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

February 2, 2023
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 a 1,200-Gallon Underground Storage Tank
Mount Vernon Library Commons
208 West Kincaid Street, Mount Vernon, Washington

Dear Annette Ademasu:

At the request of Lydig Construction (Lydig), Maul Foster & Alongi, Inc. (MFA) conducted a site assessment in support of the permanent closure of a 1,200-gallon underground storage tank (UST) 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, confirmation soil sample results, and reconnaissance groundwater sample results. The site assessment was performed by Amanda Bixby, an International Code Council-certified site assessor (certificate no. 9082049), 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 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 and prior environmental assessments are described in a previous report by MFA: *Site Assessment for Permanent Closure of Two Underground Storage Tanks* (MFA 2022).

PHYSICAL SETTING

The Property is 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 described 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 prior UST site assessment activities conducted by MFA, soil consisted of silty sand and sand with silt (MFA 2022). Groundwater was encountered at approximately 9 feet below ground surface (bgs) during UST decommissioning and excavation activities.

UST DISCOVERY AND DECOMMISSIONING

On December 15, 2022, Lydig's earthwork contractor, Pellco Construction, Inc., discovered the 1,200-gallon UST during site development activities in the southwest portion of parcel P54141 (see Figure 2). The approximately 1,200-gallon single-wall steel UST was 4 feet in diameter and 14 feet long. The top of the UST was located approximately 3 feet bgs. An approximately 7-foot-long pipe extended to the east of the 1,200-gallon UST. No other piping components were observed around the UST. The pipe was removed with the tank as part of the tank closure. The UST closure form for the 1,200-gallon UST and site assessment checklist are included in Attachment B.

UST decommissioning activities were initiated on January 4, 2023. 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 January 4, 2023, Marine Vacuum Services, Inc. (Marvac) of Seattle, Washington removed approximately 5 gallons of residual product from the bottom of the UST. The UST was then triple rinsed. Approximately 45 gallons of rinse water was removed from the UST; all liquids were transported to Marvac's facility in Seattle, Washington for treatment and disposal. Disposal manifests are included as Attachment D. Pellco Construction, Inc. then removed the UST. No holes were observed in the UST upon removal; however, significant rust was observed on the steel walls.

SITE ASSESSMENT AND OVEREXCAVATION

The site assessment was 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).

During the site assessment and excavation activities, soil was monitored for organic vapors using a photoionization detector (PID) and observed for visual and olfactory indicators of contamination (i.e., odor or staining). 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 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 collection of each sample.

Site Assessment and Initial Overexcavation

The 1,200-gallon UST was excavated and removed on January 4, 2023. Following removal, MFA inspected the excavation for visual or olfactory evidence of petroleum-contaminated soil (PCS) and identified PCS in all sidewalls and the base of the tank pit. During excavation, overburden soil above the UST bottom (i.e., shallower than 7 feet bgs) did not exhibit characteristics of PCS and was segregated for reuse.

Following tank removal, MFA directed overexcavation of PCS in the west sidewall of the tank pit to approximately 8 feet west of the former UST location; however, field indicators of PCS were still present in the sidewall. The initial excavation area spanned approximately 340 square feet and the excavation depth extended to approximately 9 feet bgs, at which point groundwater was encountered. The fill material surrounding the UST consisted of brown gravelly silty sand.

MFA collected one confirmation soil sample (T3BASE01) from the base of the excavation, beneath the central portion of the UST at 9.0 feet bgs. The sample contained visual and olfactory indicators of PCS; however, deeper excavation was not feasible due to shallow groundwater. Lateral overexcavation continued, as discussed below.

Overexcavation and Additional Confirmation Soil Sampling

From January 5 to January 9, 2023, MFA directed the continued lateral overexcavation of PCS. The overexcavation extended to a maximum depth of 9.0 feet bgs due to shallow groundwater. When PCS appeared to cease laterally in any given direction based on field observations, MFA collected confirmation soil samples from the base and sidewalls of the excavation to assess chemical concentrations in remaining soil. Details for each day of overexcavation are provided below.

On January 5, 2023, MFA directed overexcavation extending west and south. Soil was continuously evaluated for the presence of PCS using a PID and visual and olfactory observations. MFA stopped excavation once the west and south sidewalls did not exhibit visual or olfactory indicators of PCS. At the south sidewall, this excavation limit was collocated with the southern Property boundary. The PID readings for soil from the final south and west sidewalls were 9.6 ppm and 1.0 ppm, respectively. Confirmation soil samples were collected from both the south and west sidewalls at T3-SW01 and T3-SW02, respectively.

On January 6, 2023, MFA directed overexcavation to the north and east. Overexcavation to the east ceased when indicators of PCS were no longer present and the PID reading from soil in the east sidewall was 1.7 ppm, at which point two east sidewall confirmation soil samples (T3-SW03 and T3-SW04) were collected. The northern sidewall still contained PCS at the end

of the day. Due to the increased length of the excavation, an additional sample (T3-SW05) was collected from the west sidewall.

On January 9, 2023, MFA directed continued overexcavation of the north sidewall. By the end of the day, indicators of PCS were no longer present and the north sidewall soil and the PID reading was 10 ppm. A north sidewall confirmation sample (T3-SW06) was collected, along with an additional base sample (T3-BASE02) and two additional east and west sidewall samples (T3-SW07 and T3-SW08, respectively) due to the increased excavation size.

In total, two base samples and eight sidewall samples were collected from the 1,200-gallon UST excavation. The sample locations and final excavation extent are shown on Figure 2. Two additional USTs (250-gallon and 3,200-gallon capacity) are shown on Figure 2; both were decommissioned by removal in November 2022 (MFA 2022). All final confirmation soil samples from the 250-gallon and 3,200-gallon UST excavations were non-detect for all analytes.

Groundwater Sampling

Groundwater was encountered in the 1,200-gallon UST excavation at 9.0 feet bgs. Therefore, consistent with Ecology's *Site Assessment Guidance for Underground Storage Tank Systems* (Ecology 2022) and *Guidance for Remediation of Petroleum Contaminated Sites* (Ecology 2016), MFA contracted a licensed driller to install three temporary wells for reconnaissance groundwater sample collection: one upgradient (B03) and two downgradient (B01 and B02) of the excavation.

On January 10, 2023, Anderson Environmental Contracting, LLC, of Kelso, Washington, installed temporary wells B01 through B03 to 15 feet bgs. Temporary well screens (0.75-inch-diameter, 10-foot-long, polyvinyl chloride, 0.010-inch slotted well screens) were installed at each temporary boring location (see geologic boring logs in Attachment E). Reconnaissance groundwater samples were collected using low-flow sampling methods and a peristaltic pump. Water quality parameters (conductivity, pH, temperature, oxidation-reduction potential, and turbidity) were measured and recorded on field sampling data sheets before sample collection (see Attachment F). At least one well volume was purged from the temporary well screen to minimize turbidity and ensure that a representative sample was collected. Groundwater was transferred directly into laboratory-supplied containers.

Stockpile Sampling

During overexcavation activities, the PCS was segregated and stockpiled on plastic sheeting and covered with plastic sheeting to prevent soil erosion. The 1,200-gallon UST overexcavation generated approximately 150 cubic yards of PCS. In accordance with Ecology's *Site Assessment Guidance for Underground Storage Tank Systems* (Ecology 2022), MFA collected five discrete soil samples from the stockpile. The soil samples were collected from the stockpile manually from depths of 0.5 to 3.0 feet below the surface of the stockpile at the locations shown on Figure 2. Prior UST and contaminated soil removal in November 2022 at the Property included

collection of five stockpile samples (MFA 2022). Therefore, the stockpile samples associated with the 1,200-gallon UST are numbered PILE06 through PILE10.

ANALYTICAL METHODS

MFA collected confirmation soil samples from 10 locations (including a duplicate sample at one location), groundwater samples from three locations (including a duplicate sample at one location), and five stockpile characterization samples (see Figure 2). The samples were labeled, placed on ice in a cooler, and transported under standard chain-of-custody (COC) procedures to Friedman and Bruya, Inc. (FBI), in Seattle, Washington.

Confirmation soil samples were initially analyzed for petroleum hydrocarbon identification (HCID) by the Northwest Total Petroleum Hydrocarbon (NWTPH)-HCID method. Based on the initial analytical results, the following additional analyses were performed on all confirmation samples:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) by EPA Method 8260D/8021B
- Diesel-range organics (DRO) by NWTPH-Dx
- Motor-oil-range organics (ORO) by NWTPH-Dx
- Carcinogenic polycyclic aromatic hydrocarbons (cPAHs) by EPA Method 8270E
- Naphthalenes, including naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene, by EPA Method 8270E

Groundwater samples were analyzed for the following:

- BTEX by EPA Method 8260D/8021B
- Gasoline-range organics (GRO) by NWTPH-Gx
- DRO by NWTPH-Dx
- ORO by NWTPH-Dx
- cPAHs by EPA Method 8270E
- Naphthalenes, including naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene, by EPA Method 8270E

Stockpile sample analyses were selected to meet the requirements of the disposal facility, Cadman, Inc. in Everett, Washington. Stockpile samples were analyzed for the following (see Table 1):

- BTEX by EPA Method 8021B
- GRO by NWTPH-Gx
- DRO by NWTPH-Dx
- ORO by NWTPH-Dx
- Metals by EPA Method 6020B
- cPAHs by EPA Method 8270E

Analytical laboratory reports are included as Attachment G. Analytical results are summarized in Tables 1 and 2. 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 H. 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 Model Toxics Control Act (MTCA) Method A cleanup levels (CULs) for unrestricted land use (see Tables 1 and 2).

ANALYTICAL RESULTS

Soil

All confirmation soil samples except base sample T3BASE01-SS-9.0 and its duplicate, T3DUP-SS-9.0, were non-detect for all analytes. T3BASE01-SS-9.0 and its duplicate sample contained detections of DRO and naphthalene at concentrations above the MTCA Method A CULs.

Groundwater

All chemical concentrations were non-detect at the upgradient sample location B03. At downgradient locations B01 and B02, DRO was detected at concentrations well below the MTCA Method A CUL. All remaining chemicals were non-detect at the downgradient locations.

Stockpile

Laboratory concentrations of DRO and GRO exceeded MTCA Method A CULs in three of the five stockpile samples (PILE07, PILE08, and PILE10. However, upon review of the chromatograms, the reported GRO results were overlapping hydrocarbon ranges of DRO (see chromatograms in Attachment G). 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 AND BACKFILL

A total of approximately 900 cubic yards of soil (PCS and overburden) were excavated. During excavation, overburden soil above the UST bottom (i.e., shallower than 7 feet bgs) did not exhibit characteristics of PCS and was segregated for reuse. Stockpile sample results from the PCS stockpile indicated that the material was not suitable for reuse (Ecology 2016). Therefore, the total excavated soil volume of PCS (140 cubic yards or approximately 210 tons) was loaded into haul trucks and transported to Cadman, Inc. in Everett, Washington for disposal and treatment. Approximately 300 tons of clean fill material was imported to backfill the excavation. Waste manifests and import tickets are included in Attachment D.

DISCUSSION

Approximately 140 cubic yards of PCS was excavated and disposed of off-site. Confirmation soil samples collected from all four sidewalls and the northern base of the excavation were non-detect for all analytes. In the central and southern portion of the excavation, residual PCS at 9.0 feet bgs could not be removed due to shallow groundwater contributing to excessively wet soil conditions and unstable sidewalls. Residual PCS at 9.0 feet bgs contained DRO and naphthalene at concentrations above the MTCA Method A CULs. BTEX constituents were not detected. Additionally, reconnaissance groundwater samples collected downgradient of the excavation were non-detect for naphthalene and contained concentrations of DRO well below the MTCA Method A CUL. Therefore, the remaining PCS is likely localized to the central base of the UST excavation at depths below 9.0 feet bgs.

Lydig is in the process of constructing a library campus on the Property for the City of Mount Vernon. The maximum excavation depth for deep foundation footings is 8.0 feet bgs, approximately 1.0 foot above the residual PCS (see foundation plan in Attachment I). Therefore, construction workers will not come into contact with residual PCS at 9.0 feet bgs during development activities.

Based on the development plans and the absence of groundwater CUL exceedances, no additional remediation is recommended associated with the closure of this UST.

Sincerely,

Maul Foster & Alongi, Inc.

Amanda Bixby, GIT
Staff Geologist

Carolyn R. Wise, LHG
Project Hydrogeologist

Attachments: Limitations
References
Tables
Figures
Attachment A—Field Photographs
Attachment B—Permanent Closure Form and UST Checklists
Attachment C—UST Permit and Waiver
Attachment D—Waste Manifests and Import Tickets
Attachment E—Geologic Boring Logs
Attachment F—Water Field Sampling Data Sheets
Attachment G—Laboratory Reports and Chromatograms
Attachment H—Data Validation Memorandum
Attachment I—Foundation Plan

cc: Alex Carey, Lydig Construction

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

Dethier, David P. and Whetten, John T. 1981. *Preliminary Geologic Map of the Mount Vernon 7 1/2' Quadrangle, Skagit County, Washington.* OFR No. 81-105. US Geological Survey.

Ecology. 2016. *Guidance for Remediation of Petroleum Contaminated Sites.* Washington State Department of Ecology, Toxics Cleanup Program: Olympia, WA. June.

Ecology. 2022. *Site Assessment Guidance for Underground Storage Tank Systems.* Washington State Department of Ecology, Toxics Cleanup Program: Olympia, WA, published January 2021; revised October 2022.

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.

Gettler-Ryan. 2001. D. Harding and H. Kevork, Gettler-Ryan, Inc. *Event of April 5, 2001, Groundwater Monitoring & Sample Report, Former Chevron Service Station #9-0498, 800 South 2nd Street, Mount Vernon, Washington.* Letter to B. Hunter, Chevron Products Company. May 8.

MFA. 2022. *Site Assessment for Permanent Closure of Two Underground Storage Tanks, Mount Vernon Library Commons, 208 W Kincaid Street, Mount Vernon, Washington.* Prepared by Maul Foster & Alongi, Inc.: Bellingham, Washington. December 8.

Pacific. 1997. M. Miller and D. Thomas, Pacific Environmental Group, Inc. *Remedial Well Installation, Former Chevron Service Station 9-0498, 800 South Second Street, Mount Vernon, Washington.* Letter to D. Barnat, Chevron U.S.A. Products Company. June 18.

TABLES

MAUL FOSTER ALONGI

Table 1
Summary of Soil Analytical Results
Lydig Construction
Mount Vernon Library Commons

Excavation Area:	MTCA Method A, Unrestricted Land Use[1]	1,200-gallon UST										
Location:		T3-BASE01		T3-BASE02	T3-SW01	T3-SW02	T3-SW03	T3-SW04	T3-SW05	T3-SW06	T3-SW07	T3-SW08
Sample Name:		T3BASE01-SS-9.0	T3DUP-SS-9.0	T3BASE02-SS-9.0	T3SW01-SS-8.0	T3SW02-SS-8.0	T3SW03-SS-8.0	T3SW04-SS-8.0	T3SW05-SS-8.0	T3SW06-SS-8.0	T3SW07-SS-8.0	T3SW08-SS-8.0
Sample Date:		01/04/2023	01/04/2023	01/09/2023	01/05/2023	01/05/2023	01/06/2023	01/06/2023	01/06/2023	01/09/2023	01/09/2023	01/09/2023
Sample Depth (ft bgs):		9.0	9.0	9.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
HCID (detect/non-detect)												
Diesel	NV	DETECT	DETECT	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gasoline	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heavy Oil	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TPH (mg/kg)												
Gasoline-Range Hydrocarbons	100[a]	--	--	--	--	--	--	--	--	--	--	--
Diesel-Range Hydrocarbons	2,000	5,600	8,900	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Motor-Oil-Range Hydrocarbons	2,000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
Diesel+Oil[b]	2,000	5,700	9,000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
Total Metals (mg/kg)												
Arsenic	20	--	--	--	--	--	--	--	--	--	--	--
Barium	NV	--	--	--	--	--	--	--	--	--	--	--
Cadmium	2	--	--	--	--	--	--	--	--	--	--	--
Chromium	NV	--	--	--	--	--	--	--	--	--	--	--
Lead	250	--	--	--	--	--	--	--	--	--	--	--
Mercury	2	--	--	--	--	--	--	--	--	--	--	--
Selenium	NV	--	--	--	--	--	--	--	--	--	--	--
Silver	NV	--	--	--	--	--	--	--	--	--	--	--
VOCs (mg/kg)												
Benzene	0.03	0.03 U	0.03 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Ethylbenzene	6	0.05 U	0.05 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
m,p-Xylene	NV	0.12	0.10	--	--	--	--	--	--	--	--	--
o-Xylene	NV	0.05 U	0.05 U	--	--	--	--	--	--	--	--	--
Toluene	7	0.05 U	0.05 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Xylenes (total)[c]	9	0.15	0.13	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U
PAHs (mg/kg)												
1-Methylnaphthalene	NV	12	18	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
2-Methylnaphthalene	NV	18	27	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(a)anthracene	NV	0.01 U	0.05 U	0.01 U	0.01 U	0.01 U	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	0.05 U	0.01 U	0.01 U	0.01 U	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	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(k)fluoranthene	NV	0.01 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chrysene	NV	0.025	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Dibenzo(a,h)anthracene	NV	0.01 U	0.05 U	0.01 U	0.01 U	0.01 U	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	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Naphthalene	5	2.9 J	5.5 J	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
cPAH TEQ[d][2]	0.1	0.0078	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U

Table 1
Summary of Soil Analytical Results
Lydig Construction
Mount Vernon Library Commons

Excavation Area:	MTCA Method A, Unrestricted Land Use[1]	1,200-gallon UST				
Location:		Stockpile				
Sample Name:		PILE06-SS-1.0	PILE07-SS-2.0	PILE08-SS-1.5	PILE09-SS-3.0	PILE10-SS-0.5
Sample Date:		01/04/2023	01/04/2023	01/04/2023	01/05/2023	01/05/2023
Sample Depth (ft bgs):		1.0	2.0	1.5	3.0	0.5
HCID (detect/non-detect)						
Diesel	NV	--	--	--	--	--
Gasoline	NV	--	--	--	--	--
Heavy Oil	NV	--	--	--	--	--
TPH (mg/kg)						
Gasoline-Range Hydrocarbons	100[a]	5 U	210 J+	150 J+	59 J+	830 J+
Diesel-Range Hydrocarbons	2,000	1,500	8,600	16,000	190	22,000 J+
Motor-Oil-Range Hydrocarbons	2,000	250 U	250 U	250 U	250 U	480 J+
Diesel+Oil[b]	2,000	1,600	8,700	16,000	320	22,000 J+
Total Metals (mg/kg)						
Arsenic	20	1 U	1 U	3.15	1 U	2.48
Barium	NV	49.1	27.0	61.8	10.7	34.6
Cadmium	2	1 U	1 U	1 U	1 U	1 U
Chromium	NV	21.3	11.7	19.7	6.01	13.2
Lead	250	1.73	1.59	3.19	1 U	2.46
Mercury	2	1 U	1 U	1 U	1 U	1 U
Selenium	NV	1 U	1 U	1 U	1 U	1 U
Silver	NV	1 U	1 U	1 U	1 U	1 U
VOCs (mg/kg)						
Benzene	0.03	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Ethylbenzene	6	0.043	1.7 J+	0.74	0.02 U	1.9 J+
m,p-Xylene	NV	--	--	--	--	--
o-Xylene	NV	--	--	--	--	--
Toluene	7	0.02 U	0.11 J+	0.02 U	0.02 U	0.02 U
Xylenes (total)[c]	9	0.06 U	2.2 J+	1.2	0.06 U	2.7 J+
PAHs (mg/kg)						
1-Methylnaphthalene	NV	--	--	--	0.017	13
2-Methylnaphthalene	NV	--	--	--	0.01 U	18
Benzo(a)anthracene	NV	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U
Benzo(a)pyrene	0.1	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U
Benzo(b)fluoranthene	NV	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U
Benzo(k)fluoranthene	NV	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U
Chrysene	NV	0.01 U	0.029	0.029	0.01 U	0.060
Dibenzo(a,h)anthracene	NV	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U
Indeno(1,2,3-cd)pyrene	NV	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U
Naphthalene	5	--	--	--	0.01 U	2.7
cPAH TEQ[d][2]	0.1	0.01 U	0.0078	0.0078	0.01 U	0.038

Table 1
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 polycyclic aromatic hydrocarbon.

ft bgs = feet below ground surface.

HCID = hydrocarbon identification.

J = result is estimated.

J+ = result is estimated, but the result may be biased high.

mg/kg = milligrams per kilogram.

MTCA = Model Toxics Control Act.

ND = non-detect.

NV = no value.

PAH = polycyclic aromatic hydrocarbon.

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]Screening level is for gasoline-range hydrocarbons with no detectable benzene.

[b]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.

[c]Total xylenes are reported by the laboratory or are the sum of m,p-xylene and o-xylene, with non-detect results multiplied by one-half the reporting limit.

[d]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 shown in lieu of the TEQ calculation.

Reference

[1]Ecology. 2023. *Cleanup Levels and Risk Calculation (CLARC) table.* Washington State Department of Ecology, Toxics Cleanup Program. January.

[2]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.

Table 2
Summary of Groundwater Analytical Results
Lydig Construction
Mount Vernon Library Commons

Location:	MTCA Method A[1]	B01		B02	B03
Sample Name:		B01-GW-9.5	BDUP-GW-9.5	B02-GW-10.0	B03-GW-10.0
Sample Date:		01/10/2023	01/10/2023	01/10/2023	01/10/2023
Sample Depth (ft bgs):		9.5	9.5	10.0	10.0
TPH (ug/L)					
Gasoline-Range Hydrocarbons	1,000[a]	100 U	100 U	100 U	100 U
Diesel-Range Hydrocarbons	500	67	69	80	50 U
Motor-Oil-Range Hydrocarbons	500	250 U	250 U	250 U	250 U
Diesel+Oil[b]	500	190	190	210	250 U
VOCs (ug/L)					
Benzene	5	1 U	1 U	1 U	1 U
Ethylbenzene	700	1 U	1 U	1 U	1 U
Toluene	1,000	1 U	1 U	1 U	1 U
Xylenes (total)[c]	1,000	3 U	3 U	3 U	3 U
PAHs (ug/L)					
1-Methylnaphthalene	NV	0.4 U	0.4 U	0.4 U	0.4 U
2-Methylnaphthalene	NV	0.4 U	0.4 U	0.4 U	0.4 U
Benzo(a)anthracene	NV	0.04 U	0.04 U	0.04 U	0.04 U
Benzo(a)pyrene	0.1	0.04 U	0.04 U	0.04 U	0.04 U
Benzo(b)fluoranthene	NV	0.04 U	0.04 U	0.04 U	0.04 U
Benzo(k)fluoranthene	NV	0.04 U	0.04 U	0.04 U	0.04 U
Chrysene	NV	0.04 U	0.04 U	0.04 U	0.04 U
Dibenzo(a,h)anthracene	NV	0.04 U	0.04 U	0.04 U	0.04 U
Indeno(1,2,3-cd)pyrene	NV	0.04 U	0.04 U	0.04 U	0.04 U
Naphthalene	160	0.4 U	0.4 U	0.4 U	0.4 U
cPAH TEQ[d][2]	0.1	0.04 U	0.04 U	0.04 U	0.04 U

Table 2
Summary of Groundwater Analytical Results
Lydig Construction
Mount Vernon Library Commons

Notes

Detected results were compared to MTCA Method A screening criteria; non-detects (U) were not compared with screening criteria. There were no exceedances.

cPAH = carcinogenic polycyclic aromatic hydrocarbon.

ft bgs = feet below ground surface.

MTCA = Model Toxics Control Act.

NV = no value.

PAH = polycyclic aromatic hydrocarbon.

TEQ = toxicity equivalency.

TPH = total petroleum hydrocarbons.

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

ug/L = micrograms per liter.

VOC = volatile organic compound.

[a]Screening level is for gasoline-range hydrocarbons with no detectable benzene.

[b]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.

[c]Total xylenes are reported by the laboratory.

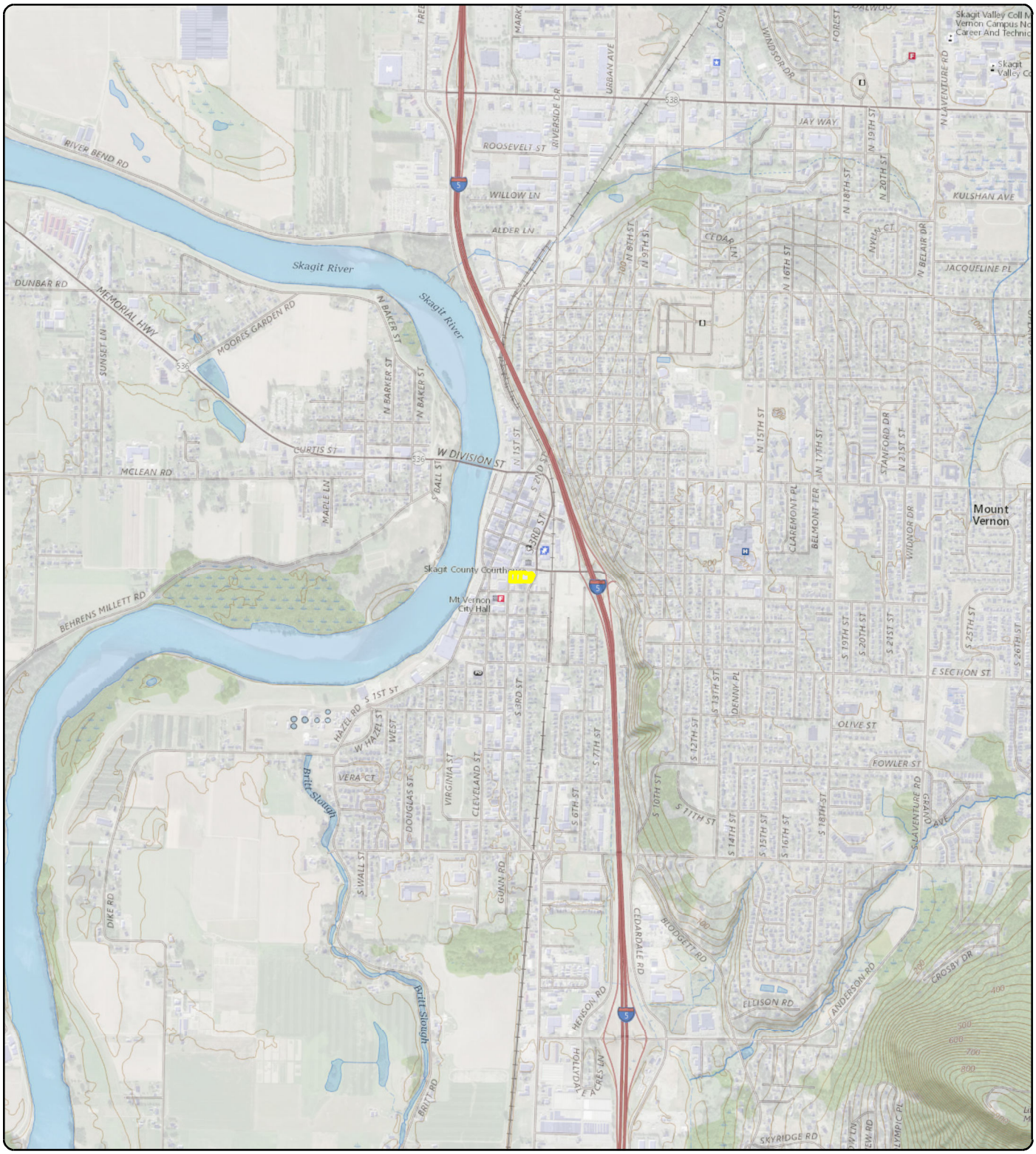
[d]When all cPAHs are non-detect, the highest reporting limit is used in lieu of the TEQ calculation.

