MAUL FOSTER ALONGI
1329 North State Street, Suite 301 | Bellingham, WA 98225 | 360 594 6262 | www.maulfoster.com

December 8, 2022
Project No. M1472.02.002

Annette Ademasu, Senior Tank Inspector
Underground Storage Tank Unit
Washington State Department of Ecology
P.O. Box 47655
Olympia, WA, 98504-7655

Re: Site Assessment for Permanent Closure of Two Underground Storage Tanks
Mount Vernon Library Commons
208 W Kincaid Street, Mount Vernon, Washington

At the request of Lydig Construction (Lydig), Maul Foster & Alongi, Inc. (MFA) conducted a site assessment in support of the permanent closure of two underground storage tanks (USTs) located at 208 West Kincaid Street in Mount Vernon, Washington (the Property) (see Figure 1). MFA prepared this site assessment report to describe UST removal, overexcavation, soil disposal, and confirmation soil sample results. The site assessment was performed by Christian Sifford, an International Code Council-certified site assessor (certificate no. 10185106), consistent with the regulations put forth in Washington Administrative Code 173-360 and the Washington State Department of Ecology (Ecology) *Site Assessment Guidance for UST Systems* (Ecology 2022).

BACKGROUND

The approximately 0.75-acre Property consists of four Skagit County parcels (P54139, P54141, P54142, and P54147) located in downtown Mount Vernon in section 19, township 34 north, and range 4 east of the Willamette Meridian (see Figure 2). The Property is bordered by South 3rd Street to the east, West Kincaid Street to the north, South 2nd Street to the west, and an unnamed alley to the south. The surrounding properties include a parking lot to the east, courthouses and municipal buildings to the north, a bank and grocery store to the west, and law offices and multifamily housing to the south. The Property is owned by the City of Mount Vernon (the City) and is being developed into a public library, transit center, and multi-use community space.

Historical information about the Property was obtained from a 2018 Phase I environmental site assessment completed by Element Solutions (Element). Prior to 1906, the Property was occupied by several residential units. A church occupied the eastern part of the Property from approximately 1906 to between 1979 and 1981. At that time, the church was removed, and the east part of the Property was converted into a parking lot. An undertaker operated out of a building in the center of the Property (northeast corner of parcel P54141 and northwest corner of P54142) in 1948. The central building became the Skagit Community Mental Health Center

before being removed by 2006 (Element 2018), after which the Property was converted to a parking lot.

The western-most parcel (P54139) of the Property was historically used as Chevron Service Station 9-0498 (also referred to as the Chevron Site, Al's Chevron, cleanup site ID 5687 / facility site ID 21539662) with operations beginning prior to 1948 (Element 2018). Nine USTs, two fuel service islands, and associated product lines were removed from the Chevron Site in August 1990, after which the parcel was converted to a parking lot. These tanks included three gasoline USTs (one 7,500-gallon UST, one 4,000-gallon UST, and one 1,000-gallon UST), one 1,000-gallon used oil UST, one 550-gallon UST, and four undocumented USTs (one 7,500-gallon UST, one 2,000-gallon UST, one 1,000-gallon UST, and one 750-gallon UST). Additionally, a 280-gallon white gasoline UST was removed in 1989 (GeoEngineers 1991). Former tank and equipment locations are shown on Figure 2 of the 1991 GeoEngineers report.

In 1990, GeoEngineers conducted a subsurface investigation to assess soil and groundwater conditions during removal of USTs at the Chevron site (GeoEngineers 1991). GeoEngineers identified diesel, gasoline, and BTEX (benzene, toluene, ethylbenzene, and xylene) concentrations in soil above Model Toxics Control Act (MTCA) Method A cleanup levels (CULs) in many of the UST excavations and nearby exploratory borings. Gasoline-range hydrocarbons and BTEX were detected in groundwater above MTCA Method A CULs as well. The Chevron site was subsequently listed on the Ecology leaking UST database in 1990. Cleanup actions were completed at the Chevron site between 1991 and 2000, including the operation of a vapor extraction/air sparge system, removal of 70 cubic yards of contaminated soil, and quarterly monitoring of fifteen groundwater monitoring wells. By January 1999, concentrations of petroleum hydrocarbon-related contaminants in groundwater were below MTCA Method A CULs (Element 2018).

On September 17, 2001, a No Further Action (NFA) determination was issued by Ecology for the Chevron site under the Voluntary Cleanup Program (Ecology 2001). In 2018, a focused subsurface investigation was completed to assess soil and groundwater conditions in the immediate vicinity of the Chevron site and downgradient of other potential off-site source areas identified through due diligence efforts. No concentrations of petroleum hydrocarbons were identified in soil or groundwater during this investigation (Elements 2018).

The Property is currently being redeveloped for the construction of the Mount Vernon Library Commons, transit center, and multi-use community space. During construction activities, two abandoned USTs were discovered. Neither UST is recorded in Ecology's UST database. Decommissioning and site assessment activities associated with the permanent closure of these USTs are described in this report.

PHYSICAL SETTING

At the time of the UST site assessment, redevelopment was underway and asphalt had been removed. The Property was level and covered with soil and gravel (see field photographs in Attachment A). Approximately 500 feet to the west of the Property, the Skagit River flows south-southwest. Generally, the Property is underlain by alluvial deposits of the Skagit River described as well-sorted and stratified sand, silt, and gravel (Dethier and Whetten 1981). Previous subsurface investigations at the Property encountered soil consisting of silty sand underlain by sand, then silt and clay (Pacific 1997) and determined that groundwater flowed north-northwest (Gettler-Ryan 2001). During the UST site assessment activities conducted by MFA, soil consisted of silty sand and sand with silt. No groundwater was encountered during the UST site assessment fieldwork.

UST DISCOVERY AND DECOMMISSIONING

On October 18, 2022, a contractor exposed the fill port for a 3,200-gallon UST during grading activities in the center of parcel P54139 near the west end of the Property (see Figure 2). The approximately 3,200-gallon single-wall steel UST was 6 feet in diameter and 16 feet in length. The top of the UST was located approximately 2 feet below ground surface (bgs). An approximately 16-foot-long underground pipe extended to the east of the 3,200-gallon UST. The pipe was removed with the tank as part of the permanent closure.

On November 10, 2022, a contractor encountered an approximately 250-gallon UST while installing pilings near the northwest corner of parcel 54142. The approximately 250-gallon single-wall steel UST was 3 feet in diameter and 6 feet in length. The top of the UST was located approximately 2 feet bgs. The tank had no associated piping or fixtures. Both USTs were oriented with their longest axis aligned north/south (see Figure 2).

The UST closure form for the 3,200-gallon UST and site assessment checklists for both USTs are included in Attachment B. The 250-gallon UST is exempt from permanent closure documentation with Ecology; MFA will report closure documentation to the Pollution Liability Insurance Agency.

UST decommissioning activities were initiated on November 10, 2022. ClearCreek Contractors, a division of Holt Services, Inc., of Edgewood, Washington, was the UST decommissioner. A UST removal permit from the City of Mount Vernon and a 30-day waiver from Ecology are included as Attachment C.

On November 10 and 14, 2022, Marine Vacuum Service, Inc. (Marvac) of Seattle, Washington emptied the USTs of residual product. The tanks were then triple rinsed. The 250-gallon UST was approximately halfway full of dark red-brown, viscous oil and water. Approximately 4,200 gallons of emulsified product and water was removed from the two USTs and transported to Marvac's facility in Seattle, Washington, for treatment and disposal (see Attachment D for

disposal manifests). To inert the tank, Sound Testing of Seattle, Washington added carbon dioxide gas to the 3,200-gallon UST and approved its removal. The 250-gallon UST was significantly damaged during its discovery. Per the recommendation of the marine chemist, the tank was not required to be inerted prior to removal.

Site assessments were performed consistent with Ecology's *Site Assessment Guidance for Underground Storage Tank Systems* (Ecology 2022) and *Guidance for Remediation of Petroleum Contaminated Sites* (Ecology 2016), as described in the following sections.

250-GALLON UST SITE ASSESSMENT

Excavation and Soil Sampling

The 250-gallon UST was excavated and removed on November 10, 2022. Following removal of the 250-gallon UST, MFA inspected the excavation for visual or olfactory evidence of petroleum-contaminated soil (PCS). PCS present in the sidewalls and base of the tank pit was excavated and stockpiled on site. The base of the excavation was approximately 8 feet bgs. The fill material surrounding the UST consisted of brown silty sand with about 5 percent brick, clay pipe, and glass fragments. The native soil consisted of grayish blue and tan silty sand. No groundwater was encountered in the excavation.

During the excavation, soil was monitored for organic vapors using a photoionization detector (PID). Confirmation soil samples were obtained from the desired sampling locations and depths within the tank pit using an excavator; the samples were collected from the middle of the bucket, away from the metal sides, and from six inches below the top surface of the soil in the bucket. The samples were collected manually or by using a U.S. Environmental Protection Agency (EPA) Method 5035 sampling kit. Soil was placed in laboratory-supplied containers for the selected analyses. Disposable gloves were worn during sample collection and replaced with new gloves after the collection of each sample.

Sample Analysis

Three confirmation soil samples were collected from the 250-gallon UST initial excavation limits for the site assessment (see Figure 2):

- T1SW01-SS-6.0 was collected from the center of the north sidewall at 6.0 feet bgs.
- T1SW02-SS-5.0 was collected from the center of the west sidewall at 5.0 feet bgs, collocated with a petroleum hydrocarbon-like odor.
- T1BASE01-SS-8.0 was collected from the center of the base of the excavation at 8.0 feet bgs, below the UST.

Samples were labeled, placed on ice in coolers, and transported to the laboratory under standard chain-of-custody (COC) procedures to Friedman and Bruya, Inc. (FBI), located at 5500 4th Avenue S in Seattle, Washington.

Soil samples were initially analyzed for the following:

- Petroleum hydrocarbon identification (HCID) by the Northwest Total Petroleum Hydrocarbon (NWTPH)-HCID

Based on the initial analytical results, the following additional analyses were performed on samples T1SW01-SS-6.0 and T1SW02-SS-5.0:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) by EPA method 8021B
- Diesel-range organics (DRO) by NWTPH-Dx method
- Motor-oil-range organics (ORO) by NWTPH-Dx method
- Carcinogenic polycyclic aromatic hydrocarbons (cPAHs) by EPA method 8270E
- Naphthalenes (including 1-methylnaphthalene, 2-methylnaphthalene, and naphthalene) by EPA method 8270E

Analytical Results

Analytical laboratory reports are included as Attachment E. Analytical results are summarized in the table. Analytical data and the laboratory's internal quality assurance and quality control data were reviewed to assess whether they met data quality objectives, consistent with EPA procedures for evaluating laboratory analytical data (FBI 2019; EPA 2020a,b). A memorandum summarizing data validation procedures, data usability, and deviations from specific field and/or laboratory methods is presented as Attachment F. Based on the data validation, all analytical results were considered acceptable for their intended use, with the assigned qualifiers. Sample results were compared to the MTCA Method A CULs for unrestricted land use (see the table).

Sample T1BASE01-SS-8.0 from the base of the excavation was non-detect for total petroleum hydrocarbons; therefore, no follow-up analyses were performed. Sample T1SW01-SS-6.0 from the north sidewall contained detections of petroleum constituents below MTCA Method A CULs for unrestricted land use. Sample T1SW02-SW-5.0 collected from the west sidewall contained concentrations of DRO, total xylenes, and naphthalene above MTCA Method A CULs for unrestricted land use. Therefore, overexcavation was conducted along the west sidewall of the excavation, as discussed below.

Overexcavation and Additional Soil Sampling

On November 15 and 17, 2022, MFA directed overexcavation of PCS on the western sidewall of the 250-gallon UST pit and conducted confirmation soil sampling (see Figure 2). Soil was continuously evaluated for the presence of PCS using a PID and visual and olfactory observations. Overexcavated soil from 0 to 4 feet bgs did not have elevated PID readings or visual and olfactory indicators of PCS; overburden soil was stockpiled separately from deeper soil identified as PCS based on field observations and PID readings. PCS removed from the western sidewall was stockpiled with the PCS excavated during the tank removal. The overexcavation proceeded laterally to the west. MFA stopped excavation when soil containing visual and/or olfactory indications of contamination was removed, at which point PID readings were below 15 parts per million (ppm).

The following confirmation soil samples were collected to complete the characterization of this excavation:

- T1SW03-SS-6.0 was collected from the center of the west sidewall (overexcavated sidewall) at 6.0 feet bgs
- T1SW04-SS-7.5 was collected from the center of the eastern sidewall at 7.5 feet bgs
- T1SW05-SS-6.0 was collected from the center of the southern sidewall at 6.0 feet bgs

Soil samples were obtained from an excavator bucket, placed in iced coolers, and transported to FBI under standard COC procedures, as described previously.

The additional soil samples were analyzed for the following as shown on the table:

- Sample T1SW03-SS-6.0:
  - GRO by NWTPH-Gx method
  - DRO by NWTPH-Dx method
  - ORO by NWTPH-Dx method
  - cPAHs by EPA method 8270E
  - Naphthalenes by EPA method 8270E
- Sample T1SW04-SS-7.5 and T1SW05-SS-6.0:
  - HCID by NWTPH-HCID method
  - Benzene by EPA method 8021B

Analytical laboratory reports are included as Attachment E. Analytical results are summarized in the table. Analytical data and the laboratory's internal quality assurance and quality control

data were reviewed to assess whether they met data quality objectives, consistent with EPA procedures for evaluating laboratory analytical data (see Attachment F) (FBI 2019; EPA 2020a,b). Based on the data validation, all analytical results were considered acceptable for their intended use, with the assigned qualifiers. Sample results were compared to the MTCA Method A CULs for unrestricted land use (see the table and Figure 2).

All final confirmation sample concentrations were non-detect or below MTCA Method A CULs. The confirmation soil sample analytical results from the initial excavation and overexcavation, together with PID readings and visual and olfactory observations document that all PCS associated with the 250-gallon UST has been removed.

3,200-GALLON UST SITE ASSESSMENT

Excavation and Soil Sampling

The 3,200-gallon UST and associated pipe was excavated and removed on November 14, 2022. No pitting or holes were observed in the UST or pipe. Following removal of the UST, MFA inspected the excavation for evidence of PCS. Visual and olfactory indicators of PCS and elevated PID readings were not present in soil along the sidewalls or below the pipe. In the excavation bottom, soil immediately below the UST at a depth of approximately 8 feet bgs exhibited staining and a strong petroleum hydrocarbon-like odor with PID readings ranging from 220 to 400 ppm. PCS from the base of the excavation was removed in approximately 6-inch-thick depth intervals and screened with a PID. MFA stopped excavation when soil containing visual and/or olfactory indications of contamination was removed, at which point PID readings were below 10 ppm. The highest PID readings (between 678 to 1,148 ppm) were encountered just south of the center of the excavation at a depth of 9.5 to 10.5 feet bgs, with readings decreasing substantially in deeper soil and laterally in the excavation. The base of the excavation sloped from a depth of 10 feet bgs in the north to 12.5 feet bgs in the south.

The fill material surrounding the 3,200-gallon UST consisted of poorly graded brown sand with silt and trace building debris. The native soil consisted of grayish brown silty sand. No fill material was encountered below the UST.

Sample Analysis

Seven confirmation soil samples were collected from the sidewalls and base of the UST excavation and one sample were collected from below the pipe (see Figure 2):

- T2BASE02-SS-12.25 collected from the base of the excavation at a depth of 12.25 feet bgs, immediately below the location of the highest PID readings.
- T2SW01-SS-3.0 collected from the east sidewall at 3.0 feet bgs, just below where the pipe was connected to the UST.

