipe, Fittings, - etc.)	VENDOR	QUANTITY	UNIT
1 Export Concrete	Iron Mt	17.84	TN

RENTAL EQUIPMENT: (Small Tools, Compressor, Pumps, - etc.)	VENDOR	QUANTITY	UNIT
1			

Hos Bros. Construction, Inc. _____ SIGNATURE Supt TITLE

Contractor / Owner Representative _____ SIGNATURE Supt. TITLE

All above work and materials subject to audit and verification by HOS Project Accounting

FORM HB805 5/13

HOS BROS. CONSTRUCTION, INC.

407127

7733 W. Bostian Road • PO Box 1788 • Woodinville, WA 98072-1788 (425) 481 5569 Fax (425) 485 6634

TEAMSTER TIME TICKET

Date: 7/2/19
S M T W TH F S

Start 600 AM PM

Finished AM PM

1/2 Hour lunch Yes ☒ No ☐

Driver's Time

Equip. Time

Driver's Name (Please print) John Crowe

Emp # 215

Truck No. 1763/1764

Trailer No. 2249/2248

During the time period covered on this time card, I (check one) ☐ Did ☐ Did Not

Experience a job-related injury [signature]

Signature

Remarks

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
600	side dump	Preloaded #1763 COF/PEY	1932	Tenny Lee	815			
815		Preloaded #1764 COF/PEY	1932	Tenny Lee	1045			
950		utility sand	Miles Sand & Gravel	1948	1045			
1045		lunch		1948	1115			
1115		concrete	1948	[illegible]	1215			
1240		Sand utility	Miles Sand & Gravel	1948	140			
		2 hrs - SAND						
		1.5 hrs - conc Bk						

FORM HB 631 12/13

OFFICE COPY

IRON MOUNTAIN QUARRY LLC
22121 17TH AVE SE #117
BOTHELL WA 98021-7404
425-481-0999 PHONE
425-486-3346 FAX

INVOICE

Customer	0001113
Job	0044
Date	07/02/19
Invoice #	0290700

Bill To	HOS BROS. CONSTRUCTION PO BOX 1788 WOODINVILLE, WA 98072	Job Description	MONROE 19-48

Plant	IRON MT QUARRY	Ticket Date	07/02/19

Item #	Description	Ticket #/Reference	Quantity	Price	Total
000100	SOLID WASTE REFUSE T	071999	.00	.00	4.50
000501	CONCRETE, BRICK, DEB	071999	17.84	7.00	124.88

POSTED
JUL 18 2019

Pat

RECEIVED HBCI
POST DATE: _____ APPR: _____
JUL 10 2019
CODE: 1948-1098:7
COMMENTS: PM07 4000801

Dillon

Subtotal	Tax	Total
129.38	.00	129.38

Customer Copy

TIME AND MATERIALS FIELD WORK AUTHORIZATION

HOS BROS. CONSTRUCTION, INC.
P.O. Box 1788, Woodinville, WA 98072-1788
(425) 481-5569 Fax (425) 485-6634 hbci@hosbros.com

JOB: 1948 PM# 23 Date 8/3/19 Day: M T (W) TH F S Su

ITEM NO.	PM NO.	DESCRIPTION OF WORK PERFORMED	EQUIPMENT / LABOR	HOURS Regular	HOURS OT	UNIT Hrs/Ea/Day
1			mini EX #2906	2		
		REMOVE DEBRI AND METAL FROM	OPERATOR	2		
		WATERLINE EXCAVATION				
		FROM STA 6+00 TO STA 10+00				
		ROAD A				

MATERIALS USED: (Concrete, Sand, Pipe, Fittings, - etc.)	VENDOR	QUANTITY	UNIT
1			

RENTAL EQUIPMENT: (Small Tools, Compressor, Pumps, - etc.)	VENDOR	QUANTITY	UNIT
1			

Hos Bros. Construction, Inc. _____ SIGNATURE _____ TITLE

Contractor / Owner Representative _____ SIGNATURE _____ TITLE

All above work and materials subject to audit and verification by HOS Project Accounting

FORM HB805 5/13

TIME AND MATERIALS FIELD WORK AUTHORIZATION

HOS BROS. CONSTRUCTION, INC.
P.O. Box 1788, Woodinville, WA 98072-1788
(425) 481-5569 Fax (425) 485-6634 hbci@hosbros.com

JOB: 1948 PM #3 Date 6/3/19 Day: M T (W) TH F S Su

ITEM NO.	PM NO.	DESCRIPTION OF WORK PERFORMED	EQUIPMENT / LABOR	HOURS Regular	HOURS OT	UNIT Hrs/Ea/Day
1		EXCAVATE AND LOAD MATERIAL	PC400 #3135	8		HR
		FROM BUILDING A.	OPERATOR	8		HR
		STOCKPILE REMAINING MATERIAL	G.E.	2		HR
		ESTIMATED 190 TCY				
		EXCAVATED AND REMOVE 2' CLEAN	PC138 #5241	8		HR
		DIRT FROM CONTAMINATED AREA	OPERATOR	8		HR
		EXCAVATED 1' DEPTH OF CONTAMINATED	G.E	6		HR
		MATERIAL FROM BUILDING C TO				
		STOCKPILE.				
		ESTIMATED PILE 260 TCY				

MATERIALS USED: (Concrete, Sand, Pipe, Fittings, - etc.)	VENDOR	QUANTITY	UNIT
1			

RENTAL EQUIPMENT: (Small Tools, Compressor, Pumps, - etc.)	VENDOR	QUANTITY	UNIT
1			

Hos Bros. Construction, Inc. _____ SIGNATURE _____ TITLE

Contractor / Owner Representative _____ SIGNATURE _____ TITLE

All above work and materials subject to audit and verification by HOS Project Accounting

FORM HB805 5/13

1 86043

150

WASTE MANAGEMENT

INVOICE

POSTED
JUL 17 2019

Customer ID:	**18-34789-33002**
Customer Name:	HOS BROS CONSTRUCTION INC
Service Period:	JULY 2019
Invoice Date:	07/16/2019
Invoice Number:	0001806-4802-4

How To Contact Us	Your Payment Is Due	Your Total Due
Visit **wm.com** To setup your online profile, sign up for paperless statements, manage your account, view holiday schedules, pay your invoice or schedule a pickup Customer Service: **(541) 454-2030**	**08/14/2019** If full payment of the invoiced amount is not received within your contractual terms, you may be charged a monthly late charge of 2.5% of the unpaid amount, with a minimum monthly charge of $5, or such late charge allowed under applicable law, regulation or contract.	~~**$114,222.40**~~ 36,471.60 See Reverse for Important Messages

Previous Balance		Payments		Adjustments		Current Charges		Total Due
77,750.80	+	0.00	+	0.00	+	36,471.60	=	~~114,222.40~~

Details for Service Location: **Customer ID: 18-34789-33002**
Hos Bros Construction Inc, PO Box 1788, Woodinville WA 98072-1788

Description	Date	Ticket	Quantity	Unit of Measure	Rate	Amount
Vehicle#: h1828	07/03/19	31250				0.00
Po#:114448wad						0.00
Petroleum contaminated soil, daily cover, pmt is r			26.62	TON	31.52	839.06
Gondola per ton			26.62	TON	23.48	625.04
Profile # 114448wad						0.00
Generator rivers edge wa llp 426 e freemont, monroe wa						0.00
Manifest#: na						0.00
Ticket Total						**1,464.10**
Vehicle#: h5237 1948	07/03/19	31251				0.00
Po#:114448wad						0.00
Petroleum contaminated soil, daily cover, pmt is r			27.02	TON	31.52	851.67
Gondola per ton			27.02	TON	23.48	634.43
Profile # 114448wad						0.00
Generator rivers edge wa llp 426 e freemont, monroe wa						0.00

Pat

Please detach and send the lower portion with payment --- (no cash or staples)

WASTE MANAGEMENT
DUWAMISH RELOAD FACILITY
7400 8TH AVE SOUTH
SEATTLE, WA 98108

(541) 454-2030

RECEIVED HBCI
POST DATE: APPR:
JUL 17 2019
CODE: 1948-1-40987 40080-01
COMMENTS: PMO3

Invoice Date	Invoice Number	Customer ID (Include with your payment)
07/16/2019	0001806-4802-4	18-34789-33002
Payment Terms	**Total Due**	**Amount**
~~Total Due by~~ 08/14/2019	~~$114,222.40~~ 36,471.60	36,471.60

4802000180647893300200001806000036471600011422240 6

Paid online

11391L22

HOS BROS CONSTRUCTION INC
PO BOX 1788
WOODINVILLE WA 98072-1788

DUWAMISH RELOAD FACILITY
PO BOX 541065
LOS ANGELES, CA 90054-1065

261-0000121-4802-9

THINK GREEN.

Printed on recycled paper.

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31250

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 07/03/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H1828
Container
Driver LONNIE McBEE
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	07/03/2019 08:59:55	Scale 1	kfunk2		Gross	97860 lb
Out	07/03/2019 09:13:05	Scale 1	kfunk2		Tare	44620 lb
					Net	53240 lb
					Tons	26.62

Comments HOS - AM

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	26.62	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	26.62	Tons				

203WM

Total Tax

Total Tickets

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108 / Ph: 206-694-0600

Reprint
Ticket# 31254

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 07/03/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H1831
Container
Driver TONY ROBBINS
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound
In	07/03/2019 09:15:21	Scale 1	kfunk2	
Out	07/03/2019 09:31:26	Scale 1	kfunk2	

Gross	101220 lb
Tare	42780 lb
Net	58440 lb
Tons	29.22

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	29.22	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	29.22	Tons				

203WM

Total Tax

Total Ticket

Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31251

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 07/03/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H5237
Container
Driver ARNE WILEN
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	07/03/2019 09:06:25	Scale 1	kfunk2		Gross	97900 lb
Out	07/03/2019 09:06:25		kfunk2		Tare	43860 lb
					Net	54040 lb
					Tons	27.02

Comments HOS - HM

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	27.02	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	27.02	Tons				SNOHOMISH

203WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31252

Ph: 206-694-0600

Customer Name	HOS BROS CONSTRUCTION INC HOS	Carrier	SELF SELF		
Ticket Date	07/03/2019	Vehicle#	H6086	Volume	
Payment Type	Credit Account	Container			
Manual Ticket#		Driver	JIM CHARLES		
Route		Check#			
Hauling Ticket#		Billing#	0000121		
Destination		Grid			
PO#	114448WAD				

	Time	Scale	Operator	Inbound		
In	07/03/2019 09:09:06	Scale 1	kfunk2		Gross	100860 lb
Out	07/03/2019 09:09:06		kfunk2		Tare	43540 lb
					Net	57320 lb
					Tons	28.66

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	28.66	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	28.66	Tons				

203WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108 Ph: 206-694-0600

Reprint
Ticket# 31253

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 07/03/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H1833
Container
Driver ANGELA CASTEEL
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound	Gross	Tare	Net	Tons
In	07/03/2019 09:11:40	Scale 1	kfunk2		100480 lb			
Out	07/03/2019 09:27:43	Scale 1	kfunk2			44120 lb	56360 lb	28.18

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	28.18	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	28.18	Tons				

203WM

Total Tax

Driver's Signature

Total Ticket

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31258

Ph: 206-694-0600

Customer Name	HOS BROS CONSTRUCTION INC HOS	Carrier	SELF SELF
Ticket Date	07/03/2019	Vehicle#	H1828
Payment Type	Credit Account	Container	
Manual Ticket#		Driver	LONNIE MCBEE
Route		Check#	
Hauling Ticket#		Billing#	0000121
Destination		Grid	
PO#	114448WAD		

Volume

	Time	Scale	Operator	Inbound		
In	07/03/2019 11:58:34	Scale 1	kfunk2		Gross	109060 lb
Out	07/03/2019 11:58:34		kfunk2		Tare	44620 lb
					Net	64440 lb
					Tons	32.22

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	32.22	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	32.22	Tons				

203WM

Total Tax

Total Ticket

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31263

Ph: 206-694-0600

Customer Name	HOS BROS CONSTRUCTION INC HOS	Carrier	SELF SELF		
Ticket Date	07/03/2019	Vehicle#	H6086	Volume	
Payment Type	Credit Account	Container			
Manual Ticket#		Driver	JIM CHARLES		
Route		Check#			
Hauling Ticket#		Billing#	0000121		
Destination		Grid			
PO#	114448WAD				

	Time	Scale	Operator	Inbound		
In	07/03/2019 12:47:13	Scale 1	kfunk2		Gross	106080 lb
Out	07/03/2019 12:47:13		kfunk2		Tare	43540 lb
					Net	62540 lb
					Tons	31.27

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	31.27	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	31.27	Tons				

203WM

Total Tax

Total Ticket

Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31262

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 07/03/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H1831
Container
Driver TONY ROBBINS
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	07/03/2019 12:35:01	Scale 1	kfunk2		Gross	108940 lb
Out	07/03/2019 12:35:01		kfunk2		Tare	42780 lb
					Net	66160 lb
					Tons	33.08

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	33.08	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	33.08	Tons				

203WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Ph: 206-694-0600

Reprint
Ticket# 31259

Customer Name	HOS BROS CONSTRUCTION INC HOS	Carrier	SELF SELF
Ticket Date	07/03/2019	Vehicle#	H5237
Payment Type	Credit Account	Container	
Manual Ticket#		Driver	ARNE WILEN
Route		Check#	
Hauling Ticket#		Billing#	0000121
Destination		Grid	
PO#	114448WAD		

Volume

	Time	Scale	Operator	Inbound		
In	07/03/2019 12:15:29	Scale 1	kfunk2		Gross	110380 lb
Out	07/03/2019 12:15:29		kfunk2		Tare	43860 lb
					Net	66520 lb
					Tons	33.26

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	33.26	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	33.26	Tons				SNOHOMISH

203WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31260

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 07/03/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H1833
Container
Driver ANGELA CASTEEL
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	07/03/2019 12:17:51	Scale 1	kfunk2		Gross	109900 lb
Out	07/03/2019 12:17:51		kfunk2		Tare	44120 lb
					Net	65780 lb
					Tons	32.89

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	32.89	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	32.89	Tons				SNOHOMISH

203WM

Total Tax

HOS BROS. CONSTRUCTION, INC.