Reference

[1]Ecology. 2023. *Cleanup Levels and Risk Calculation (CLARC) table*. Washington State Department of Ecology, Toxics Cleanup Program. January.

[2]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



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

0 1,000 2,000
Feet

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

Path: X:\0_MFA_Projects\M1472\02\002\Fig1_PropertyLocation.mxd
Print Date: 12/2/2022
Reviewed By:
Produced By: abixby
Project:

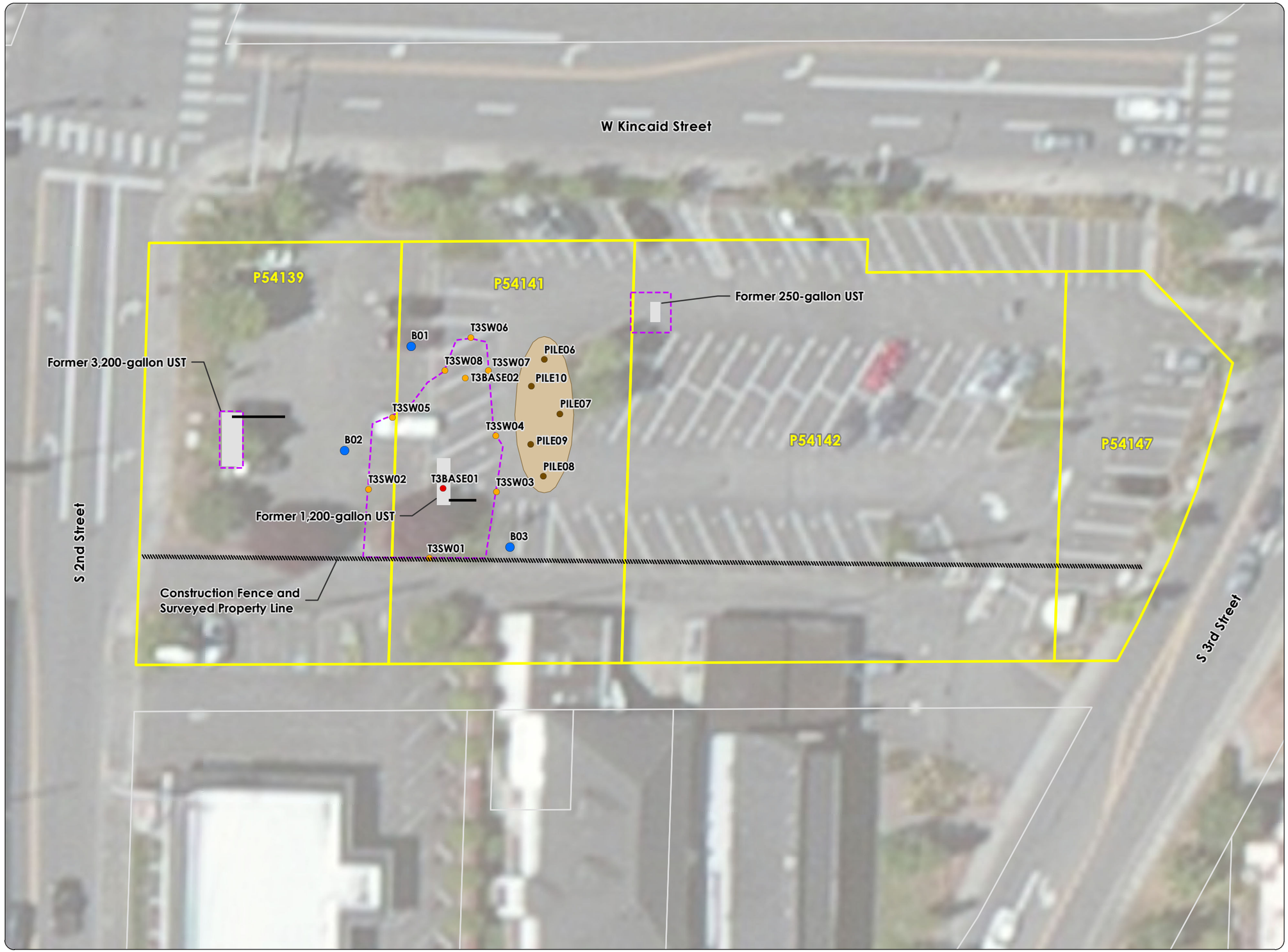


Figure 2
Property Features and Sample Locations

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

Legend

Type

- Reconnaissance Groundwater Boring
- Confirmation Sample
- Confirmation Sample, MTCA Method A CUL Exceedance
- Stockpile Sample
- Pipe
- UST
- Final Excavation Boundary
- Stockpiled Soil
- Property Parcel
- Tax Lot

Notes:
All features are approximate.
The 1,200-gallon UST was decommissioned by removal on January 4, 2023.
The 250-gallon and 3,200-gallon USTs were decommissioned by removal in November 2022.
Property parcels from the assessor are approximate. The surveyed southern property boundary is indicated by the hatched black line.
The UST location was recorded with a handheld global positioning system 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.

MAUL FOSTER ALONGI
p. 971 544 2139 | www.maulfoster.com

ATTACHMENT A

FIELD PHOTOGRAPHS

MAUL FOSTER ALONGI

PHOTOGRAPHS

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

Photo No. 1.

Description
1,200-gallon underground storage tank (UST). Photograph taken on January 4, 2023, looking south.

Photo No. 2.

Description
Marine Vacuum emptying and triple-rinsing the UST. Photograph taken on January 4, 2023, looking northwest.

MAUL FOSTER ALONGI

PHOTOGRAPHS

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

Photo No. 3.

Description
Earthwork contractor removing the inerted UST. Photograph taken on January 4, 2023, looking north.

Photo No. 4.

Description
No holes were observed in the 1,200-gallon UST; however, significant rust was observed on the steel walls. Photograph taken on January 4, 2023, looking southeast.

MAUL FOSTER ALONGI

PHOTOGRAPHS

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

Photo No. 5.

Description
1,200-gallon UST pit post-removal. Rinse water is visible in the base of the pit. Photograph taken on January 4, 2023, looking north.

Photo No. 6.

Description
Groundwater in the excavation at approximately 9.0 feet below ground surface (bgs). Bluish gray staining visible indicative of petroleum contaminated soil (PCS) in the excavation base below the former UST. Photograph taken on January 4, 2023, looking west.

MAUL FOSTER ALONGI

PHOTOGRAPHS

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

Photo No. 7.

Description
Overexcavation continued laterally until PCS impacts ceased. Final excavation extent was approximately 68 feet long by 36 feet wide, as shown on this photograph. Photograph taken on January 9, 2023, looking south.

Photo No. 8.

Description
Northern final extent of excavation. Photograph taken on January 10, 2023, looking west.

MAUL FOSTER ALONGI

PHOTOGRAPHS

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

Photo No. 9.

Description
Driller installing temporary well screen at boring location B01 for reconnaissance groundwater sample collection. Photograph taken on January 10, 2023, looking north.

Photo No. 10.

Description
Soil core (0 to 15.0 feet bgs) from boring location B01, northwest of the excavation.

MAUL FOSTER ALONGI

PHOTOGRAPHS

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

Photo No. 11.

Description
Soil core (0 to 15.0 feet bgs) from boring location B02, west of the excavation.

Photo No. 12.

Description
Soil core (0 to 15.0 feet bgs) from boring location B03, east-southeast of the excavation.

MAUL FOSTER ALONGI

PHOTOGRAPHS

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

Photo No. 13.

Description
Contractor installing geo-piles in the vicinity of the former excavation area, post-backfill. The contractor plans to place a deep footing in south portion of the former excavation area. Photograph taken on January 17, 2023, looking southwest.

Photo No. 14.

Description
Deep footing adjacent east of the former excavation area. Deep footings are installed to approximately 9.0 feet bgs. Photograph taken on January 17, 2023, looking southeast.

ATTACHMENT B

PERMANENT CLOSURE FORM AND UST CHECKLISTS

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: Jake Shalan
Address: 10621 Todd Road East	Certification Type: ICC UST Decommissioner
City: Edgewood State: WA Zip: 98372	Cert. No.: 9940226 Exp. Date: 4/28/2024
Provider Phone: 253.604.4878	Provider Email: dness@holtservicesinc.com
Provider Signature:	***Date:*** 1/10/2023

IV. TANK INFORMATION

TANK ID	TANK CAPACITY	LAST SUBSTANCE STORED	CLOSURE METHOD			CLOSURE DATE
			removal	closed-in-place	change-in-service	
7	1,200-g	diesel	☒	☐	☐	1/4/2023
			☐	☐	☐	
			☐	☐	☐	
			☐	☐	☐	
			☐	☐	☐	
			☐	☐	☐	

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
1/11/2023		William C Bullock

ECY 020-94 (Revised October 2018)

DEPARTMENT OF ECOLOGY
State of Washington

UST ID #: NA

County: Skagit

SITE CHECK/SITE ASSESSMENT CHECKLIST

FOR UNDERGROUND STORAGE TANKS

This checklist certifies that site check or site assessment activities were performed in accordance with Chapter 173-360A WAC. Instructions are found on the last page.

I. UST FACILITY	II. OWNER/OPERATOR INFORMATION
Facility Compliance Tag #: 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: Amanda Bixby	Company Name: Maul Foster & Alongi, Inc.
Phone: (360) 635-8371 Email: abixby@maulfoster.com	Address: 1329 North State Street, Suite 301
Certification #: 9082049 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	1,200	Diesel	1/4/2023

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.

Amanda Bixby		2/2/2023
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

12/19/2022 - I, Annette Ademasu, waive the "wait time". [signature]

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: (360) 336-6204
Phone:	Email: BillB@mountvernonwa.gov

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 Decommissioner
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, Inc.	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
	1,200-g	Diesel		12/22/2022	

DEVELOPMENT SERVICES
910 Cleveland Avenue
Mount Vernon, WA 98273
(360) 336-6214 -- Office
(360) 336-6243 -- Inspections

INSPECTION RESULTS RECORD

DATE PRINTED: 01/12/2023	**PERMIT TYPE:** Tanks (Install, Decommission, and/or Remove)	**PERMIT #:** FIRE22-0129
SITE ADDRESS: 208 WEST KINCAID STREET	**INSPECTOR:** Barry Kerth	**PARCEL #:** P54142

OWNER NAME AND CONTACT: CITY OF MOUNT VERNON 910 CLEVELAND AVE MOUNT VERNON, WA 98273 (360) 336-6204	**CONTRACTOR NAME AND CONTACT:** HOLT SERVICES INC 10621 Todd RD E EDGEWOOD, WA 98372 (253) 604-4878
	CONTRACTOR LICENSE #: 602 690 511

INSPECTION TYPE:	**INSPECTOR:**	**INSPECTION DATE:**
FINAL INSPECTION - FIRE	Barry Kerth	01/12/2023
TASK DESCRIPTION: Final Inspection - Fire		**STATUS:** PASSED Complete
COMMENTS:		

ATTACHMENT D

WASTE MANIFESTS

Soil Import and Export Quantities
Lydig Construction
Mount Vernon Library Commons

MAUL FOSTER ALONGI

Date	Ticket	Export: Class 3 Soil	Import: Pit Run/Gravel Borrow
	Cadman 1124522991	54,500 lbs	--
	Cadman 1124523004	51,540 lbs	--
1/11/2023	Cadman 1124523011	64,840 lbs	--
	Load Total	85.44 tons	
	Cadman 1124522995	50,380 lbs	--
1/11/2023	Cadman 1124523007	50,560 lbs	--
	Load Total	50.47 tons	
	Cadman 1124522990	51,620 lbs	--
	Cadman 1124523001	50,500 lbs	--
1/11/2023	Cadman 112452310	52,660 lbs	--
	Load Total	77.39 tons	
		--	99.8 tons
		--	100.2 tons
1/11/2023	Pellco 13657	--	99.0 tons
	Load Total		299.0 tons
Grand Totals			
	Total Export: Class 3 Soil	213.3 tons	
	Total Import: Pit Run/Gravel Borrow	299.0 tons	

Notes

-- = no value.

lbs = pounds.

PELLCO CONSTRUCTION, INC

13036 Beverly Park Rd, Mukilteo, WA 98275 425-265-7211 (Fax) 425-265-7215 www.pellcoconstruction.com

13920
Ticket Number

TEAMSTER TIME TICKET - If Rental Driver - Please attach your company ticket

Date: 1/11/23 | Drivers Name (Please Print): Greg Ramey

(Circle Day) S M T W TH F S | Trucking Company Name: Pellco

Start 6:15 AM PM | Truck Number: #DT-11 | Trailer Number: #DT-11

PLEASE PROVIDE MILEAGE READINGS | Start Mileage Reading: 74957 Miles | Stop Mileage Reeding: 75252 Miles

Finished: 3:00 AM PM | Total Drivers Time: 8.75 Hours | Total T&T: Hours

1/2 Hour Lunch Yes No | Total Equipment Time: Hours | Total Solo: Hours

TRIP LOG - Please attach ALL scale tickets

Load No.	Load Time	T&T Solo	Job Number	Description Name / Location / Product Type	Material/Equip Loaded From	Material/Equip Quantity	Material/Equip Delivered To	Unloaded Time	Time (Hours) ST	Time (Hours) OT
1	7:30	T+T	22-15	Class 3 Dirt	MVLC	27.25	Cadman	2.00	6.5	
2	"	"	"	"	"	25.77	"	"	"	
3	"	"	"	"	"	32.42	"	"	"	
4	"	"	"	Pit Run	Big Lake	34.65	MVLC	"	"	
5										
6										
7										
8										
9										
10										
11										
12										
								Total Hours:	6.5	

SUMMARY OF TOTALS

# of Loads	Job Number	Category Cost Code Number	Craft Type	Time (Hours) ST	Time (Hours) OT	T&T Solo	Location Name	Total Quantities	Measure (Check One) CY	TCY	TON
3	22-15	Export		6.5		T+T		85.44			X
1	22-15	Import		1		T+T		34.65			X
		2020		1.5	.75		Travel Time				
			Total Hours:	8.0	.75						

Project Manager Approval: X

All Tickets received from Driver? Yes No

Heavy Job Input? Yes No

SIGNATURE BLOCK

I certify that I have not been injured on the job today. If I have been injured, I certify that I have notified my immediate supervisor.

Drivers Signature: X

Injured on the job today? Yes (No)

Time signed out at Jobsite: : AM / PM

Job Site Signature: X

Time signed out at Truck Yard: : AM / PM

Truck Boss Signature: X

11/17

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 #: Pelco DT-11

Driver Signature: [signature]

Scale Attendant Signature: [signature] Date/Time In: 1/18/23

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
Sno River Delta Soils
17 E. Marine View Dr.
Everett, WA 98213
425-961-7100

TICKET NO. 1124522991		TICKET TIME 8:25:54AM	DATE 1/11/2023
Customer No. 7821431	Payment Type Account	Customer Name LIBIG CONST INC.	Order No. 10124345
Customer Job. No.	Customer P.O.	Map Ref. /	Disp. Ord. #
Truck Type Truck & Trailer	Truck No. PELL11TT	Vehicle or License Plate No.	Trailer or License Plate No. / Zone
Hauler/Carrier No.	Driver's Name	Delivered/Ordered 53.06 /	Load No. 2 / Running Total 53.06

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

Product	Description	Total	Unit Price	Amount
99005	CLASS 3 SOILS (TN)	27.25		

SCALE WEIGHT	GROSS & TARE		
97,460 LB	X ☐ Scale 1 ☐ Scale 2	A STANDBY SURCHARGE WILL BE ASSESSED FOR LOADS THAT EXCEED 10 MINUTES UNLOADING TIME.	Fuel Surcharge
Gross 42,960 LB/P.T.*			Sales Tax
Tare 54,500 LB	X Angelique		**Total**
Net	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.

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

WEIGHMASTER STATION

98846900
Sno River Delta Soils
17 E. Marine View Dr.
Everett, WA 98213
425-961-7100

TICKET NO.	1124523004	TICKET TIME	10:07:18AM	DATE	1/11/2023
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. PELL11TT	Vehicle or License Plate No.		Trailer or License Plate No.	Zone
Hauler/Carrier No.	Driver's Name	Delivered/Ordered 129.27 /		Load No. 5	Running Total 129.27

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

Product	Description	Total	Unit Price	Amount
99005	CLASS 3 SOILS (TN)	25.77		

SCALE WEIGHT	GROSS & TARE		Fuel Surcharge	
Gross 94,500 LB	X Scale 1 ☐ Scale 2	**A STANDBY SURCHARGE WILL BE ASSESSED FOR LOADS THAT EXCEED 10 MINUTES UNLOADING TIME.**	Sales Tax	
Tare 42,960 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 51,540 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
HEIDELBERGCEMENTGroup
(888) 322-6847 425-961-7100

WEIGHMASTER STATION
98846900
Sno River Delta Soils
17 E. Marine View Dr.
Everett, WA 98213
425-961-7100

TICKET NO.	1124523011	TICKET TIME	11:45:46AM	DATE	1/11/2023
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. PELL11TT	Vehicle or License Plate No.	Trailer or License Plate No.		Zone
Hauler/Carrier No.	Driver's Name	Delivered/Ordered 213.30 /	Load No. 8		Running Total 213.30

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

Product	Description	Total	Unit Price	Amount
99005	CLASS 3 SOILS (TN)	32.42		

SCALE WEIGHT	GROSS & TARE		
107,800 LB	X ☐ Scale 1 ☐ Scale 2	A STANDBY SURCHARGE WILL BE ASSESSED FOR LOADS THAT EXCEED 10 MINUTES UNLOADING TIME.	Fuel Surcharge
Gross 42,960 LB/P.T.*			Sales Tax
Tare 64,840 LB	X Angelique Deputy Weighmaster		**Total**
Net			

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

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	

PELLCO CONSTRUCTION, INC

13036 Beverly Park Rd, Mukilteo, WA 98275 425-265-7211 (Fax) 425-265-7215 www.pellcoconstruction.com

13628
Ticket Number

TEAMSTER TIME TICKET - If Rental Driver - Please attach your company ticket

Date: 1-11-21 | Drivers Name (Please Print): Wayne Yarbrough

(Circle Day) S M T (W) TH F S | Trucking Company Name: Pellco

Start 6:30 (AM) PM | Truck Number: # DT 8 | Trailer Number: # 0208

PLEASE PROVIDE MILEAGE READINGS | Start Mileage Reading: 150946 Miles | Stop Mileage Reeding: 151203 Miles

Finished: 3:30 AM PM | Total Drivers Time: 9 Hours | Total T&T: 9 Hours

1/2 Hour Lunch Yes No | Total Equipment Time: 9 Hours | Total Solo: Hours

TRIP LOG - Please attach ALL scale tickets

Load No.	Load Time	T&T Solo	Job Number	Description Name / Location / Product Type	Material/Equip Loaded From	Material/Equip Quantity	Material/Equip Delivered To	Unloaded Time	Time (Hours) ST	Time (Hours) OT
1	745	T&T	8215	Export contaminated Dirt Class 3	220	25.18	Excelsior Everett	845		
2	945				MVLC	25.20		10:30		
3	1130			Import	Big Lake		MVLC	12:15		
4	100			To work on TSA 30 min				150 / 210		
5										
6										
7										
8										
9										
10										
11										
12										
							Total Hours:		8	1

SUMMARY OF TOTALS

# of Loads	Job Number	Category Cost Code Number	Craft Type	Time (Hours) ST	Time (Hours) OT	T&T Solo	Location Name	Total Quantities	Measure (Check One) CY	TCY	TON
2	3215	Export					MVLC				
2		Import									
		2020					Travel Time				
				Total Hours:	8	1					

All Tickets received from Driver? Yes No

Project Manager Approval: X

Heavy Job Input? Yes No

SIGNATURE BLOCK

I certify that I have not been injured on the job today. If I have been injured, I certify that I have notified my immediate supervisor.

Drivers Signature: X | **Injured on the job today?** Yes (No)

Time signed out at Jobsite: : AM / PM | Job Site Signature: X

Time signed out at Truck Yard: 3:30 AM / (PM) | Truck Boss Signature: X

11/17

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 #: _____

Driver Signature: _____

Scale Attendant Signature: _____ Date/Time In: 1/11/23

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

98848900 **WEIGHMASTER STATION**
Sno River Delta Soils
17 E. Marine View Dr.
Everett, WA 98213
425-961-7100

TICKET NO.	1124522995	TICKET TIME	8:45:28AM	DATE	1/11/2023
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. PEL8TT	Vehicle or License Plate No. JEFF		Trailer or License Plate No.	Zone
Hauler/Carrier No.	Driver's Name	Delivered/Ordered 78.25 /		Load No. 3	Running Total 78.25

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

Product	Description	Total	Unit Price	Amount
99005	CLASS 3 SOILS (TN)	25.19		

SCALE WEIGHT	GROSS & TARE		Fuel Surcharge	
iross 92,940 LB	X ☐ Scale 1 ☐ Scale 2	A STANDBY SURCHARGE WILL BE ASSESSED FOR LOADS THAT EXCEED 10 MINUTES UNLOADING TIME.		
42,560 LB/P.T.*	X Angelique	**LIABILITY WAIVER**	Sales Tax	
are 50,380 LB	Deputy Weighmaster	Cadman, (Inc.) will not assume Liability for any property damage or any equipment damage for any delivery beyond the curb line.	**Total**	
et				

o one available to sign, customer waives receipt gnature. ☐	Received by Signature X	Print Name (Customer) X	Driver's Signature X	Standby Time	
rrive Job	Start Unloading	Finish Unloading	Standby Time	Customer's Initials X	**This Tickets Grand Total**

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

98848900 **WEIGHMASTER STATION**
Sno River Delta Soils
17 E. Marine View Dr.
Everett, WA 98213
425-961-7100

TICKET NO.	1124523007	TICKET TIME	10:27:54AM	DATE	1/11/2023
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. PEL8TT	Vehicle or License Plate No. JEFF		Trailer or License Plate No.	Zone
Hauler/Carrier No.	Driver's Name	Delivered/Ordered 154.55 /		Load No. 6	Running Total 154.55

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

Product	Description	Total	Unit Price	Amount
99005	CLASS 3 SOILS (TN)	25.28		

SCALE WEIGHT	GROSS & TARE		Fuel Surcharge	
93,120 LB	X ☐ Scale 1 ☐ Scale 2	A STANDBY SURCHARGE WILL BE ASSESSED FOR LOADS THAT EXCEED 10 MINUTES UNLOADING TIME.		
ross 42,560 LB/P.T.*	X Angelique	**LIABILITY WAIVER**	Sales Tax	
are 50,560 LB	Deputy Weighmaster	Cadman, (Inc.) will not assume Liability for any property damage or any equipment damage for any delivery beyond the curb line.	**Total**	
et				

o one available to sign, customer waives receipt gnature. ☐	Received by Signature X	Print Name (Customer) X	Driver's Signature X	Standby Time	
rrive Job	Start Unloading	Finish Unloading	Standby Time	Customer's Initials X	**This Tickets Grand Total**

PELLCO CONSTRUCTION, INC

13036 Beverly Park Rd, Mukilteo, WA 98275 425-265-7211 (Fax) 425-265-7215 www.pellcoconstruction.com

13564
Ticket Number

TEAMSTER TIME TICKET - If Rental Driver - Please attach your company ticket

Date: 1-11-23	Drivers Name (Please Print)	Bud Cook	
(Circle Day) S M T W TH F S	Trucking Company Name:	Pellco	
Start ~~6:00~~ 600 AM PM	Truck Number:	# 10	Trailer Number: # 10
PLEASE PROVIDE MILEAGE READINGS	Start Mileage Reading	81758 Miles	Stop Mileage Reeding 82075 Miles
Finished: 330 AM PM	Total Drivers Time	Hours	Total T&T Hours
1/2 Hour Lunch Yes ~~No~~	Total Equipment Time	Hours	Total Solo Hours

TRIP LOG - Please attach ALL scale tickets

Load No.	Load Time	T&T Solo	Job Number	Description Name / Location / Product Type	Material/Equip Loaded From	Material/Equip Quantity	Material/Equip Delivered To	Unloaded Time	Time (Hours) ST	Time (Hours) OT
1	745	T&T	22-15	contaminated.	22-15		Cadman	825		
2	900	"	"	"	"		"	951		
3	1020	"	"	"	"		"	1122		
4	1200	"	"	pit Run	359 Lake		22-15	1240		
5	1:15	"	"	"	"		"	215		
6										
7										
8										
9										
10										
11										
12										
							Total Hours:		8	1 1/2

SUMMARY OF TOTALS

# of Loads	Job Number	Category Cost Code Number	Craft Type	Time (Hours) ST	Time (Hours) OT	T&T Solo	Location Name	Total Quantities	Measure (Check One) CY	TCY	TON
		2020					Travel Time				
			Total Hours:	8	1 1/2						

All Tickets received from Driver? Yes No

Project Manager Approval: X

Heavy Job Input? Yes No

SIGNATURE BLOCK

I certify that I have not been injured on the job today. If I have been injured, I certify that I have notified my immediate supervisor.