- T2SW02-SS-6.0 was collected from the west sidewall at 6.0 feet bgs.
- T2SW03-SS-8.5 collected from the north sidewall at a depth of 8.5 feet bgs.
- T2SW04-SS-8.5 collected from the east sidewall at a depth of 8.5 feet bgs.
- T2SW05-SS-8.5 collected from the south sidewall at a depth of 8.5 feet bgs.
- T2SW06-SS-8.5 collected from the west sidewall at a depth of 8.5 feet bgs.
- T2PIPE01-SS-2.0 was collected from immediately below the pipe about 6 feet east of the UST and at 2.0 feet bgs.

Samples were labeled, placed on ice in coolers, and transported to the laboratory under standard COC procedures to FBI.

The confirmation soil samples were analyzed for the following:

- HCID by the NWTPH-HCID
- Benzene by EPA 8021B method

Analytical Results

Analytical laboratory reports are included as Attachment E. Analytical results are summarized in the table. Analytical data and the laboratory's internal quality assurance and quality control data were reviewed to assess whether they met data quality objectives, consistent with EPA procedures for evaluating laboratory analytical data (FBI 2019; EPA 2020a,b). A memorandum summarizing data validation procedures, data usability, and deviations from specific field and/or laboratory methods is presented as Attachment F. Based on the data validation, all analytical results were considered acceptable for their intended use, with the assigned qualifiers. Sample results were compared to the MTCA Method A CULs for unrestricted land use (see the table.

All final confirmation sample concentrations were non-detect or below MTCA Method A CULs. The confirmation soil sample analytical results from the initial excavation, together with PID readings and visual and olfactory observations document that all PCS associated with the 3,200-gallon UST has been removed.

STOCKPILE CHARACTERIZATION

Excavation of PCS generated approximately 32 cubic yards of PCS from the 250-gallon UST excavation and approximately 15 cubic yards of PCS from the 3,200-gallon UST excavation. The PCS was segregated and stockpiled on plastic sheeting and covered with plastic sheeting to prevent soil erosion at the locations shown on see Figure 2.

In accordance with Ecology's *Site Assessment Guidance for Underground Storage Tank Systems*, MFA collected three discrete soil samples from the 32-cubic yard stockpile and two discrete soil samples from the 15-cubic yard stockpile (see Figure 2 and the table) (Ecology 2022). The soil samples were collected from the stockpiles manually from depths of 0.5 to 1.5 feet below the surface of the stockpiles. Disposable gloves were worn during sample collection and replaced with new gloves after the collection of each sample. All samples were labeled, placed on ice in coolers, and transported to FBI under standard COC procedures.

Sample Analysis

Stockpile sample analysis was conducted to meet the requirements of the disposal facility, Cadman, Inc. in Everett, Washington. Samples from both stockpiles were analyzed for DRO, ORO, cPAHs, and naphthalenes. Additionally, the samples from the 3,200-gallon UST stockpile were analyzed for the following (see table):

- GRO by NWTPH-Gx
- BTEX by EPA method 8021B
- RCRA 8 metals (Arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver) by EPA method 6020B
- Low-level volatile organic compounds including methyl tert-butyl ether, 1,2-dichloroethane, 1,2-dibromoethane, and n-hexane by EPA method 8260D and 8021B

Analytical Results

Analytical laboratory reports are included as Attachment E and summarized in the table. Analytical data and the laboratory's internal quality assurance and quality control data were reviewed to confirm whether they met data quality objectives, consistent with EPA procedures for evaluating laboratory analytical data (see Attachment F) (FBI, 2019; EPA, 2020a,b).

Based on the analytical results, the disposal facility classified the excavated soil as Category 3 ("Petroleum Contaminated Soil To Be Thermally Treated"). Soil was approved for disposal as nonhazardous waste.

SOIL DISPOSAL

Stockpile sample results indicated that the excavated soil was not suitable for reuse (Ecology 2016). Therefore, the total excavated soil volume (47 cubic yards, or approximately 23.5 tons) was loaded into haul trucks and transported to Cadman, Inc. in Everett, Washington for disposal and treatment. Attachment D contains waste manifests.

CONCLUSIONS

The results of the assessment indicate that both abandoned USTs had minor releases to soil on the Property. PCS was excavated and disposed of off-site. Chemical concentrations in confirmation soil samples representative of the final UST excavations were either non-detect or below MTCA Method A CUL levels, confirmation that no PCS remains in either UST excavation. Groundwater was not encountered in either excavation. Therefore, no additional action is required.

Sincerely,

Maul Foster & Alongi, Inc.

CAROLYN ROCHELLE WISE 12.08.2022

Christian Sifford, GIT
Staff Geologist

Carolyn Wise, LHG
Project Hydrogeologist

Attachments: Limitations
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Table
Figures
Attachment A— Field Photographs
Attachment B— Permanent Closure Form and UST Checklists
Attachment C—UST Permit and Waiver
Attachment D—Waste Manifests
Attachment E—Laboratory Reports
Attachment F—Data Validation Memorandum

cc: Alex Carey, Lydig Construction
Kimberly Bzotte, Pollution Liability Insurance Agency

LIMITATIONS

The services undertaken in completing this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report.

REFERENCES

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TABLE

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Table
Summary of Soil Analytical Results
Lydig Construction
Mount Vernon Library Commons

Excavation Area:	MTCA Method A, Unrestricted Land Use[1]	250-gallon UST									3,200-gallon UST				
Location:		T1-BASE01	T1-SW01	T1-SW02	T1-SW03	T1-SW04	T1-SW05	Stockpile			T2-BASE02	T2-PIPE01	T2-SW01	T2-SW02	T2-SW03
Sample Name:		T1BASE01-SS-8.0	T1SW01-SS-6.0	T1SW02-SS-5.0	T1SW03-SS-6.0	T1SW04-SS-7.5	T1SW05-SS-6.0	PILE01-SS-0.5	PILE02-SS-1.0	PILE03-SS-1.5	T2BASE02-SS-12.25	T2PIPE01-SS-2.0	T2SW01-SS-3.0	T2SW02-SS-6.0	T2SW03-SS-8.5
Sample Date:		11/10/2022	11/10/2022	11/10/2022	11/15/2022	11/17/2022	11/17/2022	11/15/2022	11/15/2022	11/15/2022	11/15/2022	11/14/2022	11/14/2022	11/14/2022	11/17/2022
Sample Depth (ft bgs):		8	6.0	5.0	6.0	7.5	6.0	0.5	1.0	1.5	12.25	2.0	3.0	6.0	8.5
HCID (detect/non-detect)															
Diesel	NV	ND	DETECT	DETECT	--	ND	ND	--	--	--	ND	ND	ND	ND	ND
Gasoline	NV	ND	ND	ND	--	ND	ND	--	--	--	ND	ND	ND	ND	ND
Heavy Oil	NV	ND	ND	ND	--	ND	ND	--	--	--	ND	ND	ND	ND	ND
TPH (mg/kg)															
Gasoline-Range Hydrocarbons	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diesel-Range Hydrocarbons	2,000	--	550	4,500	50 U	--	--	1,500	2,000	3,500	--	--	--	--	--
Motor Oil-Range Hydrocarbons	2,000	--	250 U	250 U	250 U	--	--	250 U	250 U	250 U	--	--	--	--	--
Diesel+Oil[a]	2,000	--	675	4,625	250 U	--	--	1,625	2,125	3,625	--	--	--	--	--
Total Metals (mg/kg)															
Arsenic	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	NV	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	NV	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	250	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	NV	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	NV	--	--	--	--	--	--	--	--	--	--	--	--	--	--
VOCs (mg/kg)															
1,2-Dibromoethane	0.005	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	NV	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	0.03	--	0.02 U	0.2 U	--	0.02 U	0.02 U	--	--	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Ethylbenzene	6	--	0.02 U	1.8	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-butyl ether	0.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--
n-Hexane	NV	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	7	--	0.029	1.6	--	--	--	--	--	--	--	--	--	--	--
Xylenes (total)[b]	9	--	0.16	9.4	--	--	--	--	--	--	--	--	--	--	--

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Table
Summary of Soil Analytical Results
Lydig Construction
Mount Vernon Library Commons

Excavation Area:	MTCA Method A, Unrestricted Land Use[1]	250-gallon UST									3,200-gallon UST				
Location:		T1-BASE01	T1-SW01	T1-SW02	T1-SW03	T1-SW04	T1-SW05	Stockpile			T2-BASE02	T2-PIPE01	T2-SW01	T2-SW02	T2-SW03
Sample Name:		T1BASE01-SS-8.0	T1SW01-SS-6.0	T1SW02-SS-5.0	T1SW03-SS-6.0	T1SW04-SS-7.5	T1SW05-SS-6.0	PILE01-SS-0.5	PILE02-SS-1.0	PILE03-SS-1.5	T2BASE02-SS-12.25	T2PIPE01-SS-2.0	T2SW01-SS-3.0	T2SW02-SS-6.0	T2SW03-SS-8.5
Sample Date:		11/10/2022	11/10/2022	11/10/2022	11/15/2022	11/17/2022	11/17/2022	11/15/2022	11/15/2022	11/15/2022	11/15/2022	11/14/2022	11/14/2022	11/14/2022	11/17/2022
Sample Depth (ft bgs):		8	6.0	5.0	6.0	7.5	6.0	0.5	1.0	1.5	12.25	2.0	3.0	6.0	8.5
SVOCs (mg/kg)															
1-Methylnaphthalene	NV	--	0.89	11	0.01 U	--	--	3.7	3.0	7.5	--	--	--	--	--
2-Methylnaphthalene	NV	--	1.4	19	0.015	--	--	5.5	3.9	12	--	--	--	--	--
Benzo(a)anthracene	NV	--	0.01 U	0.01 U	0.01 U	--	--	0.01 U	0.01 U	0.01 U	--	--	--	--	--
Benzo(a)pyrene	0.1	--	0.01 U	0.01 U	0.01 U	--	--	0.01 U	0.01 U	0.01 U	--	--	--	--	--
Benzo(b)fluoranthene	NV	--	0.01 U	0.01 U	0.01 U	--	--	0.01 U	0.010	0.01 U	--	--	--	--	--
Benzo(k)fluoranthene	NV	--	0.01 U	0.01 U	0.01 U	--	--	0.01 U	0.01 U	0.01 U	--	--	--	--	--
Chrysene	NV	--	0.01 U	0.034	0.01 U	--	--	0.011	0.018	0.023	--	--	--	--	--
Dibenzo(a,h)anthracene	NV	--	0.01 U	0.01 U	0.01 U	--	--	0.01 U	0.01 U	0.01 U	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	NV	--	0.01 U	0.01 U	0.01 U	--	--	0.01 U	0.01 U	0.01 U	--	--	--	--	--
Naphthalene	5	--	0.30	5.8	0.01 U	--	--	1.3	0.79	3.6	--	--	--	--	--
cPAH TEQ[c][2]	0.1	--	0.01 U	0.0078	0.01 U	--	--	0.0076	0.0082	0.0077	--	--	--	--	--

Table
Summary of Soil Analytical Results
Lydig Construction
Mount Vernon Library Commons

Excavation Area:	MTCA Method A, Unrestricted Land Use[1]	3,200-gallon UST				
Location:		T2-SW04	T2-SW05	T2-SW06	Stockpile	
Sample Name:		T2SW04-SS-8.5	T2SW05-SS-8.5	T2SW06-SS-8.5	PILE04-SS-1.0	PILE05-SS-1.5
Sample Date:		11/17/2022	11/17/2022	11/17/2022	11/15/2022	11/15/2022
Sample Depth (ft bgs):		8.5	8.5	8.5	1.0	1.5
HCID (detect/non-detect)						
Diesel	NV	ND	ND	ND	--	--
Gasoline	NV	ND	ND	ND	--	--
Heavy Oil	NV	ND	ND	ND	--	--
TPH (mg/kg)						
Gasoline-Range Hydrocarbons	100	--	--	--	5 U	89
Diesel-Range Hydrocarbons	2,000	--	--	--	50 U	50 U
Motor Oil-Range Hydrocarbons	2,000	--	--	--	250 U	250 U
Diesel+Oil[a]	2,000	--	--	--	250 U	250 U
Total Metals (mg/kg)						
Arsenic	20	--	--	--	4.77	2.85
Barium	NV	--	--	--	66.5	49.5
Cadmium	2	--	--	--	1 U	1 U
Chromium	NV	--	--	--	18.3	17.3
Lead	250	--	--	--	27.8	4.31
Mercury	2	--	--	--	1 U	1 U
Selenium	NV	--	--	--	1 U	1 U
Silver	NV	--	--	--	1 U	1 U
VOCs (mg/kg)						
1,2-Dibromoethane	0.005	--	--	--	0.05 U	0.05 U
1,2-Dichloroethane	NV	--	--	--	0.05 U	0.05 U
Benzene	0.03	0.02 U	0.02 U	0.02 U	0.02 U	0.03 J
Ethylbenzene	6	--	--	--	0.02 U	0.42
Methyl tert-butyl ether	0.1	--	--	--	0.05 U	0.05 U
n-Hexane	NV	--	--	--	0.25 U	0.25 U
Toluene	7	--	--	--	0.02 U	0.1 U
Xylenes (total)[b]	9	--	--	--	0.06 U	0.3 U

Table
Summary of Soil Analytical Results
Lydig Construction
Mount Vernon Library Commons

Excavation Area:	MTCA Method A, Unrestricted Land Use[1]	3,200-gallon UST				
Location:		T2-SW04	T2-SW05	T2-SW06	Stockpile	
Sample Name:		T2SW04-SS-8.5	T2SW05-SS-8.5	T2SW06-SS-8.5	PILE04-SS-1.0	PILE05-SS-1.5
Sample Date:		11/17/2022	11/17/2022	11/17/2022	11/15/2022	11/15/2022
Sample Depth (ft bgs):		8.5	8.5	8.5	1.0	1.5
SVOCs (mg/kg)						
1-Methylnaphthalene	NV	--	--	--	0.12	0.01 U
2-Methylnaphthalene	NV	--	--	--	0.23	0.01 U
Benzo(a)anthracene	NV	--	--	--	0.05 U	0.01 U
Benzo(a)pyrene	0.1	--	--	--	0.05 U	0.01 U
Benzo(b)fluoranthene	NV	--	--	--	0.05 U	0.01 U
Benzo(k)fluoranthene	NV	--	--	--	0.05 U	0.01 U
Chrysene	NV	--	--	--	0.05 U	0.01 U
Dibenzo(a,h)anthracene	NV	--	--	--	0.05 U	0.01 U
Indeno(1,2,3-cd)pyrene	NV	--	--	--	0.05 U	0.01 U
Naphthalene	5	--	--	--	0.13	0.01 U
cPAH TEQ[(c)(2)]	0.1	--	--	--	0.05 U	0.01 U

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Table
Summary of Soil Analytical Results
Lydig Construction
Mount Vernon Library Commons

Notes

Shading indicates values that exceed MTCA Method A screening criteria; non-detects (U) were not compared with screening criteria.

-- = not analyzed.

cPAH = carcinogenic polycylic aromatic hydrocarbon.

ft bgs = feet below ground surface.

HCID = hydrocarbon identification.

J = result is estimated.

mg/kg = milligrams per kilogram.

MTCA = Model Toxics Control Act.

ND = non-detect.

NV = no value.