403436

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 7-3-19

S M T (W) TH F S

Start 6:30 (AM) PM

Finished 2:00 AM (PM)

1/2 Hour lunch Yes ☒ No ☐

Driver's Time 7

Equip. Time

Driver's Name (Please print) James Charles

Emp.# 1179

Truck No. 6086

Trailer No. 6086

During the time period covered on this time card, I (check one) ☐ Did ☒ Did Not

Experience a job-related injury [signature]

Signature

Remarks End miles 123 526

JW

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use
6:30	T&T Belly	pre trip/oil tank	398	1149	7:35	
7:45	11	Export Contaminated	1948	West Seattle	9:15	
11:20	11	11 11	11	11	1:00	
1505	11	Travel / Post trip	West Seattle	398	2:00	
		7:00 - 2:00	7	WM	#2	

FORM HB 631 12/13

OFFICE COPY

HOS BROS. CONSTRUCTION, INC. 402898

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: July 3, 2019
S M T W TH F S

Start 635 AM PM

Finished 115 AM PM

1/2 Hour lunch Yes ☑ No ☐

Driver's Time _____

Equip. Time _____

Lonnie McBee
Driver's Name (Please print)

2242
Emp.#

Truck No. 1828

Trailer No. 2140

During the time period covered on this time card, I (check one)
☐ Did ☑ Did Not

Experience a job-related injury Lonnie McBee
Signature

Remarks _____

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
635	TT	Pre/Travel	398	1948	645			
730	TT	Export (Contaminated)	1948	Waste Management	915			
1020	"	" "	"	"	1215			
105	"	Post Trip	398		115			
		7:05 - 1:15 -	6.17	WM	42			

FORM HB 631 12/13

OFFICE COPY

HOS BROS. CONSTRUCTION, INC.

406197

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 7-3-19

S M T (W) TH F S

Start 6:50 (AM) PM

Finished 1:10 AM (PM)

1/2 Hour lunch Yes ☒ No ☐

Driver's Time

Equip. Time

Driver's Name (Please print) [illegible] Emp.# 2159

Truck No. 1833 Trailer No. [illegible]

During the time period covered on this time card, I (check one) ☐ Did ☒ Did Not

Experience a job-related injury [signature]

Signature

Remarks

234092

234274

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
6:50		Pickup [illegible]						
7:13	8x	Export Contaminated	1949	Waste management	9:??			
10:4?	↓	↓	↓	↓	12:25			
1:10	1:20							
		6:50 -1:20	6	WM	x2			
		7:20						

FORM HB 631 12/13

OFFICE COPY

HOS BROS. CONSTRUCTION, INC.

397471

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 7-3-19

S M T W TH F S

Start 640 AM PM

Finished 1330 AM PM

1/2 Hour lunch Yes ☒ No ☐

Driver's Time

Equip. Time

5933 - 6113

Driver's Name (Please print) ARNE Wilen

Emp.# 248

Truck No. 5237 Trailer No. 5237

During the time period covered on this time card, I (check one)
☐ Did ☒ Did Not

Experience a job-related injury Arne Wilen
Signature

Remarks

544.4 miles

242.1 hrs

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
640	8 Axle	Travel	398	1948	740			
740	"	Contaminated Dirt	1948	W.M.	920			
1115	"	"	"	"	1230			
1230	"	Travel	W.M.	398	130			
		7:10 - 1:30	6.33	WM	x2			
		7:15 - 1:15	6.0 hrs					

FORM HB 631 12/13

OFFICE COPY

HOS BROS. CONSTRUCTION, INC. 380039

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 7-3-19

S M T (W) TH F S

Start 6:45 (AM) PM

Finished 1:45 AM PM

1/2 Hour lunch Yes ☑ No ☐

Driver's Time _____

Equip. Time _____

Anthony Robbins
Driver's Name (Please print)

225
Emp.#

Truck No. 1831

Trailer No. 2143

During the time period covered on this time card, I (check one)
☐ Did ☑ Did Not

Experience a job-related injury _____
Signature

Remarks _____

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
6:45	SAY	Pretrip / Travel	395	1946	7:50			
7:50	SAY	Expos / Contaminated	1946	Waste Management	9:25			
10:54	SAY	" "	"	" "	11:45			
11:45	SAY	Travel / Post trip	Waste Management	395	12:45			
		6:45 7:45		~M	x2			
		7:15 - 1:45	6.5 hrs					

FORM HB 631 12/13

OFFICE COPY

BEST PARKING LOT CLEANING INC
2412 INTER AVE
PUYALLUP, WA 98372

Voice: 800-310-7406
Fax: 253-770-0724

Invoice

Invoice Number: 180796

Invoice Date: Jul 9, 2019

Page: 1

Bill To: HOS BROTHERS CONSTRUCTION
P.O. BOX 1788
WOODINVILLE, WA 98072-1788

Job Site: JOB 1948
MONROE

POSTED
JUL 17 2019

Customer ID	Customer PO	Payment Terms	Due Date
HOSBRO19	110106-JULY	Net 30 Days	8/8/19

Job Slip # / Description		Hours	Price	Net
TRUCK JOB SLIP #11467 07/03/2019		7.00	105.00	735.00

RECEIVED HBC
POST DATE: JUL 11 2019 APPR:
CODE: 1948-1098-3
COMMENTS: 17403

Subtotal	735.00
Sales Tax	
Total Invoice Amount	735.00
Payment/Credit Applied	
TOTAL	**735.00**

TERMS: NET 30 DAYS MONTHLY FIN CHRG = 1.75%

PLEASE SHOW INVOICE NUMBER WITH YOUR PAYMENT

ALL INVOICE DISPUTES MUST BE SUBMITTED IN WRITING PRIOR TO INVOICE DUE DATE

MONROE EX 0.00

TIME AND MATERIALS FIELD WORK AUTHORIZATION

HOS BROS. CONSTRUCTION, INC.
P.O. Box 1788, Woodinville, WA 98072-1788
(425) 481-5569 Fax (425) 485-6634 hbci@hosbros.com

JOB: 1948 PM# 2 Date 7/8/19 Day: (M) T W TH F S Su

ITEM NO.	PM NO.	DESCRIPTION OF WORK PERFORMED	EQUIPMENT / LABOR	HOURS Regular	HOURS OT	UNIT Hrs/Ea/Day
1		EXPORT CONCRETE AND ASPHALT FROM BUILDING A EXCAVATION				
		TRUCK + TRAILER	STATION # 5237	(TBD)		

MATERIALS USED: (Concrete, Sand, Pipe, Fittings, - etc.)	VENDOR	QUANTITY	UNIT
1			

RENTAL EQUIPMENT: (Small Tools, Compressor, Pumps, - etc.)	VENDOR	QUANTITY	UNIT
1			

Hos Bros. Construction, Inc. _____ SIGNATURE _____ TITLE

Contractor / Owner Representative _____ SIGNATURE _____ TITLE

All above work and materials subject to audit and verification by HOS Project Accounting

FORM HB805 5/13

HOS BROS. CONSTRUCTION, INC. 402899

7733 W. Bostian Road • PO Box 1788 • Woodinville, WA 98072-1788 (425) 481 5569 Fax (425) 485 6634

TEAMSTER TIME TICKET

Date: S M T W TH F S — July 8/2019

Start 640 AM PM

Finished 250 AM PM

1/2 Hour lunch Yes ☑ No ☐

Driver's Time _____

Equip. Time _____

Lonnie McBee
Driver's Name (Please print)

Emp.# 2242

Truck No. 1828

Trailer No. 2140

During the time period covered on this time card, I (check one)
☐ Did ☑ Did Not
Experience a job-related injury

Lonnie McBee
Signature

Remarks _____

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
640	TT	Pre Travel	398	1948	730			
735	TT	Export Contaminated	1948	WM	905			
1015	TT	" "	"	"	1125			
105	TT	Export (Strippings)	1948	390	220			
240	TT	Post Trip	398		250			
			4.33	WM	PM 3			
			3.33	Export	PM 2			
				Conc				

FORM HB 631 12/13

OFFICE COPY

HOS BROS. CONSTRUCTION, INC.

397472

7733 W. Bostian Road • PO Box 1788 • Woodinville, WA 98072-1788 (425) 481 5569 Fax (425) 485 6634

TEAMSTER TIME TICKET

Date: 7-8-19

S (M) T W TH F S

Start 630 (AM) PM

Finished 245 AM (PM)

1/2 Hour lunch Yes ☒ No ☐

Driver's Time

Equip. Time

6112 - 6304

Driver's Name (Please print) ARNE Wilen

Emp.# 248

Truck No. 5237 Trailer No 5237

During the time period covered on this time card, I (check one) ☐ Did ☒ Did Not

Experience a job-related injury [signature] Signature

Remarks 736.4 miles

256.8 hrs

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
630	Back	Travel	398	1948	725			
725	"	Contaminated Dirt	1948	W.M.	915			
1110	"	Br Concrete	"	Iron Mt	1235			
1255	"	1" w/R	Miles	1948	145			
145	"	Travel	1948	398	245			
			2.75	WM	PM 3			
			3	Export conc.	PM 2			

FORM HB 631 12/13

OFFICE COPY

IRON MOUNTAIN QUARRY LLC
22121 17TH AVE SE #117
BOTHELL WA 98021-7404
425-481-0999 PHONE
425-486-3346 FAX

INVOICE

Customer	0001113
Job	0044
Date	07/08/19
Invoice #	0290802

POSTED
JUL 18 2019

Bill To	HOS BROS. CONSTRUCTION PO BOX 1788 WOODINVILLE, WA 98072	Job Description	MONROE 19-48

Plant	IRON MT QUARRY	Ticket Date	07/08/19

Item #	Description	Ticket #/Reference	Quantity	Price	Total
000100	SOLID WASTE REFUSE T	072379	.00	.00	7.17
000501	CONCRETE, BRICK, DEB	072379	28.47	7.00	199.29

Pat

RECEIVED HBCI
POST DATE: _____ APPR: _____
JUL 17 2019
CODE: 1948-1098-7
COMMENTS: PM03 400800

Dillon

Subtotal	Tax	Total
206.46	.00	206.46

Customer Copy

TIME AND MATERIALS FIELD WORK AUTHORIZATION

HOS BROS. CONSTRUCTION, INC.
P.O. Box 1788, Woodinville, WA 98072-1788
(425) 481-5569 Fax (425) 485-6634 hbci@hosbros.com

JOB: 1948 #PM#3 Date 7/8/19 Day: (M) T W TH F S Su

ITEM NO.	PM NO.	DESCRIPTION OF WORK PERFORMED	EQUIPMENT / LABOR	HOURS Regular	HOURS OT	UNIT Hrs/Ea/Day
1		LOAD EXPORT CONTAMINATED	AE 400 # 3135	8		HR
		BACKFILL CONTAMINATED AREA WITH	D-65 # 4714	8		HR
		NATIVE	ROLLER # 5249	8		HR
		SUPERVISOR		8	.5	HR

MATERIALS USED: (Concrete, Sand, Pipe, Fittings, - etc.)	VENDOR	QUANTITY	UNIT
1			

RENTAL EQUIPMENT: (Small Tools, Compressor, Pumps, - etc.)	VENDOR	QUANTITY	UNIT
1			

Hos Bros. Construction, Inc. _____ SIGNATURE _____ TITLE

Contractor / Owner Representative _____ SIGNATURE _____ TITLE

All above work and materials subject to audit and verification by HOS Project Accounting

FORM HB805 5/13

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31296

Ph: 206-694-0600

Customer Name	HOS BROS CONSTRUCTION INC HOS	Carrier	SELF SELF
Ticket Date	07/08/2019	Vehicle#	H1833
Payment Type	Credit Account	Container	
Manual Ticket#		Driver	ANGELA CASTEEL
Route		Check#	
Hauling Ticket#		Billing#	0000121
Destination		Grid	
PO#	114448WAD		

Volume

	Time	Scale	Operator	Inbound		
In	07/08/2019 12:11:00	Scale 1	kfunk2		Gross	106320 lb
Out	07/08/2019 12:11:00		kfunk2		Tare	44120 lb
					Net	62200 lb
					Tons	31.10

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	31.10	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	31.10	Tons				

203WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108 Ph: 206-694-0600

Reprint
Ticket# 31298

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 07/08/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H1823
Container
Driver KAREN ECHANIZ
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	07/08/2019 12:14:03	Scale 1	kfunk2		Gross	111280 lb
Out	07/08/2019 12:14:03		kfunk2		Tare	44120 lb
					Net	67160 lb
					Tons	33.58

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	33.58	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	33.58	Tons				SNOHOMISH

203WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31299

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 07/08/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H1831
Container
Driver TONY ROBBINS
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound
In	07/08/2019 12:19:55	Scale 1	kfunk2	
Out	07/08/2019 12:19:55		kfunk2	