Drivers Signature: X [signature]

Injured on the job today? Yes No

Time signed out at Jobsite: : AM / PM

Job Site Signature: X

Time signed out at Truck Yard: : AM / PM

Truck Boss Signature: X

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

WEIGHMASTER STATION
98848900
Sno River Delta Soils
17 E. Marine View Dr.
Everett, WA 98213
425-961-7100

TICKET NO.	1124522990	TICKET TIME	8:09:00AM	DATE	1/11/2023
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 25.81 /		Load No. 1	Running Total 25.81

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

Product	Description	Total	Unit Price	Amount
99005	CLASS 3 SOILS (TN)	25.81		

SCALE WEIGHT	GROSS & TARE		
iross 94,820 LB	X Scale 1 ☐ Scale 2	A STANDBY SURCHARGE WILL BE ASSESSED FOR LOADS THAT EXCEED 10 MINUTES UNLOADING TIME.	Fuel Surcharge
43,200 LB/P.T.*		**LIABILITY WAIVER**	Sales Tax
are 51,620 LB	X Angelique Deputy Weighmaster	Cadman, (Inc.) will not assume Liability for any property damage or any equipment damage for any delivery beyond the curb line.	**Total**
let			

o one available to sign, customer waives receipt gnature. ☐	Received by Signature X	Print Name (Customer) X	Driver's Signature X	Standby Time

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

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

WEIGHMASTER STATION
98848900
Sno River Delta Soils
17 E. Marine View Dr.
Everett, WA 98213
425-961-7100

TICKET NO.	1124523001	TICKET TIME	9:42:47AM	DATE	1/11/2023
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 103.50 /		Load No. 4	Running Total 103.50

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

Product	Description	Total	Unit Price	Amount
99005	CLASS 3 SOILS (TN)	25.25		

SCALE WEIGHT	GROSS & TARE		
93,700 LB	X Scale 1 ☐ Scale 2	A STANDBY SURCHARGE WILL BE ASSESSED FOR LOADS THAT EXCEED 10 MINUTES UNLOADING TIME.	Fuel Surcharge
ross 43,200 LB/P.T.*		**LIABILITY WAIVER**	Sales Tax
are 50,500 LB	X Angelique Deputy Weighmaster	Cadman, (Inc.) will not assume Liability for any property damage or any equipment damage for any delivery beyond the curb line.	**Total**
et			

o one available to sign, customer waives receipt gnature. ☐	Received by Signature X	Print Name (Customer) X	Driver's Signature X	Standby Time

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

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

WEIGHMASTER STATION

98846900
Sno River Delta Soils
17 E. Marine View Dr.
Everett, WA 98213
425-961-7100

TICKET NO.	1124523010	TICKET TIME	11:10:01AM	DATE	1/11/2023
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 180.88 /		Load No. 7	Running Total 180.88

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

Product	Description	Total	Unit Price	Amount
99005	CLASS 3 SOILS (TN)	26.33		

SCALE WEIGHT	GROSS & TARE		
iross 95,860 LB			Fuel Surcharge
are 43,200 LB/P.T.*	X ☐ Scale 1 ☐ Scale 2	**A STANDBY SURCHARGE WILL BE ASSESSED FOR LOADS THAT EXCEED 10 MINUTES UNLOADING TIME.**	Sales Tax
et 52,660 LB	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**

) one available to sign, customer waives receipt gnature. ☐	Received by Signature X	Print Name (Customer) X	Driver's Signature X	Standby Time

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

5x8 -10
2x8 -4

PELLCO CONSTRUCTION, INC

13036 Beverly Park Rd, Mukilteo, WA 98275 425-265-7211 (Fax) 425-265-7215 www.pellcoconstruction.com

13657
Ticket Number

TEAMSTER TIME TICKET - If Rental Driver - Please attach your company ticket

Date: 1-11-23
Drivers Name (Please Print) Adam Lund
(Circle Day) S M T W TH F S
Trucking Company Name: Pellco
Start 6:00 AM PM
Truck Number: # 7
Trailer Number: #
PLEASE PROVIDE MILEAGE READINGS Start Mileage Reading 231,453 Miles
Stop Mileage Reeding 231,694 Miles
Finished: 3:30 AM PM
Total Drivers Time 9.5 Hours
Total T&T Hours
1/2 Hour Lunch Yes No
Total Equipment Time Hours
Total Solo Hours

TRIP LOG - Please attach ALL scale tickets

Load No.	Load Time	T&T Solo	Job Number	Description Name / Location / Product Type	Material/Equip Loaded From	Material/Equip Quantity	Material/Equip Delivered To	Unloaded Time	Time (Hours) ST	Time (Hours) OT
1	7:15	SD	2215	Gravel Borrow	Big lake	99,360	2215	8:05		
2	8:30	SD	2215	Gravel Borrow	Biglake	100/20	2215	9:15		
3	10:00	SD	2215	Gravel Borrow	Big lake	99,440	2215	11:00		
4	12:00	SD	2215	Steel Sheets	Yard		2215	2:45		
5										
6										
7										
8										
9										
10										
11										
12										
								Total Hours:		

SUMMARY OF TOTALS

# of Loads	Job Number	Category Cost Code Number	Craft Type	Time (Hours) ST	Time (Hours) OT	T&T Solo	Location Name	Total Quantities	Measure (Check One) CY	Measure (Check One) TCY	Measure (Check One) TON
		2020					Travel Time				
			Total Hours:	8	1.5						

Project Manager Approval: X

All Tickets received from Driver? Yes No

Heavy Job Input? Yes No

SIGNATURE BLOCK

I certify that I have not been injured on the job today. If I have been injured, I certify that I have notified my immediate supervisor.

Drivers Signature: X [signature]

Injured on the job today? Yes (No)

Time signed out at Jobsite: 2:45 AM / PM

Job Site Signature: X

Time signed out at Truck Yard: 3:30 AM / PM

Truck Boss Signature: X

STRAIGHT BILL OF LADING

ORIGINAL — NOT NEGOTIABLE

Shipper No. 020936

Carrier No. _____

Page _____ of _____

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

Date 1-4-23

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 CONTRACTOR

Street 208 W KINCAID ST.

City MT. VERNON State WA Zip Code 98273

24 hr. Emergency Contact Tel. No. 800-540-7491

Route

Vehicle Number 2128

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)
1TT		OILY WATER - NON REG by DOT	50	GAL		

PLACARDS TENDERED: YES ☐ NO ☒

Note — (1) Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property, as follows: "The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding _____ per _____."
(2) Where the applicable tariff provisions specify a limitation of the carrier's liability absent a release or a value declaration by the shipper and the shipper does not release the carrier's liability or declare a value, the carrier's liability shall be limited to the extent provided by such provisions. See NMFC Item 172.
(3) Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation. See Section 2(e) of item 360, Bills of Lading, Freight Bills and Statements of Charges and Section 1(a) of the Contract Terms and Conditions for a list of such articles.

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

_____ Signature

REMIT C.O.D. TO: ADDRESS

COD Amt: $

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

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)

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 CLEAR CREEK CONTRACTOR

PER _____

CARRIER MARINE VACUUM SERVICE, INC.

PER _____

DATE 1-4-2023

1

Permanent post-office address of shipper.

ATTACHMENT E

GEOLOGIC BORING LOGS

MAUL FOSTER ALONGI

Geologic Borehole Log

Project Number	Boring Number	Sheet
M1472.02.002	**B01**	**1 of 1**

Project Name	**Mount Vernon Library Commons**		
Project Location	**208 W Kincaid Street, Mount Vernon, WA**	Surface Elevation (feet)	
Start/End Date	**1/10/2023 to 1/10/2023**	Northing	
Driller/Equipment	**AEC/Direct-Push GeoProbe**	Easting	
Geologist/Engineer	**A. Bixby**	Total Depth of Borehole	**15.0 feet**
Sample Method	**Core Barrel**	Outer Hole Diam	**2.25 inch**

Depth (feet, bgs)	Water Levels	Percent Recovery	Screen Int.	Sample Data: Sample ID	Sample Data: PID (ppm)	Lithologic Column	Soil Description
1					0.3		0.0 to 1.4 feet: GRAVELLY SILTY SAND (SM); brown; 20% fines, low plasticity; 50% sand, fine to coarse; 30% gravel, fine to coarse, subangular to subrounded; loose; no odor; no staining; moist. @ 0.2 to 0.3 feet: Gray concrete.
2							1.4 to 3.0 feet: SILTY SAND (SM); brown; 35% fines, low plasticity; 65% sand, fine; medium dense; no odor; no staining; moist.
3		60			0.4		
4							3.0 to 5.0 feet: NO RECOVERY.
5							
6	▼				0.7		5.0 to 8.7 feet: SILTY SAND (SM); brown; 35% fines, low plasticity; 65% sand, fine; medium dense; no odor; no staining; moist.
7							@ 7.0 to 7.1 feet: Fines increase to 45%; iron mottling; becomes very dense.
8		100			0.7		
9	▽				0.6		@ 8.5 feet: Fines decrease to 30%; becomes medium dense; becomes wet. 8.7 to 15.0 feet: SAND WITH SILT (SP-SM); grayish brown; 10% fines, low plasticity; 90% sand, fine to medium; loose; no odor; no staining; wet.
10				**B01-GW-9.5** **BDUP-GW-9.5**			
11					0.7		
12					0.8		@ 12.0 feet: Coarse sand lamina.
13		100			0.6		@ 13.1 to 13.2 feet: Coarse sand lamina.
14							@ 13.7 to 13.9 feet: Wood.
15					0.7		@ 14.3 to 14.5 feet: Coarse sand lamina. @ 14.6 to 14.8 feet: Wood.

Total Depth = 15.0 feet bgs

NOTES:

1. bgs = below ground surface. 2. Depths are relative to feet bgs. 3. PID = photoionization detector. 4. ppm = parts per million.

Borehole Completion Details
0 to 15.0 feet bgs: 2.25-inch-diameter borehole.

Reconnaissance Well Completion Details
3.0 to 13.0 feet bgs: Temporary polyvinyl chloride slotted screen.

Borehole Abandonment Details
0 to 13.0 feet bgs: Bentonite chips hydrated with potable water.
13.0 to 15.0 feet bgs: Slough.

▽ **Water level at approximately 8.5 feet bgs at time of drilling.** ▼ **Water level at 6.25 feet bgs at time of sampling on 1/10/2023.**

MFA BOREHOLE W/RECON SCREEN W:\GINT\GINTW\PROJECTS\M1472.02\B01 - B03.GPJ 1/16/23

Geologic Borehole Log

MAUL FOSTER ALONGI

Project Number	Boring Number	Sheet
M1472.02.002	**B02**	**1 of 1**

Project Name	**Mount Vernon Library Commons**		
Project Location	**208 W Kincaid Street, Mount Vernon, WA**	Surface Elevation (feet)	
Start/End Date	**1/10/2023 to 1/10/2023**	Northing	
Driller/Equipment	**AEC/Direct-Push GeoProbe**	Easting	
Geologist/Engineer	**A. Bixby**	Total Depth of Borehole	**15.0 feet**
Sample Method	**Core Barrel**	Outer Hole Diam	**2.25 inch**

Depth (feet, bgs)	Water Levels	Percent Recovery	Screen Int.	Sample Data: Sample ID	Sample Data: PID (ppm)	Lithologic Column	Soil Description
1					0.5		0.0 to 1.5 feet: GRAVELLY SILTY SAND (SM); brown; 20% fines, low plasticity; 40% sand, fine to coarse; 40% gravel, subangular to subrounded; loose; no odor; no staining; moist. @ 0.2 to 0.3 feet: Gray concrete.
2					0.5		1.5 to 2.0 feet: SAND WITH SILT (SP-SM); brown; 15% fines, low plasticity; 85% sand, fine; medium dense; no odor; no staining; iron mottling; moist.
3		60					2.0 to 3.0 feet: SANDY SILT (MLS); brown; 70% fines, medium plasticity; 30% sand, fine; soft; no odor; no staining; moist. 3.0 to 5.0 feet: NO RECOVERY.
4							
5							
6					0.6		5.0 to 9.5 feet: SILTY SAND (SM); brown; 30% fines, low plasticity; 70% sand, fine; medium dense; no odor; no staining; moist.
7							@ 6.9 to 9.2 feet: Iron mottling.
8	▼ ▽	90					@ 8.0 feet: Becomes wet.
9					0.7		@ 9.3 feet: Color changes to grayish brown; no odor.
10				B02-GW-10.0			9.5 to 10.0 feet: NO RECOVERY.
11					0.8		10.0 to 12.5 feet: SILTY SAND (SM); grayish brown; 30% fines, low plasticity; 70% sand, fine; medium dense; no odor; no staining; moist.
12							
13		100			0.7		12.5 to 15.0 feet: SAND WITH SILT (SP-SM); dark gray; 10% fines, low plasticity; 90% sand, fine to medium; loose; no odor; no staining; wet.
14							
15					0.8		

Total Depth = 15.0 feet bgs

NOTES:

1. bgs = below ground surface. 2. Depths are relative to feet bgs. 3. PID = photoionization detector. 4. ppm = parts per million.

Borehole Completion Details
0 to 15.0 feet bgs: 2.25-inch-diameter borehole.

Reconnaissance Well Completion Details
4.0 to 14.0 feet bgs: Temporary polyvinyl chloride slotted screen.

Borehole Abandonment Details
0 to 14.0 feet bgs: Bentonite chips hydrated with potable water.
14.0 to 15.0 feet bgs: Slough.

▽ **Water level at approximately 8.0 feet bgs at time of drilling.** ▼ **Water level at 7.6 feet bgs at time of sampling on 1/10/2023.**

MFA BOREHOLE W/RECON SCREEN W:\GINT\GINTW\PROJECTS\M1472.02\B01 - B03.GPJ 1/16/23

Geologic Borehole Log

MAUL FOSTER ALONGI

Project Number	Boring Number	Sheet
M1472.02.002	B03	1 of 1

Project Name	Mount Vernon Library Commons		
Project Location	208 W Kincaid Street, Mount Vernon, WA	Surface Elevation (feet)	
Start/End Date	1/10/2023 to 1/10/2023	Northing	
Driller/Equipment	AEC/Direct-Push GeoProbe	Easting	
Geologist/Engineer	A. Bixby	Total Depth of Borehole	15.0 feet
Sample Method	Core Barrel	Outer Hole Diam	2.25 inch

Depth (feet, bgs)	Water Levels	Percent Recovery	Screen Int.	Sample Data: Sample ID	Sample Data: PID (ppm)	Lithologic Column	Soil Description
1							0.0 to 0.9 feet: GRAVELLY SILTY SAND (SM); brown; 20% fines, low plasticity; 50% sand, fine to coarse; 30% gravel, fine to coarse, subangular to subrounded; loose; no odor; no staining; dry to moist.
					0.4		@ 0.2 to 0.3 feet: Gray concrete.
2							0.9 to 2.8 feet: SILTY SAND (SM); brown; 20% fines, low plasticity; 80% sand, fine; medium dense; no odor; no staining; iron mottling; moist.
					1.0		
3		68					
					0.8		2.8 to 3.4 feet: SILT (ML); grayish brown; 90% fines, medium plasticity; 10% sand, fine; soft; no odor; no staining; moist.
4							3.4 to 5.0 feet: NO RECOVERY.
5							
6							5.0 to 6.9 feet: SILT (ML); grayish brown; 90% fines, medium plasticity; 10% sand, fine; soft; no odor; no staining; iron mottling; moist.
					0.9		
7							6.9 to 7.8 feet: SILTY SAND (SM); grayish brown; 20% fines, low plasticity; 80% sand, fine; medium dense; no odor; no staining; iron mottling; moist.
8	▽	80			0.9		7.8 to 9.0 feet: SAND (SW); dark gray; 100% sand, fine to coarse; loose; no odor; no staining; wet.
							@ 8.4 feet: Fine sand lamina.
9					0.9		9.0 to 10.0 feet: NO RECOVERY.
10				B03-GW-10.0			10.0 to 15.0 feet: SAND (SW); dark gray; 100% sand, fine to coarse; loose; no odor; no staining; wet.
11					0.9		
12							
13		100			1.0		
14							
15					0.9		

Total Depth = 15.0 feet bgs

NOTES:

1. bgs = below ground surface. 2. Depths are relative to feet bgs. 3. PID = photoionization detector. 4. ppm = parts per million.

Borehole Completion Details
0 to 15.0 feet bgs: 2.25-inch-diameter borehole.

Reconnaissance Well Completion Details
3.0 to 13.0 feet bgs: Temporary polyvinyl chloride slotted screen.

Borehole Abandonment Details
0 to 13.0 feet bgs: Bentonite chips hydrated with potable water.
13.0 to 15.0 feet bgs: Slough.

▽ **Water level at approximately 7.8 feet bgs at time of drilling.** ▼ **Water level at 8.05 feet bgs at time of sampling on 1/10/2023.**

MFA BOREHOLE W/RECON SCREEN W:\GINT\GINTW\PROJECTS\M1472.02\B01 - B03.GPJ 1/16/23

ATTACHMENT F

WATER FIELD SAMPLING DATA SHEETS

Maul Foster & Alongi, Inc.

400 E. Mill Plain Blvd, Suite 400, Vancouver, WA 98660 (360) 694-2691 Fax. (360) 906-1958

Water Field Sampling Data Sheet

Client Name	Lydig Construction	**Sample Location**	B01		
Project #	M1472.02.002	**Sampler**	A. Bixby		
Project Name	Mount Vernon Library Commons	**Sampling Date**	1/10/2023		
Sampling Event	1,200 Gallon UST	**Sample Name**	B01-GW-9.5		
Sub Area		**Sample Depth**	9.5		
FSDS QA:	A. Bixby 1/15/2023	**Easting**		**Northing**	**TOC**

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	**Time**	**DT-Bottom**	**DT-Product**	**DT-Water**	**DTP-DTW**	**DTB-DTW**	**Pore Volume**
1/10/2023	10:50	11.65		6.25		5.4	0.12

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	Time	Purge Vol (gal)	Flowrate l/min	pH	Temp (C)	E Cond (uS/cm)	DO (mg/L)	ORP	Turbidity
(2) Peristaltic Pump	10:18:00 AM	1	0.2						924
	12:00:00 PM	2.2	0.2	6.83	13.4	570		31	135
	12:03:00 PM	2.3	0.2	6.35	13.4	570		38	78.6
	12:06:00 PM	2.4	0.2	6.35	13.3	570		40	68.3
Final Field Parameters	12:09:00 PM	2.5	0.2	6.29	13.3	580		40	58.9

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations: Initially turbid and brown, then clear; colorless; no odor; no sheen.

Sample Information

Sampling Method	Sample Type	Sampling Time	Container Code/Preservative	#	Filtered
(2) Peristaltic Pump	Groundwater	12:10:00 PM	VOA-Glass	3	No
			Amber Glass	2	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly		
			Total Bottles	5	

General Sampling Comments Began purging at 10:52.

Signature _____

Maul Foster & Alongi, Inc.

400 E. Mill Plain Blvd, Suite 400, Vancouver, WA 98660 (360) 694-2691 Fax. (360) 906-1958

Water Field Sampling Data Sheet

Client Name	Lydig Construction	**Sample Location**	B02		
Project #	M1472.02.002	**Sampler**	A. Bixby		
Project Name	Mount Vernon Library Commons	**Sampling Date**	1/10/2023		
Sampling Event	1,200 Gallon UST	**Sample Name**	B02-GW-10.0		
Sub Area		**Sample Depth**	10		
FSDS QA:	A. Bixby 1/15/2023	**Easting**		**Northing**	**TOC**

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	**Time**	**DT-Bottom**	**DT-Product**	**DT-Water**	**DTP-DTW**	**DTB-DTW**	**Pore Volume**
1/10/2023	12:50	13.3		7.6		5.7	0.13

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	Time	Purge Vol (gal)	Flowrate l/min	pH	Temp (C)	E Cond (uS/cm)	DO (mg/L)	ORP	Turbidity
(2) Peristaltic Pump	2:10:00 PM	3.2	0.2	6.45	13.4	630		31	58.5
	2:13:00 PM	3.3	0.2	6.45	13.6	630		31	70.6
	2:16:00 PM	3.4	0.2	6.45	13.7	640		32	70.3
Final Field Parameters	2:19:00 PM	3.5	0.2	6.45	13.7	640		32	55.2

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations: Initially turbid and brown, then clear; colorless; no odor; no sheen.

Sample Information

Sampling Method	Sample Type	Sampling Time	Container Code/Preservative	#	Filtered
(2) Peristaltic Pump	Groundwater	2:40:00 PM	VOA-Glass	3	No
			Amber Glass	2	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly		
			Total Bottles	5	

General Sampling Comments Began purging at 12:55.

Signature _____

Maul Foster & Alongi, Inc.

400 E. Mill Plain Blvd, Suite 400, Vancouver, WA 98660 (360) 694-2691 Fax. (360) 906-1958

Water Field Sampling Data Sheet

Client Name	Lydig Construction	**Sample Location**	B03
Project #	M1472.02.002	**Sampler**	A. Bixby
Project Name	Mount Vernon Library Commons	**Sampling Date**	1/10/2023
Sampling Event	1,200 Gallon UST	**Sample Name**	B02-GW-10.0
Sub Area		**Sample Depth**	10
FSDS QA:	A. Bixby 1/15/2023	**Easting**	**Northing**	**TOC**

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	**Time**	**DT-Bottom**	**DT-Product**	**DT-Water**	**DTP-DTW**	**DTB-DTW**	**Pore Volume**
1/10/2023	12:35	12.1		8.05		4.05	0.09

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	Time	Purge Vol (gal)	Flowrate l/min	pH	Temp (C)	E Cond (uS/cm)	DO (mg/L)	ORP	Turbidity
(2) Peristaltic Pump	1:40:00 PM	2.5	0.2	6.19	12.6	440		46	49.2
	1:43:00 PM	2.6	0.2	6.17	12.6	440		47	36.6
	1:46:00 PM	2.7	0.2	6.16	12.6	430		47	30
Final Field Parameters	1:49:00 PM	2.8	0.2	6.15	12.6	430		48	29.5

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations: Initially turbid and brown, then clear; colorless; no odor; no sheen.

Sample Information

Sampling Method	Sample Type	Sampling Time	Container Code/Preservative	#	Filtered
(2) Peristaltic Pump	Groundwater	2:00:00 PM	VOA-Glass	3	No
			Amber Glass	2	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly		
			Total Bottles	5	

General Sampling Comments Began purging at 12:40.

Signature _____

ATTACHMENT G

LABORATORY REPORTS AND CHROMATOGRAMS

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

February 1, 2023

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

Dear Ms Bixby:

Included are the amended results from the testing of material submitted on January 5, 2023 from the Mount Vernon Library Commons M1472.02.002, F&BI 301034 project. The case narrative was expanded.

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
MFA0112R.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

January 12, 2023

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

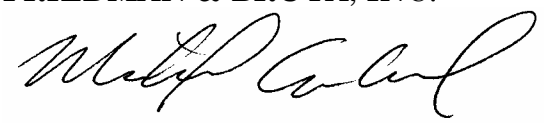
Dear Ms Bixby:

Included are the results from the testing of material submitted on January 5, 2023 from the Mount Vernon Library Commons M1472.02.002, F&BI 301034 project. There are 31 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
MFA0112R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on January 5, 2023 by Friedman & Bruya, Inc. from the Maul Foster Alongi Mount Vernon Library Commons M1472.02.002, F&BI 301034 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Maul Foster Alongi
301034 -01	T3BASE01-SS-9.0
301034 -02	T3DUP-SS-9.0
301034 -03	PILE06-SS-1.0
301034 -04	PILE07-SS-2.0
301034 -05	PILE08-SS-1.5
301034 -06	TRIP BLANK 01

The NWTPH-Dx chromatograms were reviewed to determine the possible presence of gasoline. A chromatographic pattern indicative of a low boiling product, such as gasoline, was not observed.

Selenium in the 6020B matrix spike and matrix spike duplicate did not meet the acceptance criteria. The laboratory control sample passed the acceptance criteria, therefore the results were due to matrix effect.

All other quality control requirements were acceptable.