SVOC = semivolatile organic compound.

TEQ = toxicity equivalency.

TPH = total petroleum hydrocarbons.

U = result is non-detect at the method reporting limit.

UST = underground storage tank.

VOC = volatile organic compound.

[a]Diesel+Oil is the sum of diesel-range and motor-oil-range hydrocarbons. When results are non-detect, half the reporting limit is used. When both results are non-detect, the highest reporting limit is shown.

[b]Total xylenes are reported by the laboratory.

[c]One-half the reporting limit is used for non-detect results in the cPAH TEQ calculation. When all cPAHs are non-detect, the highest reporting limit is used.

Reference

[1]Ecology. 2022. *Cleanup Levels and Risk Calculation (CLARC) table.* Washington State Department of Ecology, Toxics Cleanup Program. July errata.

[1]Ecology. 2015. *Implementation Memorandum #10: Evaluating the Human Health Toxicity of Carcinogenic PAHs (cPAHs) Using Toxicity Equivalency Factors (TEFs)* . Publication No. 15-09-049. Washington State Department of Ecology, Toxics Cleanup Program. April 20.

FIGURES

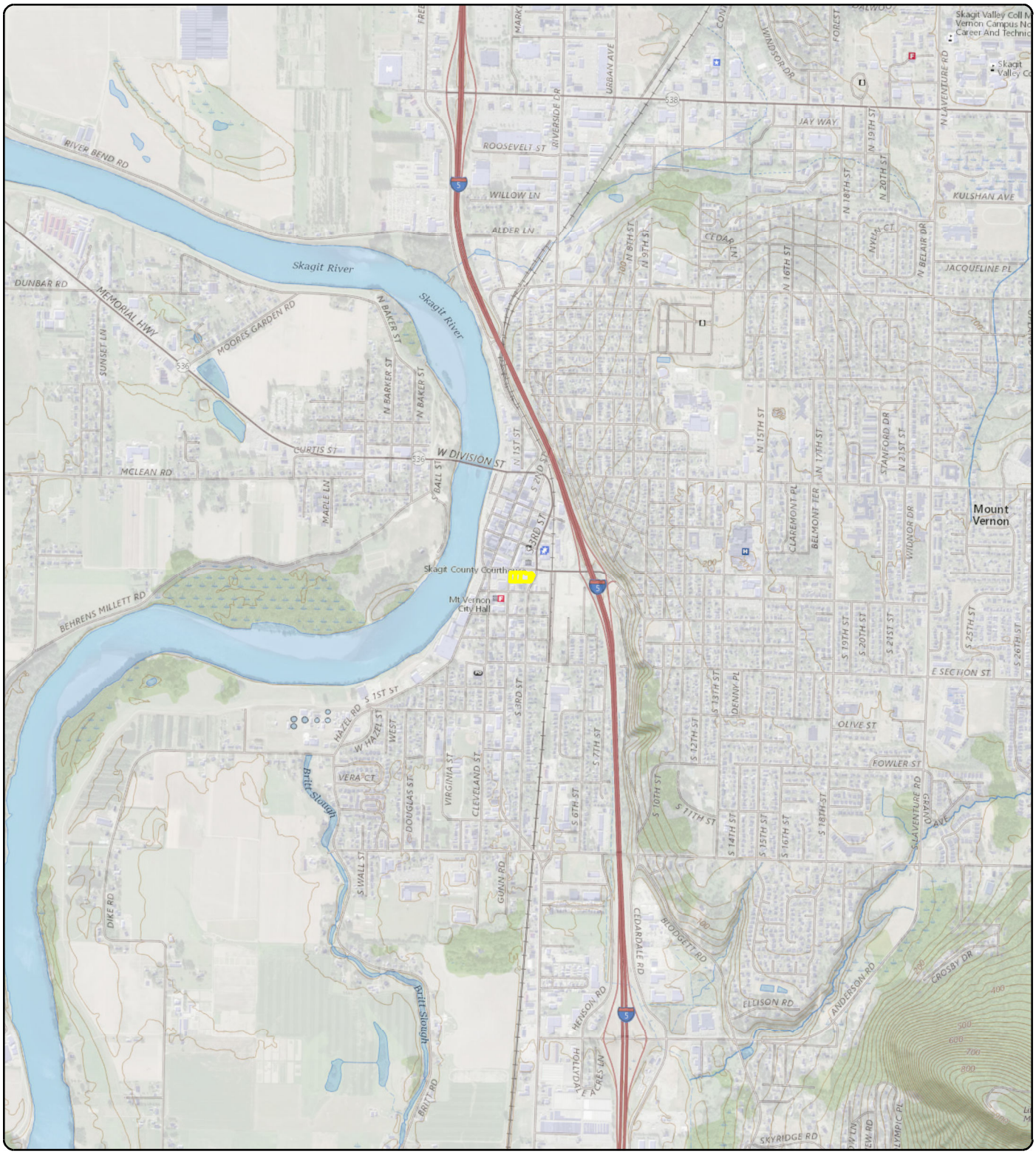
Path: X:\0_MFA_Projects\M1472\021.002\Fig1_PropertyLocation.mxd

Print Date: 12/2/2022

Reviewed By:

Produced By: abixby

Project:



Notes:
U.S. Geological Survey 7.5-minute topographic quadrangle (2014): Mount Vernon.
Township 34 north, range 4 east, section 19.

Data Source:
Property boundary obtained from Skagit County.

Legend

Property Parcel

Figure 1
Property Location

Mount Vernon Library Commons
208 W Kincaid Street
Mount Vernon, Washington

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0 1,000 2,000
Feet

Figure 2
Property Features and Sample Locations

Mount Vernon Library Commons
208 W Kincaid Street
Mount Vernon, Washington

W Kincaid Street

S 2nd Street

S 3rd Street

P54139

P54141

P54142

P54147

250-gallon UST

3,200-gallon UST

PILE04-SS-0.5

3,200-gallon UST Stockpile

PILE05-SS-0.5

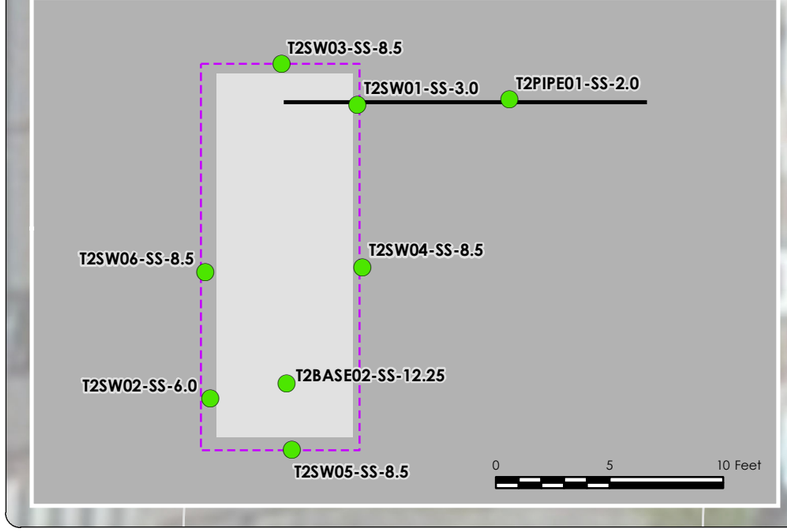
PILE01-SS-0.5

250-gallon UST Stockpile

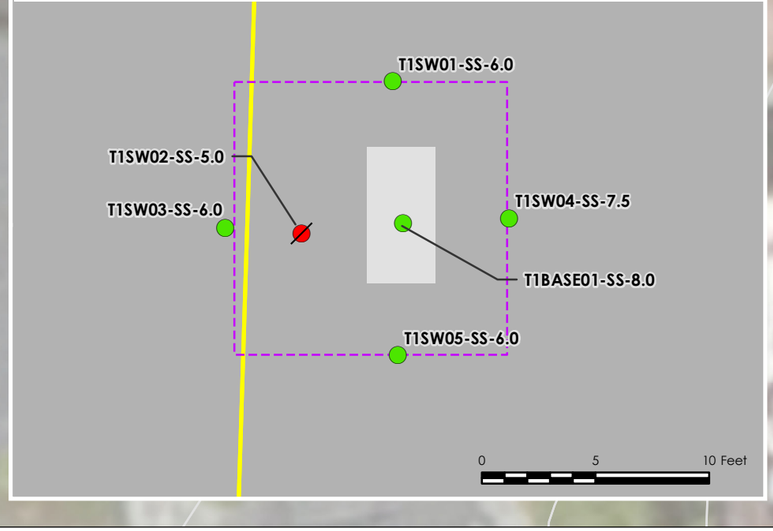
PILE02-SS-1.0

PILE03-SS-1.5

3,200-Gallon UST Sample Locations



250-Gallon UST Sample Locations



Legend

- Confirmation Sample
- Confirmation Sample, Removed
- Stockpile Sample
- Pipe
- UST
- Final Excavation Boundary
- Stockpiled Soil
- Property Parcel
- Tax Lot

Notes:
All features are approximate.
Confirmation sample T1SW02-SS-5.0 contained chemical concentrations above MTCA A CULs; soils associated with this sample were removed.
The 250-gallon UST was decommissioned by removal on November 10, 2022.
The 3,200-gallon UST was decommissioned by removal on November 14, 2022.
UST locations were recorded with a handheld global positioning system unit with sub-foot accuracy.
CUL = cleanup level.
MTCA = Model Toxics Control Act.
UST = underground storage tank.

0 10 20
Feet

Data Sources:
Aerial photograph obtained from Esri;
tax lot data obtained from Whatcom County.

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Path: X:\0_MFA_Projects\M1472\002\002\Fig2_PropertyFeaturesandSampleLocs.mxd
Print Date: 12/6/2022
Reviewed By: abixby
Produced By: abixby
Project: M1472.002.002

ATTACHMENT A

FIELD PHOTOGRAPHS

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PHOTOGRAPHS

Project Name: Mount Vernon Library Commons
Project Number: M1472.02.002
Location: 208 W Kincaid Street, Mount Vernon, Washington

Photo No. 1.

Description
Uncovering the 250-gallon underground storage tank (UST) in the north-central portion of the Property, looking east.

Photo No. 2.

Description
In-situ 250-gallon UST.

MAUL FOSTER ALONGI

PHOTOGRAPHS

Project Name: Mount Vernon Library Commons
Project Number: M1472.02.002
Location: 208 W Kincaid Street, Mount Vernon, Washington

Photo No. 3.

Description
Decommissioning the 250-gallon UST by removal, looking southwest.

Photo No. 4.

Description
Oily water in the 250-gallon UST pit, looking north.

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PHOTOGRAPHS

Project Name: Mount Vernon Library Commons
Project Number: M1472.02.002
Location: 208 W Kincaid Street, Mount Vernon, Washington

Photo No. 5.

Description
Covered, stockpiled soil from the 250-gallon UST pit, looking south.

Photo No. 6.

Description
250-gallon UST being cleaned and prepped for off-site recycling.

PHOTOGRAPHS

Project Name: Mount Vernon Library Commons
Project Number: M1472.02.002
Location: 208 W Kincaid Street, Mount Vernon, Washington

Photo No. 7.

Description
Initial excavation extent of the 250-gallon UST pit, looking northeast.

Photo No. 8.

Description
Final excavation extent of the 250-gallon UST pit, after overexcavation of the west sidewall, looking west.

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PHOTOGRAPHS

Project Name: Mount Vernon Library Commons
Project Number: M1472.02.002
Location: 208 W Kincaid Street, Mount Vernon, Washington

Photo No. 9.

Description
Uncovering the 3,200-gallon UST in the western portion of the Property, looking north.

Photo No. 10.

Description
In-situ 3,200-gallon UST.

MAUL FOSTER ALONGI

PHOTOGRAPHS

Project Name: Mount Vernon Library Commons
Project Number: M1472.02.002
Location: 208 W Kincaid Street, Mount Vernon, Washington

Photo No. 11.

Description
Uncovering piping associated with the 3,200-gallon UST, looking east. A triangular hole was cut into the top of the UST to allow for removal of residual product and water.

Photo No. 12.

Description
Uncovered the 3,200-gallon UST.

MAUL FOSTER ALONGI

PHOTOGRAPHS

Project Name: Mount Vernon Library Commons
Project Number: M1472.02.002
Location: 208 W Kincaid Street, Mount Vernon, Washington

Photo No. 13.

Description
Removed 3200-gallon UST.

Photo No. 14.

Description
3,200-gallon UST pit with gray-stained soil.

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PHOTOGRAPHS

Project Name: Mount Vernon Library Commons
Project Number: M1472.02.002
Location: 208 W Kincaid Street, Mount Vernon, Washington

Photo No. 15.

Description
Excavation in the 3,200-gallon UST pit to evaluate the vertical extent of impacted soil, looking north.

Photo No. 16.

Description
Final excavation extent of the 3,200-gallon UST pit, looking southeast.

MAUL FOSTER ALONGI

PHOTOGRAPHS

Project Name: Mount Vernon Library Commons
Project Number: M1472.02.002
Location: 208 W Kincaid Street, Mount Vernon, Washington

Photo No. 17.

Description
Covered, stockpiled soil from the 3,200-gallon UST pit, looking east.

Photo No. 18.

Description
Property overview, looking west.

ATTACHMENT B

PERMANENT CLOSURE FORM AND UST CHECKLISTS

DEPARTMENT OF ECOLOGY
State of Washington

SITE CHECK/SITE ASSESSMENT CHECKLIST
FOR UNDERGROUND STORAGE TANKS

UST ID #: NA

County: Skagit

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 #: NA; undocumented	Owner/Operator Name: Bill Bullock
UST ID #: NA; undocumented	Business Name: City of Mount Vernon
Site Name: Mount Vernon Library Commons	Address: 1024 Cleveland Avenue
Site Address: 208 W Kincaid Street	City: Mount Vernon State: WA Zip: 98273
City: Mount Vernon, WA	Phone: (360) 336-6204
Phone:	Email: BillB@mountvernonwa.gov

III. CERTIFIED SITE ASSESSOR

Service Provider Name: Christian Sifford	Company Name: Maul Foster & Alongi, Inc.
Phone: (541) 391-3652 Email: csifford@maulfoster.com	Address: 1329 North State Street, Suite 301
Certification #: 10185106 Exp. Date: 2/28/24	City: Bellingham State: WA Zip: 98225

IV. TANK INFORMATION

TANK ID	TANK CAPACITY	LAST SUBSTANCE STORED	DATE SITE CHECK OR ASSESSMENT CONDUCTED
NA; undocumented	250	Heating oil	11/10/2022

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):

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.

Christian Sifford		12/08/2022
Print or Type Name	Signature of Certified Site Assessor	Date

SITE CHECK/SITE ASSESSMENT CHECKLIST
FOR UNDERGROUND STORAGE TANKS

INSTRUCTIONS

This checklist must accompany the results of a Site Check Report, which is performed if a release of petroleum or other regulated substance is suspected. It is also required to accompany a Site Assessment Report, which is required following the permanent closure or "change-in-service" of an underground storage tank system. This form is required to be filled out whether or not contamination is found. This checklist is to be completed by the Site Assessor and submitted **within thirty days of completing** these activities to the following address:

Dept. of Ecology
UST Section
PO Box 47655
Olympia, WA 98504-7655

I./II. UST Facility and Owner/Operator Information: Fill out these sections completely. If you do not know your UST ID number, include the facility compliance tag number.