Gross	110740 lb
Tare	42780 lb
Net	67960 lb
Tons	33.98

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	33.98	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	33.98	Tons				

203WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108 Ph: 206-694-0600

Reprint
Ticket# 31281

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 07/08/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H5238
Container
Driver JIM CHARLES
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator
In	07/08/2019 09:15:02	Scale 1	kfunk2
Out	07/08/2019 09:25:08	Scale 1	kfunk2

Inbound

Gross	106080 lb
Tare	43020 lb
Net	63060 lb
Tons	31.53

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	31.53	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	31.53	Tons				SNOHOMISH

203WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Ph: 206-694-0600

Reprint
Ticket# 31277

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 07/08/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H5237
Container
Driver ARNE WILEN
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound
In	07/08/2019 08:58:30	Scale 1	kfunk2	
Out	07/08/2019 08:58:30		kfunk2	

Gross	108240 lb
Tare	43860 lb
Net	64380 lb
Tons	32.19

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	32.19	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	32.19	Tons				

203WM

Total Tax

Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Ph: 206-694-0600

Reprint
Ticket# 31278

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 07/08/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H1831
Container
Driver TONY ROBBINS
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound
In	07/08/2019 09:01:27	Scale 1	kfunk2	
Out	07/08/2019 09:01:27		kfunk2	

Gross	111960 lb
Tare	42780 lb
Net	69180 lb
Tons	34.59

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	34.59	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	34.59	Tons				

203WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Ph: 206-694-0600

Reprint
Ticket# 31279

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 07/08/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H1823
Container
Driver KAREN ECHANIZ
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	07/08/2019 09:05:18	Scale 1	kfunk2		Gross	108940 lb
Out	07/08/2019 09:05:18		kfunk2		Tare	44120 lb
					Net	64820 lb
					Tons	32.41

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	32.41	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	32.41	Tons				

203WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 31280

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 07/08/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H1833
Container
Driver ANGELA CASTEEL
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	07/08/2019 09:12:20	Scale 1	kfunk2		Gross	104580 lb
Out	07/08/2019 09:12:20		kfunk2		Tare	44120 lb
					Net	60460 lb
					Tons	30.23

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	30.23	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	30.23	Tons				

203WM

Total Tax

Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108 Ph: 206-694-0600

Reprint
Ticket# 31295

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 07/08/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H1828
Container
Driver LONNIE MCBEE
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	07/08/2019 11:18:23	Scale 1	kfunk2		Gross	114200 lb
Out	07/08/2019 11:18:23		kfunk2		Tare	44620 lb
					Net	69580 lb
					Tons	34.79

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	34.79	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	34.79	Tons				

203WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108 , Ph: 206-694-0600

Reprint
Ticket# 31276

Customer Name	HOS BROS CONSTRUCTION INC HOS	Carrier	SELF SELF
Ticket Date	07/08/2019	Vehicle#	H1828
Payment Type	Credit Account	Container	
Manual Ticket#		Driver	LONNIE MCBEE
Route		Check#	
Hauling Ticket#		Billing#	0000121
Destination		Grid	
PO#	114448WAD		

Volume

	Time	Scale	Operator	Inbound		
In	07/08/2019 08:56:19	Scale 1	kfunk2		Gross	105600 lb
Out	07/08/2019 08:56:19		kfunk2		Tare	44620 lb
					Net	60980 lb
					Tons	30.49

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	30.49	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	30.49	Tons				SNOHOMISH

203WM

Total Tax

Print Name/Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Ph: 206-694-0600

Reprint
Ticket# 31300

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 07/08/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H5238
Container
Driver JIM CHARLES
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	07/08/2019 12:34:24	Scale 1	kfunk2		Gross	114640 lb
Out	07/08/2019 12:34:24		kfunk2		Tare	43020 lb
					Net	71620 lb
					Tons	35.81

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	35.81	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	35.81	Tons				

203WM

Total Tax

HOS BROS. CONSTRUCTION, INC. 402899

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: July 8 /2019
S (M) T W TH F S

Driver's Name (Please print) Lonnie McBee Emp.# 2242

Start 640 (AM) PM

Truck No. 1828 Trailer No. 2140

Finished 250 AM (PM)

During the time period covered on this time card, I (check one)
☐ Did ● Did Not

1/2 Hour lunch Yes● No ☐

Experience a job-related injury Lonnie McBee
Signature

Driver's Time

Equip. Time

Remarks

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
640	TT	Pre / Travel	398	1948	730			
735	TT	Export Contaminated	1948	W.M.	905			
1015	TT	" "	"	"	1125			
105	TT	Export (Strippings)	1948	390	220			
240	TT	Post Trip	398		250			
			4.33	WM	PM 3			
			3.33	Export	PM 2			
				cont				

FORM HB 631 12/13

OFFICE COPY

HOS BROS. CONSTRUCTION, INC.

397472

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 7-8-19

S M T W TH F S

Driver's Name (Please print) ARNE Wilen Emp.# 248

Start 630 AM PM

Truck No. 5237 Trailer No. 5237

Finished 245 AM PM

During the time period covered on this time card, I (check one)
☐ Did ☒ Did Not

1/2 Hour lunch Yes ☒ No ☐

Experience a job-related injury _____ Signature

Driver's Time _____

Equip. Time 6½ - 6304

Remarks 136.4 miles
256.8 hrs

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
630	ROCK	TRAVEL	398	1948	725			
725	"	CONTAMINATED DIRT	1948	W.M.	915			
910	"	BN CONCRETE	"	ENUMCLAW	1235			
1255	"	1" W/R	MILLS	1948	145			
145	"	TRAVEL	1948	398	245			
			2.75	WM	PM 3			
			3	EXPORT CONC.	PM 2			

FORM HB 631 12/13

OFFICE COPY

HOS BROS. CONSTRUCTION, INC.

406198

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 7 8 19

S (M) T W TH F S

Start 6:35 AM PM

Finished 3:42 AM (PM)

1/2 Hour lunch Yes ☐ No ☐

Driver's Time

Equip. Time

Driver's Name (Please print) [illegible] Emp.# 2159

Truck No. 1833 Trailer No. 2144

During the time period covered on this time card, I (check one) ☐ Did ☒ Did Not

Experience a job-related injury [signature]

Signature

Remarks 234274
234513

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
6:55		Pre lay Pavement						
9:46	8x	Export Excavation	(4.8)	WM	9:17			
10:4[illegible]	↓	↓	↓	↓	12:15			
				Torey				
1:04	↓	Export	1911	~~396~~	1:38			
2:15	↓	↓	↓	390	3:14			
3:14	↓	[illegible] Pickup	390	[illegible]				
3:31	3:42	Post lay Pavement						
			4.8	WM	PM 3			

FORM HB 631 12/13

OFFICE COPY

405372

HOS BROS. CONSTRUCTION, INC.

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 7-8-19
S (M) T W TH F S

Start 6:50 (AM) PM

Finished 356 AM (PM)

1/2 Hour lunch Yes ☐ No ☐

Driver's Time

Equip. Time

Driver's Name (Please print) KAREN ELHAWIR Emp.# 906

Truck No. 1823 Trailer No. 2135

During the time period covered on this time card, I (check one) ☐ Did ☐ Did Not

Experience a job-related injury Karen Elhawir Signature

Remarks

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
650	T&T	TRAVEL	398	1948	736			
740	T&T	CONTAMINATED X	1948	W. Mngmt	940			
1040	T&T	CONTAMINATED X	1948	W. Mngmt	1217			
105	T&T	CLEAN X	1941	ESTATEX	145			
		PIT RUN (PRELD)	398	398				
221	T&T	CLEAN X	1941	390	320			
330	T&T	PIT RUN (Preld) 1959	390 1959	398	356			
			1959					
			5	WM	PM3			

FORM HB 631 12/13

CUSTOMER COPY

403437

HOS BROS. CONSTRUCTION, INC.

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 7-8-19

S (M) T W TH F S

Start 635 (AM) PM

Finished 3:20 AM (PM)

1/2 Hour lunch Yes ☐ No ☐

Driver's Time 8:25

Equip. Time

Driver's Name (Please print): James Charles Emp.# 1178

Truck No. 5238 Trailer No. 5238

During the time period covered on this time card, I (check one) ☐ Did ☐ Did Not

Experience a job-related injury [signature]

Signature

Remarks End mile: 6677

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
6:35	Start Day	Pre-trip/Travel	398	1948	7:20			
7:25	11	Export Contaminated	1948	[illegible] Seattle	9:25			
10:45	11	" "	" "	" "	12:40			
1:10	11	1½ drain Rock	Cal-Portland Seattle	1948	2:10			
3:05	11	Park/Pre-trip / Post-trip	Cal-Portland Seattle	398	3:20			
		6:35 - 2:10	[illegible] 7	WM	PM 3			

FORM HB 631 12/13

OFFICE COPY

HOS BROS. CONSTRUCTION, INC. 380040

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 7-8-19
S (M) T W TH F S

Driver's Name (Please print) Anthony Robbins

Emp.# 2754

Start 6:45 AM PM

Truck No. 1831

Trailer No. 2143

Finished 5:03 AM (PM)

During the time period covered on this time card, I (check one)
☐ Did ☑ Did Not

1/2 Hour lunch Yes ☑ No ☐

Experience a job-related injury _____
Signature

Driver's Time _____

Remarks _____

Equip. Time _____

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
6:45	8AX	Pic trip / Travel	398	995	7:40			
7:40	8AX	Export Contaminated	1946	[illegible]	9:10			
10:35	8AX	" "	"	" "	12:25			
1:12	8AX	Export Clean Soil	1941	[illegible] Monroe	2:25			
2:30	8AX	Export Clean Soil	1941	390-1	4:35			
4:35	8AX	Travel / Post trip	390-1	398	5:03			
		6:45 - 12:25	5.17	WM	PM 3			

FORM HB 631 12/13

OFFICE COPY

227

BEST PARKING LOT CLEANING INC
2412 INTER AVE
PUYALLUP, WA 98372

Voice: 800-310-7406
Fax: 253-770-0724

Invoice Number: 180881

Invoice Date: Jul 8, 2019

Invoice

Page: 1

Bill To: HOS BROTHERS CONSTRUCTION
P.O. BOX 1788
WOODINVILLE, WA 98072-1788

Job Site: JOB 1948
MONROE

POSTED
JUL 17 2019

Customer ID	Customer PO	Payment Terms	Due Date
HOSBRO19	110106-JULY	Net 30 Days	8/7/19

Job Slip # / Description		Hours	Price	Net
TRUCK JOB SLIP #11468 07/08/2019	.	6.50	105.00	682.50

DW

RECEIVED HBC
POST DATE:_____ APPR
JUL 17 2019
CODE: 1948 / 10983
COMMENTS: PM03

Pat

Dillon

Subtotal	682.50
Sales Tax	
Total Invoice Amount	682.50
Payment/Credit Applied	
TOTAL	**682.50**

TERMS: NET 30 DAYS MONTHLY FIN CHRG = 1.75%

PLEASE SHOW INVOICE NUMBER WITH YOUR PAYMENT

ALL INVOICE DISPUTES MUST BE SUBMITTED
IN WRITING PRIOR TO INVOICE DUE DATE

MONROE EX 0.00

TIME AND MATERIALS FIELD WORK AUTHORIZATION

HOS BROS. CONSTRUCTION, INC.
P.O. Box 1788, Woodinville, WA 98072-1788
(425) 481-5569 Fax (425) 485-6634 hbci@hosbros.com

JOB: 1948 PM# ~~4~~ 3 Date 7/9/19 Day: M (T) W TH F S Su

ITEM NO.	PM NO.	DESCRIPTION OF WORK PERFORMED	EQUIPMENT / LABOR	HOURS Regular	HOURS OT	UNIT Hrs/Ea/Day
1		BACKFILL SINK HOLE AND COMPACT IN BURNING A ON TOP	PC 400 #3135	2		HR
			PC 238 #5228	2		HR
			OPERATOR X 2	4		HR

MATERIALS USED: (Concrete, Sand, Pipe, Fittings, - etc.)	VENDOR	QUANTITY	UNIT
1			

RENTAL EQUIPMENT: (Small Tools, Compressor, Pumps, - etc.)	VENDOR	QUANTITY	UNIT
1			

Hos Bros. Construction, Inc. _____ SIGNATURE _____ TITLE

Contractor / Owner Representative _____ SIGNATURE _____ TITLE

All above work and materials subject to audit and verification by HOS Project Accounting

FORM HB805 5/13

TIME AND MATERIALS FIELD WORK AUTHORIZATION

HOS BROS. CONSTRUCTION, INC.
P.O. Box 1788, Woodinville, WA 98072-1788
(425) 481-5569 Fax (425) 485-6634 hbci@hosbros.com

JOB: 1948 PM# 3 Impacted Soils Date 7/11/19 Day: M T W (TH) F S Su

ITEM NO.	PM NO.	DESCRIPTION OF WORK PERFORMED	EQUIPMENT / LABOR	HOURS Regular	HOURS OT	UNIT Hrs/Ea/Day
1		Move Impacted Soil Stockpile	Rc #400 #3135	2½		Hr
		For room on Future Excavation	Loader # 2417	2½		Hr
		Take Sidewall Samples From CB #24	[redacted]			
		Excavation	Operator x 2	5		Hr
		Backfill with native stockpile				
		from different location.				
		Excavate for Samples Building C	Rc 238 # 5228	6		Hr
		Excavate Impacted area Building E				
		Truck to Building C Stockpile	Truck Solo			
		Blend material for Sample Tests.	# 1826	(TBD)		Hr

MATERIALS USED: (Concrete, Sand, Pipe, Fittings, - etc.)	VENDOR	QUANTITY	UNIT
1			

RENTAL EQUIPMENT: (Small Tools, Compressor, Pumps, - etc.)	VENDOR	QUANTITY	UNIT
1			

Hos Bros. Construction, Inc. _____ SIGNATURE _____ TITLE

Contractor / Owner Representative _____ SIGNATURE _____ TITLE

All above work and materials subject to audit and verification by HOS Project Accounting

FORM HB805 5/13

HOS BROS. CONSTRUCTION, INC.