Date of Report: 01/12/23
Date Received: 01/05/23
Project: Mount Vernon Library Commons M1472.02.002, F&BI 301034
Date Extracted: 01/05/23
Date Analyzed: 01/05/23

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

Sample ID Laboratory ID	% Moisture
T3BASE01-SS-9.0 301034-01	16
T3DUP-SS-9.0 301034-02	17
PILE06-SS-1.0 301034-03	27
PILE07-SS-2.0 301034-04	21
PILE08-SS-1.5 301034-05	22

Date of Report: 01/12/23
Date Received: 01/05/23
Project: Mount Vernon Library Commons M1472.02.002, F&BI 301034
Date Extracted: 01/05/23
Date Analyzed: 01/05/23

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)
T3BASE01-SS-9.0 301034-01	ND	D	ND	ip
T3DUP-SS-9.0 301034-02	ND	D	ND	ip
Method Blank 03-113 MB	ND	ND	ND	102

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

Date of Report: 01/12/23
Date Received: 01/05/23
Project: Mount Vernon Library Commons M1472.02.002, F&BI 301034
Date Extracted: 01/05/23
Date Analyzed: 01/06/23

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING 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 50-132)
PILE06-SS-1.0 301034-03	<0.02	<0.02	0.043	<0.06	<5	86
PILE07-SS-2.0 301034-04	<0.02	0.11	1.7	2.2	210	ip
PILE08-SS-1.5 301034-05	<0.02	<0.02	0.74	1.2	150	110
Method Blank 03-007 MB	<0.02	<0.02	<0.02	<0.06	<5	92

Date of Report: 01/12/23
Date Received: 01/05/23
Project: Mount Vernon Library Commons M1472.02.002, F&BI 301034
Date Extracted: 01/09/23
Date Analyzed: 01/10/23

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Surrogate (% Recovery) Limit (50-150)
TRIP BLANK 01 301034-06	<1	<1	<1	<3	126
Method Blank 03-0014 MB	<1	<1	<1	<3	119

Date of Report: 01/12/23
Date Received: 01/05/23
Project: Mount Vernon Library Commons M1472.02.002, F&BI 301034
Date Extracted: 01/05/23
Date Analyzed: 01/05/23

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)
T3BASE01-SS-9.0 301034-01	5,600	<250	116
T3DUP-SS-9.0 301034-02	8,900	<250	127
PILE06-SS-1.0 301034-03	1,500	<250	109
PILE07-SS-2.0 301034-04	8,600	<250	124
PILE08-SS-1.5 301034-05	16,000	<250	141
Method Blank 03-108 MB	<50	<250	107

Analysis For Total Metals By EPA Method 6020B

Client ID:	PILE06-SS-1.0	Client:	Maul Foster Alongi
Date Received:	01/05/23	Project:	M1472.02.002, F&BI 301034
Date Extracted:	01/05/23	Lab ID:	301034-03
Date Analyzed:	01/06/23	Data File:	301034-03.052
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Barium	49.1
Cadmium	<1
Chromium	21.3
Lead	1.73
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	PILE07-SS-2.0	Client:	Maul Foster Alongi
Date Received:	01/05/23	Project:	M1472.02.002, F&BI 301034
Date Extracted:	01/05/23	Lab ID:	301034-04
Date Analyzed:	01/05/23	Data File:	301034-04.140
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Barium	27.0
Cadmium	<1
Chromium	11.7
Lead	1.59
Mercury	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	PILE07-SS-2.0	Client:	Maul Foster Alongi
Date Received:	01/05/23	Project:	M1472.02.002, F&BI 301034
Date Extracted:	01/05/23	Lab ID:	301034-04
Date Analyzed:	01/06/23	Data File:	301034-04.057
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	PILE08-SS-1.5	Client:	Maul Foster Alongi
Date Received:	01/05/23	Project:	M1472.02.002, F&BI 301034
Date Extracted:	01/05/23	Lab ID:	301034-05
Date Analyzed:	01/05/23	Data File:	301034-05.141
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Barium	61.8
Cadmium	<1
Chromium	19.7
Lead	3.19
Mercury	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	PILE08-SS-1.5	Client:	Maul Foster Alongi
Date Received:	01/05/23	Project:	M1472.02.002, F&BI 301034
Date Extracted:	01/05/23	Lab ID:	301034-05
Date Analyzed:	01/06/23	Data File:	301034-05.058
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.15
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Maul Foster Alongi
Date Received:	NA	Project:	M1472.02.002, F&BI 301034
Date Extracted:	01/05/23	Lab ID:	I3-04 mb2
Date Analyzed:	01/05/23	Data File:	I3-04 mb2.116
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Barium	<1
Cadmium	<1
Chromium	<2
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	T3BASE01-SS-9.0	Client:	Maul Foster Alongi
Date Received:	01/05/23	Project:	M1472.02.002, F&BI 301034
Date Extracted:	01/06/23	Lab ID:	301034-01
Date Analyzed:	01/06/23	Data File:	010610.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	lm

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	90	109
Toluene-d8	112	89	112
4-Bromofluorobenzene	108	84	115

Compounds:	Concentration mg/kg (ppm)
Benzene	<0.03
Toluene	<0.05
Ethylbenzene	<0.05
m,p-Xylene	0.12
o-Xylene	<0.05

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	T3DUP-SS-9.0	Client:	Maul Foster Alongi
Date Received:	01/05/23	Project:	M1472.02.002, F&BI 301034
Date Extracted:	01/06/23	Lab ID:	301034-02
Date Analyzed:	01/06/23	Data File:	010611.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	lm

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	90	109
Toluene-d8	111	89	112
4-Bromofluorobenzene	101	84	115

Compounds:	Concentration mg/kg (ppm)
Benzene	<0.03
Toluene	<0.05
Ethylbenzene	<0.05
m,p-Xylene	0.10
o-Xylene	<0.05

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	Method Blank	Client:	Maul Foster Alongi
Date Received:	Not Applicable	Project:	M1472.02.002, F&BI 301034
Date Extracted:	01/06/23	Lab ID:	03-054 mb
Date Analyzed:	01/06/23	Data File:	010605.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	lm

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	90	109
Toluene-d8	110	89	112
4-Bromofluorobenzene	96	84	115

Compounds:	Concentration mg/kg (ppm)
Benzene	<0.03
Toluene	<0.05
Ethylbenzene	<0.05
m,p-Xylene	<0.1
o-Xylene	<0.05

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	T3BASE01-SS-9.0	Client:	Maul Foster Alongi
Date Received:	01/05/23	Project:	M1472.02.002, F&BI 301034
Date Extracted:	01/06/23	Lab ID:	301034-01 1/5
Date Analyzed:	01/06/23	Data File:	010607.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	99	16	137
Terphenyl-d14	95	31	167

Compounds:	Concentration mg/kg (ppm)
Naphthalene	2.9
Benz(a)anthracene	<0.01
Chrysene	0.025
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:	T3BASE01-SS-9.0	Client:	Maul Foster Alongi
Date Received:	01/05/23	Project:	M1472.02.002, F&BI 301034
Date Extracted:	01/06/23	Lab ID:	301034-01 1/50
Date Analyzed:	01/06/23	Data File:	010618.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	80 d	10	198
Terphenyl-d14	97 d	50	124

Compounds:	Concentration mg/kg (ppm)
2-Methylnaphthalene	18
1-Methylnaphthalene	12

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	T3DUP-SS-9.0	Client:	Maul Foster Alongi
Date Received:	01/05/23	Project:	M1472.02.002, F&BI 301034
Date Extracted:	01/06/23	Lab ID:	301034-02 1/25
Date Analyzed:	01/06/23	Data File:	010608.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	104 d	16	137
Terphenyl-d14	91 d	31	167

Compounds:	Concentration mg/kg (ppm)
Naphthalene	5.5
2-Methylnaphthalene	27
1-Methylnaphthalene	18
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:	PILE06-SS-1.0	Client:	Maul Foster Alongi
Date Received:	01/05/23	Project:	M1472.02.002, F&BI 301034
Date Extracted:	01/05/23	Lab ID:	301034-03 1/5
Date Analyzed:	01/06/23	Data File:	010610.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Terphenyl-d14	101	50	124

Compounds:	Concentration mg/kg (ppm)
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:	PILE07-SS-2.0	Client:	Maul Foster Alongi
Date Received:	01/05/23	Project:	M1472.02.002, F&BI 301034
Date Extracted:	01/05/23	Lab ID:	301034-04 1/5
Date Analyzed:	01/06/23	Data File:	010613.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Terphenyl-d14	95	31	167

Compounds:	Concentration mg/kg (ppm)
Benz(a)anthracene	<0.01
Chrysene	0.029
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:	PILE08-SS-1.5	Client:	Maul Foster Alongi
Date Received:	01/05/23	Project:	M1472.02.002, F&BI 301034
Date Extracted:	01/05/23	Lab ID:	301034-05 1/5
Date Analyzed:	01/06/23	Data File:	010614.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Terphenyl-d14	89	31	167

Compounds:	Concentration mg/kg (ppm)
Benz(a)anthracene	<0.01
Chrysene	0.029
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:	M1472.02.002, F&BI 301034
Date Extracted:	01/06/23	Lab ID:	03-115 mb2 1/5
Date Analyzed:	01/06/23	Data File:	010606.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	89	16	137
Terphenyl-d14	107	31	167

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:	M1472.02.002, F&BI 301034
Date Extracted:	01/05/23	Lab ID:	03-115 mb 1/5
Date Analyzed:	01/06/23	Data File:	010608.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Terphenyl-d14	104	50	124

Compounds:	Concentration mg/kg (ppm)
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: 01/12/23
Date Received: 01/05/23
Project: Mount Vernon Library Commons M1472.02.002, F&BI 301034

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: 301003-04 (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	82	66-121
Toluene	mg/kg (ppm)	0.5	88	72-128
Ethylbenzene	mg/kg (ppm)	0.5	88	69-132
Xylenes	mg/kg (ppm)	1.5	87	69-131
Gasoline	mg/kg (ppm)	20	90	61-153

Date of Report: 01/12/23
Date Received: 01/05/23
Project: Mount Vernon Library Commons M1472.02.002, F&BI 301034

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

Laboratory Code: 301072-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	112	70-130
Toluene	ug/L (ppb)	50	106	70-130
Ethylbenzene	ug/L (ppb)	50	102	70-130
Xylenes	ug/L (ppb)	150	100	70-130

Date of Report: 01/12/23
Date Received: 01/05/23
Project: Mount Vernon Library Commons M1472.02.002, F&BI 301034

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

Laboratory Code: 301030-01 (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	108	106	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	112	70-130

Date of Report: 01/12/23
Date Received: 01/05/23
Project: Mount Vernon Library Commons M1472.02.002, F&BI 301034

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

Laboratory Code: 212411-01 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	87	79	75-125	10
Barium	mg/kg (ppm)	50	56.4	102	96	75-125	6
Cadmium	mg/kg (ppm)	10	<5	89	90	75-125	1
Chromium	mg/kg (ppm)	50	19.3	96	100	75-125	4
Lead	mg/kg (ppm)	50	128	116	108	75-125	7
Mercury	mg/kg (ppm	5	<5	83	84	75-125	1
Selenium	mg/kg (ppm)	5	<5	73 vo	69 vo	75-125	6
Silver	mg/kg (ppm)	10	<5	90	93	75-125	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	89	80-120
Barium	mg/kg (ppm)	50	102	80-120
Cadmium	mg/kg (ppm)	10	98	80-120
Chromium	mg/kg (ppm)	50	90	80-120
Lead	mg/kg (ppm)	50	106	80-120
Mercury	mg/kg (ppm)	5	95	80-120
Selenium	mg/kg (ppm)	5	88	80-120
Silver	mg/kg (ppm)	10	105	80-120

Date of Report: 01/12/23
Date Received: 01/05/23
Project: Mount Vernon Library Commons M1472.02.002, F&BI 301034

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

Laboratory Code: 301039-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Benzene	mg/kg (ppm)	2	<0.03	59	71	29-129	18
Toluene	mg/kg (ppm)	2	<0.05	47	59	35-130	23 vo
Ethylbenzene	mg/kg (ppm)	2	0.47	37 b	48 b	32-137	26 b
m,p-Xylene	mg/kg (ppm)	2	5.0	0 b	15	34-136	nm
o-Xylene	mg/kg (ppm)	2	1.8	19 b	32 b	33-134	51 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	2	90	71-118
Toluene	mg/kg (ppm)	2	77	66-126
Ethylbenzene	mg/kg (ppm)	2	78	64-123
m,p-Xylene	mg/kg (ppm)	2	81	78-122
o-Xylene	mg/kg (ppm)	2	81	77-124

Date of Report: 01/12/23
Date Received: 01/05/23
Project: Mount Vernon Library Commons M1472.02.002, F&BI 301034

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

Laboratory Code: 301034-03 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	0.069	88	92	28-125	4
2-Methylnaphthalene	mg/kg (ppm)	0.83	0.53	141 b	150 b	10-192	6 b
1-Methylnaphthalene	mg/kg (ppm)	0.83	0.51	136 b	149 b	10-163	9 b
Benz(a)anthracene	mg/kg (ppm)	0.83	<0.01	94	93	50-150	1
Chrysene	mg/kg (ppm)	0.83	<0.01	94	94	50-150	0
Benzo(a)pyrene	mg/kg (ppm)	0.83	<0.01	88	91	50-150	3
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	<0.01	84	88	50-150	5
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	<0.01	84	88	50-150	5
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	<0.01	101	94	41-134	7
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	<0.01	95	90	44-130	5

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.83	84	58-108
2-Methylnaphthalene	mg/kg (ppm)	0.83	96	67-109
1-Methylnaphthalene	mg/kg (ppm)	0.83	100	66-107
Benz(a)anthracene	mg/kg (ppm)	0.83	98	70-130
Chrysene	mg/kg (ppm)	0.83	105	70-130
Benzo(a)pyrene	mg/kg (ppm)	0.83	94	68-120
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	93	69-125
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	94	70-130
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	91	67-129
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	89	67-128

Date of Report: 01/12/23
Date Received: 01/05/23
Project: Mount Vernon Library Commons M1472.02.002, F&BI 301034

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

Laboratory Code: 301034-03 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Benz(a)anthracene	mg/kg (ppm)	0.83	<0.01	94	93	50-150	1
Chrysene	mg/kg (ppm)	0.83	<0.01	94	94	50-150	0
Benzo(a)pyrene	mg/kg (ppm)	0.83	<0.01	88	91	50-150	3
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	<0.01	84	88	50-150	5
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	<0.01	84	88	50-150	5
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	<0.01	101	94	41-134	7
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	<0.01	95	90	44-130	5

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benz(a)anthracene	mg/kg (ppm)	0.83	98	70-130
Chrysene	mg/kg (ppm)	0.83	105	70-130
Benzo(a)pyrene	mg/kg (ppm)	0.83	94	68-120
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	93	69-125
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	94	70-130
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	91	67-129
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	89	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.

SAMPLE CHAIN OF CUSTODY

01/05/23

A2/VW1/VS-A1

Page # 1 of 1

301034

Report To Amanda Bixby

Company Maul Foster & Alongi

Address 1329 N State St, Ste 301

City, State, ZIP Bellingham, WA 98225

Phone (360)635-8311 Email abixby@maulfoster.com

SAMPLERS (signature)

PROJECT NAME: Mount Vernon Library Commons

PO # M1472.02.002

REMARKS: X = analyze; C = hold; Project specific RLs? - Yes / No

INVOICE TO: accounting@maulfoster.com

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

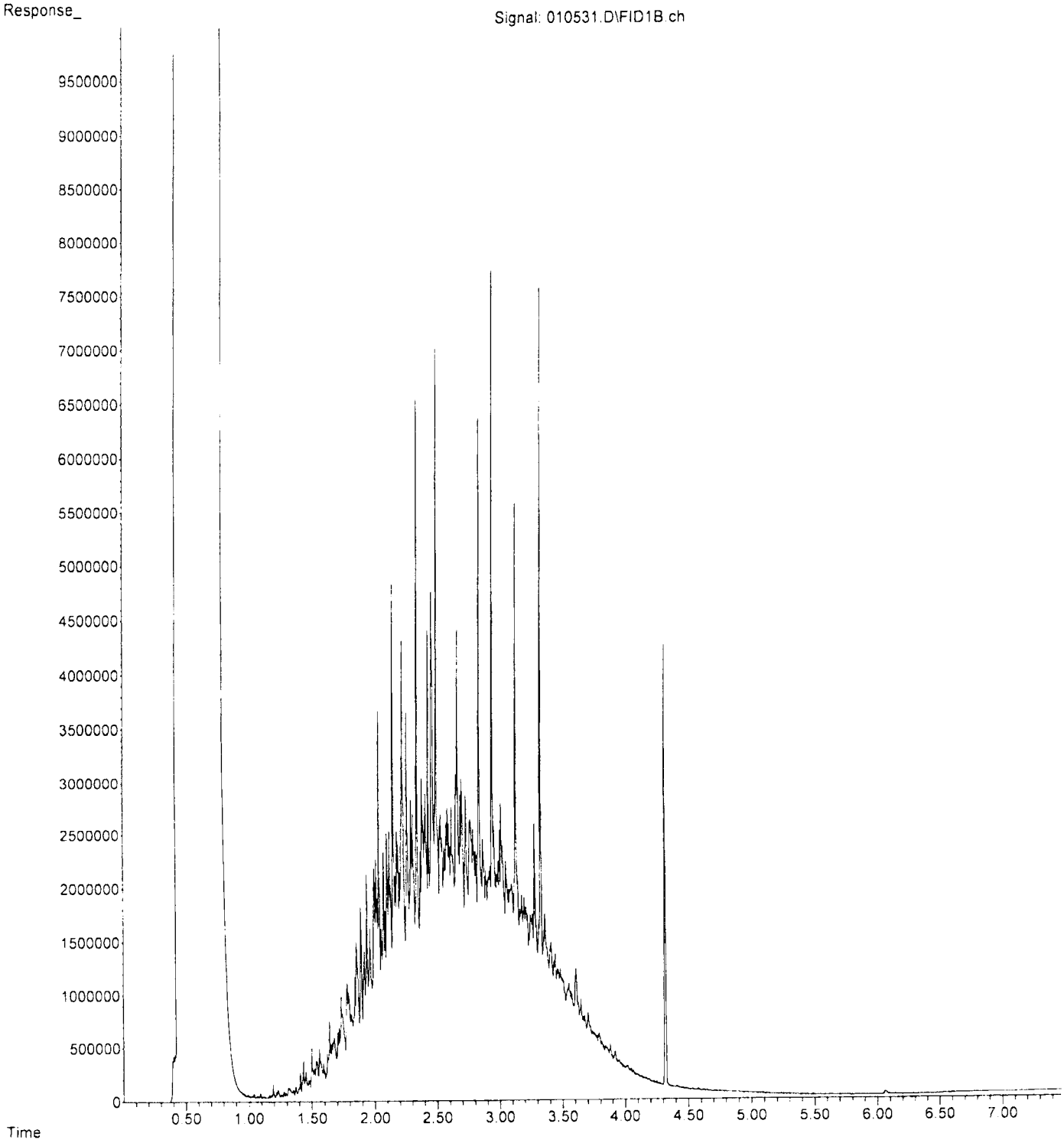
SAMPLE DISPOSAL
- ☐ Archive samples
- ☐ Other
- Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	cPAHs EPA 8270	~~Carcinogenic PCBs EPA 8082~~	n-hexane, EDB, EDC, MTBE by 8260	cPAHs "naph. by 8270	Total lead by 6020	RCRA 8 metals by 6020	Notes ~~(diorups ME 1/5/23~~ ME
T3BASE01-SS-9.0	01 A-E	1/4/23	1040	S	5	⊗	O	O	X			⊗	O	⊗	O		4 hr HCID; 24 hr follow ups
T3DUP-SS-9.0	02	1/4/23	1040	S	5	⊗	O	O	X			⊗	O	⊗	O		↓
PILE06-SS-1.0	03	1/4/23	1400	S	5	X	X	X			X					X	48 hr TAT
PILE07-SS-2.0	04	1/4/23	1410	S	5	X	X	X			X					X	48 hr TAT
PILE08-SS-1.5	05	1/4/23	1420	S	5	X	X	X			X					X	48 hr TAT
TRIPBLANK01	06	1/4/23	NA	W	2			X									5-day TAT

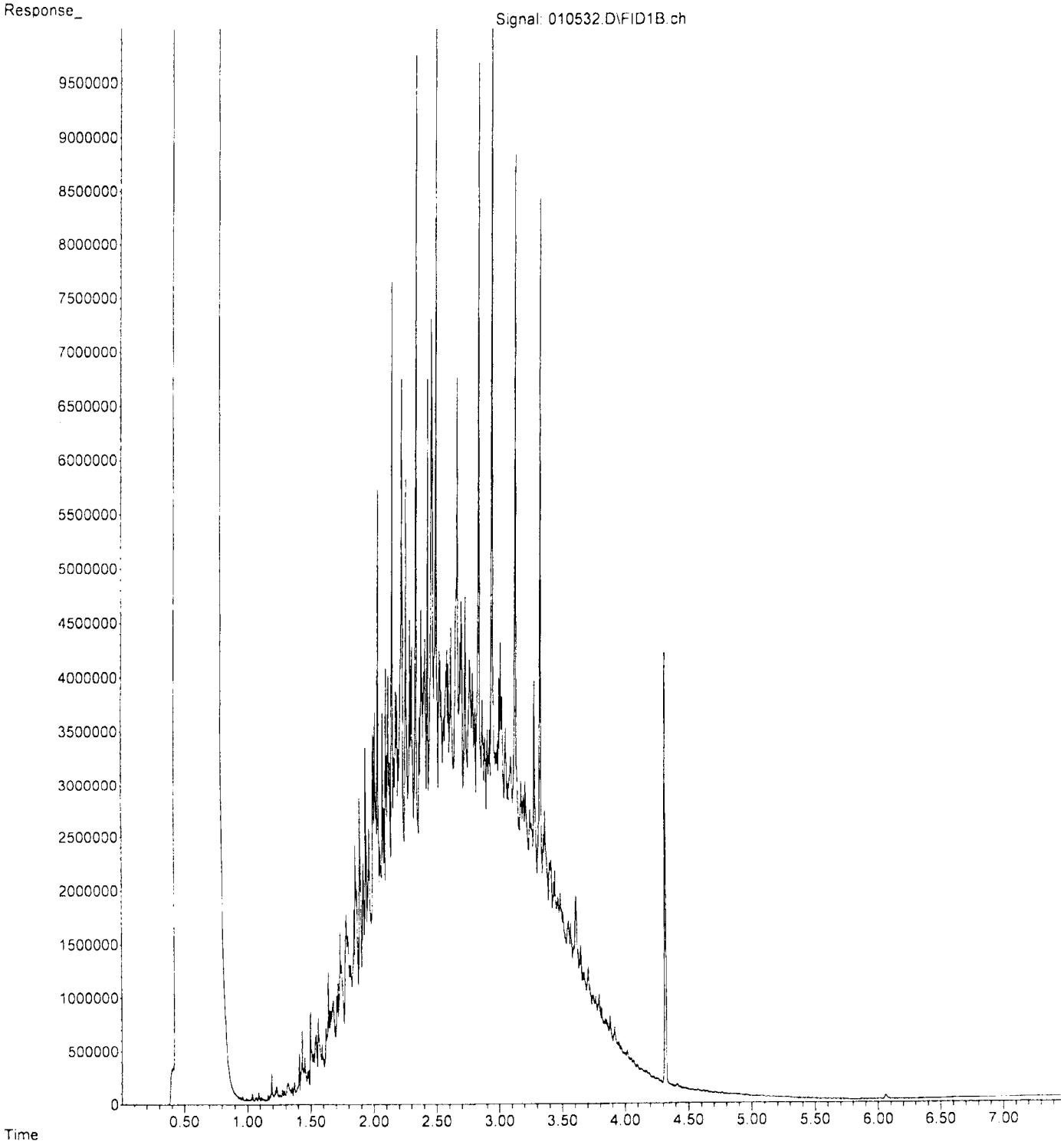
SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	MFA	Amanda Bixby	1/4/23	16:00
Received by:	ANH PHAN	FSB	01/05/23	08:54
Relinquished by:				
Received by:		Samples received at 2 °C		

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

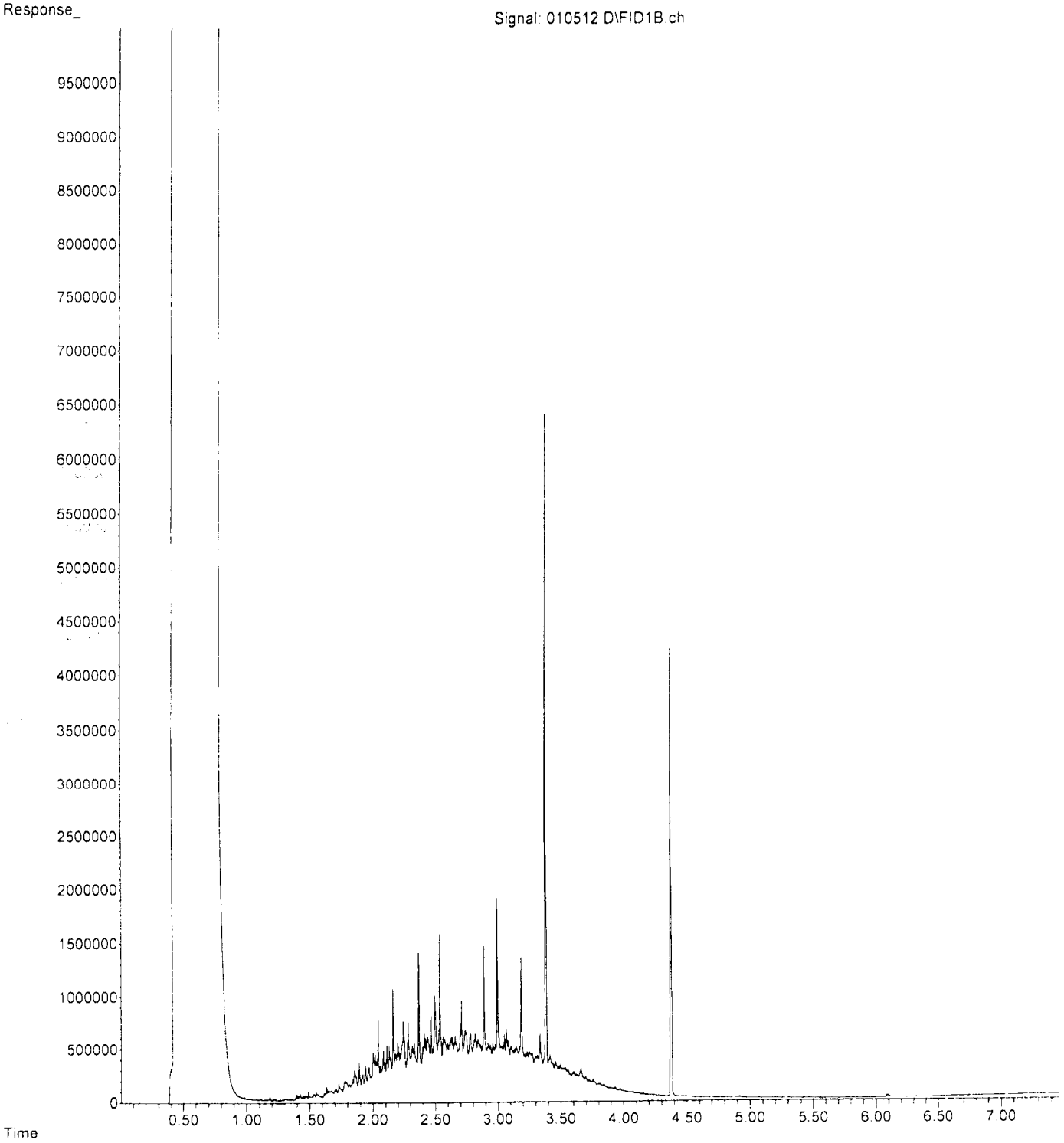
File : P:\Proc_GC14\01-05-23\010531.D
Operator : TL
Acquired : 05 Jan 2023 04:11 pm using AcqMethod DX.M
Instrument : GC14
Sample Name: 301034-01
Misc Info : ERR
Vial Number: 28



File :P:\Proc_GC14\01-05-23\010532.D
Operator : TL
Acquired : 05 Jan 2023 04:23 pm using AcqMethod DX.M
Instrument : GC14
Sample Name: 301034-02
Misc Info : ERR
Vial Number: 29