III. Service Provider Information: It is the responsibility of the ICC-certified Site Assessor to ensure that sampling and documentation procedures are completed in accordance with Ecology's *Guidance for Site Checks and Site Assessment for Underground Storage Tanks*.

IV. Tank Information: Use the same Tank identification numbers listed on the facility's Business License which is based on the most recent UST Addendum on file with Ecology. List the last substance stored in each tank, the tank sizes and the date the site check or site assessment was completed.

V. Required Signature: The Site Assessor signature certifies these procedures were followed.

All confirmed releases must be reported to Ecology by the owner within 24 hours and by service providers within 72 hours of discovery. A Site Characterization Report must be submitted to Ecology within 90 days after confirming a release.

Further questions? *Please contact your regional office below and ask for a tank inspector to assist you.*

Regional Office	Counties Served
Central (509) 575-2490	Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima
Eastern (509) 329-3400	Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman
HQ (360) 407-7170	Federal facilities in Western Washington
Northwest (425) 649-7000	Island, King, Kitsap, San Juan, Skagit, Snohomish, Whatcom
Southwest (360) 407-6300	Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Lewis, Mason, Pacific, Pierce, Skamania, Thurston, Wahkiakum

or find a complete list of UST inspectors at:
www.ecy.wa.gov/programs/tcp/ust-lust/people.html

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 173-360A WAC. Instructions are found on the back page.

UST ID #: 5057
County: Skagit

I. UST FACILITY	II. OWNER/OPERATOR INFORMATION
Facility Compliance Tag #:	Owner/Operator Name: **City of Mount Vernon**
UST ID #: **5057**	Business Name:
Site Name: **Mount Vernon Library Commons**	Address: **910 Cleveland Avenue**
Site Address: **208 W. Kincaid Street**	City: **Mount Vernon** State: **WA** Zip: **98273**
City: **Mount Vernon**	Phone:
Phone:	Email: **billb@mountvernonwa.gov**

III. CERTIFIED UST DECOMMISSIONER

Company Name: Clearcreek Contractors, a Division of Holt Services, Inc.	Service Provider Name: Darren Ness
Address: 10621 Todd Road East	Certification Type: ICC UST Decommissioner
City: Edgewood State: WA Zip: 98372	Cert. No.: 8470564 Exp. Date: 4/21/2022
Provider Phone: 253.604.4878	Provider Email: dness@holtservicesinc.com
Provider Signature: Darren R. Ness Digitally signed by Darren R. Ness DN: C=US, E=dness@holtservicesinc.com, O=Holt Services, OU=Clearcreek Contractors, CN=Darren R. Ness Date: 2022.11.18 09:19:58-08'00'	***Date:*** 11/16/2022

IV. TANK INFORMATION

TANK ID	TANK CAPACITY	LAST SUBSTANCE STORED	CLOSURE METHOD			CLOSURE DATE
			removal	closed-in-place	change-in-service	
7	3,200-g	gasoline	☒	☐	☐	11/14/2022
			☐	☐	☐	
			☐	☐	☐	
			☐	☐	☐	
			☐	☐	☐	
			☐	☐	☐	

V. REQUIRED SIGNATURE

Signature acknowledges UST(s) comply with UST regulation WAC 173-360A-0810 Permanent Closure Requirements.

Date	Signature of Tank Owner/Operator or Authorized Representative	Print or Type Name
11/18/22	William C Bullock	William C Bullock

ECY 020-94 (Revised October 2018)

DEPARTMENT OF ECOLOGY
State of Washington

SITE CHECK/SITE ASSESSMENT CHECKLIST
FOR UNDERGROUND STORAGE TANKS

UST ID #: NA

County: Skagit

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 #: NA; undocumented	Owner/Operator Name: Bill Bullock
UST ID #: NA; undocumented	Business Name: City of Mount Vernon
Site Name: Mount Vernon Library Commons	Address: 1024 Cleveland Avenue
Site Address: 208 W Kincaid Street	City: Mount Vernon State: WA Zip: 98273
City: Mount Vernon, WA	Phone: (360) 336-6204
Phone:	Email: BillB@mountvernonwa.gov

III. CERTIFIED SITE ASSESSOR	
Service Provider Name: Christian Sifford	Company Name: Maul Foster & Alongi, Inc.
Phone: (541) 391-3652 Email: csifford@maulfoster.com	Address: 1329 North State Street, Suite 301
Certification #: 10185106 Exp. Date: 2/28/24	City: Bellingham State: WA Zip: 98225

IV. TANK INFORMATION

TANK ID	TANK CAPACITY	LAST SUBSTANCE STORED	DATE SITE CHECK OR ASSESSMENT CONDUCTED
NA; undocumented	3,200	Gasoline	11/14/2022

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):

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.

Christian Sifford		12/08/2022
Print or Type Name	Signature of Certified Site Assessor	Date

SITE CHECK/SITE ASSESSMENT CHECKLIST
FOR UNDERGROUND STORAGE TANKS

INSTRUCTIONS

This checklist must accompany the results of a Site Check Report, which is performed if a release of petroleum or other regulated substance is suspected. It is also required to accompany a Site Assessment Report, which is required following the permanent closure or "change-in-service" of an underground storage tank system. This form is required to be filled out whether or not contamination is found. This checklist is to be completed by the Site Assessor and submitted **within thirty days of completing** these activities to the following address:

Dept. of Ecology
UST Section
PO Box 47655
Olympia, WA 98504-7655

I./II. UST Facility and Owner/Operator Information: Fill out these sections completely. If you do not know your UST ID number, include the facility compliance tag number.

III. Service Provider Information: It is the responsibility of the ICC-certified Site Assessor to ensure that sampling and documentation procedures are completed in accordance with Ecology's *Guidance for Site Checks and Site Assessment for Underground Storage Tanks*.

IV. Tank Information: Use the same Tank identification numbers listed on the facility's Business License which is based on the most recent UST Addendum on file with Ecology. List the last substance stored in each tank, the tank sizes and the date the site check or site assessment was completed.

V. Required Signature: The Site Assessor signature certifies these procedures were followed.

All confirmed releases must be reported to Ecology by the owner within 24 hours and by service providers within 72 hours of discovery. A Site Characterization Report must be submitted to Ecology within 90 days after confirming a release.

Further questions? *Please contact your regional office below and ask for a tank inspector to assist you.*

Regional Office	Counties Served
Central (509) 575-2490	Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima
Eastern (509) 329-3400	Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman
HQ (360) 407-7170	Federal facilities in Western Washington
Northwest (425) 649-7000	Island, King, Kitsap, San Juan, Skagit, Snohomish, Whatcom
Southwest (360) 407-6300	Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Lewis, Mason, Pacific, Pierce, Skamania, Thurston, Wahkiakum

or find a complete list of UST inspectors at:
www.ecy.wa.gov/programs/tcp/ust-lust/people.html

ATTACHMENT C

UST PERMIT AND WAIVER

Tanks (Install, Decommission, and/or Remove)

Fire Permit

Reference Number	REFERENCE-22-0638
Permit Number	FIRE22-0107 Permit finaled

Options

Current Fees

$0.00

Additional fees may be required

Please complete the following information to submit your permit application.

My Project

Location

208 W KINCAID ST

Mount Vernon, WA 98273

Parcel

P54141 (https://ci-mountvernon-wa.smartgovcommunity.com:443/Parcels/ParcelDetail/Index/2381c1f5-4ff9-45eb-9e1f-a9d80045d02f)

Created	10/26/2022
Submitted	10/26/2022
Approved	11/3/2022
Issued	11/4/2022
Closed	- -
Application Expires	11/4/2024

Give your project a name

City of Mount Vernon, Holt Services I

Describe the purpose of the permit

Decommission an Underground Stora

Permit Public Notices

Permit Contacts

Permit Submittals

At least 1 file must be uploaded for each submittal requirement

Permit Parcels

Permit Fees

Current Fees $0.00

Permit Inspections

There is 1 required inspection for this permit

DEPARTMENT OF ECOLOGY
State of Washington

30-DAY NOTICE
FOR UNDERGROUND STORAGE TANK SYSTEMS

UST ID #: 5057

County: Skagit

This form provides Ecology 30-days' advanced notice for projects, as required by Chapter 173-360A WAC. Instructions are on the back page.

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):		Owner/Operator Name: City of Mount Vernon		
UST ID # (if applicable): 5057		Business Name:		
Site Name: Mount Vernon Library Commons		Mailing Address: 910 Cleveland Avenue		
Site Address: 208 W. Kincaid Street		City: Mount Vernon	State: WA	Zip: 98273
City: Mount Vernon		Phone:		
Phone:		Email:		

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: Clearcreek Contractors, a division of Holt Services, Inc.		Certification Type: ICC UST Deommissioner	
Service Provider Name: Darren Ness		Cert. No.: 8470564	Exp. Date: 4/21/2023
Provider Phone: 206.549.4080		Provider Email: dness@holtservicesinc.com	

2) ☐ Installer ☐ Decommissioner ☒ Site Assessor

Company Name: Maul Foster & Alongi		Certification Type: ICC Site Assessor	
Service Provider Name: Christian Sifford		Cert. No.: 10185106	Exp. Date: 2/28/2024
Provider Phone: 541.391.3652		Provider Email: csifford@maulfoster.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
7	4k - 6k	Gasoline		11/2/2022	30-day Notice time frame waived by: Kale Carlson KC UST Inspector Department of Ecology 10/31/2022

30-DAY NOTICE

FOR UNDERGROUND STORAGE TANK SYSTEMS

GENERAL INSTRUCTIONS

Under WAC 173-360A-0300, 173-360A-0810 and 173-360A-0820, owners and/or operators are required to notify the Department of Ecology (Ecology) **at least 30 days prior** to beginning underground storage tank (UST) and/or piping installation, decommissioning, or change-in-service projects by mailing this notice to the address below. A separate form must be used for each project type (e.g. install, removal). Once this form is received by Ecology, it is date-stamped and returned to the owner/operator listed on the form. Installation and decommissioning projects cannot begin within the first 30 days after the date stamped on this form unless the wait-period has been waived by a regional Ecology UST inspector. If a project cannot meet the deadlines described below, an additional 30-Day Notice may be required.

Department of Ecology
Underground Storage Tank Section
PO Box 47655
Olympia, WA 98504-7655

SITE AND OWNER/OPERATOR INFORMATION

Fill in the site/owner information completely. The contact person listed on this form must confirm the exact date an installation or decommissioning project will begin by contacting the regional UST inspector **at least 3 business days** before proceeding.

INSTALLATION/REPLACEMENT OF TANK AND/OR PIPING

Installation projects must begin within 90 days of the date stamped on this notice. Complete the Tank Information section by assigning Tank ID numbers that have not previously been used at the facility. Once processed, this form allows a one-time drop of product for UST system testing purposes only. The fuel drop is not required to occur within the 90-day period. Once your tank(s) store more than one inch of product, leak detection equipment and monitoring must be in place.

To receive additional deliveries and operate the new tanks/piping, you must submit the Business License application, UST Addendum, and the tank/piping Manufacturer's Installation Checklists to the Department of Revenue (DOR) **within 30 days** of completing the installation. This activates the mailing of your Business License with tank endorsement(s) from DOR and the facility compliance tag from Ecology.

If only piping is being installed or replaced piping, the ICC-certified installer must certify the installation by completing the Retrofit/Repair Checklist with the Manufacturer's Installation Checklist and submitting it to the owner/operator. The form packet must be submitted by the owner/operator to Ecology **within 30 days** of completing the piping installation.

PERMANENT CLOSURE OF TANK AND/OR PIPING

Decommissioning projects must be completed within 90 days after the date stamped on this returned notice. Complete the Tank Information section using Tank ID numbers listed on the Business License. Use the Comments box to include additional information, such as the date when product was removed from both the piping and the tank to less than one inch.

Contact your local fire marshal and planning department prior to tank closure to procure any permits required by county or other local jurisdictions. Compliance with the State Environmental Policy Act (SEPA) Rules, Chapter 197-11 WAC may also apply.

A site assessment is required at the time of closure. If contamination is not discovered, a site assessment report must be submitted to the above address **within 30 days**. If contamination is discovered or confirmed, it must be reported to the appropriate Ecology regional office **within 24 hours** and a site characterization report must be submitted to the above address **within 90 days**.

The following are some examples of tanks that are exempt from the UST regulations.

- Farm or residential tanks, 1,100 gallons or less, used to store motor fuel for personal or farm use only. The fuel must be used for farm purposes and cannot be for resale.
- Tanks used for storing heating oil that is used solely for the purpose of heating the premises.
- Tanks with a capacity of 110 gallons or less.
- Emergency overflow tanks, catch basins, or sumps.

ATTACHMENT D

WASTE MANIFESTS

STRAIGHT BILL OF LADING
ORIGINAL — NOT NEGOTIABLE

Shipper No. 020987

Carrier No.

Page 1 of 4

MARINE VACUUM SERVICE, INC.
(Name of carrier) (SCAC)

Date 11-14-22

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 S. GRAHAM ST.
City SEATTLE State WA Zip Code 98108

FROM: Shipper Clear Creek Contractors
Street
City Mt. Vernon State WA Zip Code
24 hr. Emergency Contact Tel. No. 800-540-7491

Route

Vehicle Number 007

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		Oily Waste water	1200	Gals		
		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: $

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)

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

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
PER X

CARRIER MARINE VACUUM SERVICE, INC.
PER Rattanng Chen
DATE 11-14-22

1

Permanent post-office address of shipper.

STRAIGHT BILL OF LADING

ORIGINAL — NOT NEGOTIABLE

Shipper No. 23760

Carrier No. _____

Page 1 of 4

Marine Vacuum Service Inc.
(Name of carrier) (SCAC)

Date 11-10-22

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 Clean creek
Street 208 W Vernon
City MT Vernon State WA Zip Code
24 hr. Emergency Contact Tel. No. ChemTel 1-800-255-3924 Contract MIS3627926

Route

Vehicle Number 048

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) UN1863 Fuel Aviation, Mixture, 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	1500	Gals		
1 TT		Waste Water Non Reg by DOT				
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: $

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)

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

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 _____

PER _____

CARRIER MAR VAC

PER [signature]

DATE 11-10-22

Permanent post-office address of shipper.

(2)

BILL OF LADING

PRODUCT TRANSPORT MANIFEST

Nº 31945

MARINE VACUUM SERVICE, INC.

24 HOUR EMERGENCY PHONE NUMBER (206) 762-0240

FAX NUMBER 206-763-8084

TRUCK NUMBER 048 DATE 11-10-22

TO
DESTINATION
NAME Marine Vacuum Service, Inc.
STREET 1516 South Graham Street
CITY/STATE Seattle, WA 98108

FROM
SHIPPER
NAME clear creek
STREET 205 w vernon
CITY/STATE MT vernon WA

QUANTITY	PROPER SHIPPING NAME	UN (PLACARD) NUMBER
1500 gals	city waste waters non reg by dot	

SLUDGE

RECEIVER Accepted DATE 11-10-22 SHIPPER DATE

NOTE:

Customer warrants that the waste petroleum products being transferred by the above collector do not contain any contaminates including without limitations, pesticides, chlorinated solvents at concentrations greater than 1000 PPM, any detectable levels of PCBs, or any other material classified as cangerous or hazardous waste by 40 CFR Part 261, Subpart C and D (implementing the Federal Resource Conservation and Recover Act), or by any equivalent state dangerous or hazardous substance classification programs. Should laboratory tests find this waste not in compliance with 40 CFR Part 261, customer (generator) agrees to pay for all disposal costs incurred.