404738

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 7-11-19

S M T W (TH) F S

Start 6:30 (AM) PM

Finished ____ AM PM

1/2 Hour lunch Yes ☑ No ☐

Driver's Time ____

Equip. Time ____

Kenneth Moore — Driver's Name (Please print)

2275 — Emp.#

Truck No. 1826 — Trailer No. 258

During the time period covered on this time card, I (check one)
☐ Did ☐ Did Not

Experience a job-related injury ____ Signature

Remarks ____

DV

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
630	TT	pit TRIP	398		659			
659	TT	TRAIN	398	1948	739			
739	TT	UTility Sand	1948	WCJ	820			
820	TT	Rep Gravel	CRUSHER	1948	940			
111	SOLO	Load #11	1948	—				
127	TT	Rep GRAVEL	CRUSHER	1948	108			
120	TT	Rep gravel	CRUSHER	1948	151			
151	TT	TRAIN	1948	398	248			
248	TT	POST TRIP	398					
		SOLO	2.5	PM#3				
		T&T	1hr	PM04				

FORM HB 631 12/13

OFFICE COPY

TIME AND MATERIALS FIELD WORK AUTHORIZATION

HOS BROS. CONSTRUCTION, INC.
P.O. Box 1788, Woodinville, WA 98072-1788
(425) 481-5569 Fax (425) 485-6634 hbci@hosbros.com

JOB: 1948 PM# 3 O.T. PREMIUM Date 7/11/19 Day: M T W (TH) F S Su

ITEM NO.	PM NO.	DESCRIPTION OF WORK PERFORMED	EQUIPMENT / LABOR	HOURS Regular	HOURS OT	UNIT Hrs/Ea/Day
1		EMAIL O.T. PREMIUM WITH DELAYS ON HANDLING UNKNOWN MATERIALS DURING CB#24 EXCAVATION, AND BACKFILL.	OPERATOR X 2		4	HR
			LABOR X 2		3	HR

MATERIALS USED: (Concrete, Sand, Pipe, Fittings, - etc.)	VENDOR	QUANTITY	UNIT
1			

RENTAL EQUIPMENT: (Small Tools, Compressor, Pumps, - etc.)	VENDOR	QUANTITY	UNIT
1			

Hos Bros. Construction, Inc. _____ SIGNATURE _____ TITLE

Contractor / Owner Representative _____ SIGNATURE _____ TITLE

All above work and materials subject to audit and verification by HOS Project Accounting

FORM HB805 5/13

TIME AND MATERIALS FIELD WORK AUTHORIZATION

HOS BROS. CONSTRUCTION, INC.
P.O. Box 1788, Woodinville, WA 98072-1788
(425) 481-5569 Fax (425) 485-6634 hbci@hosbros.com

JOB: PM # 103 # 1948 Date 7/11/19 Day: M T W (TH) F S Su

ITEM NO.	PM NO.	DESCRIPTION OF WORK PERFORMED	EQUIPMENT / LABOR	HOURS Regular	HOURS OT	UNIT Hrs/Ea/Day
1		SEPERATE CONCRETE AND METAL	PC 400 # 3135	2		HR
		DEBRIS FROM EXCAVATION CB # 24	LOADER # 2417	2		HR

MATERIALS USED: (Concrete, Sand, Pipe, Fittings, - etc.)	VENDOR	QUANTITY	UNIT
1			

RENTAL EQUIPMENT: (Small Tools, Compressor, Pumps, - etc.)	VENDOR	QUANTITY	UNIT
1			

Hos Bros. Construction, Inc. _____ SIGNATURE _____ TITLE

Contractor / Owner Representative _____ SIGNATURE _____ TITLE

All above work and materials subject to audit and verification by HOS Project Accounting

FORM HB805 5/13

IRON MOUNTAIN QUARRY LLC
22121 17TH AVE SE #117
BOTHELL WA 98021-7404
425-481-0999 PHONE
425-486-3346 FAX

INVOICE

Customer	0001113
Job	0044
Date	07/12/19
Invoice #	0290982

Bill To	HOS BROS. CONSTRUCTION PO BOX 1788 WOODINVILLE, WA 98072 ,	Job Description	MONROE 19-48

Plant: IRON MT QUARRY | Ticket Date: 07/12/19

Item #	Description	Ticket #/Reference	Quantity	Price	Total
000100	SOLID WASTE REFUSE T	073147	.00	.00	4.85
000501	CONCRETE, BRICK, DEB	073147	19.26	7.00	134.82

POSTED
JUL 18 2019

RECEIVED HBCI
POST DATE:_____ APPR:_____
JUL 17 2019
CODE: 1948 - 1098 - 7
COMMENTS: PM03 400080.01

Pat

Allen

Subtotal	Tax	Total
139.67	.00	139.67

Customer Copy

406419

HOS BROS. CONSTRUCTION, INC.

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: July 12 2019

S M T W TH F S

Start 630 AM PM

Finished 300 AM PM

1/2 Hour lunch Yes ☑ No ☐

Driver's Time _____

Equip. Time _____

Anthony Mangold — Driver's Name (Please print)

2320 — Emp.#

Truck No. 1838

Trailer No. 2150

During the time period covered on this time card, I (check one)

☐ Did ☑ Did Not

Experience a job-related injury Tony Mangold — Signature

Remarks _____

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
630	8 Axle	Pretrip	398	398	640			
640		Travel	398 (1948) WC1		740			
740		Utility Sand	WC1	1948	806			
826		Utility Sand	WC1	1948	854			
915		Concrete	1948	Iron Mtn.	1026			
1054		Screenings	Granite	1948	1238			
1244		Travel	1948	1941	129			
129		Ex Clean Soil	194 ✓	390 ✓	225			
~~733~~		~~Water Truck~~						
233		Travel	390	398	256			
256		Post Trip	398	398	300			
		6:30 - 8:54	2.4	PM #04				
		8:54 - 10:20	1.5	PM #02				

FORM HB 631 12/13

OFFICE COPY

TIME AND MATERIALS FIELD WORK AUTHORIZATION

HOS BROS. CONSTRUCTION, INC.
P.O. Box 1788, Woodinville, WA 98072-1788
(425) 481-5569 Fax (425) 485-6634 hbci@hosbros.com

JOB: 1948 PM# 3 CONTAMINATED IN STORM Date 7/12/19 Day: M T W TH (F) S Su

ITEM NO.	PM NO.	DESCRIPTION OF WORK PERFORMED	EQUIPMENT / LABOR	HOURS Regular	HOURS OT	UNIT Hrs/Ea/Day
1			PICKUP #3135	3		HR
		REMOVE CONCRETE AND DEBRIS FROM	LABOR #2417	3		HR
		STORM EXCAVATION CB#23 AND PIPE	OPERATOR X2	2	4	HR
		RUN TO CB#24	LABOR X2		4	HR
		IMPORT BACKFILL FROM NATIVE				
		STOCKPILE.				

MATERIALS USED: (Concrete, Sand, Pipe, Fittings, - etc.)	VENDOR	QUANTITY	UNIT
1			

RENTAL EQUIPMENT: (Small Tools, Compressor, Pumps, - etc.)	VENDOR	QUANTITY	UNIT
1			

Hos Bros. Construction, Inc. _____ SIGNATURE _____ TITLE

Contractor / Owner Representative _____ SIGNATURE _____ TITLE

All above work and materials subject to audit and verification by HOS Project Accounting

FORM HB805 5/13

TIME AND MATERIALS FIELD WORK AUTHORIZATION

HOS BROS. CONSTRUCTION, INC.
P.O. Box 1788, Woodinville, WA 98072-1788
(425) 481-5569 Fax (425) 485-6634 hbci@hosbros.com

JOB: 1948 PM#3 Date 7/15/19 Day: (M) T W TH F S Su

ITEM NO.	PM NO.	DESCRIPTION OF WORK PERFORMED	EQUIPMENT / LABOR	HOURS Regular	HOURS OT	UNIT Hrs/Ea/Day
1		LOAD CONTAMINATED EXPENT	PC400 # 3135	8		HR
		IRON MT.	OPERATOR	8		
			TRUCK & TRAILER TBD			

MATERIALS USED: (Concrete, Sand, Pipe, Fittings, - etc.)	VENDOR	QUANTITY	UNIT
1			

RENTAL EQUIPMENT: (Small Tools, Compressor, Pumps, - etc.)	VENDOR	QUANTITY	UNIT
1			

Hos Bros. Construction, Inc. _____ SIGNATURE _____ TITLE

Contractor / Owner Representative _____ SIGNATURE _____ TITLE

All above work and materials subject to audit and verification by HOS Project Accounting

FORM HB805 5/13

0776

IRON MOUNTAIN QUARRY LLC
22121 17TH AVE SE #117
BOTHELL WA 98021-7404
425-481-0999 PHONE
425-486-3346 FAX

INVOICE

Customer	0001113
Job	0044
Date	07/15/19
Invoice #	0291063

Bill To	Job Description
HOS BROS. CONSTRUCTION PO BOX 1788 WOODINVILLE, WA 98072	MONROE 19-48

Plant: IRON MT QUARRY Ticket Date: 07/15/19

Item #	Description	Ticket #/Reference	Quantity	Price	Total
000012	3/4" WASHED	073570	30.35	13.00	394.55
000100	SOLID WASTE REFUSE T	073411, 073419, 073422, 073425	.00	.00	87.39
000100	SOLID WASTE REFUSE T	073436, 073473, 073493, 073494	.00	.00	111.97
000100	SOLID WASTE REFUSE T	073507, 073527, 073542, 073564	.00	.00	83.65
000508	CLASS 2 PETROLEUM CO	073411, 073419, 073422, 073425	107.89	22.50	2427.54
000508	CLASS 2 PETROLEUM CO	073436, 073473, 073493, 073494	138.23	22.50	3110.19
000508	CLASS 2 PETROLEUM CO	073507, 073527, 073542, 073564	103.28	22.50	2323.81

POSTED
JUL 31 2019

RECEIVED HBCI
POST DATE: _____ APPR: _____
1948-1098.2
JUL 24 2019
CODE: 1948-1098.7
COMMENTS: 460 86.01

Post
6 394.55
8,144.55
PM #03
Drilon

Subtotal	Tax	Total
8539.10	.00	8539.10

Customer Copy

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA
Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____
WEIGHER

Terms: Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice: It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line.

DRIVER'S SIGNATURE _____

MISSING 1 TICKET
32.25 tons

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA

Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____

WEIGHER

Terms: Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice: It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line.

DRIVER'S SIGNATURE _____

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA
Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____
WEIGHER

Terms: Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice: It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line.

DRIVER'S SIGNATURE _____

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA
Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____
WEIGHER

Terms: Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice: It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line.

DRIVER'S SIGNATURE _____

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA

Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____

WEIGHER

Terms: Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice: It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line.

DRIVER'S SIGNATURE _____

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA

Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____

WEIGHER

Terms. Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice: It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line.

DRIVER'S SIGNATURE Tony

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA
Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____
WEIGHER

Terms: Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice: It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line.

DRIVER'S SIGNATURE _____

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA

Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____

WEIGHER

Terms: Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice: It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line.

DRIVER'S SIGNATURE _____

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA

Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____

WEIGHER

Terms: Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice: It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line.

DRIVER'S SIGNATURE _____

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA
Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____
WEIGHER

Terms: Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice: It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line.

DRIVER'S SIGNATURE _____

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA
Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____
WEIGHER

Terms: Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice: It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line.

DRIVER'S SIGNATURE _____

HOS BROS. CONSTRUCTION, INC.

406283

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 7/15/19

S (M) T W TH F S

Start 630 (AM) PM

Finished 345 AM (PM)

1/2 Hour lunch Yes ☒ No ☐

Driver's Time _____

Equip. Time _____

S. & Erickson — Driver's Name (Please print)

1031 — Emp.#

Truck No. 1821

Trailer No. 2133

During the time period covered on this time card, I (check one)
☐ Did ☒ Did Not

Experience a job-related injury _____ Signature

Remarks _____

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
630	8	Pre/Travel	398	1948	715			
723	11	Class II	1948	I.M.	825	—		
850	11	P. Gravel	miles	1948	941			
942	11	Class II	1948	I.M.	1047	—		
1139	11	P. Gravel	miles	1948	1230			
1230	11	Class II	1948	I.M.	1340	—		
158	11	P Gravel	miles	1948	249			
345	11	Travel / Post	1948	398	345			
		12 - total LOADS						
		38.4 hrs total						
		3.48 OT						

FORM HB 631 12/13

OFFICE COPY

HOS BROS. CONSTRUCTION, INC. 400132

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 7-15-19

S (M) T W TH F S

Start 7:00 (AM) PM

Finished 4:43 AM (PM)

1/2 Hour lunch Yes ☒ No ☐

Driver's Time _____

Equip. Time _____

Driver's Name (Please print) Ryan Sibley

Emp.# 2255

Truck No. 1825

Trailer No. 2137

During the time period covered on this time card, I (check one)
☐ Did ☒ Did Not

Experience a job-related injury Ryan Sibley
Signature

Remarks _____

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
700		Pre trip	398		710			
710		X-Port	1941 398	390	720			
822	34.34	X-Port	1948	Iron Mountain	920	—		
935		2x4	Iron Mountain	1957	1035			
1120		X-Port	1948	Iron Mountain	106	—		
125		Washed Sand	Lake Industries	1957	235			
315		X-Port	1941 ✓	390 ✓	415			
437		Post trip	398		443			

FORM HB 631 12/13

OFFICE COPY

406843

HOS BROS. CONSTRUCTION, INC.