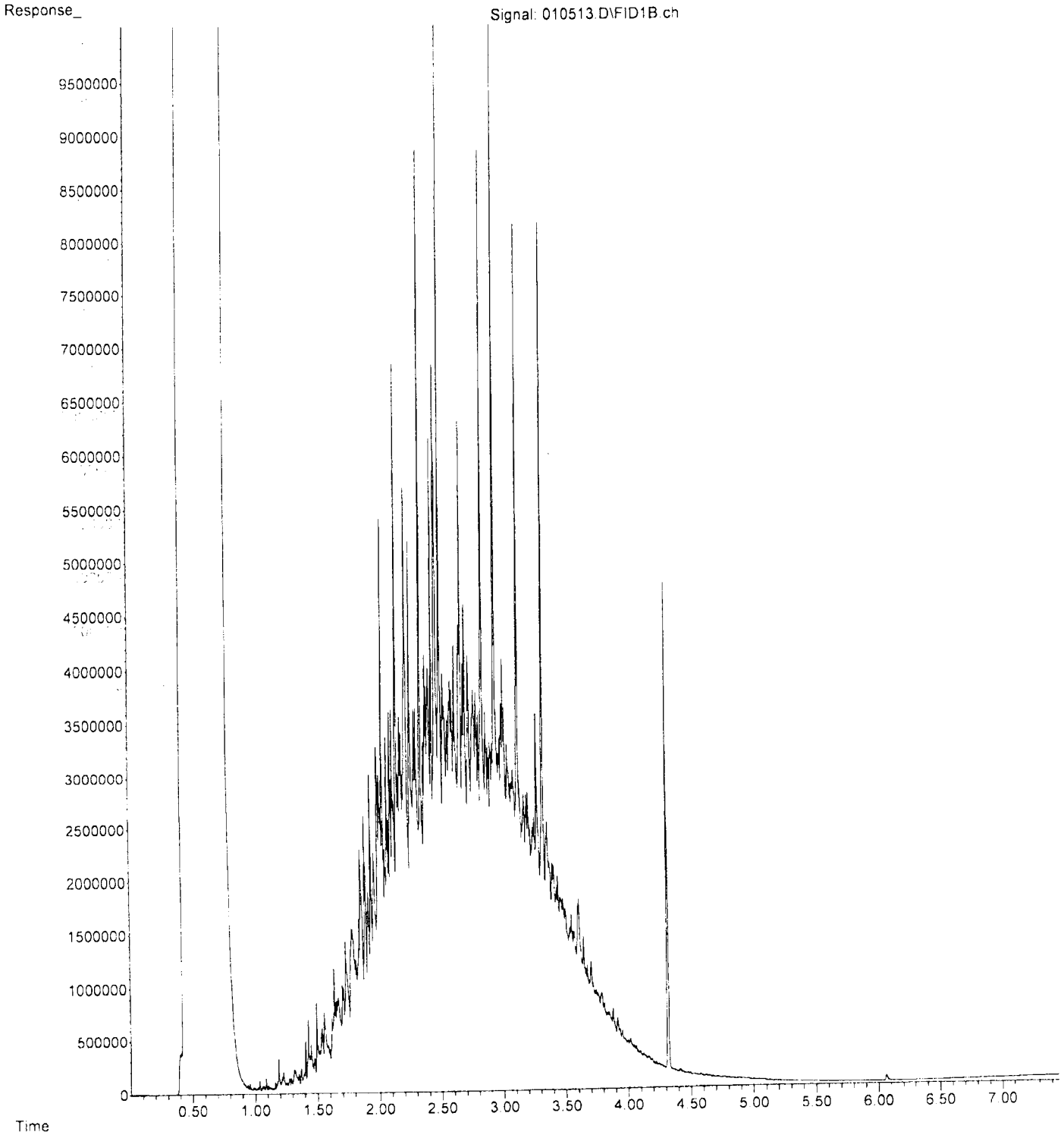


File :P:\Proc_GC14\01-05-23\010512.D
Operator : TL
Acquired : 05 Jan 2023 10:45 am using AcqMethod DX.M
Instrument : GC14
Sample Name: 301034-03
Misc Info : ERR
Vial Number: 14

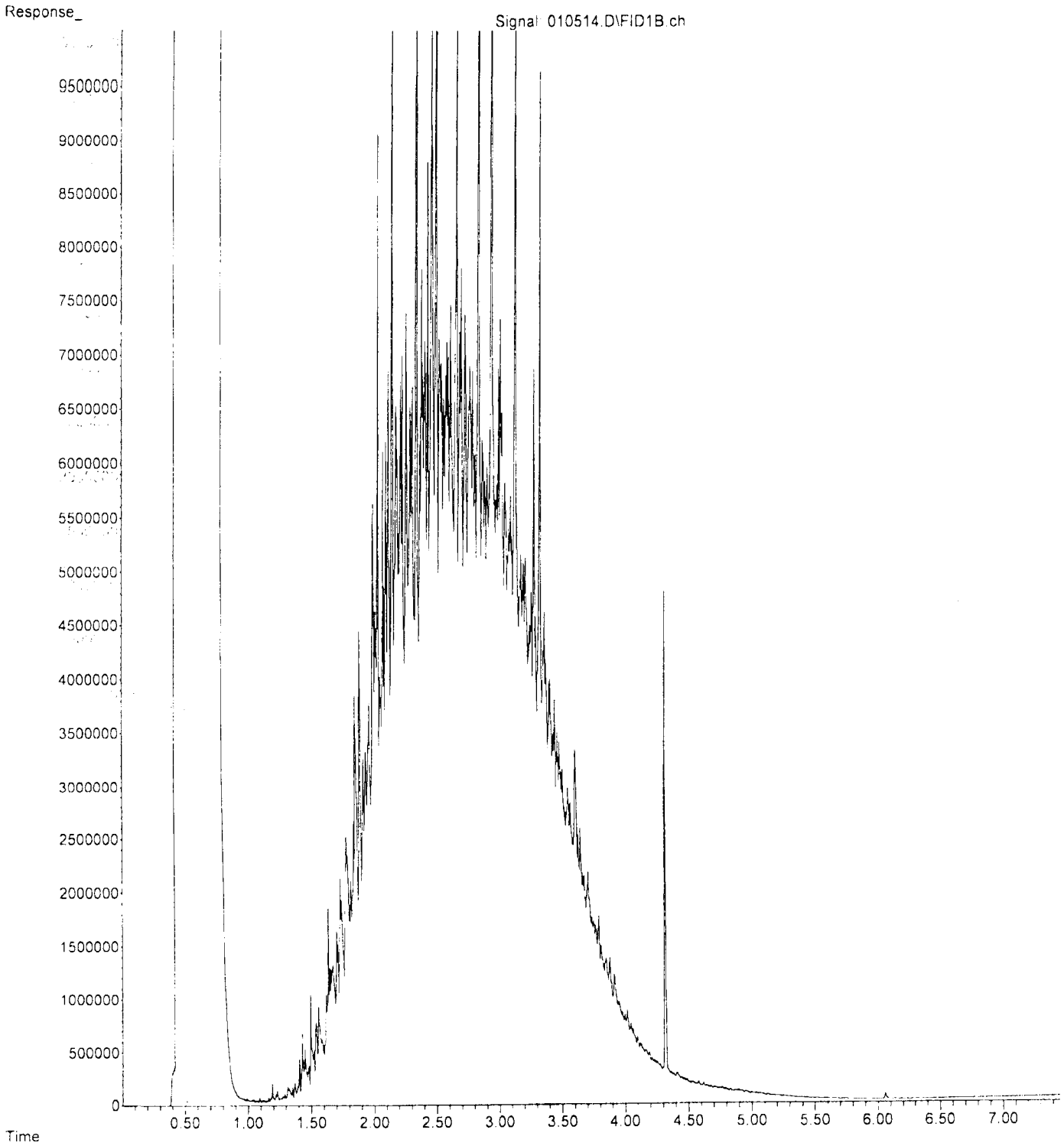


File :P:\Proc_GC14\01-05-23\010513.D
Operator : TL
Acquired : 05 Jan 2023 10:57 am using AcqMethod DX.M
Instrument : GC14
Sample Name: 301034-04
Misc Info :
Vial Number: 15

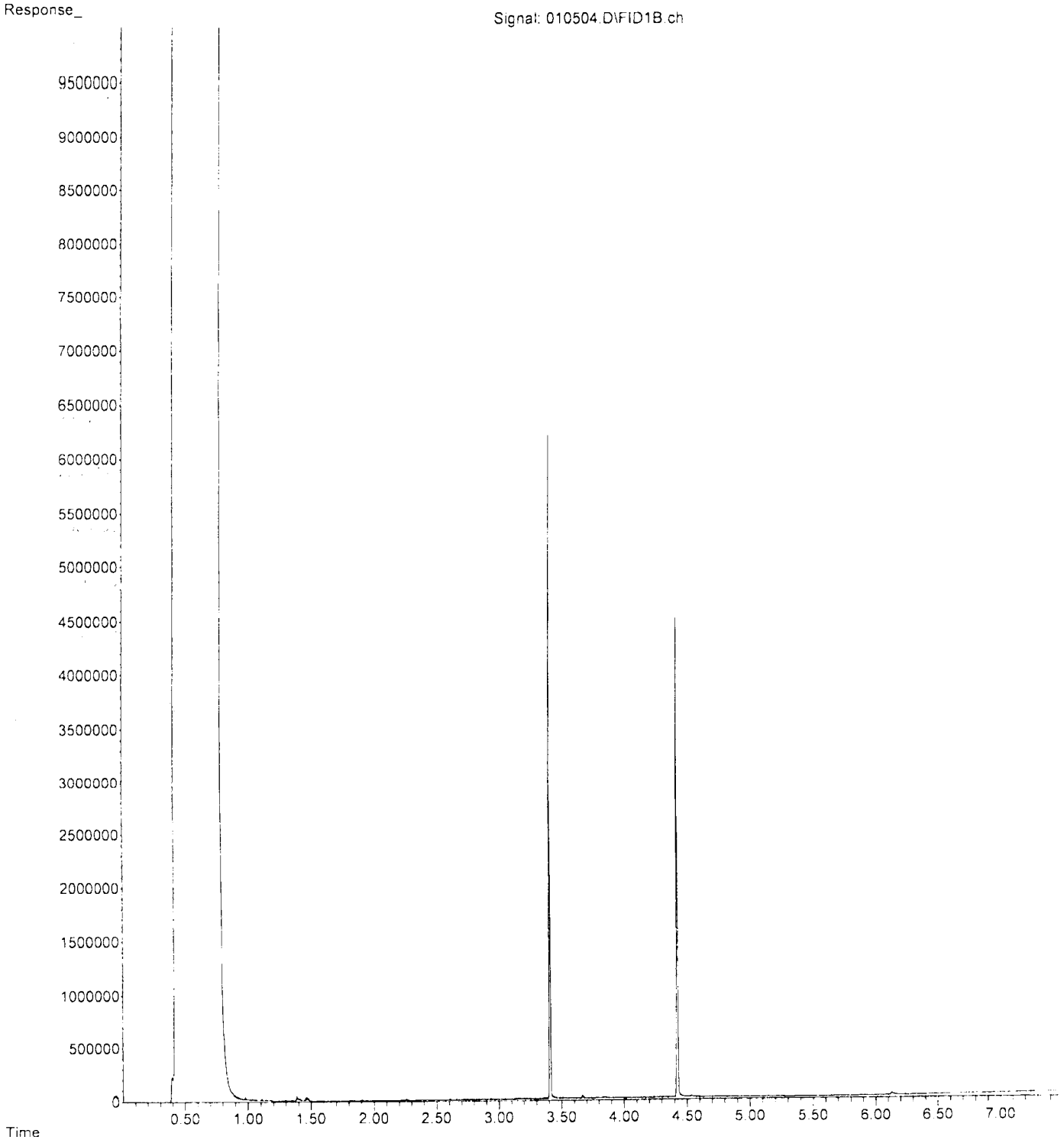
ERR



File : P:\Proc_GC14\01-05-23\010514.D
Operator : TL
Acquired : 05 Jan 2023 11:09 am using AcqMethod DX.M
Instrument : GC14
Sample Name: 301034-05
Misc Info : ERR
Vial Number: 16

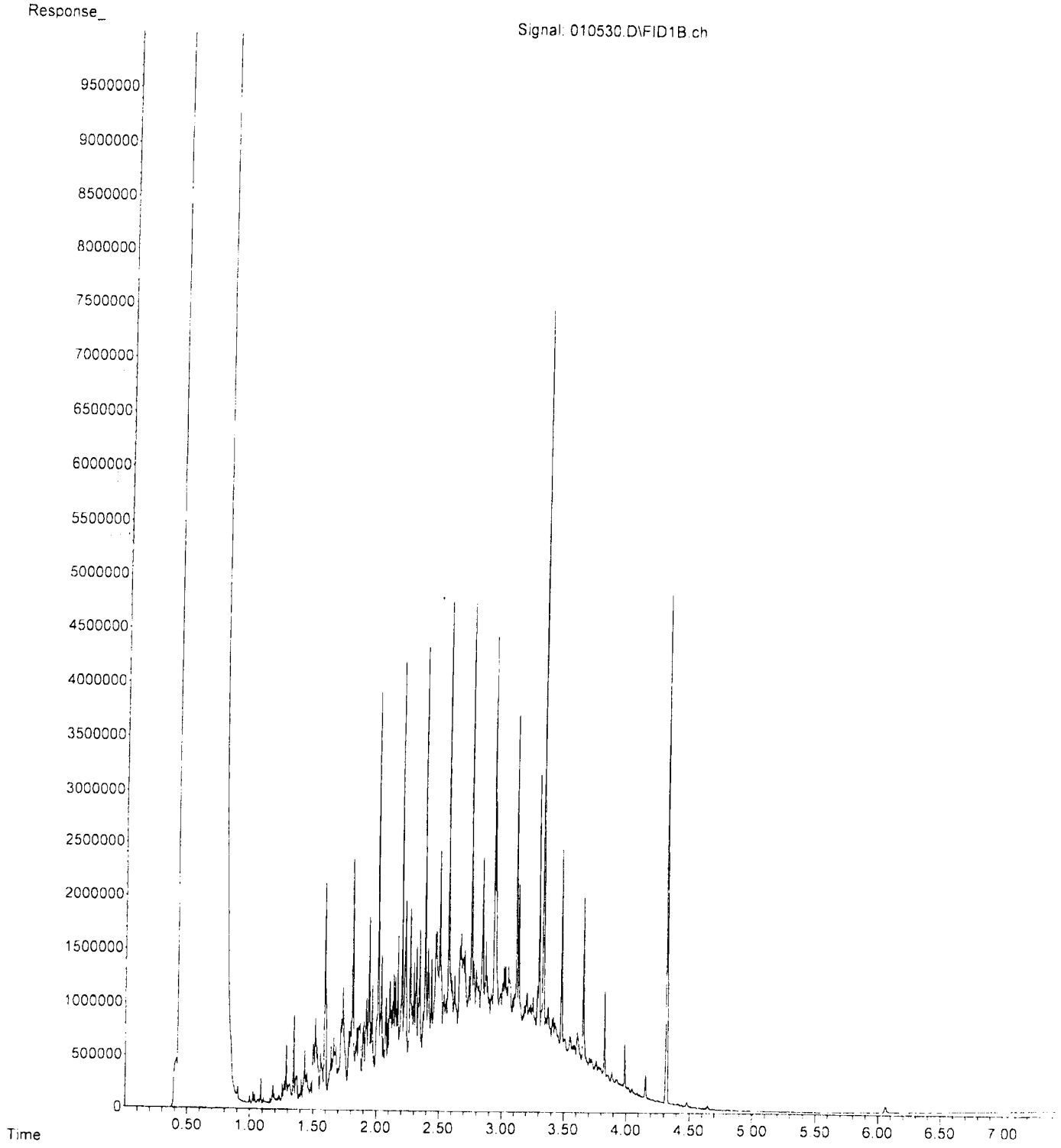


File :P:\Proc_GC14\01-05-23\010504.D
Operator : TL
Acquired : 05 Jan 2023 08:40 am using AcqMethod DX.M
Instrument : GC14
Sample Name: 03-108 mb
Misc Info : ERR
Vial Number: 6



File :P:\Proc_GC14\01-05-23\010530.D
Operator : TL
Acquired : 05 Jan 2023 03:59 pm using AcqMethod DX.M
Instrument : GC14
Sample Name: 500 Dx 67-143B
Misc Info :
Vial Number: 3

ERR



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

January 11, 2023

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

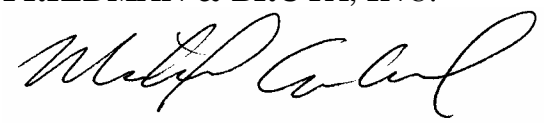
Dear Ms Bixby:

Included are the results from the testing of material submitted on January 7, 2023 from the Mount Vernon Library Commons M1472 02 002, F&BI 301083 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
MFA0111R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on January 7, 2023 by Friedman & Bruya, Inc. from the Maul Foster Alongi Mount Vernon Library Commons M1472 02 002, F&BI 301083 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Maul Foster Alongi
301083 -01	T3SW03-SS-8.0
301083 -02	T3SW04-SS-8.0
301083 -03	T3SW05-SS-8.0

All quality control requirements were acceptable.

Date of Report: 01/11/23
Date Received: 01/07/23
Project: Mount Vernon Library Commons M1472 02 002, F&BI 301083
Date Extracted: 01/07/23
Date Analyzed: 01/07/23

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

Sample ID Laboratory ID	% Moisture
T3SW03-SS-8.0 301083-01	21
T3SW04-SS-8.0 301083-02	25
T3SW05-SS-8.0 301083-03	19

Date of Report: 01/11/23
Date Received: 01/07/23
Project: Mount Vernon Library Commons M1472 02 002, F&BI 301083
Date Extracted: 01/09/23
Date Analyzed: 01/09/23

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)
T3SW03-SS-8.0 301083-01	ND	ND	ND	109
T3SW04-SS-8.0 301083-02	ND	ND	ND	107
T3SW05-SS-8.0 301083-03	ND	ND	ND	109
Method Blank 03-124 MB	ND	ND	ND	103

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

Date of Report: 01/11/23
Date Received: 01/07/23
Project: Mount Vernon Library Commons M1472 02 002, F&BI 301083
Date Extracted: 01/09/23
Date Analyzed: 01/10/23

**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	Toluene	Ethyl Benzene	Total Xylenes	Surrogate (% Recovery) (Limit 50-132)
T3SW03-SS-8.0 301083-01	<0.02	<0.02	<0.02	<0.06	87
T3SW04-SS-8.0 301083-02	<0.02	<0.02	<0.02	<0.06	78
T3SW05-SS-8.0 301083-03	<0.02	<0.02	<0.02	<0.06	91
Method Blank 03-0013 MB	<0.02	<0.02	<0.02	<0.06	90

Date of Report: 01/11/23
Date Received: 01/07/23
Project: Mount Vernon Library Commons M1472 02 002, F&BI 301083
Date Extracted: 01/09/23
Date Analyzed: 01/09/23

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)
T3SW03-SS-8.0 301083-01	<50	<250	104
T3SW04-SS-8.0 301083-02	<50	<250	104
T3SW05-SS-8.0 301083-03	<50	<250	102
Method Blank 03-119 MB	<50	<250	104

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	T3SW03-SS-8.0	Client:	Maul Foster Alongi
Date Received:	01/07/23	Project:	M1472 02 002, F&BI 301083
Date Extracted:	01/09/23	Lab ID:	301083-01 1/5
Date Analyzed:	01/09/23	Data File:	010911.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	65	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:	T3SW04-SS-8.0	Client:	Maul Foster Alongi
Date Received:	01/07/23	Project:	M1472 02 002, F&BI 301083
Date Extracted:	01/09/23	Lab ID:	301083-02 1/5
Date Analyzed:	01/09/23	Data File:	010912.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	68	10	198
Terphenyl-d14	97	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:	T3SW05-SS-8.0	Client:	Maul Foster Alongi
Date Received:	01/07/23	Project:	M1472 02 002, F&BI 301083
Date Extracted:	01/09/23	Lab ID:	301083-03 1/5
Date Analyzed:	01/09/23	Data File:	010913.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	65	10	198
Terphenyl-d14	94	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:	M1472 02 002, F&BI 301083
Date Extracted:	01/09/23	Lab ID:	03-125 mb 1/5
Date Analyzed:	01/09/23	Data File:	010910.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	84	10	198
Terphenyl-d14	109	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: 01/11/23
Date Received: 01/07/23
Project: Mount Vernon Library Commons M1472 02 002, F&BI 301083

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

Laboratory Code: 301058-01 (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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	94	66-121
Toluene	mg/kg (ppm)	0.5	94	72-128
Ethylbenzene	mg/kg (ppm)	0.5	98	69-132
Xylenes	mg/kg (ppm)	1.5	100	69-131

Date of Report: 01/11/23
Date Received: 01/07/23
Project: Mount Vernon Library Commons M1472 02 002, F&BI 301083

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

Laboratory Code: 301073-06 (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	110	108	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	108	70-130

Date of Report: 01/11/23
Date Received: 01/07/23
Project: Mount Vernon Library Commons M1472 02 002, F&BI 301083

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

Laboratory Code: 301083-01 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	77	74	28-125	4
2-Methylnaphthalene	mg/kg (ppm)	0.83	<0.01	86	84	10-192	2
1-Methylnaphthalene	mg/kg (ppm)	0.83	<0.01	88	87	10-163	1
Benz(a)anthracene	mg/kg (ppm)	0.83	<0.01	94	93	50-150	1
Chrysene	mg/kg (ppm)	0.83	<0.01	98	97	50-150	1
Benzo(a)pyrene	mg/kg (ppm)	0.83	<0.01	89	88	50-150	1
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	<0.01	90	89	50-150	1
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	<0.01	86	86	50-150	0
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	<0.01	105	98	41-134	7
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	<0.01	101	93	44-130	8

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.83	80	58-108
2-Methylnaphthalene	mg/kg (ppm)	0.83	90	67-109
1-Methylnaphthalene	mg/kg (ppm)	0.83	93	66-107
Benz(a)anthracene	mg/kg (ppm)	0.83	96	70-130
Chrysene	mg/kg (ppm)	0.83	102	70-130
Benzo(a)pyrene	mg/kg (ppm)	0.83	89	68-120
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	88	69-125
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	89	70-130
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	97	67-129
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	95	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.

301083

SAMPLE CHAIN OF CUSTODY

01/07/23 A1/VS-A1

Report To Amanda Bixby

Company Maul Foster & Alongi

Address 1329 N State St, Ste 301

City, State, ZIP Bellingham, WA 98225

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

SAMPLERS (*signature*) Amanda Bixby

PROJECT NAME: Mount Vernon Library Commons

PO #: M1472.02.002

REMARKS: X = analyze. O = hold.

INVOICE TO: accounting@maulfoster.com

TURNAROUND TIME
- ☐ Standard Turnaround
- ☒ RUSH see notes

Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Archive Samples
- ☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	n-hexane, EDB, EDC, MTBE by 8260	cPAHs + naph by 8270	Total lead by 6020		Notes
T35W03-SS-8.0	01 A-E	1/6/23	1220	S	5	X	⊗	O	⊗				O	⊗	O		4 hr HCID; 24 hr follow-ups
T35W04-SS-8.0	02 |	1/6/23	1420	S	5	X	⊗	O	⊗				O	⊗	O		↓
T35W05-SS-8.0	03 |	1/6/23	1430	S	5	X	⊗	O	⊗				O	⊗	O		⊗ per AB 1/9/23
													Samples received at 4 °C				

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Amanda Bixby	Amanda Bixby	MFA	1/6/23	1600
Received by:	Eric Young	F+B	1/7/23	1000
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
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

January 12, 2023

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 January 10, 2023 from the Mount Vernon Library Commons M1472.02.002, F&BI 301102 project. There are 14 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
MFA0112R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on January 10, 2023 by Friedman & Bruya, Inc. from the Maul Foster Alongi Mount Vernon Library Commons M1472.02.002 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Maul Foster Alongi
301102 -01	T3SW06-SS-8.0
301102 -02	T3BASE02-SS-9.0
301102 -03	T3SW07-SS-8.0
301102 -04	T3SW08-SS-8.0

All quality control requirements were acceptable.

Date of Report: 01/12/23
Date Received: 01/10/23
Project: Mount Vernon Library Commons M1472.02.002, F&BI 301102
Date Extracted: 01/10/23
Date Analyzed: 01/10/23

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

Sample ID Laboratory ID	% Moisture
T3SW06-SS-8.0 301102-01	24
T3BASE02-SS-9.0 301102-02	22
T3SW07-SS-8.0 301102-03	22
T3SW08-SS-8.0 301102-04	23

Date of Report: 01/12/23
Date Received: 01/10/23
Project: Mount Vernon Library Commons M1472.02.002, F&BI 301102
Date Extracted: 01/10/23
Date Analyzed: 01/10/23

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)
T3SW06-SS-8.0 301102-01	ND	ND	ND	99
T3BASE02-SS-9.0 301102-02	ND	ND	ND	102
T3SW07-SS-8.0 301102-03	ND	ND	ND	101
T3SW08-SS-8.0 301102-04	ND	ND	ND	108
Method Blank 03-127 MB	ND	ND	ND	105

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

Date of Report: 01/12/23
Date Received: 01/10/23
Project: Mount Vernon Library Commons M1472.02.002, F&BI 301102
Date Extracted: 01/10/23
Date Analyzed: 01/11/23

**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	Toluene	Ethyl Benzene	Total Xylenes	Surrogate (% Recovery) (Limit 50-150)
T3SW06-SS-8.0 301102-01	<0.02	<0.02	<0.02	<0.06	125
T3BASE02-SS-9.0 301102-02	<0.02	<0.02	<0.02	<0.06	131
T3SW07-SS-8.0 301102-03	<0.02	<0.02	<0.02	<0.06	123
T3SW08-SS-8.0 301102-04	<0.02	<0.02	<0.02	<0.06	123
Method Blank 03-0015 MB	<0.02	<0.02	<0.02	<0.06	85

Date of Report: 01/12/23
Date Received: 01/10/23
Project: Mount Vernon Library Commons M1472.02.002, F&BI 301102
Date Extracted: 01/10/23
Date Analyzed: 01/10/23

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)
T3SW06-SS-8.0 301102-01	<50	<250	105
T3BASE02-SS-9.0 301102-02	<50	<250	104
T3SW07-SS-8.0 301102-03	<50	<250	104
T3SW08-SS-8.0 301102-04	<50	<250	106
Method Blank 03-126 MB2	<50	<250	104

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	T3SW06-SS-8.0	Client:	Maul Foster Alongi
Date Received:	01/10/23	Project:	M1472.02.002, F&BI 301102
Date Extracted:	01/10/23	Lab ID:	301102-01 1/5
Date Analyzed:	01/10/23	Data File:	011006.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	71	16	137
Terphenyl-d14	93	31	167

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:	T3BASE02-SS-9.0	Client:	Maul Foster Alongi
Date Received:	01/10/23	Project:	M1472.02.002, F&BI 301102
Date Extracted:	01/10/23	Lab ID:	301102-02 1/5
Date Analyzed:	01/10/23	Data File:	011007.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	72	16	137
Terphenyl-d14	95	31	167

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:	T3SW07-SS-8.0	Client:	Maul Foster Alongi
Date Received:	01/10/23	Project:	M1472.02.002, F&BI 301102
Date Extracted:	01/10/23	Lab ID:	301102-03 1/5
Date Analyzed:	01/10/23	Data File:	011008.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	62	16	137
Terphenyl-d14	92	31	167

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:	T3SW08-SS-8.0	Client:	Maul Foster Alongi
Date Received:	01/10/23	Project:	M1472.02.002, F&BI 301102
Date Extracted:	01/10/23	Lab ID:	301102-04 1/5
Date Analyzed:	01/10/23	Data File:	011009.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	49	16	137
Terphenyl-d14	90	31	167

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:	M1472.02.002, F&BI 301102
Date Extracted:	01/10/23	Lab ID:	03-125 mb2 1/5
Date Analyzed:	01/10/23	Data File:	011005.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	85	16	137
Terphenyl-d14	107	31	167

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: 01/12/23
Date Received: 01/10/23
Project: Mount Vernon Library Commons M1472.02.002, F&BI 301102

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

Laboratory Code: 301008-03 (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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	86	66-121
Toluene	mg/kg (ppm)	0.5	94	72-128
Ethylbenzene	mg/kg (ppm)	0.5	92	69-132
Xylenes	mg/kg (ppm)	1.5	93	69-131

Date of Report: 01/12/23
Date Received: 01/10/23
Project: Mount Vernon Library Commons M1472.02.002, F&BI 301102

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

Laboratory Code: 301095-01 (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	116	116	70-130	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	118	70-130

Date of Report: 01/12/23
Date Received: 01/10/23
Project: Mount Vernon Library Commons M1472.02.002, F&BI 301102

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

Laboratory Code: 301083-01 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	77	74	28-125	4
2-Methylnaphthalene	mg/kg (ppm)	0.83	<0.01	86	84	10-192	2
1-Methylnaphthalene	mg/kg (ppm)	0.83	<0.01	88	87	10-163	1
Benz(a)anthracene	mg/kg (ppm)	0.83	<0.01	94	93	50-150	1
Chrysene	mg/kg (ppm)	0.83	<0.01	98	97	50-150	1
Benzo(a)pyrene	mg/kg (ppm)	0.83	<0.01	89	88	50-150	1
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	<0.01	90	89	50-150	1
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	<0.01	86	86	50-150	0
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	<0.01	105	98	41-134	7
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	<0.01	101	93	44-130	8

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.83	80	58-108
2-Methylnaphthalene	mg/kg (ppm)	0.83	90	67-109
1-Methylnaphthalene	mg/kg (ppm)	0.83	93	66-107
Benz(a)anthracene	mg/kg (ppm)	0.83	96	70-130
Chrysene	mg/kg (ppm)	0.83	102	70-130
Benzo(a)pyrene	mg/kg (ppm)	0.83	89	68-120
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	88	69-125
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	89	70-130
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	97	67-129
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	95	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.