CADMAN
HEIDELBERGCEMENTGroup
(888) 322-6847 425-961-7100

TICKET NO.	1124522146	TICKET TIME	8:31:52AM	DATE	11/29/2022

Customer No.	Payment Type	Customer Name	Order No.
7821451	Account	LYDIG CONST INC.	10124345

Customer Job. No.	Customer P.O.	Map Ref.	Disp. Ord. #
		/	

Truck Type	Truck No.	Vehicle or License Plate No.	Trailer or License Plate No.	Zone
Truck & Trailer	PELL11TT			

Hauler/Carrier No.	Driver's Name	Delivered/Ordered	Load No.	Running Total
		46.17 /	2	46.17

WEIGHMASTER STATION
98846900
Sno River Delta Soils
17 E. Marine View Dr.
Everett, WA 98213

DEL/P MVLC
DEL/P 208 W KINCAID ST
MT VERNON

Product	Description	Total	Unit Price	Amount
99005	CLASS 3 SOILS (TN)	23.43		

SCALE WEIGHT
89,820 LB
Gross
42,960 LB/P.T.*
Tare
46,860 LB
Net

GROSS & TARE
☒ Scale 1 ☐ Scale 2
X Angelique
Deputy Weighmaster

A STANDBY SURCHARGE WILL BE ASSESSED FOR LOADS THAT EXCEED 10 MINUTES UNLOADING TIME.

LIABILITY WAIVER
Cadman, (Inc.) will not assume Liability for any property damage or any equipment damage for any delivery beyond the curb line.

Fuel Surcharge	
Sales Tax	
Total	

No one available to sign, customer waives receipt signature. ☐	Received by Signature X	Print Name (Customer) X	Driver's Signature X	Standby Time	

Arrive Job		Start Unloading		Finish Unloading		Standby Time		Customer's Initials X	This Tickets Grand Total	

CADMAN
HEIDELBERGCEMENT Group

Petroleum Contaminated Soil
Transport and Receiving Manifest
CUSTOMER: ***LYDIG***
JOB NAME: ***MVLC***

*****CLASS 3 ONLY *******

Generator/Property Owner	Transporter
Name: ***CITY OF MT VERNON***	
Address: ***1024 CLEVELAND AVE***	Address: ***VARIOUS***
City: ***MT VERNON*** ST: ***WA*** ZIP: ***98101***	City: ST ZIP:
Telephone:	Telephone:
Contact:	Contact:

Job Site Information	Receiving Facility
Address ***208 W KINCAID ST***	***CADMAN SOIL REMEDIATION***
City: ***MT VERNON*** ST: ***WA*** ZIP:	***17 EAST MARINE VIEW DRIVE, EVERETT 98201***
Telephone: ***425.885.3314***	Phone: ***425.210.8429***
Onsite Contact: ***ALEX CAREY***	Contact: ***Larry W. Baker***

Material Description	Class	Off-load Location
Petroleum Contaminated Soil	***3***	***CADMAN Soil Remediation***

Truck #: Pelico DT-11

Driver Signature: _____

Scale Attendant Signature: _____ Date/Time In: _____

Owner/ Authorized Agent

This is to certify that the accompanying material is the same as represented by the previously submitted analytical and is solely from the site listed on the CADMAN Contaminated Soil Site Information Sheet.

Authorized Signature _____ Date _____

***** Each incoming load must be accompanied by a completed manifest *****

CADMAN
HEIDELBERGCEMENTGroup
(888) 322-6847 425-961-7100

WEIGHMASTER STATION
98846900
Sno River Delta Soils
17 E. Marine View Dr.
Everett, WA 98213

TICKET NO.	1124522145	TICKET TIME	8:15:03AM	DATE	11/29/2022
Customer No. 7821451	Payment Type Account	Customer Name LYDIG CONST INC.			Order No. 10124345
Customer Job. No.	Customer P.O.		Map Ref. /		Disp. Ord. #
Truck Type Truck & Trailer	Truck No. PELL10TT	Vehicle or License Plate No.	Trailer or License Plate No.		Zone
Hauler/Carrier No.	Driver's Name	Delivered/Ordered 22.74 /	Load No. 1		Running Total 22.74

DEL/P MVLC
DEL/P 208 W KINCAID ST
MT VERNON

Product	Description	Total	Unit Price	Amount
99005	CLASS 3 SOILS (TN)	22.74		

SCALE WEIGHT	GROSS & TARE		Fuel Surcharge	
Gross 88,680 LB	[X] Scale 1 [ ] Scale 2	**A STANDBY SURCHARGE WILL BE ASSESSED FOR LOADS THAT EXCEED 10 MINUTES UNLOADING TIME.**	Sales Tax	
Tare 43,200 LB/P.T.*	X Angelique Deputy Weighmaster	**LIABILITY WAIVER** Cadman, (Inc.) will not assume Liability for any property damage or any equipment damage for any delivery beyond the curb line.	**Total**	
Net 45,480 LB				

No one available to sign, customer waives receipt signature. [ ]	Received by Signature X	Print Name (Customer) X	Driver's Signature X	Standby Time	

Arrive Job		Start Unloading		Finish Unloading		Standby Time		Customer's Initials X	This Tickets Grand Total	

CADMAN
HEIDELBERGCEMENT Group

Petroleum Contaminated Soil
Transport and Receiving Manifest
CUSTOMER: ***LYDIG***
JOB NAME: ***MVLC***

*****CLASS 3 ONLY *******

Generator/Property Owner	Transporter
Name: ***CITY OF MT VERNON***	
Address: ***1024 CLEVELAND AVE***	Address: ***VARIOUS***
City: ***MT VERNON*** ST: ***WA*** ZIP: ***98101***	City: ST ZIP:
Telephone:	Telephone:
Contact:	Contact:

Job Site Information	Receiving Facility
Address ***208 W KINCAID ST***	***CADMAN SOIL REMEDIATION***
City: ***MT VERNON*** ST: ***WA*** ZIP:	***17 EAST MARINE VIEW DRIVE, EVERETT 98201***
Telephone: ***425.885.3314***	Phone: ***425.210.8429***
Onsite Contact: ***ALEX CAREY***	Contact: ***Larry W. Baker***

Material Description	Class	Off-load Location
Petroleum Contaminated Soil	***3***	***CADMAN Soil Remediation***

Truck #: Pelico #10

Driver Signature: [signature]

Scale Attendant Signature: _____ Date/Time In: _____

Owner/ Authorized Agent

This is to certify that the accompanying material is the same as represented by the previously submitted analytical and is solely from the site listed on the CADMAN Contaminated Soil Site Information Sheet.

Authorized Signature _____ Date _____

***** Each incoming load must be accompanied by a completed manifest *****

CADMAN
HEIDELBERGCEMENTGroup
(888) 322-6847 425-961-7100

WEIGHMASTER STATION
98846900
Sno River Delta Soils
17 E. Marine View Dr.
Everett, WA 98213

TICKET NO.	1124522147	TICKET TIME	10:17:02AM	DATE	11/29/2022
Customer No. 7821451	Payment Type Account	Customer Name LYDIG CONST INC.			Order No. 10124345
Customer Job. No.	Customer P.O.		Map Ref. /		Disp. Ord. #
Truck Type Truck & Trailer	Truck No. PELL10TT	Vehicle or License Plate No.	Trailer or License Plate No.		Zone
Hauler/Carrier No.	Driver's Name	Delivered/Ordered 62.01 /	Load No. 3		Running Total 62.01

DEL/P MVLC
DEL/P 208 W KINCAID ST
MT VERNON

Product	Description	Total	Unit Price	Amount
99005	CLASS 3 SOILS (TN)	15.84		

SCALE WEIGHT	GROSS & TARE		
Gross 74,880 LB	☒ Scale 1 ☐ Scale 2	A STANDBY SURCHARGE WILL BE ASSESSED FOR LOADS THAT EXCEED 10 MINUTES UNLOADING TIME.	Fuel Surcharge
Tare 43,200 LB/P.T.*	X Angelique Deputy Weighmaster	LIABILITY WAIVER Cadman, (Inc.) will not assume Liability for any property damage or any equipment damage for any delivery beyond the curb line.	Sales Tax
Net 31,680 LB			**Total**

No one available to sign, customer waives receipt signature. ☐	Received by Signature X	Print Name (Customer) X	Driver's Signature X	Standby Time

Arrive Job		Start Unloading		Finish Unloading		Standby Time		Customer's Initials X	This Tickets Grand Total	

CADMAN
HEIDELBERGCEMENT Group

Petroleum Contaminated Soil
Transport and Receiving Manifest
CUSTOMER: ***LYDIG***
JOB NAME: ***MVLC***

****CLASS 3 ONLY ****

Generator/Property Owner	Transporter
Name: ***CITY OF MT VERNON***	
Address: ***1024 CLEVELAND AVE***	Address: ***VARIOUS***
City: ***MT VERNON*** ST: ***WA*** ZIP: ***98101***	City: ST ZIP:
Telephone:	Telephone:
Contact:	Contact:

Job Site Information	Receiving Facility
Address ***208 W KINCAID ST***	***CADMAN SOIL REMEDIATION***
City: ***MT VERNON*** ST: ***WA*** ZIP:	***17 EAST MARINE VIEW DRIVE, EVERETT 98201***
Telephone: ***425.885.3314***	Phone: ***425.210.8429*** 425-346-0946
Onsite Contact: ***ALEX CAREY***	Contact: ***Larry W. Baker*** Doug Warpus

Material Description	Class	Off-load Location
Petroleum Contaminated Soil	***3***	***CADMAN Soil Remediation***

Truck #: Pelco #10

Driver Signature:

Scale Attendant Signature: JR Date/Time In: 11/29/22

Owner/ Authorized Agent

This is to certify that the accompanying material is the same as represented by the previously submitted analytical and is solely from the site listed on the CADMAN Contaminated Soil Site Information Sheet.

Authorized Signature _____ Date_____

***** Each incoming load must be accompanied by a completed manifest *****

ATTACHMENT E

LABORATORY REPORTS

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

5500 4th Avenue South
Seattle, WA 98108
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

November 29, 2022

Carolyn Wise, Project Manager
Maul Foster Alongi
1329 N State St, Suite 301
Bellingham, WA 98225

Dear Ms Wise:

Included is the amended report from the testing of material submitted on November 11, 2022 from the MVLC UST Pull M1472.02.002, F&BI 211182 project. The percent moisture results have been included and the overrange methylnaphthalene results in the full concentration analysis of sample T1SW02-SS-5.0 have been removed.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Amanda Bixby. Fiona Bellows
MFA1128R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

5500 4th Avenue South
Seattle, WA 98108
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

November 28, 2022

Carolyn Wise, Project Manager
Maul Foster Alongi
1329 N State St, Suite 301
Bellingham, WA 98225

Dear Ms Wise:

Included are the results from the testing of material submitted on November 11, 2022 from the MVLC UST Pull M1472.02.002, F&BI 211182 project. There are 13 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Amanda Bixby
MFA1128R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on November 11, 2022 by Friedman & Bruya, Inc. from the Maul Foster Alongi MVLC UST Pull, F&BI 211182 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Maul Foster Alongi
211182 -01	T1BASE01-SS-8.0
211182 -02	T1SW01-SS-6.0
211182 -03	T1SW02-SS-5.0

All quality control requirements were acceptable.

Date of Report: 11/28/22
Date Received: 11/11/22
Project: MVLC UST Pull, F&BI 211182
Date Extracted: NA
Date Analyzed: 11/14/22

RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES FOR PERCENT MOISTURE USING ASTM D2216-98

Sample ID Laboratory ID	% Moisture
T1BASE01-SS-8.0 211182-01	26
T1SW01-SS-6.0 211182-02	22
T1SW02-SS-5.0 211182-03	23

Date of Report: 11/28/22
Date Received: 11/11/22
Project: MVLC UST Pull, F&BI 211182
Date Extracted: 11/11/22
Date Analyzed: 11/11/22

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

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

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

Sample ID Laboratory ID	Gasoline	Diesel	Heavy Oil	Surrogate (% Recovery) (Limit 50-150)
T1BASE01-SS-8.0 211182-01	ND	ND	ND	97
T1SW01-SS-6.0 211182-02	ND	D	ND	120
T1SW02-SS-5.0 211182-03	ND	D	ND	ip
Method Blank 02-2774 MB	ND	ND	ND	100

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

Date of Report: 11/28/22
Date Received: 11/11/22
Project: MVLC UST Pull, F&BI 211182
Date Extracted: 11/15/22
Date Analyzed: 11/15/22

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND EPA METHOD 8021B

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

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Surrogate (% Recovery) (Limit 50-132)
T1SW01-SS-6.0 211182-02	<0.02	0.029	<0.02	0.16	120
T1SW02-SS-5.0 211182-03 1/10	<0.2	1.6	1.8	9.4	120
Method Blank 02-2717 MB	<0.02	<0.02	<0.02	<0.06	103

Date of Report: 11/28/22
Date Received: 11/11/22
Project: MVLC UST Pull, F&BI 211182
Date Extracted: 11/14/22
Date Analyzed: 11/14/22

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

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

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
T1SW01-SS-6.0 211182-02	550	<250	100
T1SW02-SS-5.0 211182-03	4,500	<250	120
Method Blank 02-2777 MB	<50	<250	100

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	T1SW01-SS-6.0	Client:	Maul Foster Alongi
Date Received:	11/11/22	Project:	MVLC UST Pull, F&BI 211182
Date Extracted:	11/15/22	Lab ID:	211182-02 1/5
Date Analyzed:	11/16/22	Data File:	111540.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	85	10	198
Terphenyl-d14	85	50	124

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.30
2-Methylnaphthalene	1.4
1-Methylnaphthalene	0.89
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	T1SW02-SS-5.0	Client:	Maul Foster Alongi
Date Received:	11/11/22	Project:	MVLC UST Pull, F&BI 211182
Date Extracted:	11/15/22	Lab ID:	211182-03 1/5
Date Analyzed:	11/16/22	Data File:	111541.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	124	10	198
Terphenyl-d14	86	50	124

Compounds:	Concentration mg/kg (ppm)
Naphthalene	5.8
Benz(a)anthracene	<0.01
Chrysene	0.034
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	T1SW02-SS-5.0	Client:	Maul Foster Alongi
Date Received:	11/11/22	Project:	MVLC UST Pull, F&BI 211182
Date Extracted:	11/15/22	Lab ID:	211182-03 1/50
Date Analyzed:	11/18/22	Data File:	111734.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	91	10	198
Terphenyl-d14	86	50	124

Compounds:	Concentration mg/kg (ppm)
2-Methylnaphthalene	19
1-Methylnaphthalene	11

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	Method Blank	Client:	Maul Foster Alongi
Date Received:	Not Applicable	Project:	MVLC UST Pull, F&BI 211182
Date Extracted:	11/15/22	Lab ID:	02-2788 mb 1/5
Date Analyzed:	11/15/22	Data File:	111513.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	92	10	198
Terphenyl-d14	120	50	124

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 11/28/22
Date Received: 11/11/22
Project: MVLC UST Pull, F&BI 211182

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES USING EPA METHOD 8021B

Laboratory Code: 211193-12 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	0.28	0.26	7
Toluene	mg/kg (ppm)	0.020	0.031	43 a
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	104	70-130
Toluene	mg/kg (ppm)	0.5	100	70-130
Ethylbenzene	mg/kg (ppm)	0.5	104	70-130
Xylenes	mg/kg (ppm)	1.5	107	70-130

Date of Report: 11/28/22
Date Received: 11/11/22
Project: MVLC UST Pull, F&BI 211182