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 7-15-2019

S (M) T W TH F S

Start 6:50 AM PM

Finished 4:50 AM (PM)

1/2 Hour lunch Yes ☒ No ☐

Driver's Time _____

Equip. Time _____

Driver's Name (Please print) Wilfred B Galvan

Emp.# 2154

Truck No. 1822

Trailer No. 2134

During the time period covered on this time card, I (check one)

☐ Did ☒ Did Not

Experience a job-related injury WB Galvan

Signature

Remarks _____

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
6:50	T	Pre Trip	398		7:00			
7:00	T	Travel	398	1948	7:40			
7:55	T	Export -	1948	Iron MT	9:00	—		
9:15	T	Export - Gatchell	Gatchell	1948	10:25			
10:30	T	Export -	1948	Iron MT	11:43	—		
11:47		Lunch	Iron MT		12:18			
12:37	T	Export - Gatchell	Gatchell	1948	1:32			
1:32	T	Export -	1948	Iron MT	2:41	—		
2:50	T	3/4 Clean Iron MT	Iron MT	1948	3:47			
3:47		Travel	1948	398	4:40			
4:40		Post Trip	398		4:50			

FORM HB 631 12/13

OFFICE COPY

404741

HOS BROS. CONSTRUCTION, INC.

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 6-15-19
S M T W TH F S

Start 640 AM PM

Finished 434 AM PM

1/2 Hour lunch Yes ☑ No ☐

Driver's Time _____

Equip. Time _____

Ken Moore
Driver's Name (Please print)

2278
Emp.#

Truck No. 182C

Trailer No. 2138

During the time period covered on this time card, I (check one)
☐ Did ☑ Did Not

Experience a job-related injury Ken Moore
Signature

Remarks _____

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
641	TT	PRETRIP	398		651			
651	TT	TRAVEL	398	1948	741			
741	TT	EXPORT	1948	IRON MT	904	→		
904	TT	2¼ ROCK	IRON MT	1957	1015			
1107	TT	EXPORT	1948	IRON MT	1257	→		
1259	TT	2¼ ROCK	IRON MT	1957	220			
301	TT	EXPORT	1941 ✓	390V	408			
408	TT	TRAVEL	390	398	427			
427	TT	POST TRIP	398	— —				

FORM HB 631 12/13

OFFICE COPY

406421

HOS BROS. CONSTRUCTION, INC.

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: July 15, 2019
S (M) T W TH F S

Start 645 (AM) PM

Finished 347 AM (PM)

1/2 Hour lunch Yes ☑ No ☐

Driver's Time _____

Equip. Time _____

Anthony Mangold — Driver's Name (Please print)

Emp.# 2320

Truck No. 1838

Trailer No. 2150

During the time period covered on this time card, I (check one)
☐ Did ☑ Did Not
Experience a job-related injury Tony Mangold
Signature

Remarks _____

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
645	Axle	Pretrip	398	398	655			
655		Travel	398	(1948)	742			
742		Ex dirt	1948	Iron Mt	850	—		
925		Pea Gravel	GETCHEL	1948	1028			
1034		Ex dirt	1948	Iron Mt.	1141	—		
1232		Pea Gravel	Getchell	1948	128			
218		Ex Clean Soil	1941✓	390✓	316			
324		Travel	390	398	344			
344		Post trip	398	398	347			

FORM HB 631 12/13

OFFICE COPY

LABOR AND MATERIALS FIELD WORK AUTHORIZATION

HOS BROS. CONSTRUCTION, INC.
P.O. Box 1788, Woodinville, WA 98072-1788
(425) 481-5568 Fax (425) 485-6634 hbci@hosbros.com

JOB: 1948 Pm # 3

Date 7/22/19 Day: (M) T W TH

ITEM NO.	PM NO.	DESCRIPTION OF WORK PERFORMED	EQUIPMENT / LABOR	HOURS Regular	HOURS OT	Hr
1		Export Contaminated Dirt	R400 # 3135	8		
		Load Trucks, Seperate metal	Operator	8		
		And Rubber from Stockpile				

MATERIALS USED: (Concrete, Sand, Pipe, Fittings, - etc.)			VENDOR	QUANTITY	UNIT
1					

RENTAL EQUIPMENT: (Small Tools, Compressor, Pumps, - etc.)			VENDOR	QUANTITY	UNIT
1					

Hos Bros. Construction, Inc. _____ SIGNATURE _____ TITLE

Contractor / Owner Representative _____ SIGNATURE _____ TITLE

All above work and materials subject to audit and verification by HOS Project Accounting

FORM HEB05 5/13

IRON MOUNTAIN QUARRY LLC
22121 17TH AVE SE #117
BOTHELL WA 98021-7404
425-481-0999 PHONE
425-486-3346 FAX

POSTED
JUL 31 2019

0846 INVOICE

Customer	0001113
Job	0048
Date	07/22/19
Invoice #	0291319

Bill To	Job Description
HOS BROS. CONSTRUCTION PO BOX 1788 WOODINVILLE, WA 98072 ,,	RIVERSEDGE HOLE 2 #19-48

Plant: IRON MT QUARRY | Ticket Date: 07/22/19

Item #	Description	Ticket #/Reference	Quantity	Price	Total
000012	3/4" WASHED	074403, 074404, 074407, 074414	118.94	13.00	1546.22
000012	3/4" WASHED	074444, 074453, 074459, 074461	118.60	13.00	1541.80
000100	SOLID WASTE REFUSE T	074388, 074393, 074394, 074397	.00	.00	84.56
000100	SOLID WASTE REFUSE T	074401, 074415, 074434, 074436	.00	.00	81.92
000100	SOLID WASTE REFUSE T	074439, 074441, 074460, 074482	.00	.00	88.74
000100	SOLID WASTE REFUSE T	074489, 074498, 074500, 074506	.00	.00	105.27
000100	SOLID WASTE REFUSE T	074512, 074531, 074534	.00	.00	80.97
000508	CLASS 2 PETROLEUM CO	074388, 074393, 074394, 074397	104.41	22.50	2349.24
000508	CLASS 2 PETROLEUM CO	074401, 074415, 074434, 074436	101.13	22.50	2275.44
000508	CLASS 2 PETROLEUM CO	074439, 074441, 074460, 074482	109.55	22.50	2464.88
000508	CLASS 2 PETROLEUM CO	074489, 074498, 074500, 074506	129.97	22.50	2924.33
000508	CLASS 2 PETROLEUM CO	074512, 074531, 074534	99.95	22.50	2248.89

2437.8

545.01 TONS

12704.24

Pat

RECEIVED HBCI
POST DATE: _____ APPR: _____
1948-1098.2 3,088.02
JUL 31 2019
CODE: 1948-1098.7 12,704.24
COMMENTS: 46080.01
PM #03
Dillon

Subtotal	Tax	Total
15792.26	.00	15792.26

Customer Copy

BEST PARKING LOT CLEANING INC
2412 INTER AVE
PUYALLUP, WA 98372

Voice: 800-310-7406
Fax: 253-770-0724

Invoice

POSTED
JUL 31 2019

Invoice Number: 181581

Invoice Date: Jul 29, 2019

Page: 1

Bill To: HOS BROTHERS CONSTRUCTION
P.O. BOX 1788
WOODINVILLE, WA 98072-1788

Job Site: JOB 1948
MONROE

Customer ID	Customer PO	Payment Terms	Due Date
HOSBRO19	110106-JULY	Net 30 Days	8/28/19

Job Slip # / Description		Hours	Price	Net
TRUCK JOB SLIP #14490 07/22/2019		8.25	105.00	866.25
TRUCK JOB SLIP #14453 07/24/2019		3.50	105.00	367.50

RECEIVED HBC
POST DATE:_____ APPR:_____
JUL 31 2019
CODE: 1948-10983
COMMENTS:_____

$866.25
PM 03

Subtotal	1,233.75
Sales Tax	
Total Invoice Amount	1,233.75
Payment/Credit Applied	
TOTAL	**1,233.75**

TERMS: NET 30 DAYS MONTHLY FIN CHRG = 1.75%

PLEASE SHOW INVOICE NUMBER WITH YOUR PAYMENT

ALL INVOICE DISPUTES MUST BE SUBMITTED IN WRITING PRIOR TO INVOICE DUE DATE

MONROE EX 0.00

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA

Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____

WEIGHER

Terms: Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice: It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line.

DRIVER'S SIGNATURE _____

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA
Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____
WEIGHER

Terms: Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice: It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line.

DRIVER'S SIGNATURE Tracy Olson

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA
Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____
WEIGHER

Terms: Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice: It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line.

DRIVER'S SIGNATURE _____

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA
Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____
WEIGHER

Terms: Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice: It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line.

DRIVER'S SIGNATURE _____

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA
Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____
WEIGHER

Terms: Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice: It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line.

DRIVER'S SIGNATURE _____

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA

Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____

WEIGHER

Terms: Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice: It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line.

DRIVER'S SIGNATURE _____

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA
Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____
WEIGHER

Terms: Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice: It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line.

DRIVER'S SIGNATURE _____

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA
Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____
WEIGHER

Terms: Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice: It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line.

DRIVER'S SIGNATURE _____

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA

Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____

WEIGHER

Terms: Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice: It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line.

DRIVER'S SIGNATURE _____

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA
Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____
WEIGHER

Terms: Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice: It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line.

DRIVER'S SIGNATURE _____

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA
Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____
WEIGHER

Terms: Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice: It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line.

DRIVER'S SIGNATURE _____

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA
Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____
WEIGHER

Terms: Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice: It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line.

DRIVER'S SIGNATURE Tracy Olson

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA
Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____
WEIGHER

Terms: Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice: It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line.

DRIVER'S SIGNATURE _____

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA
Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____
WEIGHER

Terms: Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice: It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line.

DRIVER'S SIGNATURE _____

HOS BROS. CONSTRUCTION, INC.

406686

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 07-22-19
S (M) T W TH F S

Start 6:30 (AM) PM

Finished 4:04 AM (PM)

1/2 Hour lunch Yes ☑ No ☐

Driver's Time ______

Equip. Time ______

Driver's Name (Please print): Tracy Olson

Emp.#: 1994

Truck No. 1818

Trailer No. 2130

During the time period covered on this time card, I (check one) ☐ Did ☑ Did Not Experience a job-related injury

Signature: [signature]

Remarks: Lunch - 10:58 to 11:28   END 246739
START 246520
TOTAL 219

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use
6:30		PRE TRIP		398	6:35	
6:35		TRAVEL	398	1948 (circled)	7:17	
7:26	S&PUP[?]	EXPORT - CLASS 2	1948	IRON MNT. GRANITE FALLS	8:30	
8:44	↓	3/4 CHIP	IRON MNT	1948	9:42	
9:42	↓	EXPORT - CLASS 2	1948	IRON MNT	10:56	
11:28	↓	3/4 CHIP	IRON MNT	1948	12:23	
12:26	↓	EXPORT	1948	IRON MNT	1:34	
1:59	↓	PEA GRAVEL	MILES [?] CETCHEL PIT	1948	2:55	
3:03		TRAVEL	1948	398	3:54	
3:54		POST TRIP			4:04	
		6:30-4:04	9.07	hrs		
			↳ 1.07	OT		
			19 total			
			Loads			

FORM HB 631 12/13

OFFICE COPY

407094

HOS BROS. CONSTRUCTION, INC.