30110 2

SAMPLE CHAIN OF CUSTODY

01/10/23 A1/VS-A2

Page # 1 of 1

Report To Amanda Bixby

Company Maul Foster & Alongi, Inc.

Address 1329 N State St, Ste 301

City, State, ZIP Bellingham, WA, 98225

Phone 360-635-8371 Email abixby@maulfoster.com

SAMPLERS (signature)

PROJECT NAME: Mount Vernon Library Commons

PO #: M1472.02.002

REMARKS

INVOICE TO: accounting@maulfoster.com

TURNAROUND TIME
- ☐ Standard Turnaround
- ☒ RUSH 4hr HCID, 24hr Others

Rush charges authorized by: A. Bixby

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Archive Samples
- ☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED: TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	n-hexane, MTBE, EDB, EDC by 8260	cPAHs + naphthalene by 8270	Total Lead by 6020		Notes
T3SW06-SS-8.0	01 A-E	1/9/23	13:20	Soil	5	X	X	O	X				O	X	O		X = run
T3BASE02-SS-9.0	02	1/9/23	13:00	Soil	5	X	X	O	X				O	X	O		O = hold
T3SW07-SS-8.0	03	1/9/23	13:30	Soil	5	X	X	O	X				O	X	O		
T3SW08-SS-8.0	04	1/9/23	13:40	Soil	5	X	X	O	X				O	X	O		
							O		O					O			

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Christian Sifford	MFA	1/9/23	15:30
Received by:	ANHPHAM	FSB	01/10/23	09:12
Relinquished by:				
Received by:		Samples received at 0 °C		

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
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

January 20, 2023

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 January 11, 2023 from the Mount Vernon Library Commons M1472.02.002, F&BI 301138 project. There are 8 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
MFA0120R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on January 11, 2022 by Friedman & Bruya, Inc. from the Maul Foster Alongi Mount Vernon Library Commons M1472.02.002 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Maul Foster Alongi
301138 -01	TRIP BLANK 02
301138 -02	B01-GW-9.5
301138 -03	BDUP-GW-9.5
301138 -04	B02-GW-10.0
301138 -05	B03-GW-10.0

All quality control requirements were acceptable.

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	B01-GW-9.5	Client:	Maul Foster Alongi
Date Received:	01/11/23	Project:	M1472.02.002, F&BI 301138
Date Extracted:	01/11/23	Lab ID:	301138-02 1/2
Date Analyzed:	01/11/23	Data File:	011119.D
Matrix:	Water	Instrument:	GCMS12
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	82	11	173

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.4
2-Methylnaphthalene	<0.4
1-Methylnaphthalene	<0.4

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	BDUP-GW-9.5	Client:	Maul Foster Alongi
Date Received:	01/11/23	Project:	M1472.02.002, F&BI 301138
Date Extracted:	01/11/23	Lab ID:	301138-03 1/2
Date Analyzed:	01/11/23	Data File:	011120.D
Matrix:	Water	Instrument:	GCMS12
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	81	11	173

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.4
2-Methylnaphthalene	<0.4
1-Methylnaphthalene	<0.4

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	B02-GW-10.0	Client:	Maul Foster Alongi
Date Received:	01/11/23	Project:	M1472.02.002, F&BI 301138
Date Extracted:	01/11/23	Lab ID:	301138-04 1/2
Date Analyzed:	01/11/23	Data File:	011121.D
Matrix:	Water	Instrument:	GCMS12
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	81	11	173

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.4
2-Methylnaphthalene	<0.4
1-Methylnaphthalene	<0.4

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	B03-GW-10.0	Client:	Maul Foster Alongi
Date Received:	01/11/23	Project:	M1472.02.002, F&BI 301138
Date Extracted:	01/11/23	Lab ID:	301138-05 1/2
Date Analyzed:	01/11/23	Data File:	011122.D
Matrix:	Water	Instrument:	GCMS12
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	83	11	173

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.4
2-Methylnaphthalene	<0.4
1-Methylnaphthalene	<0.4

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	Method Blank	Client:	Maul Foster Alongi
Date Received:	Not Applicable	Project:	M1472.02.002, F&BI 301138
Date Extracted:	01/11/23	Lab ID:	03-129 mb2
Date Analyzed:	01/11/23	Data File:	011108.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	90	15	144

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.2
2-Methylnaphthalene	<0.2
1-Methylnaphthalene	<0.2

Date of Report: 01/20/23
Date Received: 01/11/23
Project: Mount Vernon Library Commons M1472.02.002, F&BI 301138

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	ug/L (ppb)	5	91	78	50-104	15
2-Methylnaphthalene	ug/L (ppb)	5	101	88	54-109	14
1-Methylnaphthalene	ug/L (ppb)	5	106	92	55-108	14

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

01/11/23 VW3/C2

Page # 1 of 1

301138

Report To Amanda Bixby, Carolyn Wise

Company Maul Foster & Alongi

Address 1329 N State St, Ste 301

City, State, ZIP Bellingham, WA 98225

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

SAMPLERS (*signature*) Amanda Bixby

PROJECT NAME: Mount Vernon Library Commons

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

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 + naph. by 8270				Notes
TRIPBLANK02	01 A-B	1/10/23	NA	W	2			X									No rush
B01-GW-9.5	02 A-E	1/10/23	1210	W	5	X		X					X				48-hr TAT
BDUP-GW-9.5	03	1/10/23	1210	W	5	X		X					X				
B02-GW-10.0	04	1/10/23	1440	W	5	X		X					X				
B03-GW-10.0	05	1/10/23	1400	W	5	X		X					X				
																	Samples received at 0 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Amanda Bixby	Amanda Bixby	MFA	1/10/23	1600
Received by:	ANH PHAN	F&B	01/11/23	08:49
Relinquished by:				
Received by:				

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

NP

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

February 1, 2023

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 January 11, 2023 from the Mount Vernon Library Commons M1472.02.002, F&BI 301138 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
MFA0201R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on January 11, 2022 by Friedman & Bruya, Inc. from the Maul Foster Alongi Mount Vernon Library Commons M1472.02.002, F&BI 301138 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Maul Foster Alongi
301138 -01	TRIP BLANK 02
301138 -02	B01-GW-9.5
301138 -03	BDUP-GW-9.5
301138 -04	B02-GW-10.0
301138 -05	B03-GW-10.0

All quality control requirements were acceptable.

Date of Report: 02/01/23
Date Received: 01/11/23
Project: Mount Vernon Library Commons M1472.02.002, F&BI 301138
Date Extracted: 01/13/23
Date Analyzed: 01/13/23

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
TRIP BLANK 02 301138-01	<100	114
B01-GW-9.5 301138-02	<100	111
BDUP-GW-9.5 301138-03	<100	118
B02-GW-10.0 301138-04	<100	111
B03-GW-10.0 301138-05	<100	119
Method Blank 03-0022 MB	<100	111

Date of Report: 02/01/23
Date Received: 01/11/23
Project: Mount Vernon Library Commons M1472.02.002, F&BI 301138

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

Laboratory Code: 301138-02 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	ug/L (ppb)	1,000	83	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.

SAMPLE CHAIN OF CUSTODY

01/11/23

VW3/C2

Page # 1 of 1

301138

Report To Amanda Bixby, Carolyn Wise

Company Maul Foster & Alongi

Address 1329 N State St, Ste 301

City, State, ZIP Bellingham, WA 98225

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

SAMPLERS (*signature*)

PROJECT NAME: Mount Vernon Library Commons

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

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 + naph. by 8270				Notes
																	● per AB 1/31/23 ME
TRIPBLANK02	01 A-B	1/10/23	NA	W	2			X									No rush
B01-GW-9.5	02 A-E	1/10/23	1210	W	5	X	●	X					X				48-hr TAT
BDUP-GW-9.5	03	1/10/23	1210	W	5	X	●	X					X				
B02-GW-10.0	04	1/10/23	1440	W	5	X	●	X					X				
B03-GW-10.0	05	1/10/23	1400	W	5	X	●	X					X				
													Samples received at				0 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Amanda Bixby	MFA	1/10/23	1600
Received by:	ANH PHAN	FSB	01/11/23	09:49
Relinquished by:				
Received by:				

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

NP

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

January 16, 2023

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 January 11, 2023 from the Mount Vernon Library Commons M1472.02.002, F&BI 301138 project. There are 12 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
MFA0116R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on January 11, 2023 by Friedman & Bruya, Inc. from the Maul Foster Alongi Mount Vernon Library Commons M1472.02.002, F&BI 301138 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Maul Foster Alongi
301138 -01	TRIP BLANK 02
301138 -02	B01-GW-9.5
301138 -03	BDUP-GW-9.5
301138 -04	B02-GW-10.0
301138 -05	B03-GW-10.0

All quality control requirements were acceptable.

Date of Report: 01/16/23
Date Received: 01/11/23
Project: Mount Vernon Library Commons M1472.02.002, F&BI 301138
Date Extracted: 01/13/23
Date Analyzed: 01/13/23

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Surrogate (% Recovery) Limit (50-150)
TRIP BLANK 02 301138-01	<1	<1	<1	<3	122
B01-GW-9.5 301138-02	<1	<1	<1	<3	120
BDUP-GW-9.5 301138-03	<1	<1	<1	<3	127
B02-GW-10.0 301138-04	<1	<1	<1	<3	121
B03-GW-10.0 301138-05	<1	<1	<1	<3	129
Method Blank 03-0022 MB	<1	<1	<1	<3	122

Date of Report: 01/16/23
Date Received: 01/11/23
Project: Mount Vernon Library Commons M1472.02.002, F&BI 301138
Date Extracted: 01/12/23
Date Analyzed: 01/12/23

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
B01-GW-9.5 301138-02	67 x	<250	112
BDUP-GW-9.5 301138-03	69 x	<250	107
B02-GW-10.0 301138-04	80 x	<250	118
B03-GW-10.0 301138-05	<50	<250	115
Method Blank 03-146 MB	<50	<250	110

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	B01-GW-9.5	Client:	Maul Foster Alongi
Date Received:	01/11/23	Project:	M1472.02.002, F&BI 301138
Date Extracted:	01/11/23	Lab ID:	301138-02 1/2
Date Analyzed:	01/11/23	Data File:	011119.D
Matrix:	Water	Instrument:	GCMS12
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Terphenyl-d14	100	50	150

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

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	BDUP-GW-9.5	Client:	Maul Foster Alongi
Date Received:	01/11/23	Project:	M1472.02.002, F&BI 301138
Date Extracted:	01/11/23	Lab ID:	301138-03 1/2
Date Analyzed:	01/11/23	Data File:	011120.D
Matrix:	Water	Instrument:	GCMS12
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Terphenyl-d14	99	50	150

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

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	B02-GW-10.0	Client:	Maul Foster Alongi
Date Received:	01/11/23	Project:	M1472.02.002, F&BI 301138
Date Extracted:	01/11/23	Lab ID:	301138-04 1/2
Date Analyzed:	01/11/23	Data File:	011121.D
Matrix:	Water	Instrument:	GCMS12
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Terphenyl-d14	95	50	150

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

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	B03-GW-10.0	Client:	Maul Foster Alongi
Date Received:	01/11/23	Project:	M1472.02.002, F&BI 301138
Date Extracted:	01/11/23	Lab ID:	301138-05 1/2
Date Analyzed:	01/11/23	Data File:	011122.D
Matrix:	Water	Instrument:	GCMS12
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Terphenyl-d14	98	50	150

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

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	Method Blank	Client:	Maul Foster Alongi
Date Received:	Not Applicable	Project:	M1472.02.002, F&BI 301138
Date Extracted:	01/11/23	Lab ID:	03-129 mb2
Date Analyzed:	01/11/23	Data File:	011108.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Terphenyl-d14	114	41	138

Compounds:	Concentration ug/L (ppb)
Benz(a)anthracene	<0.02
Chrysene	<0.02
Benzo(a)pyrene	<0.02
Benzo(b)fluoranthene	<0.02
Benzo(k)fluoranthene	<0.02
Indeno(1,2,3-cd)pyrene	<0.02
Dibenz(a,h)anthracene	<0.02

Date of Report: 01/16/23
Date Received: 01/11/23
Project: Mount Vernon Library Commons M1472.02.002, F&BI 301138

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

Laboratory Code: 301138-02 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	120	70-130
Toluene	ug/L (ppb)	50	114	70-130
Ethylbenzene	ug/L (ppb)	50	108	70-130
Xylenes	ug/L (ppb)	150	113	70-130

Date of Report: 01/16/23
Date Received: 01/11/23
Project: Mount Vernon Library Commons M1472.02.002, F&BI 301138

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	96	104	70-130	8

Date of Report: 01/16/23
Date Received: 01/11/23
Project: Mount Vernon Library Commons M1472.02.002, F&BI 301138

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Benz(a)anthracene	ug/L (ppb)	5	123	106	70-130	15
Chrysene	ug/L (ppb)	5	128 vo	112	67-119	13
Benzo(a)pyrene	ug/L (ppb)	5	118	104	68-126	13
Benzo(b)fluoranthene	ug/L (ppb)	5	119	106	62-130	12
Benzo(k)fluoranthene	ug/L (ppb)	5	120	100	67-125	18
Indeno(1,2,3-cd)pyrene	ug/L (ppb)	5	128	116	63-131	10
Dibenz(a,h)anthracene	ug/L (ppb)	5	118	109	62-133	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

01/11/23 VW3/C2

Page # 1 of 1

301138

Report To Amanda Bixby, Carolyn Wise

Company Maul Foster & Alongi

Address 1329 N State St, Ste 301

City, State, ZIP Bellingham, WA 98225

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

SAMPLERS (*signature*) Amanda Bixby

PROJECT NAME: Mount Vernon Library Commons

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

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 + naph. by 8270				Notes
TRIPBLANK02	01 A-B	1/10/23	NA	W	2			X									No rush
B01-GW-9.5	02 A-E	1/10/23	1210	W	5	X		X					X				48-hr TAT
BDUP-GW-9.5	03	1/10/23	1210	W	5	X		X					X				
B02-GW-10.0	04	1/10/23	1440	W	5	X		X					X				
B03-GW-10.0	05	1/10/23	1400	W	5	X		X					X				
																	Samples received at 0 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Amanda Bixby	Amanda Bixby	MFA	1/10/23	1600
Received by:	ANH PHAN	F&B	01/11/23	08:49
Relinquished by:				
Received by:				

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

NP

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

January 20, 2023

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 January 6, 2023 from the Mt Vernon Library Commons M1472.02.002, F&BI 301058 project. There are 8 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
MFA0120R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on January 6, 2022 by Friedman & Bruya, Inc. from the Maul Foster Alongi Mt Vernon Library Commons M1472.02.002, F&BI 301058 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Maul Foster Alongi
301058 -01	T3SW01-SS-8.0
301058 -02	T3SW02-SS-8.0
301058 -03	Pile09-SS-3.0
301058 -04	Pile10-SS-0.5

All quality control requirements were acceptable.

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	T3SW01-SS-8.0	Client:	Maul Foster Alongi
Date Received:	01/06/23	Project:	M1472.02.002, F&BI 301058
Date Extracted:	01/06/23	Lab ID:	301058-01 1/5
Date Analyzed:	01/06/23	Data File:	010611.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	67	16	137

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	T3SW02-SS-8.0	Client:	Maul Foster Alongi
Date Received:	01/06/23	Project:	M1472.02.002, F&BI 301058
Date Extracted:	01/06/23	Lab ID:	301058-02 1/5
Date Analyzed:	01/06/23	Data File:	010612.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	75	16	137

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	Pile09-SS-3.0	Client:	Maul Foster Alongi
Date Received:	01/06/23	Project:	M1472.02.002, F&BI 301058
Date Extracted:	01/06/23	Lab ID:	301058-03 1/5
Date Analyzed:	01/06/23	Data File:	010609.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	75	16	137

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	0.017

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	Pile10-SS-0.5	Client:	Maul Foster Alongi
Date Received:	01/06/23	Project:	M1472.02.002, F&BI 301058
Date Extracted:	01/06/23	Lab ID:	301058-04 1/25
Date Analyzed:	01/06/23	Data File:	010610.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	111	16	137

Compounds:	Concentration mg/kg (ppm)
Naphthalene	2.7
2-Methylnaphthalene	18
1-Methylnaphthalene	13

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	Method Blank	Client:	Maul Foster Alongi
Date Received:	Not Applicable	Project:	M1472.02.002, F&BI 301058
Date Extracted:	01/06/23	Lab ID:	03-115 mb2 1/5
Date Analyzed:	01/06/23	Data File:	010606.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	89	16	137

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01

Date of Report: 01/20/23
Date Received: 01/06/23
Project: Mt Vernon Library Commons M1472.02.002, F&BI 301058

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

Laboratory Code: 301034-03 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	0.069	88	92	28-125	4
2-Methylnaphthalene	mg/kg (ppm)	0.83	0.53	141 b	150 b	10-192	6 b
1-Methylnaphthalene	mg/kg (ppm)	0.83	0.51	136 b	149 b	10-163	9 b

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.83	84	58-108
2-Methylnaphthalene	mg/kg (ppm)	0.83	96	67-109
1-Methylnaphthalene	mg/kg (ppm)	0.83	100	66-107

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

01/06/23 v5.A1 / A1

Page # 1 of 1

301058

Report To Amanda Bixby

Company Maul Foster & Alongi

Address 1329 N State St, ste 301

City, State, ZIP Bellingham, WA 98225

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

SAMPLERS (*signature*) Amanda Bixby

PROJECT NAME: Mount Vernon Library Commons

PO #: M1472.02.002

REMARKS:

Project specific RLs? - Yes / No

INVOICE TO: accounting@maulfoster.com

TURNAROUND TIME

☐ Standard turnaround

☒ RUSH See notes

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	cPAHs EPA 8270	PCBs EPA 8082	n-hexane, EDB, EDC, MTBE by 8260	cPAHs + naph. by 8270	Total lead by 6020	RCRA 8 Metals by 6020	Notes
T35W01-SS-8.0	01 A-F	1/5/23	1140	S	5	⊗	○	⊗	X				○	⊗	○		4 hr HCID; 24 hr follow ups
T35W02-SS-8.0	02	1/5/23	1440	S	5	⊗	○	⊗	X				○	⊗	○		↓
PILED9-SS-3.0	03	1/5/23	1400	S	5	X	X	X			X					X	48 hr TAT
PILE10-SS-0.5	04	1/5/23	1410	S	5	X	X	X			X					X	↓

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Amanda Bixby	Amanda Bixby	MFA	1/5/23	1600
Received by:	ANH PHAN	FSB	01/06/23	08:50
Relinquished by:				
Received by:		Samples received at 3 °C		

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

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

February 1, 2023

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

Dear Ms Bixby:

Included are the amended results from the testing of material submitted on January 6, 2023 from the Mt Vernon Library Commons M1472.02.002, F&BI 301058 project. The case narrative was expanded.

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
MFA0112R.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

January 12, 2023

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 January 6, 2023 from the Mt Vernon Library Commons M1472.02.002, F&BI 301058 project. There are 19 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
MFA0112R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on January 6, 2023 by Friedman & Bruya, Inc. from the Maul Foster Alongi Mt Vernon Library Commons M1472.02.002, F&BI 301058 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Maul Foster Alongi
301058 -01	T3SW01-SS-8.0
301058 -02	T3SW02-SS-8.0
301058 -03	Pile09-SS-3.0
301058 -04	Pile10-SS-0.5

The NWTPH-Dx chromatograms were reviewed to determine the possible presence of gasoline. A chromatographic pattern indicative of a low boiling product, such as gasoline, was not observed.

All quality control requirements were acceptable.

Date of Report: 01/12/23
Date Received: 01/06/23
Project: Mt Vernon Library Commons M1472.02.002, F&BI 301058
Date Extracted: 01/06/23
Date Analyzed: 01/06/23

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

Sample ID Laboratory ID	% Moisture
T3SW01-SS-8.0 301058-01	26
T3SW02-SS-8.0 301058-02	22
Pile09-SS-3.0 301058-03	11
Pile10-SS-0.5 301058-04	11

Date of Report: 01/12/23
Date Received: 01/06/23
Project: Mt Vernon Library Commons M1472.02.002, F&BI 301058
Date Extracted: 01/06/23
Date Analyzed: 01/06/23

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)
T3SW01-SS-8.0 301058-01	ND	ND	ND	102
T3SW02-SS-8.0 301058-02	ND	ND	ND	101
Method Blank 03-113 MB2	ND	ND	ND	101

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

Date of Report: 01/12/23
Date Received: 01/06/23
Project: Mt Vernon Library Commons M1472.02.002, F&BI 301058
Date Extracted: 01/09/23
Date Analyzed: 01/09/23

**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	Toluene	Ethyl Benzene	Total Xylenes	Surrogate (% Recovery) (Limit 50-132)
T3SW01-SS-8.0 301058-01	<0.02	<0.02	<0.02	<0.06	91
T3SW02-SS-8.0 301058-02	<0.02	<0.02	<0.02	<0.06	89
Method Blank 03-0013 MB	<0.02	<0.02	<0.02	<0.06	90

Date of Report: 01/12/23
Date Received: 01/06/23
Project: Mt Vernon Library Commons M1472.02.002, F&BI 301058
Date Extracted: 01/09/23
Date Analyzed: 01/09/23

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING 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)
Pile09-SS-3.0 301058-03	<0.02	<0.02	<0.02	<0.06	59	123
Pile10-SS-0.5 301058-04	<0.02	<0.02	1.9	2.7	830	ip
Method Blank 03-0013 MB	<0.02	<0.02	<0.02	<0.06	<5	90

Date of Report: 01/12/23
Date Received: 01/06/23
Project: Mt Vernon Library Commons M1472.02.002, F&BI 301058
Date Extracted: 01/06/23
Date Analyzed: 01/06/23

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)
T3SW01-SS-8.0 301058-01	<50	<250	104
T3SW02-SS-8.0 301058-02	<50	<250	104
Pile09-SS-3.0 301058-03	190	<250	110
Pile10-SS-0.5 301058-04	22,000	480 x	ip
Method Blank 03-116 MB2	<50	<250	100

Analysis For Total Metals By EPA Method 6020B

Client ID:	Pile09-SS-3.0	Client:	Maul Foster Alongi
Date Received:	01/06/23	Project:	M1472.02.002, F&BI 301058
Date Extracted:	01/06/23	Lab ID:	301058-03
Date Analyzed:	01/06/23	Data File:	301058-03.120
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Barium	10.7
Cadmium	<1
Chromium	6.01
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	Pile10-SS-0.5	Client:	Maul Foster Alongi
Date Received:	01/06/23	Project:	M1472.02.002, F&BI 301058
Date Extracted:	01/06/23	Lab ID:	301058-04
Date Analyzed:	01/06/23	Data File:	301058-04.102
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.48
Barium	34.6
Cadmium	<1
Chromium	13.2
Lead	2.46
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Maul Foster Alongi
Date Received:	NA	Project:	M1472.02.002, F&BI 301058
Date Extracted:	01/06/23	Lab ID:	I3-11 mb
Date Analyzed:	01/06/23	Data File:	I3-11 mb.097
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 Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	T3SW01-SS-8.0	Client:	Maul Foster Alongi
Date Received:	01/06/23	Project:	M1472.02.002, F&BI 301058
Date Extracted:	01/06/23	Lab ID:	301058-01 1/5
Date Analyzed:	01/06/23	Data File:	010611.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Terphenyl-d14	90	31	167

Compounds:	Concentration mg/kg (ppm)
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:	T3SW02-SS-8.0	Client:	Maul Foster Alongi
Date Received:	01/06/23	Project:	M1472.02.002, F&BI 301058
Date Extracted:	01/06/23	Lab ID:	301058-02 1/5
Date Analyzed:	01/06/23	Data File:	010612.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Terphenyl-d14	95	31	167

Compounds:	Concentration mg/kg (ppm)
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:	Pile09-SS-3.0	Client:	Maul Foster Alongi
Date Received:	01/06/23	Project:	M1472.02.002, F&BI 301058
Date Extracted:	01/06/23	Lab ID:	301058-03 1/5
Date Analyzed:	01/06/23	Data File:	010609.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Terphenyl-d14	90	31	167

Compounds:	Concentration mg/kg (ppm)
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:	Pile10-SS-0.5	Client:	Maul Foster Alongi
Date Received:	01/06/23	Project:	M1472.02.002, F&BI 301058
Date Extracted:	01/06/23	Lab ID:	301058-04 1/25
Date Analyzed:	01/06/23	Data File:	010610.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Terphenyl-d14	89 d	31	167

Compounds:	Concentration mg/kg (ppm)
Benz(a)anthracene	<0.05
Chrysene	0.060
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:	Method Blank	Client:	Maul Foster Alongi
Date Received:	Not Applicable	Project:	M1472.02.002, F&BI 301058
Date Extracted:	01/06/23	Lab ID:	03-115 mb2 1/5
Date Analyzed:	01/06/23	Data File:	010606.D
Matrix:	Soil	Instrument:	GCMS12
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Terphenyl-d14	107	31	167

Compounds:	Concentration mg/kg (ppm)
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: 01/12/23
Date Received: 01/06/23
Project: Mt Vernon Library Commons M1472.02.002, F&BI 301058

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: 301058-01 (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	94	66-121
Toluene	mg/kg (ppm)	0.5	94	72-128
Ethylbenzene	mg/kg (ppm)	0.5	98	69-132
Xylenes	mg/kg (ppm)	1.5	100	69-131
Gasoline	mg/kg (ppm)	20	95	61-153

Date of Report: 01/12/23
Date Received: 01/06/23
Project: Mt Vernon Library Commons M1472.02.002, F&BI 301058

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

Laboratory Code: 301046-01 (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	10,000	91 b	129 b	70-130	34 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	114	70-130

Date of Report: 01/12/23
Date Received: 01/06/23
Project: Mt Vernon Library Commons M1472.02.002, F&BI 301058

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

Laboratory Code: 301058-03 (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	<1	92	90	75-125	2
Barium	mg/kg (ppm)	50	9.55	107	105	75-125	2
Cadmium	mg/kg (ppm)	10	<1	99	98	75-125	1
Chromium	mg/kg (ppm)	50	5.35	99	97	75-125	2
Lead	mg/kg (ppm)	50	<1	102	99	75-125	3
Mercury	mg/kg (ppm	5	<1	101	87	75-125	15
Selenium	mg/kg (ppm)	5	<1	95	92	75-125	3
Silver	mg/kg (ppm)	10	<1	98	97	75-125	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	89	80-120
Barium	mg/kg (ppm)	50	97	80-120
Cadmium	mg/kg (ppm)	10	95	80-120
Chromium	mg/kg (ppm)	50	104	80-120
Lead	mg/kg (ppm)	50	102	80-120
Mercury	mg/kg (ppm)	5	102	80-120
Selenium	mg/kg (ppm)	5	93	80-120
Silver	mg/kg (ppm)	10	98	80-120

Date of Report: 01/12/23
Date Received: 01/06/23
Project: Mt Vernon Library Commons M1472.02.002, F&BI 301058

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

Laboratory Code: 301034-03 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Benz(a)anthracene	mg/kg (ppm)	0.83	<0.01	94	93	50-150	1
Chrysene	mg/kg (ppm)	0.83	<0.01	94	94	50-150	0
Benzo(a)pyrene	mg/kg (ppm)	0.83	<0.01	88	91	50-150	3
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	<0.01	84	88	50-150	5
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	<0.01	84	88	50-150	5
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	<0.01	101	94	41-134	7
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	<0.01	95	90	44-130	5

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benz(a)anthracene	mg/kg (ppm)	0.83	98	70-130
Chrysene	mg/kg (ppm)	0.83	105	70-130
Benzo(a)pyrene	mg/kg (ppm)	0.83	94	68-120
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	93	69-125
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	94	70-130
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	91	67-129
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	89	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.