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

Laboratory Code: 211187-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	2,000	<50	61	72	50-150	17

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	2,000	78	50-150

Date of Report: 11/28/22
Date Received: 11/11/22
Project: MVLC UST Pull, F&BI 211182

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

Laboratory Code: 211199-21 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.83	<0.01	74	80	28-125	8
2-Methylnaphthalene	mg/kg (ppm)	0.83	<0.01	76	82	10-192	8
1-Methylnaphthalene	mg/kg (ppm)	0.83	<0.01	74	80	10-163	8
Benz(a)anthracene	mg/kg (ppm)	0.83	<0.01	95	102	50-150	7
Chrysene	mg/kg (ppm)	0.83	<0.01	87	95	50-150	9
Benzo(a)pyrene	mg/kg (ppm)	0.83	<0.01	92	97	50-150	5
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	<0.01	97	103	50-150	6
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	<0.01	91	95	50-150	4
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	<0.01	89	95	41-134	7
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	<0.01	93	97	44-130	4

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.83	92	58-108
2-Methylnaphthalene	mg/kg (ppm)	0.83	91	67-109
1-Methylnaphthalene	mg/kg (ppm)	0.83	89	66-107
Benz(a)anthracene	mg/kg (ppm)	0.83	110	70-130
Chrysene	mg/kg (ppm)	0.83	105	70-130
Benzo(a)pyrene	mg/kg (ppm)	0.83	106	68-120
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	112	69-125
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	105	70-130
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	104	67-129
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	112	67-128

Data Qualifiers & Definitions

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

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

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

211182

SAMPLE CHAIN OF CUSTODY

11/11/22 VSC 1/81

Page # _____ of _____

Report To Carolyn Wise

Company Maul Foster & Alongi

Address 1329 N State Sty Suite 301

City, State, ZIP Bellingham, WA, 98225

Phone 360-594-6255 Email cwise@maulfoster.com

SAMPLERS (signature)

PROJECT NAME: MULC UST Pull

PO #: M1472.02.002

REMARKS Email Results to abixby@maulfoster.com

Project specific RLs? - Yes / No

INVOICE TO: Carolyn Wise

TURNAROUND TIME
- ☐ Standard turnaround
- ☒ RUSH 4 hour
- Rush charges authorized by: Carolyn Wise

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

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	n-Hexane; MTBE; 1,2-dibromoethane; 1,2-dichloroethane	cPAHs w/ naphthalenes	Total Pb		Notes
TI BASE01-SS-8.0	01A-F	11/10/22	14:00	Soil	6	0	0	0	X				0	0	0		X = run (4 hr)
TI SW01-SS-6.0	02	11/10/22	14:30	Soil	6	✓	0	✓	X		✓		0	0	0		0 = hold
TI SW02-SS-5.0	03	11/10/22	15:00	Soil	6	✓	0	✓	X		✓		0	0	0		✓ - per AB
																	@ 11/14
																	48 hr

Samples received at 1 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Christian Stafford	MFA	11/10/22	16:00
Received by:	ANH PHAN	F&B	11/11/22	13:41
Relinquished by:				
Received by:				

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

5500 4th Avenue South
Seattle, WA 98108
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

November 28, 2022

Carolyn Wise, Project Manager
Maul Foster Alongi
1329 N State St, Suite 301
Bellingham, WA 98225

Dear Ms Wise:

Included are the additional results from the testing of material submitted on November 15, 2022 from the MVLC UST Pull M1472.02.002, F&BI 211219 project. There are 4 pages included in this report.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Amanda Bixby
MFA1128R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on November 15, 2022 by Friedman & Bruya, Inc. from the Maul Foster Alongi MVLC UST Pull M1472.02.002, F&BI 211219 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Maul Foster Alongi
211219 -01	T2BASE01-SS-10.0
211219 -02	T2SW01-SS-3.0
211219 -03	T2SW02-SS-6.0
211219 -04	T2PIPE01-SS-2.0

All quality control requirements were acceptable.

Date of Report: 11/28/22
Date Received: 11/15/22
Project: MVLC UST Pull M1472.02.002, F&BI 211219
Date Extracted: 11/18/22
Date Analyzed: 11/18/22

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE
USING EPA METHOD 8021B

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

Sample ID Laboratory ID	Benzene	Surrogate (% Recovery) (Limit 50-150)
T2SW01-SS-3.0 211219-02	<0.02	120
T2SW02-SS-6.0 211219-03	<0.02	110
T2PIPE01-SS-2.0 211219-04	<0.02	110
Method Blank 02-2713 MB2	<0.02	121

Date of Report: 11/28/22
Date Received: 11/15/22
Project: MVLC UST Pull M1472.02.002, F&BI 211219

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR BENZENE AND TPH AS GASOLINE USING EPA METHOD 8021B

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Benzene	mg/kg (ppm)	0.5	98	106	70-130	8

Data Qualifiers & Definitions

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

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

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

SAMPLE CHAIN OF CUSTODY

11/15/22 B11VS-C2

211219

Report To Carolyn Wise

Company Maul Foster & Alongi, Inc

Address 1329 N State St, Suite 301

City, State, ZIP Bellingham, WA, 98225

Phone 360-594-6255 Email cwise@maulfoster.com

SAMPLERS (signature)

PROJECT NAME: MVLC UST Pull

PO #: M1472.02.002

REMARKS: Email results to abixby@maulfoster.com as well. Hold T2BASE sample for all analyses. Project specific RLs? - Yes / No

INVOICE TO: Carolyn Wise

Page # _____ of _____

TURNAROUND TIME
- ☐ Standard turnaround
- ☒ RUSH 4 hr
- Rush charges authorized by: Carolyn Wise

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

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	n-Hexane, MTBE, EDC, EDB	cPAHs, with naphthalenes	Total Pb		Notes
T2BASE01-SS-10.0	01A-F	11/14/22	14:40	Soil	6	O	O	O	~~X~~ O	~~X~~ O			O	O	O		X = run (4hr)
T2SW01-SS-3.0	02	11/14/22	14:50	Soil	6	O	O	~~X~~	X				O	O	O		O = Hold
T2SW02-SS-6.0	03	11/14/22	15:00	Soil	6	O	O	~~X~~	X				O	O	O		⊗ - benzene
T2PIPE01-SS-2.0	04	11/14/22	14:00	Soil	6	O	O	~~X~~	X				O	O	O		ef 11/18

ANALYSES REQUESTED

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Christian Sifford	MFA	11/14/22	16:30
Received by:	ANH PHAN	FSB	11/15/22	13:53
Relinquished by:				
Received by:		Samples received at 2 °C		

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

5500 4th Avenue South
Seattle, WA 98108
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

November 17, 2022

Carolyn Wise, Project Manager
Maul Foster Alongi
1329 N State St, Suite 301
Bellingham, WA 98225

Dear Ms Wise:

Included are the results from the testing of material submitted on November 15, 2022 from the MVLC UST Pull M1472.02.002, F&BI 211219 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
MFA1117R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on November 15, 2022 by Friedman & Bruya, Inc. from the Maul Foster Alongi MVLC UST Pull M1472.02.002, F&BI 211219 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Maul Foster Alongi
211219 -01	T2BASE01-SS-10.0
211219 -02	T2SW01-SS-3.0
211219 -03	T2SW02-SS-6.0
211219 -04	T2PIPE01-SS-2.0

All quality control requirements were acceptable.

Date of Report: 11/17/22
Date Received: 11/15/22
Project: MVLC UST Pull M1472.02.002, F&BI 211219
Date Extracted: 11/15/22
Date Analyzed: 11/15/22

RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES FOR PERCENT MOISTURE USING ASTM D2216-98

Sample ID Laboratory ID	% Moisture
T2SW01-SS-3.0 211219-02	20
T2SW02-SS-6.0 211219-03	20
T2PIPE01-SS-2.0 211219-04	13

Date of Report: 11/17/22
Date Received: 11/15/22
Project: MVLC UST Pull M1472.02.002, F&BI 211219
ate Extracted: 11/15/22
Date Analyzed: 11/15/22

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

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

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

Sample ID Laboratory ID	Gasoline	Diesel	Heavy Oil	Surrogate (% Recovery) (Limit 50-150)
T2SW01-SS-3.0 211219-02	ND	ND	ND	110
T2SW02-SS-6.0 211219-03	ND	ND	ND	110
T2PIPE01-SS-2.0 211219-04	ND	ND	ND	110
Method Blank 02-2792 MB	ND	ND	ND	110

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

Data Qualifiers & Definitions

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

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

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

SAMPLE CHAIN OF CUSTODY

11/15/22 B1|VS-C2

211219

Report To Carolyn Wise

Company Maul Foster & Alongi, Inc

Address 1329 N State St, Suite 301

City, State, ZIP Bellingham, WA, 98225

Phone 360-594-6255 Email cwise@maulfoster.com

SAMPLERS (signature)

PROJECT NAME: MVLC UST Pull

PO #: M1472.02.002

REMARKS: Email results to abixby@maulfoster.com as well. Hold T2BASE sample for all analyses. Project specific RLs? - Yes / No

INVOICE TO: Carolyn Wise

Page # _____ of _____

TURNAROUND TIME
- ☐ Standard turnaround
- ☒ RUSH 4 hr

Rush charges authorized by: Carolyn Wise

SAMPLE DISPOSAL
- ☐ Archive samples
- ☐ Other

Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	n-Hexane, MTBE, EDC, EDB	cPAHs, w/ naphthalenes	Total Pb		Notes
						ANALYSES REQUESTED											
T2BASE01-SS-10.0	01 A-F	11/14/22	14:40	Soil	6	0	0	0	~~X~~ 0	0			0	0	0		X = run (4hr)
T2SW01-SS-3.0	02	11/14/22	14:50	Soil	6	0	0	0	X				0	0	0		0 = Hold
T2SW02-SS-6.0	03	11/14/22	15:00	Soil	6	0	0	0	X				0	0	0		
T2PIPE01-SS-2.0	04	11/14/22	14:00	Soil	6	0	0	0	X				0	0	0		

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Christian Sifford	MFA	11/14/22	16:30
Received by:	ANH PHAN	FSH	11/15/22	13:53
Relinquished by:				
Received by:		Samples received at 2 °C		

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

5500 4th Avenue South
Seattle, WA 98108
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

November 29, 2022

Carolyn Wise, Project Manager
Maul Foster Alongi
1329 N State St, Suite 301
Bellingham, WA 98225

Dear Ms Wise:

Included is the amended report from the testing of material submitted on November 16, 2022 from the MVLC UST Pull M1472.02.002, F&BI 211243 project. The methylnaphthalene results that exceeded the calibration range in the full concentration analysis of sample PILE03-SS-1.5 have been removed.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Amanda Bixby, Fiona Bellows
MFA1122R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

5500 4th Avenue South
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November 22, 2022

Carolyn Wise, Project Manager
Maul Foster Alongi
1329 N State St, Suite 301
Bellingham, WA 98225

Dear Ms Wise:

Included are the results from the testing of material submitted on November 16, 2022 from the MVLC UST Pull M1472.02.002, F&BI 211243 project. There are 29 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Amanda Bixby
MFA1122R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on November 16, 2022 by Friedman & Bruya, Inc. from the Maul Foster Alongi MVLC UST Pull M1472.02.002, F&BI 211243 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Maul Foster Alongi
211243 -01	T1SW03-SS-6.0
211243 -02	PILE01-SS-0.5
211243 -03	PILE02-SS-1.0
211243 -04	PILE03-SS-1.5
211243 -05	T2BASE02-SS-12.25
211243 -06	PILE04-SS-1.0
211243 -07	PILE05-SS-1.5

All quality control requirements were acceptable.

Date of Report: 11/22/22
Date Received: 11/16/22
Project: MVLC UST Pull M1472.02.002, F&BI 211243
Date Extracted: NA
Date Analyzed: 11/17/22

RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES FOR PERCENT MOISTURE USING ASTM D2216-98

Sample ID Laboratory ID	% Moisture
T1SW03-SS-6.0 211243-01	28
PILE01-SS-0.5 211243-02	26
PILE02-SS-1.0 211243-03	27
PILE03-SS-1.5 211243-04	24
T2BASE02-SS-12.25 211243-05	31
PILE04-SS-1.0 211243-06	24
PILE05-SS-1.5 211243-07	28

Date of Report: 11/22/22
Date Received: 11/16/22
Project: MVLC UST Pull M1472.02.002, F&BI 211243
Date Extracted: 11/17/22
Date Analyzed: 11/17/22

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

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

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

Sample ID Laboratory ID	Gasoline	Diesel	Heavy Oil	Surrogate (% Recovery) (Limit 50-150)
T2BASE02-SS-12.25 211243-05	ND	ND	ND	99
Method Blank 02-2803 MB	ND	ND	ND	90

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

Date of Report: 11/22/22
Date Received: 11/16/22
Project: MVLC UST Pull M1472.02.002, F&BI 211243
Date Extracted: 11/18/22
Date Analyzed: 11/18/22

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE
USING EPA METHOD 8021B
Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Benzene	Surrogate (% Recovery) (Limit 50-150)
T2BASE02-SS-12.25 211243-05	<0.02	130
Method Blank 02-2713 MB2	<0.02	121

Date of Report: 11/22/22
Date Received: 11/16/22
Project: MVLC UST Pull M1472.02.002, F&BI 211243
Date Extracted: 11/17/22
Date Analyzed: 11/17/22

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING EPA METHODS 8021B AND NWTPH-Gx

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

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
PILE04-SS-1.0 211243-06	<0.02	<0.02	<0.02	<0.06	<5	120
PILE05-SS-1.5 211243-07 1/5	0.03 j	<0.1	0.42	<0.3	89	120
Method Blank 02-2719 MB2	<0.02	<0.02	<0.02	<0.06	<5	111

Date of Report: 11/22/22
Date Received: 11/16/22
Project: MVLC UST Pull M1472.02.002, F&BI 211243
Date Extracted: 11/17/22
Date Analyzed: 11/17/22

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

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

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
T1SW03-SS-6.0 211243-01	<50	<250	99
PILE01-SS-0.5 211243-02	1,500	<250	110
PILE02-SS-1.0 211243-03	2,000	<250	110
PILE03-SS-1.5 211243-04	3,500	<250	120
PILE04-SS-1.0 211243-06	<50	<250	100
PILE05-SS-1.5 211243-07	<50	<250	96
Method Blank 02-2799 MB2	<50	<250	98

Analysis For Total Metals By EPA Method 6020B

Client ID:	PILE04-SS-1.0	Client:	Maul Foster Alongi
Date Received:	11/16/22	Project:	MVLC UST Pull M1472.02.002
Date Extracted:	11/17/22	Lab ID:	211243-06
Date Analyzed:	11/17/22	Data File:	211243-06.046
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Barium	66.5
Cadmium	<1
Chromium	18.3
Lead	27.8
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	PILE04-SS-1.0	Client:	Maul Foster Alongi
Date Received:	11/16/22	Project:	MVLC UST Pull M1472.02.002
Date Extracted:	11/17/22	Lab ID:	211243-06
Date Analyzed:	11/17/22	Data File:	211243-06.103
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	4.77

Analysis For Total Metals By EPA Method 6020B

Client ID:	PILE05-SS-1.5	Client:	Maul Foster Alongi
Date Received:	11/16/22	Project:	MVLC UST Pull M1472.02.002
Date Extracted:	11/17/22	Lab ID:	211243-07
Date Analyzed:	11/17/22	Data File:	211243-07.047
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Barium	49.5
Cadmium	<1
Chromium	17.3
Lead	4.31
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	PILE05-SS-1.5	Client:	Maul Foster Alongi
Date Received:	11/16/22	Project:	MVLC UST Pull M1472.02.002
Date Extracted:	11/17/22	Lab ID:	211243-07
Date Analyzed:	11/17/22	Data File:	211243-07.104
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.85