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 7-22-19

S M T W TH F S

Start 640 AM PM

Finished 433 AM PM

1/2 Hour lunch Yes ☐ No ☐ 1118

Driver's Time

Equip. Time

Driver's Name (Please print) Harold L Jackson

Emp.# 2500

Truck No. 1820

Trailer No. 2132

During the time period covered on this time card, I (check one) ☐ Did ☐ Did Not

Experience a job-related injury

Signature [illegible]

Remarks

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
640	TTT	[illegible]			650			
654	"	[illegible]	1948	?	735			
737	"	[illegible]		Iron MT	843			
851	"	[illegible]	Iron MT	1948	958			
1001	"	[illegible]	1948	Iron MT	1105			
1109	"	[illegible]	Iron MT	1948	1249			
1257	"	[illegible]	1948	Iron MT	204			
233		[illegible]	Menzel C	1948	333			
333		Back To Yard			420			
423		Post Trip			433			
		6:40 - 4:33	9.38	hrs				
			41.38 OT					

FORM HB 631 12/13

OFFICE COPY

HOS BROS. CONSTRUCTION, INC. 234951

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

RENTAL TEAMSTER TIME TICKET

Date: 7/22/14
S M T W TH F

Start 7:45 AM PM

Finished 3:30 AM PM

1/2 Hour lunch Yes ☐ No ☐

Driver's Time ____________

Equip. Time ____________

Driver's Name (Please print) [illegible]

Emp.# [illegible]

Truck No. 20

Trailer No. 20

During the time period covered on this time card, I (check one)
☐ Did ☐ Did Not

Experience a job-related injury ____________
Signature

Remarks ____________

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
7:45	8 axle	Import Dirt	1948	Fremont	8:34			
8:50	8 axle	[illegible]	Fremont	1948	9:40			
9:54	8 axle	Import Dirt	1948	Fremont	10:53			
11:06	8 axle	[illegible]	Fremont	Job 1948	11:50			
12:10	8 axle	Import Dirt	Job 1948	Fremont	12:57			
1:23	8 axle	[illegible]	[illegible]	1948	2:14			
3:15	8 axle	Import Dirt	1948	Fremont	3:30			
		7:45 - 3:30	7.75	hrs				

FORM HB 107 5/14

OFFICE COPY

HOS BROS. CONSTRUCTION, INC. 234953

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

RENTAL TEAMSTER TIME TICKET

Date: 7/22/19
S (M) T W TH F

Start 7:45 (AM) PM

Finished 3:30 AM PM

1/2 Hour lunch Yes ☐ No ☒

Driver's Time 7.75

Equip. Time

Driver's Name (Please print) Joe Pesnack Emp.#

Truck No. Wolford 18 Trailer No. 18

During the time period covered on this time card, I (check one) ☐ Did ☒ Did Not

Experience a job-related injury ______ Signature

Remarks

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
7:45	24	Export dirt - imported soil	19418	Iron Mountain	8:55			
10:04	" "	" "	" "	" "	11:20			
12:30	" "	" "	" "	" "	1:35			
2:30	" "	" "	" "	" "	3:30			
		7:45 - 3:30	7.75	hrs				

FORM HB 107 5/14

DRIVER'S COPY

HOS BROS. CONSTRUCTION, INC. 234954

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

RENTAL TEAMSTER TIME TICKET

Date: 7/20/14
S M T W TH F

Start 8:00 AM PM

Finished 2:30 AM PM

1/2 Hour lunch Yes ☐ No ☒

Driver's Time _____

Equip. Time _____

Driver's Name (Please print) John Coleman

Emp.# _____

Truck No. 24

Trailer No. _____

During the time period covered on this time card, I (check one)
☐ Did ☐ Did Not

Experience a job-related injury _____
Signature

Remarks _____

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
8:00	24	Import Soil	HOS/Moore	IronMountain	8:50			
9:10	24	Utility Sand	Miles/Merrill	HOS/Moore	10:20			
10:50	24	Import Soil	HOS/Moore	IronMountain	11:40			
12:10	24	Utility Sand	Merrill	HOS/Moore	1:10			
1:10	24	Import Soil	HOS/Moore	IronMountain	2:30			
		8 - 2:30	6.5 hrs					

FORM HB 107 5/14

OFFICE COPY

HOS BROS. CONSTRUCTION, INC. 234952

7733 W Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481 5569 Fax (425) 485.6634

RENTAL TEAMSTER TIME TICKET

Date: 7-22-19
S M T W TH F

Start 8:10 AM PM

Finished ____ AM PM

1/2 Hour lunch Yes ☐ No ☐

Driver's Time ____

Equip. Time ____

Driver's Name (Please print) Paul Eastland

Truck No. 16

Emp.# 230

Trailer No. ____

During the time period covered on this time card, I (check one)
☐ Did ☐ Did Not

Experience a job-related injury ____
Signature

Remarks ____

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
8:10	T-T	[redacted] C.D.F	198	Iron Mt	9:20			
10:00		Recycled Sand	Maxwelton	198	11:00			
11:15		C. D. F			12:30			
12:50		Rec Gravel			1:45			
		8:10 - 1:45	5.58	hrs				
		Mazama						

FORM HB 107 5/14

OFFICE COPY

TIME AND MATERIALS FIELD WORK AUTHORIZATION

HOS BROS. CONSTRUCTION, INC.
P.O. Box 1788, Woodinville, WA 98072-1788
(425) 481-5569 Fax (425) 485-6634 hbci@hosbros.com

JOB: 1948 PM#3 Date 7/24/19 Day: M T (W) TH F S Su

ITEM NO.	PM NO.	DESCRIPTION OF WORK PERFORMED	EQUIPMENT / LABOR	HOURS Regular	HOURS OT	UNIT Hrs/Ea/Day
1		REMOVE EXISTING STORM MANHOLE IN BUILDING A. SEPERATE GARBAGE AND STOCKPILE CONTAMINATED MATERIAL FOR TESTING.	PC400 3135	3		HR
			OPERATOR	3		HR

MATERIALS USED: (Concrete, Sand, Pipe, Fittings, - etc.)	VENDOR	QUANTITY	UNIT
1			

RENTAL EQUIPMENT: (Small Tools, Compressor, Pumps, - etc.)	VENDOR	QUANTITY	UNIT
1			

Hos Bros. Construction, Inc. _____ SIGNATURE _____ TITLE

Contractor / Owner Representative _____ SIGNATURE _____ TITLE

All above work and materials subject to audit and verification by HOS Project Accounting

FORM HB805 5/13

TIME AND MATERIALS FIELD WORK AUTHORIZATION

HOS BROS. CONSTRUCTION, INC.
P.O. Box 1788, Woodinville, WA 98072-1788
(425) 481-5569 Fax (425) 485-6634 hbci@hosbros.com

JOB: 1948 Pm #3 Date 7/26/19 Day: M T W TH (F) S Su

ITEM NO.	PM NO.	DESCRIPTION OF WORK PERFORMED	EQUIPMENT / LABOR	HOURS Regular	HOURS OT	UNIT Hrs/Ea/Day
1		BACKFILL AND COMPACTION of CONTAMINATED OVER EX INSIDE BUILDING C	PC138 # 3032	3		HR
			OPERATOR	3		HR

MATERIALS USED: (Concrete, Sand, Pipe, Fittings, - etc.)	VENDOR	QUANTITY	UNIT
1			

RENTAL EQUIPMENT: (Small Tools, Compressor, Pumps, - etc.)	VENDOR	QUANTITY	UNIT
1			

Hos Bros. Construction, Inc. _____ SIGNATURE _____ TITLE

Contractor / Owner Representative _____ SIGNATURE _____ TITLE

All above work and materials subject to audit and verification by HOS Project Accounting

FORM HB805 5/13

TIME AND MATERIALS FIELD WORK AUTHORIZATION

HOS BROS. CONSTRUCTION, INC.
P.O. Box 1788, Woodinville, WA 98072-1788
(425) 481-5569 Fax (425) 485-6634 hbci@hosbros.com

JOB: 1948 PM #3 Date 7/27/19 Day: M T W TH F (S) Su

ITEM NO.	PM NO.	DESCRIPTION OF WORK PERFORMED	EQUIPMENT / LABOR	HOURS Regular	HOURS OT	UNIT Hrs/Ea/Day
1		BACKFILL AND COMPACTION OF CONTAMINATED OVER EX INSIDE BUILDING C	PC138 # 3032	3		HR
			OPERATOR		3	HR

MATERIALS USED: (Concrete, Sand, Pipe, Fittings, - etc.)	VENDOR	QUANTITY	UNIT
1			

RENTAL EQUIPMENT: (Small Tools, Compressor, Pumps, - etc.)	VENDOR	QUANTITY	UNIT
1			

Hos Bros. Construction, Inc. _____ SIGNATURE _____ Supt TITLE

Contractor / Owner Representative _____ SIGNATURE _____ TITLE

All above work and materials subject to audit and verification by HOS Project Accounting

FORM HB805 5/13

TIME AND MATERIALS FIELD WORK AUTHORIZATION

HOS BROS CONSTRUCTION, INC.
P.O. BOX 1788, Woodinville, WA 98072-1788
(425) 481-5569 Fax (425) 485-6634 hbci@hosbros.com

HOS BROS

JOB: 1948 PM#3 Date 7/29 Day: (M) T W TH F S Su

ITEM NO.	PM NO.	DESCRIPTION OF WORK PERFORMED	EQUIPMENT / LABOR	HOURS Regular	HOURS OT	UNIT Hrs/Ea/Day
1						
		SEPERATE EMMP MATERIAL FROM STOCKPILE FOR HAUL OFF.	KOM 138	2		

MATERIALS USED: (Concrete, Sand, Pipe, Fittings, - etc.)	VENDOR	QUANTITY	UNIT
1			

RENTAL EQUIPMENT: (Small Tools, Compressor, Pumps, etc.)	VENDOR	QUANTITY	UNIT
1			

Hos Bros. Construction, Inc. _____ SIGNATURE _____ P.E. TITLE

Contractor / Owner Representative _____ SIGNATURE _____ TITLE

All above work and materials subject to audit and verification by HOS Project Accounting

FORM HB805 07/01

TIME AND MATERIALS FIELD WORK AUTHORIZATION

HOS BROS. CONSTRUCTION, INC.
P.O. Box 1788, Woodinville, WA 98072-1788
(425) 481-5569 Fax (425) 485-6634 hbci@hosbros.com

JOB: 1948 Pm #3 Date 7/30/19 Day: M (T) W TH F S Su

ITEM NO.	PM NO.	DESCRIPTION OF WORK PERFORMED	EQUIPMENT / LABOR	HOURS Regular	HOURS OT	UNIT Hrs/Ea/Day
1		LOAD EXPORT ON TRUCKS	PC 400 #3135	8		Hr
		TO IRON MT. CONTAMINATED	OPERATOR	8		Hr
			TRUCK & TRAILER	TBD		

MATERIALS USED: (Concrete, Sand, Pipe, Fittings, - etc.)	VENDOR	QUANTITY	UNIT
1			

RENTAL EQUIPMENT: (Small Tools, Compressor, Pumps, - etc.)	VENDOR	QUANTITY	UNIT
1			

Hos Bros. Construction, Inc. _____ SIGNATURE Supt TITLE

Contractor / Owner Representative _____ SIGNATURE _____ TITLE

All above work and materials subject to audit and verification by HOS Project Accounting

FORM HB805 5/13

HOS BROS. CONSTRUCTION, INC.

407100

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 7-30-19
S M T W TH F S

Driver's Name (Please print) Harold L. Jackson Emp.# 2500

Start 645 AM PM

Truck No. 1520 Trailer No. 2132

Finished 225 AM PM

During the time period covered on this time card, I (check one) ☐ Did ☑ Did Not

1/2 Hour lunch Yes ☑ No ☐ 1153

Experience a job-related injury ______ Signature

Driver's Time ______

Remarks ______

Equip. Time ______

DE

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
645	T&T	Pre Trip			655			
655	"	Trav Time To Job	1948		738			
746	"	Comp Dirt	"	Iron MT	845	–		
912	"	Pea Gravel	Menzel	1948	1012			
1020	"	Comp Dirt	1948	Iron MT	1122	–		
1137	"	Pea Gravel	Menzel	1948	115			
116		Back To Yard			215			
215		Post Trip			225			
		6:45 - 2:25	7.17	IM	2			

FORM HB 631 12/13

OFFICE COPY

HOS BROS. CONSTRUCTION, INC.

406090

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: July 30 2019
S M (T) W TH F S

Start 6 30 (AM) PM

Finished 4 20 AM (PM)

1/2 Hour lunch Yes ☒ No ☐

Driver's Time ______

Equip. Time ______

Lonnie McBee — Driver's Name (Please print)

Emp.# 2242

Truck No. 1826

Trailer No. 2138

During the time period covered on this time card, I (check one) ☐ Did ☒ Did Not

Experience a job-related injury Lonnie McBee
Signature

Remarks Picked pea gravel up at Miles (Getchel)

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
630	TT	Pre / Travel	398	1948	720			
735	TT	Export	1948	Iron Mtn	850	–		
920	TT	Import Pea Gravel	Miles	1948	1005			
1015	TT	Export	1948	Iron Mtn	1125	–		
1210	TT	Import (Pea Gravel)	Miles Getchell	1948	1255			
105	TT	Export	1948	Iron Mtn	210	–		
235	TT	Import 1½ drain	Miles Getchell	1948	325			
410	TT	Post Trip	398		420			
		6:30 -4:20	9.33	JM	3			
			4 1.33 OT					

FORM HB 631 12/13

OFFICE COPY

HOS BROS. CONSTRUCTION, INC.