SAMPLE CHAIN OF CUSTODY

01/06/23 v5.A1 / A1

Page # 1 of 1

301058

Report To Amanda Bixby

Company Maul Foster & Alongi

Address 1329 N State St, ste 301

City, State, ZIP Bellingham, WA 98225

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

SAMPLERS (*signature*) Amanda Bixby

PROJECT NAME: Mount Vernon Library Commons

PO #: M1472.02.002

REMARKS:

Project specific RLs? - Yes / No

INVOICE TO: accounting@maulfoster.com

TURNAROUND TIME

☐ Standard turnaround

☒ RUSH See notes

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	cPAHs EPA 8270	PCBs EPA 8082	n-hexane, EDB, EDC, MTBE by 8260	cPAHs + naph. by 8270	Total lead by 6020	RCRA 8 Metals by 6020	Notes
T35W01-SS-8.0	01 A-F	1/5/23	1140	S	5	⊗	○	⊗	X				○	⊗	○		4 hr HCID; 24 hr follow ups
T35W02-SS-8.0	02	1/5/23	1440	S	5	⊗	○	⊗	X				○	⊗	○		↓
PILED9-SS-3.0	03	1/5/23	1400	S	5	X	X	X			X					X	48 hr TAT
PILE10-SS-0.5	04	1/5/23	1410	S	5	X	X	X			X					X	↓

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Amanda Bixby	Amanda Bixby	MFA	1/5/23	1600
Received by:	ANH PHAN	FSB	01/06/23	08:50
Relinquished by:				
Received by:		Samples received at 3 °C		

Friedman & Bruya, Inc.

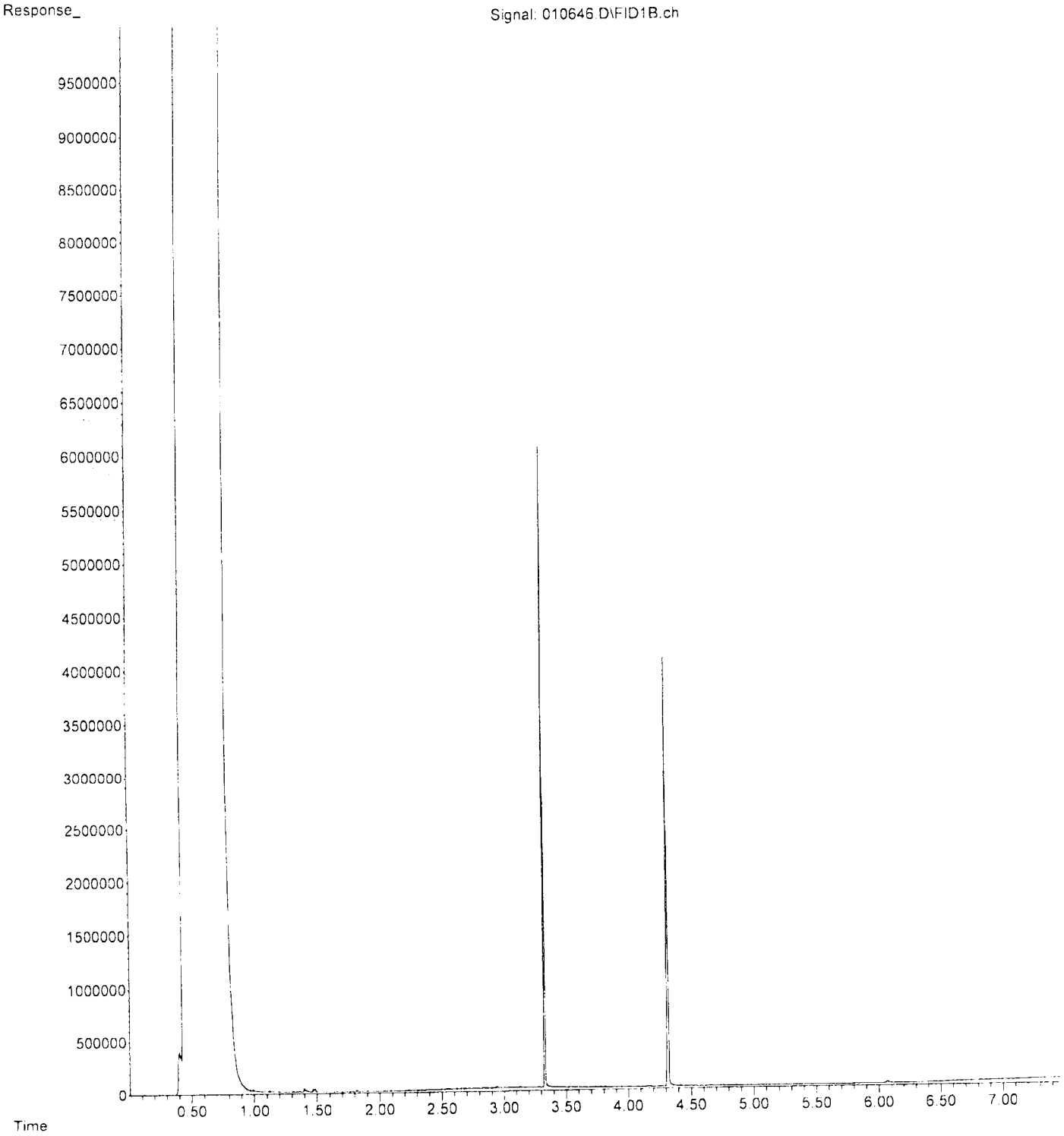
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

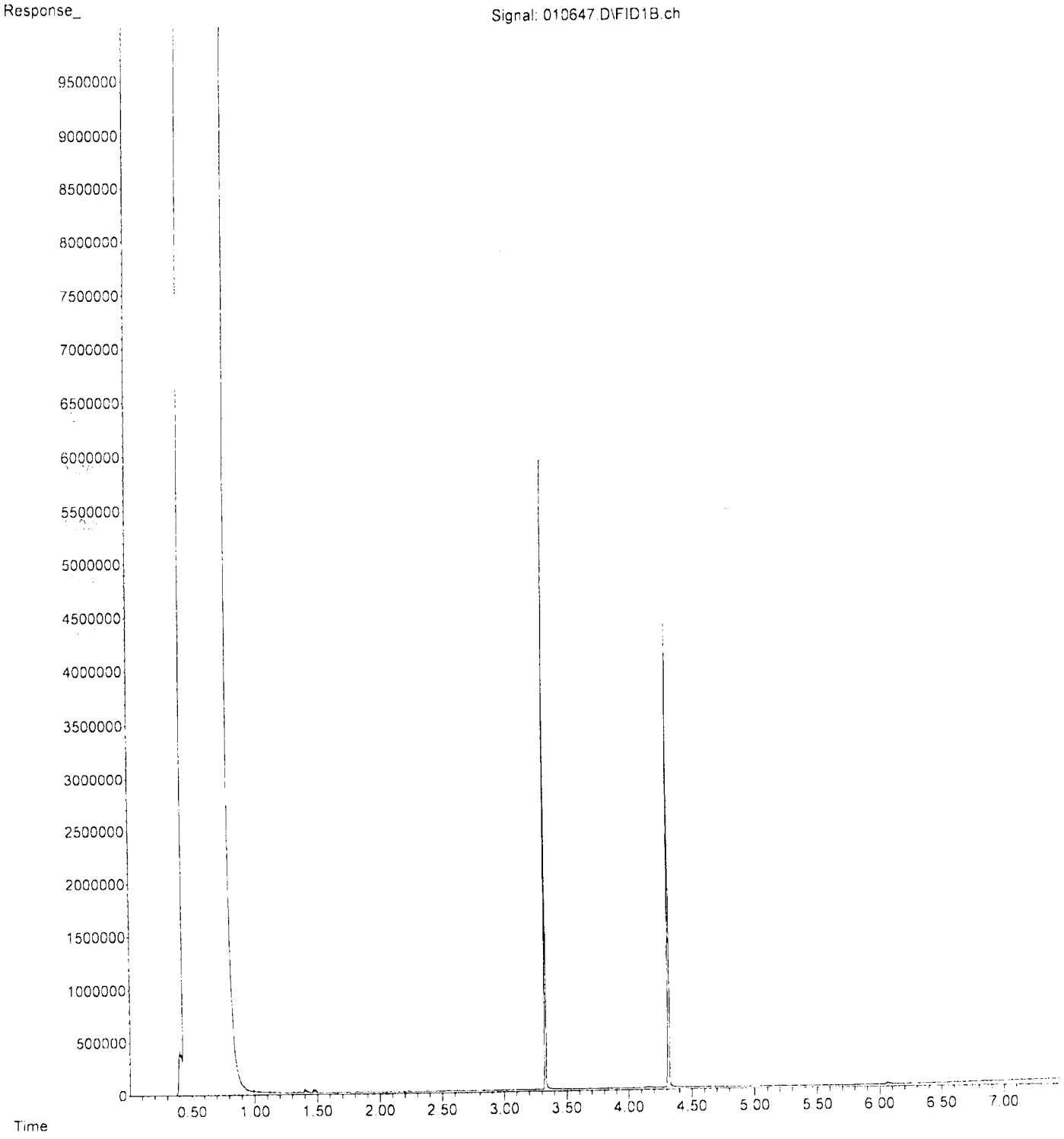
File :P:\Proc_GC14\01-06-23\010646.D
Operator : TL
Acquired : 06 Jan 2023 06:11 pm using AcqMethod DX.M
Instrument : GC14
Sample Name: 301058-01
Misc Info :
Vial Number: 42

ERR



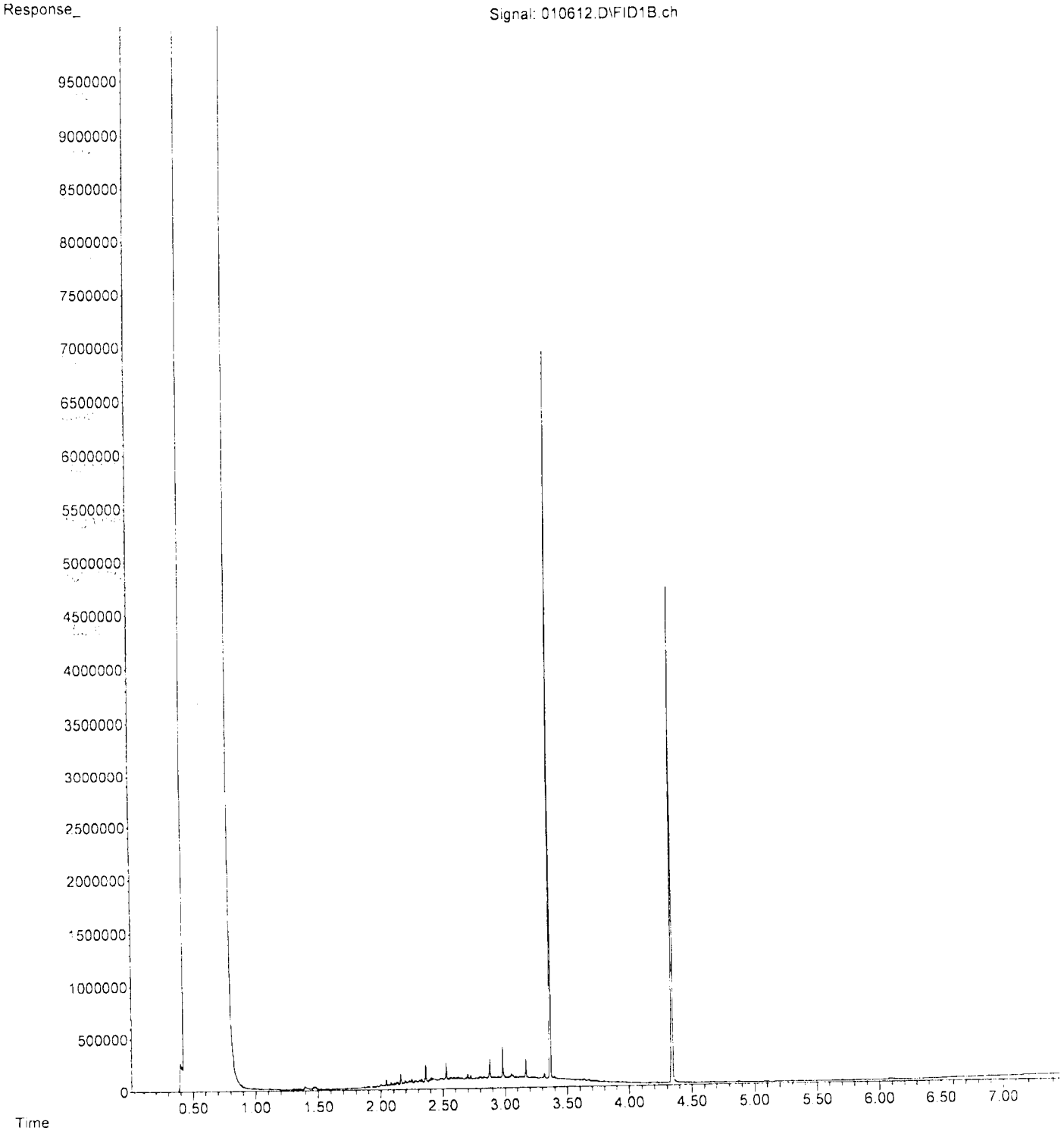
File :P:\Proc_GC14\01-06-23\010647.D
Operator : TL
Acquired : 06 Jan 2023 06:23 pm using AcqMethod DX.M
Instrument : GC14
Sample Name: 301058-02
Misc Info :
Vial Number: 43

ERR



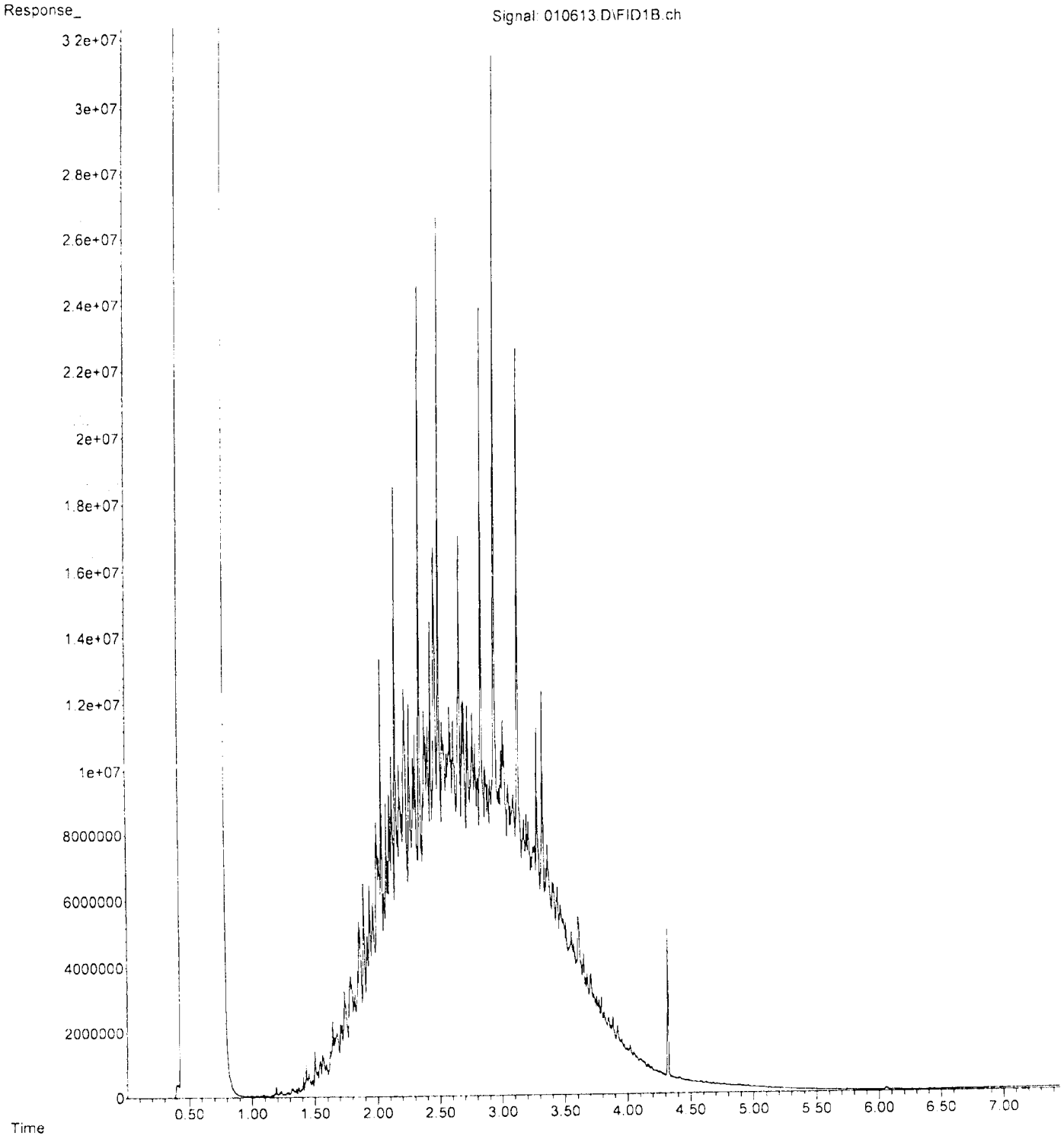
File : P:\Proc_GC14\01-06-23\010612.D
Operator : TL
Acquired : 06 Jan 2023 10:01 am using AcqMethod DX.M
Instrument : GC14
Sample Name: 301058-03
Misc Info :
Vial Number: 14

ERR



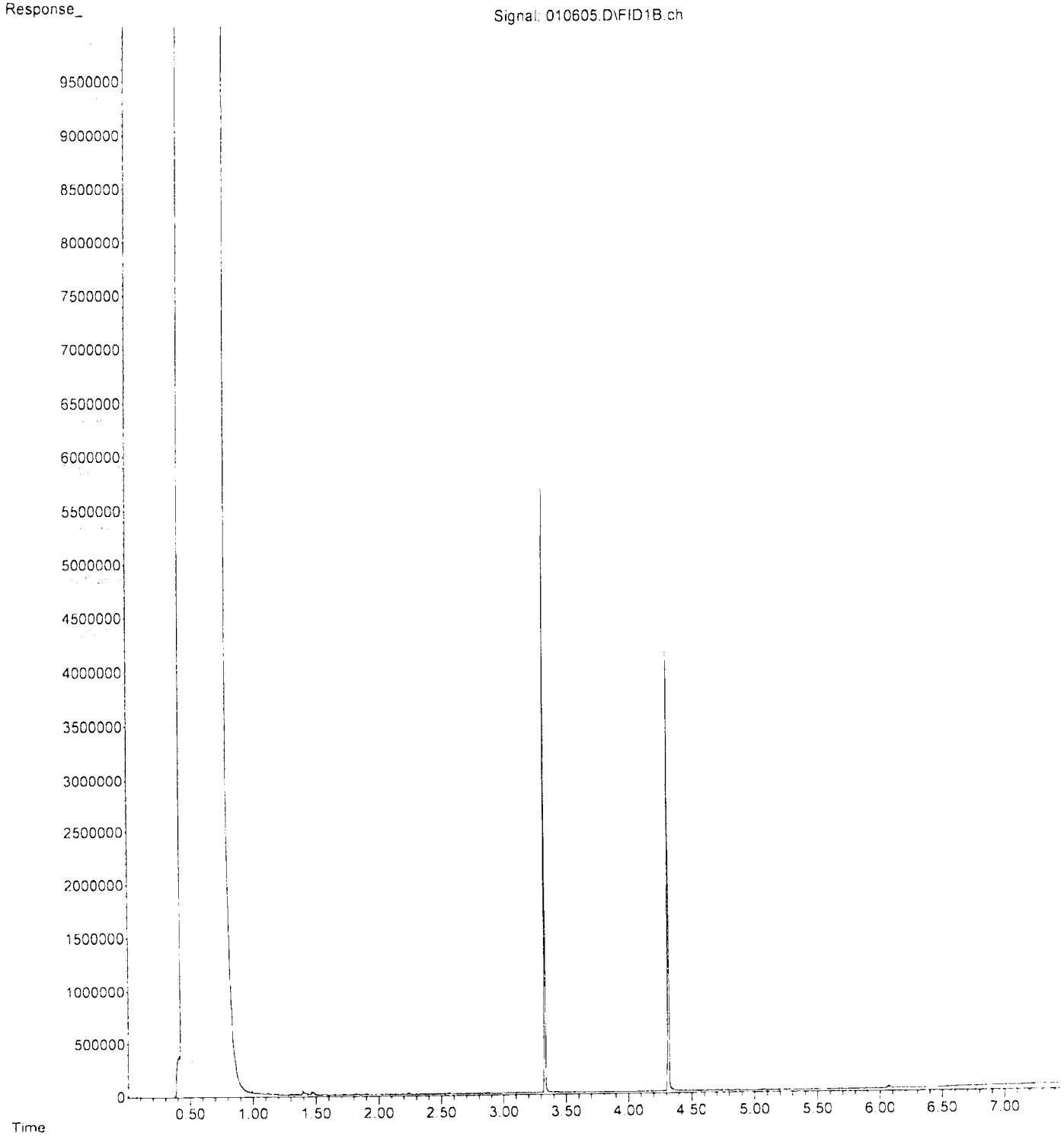
File :P:\Proc_GC14\01-06-23\010613.D
Operator : TL
Acquired : 06 Jan 2023 10:12 am using AcqMethod DX.M
Instrument : GC14
Sample Name: 301058-04
Misc Info :
Vial Number: 15

ERR

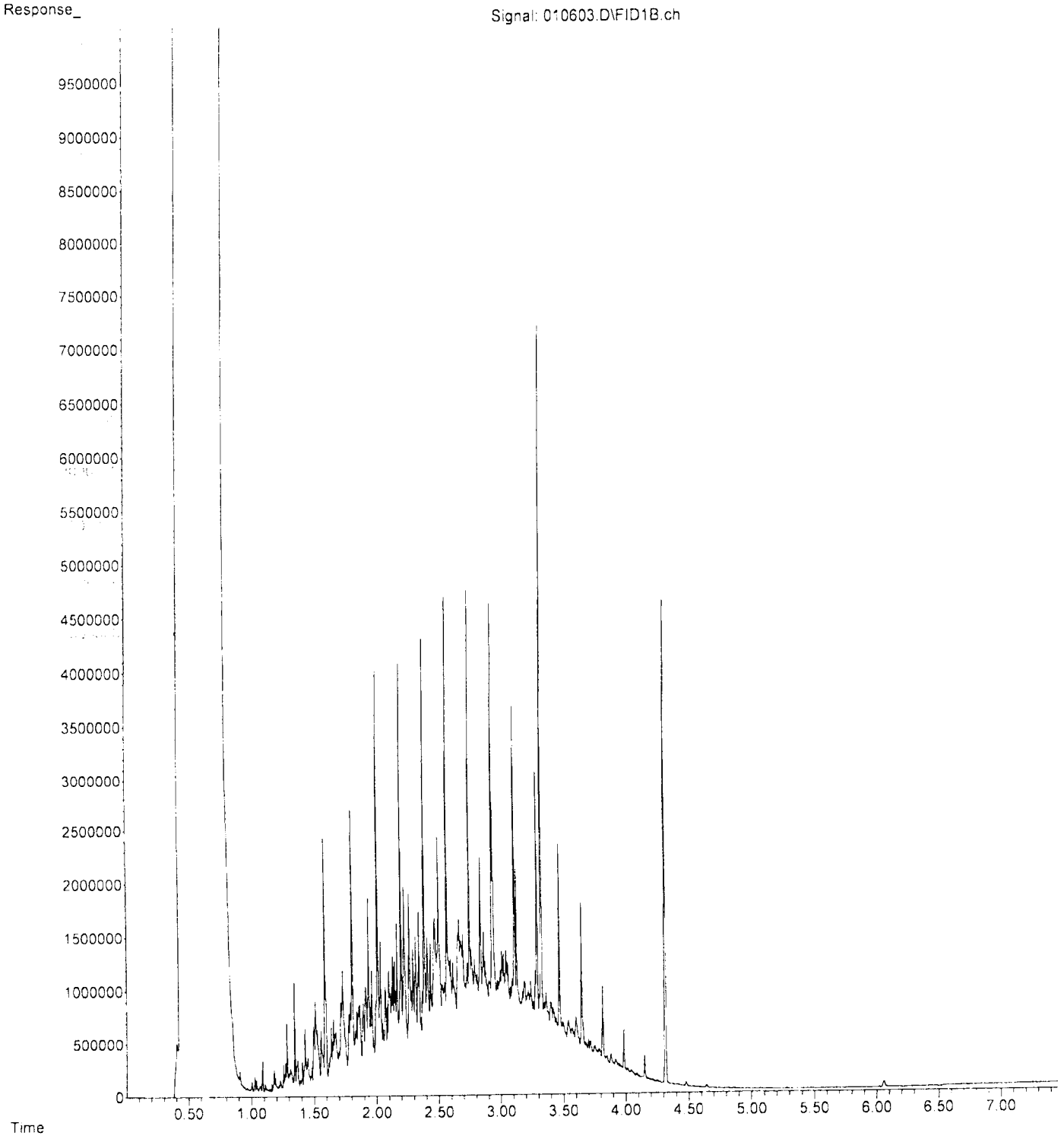


File : P:\Proc_GC14\01-06-23\010605.D
Operator : TL
Acquired : 06 Jan 2023 08:19 am using AcqMethod DX.M
Instrument : GC14
Sample Name: 03-116 mb2
Misc Info :
Vial Number: 7

ERR



File : P:\Proc_GC14\01-06-23\010603.D
Operator : TL
Acquired : 06 Jan 2023 07:43 am using AcqMethod DX.M
Instrument : GC14
Sample Name: 500 Dx 67-143B
Misc Info : ERR
Vial Number: 3



ATTACHMENT H

DATA VALIDATION MEMORANDUM

DATA QUALITY ASSURANCE/QUALITY CONTROL REVIEW

PROJECT NO. M1472.02.002 | FEBRUARY 2, 2023 | MOUNT VERNON LIBRARY COMMONS

Maul Foster & Alongi, Inc. (MFA), conducted an independent Stage 2A review of the quality of analytical results for groundwater, soil, stockpile soil, and associated quality control samples collected in January 2023 at 208 W Kincaid Street, Mount Vernon, Washington.