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Maul Foster Alongi
Date Received:	NA	Project:	MVLC UST Pull M1472.02.002
Date Extracted:	11/17/22	Lab ID:	I2-815 mb2
Date Analyzed:	11/17/22	Data File:	I2-815 mb2.102
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Barium	<1
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	PILE04-SS-1.0	Client:	Maul Foster Alongi
Date Received:	11/16/22	Project:	MVLC UST Pull M1472.02.002
Date Extracted:	11/17/22	Lab ID:	211243-06
Date Analyzed:	11/17/22	Data File:	111706.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	90	109
Toluene-d8	108	89	112
4-Bromofluorobenzene	98	84	115

Compounds:	Concentration mg/kg (ppm)
Hexane	<0.25
Methyl t-butyl ether (MTBE)	<0.05
1,2-Dibromoethane (EDB)	<0.05
1,2-Dichloroethane (EDC)	<0.05

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	PILE05-SS-1.5	Client:	Maul Foster Alongi
Date Received:	11/16/22	Project:	MVLC UST Pull M1472.02.002
Date Extracted:	11/17/22	Lab ID:	211243-07
Date Analyzed:	11/17/22	Data File:	111707.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	91	90	109
Toluene-d8	106	89	112
4-Bromofluorobenzene	104	84	115

Compounds:	Concentration mg/kg (ppm)
Hexane	<0.25
Methyl t-butyl ether (MTBE)	<0.05
1,2-Dibromoethane (EDB)	<0.05
1,2-Dichloroethane (EDC)	<0.05

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	Method Blank	Client:	Maul Foster Alongi
Date Received:	Not Applicable	Project:	MVLC UST Pull M1472.02.002
Date Extracted:	11/17/22	Lab ID:	02-2766 mb
Date Analyzed:	11/17/22	Data File:	111705.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	95	90	109
Toluene-d8	106	89	112
4-Bromofluorobenzene	99	84	115

Compounds:	Concentration mg/kg (ppm)
Hexane	<0.25
Methyl t-butyl ether (MTBE)	<0.05
1,2-Dibromoethane (EDB)	<0.05
1,2-Dichloroethane (EDC)	<0.05

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	T1SW03-SS-6.0	Client:	Maul Foster Alongi
Date Received:	11/16/22	Project:	MVLC UST Pull M1472.02.002
Date Extracted:	11/17/22	Lab ID:	211243-01 1/5
Date Analyzed:	11/17/22	Data File:	111722.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	83	10	198
Terphenyl-d14	124	50	124

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	0.015
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	PILE01-SS-0.5	Client:	Maul Foster Alongi
Date Received:	11/16/22	Project:	MVLC UST Pull M1472.02.002
Date Extracted:	11/17/22	Lab ID:	211243-02 1/5
Date Analyzed:	11/17/22	Data File:	111723.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	82	10	198
Terphenyl-d14	110	50	124

Compounds:	Concentration mg/kg (ppm)
Naphthalene	1.3
2-Methylnaphthalene	5.5
1-Methylnaphthalene	3.7
Benz(a)anthracene	<0.01
Chrysene	0.011
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	PILE02-SS-1.0	Client:	Maul Foster Alongi
Date Received:	11/16/22	Project:	MVLC UST Pull M1472.02.002
Date Extracted:	11/17/22	Lab ID:	211243-03 1/5
Date Analyzed:	11/18/22	Data File:	111730.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	99	10	198
Terphenyl-d14	84	50	124

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.79
2-Methylnaphthalene	3.9
1-Methylnaphthalene	3.0
Benz(a)anthracene	<0.01
Chrysene	0.018
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	0.010
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	PILE03-SS-1.5	Client:	Maul Foster Alongi
Date Received:	11/16/22	Project:	MVLC UST Pull M1472.02.002
Date Extracted:	11/17/22	Lab ID:	211243-04 1/5
Date Analyzed:	11/18/22	Data File:	111731.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	111	10	198
Terphenyl-d14	97	50	124

Compounds:	Concentration mg/kg (ppm)
Naphthalene	3.6
Benz(a)anthracene	<0.01
Chrysene	0.023
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	PILE03-SS-1.5	Client:	Maul Foster Alongi
Date Received:	11/16/22	Project:	MVLC UST Pull M1472.02.002
Date Extracted:	11/17/22	Lab ID:	211243-04 1/100
Date Analyzed:	11/18/22	Data File:	111821.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	84 d	10	198
Terphenyl-d14	102 d	50	124

Compounds:	Concentration mg/kg (ppm)
2-Methylnaphthalene	12
1-Methylnaphthalene	7.5

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	PILE04-SS-1.0	Client:	Maul Foster Alongi
Date Received:	11/16/22	Project:	MVLC UST Pull M1472.02.002
Date Extracted:	11/17/22	Lab ID:	211243-06 1/25
Date Analyzed:	11/18/22	Data File:	111820.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	84 d	10	198
Terphenyl-d14	102 d	50	124

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.13
2-Methylnaphthalene	0.23
1-Methylnaphthalene	0.12
Benz(a)anthracene	<0.05
Chrysene	<0.05
Benzo(a)pyrene	<0.05
Benzo(b)fluoranthene	<0.05
Benzo(k)fluoranthene	<0.05
Indeno(1,2,3-cd)pyrene	<0.05
Dibenz(a,h)anthracene	<0.05

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	PILE05-SS-1.5	Client:	Maul Foster Alongi
Date Received:	11/16/22	Project:	MVLC UST Pull M1472.02.002
Date Extracted:	11/17/22	Lab ID:	211243-07 1/5
Date Analyzed:	11/18/22	Data File:	111733.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	82	10	198
Terphenyl-d14	95	50	124

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	Method Blank	Client:	Maul Foster Alongi
Date Received:	Not Applicable	Project:	MVLC UST Pull M1472.02.002
Date Extracted:	11/17/22	Lab ID:	02-2802 mb 1/5
Date Analyzed:	11/17/22	Data File:	111713.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	93	10	198
Terphenyl-d14	123	50	124

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 11/22/22
Date Received: 11/16/22
Project: MVLC UST Pull M1472.02.002, F&BI 211243

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR BENZENE USING EPA METHOD 8021B

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Benzene	mg/kg (ppm)	0.5	98	106	70-130	8

Date of Report: 11/22/22
Date Received: 11/16/22
Project: MVLC UST Pull M1472.02.002, F&BI 211243

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 211236-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	108	70-130
Toluene	mg/kg (ppm)	0.5	108	70-130
Ethylbenzene	mg/kg (ppm)	0.5	108	70-130
Xylenes	mg/kg (ppm)	1.5	107	70-130
Gasoline	mg/kg (ppm)	20	105	70-130

Date of Report: 11/22/22
Date Received: 11/16/22
Project: MVLC UST Pull M1472.02.002, F&BI 211243

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

Laboratory Code: 211231-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	50	80	82	70-130	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	86	70-130

Date of Report: 11/22/22
Date Received: 11/16/22
Project: MVLC UST Pull M1472.02.002, F&BI 211243

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

Laboratory Code: 211220-01 x5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	<5	93	114	75-125	20
Barium	mg/kg (ppm)	50	41.9	127 b	122	75-125	4
Cadmium	mg/kg (ppm)	10	<5	103	107	75-125	4
Chromium	mg/kg (ppm)	50	18.3	93	95	75-125	2
Lead	mg/kg (ppm)	50	<5	101	102	75-125	1
Mercury	mg/kg (ppm	5	<5	103	108	75-125	5
Selenium	mg/kg (ppm)	5	<5	97	94	75-125	3
Silver	mg/kg (ppm)	10	<5	100	106	75-125	6

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	97	80-120
Barium	mg/kg (ppm)	50	98	80-120
Cadmium	mg/kg (ppm)	10	100	80-120
Chromium	mg/kg (ppm)	50	102	80-120
Lead	mg/kg (ppm)	50	99	80-120
Mercury	mg/kg (ppm)	5	98	80-120
Selenium	mg/kg (ppm)	5	98	80-120
Silver	mg/kg (ppm)	10	101	80-120

Date of Report: 11/22/22
Date Received: 11/16/22
Project: MVLC UST Pull M1472.02.002, F&BI 211243

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

Laboratory Code: 211243-06 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Hexane	mg/kg (ppm)	1	<0.25	33	32	10-137	3
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	1	<0.05	80	76	21-145	5
1,2-Dichloroethane (EDC)	mg/kg (ppm)	1	<0.05	80	77	12-160	4
1,2-Dibromoethane (EDB)	mg/kg (ppm)	1	<0.05	74	74	28-142	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Hexane	mg/kg (ppm)	1	109	43-142
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	1	116	60-123
1,2-Dichloroethane (EDC)	mg/kg (ppm)	1	118	56-135
1,2-Dibromoethane (EDB)	mg/kg (ppm)	1	106	74-132

Date of Report: 11/22/22
Date Received: 11/16/22
Project: MVLC UST Pull M1472.02.002, F&BI 211243

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

Laboratory Code: 211243-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.83	<0.01	86	85	28-125	1
2-Methylnaphthalene	mg/kg (ppm)	0.83	0.011	92	91	10-192	1
1-Methylnaphthalene	mg/kg (ppm)	0.83	<0.01	90	89	10-163	1
Benz(a)anthracene	mg/kg (ppm)	0.83	<0.01	106	105	50-150	1
Chrysene	mg/kg (ppm)	0.83	<0.01	100	99	50-150	1
Benzo(a)pyrene	mg/kg (ppm)	0.83	<0.01	104	101	50-150	3
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	<0.01	113	112	50-150	1
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	<0.01	111	111	50-150	0
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	<0.01	78	78	41-134	0
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	<0.01	80	79	44-130	1

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.83	86	58-108
2-Methylnaphthalene	mg/kg (ppm)	0.83	90	67-109
1-Methylnaphthalene	mg/kg (ppm)	0.83	89	66-107
Benz(a)anthracene	mg/kg (ppm)	0.83	106	70-130
Chrysene	mg/kg (ppm)	0.83	101	70-130
Benzo(a)pyrene	mg/kg (ppm)	0.83	105	68-120
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	113	69-125
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	111	70-130
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	93	67-129
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	93	67-128

Data Qualifiers & Definitions

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

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

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

211243

SAMPLE CHAIN OF CUSTODY

~~11/16/22~~ 11/16/22 M1/VS-CB

Page # 1 of 1

Report To Carolyn Wise

Company Maul Foster & Alongi

Address 1329 N State St, Suite 301

City, State, ZIP Bellingham, WA, 98225

Phone 360-594-6255 Email cwise@maulfoster.com

SAMPLERS (signature) AP

PROJECT NAME: MVLC UST Pull

PO #: M1472.02.002

REMARKS: Email results to abixby@maulfoster.com as well

Project specific RLs? - Yes / No

INVOICE TO: Carolyn Wise

TURNAROUND TIME

☐ Standard turnaround

☒ RUSH

Rush charges authorized by: Carolyn Wise

SAMPLE DISPOSAL

☐ Archive samples

☐ Other

Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	cPAHs with naphthalene	n-Hexane, MTBE, EDC, EDB	Total Pb	RCRA 8 metals	Notes
TISW03-SS-6.0	01 A-B	11/15/22	11:30	Soil	2	X							X				
PILE01-SS-0.5	02 A-F	11/15/22	11:40	Soil	6	X							X				Extra containers
PILE02-SS-1.0	03	11/15/22	11:50	Soil	6	X							X				Extra Containers
PILE03-SS-1.5	04	11/15/22	12:00	Soil	6	X							X				Extra Containers
T2 BASE02-SS-12.25	05	11/15/22	14:45	Soil	6	O	O	O	X				O	O	O		4hr turnaround for HCID
PILE04-SS-1.0	06	11/15/22	15:00	Soil	6	X	X	X					X	X		X	
PILE05-SS-1.5	07	11/15/22	15:15	Soil	6	X	X	X					X	X		X	
																	X = analyze
																	O = hold

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Christian Sifford	MFA	11/15/22	4:30
Received by:	ANHPHAM	F&B	11/16/22	15:13
Relinquished by:				
Received by:		Samples received at 4 °C		

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

5500 4th Avenue South
Seattle, WA 98108
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

November 28, 2022

Amanda Bixby, Project Manager
Maul Foster Alongi
1329 N State St, Suite 301
Bellingham, WA 98225

Dear Ms Bixby:

Included are the additional results from the testing of material submitted on November 18, 2022 from the MVLC UST Pull M1472.02.002, F&BI 211275 project. There are 4 pages included in this report.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Carolyn Wise
MFA1128R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on November 18, 2022 by Friedman & Bruya, Inc. from the Maul Foster Alongi MVLC UST Pull M1472.02.002, F&BI 211275 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Maul Foster Alongi
211275 -01	T1SW04-SS-7.5
211275 -02	T1SW05-SS-6.0
211275 -03	T2SW03-SS-8.5
211275 -04	T2SW04-SS-8.5
211275 -05	T2SW05-SS-8.5
211275 -06	T2SW06-SS-8.5

All quality control requirements were acceptable.

Date of Report: 11/28/22
Date Received: 11/18/22
Project: MVLC UST Pull M1472.02.002, F&BI 211275
Date Extracted: 11/21/22
Date Analyzed: 11/21/22

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES USING EPA METHOD 8021B

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

Sample ID Laboratory ID	Benzene	Surrogate (% Recovery) (Limit 50-150)
T1SW04-SS-7.5 211275-01	<0.02	120
T1SW05-SS-6.0 211275-02	<0.02	120
T2SW03-SS-8.5 211275-03	<0.02	120
T2SW04-SS-8.5 211275-04	<0.02	120
T2SW05-SS-8.5 211275-05	<0.02	110
T2SW06-SS-8.5 211275-06	<0.02	110
Method Blank 02-2723 MB	<0.02	115

Date of Report: 11/28/22
Date Received: 11/18/22
Project: MVLC UST Pull M1472.02.002, F&BI 211275

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR BENZENE AND TPH AS GASOLINE USING EPA METHOD 8021B

Laboratory Code: 211275-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	100	70-130

Data Qualifiers & Definitions

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

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

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

211275

SAMPLE CHAIN OF CUSTODY

11/18/22 H1/VS-B2C2

Page # 1 of 1

Report To: Amanda Bixby

Company: Maul Foster & Alongi, Inc

Address: 1329 N State St, Suite 301

City, State, ZIP: Bellingham, WA 98225

Phone: (360)635-8371 Email: abixby@maulfoster.com

SAMPLERS (signature): [signature]

PROJECT NAME: MVLC UST Pull

PO #: M1472.02.002

REMARKS: X = analyze, O = hold

Project specific RLs? - Yes / No

INVOICE TO: accounting@maulfoster.com

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

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

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	cPAHs + naphthalenes	MTBE, EDC, EDB, n-hexane	Total Pb		Notes
T1SW04-SS-7.5	01 A-F	11/17/22	0830	S	5	O	O	Ⓧ	X				O	O	O		First priority
T1SW05-SS-6.0	02	11/17/22	0840	S	5	O	O	Ⓧ	X				O	O	O		TAT on HCID,
T2SW03-SS-8.5	03	11/17/22	0930	S	5	O	O	Ⓧ	X				O	O	O		24-hour TAT
T2SW04-SS-8.5	04	11/17/22	0940	S	5	O	O	Ⓧ	X				O	O	O		on follow-ups
T2SW05-SS-8.5	05	11/17/22	0950	S	5	O	O	Ⓧ	X				O	O	O		
T2SW06-SS-8.5	06	11/17/22	1000	S	5	O	O	Ⓧ	X				O	O	O		Stir bars
																	in 5035 kits

Notes: Ⓧ - benzene only 11/18 next day

Samples received at 2 °C

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	[signature]	Amanda Bixby	MFA	11/17/22	1130
Received by:					
Relinquished by:					
Received by:	[signature]	ANH PHAN	F&B	11/18/22	08:59

X Please get ... MFA Bham office X

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

5500 4th Avenue South
Seattle, WA 98108
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

November 29, 2022

Amanda Bixby, Project Manager
Maul Foster Alongi
1329 N State St, Suite 301
Bellingham, WA 98225

Dear Ms Bixby:

Included is the amended report from the testing of material submitted on November 18, 2022 from the MVLC UST Pull M1472.02.002, F&BI 211275 project. The percent moisture has been included in the report.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Carolyn Wise
MFA1122R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

5500 4th Avenue South
Seattle, WA 98108
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

November 22, 2022

Amanda Bixby, Project Manager
Maul Foster Alongi
1329 N State St, Suite 301
Bellingham, WA 98225

Dear Ms Bixby:

Included are the results from the testing of material submitted on November 18, 2022 from the MVLC UST Pull M1472.02.002, F&BI 211275 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Carolyn Wise
MFA1122R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on November 18, 2022 by Friedman & Bruya, Inc. from the Maul Foster Alongi MVLC UST Pull M1472.02.002, F&BI 211275 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Maul Foster Alongi
211275 -01	T1SW04-SS-7.5
211275 -02	T1SW05-SS-6.0
211275 -03	T2SW03-SS-8.5
211275 -04	T2SW04-SS-8.5
211275 -05	T2SW05-SS-8.5
211275 -06	T2SW06-SS-8.5

All quality control requirements were acceptable.