391166

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 07-30-19
S M (T) W TH F S

Start 715 (AM) PM

Finished 301 AM (PM)

1/2 Hour lunch Yes ■ No ☐

Driver's Time _____

Equip. Time _____

Norm Shanks
Driver's Name (Please print)

1430
Emp.#

Truck No. 1754

Trailer No. 2227

During the time period covered on this time card, I (check one)
☐ Did ■ Did Not

Experience a job-related injury Norman Shanks
Signature

Remarks 14889
15048

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
715	8 axel	TC-Travel	398	1948	805			
832		concrete	1948	Im	929	—		
956		pea gravel	Menzel	1948	1050			
1115		scrap metal	1948	United Recy	1223			
1230		lunch	399	399	100			
126		export	1941 ✓	390 ✓	232			
232		Travel-TC	390	398	301			
		7:15 - 12:30	4.75					

FORM HB 631 12/13

OFFICE COPY

IRON MOUNTAIN QUARRY LLC
22121 17TH AVE SE #117
BOTHELL WA 98021-7404
425-481-0999 PHONE
425-486-3346 FAX

INVOICE

Customer	0001113
Job	0048
Date	07/30/19
Invoice #	0291607

Bill To	HOS BROS. CONSTRUCTION PO BOX 1788 WOODINVILLE, WA 98072 ,	Job Description	RIVERSEDGE HOLE 2 #19-48

Plant	IRON MT QUARRY	Ticket Date	07/30/19

Item #	Description	Ticket #/Reference	Quantity	Price	Total
000100	SOLID WASTE REFUSE T	075611, 075621, 075673, 075678	.00	.00	95.86
000100	SOLID WASTE REFUSE T	075746	.00	.00	25.47
000508	CLASS 2 PETROLEUM CO	075611, 075621, 075673, 075678	118.35	22.50	2662.88
000508	CLASS 2 PETROLEUM CO	075746	31.45	22.50	707.63

POSTED
AUG 0 5 2019

Pat

RECEIVED HBCI
POST DATE: _____ APPR:
AUG 0 5 2019
CODE: 1948-1098.7
COMMENTS: PM03 40080.01

Pillar

Subtotal	Tax	Total
3491.84	.00	3491.84

Customer Copy

IRON MOUNTAIN QUARRY LLC
22121 17TH AVE SE #117
BOTHELL WA 98021-7404
425-481-0999 PHONE
425-486-3346 FAX

INVOICE

Customer	0001113
Job	0044
Date	07/30/19
Invoice #	0291606

Bill To	HOS BROS. CONSTRUCTION PO BOX 1788 WOODINVILLE, WA 98072	Job Description	MONROE 19-48

Plant	IRON MT QUARRY	Ticket Date	07/30/19

Item #	Description	Ticket #/Reference	Quantity	Price	Total
000100	SOLID WASTE REFUSE T	075634	.00	.00	5.38
000501	CONCRETE, BRICK, DEB	075634	21.35	7.00	149.45

POSTED
AUG 05 2019

Pd

RECEIVED HBCI
POST DATE: ______ APPR: [signature]
AUG 05 2019
CODE: 1948-1098-7
COMMENTS: PM03 400800-01

Pd Kn

Subtotal	Tax	Total
154.83	.00	154.83

Customer Copy

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA
Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____
WEIGHER

Terms: Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice: It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line.

DRIVER'S SIGNATURE _____

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA
Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____
WEIGHER

Terms: Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice: It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line.

DRIVER'S SIGNATURE _____

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA
Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____
WEIGHER

Terms: Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice: It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line .

DRIVER'S SIGNATURE L McBee.

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA
Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____
WEIGHER

Terms: Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice: It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line.

DRIVER'S SIGNATURE _____

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA
Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____
WEIGHER

Terms: Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice. It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line.

DRIVER'S SIGNATURE _____

IRON MOUNTAIN QUARRY LLC

Quarry site: 20800 Wayside Mine Rd – Granite Falls WA

Phone: (Toll Free) 1-866-672-3434

DATE _____ **TIME** _____ **TICKET#** _____

CUSTOMER _____ ☐ **CASH** ☐ **CHARGE**

JOB _____ **PO#** _____

HAULER _____ **TRUCK#** _____ ☐ **HIRED**

PRODUCT _____

PRICE _____

SUBTOTAL _____

TAX _____

TOTAL _____

_____

WEIGHER

Terms: Net 30 days from the end of the month. A finance charge will be assessed on all past due accounts at a rate of 1-1/2% PER MONTH. Annual Finance Charge of 18%. Notice: It is specifically agreed that this company shall not be in any way responsible for damage to customers property resulting in Deliveries beyond curb line.

DRIVER'S SIGNATURE _____

TIME AND MATERIALS FIELD WORK AUTHORIZATION

HOS BROS. CONSTRUCTION, INC.
P.O. Box 1788, Woodinville, WA 98072-1788
(425) 481-5569 Fax (425) 485-6634 hbci@hosbros.com

JOB: 1948 PM#3 Date 7/31/19 Day: M T (W) TH F S Su

ITEM NO.	PM NO.	DESCRIPTION OF WORK PERFORMED	EQUIPMENT / LABOR	HOURS Regular	HOURS OT	UNIT Hrs/Ea/Day
1		REMOVE GARBAGE FROM EXISTING STORM REMOVAL BUILDING A AND BACKFILL TRENCH.	PC400 # 3135	8		
			OPERATOR	8		
			G.E.	6		
			MINI EX 2906	3		
			OPERATOR	3		
			ROLLER #5249	6		

MATERIALS USED: (Concrete, Sand, Pipe, Fittings, - etc.)	VENDOR	QUANTITY	UNIT
1			

RENTAL EQUIPMENT: (Small Tools, Compressor, Pumps, - etc.)	VENDOR	QUANTITY	UNIT
1			

Hos Bros. Construction, Inc. _____ SIGNATURE Supt TITLE

Contractor / Owner Representative _____ SIGNATURE _____ TITLE

All above work and materials subject to audit and verification by HOS Project Accounting

FORM HB805 5/13

TIME AND MATERIALS FIELD WORK AUTHORIZATION

HOS BROS. CONSTRUCTION, INC.
P.O. Box 1788, Woodinville, WA 98072-1788
(425) 481-5569 Fax (425) 485-6634 hbci@hosbros.com

JOB: 1948 Pm# 3 Date 8/2/19 Day: M T W TH (F) S Su

ITEM NO.	PM NO.	DESCRIPTION OF WORK PERFORMED	EQUIPMENT / LABOR	HOURS Regular	HOURS OT	UNIT Hrs/Ea/Day
1			PC490 #5202	6		
		LOAD REMAINDER OF CONTAMINATED	OPERATOR	6		
		FROM BUILDING A				
		BEST		(TBD)		
		SWEEPER				

MATERIALS USED: (Concrete, Sand, Pipe, Fittings, - etc.)			VENDOR	QUANTITY	UNIT
1					

RENTAL EQUIPMENT: (Small Tools, Compressor, Pumps, - etc.)			VENDOR	QUANTITY	UNIT
1					

Hos Bros. Construction, Inc. _____ SIGNATURE _____ TITLE

Contractor / Owner Representative _____ SIGNATURE _____ TITLE

All above work and materials subject to audit and verification by HOS Project Accounting

FORM HB805 5/13

BEST PARKING LOT CLEANING INC.
800-310-7406

40 ANNIVERSARY 1977 - 2017

www.bestparkinglot.com

Seattle 206-382-9340
Tacoma 253-863-3330
Puyallup 253-841-7406

JOB SLIP # 10658

CUSTOMER: JOB NAME:

WATER UP LOCATION: ADDRESS:

DUMPING LOCATION : CITY:

DISPATCHED BY: JOB PHONE:

REQUESTED BY: ON DATE:

SWEEPER	VACUUM	TANKER	PO NUMBER	OPERATOR	LABORER
PORTAL ZONE	ON JOB	OFF JOB	PORTAL ZONE	TOTAL	3 HOUR MIN

DESCRIPTION OF SERVICES:

Circle Site Portal charge
YARD Puyallup Woodinville
Zone Charge 1= 1 (.5 /.5)
2= 1.5 (.75/.75)
3= 2 (1.0/1.0)
4= 2.5 (1.25/1.25)
5= 3 (1.5/1.5)
6= Outside

SPILL RESPONSE:

BIO DEGREASER

BIO ABSORBENT

SPILL KIT

BOOMS

PPE

OTHER PRODUCTS

PRESSURE WASHING

FIRE HOSE PER FT

POLY BROOMS

ALL DEBRIS HAULED OFF IS SUBJECT TO A PER YARD FEE $45 - $178.20 AND UP

WATER ON SITE? YES NO LOCATION OF HYRANT _____ LOADS OF FRESH WATER _____

DISPOSAL ON SITE? YES NO (Solids) Yards of Disposal _____ (Liquids) Gallons of Disposal _____

(If available) SIGNED BY: _____

VACTORS * CCTV* SWEEPERS * VACUUMS * WATER TRUCKS * PRESSURE WASHING * DE-ICING * PLOWING * DISPOSAL*SPILL RESPONSE

After 30 days 1.75% per month interest will be charged. Signature of this invoice will be considered your notice of our intent to lien.

Office use only:
Credit Card COD On Account T&M Quote Sales Person_____

Best Parking Lot Cleaning Inc. 2412 Inter Ave Puyallup, WA 98372 1-800-310-7406

White - Original Yellow - Remittance Pink - Contractors Copy

HOS BROS. CONSTRUCTION, INC.

396190

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 8 2 19

S M T W TH F S

Start 640 AM PM

Finished 310 AM PM

1/2 Hour lunch Yes ☒ No ☐

Driver's Time _____

Equip. Time _____

Lino Frias
Driver's Name (Please print)

1159
Emp.#

Truck No. 1824 Trailer No. 236

During the time period covered on this time card, I (check one)
☐ Did ☒ Did Not

Experience a job-related injury _____
Signature

Remarks _____

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
640	Axle	Pre Trip / Travel	398	AMB	740			
740		Export	1948	[illegible] Seattle	859	—		
921		Type 17	cal Portland	1948	1052			
1053		Export	1948	WM Seattle	1203	—		
101		Type 17	cal Portland	1948	213			
213		Post Trip / Travel	1948	398	310			
		6:40 - 3:10	8	WM	2			

FORM HB 631 12/13

OFFICE COPY

404360

HOS BROS. CONSTRUCTION, INC.

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 9-2-19
S M T W TH F S

Start 700 AM PM

Finished 400 AM PM

1/2 Hour lunch Yes ☒ No ☐

Driver's Time 8 1/2 hrs

Equip. Time

Mike Pfeifer
Driver's Name (Please print)

1275
Emp.#

Truck No. 1840

Trailer No. 2152

During the time period covered on this time card, I (check one)
☐ Did ☒ Did Not

Experience a job-related injury _____
Signature

Remarks

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
700	9AX	Pre trip & travel	398	1942	801			
843		Export	1942	WM	928	-		
962		Export type 17	Cal portland	1948	1121			
1124		Export	1948	WM	1246	-		
145		Export type 17	Cal portland	1948	305			
305		Travel & port trip	1948	398	400			
		7:00 - 4:00	8.5	2				
			4 .5OT					

FORM HB 631 12/13

OFFICE COPY

HOS BROS. CONSTRUCTION, INC. 227354

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

RENTAL TEAMSTER TIME TICKET

Date: 6/12/14
S M T W TH F

Start 0640 AM PM

Finished AM PM

1/2 Hour lunch Yes ☐ No ☐

Driver's Time

Equip. Time

Hamish Allhouse
Driver's Name (Please print)

Emp.#

Truck No. AERO 35

Trailer No. Wht. side Dump

During the time period covered on this time card, I (check one)
☐ Did ☒ Did Not

Experience a job-related injury
Signature

Remarks

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
0645	21YD	Commercial Dirt	Monroe	WM Pheasant	1000			
1130			Monroe	WM	1300			
					1			
		8:45 - 11:30 +15 hrs	2.75	WM				
			4.25					

OFFICE COPY

HOS BROS. CONSTRUCTION, INC. 227353

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481 5569 Fax (425) 485.6634

RENTAL TEAMSTER TIME TICKET

Date: 8-2
S M T W TH F (F circled)

Start 8:40 AM (circled) PM

Finished ______ AM PM

1/2 Hour lunch Yes ☐ No ☒

Driver's Time ______

Equip. Time ______

Driver's Name (Please print) Josh H.

Emp.# ______

Truck No. 19 Trailer No. 36

During the time period covered on this time card, I (check one)
☐ Did ☐ Did Not

Experience a job-related injury ______
Signature

Remarks ______

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
8:40	TT	Haz. dirt	MS Monroe	Duwamish Reload Facility	10:15	-		
11:45	|	|	|	|	1:00	-		
	|	|	|	|				
					2			
		8:40 - 1:00	4.33	WM				

FORM HB 107 5/14

OFFICE COPY

HOS BROS. CONSTRUCTION, INC. 227351

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

RENTAL TEAMSTER TIME TICKET

Date: 8-2-19
S M T W TH F

Start 7:40 AM PM

Finished ____ AM PM

1/2 Hour lunch Yes ☐ No ☒

Driver's Time ____

Equip. Time ____

Russell
Driver's Name (Please print)

Emp.#

Truck No. Acro 17

Trailer No. 17A

During the time period covered on this time card, I (check one)
☐ Did ☐ Did Not

Experience a job-related injury ____
Signature

Remarks ____

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
7:50	8 axle	Contaminated Soil	1948	WM Duwamish	9:12	–		
9:41		Type 17	Cal Portland	1948	11:05			
11:09		Contaminated Soil	1948	WM Duwamish	12:24	–		
12:46		Type 17	Cal Portland	1948	2:00			
					2			
		7:50 - 2:00	6.17	WM				

CUSTOMER COPY

FORM HB 107 5/14

HOS BROS. CONSTRUCTION, INC. 227352

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481 5569 Fax (425) 485.6834

RENTAL TEAMSTER TIME TICKET

Date: 8-2-19
S M T W TH (F)

Start 8:10 (AM) PM

Finished ______ AM PM

1/2 Hour lunch Yes ☐ No ☑

Driver's Time ______

Equip. Time ______

John A
Driver's Name (Please print)

1948
Emp.#

Truck No. 14 Trailer No. 14

During the time period covered on this time card, I (check one)
☐ Did ☑ Did Not
Experience a job-related injury John A
Signature

Remarks ______

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
8:15	24yrd	C - Dirt	Mondol	Jim Scott	9:45	–		
12:00					[illegible]	–		
					13:30			
11:00	24yrd	3MP Type 17	cal-port	Mondol	12:00			
14:15					15:30			
		8:15 - 2:30	6.25	WM	2			

HOS BROS. CONSTRUCTION, INC. 393029

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 8 2 19
S M T W TH (F) S

Start 745 (AM) PM

Finished ______ AM PM

1/2 Hour lunch Yes ☐ (No ☑)

Driver's Time ______

Equip. Time ______

Wayne Gilbert
Driver's Name (Please print) ______ Emp.# ______

Truck No. GF 2383 Trailer No. 3285

During the time period covered on this time card, I (check one)
☐ Did ☐ Did Not

Experience a job-related injury ______
Signature

Remarks ______

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
745	T&T	Dirty Dirt	1948	Westmongart Seattle	1012	—		
1045	T&T	Type 17	Glacier [illegible] Seattle	1948	1220			
1224	T&T	Dirty Dirt	1948	Westmongart Seattle	150	—		
212	T&T	Type 17	Cal Portland	1948	245			
		7:45 - 3:45	9	WM	2			
			↳ 10T					

FORM HB 631 12/13

OFFICE COPY

HOS BROS. CONSTRUCTION, INC.