Friedman & Bruya, Inc. (FBI), performed the analyses. MFA reviewed FBI report numbers 301034-amended, 301058-amended, 301058-additional, 301083, 301102, 301138, 301138-additional_1, and 301138-additional_2. The analyses performed and the samples analyzed are listed in the following tables. Not all analyses were performed on every sample.

Analysis	References
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
Total metals	EPA 6020B
Semivolatile organic compounds	EPA 8270E
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 301034-amended			
T3BASE01-SS-9.0	T3DUP-SS-9.0	PILE06-SS-1.0	PILE07-SS-2.0
PILE08-SS-1.5	TRIP BLANK 01	--	--
Reports 301058-amended/301058-additional			
T3SW01-SS-8.0	T3SW02-SS-8.0	Pile09-SS-3.0	Pile10-SS-0.5
Report 301083			
T3SW03-SS-8.0	T3SW04-SS-8.0	T3SW05-SS-8.0	--
Report 301102			
T3SW06-SS-8.0	T3BASE02-SS-9.0	T3SW07-SS-8.0	T3SW08-SS-8.0
Reports 301138/301138-additional_1/301138-additional_2			
TRIP BLANK 02	B01-GW-9.5	BDUP-GW-9.5	B02-GW-10.0
B03-GW-10.0	--	--	--

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 2022).

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.
- J+ = result is estimated, but the result may be biased high.
- U = result is non-detect at the method reporting limit (MRL).

Method NWTPH-HCID is a qualitative method. Hydrocarbon identification results are reported by FBI as either detect or non-detect. FBI reported laboratory method blanks but did not report other batch quality control results for NWTPH-HCID. Qualification by the reviewer was not required.

In report 301058-amended, FBI noted that the NWTPH-Dx motor-oil-range hydrocarbons result for sample Pile10-SS-0.5 had a chromatographic pattern that did not resemble the fuel standard used for quantitation. Results are reported as motor-oil-range hydrocarbons rather than specific fuel products; thus, qualification by the reviewer was not required. The associated result is qualified in the Surrogate Recovery Results section below.

In report 301138, FBI noted that the NWTPH-Dx diesel-range hydrocarbons results for samples B01-GW-9.5, BDUP-GW-9.5, and B02-GW-10.0 had chromatographic patterns that did not resemble the fuel standard used for quantitation. Results are reported as diesel-range hydrocarbons rather than specific fuel products; thus, qualification by the reviewer was not required.

According to the case narratives accompanying reports 301034-amended and 301058-amended, the NWTPH-Dx chromatograms did not show indication of gasoline products. The reviewer confirmed with the laboratory that the NWTPH-Gx gasoline-range hydrocarbons results for samples PILE07-SS-2.0, PILE08-SS-1.5, Pile09-SS-3.0, and Pile10-SS-0.5 were likely impacted by overlap from diesel-range hydrocarbons. The reviewer qualified associated sample results with J+, as shown in the following table. Some results were also qualified based on surrogate issues in the Surrogate Recovery Results section.

Report	Sample	Analyte	Original Result (mg/kg)	Qualified Result (mg/kg)
301034	PILE07-SS-2.0	Gasoline-range hydrocarbons	210	210 J+[a]
	PILE08-SS-1.5		150	150 J+
301058	Pile09-SS-3.0		59	59 J+
	Pile10-SS-0.5		830	830 J+[a]

Notes
J+ = result is estimated, but the result may be biased high.
mg/kg = milligrams per kilogram.
[a]Final qualification based on chromatographic overlap and surrogate recovery.

SAMPLE CONDITIONS

Sample Custody

Sample custody was appropriately documented on the chain-of-custody (COC) forms accompanying the reports. Gaps in custody for all sample delivery groups are due to shipment via a third-party shipping service.

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., 301034-01 1/50 indicates a dilution factor of 50).

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.

Trip blanks (TRIP BLANK 01 in report 301034-amended, and TRIP BLANK 02 in report 301138) were submitted for EPA Method 8021B analysis. TRIP BLANK 02 was also analyzed by NWTPH-Gx in report 301138-additional_2.

The trip blanks were non-detect to MRLs for all target analytes.

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.

Where LCSD were not reported, laboratory precision was evaluated using laboratory duplicate results or matrix spike (MS) and matrix spike duplicate (MSD) results. The LCS and remaining LCSD were prepared and analyzed at the required frequency.

According to report 301138, the EPA Method 8270E LCS result for chrysene was above the upper percent recovery acceptance limit of 119 percent, at 128 percent. All associated sample results were non-detect and thus did not require qualification.

All remaining 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.

Where laboratory duplicate results were not reported, laboratory precision was evaluated using LCS and LCSD or MS and MSD results. All 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.

Where MS and MSD were not reported, laboratory precision and accuracy were evaluated using LCS and laboratory duplicate results. All remaining MS and MSD samples were prepared and analyzed at the required frequency.

When MS and MSD were prepared from samples with high concentrations of target analytes, associated MS and/or MSD percent recovery and/or RPD control limit exceedances did not require qualification because spike concentrations could not be accurately quantified. High concentrations of target analytes are defined as four times the spike amount for all analyses.

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 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.

The laboratory appropriately documented and qualified surrogate outliers. When surrogate percent recoveries were outside of acceptance limits because of dilutions necessary to quantify high concentrations of target analytes, qualification by the reviewer was not required. The reviewer confirmed that batch quality control results for samples with surrogate outliers were within acceptance limits.

According to report 301034-amended, the NWTPH-HCID surrogate recoveries for samples T3BASE01-SS-9.0 and T3DUP-SS-9.0 were outside percent recovery acceptance limits due to matrix effects. The reviewer confirmed with the laboratory that the surrogates recovered high. NWTPH-HCID is a qualitative analysis, and the results did not require qualification. The reviewer confirmed that the associated NWTPH-Dx follow-up analyses for these samples had passing surrogate recoveries.

According to report 301034-amended, the EPA Method 8021B and NWTPH-Gx surrogate recovery for sample PILE07-SS-2.0 was outside percent recovery acceptance limits due to matrix effects. The reviewer confirmed with the laboratory that the surrogate was above the

upper percent recovery acceptance limit of 132 percent, at 134 percent. The reviewer qualified the associated detected sample results with J+, as shown in the following table. Associated non-detect sample results did not require qualification. The gasoline-range hydrocarbons result was also qualified in the Data Qualification section above due to overlap from diesel-range hydrocarbons.

Report	Sample	Analyte	Original Result (mg/kg)	Qualified Result (mg/kg)
301034-amended	PILE07-SS-2.0	Toluene	0.11	0.11 J+
		Ethylbenzene	1.7	1.7 J+
		Xylenes (total)	2.2	2.2 J+
		Gasoline-range hydrocarbons	210	210 J+[a]

Notes
J+ = result is estimated, but the result may be biased high.
Mg/kg = milligrams per kilogram.
[a]Final qualification based on chromatographic overlap and surrogate recovery.

According to report 301058-amended, the EPA Method 8021B and NWTPH-Gx surrogate recovery for sample Pile10-SS-0.5 was outside percent recovery acceptance limits due to matrix effects. The reviewer confirmed with the laboratory that the surrogate was above the upper percent recovery acceptance limit of 150 percent, at 224 percent. The reviewer qualified the associated detected sample results with J+, as shown in the following table. Associated non-detect sample results did not require qualification. The gasoline-range hydrocarbons result was also qualified in the Data Qualification section above due to overlap from diesel-range hydrocarbons.

Report	Sample	Analyte	Original Result (mg/kg)	Qualified Result (mg/kg)
301058-amended	Pile10-SS-0.5	Ethylbenzene	1.9	1.9 J+
		Xylenes (total)	2.7	2.7 J+
		Gasoline-range hydrocarbons	830	830 J+[a]

Notes
J+ = result is estimated, but the result may be biased high.
mg/kg = milligrams per kilogram.
[a]Final qualification based on chromatographic overlap and surrogate recovery.

According to report 301058-amended, the NWTPH-Dx surrogate recovery for sample Pile10-SS-0.5 was outside percent recovery acceptance limits due to matrix effects. The reviewer confirmed with the laboratory that the surrogate was above the upper percent recovery acceptance limit of 150 percent, at 155 percent. The reviewer qualified the associated sample results with J+, as shown in the following table.

Report	Sample	Analyte	Original Result (mg/kg)	Qualified Result (mg/kg)
301058-amended	Pile10-SS-0.5	Diesel-range hydrocarbons	22,000	22,000 J+
		Motor-oil-range hydrocarbons	480	480 J+
Notes J+ = result is estimated, but the result may be biased high. mg/kg = milligrams per kilogram.				

All remaining surrogate results were within percent recovery acceptance limits.

FIELD DUPLICATE RESULTS

Field duplicate samples measure both field and laboratory precision. The following field duplicate and parent sample pairs were submitted for analysis:

Report	Parent Sample	Field Duplicate Sample
301034-amended	T3BASE01-SS-9.0	T3DUP-SS-9.0
301138/301138-additional_1/ 301138-additional_2	B01-GW-9.5	BDUP-GW-9.5

MFA uses acceptance criteria of 100 percent RPD for results that are less than five times the MRL or 50 percent RPD for results that are greater than five times the MRL. RPD was not evaluated when both results in the sample pair were non-detect. When one result in the sample pair was non-detect, RPD was evaluated using the MRL of the non-detect result. Field duplicate results that exceeded the acceptance criteria were qualified by the reviewer with J, as shown in the following table.

Report	Sample	Analyte	RPD (%)	Original Result (mg/kg)	Qualified Result (mg/kg)
301034-amended	T3BASE01-SS-9.0	Naphthalene	62	2.9	2.9 J
	T3DUP-SS-9.0			5.5	5.5 J
Notes J = result is estimated. mg/kg = milligrams per kilogram. RPD = relative percent difference.					

All remaining field duplicate results met the RPD acceptance criteria.

DATA PACKAGE

The data packages were reviewed for transcription errors, omissions, and anomalies.

The COC forms accompanying reports 301034-amended, 301058-amended, 301058-additional, 301083, and 301102 have notations by FBI that marked some samples for analysis

that were initially submitted on hold. The reviewer confirmed that these analyses were requested by MFA project staff after sample receipt.

Reports 301058-additional and 301138-additional_1 include 1-methylnaphthalene, 2-methylnaphthalene, and naphthalene results by EPA Method 8270E for samples T3SW01-SS-8.0, T3SW02-SS-8.0, B01-GW-9.5, BDUP-GW-9.5, B02-GW-10.0, and B03-GW-10.0. These analytes were requested on the COC forms on hold, or the analytes were initiated after sample receipt, but results were missing from initial reports 301058 and 301138. FBI also reported these analytes for samples Pile09-SS-3.0 and Pile10-SS-0.5, which had not been requested. FBI released these results in separate reports due to laboratory system limitations.

On the COC form accompanying report 301034-amended, samples T3BASE01-SS-9.0 and T3DUP-SS-9.0 were submitted on hold for benzene, toluene, ethylbenzene, and total xylenes by EPA Method 8021B. Analysis was initiated after sample receipt by MFA project staff. FBI reported these analytes by EPA Method 8260D rather than 8021B. The reviewer alerted the MFA project manager and confirmed that screening levels had been met with EPA Method 8260D. MFA did not request reanalysis of the samples by EPA Method 8021B.

Report 301138-additional_2 includes NWTPH-Gx results for samples TRIP BLANK 02, B01-GW-9.5, BDUP-GW-9.5, B02-GW-10.0, and B03-GW-10.0. The reviewer confirmed that the MFA project manager requested this additional analysis after the final report was received. FBI added a notation to the COC form to indicate this analysis. FBI released these results in a separate report due to laboratory system limitations.

FBI released amendments for reports 301034 and 301058 to update the case narratives accompanying the reports. The laboratory also included NWTPH-Dx chromatograms at the end of the reports. The file names are appended with "amended" to indicate the revisions.

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).

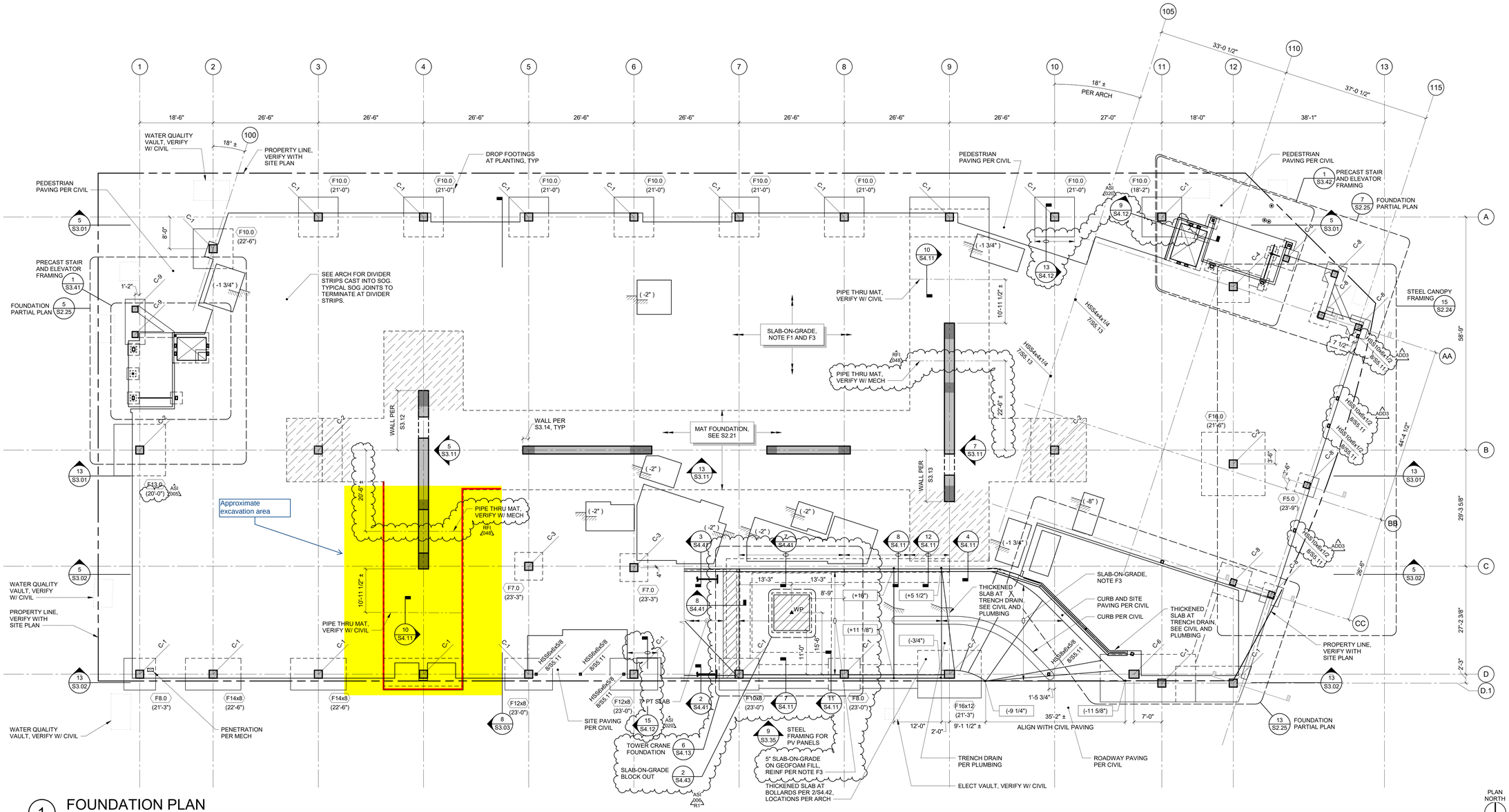
EPA. 2020a. *National Functional Guidelines for Inorganic Superfund Methods Data Review.* EPA 542-R-20-006. U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation: Washington, DC. November.

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. 2022. *Quality Assurance Manual.* Rev. 18. Friedman & Bruya, Inc.: Seattle, WA. December 9.

ATTACHMENT I

FOUNDATION PLAN



1 FOUNDATION PLAN

3/32" = 1'-0"

FOOTING SCHEDULE

TYPE MARK	DIMENSIONS			REINFORCING	TYPE COMMENTS
	LENGTH	WIDTH	DEPTH		
F3.0	3'-0"	3'-0"	1'-0"	(3) #5 EW BOT	STD HOOK EA END
F5.0	5'-0"	5'-0"	1'-3"	(5) #6 EW BOT	-
F6.0	6'-0"	6'-0"	1'-6"	(5) #7 EW BOT	-
F7.0	7'-0"	7'-0"	1'-9"	(6) #7 EW BOT	-
F8.0	8'-0"	8'-0"	2'-0"	(6) #7 EW BOT (GR 80)	7/S4.01
F10.0	10'-0"	10'-0"	2'-6"	(8) #8 EW BOT (GR 80)	7/S4.01
F13.0	13'-0"	13'-0"	3'-0"	(10) #9 EW BOT (GR 80)	7/S4.01
F16.0	16'-0"	16'-0"	3'-6"	(14) #9 EW BOT (GR 80)	7/S4.01
F10x8	8'-0"	10'-0"	2'-0"	(6) #7 LNGT BOT (GR 80) (8) #7 TRANS BOT (GR 80)	7/S4.01
F12x8	8'-0"	12'-0"	2'-0"	(8) #7 LNGT BOT (GR 80) (10) #7 TRANS BOT (GR 80)	7/S4.01
F14x8	8'-0"	14'-0"	2'-6"	(8) #8 LNGT BOT (GR 80) (12) #8 TRANS BOT (GR 80)	7/S4.01
F16x12	12'-0"	16'-0"	2'-9"	(12) #8 LNGT BOT (GR 80) (13) #8 TRANS BOT (GR 80)	7/S4.01
F24x12	12'-0"	24'-0"	3'-6"	(12) #10 LNGT BOT (GR 80) (18) #10 TRANS BOT (GR 80)	7/S4.01 RFI 007

INDICATES FOOTING TYPE, SEE 8/S4.02

F10.0 (99'-0") — INDICATES BOTTOM OF FOOTING ELEVATION

CONCRETE COLUMN SCHEDULE

TYPE MARK	C-1	C-2	C-3	C-4	C-5	C-6	C-7	C-8	C-9
LEVEL 4									
LEVEL 3									
LEVEL 2	24x24 (4) #10 (8) #8 #5 @ 6" OC	24x24 (12) #10 #5 @ 4" OC #5 @ 6" OC		24x24 (4) #10 (8) #8 #5 @ 4" OC #5 @ 6" OC	24x24 (4) #10 (8) #8 #5 @ 6" OC		24x24 (4) #10 (8) #8 #5 @ 6" OC		18x18 (4) #10 (4) #8 #5 @ 4.5" OC #5 @ 6" OC
LEVEL 1			24x24 (4) #10 (8) #8 #5 @ 6" OC		TRANSFER BEAM BELOW	30x24 (4) #10 (10) #8 #5 @ 6" OC	30x24 (4) #10 (10) #8 #5 @ 6" OC	18x18 (4) #10 (4) #8 #5 @ 4.5" OC #5 @ 6" OC	

NOTES:
1. SEE TYPICAL CONCRETE COLUMN ELEVATION 12/S4.21 FOR ADDITIONAL INFORMATION.
2. SEE S4.21 FOR COLUMN SECTION DETAILS.
3. WHERE ZONE 2 TIE SIZE AND SPACING IS NOT SPECIFIED, USE ZONE 1 OVER ENTIRE HEIGHT.

KEY:

COL SIZE
VERT REINF
ZONE 1 TIES
ZONE 2 TIES

GENERAL PLAN NOTES:

G1. REFERENCE DRAWINGS:
- S0.0X - STRUCTURAL NOTES
- S0.11 - LOAD MAPS
- S2.21 - MAT FOUNDATION PARTIAL PLAN
- S2.3X - EXTERIOR CFS FRAMING PLANS
- S3.11 - SHEAR WALL ELEVATIONS
- S4.0X - TYPICAL CONCRETE DETAILS
- S5.0X - TYPICAL STEEL DETAILS
- S6.01 - TYPICAL MASONRY VENEER DETAILS
- ADD3 A2.0X - SLAB EDGE PLAN

G2. C-1 INDICATES COLUMN ABOVE. SEE CONCRETE COLUMN SCHEDULE ON THIS SHEET

FOUNDATION PLAN NOTES:

F1. TOP OF SLAB-ON-GRADE SHALL BE 26'-0" THIS LEVEL, UNO.

F2. (+X-X") INDICATES VERTICAL OFFSET OF TOP OF SLAB RELATIVE TO ELEVATION SPECIFIED IN NOTE F1. SLOPE LINEARLY BETWEEN ELEVATIONS SHOWN.

F3. SLAB-ON-GRADE SHALL BE 5" THICK WITH #4 @ 14" OC EW (RFI 007) GRADE 80 UNO. A BASE FOR SLAB-ON-GRADE SHALL CONSIST OF VAPOR RETARDER OVER RIGID INSULATION PER ARCH, AND 24" COMPACTED GRAVEL FILL (CAPILLARY BREAK) PER GEOTECHNICAL REPORT.

F4. PROVIDE 12" COMPACTED FILL BELOW FOUNDATIONS PER GEOTECHNICAL REPORT, VERIFY WITH DEFERRED DESIGN.

F5. PROVIDE RAMMED AGGREGATE PIERS (RAP) BELOW SLAB-ON-GRADE AND FOUNDATIONS PER DEFERRED DESIGN TO ACHIEVE ALLOWABLE BEARING PRESSURE PER SO.01. SEE 3/S4.02 FOR ADDITIONAL INFORMATION. REFER TO GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION. FOR BIDDING PURPOSES, ASSUME GROUND IMPROVEMENTS EXTEND A MINIMUM OF 45 FEET BELOW GRADE BELOW FOUNDATIONS, AND 25 FEET BELOW SLAB ON GRADE. THIS TO BE CONFIRMED BY RAP DESIGNER.

F6. INDICATES AREA OF IMPOVED SUBGRADE BELOW MAT FOUNDATION FOR INCREASED BEARING CAPACITY TO PERMIT MINIMUM 1/3 INCREASE (6667 PSF) FOR SEISMIC/WIND ALLOWABLE BEARING CAPACITY.

F7. DESIGN GROUNDWATER ELEVATION IS 22'-0" PER GEOTECH.

F8. PROVIDE ADDITIONAL REINFORCING AT FOOTINGS TO TIE FOUNDATIONS TO SLAB-ON-GRADE. SEE DETAIL 8/S4.02.

F9. INDICATES CLOSURE STRIP.

HKP architects
MOUNT VERNON
P: (360) 336-2155
204 West Montgomery Street
Mount Vernon, WA 98273
www.hkpa.com

kpff
1601 Fifth Avenue, Suite 1600
Seattle, WA 98101
206.622.5822
kpff.com

STATE OF WASHINGTON — LUYING ZHONG — 38038 — REGISTERED PROFESSIONAL ENGINEER — 7/21/22

Owner:
CITY OF MOUNT VERNON
910 CLEVELAND AVENUE
MOUNT VERNON, WA 98273

Project Title:
MOUNT VERNON LIBRARY COMMONS
2ND STREET & KINCAID
MOUNT VERNON, WA 98273

Sheet Contents:
FOUNDATION PLAN

Revisions:

Rev.	Date
ADD2	8/05/2022
ADD3	8/10/2022
ASI 005	9/30/2022
RFI 007	10/07/2022
ASI 006 R1	11/14/2022
RFI 048	12/05/2022
ASI 020	1/20/2023

Drawn By: JBB
Checked: SLR ADD2
Date: 7/22/2022
Job No.: 661
Sheet No.: S2.11