Date of Report: 11/22/22
Date Received: 11/18/22
Project: MVLC UST Pull M1472.02.002, F&BI 211275
Date Extracted: NA
Date Analyzed: 11/22/22

RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES FOR PERCENT MOISTURE USING ASTM D2216-98

Sample ID Laboratory ID	% Moisture
T1SW04-SS-7.5 211275-01	25
T1SW05-SS-6.0 211275-02	30
T2SW03-SS-8.5 211275-03	24
T2SW04-SS-8.5 211275-04	21
T2SW05-SS-8.5 211275-05	20
T2SW06-SS-8.5 211275-06	13

Date of Report: 11/22/22
Date Received: 11/18/22
Project: MVLC UST Pull M1472.02.002, F&BI 211275
Date Extracted: 11/18/22
Date Analyzed: 11/18/22

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

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

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

Sample ID Laboratory ID	Gasoline	Diesel	Heavy Oil	Surrogate (% Recovery) (Limit 50-150)
T1SW04-SS-7.5 211275-01	ND	ND	ND	100
T1SW05-SS-6.0 211275-02	ND	ND	ND	100
T2SW03-SS-8.5 211275-03	ND	ND	ND	100
T2SW04-SS-8.5 211275-04	ND	ND	ND	110
T2SW05-SS-8.5 211275-05	ND	ND	ND	110
T2SW06-SS-8.5 211275-06	ND	ND	ND	100
Method Blank 02-2803 MB2	ND	ND	ND	100

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

Data Qualifiers & Definitions

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

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

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

211275

SAMPLE CHAIN OF CUSTODY

11/18/22 #11[illegible]

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Report To: Amanda Bixby

Company: Maul Foster & Alongi, Inc

Address: 1329 N State St, Suite 301

City, State, ZIP: Bellingham, WA 98225

Phone: (360) 635-8371 Email: abixby@maulfoster.com

SAMPLERS (signature): [signature]

PROJECT NAME	PO #
MVLC UST Pull	M1472.02.002
REMARKS X = analyze O = hold Project specific RLs? - Yes / No	INVOICE TO accounting@maulfoster.com

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

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

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	cPAHs + naphthalenes	MTBE, EDC, EDB, n-hexane	Total Pb		⊗ benzene only EY 11/18/22 next day Notes
T1SW04-SS-7.5	01 A-F	11/17/22	0830	S	5	O	O	⊗	X				O	O	O		First priority
T1SW05-SS-6.0	02	11/17/22	0840	S	5	O	O	⊗	X				O	O	O		TAT on HCID,
T2SW03-SS-8.5	03	11/17/22	0930	S	5	O	O	⊗	X				O	O	O		24-hour TAT
T2SW04-SS-8.5	04	11/17/22	0940	S	5	O	O	⊗	X				O	O	O		on follow-ups
T2SW05-SS-8.5	05	11/17/22	0950	S	5	O	O	⊗	X				O	O	O		
T2SW06-SS-8.5	06	11/17/22	1000	S	5	O	O	⊗	X				O	O	O		Stir bars
																	in 5035 kits

Samples received at 2 °C

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	[signature]	Amanda Bixby	MFA	11/17/22	1130
Received by:					
Relinquished by:					
Received by:	[signature]	ANH PHAN	F&B	11/18/22	08:59

* Please return cooler to MFA Bham office *

ATTACHMENT F

DATA VALIDATION MEMORANDUM

DATA QUALITY ASSURANCE/QUALITY CONTROL REVIEW

PROJECT NO. M1472.02.002 | NOVEMBER 30, 2022 | MOUNT VERNON LIBRARY COMMONS

Maul Foster & Alongi, Inc. (MFA), conducted an independent Stage 2A review of the quality of analytical results for soil samples collected in November 2022 at 208 W Kincaid Street, Mount Vernon, Washington.

Friedman & Bruya, Inc. (FBI), performed the analyses. MFA reviewed FBI report numbers 211182, 211219, 211219-Additional, 211243, 211275, and 211275-Additional. The analyses performed and the samples analyzed are listed in the following tables. Not all analyses were performed on all samples. One sample submitted on hold is indicated in the second table below.

Analysis	Reference
Diesel- and motor-oil-range hydrocarbons	NWTPH-Dx
Gasoline, diesel, and heavy oil	NWTPH-HCID
Gasoline-range hydrocarbons	NWTPH-Gx
Percent moisture	ASTM D2216-98
Semivolatile organic compounds	EPA 8270E
Total metals	EPA 6020B
Volatile organic compounds	EPA 8021B, EPA 8260D

Notes
ASTM = ASTM International.
EPA = U.S. Environmental Protection Agency.
HCID = hydrocarbon identification.
NWTPH = Northwest Total Petroleum Hydrocarbons.

Samples Analyzed			
Report 211182	**Reports 211219 and 211219-Additional**	**Report 211243**	**Report 211275 and 211275-Additional**
T1BASE01-SS-8.0	T2BASE01-SS-10.0 (hold)	T1SW03-SS-6.0	T1SW04-SS-7.5
T1SW01-SS-6.0	T2SW01-SS-3.0	PILE01-SS-0.5	T1SW05-SS-6.0
T1SW02-SS-5.0	T2SW02-SS-6.0	PILE02-SS-1.0	T2SW03-SS-8.5
--	T2PIPE01-SS-2.0	PILE03-SS-1.5	T2SW04-SS-8.5
--	--	T2BASE02-SS-12.25	T2SW05-SS-8.5
--	--	PILE04-SS-1.0	T2SW06-SS-8.5
--	--	PILE05-SS-1.5	--

DATA QUALIFICATION

Analytical results were evaluated according to applicable sections of U.S. Environmental Protection Agency (EPA) guidelines for data review (EPA 2020a, 2020b) and appropriate laboratory- and method-specific guidelines (EPA 1986, FBI 2019).

Data validation procedures were modified, as appropriate, to accommodate quality control requirements for methods that EPA data review procedures do not specifically address (e.g., Northwest Total Petroleum Hydrocarbons [NWTPH]-Dx).

Based on the results of the data quality review procedures described below, the data, with the appropriate final data qualifiers assigned, are considered acceptable for their intended use. Final data qualifiers represent qualifiers originating from the laboratory and accepted by the reviewer, and data qualifiers assigned by the reviewer during validation.

Final data qualifiers:

- J = result is estimated.
- U = result is non-detect at the method reporting limit (MRL).

Method NWTPH-HCID is a qualitative analysis. Hydrocarbon identification results are reported by FBI as either detect or non-detect.

SAMPLE CONDITIONS

Sample Custody

Sample custody was appropriately documented on the chain-of-custody (COC) forms accompanying the reports.

Holding Times

Extractions and analyses were performed within the recommended holding times.

Preservation and Sample Storage

The samples were preserved and stored appropriately.

REPORTING LIMITS

The laboratory evaluated results to MRLs. Samples that required dilutions because of high analyte concentrations, matrix interferences, and/or dilutions necessary for preparation and/or analysis were reported with raised MRLs.

The reviewer confirmed that when samples were diluted for analysis or when a higher sample volume was used for the extraction FBI provided the preparation or dilution factor after the

laboratory sample identification number (e.g., 211243-07 1/5 indicates a dilution factor of five).

In report 211243, FBI reported the EPA Method 8021B benzene result for sample PILE05-SS-1.5 below the MRL with a J flag. The reviewer confirmed with the laboratory that this result was reported below the MRL to meet project screening needs. The reviewer accepted the laboratory qualification.

BLANKS

Method Blanks

Laboratory method blanks are used to assess whether laboratory contamination was introduced during sample preparation and analysis. Laboratory method blank analyses were performed at the required frequencies. For purposes of data qualification, the laboratory method blanks were associated with all samples prepared in the analytical batch.

All laboratory method blank results were non-detect to MRLs.

Equipment Rinsate Blanks

Equipment rinsate blanks are used to evaluate field equipment decontamination. These blanks were not required for this sampling event, as all samples were collected using dedicated, single-use equipment.

Trip Blanks

Trip blanks are used to evaluate whether volatile organic compound contamination was introduced during sample storage and during shipment between the sampling location and the laboratory.

A trip blank sample was not submitted for analysis. Sample storage and shipment conditions could not be evaluated by the reviewer for potential volatile organic compound contamination.

LABORATORY CONTROL SAMPLE AND LABORATORY CONTROL SAMPLE DUPLICATE RESULTS

A laboratory control sample (LCS) and a laboratory control sample duplicate (LCSD) are spiked with target analytes to provide information about laboratory precision and accuracy.

FBI did not report LCS or LCSD results for NWTPH-HCID in reports 211182, 211219, or 211275. The reviewer was not able to evaluate accuracy or precision for this method. The method is qualitative; thus, qualification was not necessary. Where LCSD were not reported for the remaining methods, laboratory precision was evaluated using laboratory duplicate or matrix spike (MS) and matrix spike duplicate (MSD) results. The remaining LCS and the LCSD were prepared and analyzed at the required frequency

All LCS and LCSD results were within acceptance limits for percent recovery and relative percent difference (RPD).

LABORATORY DUPLICATE RESULTS

Laboratory duplicate results are used to evaluate laboratory precision.

FBI did not report laboratory duplicate results for NWTPH-HCID in reports 211182, 211219, or 211275. The reviewer was not able to evaluate precision for this method. The method is qualitative; thus, qualification was not necessary. Where laboratory duplicates were not reported for the remaining methods, laboratory precision was evaluated using LCS and LCSD or MS and MSD results. The remaining laboratory duplicate samples were prepared and analyzed at the required frequency.

Laboratory duplicate results greater than five times the MRL were evaluated using laboratory RPD control limits. Laboratory duplicate results less than five times the MRL, including non-detects, were evaluated using a control limit of the MRL of the parent sample; the absolute difference of the laboratory duplicate sample result and the parent sample result, or the MRL for non-detects, was compared to the MRL of the parent sample.

All laboratory duplicate results met the acceptance criteria.

MATRIX SPIKE AND MATRIX SPIKE DUPLICATE RESULTS

MS and MSD results are used to evaluate laboratory precision, accuracy, and the effect of the sample matrix on sample preparation and analysis.

FBI did not report MS or MSD results for NWTPH-HCID in reports 211182, 211219, or 211275. The reviewer was not able to evaluate accuracy or precision for this method. The method is qualitative; thus, qualification was not necessary. Where MS and MSD were not reported for the remaining methods, laboratory precision and accuracy were evaluated using LCS, LCSD, or laboratory duplicate results. All remaining MS and MSD samples were prepared and analyzed at the required frequency.

When MS and MSD were prepared with samples from unrelated projects, the MS and/or MSD percent recovery and/or RPD control limit exceedances did not require qualification because these sample matrices were not representative of project sample matrices.

All remaining MS and MSD results were within acceptance limits for percent recovery and RPD.

SURROGATE RECOVERY RESULTS

The samples were spiked with surrogate compounds to evaluate laboratory performance for individual samples for organic analyses.

In report 211182, FBI noted that the NWTPH-HCID surrogate result for T1SW02-SS-5.0 was outside recovery limits due to matrix effects. The method is qualitative; thus, qualification was not necessary.

All remaining surrogate results were within percent recovery acceptance limits.

FIELD DUPLICATE RESULTS

Field duplicate samples measure both field and laboratory precision. No field duplicate samples were submitted for analysis.

DATA PACKAGE

The data package was reviewed for transcription errors, omissions, and anomalies.

The COC forms accompanying reports 211219-Additional, 211182, 211275, and 211275-Additional have markups by FBI that mark some samples for analysis that were initially submitted on hold. The reviewer confirmed that these requests were made by the MFA project manager and that the correct analysis suite was reported for all samples.

Report 211182 was revised on November 29, 2022, to include ASTM D2216-98 percent moisture results as well as to remove the initial EPA Method 8270E 2-methylnaphthalene and 1-methylnaphthalene results for sample T1SW02-SS-5.0 that were over the calibration range of the instrument. In the revision, only the reanalysis for these analytes were reported, which were analyzed at higher dilutions and were within the calibration range of the instrument. FBI described these revisions in the first cover page of the report.

Report 211243 was revised on November 29, 2022, to remove the initial EPA Method 8270E 2-methylnaphthalene and 1-methylnaphthalene results for sample PILE03-SS-1.5 that were over the calibration range of the instrument. In the revision, only the reanalysis for these analytes were reported, which were analyzed at higher dilutions and were within the calibration range of the instrument. FBI described this revision in the first cover page of the report.

Report 211275 was revised on November 29, 2022, to include ASTM D2216-98 percent moisture results. FBI described this revision in the first cover page of the report. The COC form was also rescanned to include the text at the bottom of the page.

No other issues were found.

REFERENCES

EPA. 1986. *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods.* EPA publication SW-846. 3rd ed. U.S. Environmental Protection Agency. Final updates I (1993), II (1995), IIA (1994), IIB (1995), III (1997), IIIA (1999), IIIB (2005), IV (2008), V (2015), VI phase I (2017), VI phase II (2018), VI phase III (2019), VII phase I (2019), and VII phase II (2020).

EPA. 2020a. *National Functional Guidelines for Inorganic Superfund Methods Data Review.* EPA 542-R-20-006. U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation: Washington, DC. November.

EPA. 2020b. *National Functional Guidelines for Organic Superfund Methods Data Review.* EPA 540-R-20-005. U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation: Washington, DC. November.

FBI. 2019. *Quality Assurance Manual.* Rev. 17. Friedman & Bruya, Inc.: Seattle, WA. November 6.