393030

7733 W. Bostian Road • P.O. Box 1788 • Woodinville, WA 98072-1788 (425) 481.5569 Fax (425) 485.6634

TEAMSTER TIME TICKET

Date: 8/2/19
S M T W TH (F) S

Start 0745 (AM) PM

Finished ____ AM PM

1/2 Hour lunch Yes ☐ No ☒

Driver's Time ____

Equip. Time ____

CHARLES HAMILTON
Driver's Name (Please print)

GRAND FORCE 2384
Emp.#

Truck No. 2384

Trailer No. 3285

During the time period covered on this time card, I (check one) ☐ Did ☒ Did Not
Experience a job-related injury

[signature]
Signature

Remarks ____

Please print firmly - 5 part form

Start/ Load Time	Truck Size	Description/Materials Hauled	Materials Loaded From	Materials Delivered To	Time Unloaded	Office Use		
0745	T/T	DIRT	1948 Monroe	W. M.	1000	–		
1100	T/T	TYPE 17	CAL- PORTLAND	1948 Monroe	1230			
1230	T/T	DIRT	1948 Monroe	W. M.	1345	–		
1430	T/T	TYPE 17	CAL- PORTLAND	1948 Monroe	1615			
		7:45 - 4:15	8.5	WM	2			
			47.5 OT					

FORM HB 631 12/13

OFFICE COPY

Driver's Signature

Total Ticket

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 32221

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 08/02/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# A35
Container
Driver HARRISON NIEHOUSE
Check#
Billing# 0000121
Grid

Volume

AUG 05

	Time	Scale	Operator
In	08/02/2019 13:00:11	Scale 1	kfunk2
Out	08/02/2019 13:00:11		kfunk2

Inbound

Gross	94780 lb
Tare	41360 lb
Net	53420 lb
Tons	26.71

Comments AERO-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	26.71	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	26.71	Tons				

203WM

Total Tax

Total Ticket

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 32171

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 08/02/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# A19
Container
Driver JOSH HELO
Check#
Billing# 0000121
Grid

Volume

RECEIVED
AUG 05 2019

	Time	Scale	Operator
In	08/02/2019 09:57:57	Scale 1	kfunk2
Out	08/02/2019 10:17:05	Scale 1	kfunk2

Inbound

Gross	92540 lb
Tare	36620 lb
Net	55920 lb
Tons	27.96

Comments AERO-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	27.96	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	27.96	Tons				SNOHOMISH

203WM

Total Tax

Driver's Signature

Total Ticket

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 32220

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 08/02/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# A19
Container
Driver JOSH HELO
Check#
Billing# 0000121
Grid

RECEIVED
AUG 05 2019

	Time	Scale	Operator
In	08/02/2019 12:55:01	Scale 1	kfunk2
Out	08/02/2019 12:55:01		kfunk2

Comments AERO-KF

Volume		
Inbound	Gross	92660 lb
	Tare	36620 lb
	Net	56040 lb
	Tons	28.02

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	28.02	Tons				
2	BOND TON-GONDOLA PER TON	100	28.02	Tons				SNOHOMISH

203WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 32201

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 08/02/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H1824
Container
Driver LINO FRIAS
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator			
In	08/02/2019 11:54:46	Scale 1	kfunk2	Inbound	Gross	101560 lb
Out	08/02/2019 11:54:46		kfunk2		Tare	42860 lb
					Net	58700 lb
					Tons	29.35

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	29.35	Tons				
2	GOND TON-GONDOLA PER TON	100	29.35	Tons				SNOHOMISH

203WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 32153

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 08/02/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H1824
Container
Driver LINO FRIAS
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator
In	08/02/2019 08:44:53	Scale 1	kfunk2
Out	08/02/2019 08:57:22	Scale 1	kfunk2

Inbound

Gross	104720 lb
Tare	42860 lb
Net	61860 lb
Tons	30.93

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	30.93	Tons				
2	GOND TON-GONDOLA PER TON	100	30.93	Tons				SNOHOMISH

203WM

Total Tax

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Ph: 206-694-0600

Reprint
Ticket# 32160

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 08/02/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H1840
Container
Driver MIKE PFEIFER
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator
In	08/02/2019 09:11:21	Scale 1	kfunk2
Out	08/02/2019 09:25:05	Scale 1	kfunk2

Inbound

Gross	102000 lb
Tare	43380 lb
Net	58620 lb
Tons	29.31

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	29.31	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	29.31	Tons				SNOHOMISH

203WM

Total Tax

Driver's Signature

Total Ticket

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 32215

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 08/02/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# H1840
Container
Driver MIKE PFEIFER
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	08/02/2019 12:27:59	Scale 1	kfunk2		Gross	103760 lb
Out	08/02/2019 12:27:59		kfunk2		Tare	43380 lb
					Net	60380 lb
					Tons	30.19

Comments HOS BROS-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	30.19	Tons				
2	GOND TON-GONDOLA PER TON	100	30.19	Tons				SNOHOMISH

203WM

Total Tax

Total Ticket

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 32233

Ph: 206-694-0600

Customer Name	HOS BROS CONSTRUCTION INC HOS	Carrier	SELF SELF		
Ticket Date	08/02/2019	Vehicle#	GF2383	Volume	
Payment Type	Credit Account	Container			
Manual Ticket#		Driver	WAYNE GILBERT		
Route		Check#			
Hauling Ticket#		Billing#	0000121		
Destination		Grid			
PO#	114448WAD				

	Time	Scale	Operator	Inbound		
In	08/02/2019 13:45:22	Scale 1	kfunk2		Gross	113600 lb
Out	08/02/2019 13:45:22		kfunk2		Tare	41860 lb
					Net	71740 lb
					Tons	35.87

Comments GF-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	35.87	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	35.87	Tons				

203WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Ph: 206-694-0600

Reprint
Ticket# 32172

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 08/02/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# GF2383
Container
Driver WAYNE GILBERT
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	08/02/2019 10:04:56	Scale 1	kfunk2		Gross	103520 lb
Out	08/02/2019 10:23:04	Scale 1	kfunk2		Tare	41860 lb
					Net	61660 lb
					Tons	30.83

Comments GROUND FORCE-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	30.83	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	30.83	Tons				SNOHOMISH

03WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 32173

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 08/02/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# GF2384
Container
Driver CHARLES HAMILTON
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator
In	08/02/2019 10:07:44	Scale 1	kfunk2
Out	08/02/2019 10:27:59	Scale 1	kfunk2

Inbound

Gross	108540 lb
Tare	42120 lb
Net	66420 lb
Tons	33.21

Comments GROUND FORCE-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	33.21	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	33.21	Tons				SNOHOMISH

203WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 32234

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 08/02/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# GF2384
Container
Driver CHARLES HAMILTON
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator			
In	08/02/2019 13:47:46	Scale 1	kfunk2	Inbound	Gross	109840 lb
Out	08/02/2019 13:47:46		kfunk2		Tare	42120 lb
					Net	67720 lb
					Tons	33.86

Comments GF-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	33.86	Tons				
2	GOND TON-GONDOLA PER TON	100	33.86	Tons				SNOHOMISH

203WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 32161

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 08/02/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# A14
Container
Driver JOHN ARCHAMBEAULT
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator			
In	08/02/2019 09:23:47	Scale 1	kfunk2	Inbound	Gross	90080 lb
Out	08/02/2019 09:34:56	Scale 1	kfunk2		Tare	40060 lb
					Net	50020 lb
					Tons	25.01

Comments AERO-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	25.01	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	25.01	Tons				SNOHOMISH

203WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 32225

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 08/02/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# A14
Container
Driver JOHN ARCHAMBEAULT
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	08/02/2019 13:15:29	Scale 1	kfunk2		Gross	99440 lb
Out	08/02/2019 13:15:29		kfunk2		Tare	40060 lb
					Net	59380 lb
					Tons	29.69

Comments HOS BROS - LM

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	29.69	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	29.69	Tons				

203WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 32157

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 08/02/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# A17
Container
Driver RUSSELL KUSHNER
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator	Inbound		
In	08/02/2019 08:55:44	Scale 1	kfunk2		Gross	108840 lb
Out	08/02/2019 09:12:38	Scale 1	kfunk2		Tare	42060 lb
					Net	66780 lb
					Tons	33.39

Comments AERO-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	33.39	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	33.39	Tons				SNOHOMISH

203WM

Total Tax

Driver's Signature

Total Ticket

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Reprint
Ticket# 32208

Ph: 206-694-0600

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 08/02/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# A17
Container
Driver RUSSELL KUSHNER
Check#
Billing# 0000121
Grid

Volume

	Time	Scale	Operator
In	08/02/2019 12:11:13	Scale 1	kfunk2
Out	08/02/2019 12:11:13	"	kfunk2

Inbound

Gross	98700 lb
Tare	42060 lb
Net	56640 lb
Tons	28.32

Comments AERO-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	28.32	Tons				
2	GOND TON-GONDOLA PER TON	100	28.32	Tons				SNOHOMISH

203WM

Total Tax

Driver's Signature

WASTE MANAGEMENT

8th Ave Reload
7400 8th Ave S
Seattle, WA, 98108

Ph: 206-694-0600

Reprint
Ticket# 32170

Customer Name HOS BROS CONSTRUCTION INC HOS
Ticket Date 08/02/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO# 114448WAD

Carrier SELF SELF
Vehicle# A35
Container
Driver HARRISON NIEHOUSE
Check#
Billing# 0000121
Grid

	Time	Scale	Operator
In	08/02/2019 09:54:00	Scale 1	kfunk2
Out	08/02/2019 10:13:08	Scale 1	kfunk2

Inbound

Volume

Gross	94340 lb
Tare	41360 lb
Net	52980 lb
Tons	26.49

Comments AERO-KF

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	26.49	Tons				SNOHOMISH
2	GOND TON-GONDOLA PER TON	100	26.49	Tons				SNOHOMISH

203WM

Total Tax

WASTE MANAGEMENT

INVOICE

0677 Page 1 of 5

186643

Customer ID: 18-34789-33002
Customer Name: HOS BROS CONSTRUCTION INC
Service Period: AUGUST 2019
Invoice Date: 08/16/2019
Invoice Number: 0001874-4802-2

How To Contact Us	Your Payment Is Due	Your Total Due
Visit **wm.com** To setup your online profile, sign up for paperless statements, manage your account, view holiday schedules, pay your invoice or schedule a pickup Customer Service: **(541) 454-2030**	**09/14/2019** If full payment of the invoiced amount is not received within your contractual terms, you may be charged a monthly late charge of 2.5% of the unpaid amount, with a minimum monthly charge of $5, or such late charge allowed under applicable law, regulation or contract.	**$26,352.70** See Reverse for Important Messages

POSTED AUG 26 2019

Previous Balance	+ Payments	+ Adjustments	+ Current Charges	= Total Due
114,222.40	(114,222.40)	0.00	26,352.70	**26,352.70**

Details for Service Location:
Hos Bros Construction Inc, PO Box 1788, Woodinville WA 98072-1788

Customer ID: 18-34789-33002

Description	Date	Ticket	Quantity	Unit of Measure	Rate	Amount
Vehicle#: h1824	08/02/19	32153				0.00
Po#:114448wad						0.00
Petroleum contaminated soil, daily cover, pmt is r			30.93	TON	31.52	974.91
Gondola per ton			30.93	TON	23.48	726.24
Profile # 114448wad						0.00
Generator rivers edge wa lllp 426 e freemont, monroe wa						0.00
Manifest#: na						0.00
Ticket Total						**1,701.15**
Vehicle#: a17	08/02/19	32157				0.00
Po#:114448wad						0.00
Petroleum contaminated soil, daily cover, pmt is r			33.39	TON	31.52	1,052.45
Gondola per ton			33.39	TON	23.48	784.00
Profile # 114448wad						0.00
Generator rivers edge wa lllp 426 e freemont, monroe wa						0.00

Pat

✂ ---------- *Please detach and send the lower portion with payment --- (no cash or staples)* ----------

WASTE MANAGEMENT
DUWAMISH RELOAD FACILITY
7400 8TH AVE SOUTH
SEATTLE, WA 98108
(541) 454-2030

RECEIVED HBC
POST DATE: _____ APPR: LG
AUG 23 2019
CODE: 1848-1028-7
COMMENTS: PM03 460800

Invoice Date	Invoice Number	Customer ID *(Include with your payment)*
08/16/2019	0001874-4802-2	**18-34789-33002**
Payment Terms	**Total Due**	**Amount**
Total Due by 09/14/2019	$26,352.70	

Dillon

4802000183478933002000001874000026352700000263527O 6

PM03

0000629 NX 7228 -C03-P00629-I1 I1391L29

HOS BROS CONSTRUCTION INC
PO BOX 1788
WOODINVILLE WA 98072-1788

DUWAMISH RELOAD FACILITY
PO BOX 541065
LOS ANGELES, CA 90054-1065

THINK GREEN®

R1_0000171_4802_0