PHASE II ENVIRONMENTAL SITE ASSESSMENT NWYS PROPERTY 427 N 4TH STREET MOUNT VERNON, WASHINGTON

prepared for:

Northwest Youth Services 1020 N State Street Mount Vernon, Washington 98225

September 15, 2023



soil • water • air compliance solutions

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ERTS # 724299

Report made to kelly

\$\int(\text{204})594-0000.\$

16/23/2023

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Whatcom Environmental Services 228 East Champion Street #101 Bellingham, Washington 98225 (360) 752-9571

September 15, 2023

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LIST OF ACRONYMS

AST - Aboveground Storage Tank

ASTM - American Society for Testing and Materials

BGS - Below Ground Surface

BTEX - Benzene, Toluene, Ethylbenzene, Xylene

CSCSL - Confirmed and Suspected Contaminated Sites List

ERNS - Emergency Response Notification System

ESA - Environmental Site Assessment

HSL - Hazardous Sites List

LUST - Leaking Underground Storage Tank

MTBE - Methyl Tertiary Butyl Ether

MTCA - Model Toxics Control Act

NFA - No Further Action

PAH - Polycyclic Aromatic Hydrocarbons

PCB - Polychlorinated Biphenyl
PID - Photoionization Detector

RCRA - Resource Conservation and Recovery Act

REC - Recognized Environmental Condition

TPH - Total Petroleum HydrocarbonsUSDA - U.S. Department of Agriculture

USGS - U.S. Geological Survey

UST - Underground Storage Tank

VEC - Vapor Encroachment Condition
WAC - Washington Administrative Code

WCHD - Whatcom County Health Department

WSDNR - Washington State Department of Natural Resources

1.0 INTRODUCTION

A Phase II Environmental Site Assessment (ESA) was conducted to investigate the Northwest Youth Services property located at 427 N 4th Street in the City of Mount Vernon, Washington (Figure 1).

This Phase II ESA work was undertaken to investigate a Recognized Environmental Condition (REC) identified in a Phase I ESA dated January 6, 2022, titled Phase I Environmental Site Assessment, N 4th Street Property, 427 North 4th Street, Mount Vernon, Washington (Enviro Assessment, PC, 2022).

This report documents the results of the Phase II ESA site investigation conducted in general accordance with the scope and limitations of ASTM Designation E 1903-19. The main objective of completing a Phase II ESA is to assist the User to obtain sound, scientifically valid data concerning actual property conditions related to past uses of the site. The Phase II ESA process will provide the User with information to determine its choices of action in connection with the following objectives: (1) assess whether there has been a release of hazardous substances to soil or groundwater at the subject property, (2) provide information relevant to identifying, defining, and evaluating property conditions associated with target analytes that may pose risk to human health or the environment, and (3) provide information relevant to evaluating and allocating business environmental risk in transactional and contractual contexts, including transferring, financing, and insuring the subject property.

2.0 SITE DESCRIPTION

The Phase II ESA was conducted for the NWYS Property located at 427 N 4th Street in Mount Vernon, Washington. The property location is shown on Figure 1. The layout of the subject property and adjoining properties is shown on Figure 2.

SITE ADDRESS	427 N 4th Street, Mount Vernon, WA
PROPERTY SIZE	0.16 acres
SECTION/TOWNSHIP/RANGE	Section 19, Township 34, Range 04
QUARTER/QUARTER	SE 1/4 of NE 1/4
ZONING	Residential/Commercial/Industrial/Manufacturing
PARCEL NUMBERS AND LEGAL DESCRIPTION	P26595: THAT PORTION OF GOVERNMENT LOT 9 IN SECTION 19, TOWNSHIP 34 NORTH, RANGE 4 EAST W.M., DESCRIBED AS FOLLOWS: BEGINNING AT A POINT 1,395 FEET NORTH AND 30 FEET WEST OF THE 1/4 CORNER BETWEEN SECTIONS 19 AND 20, IN TOWNSHIP 34 NORTH, RANGE 4 EAST W.M.; THENCE WEST 118.32 FEET; THENCE NORTH 60 FEET; THENCE EAST 118.32 FEET; THENCE SOUTH 60 FEET TO THE POINT OF BEGINNING.
SITE ELEVATION	98 ft. above sea level
SITE TOPOGRAPHY	Generally level
CURRENT USE	Residential and Commercial Building
PROPERTY STRUCTURES	One commercial structure (per Assessor: approximately 4,269 square feet, constructed in 1923). Remainder of property is paved.
ROADS AND IMPROVEMENTS	Property is bordered on the east by N 4th Street and on the north by W Highland Street.
VEGETATION	Landscaping on north side, remainder of property is covered by the building or pavement.
ADJOINING PROPERTY USE	Residential to the south, and west. Commercial to the north and east.

2.1 SITE GEOLOGY

The site is located in the northern portion of the Puget Sound Basin. The region is characterized by thick sequences of Pleistocene glacial till and outwash terraces and melt-water deposits that settled on a basement of tectonically deformed sedimentary and ancient metamorphic bedrock. The glacial deposits have been reworked by more recent fluvial, lacustrine, and aeolian actions into the landforms present today.

Soils in the area of the subject property are described in the Soil Survey of Skagit County Area, Washington (USDA, 2021). The subject property is shown to be on the Bow-Urban Land complex typically on 0 to 8 percent slopes. This unit is described as consisting of 60 percent Bow gravelly loam intermingled with 35 percent Urban land. The Bow soil is very deep and somewhat poorly drained. It formed in glaciolacustrine material dominated by glacial till and lake sediments mantled by volcanic ash. The permeability is slow, and the water capacity is high. The Urban land component consists of areas covered by streets, buildings, parking lots and other structures that so obscure the soil that identification of the soil series is not feasible. The average annual precipitation at the property is approximately 50 inches, the average annual air temperature is approximately 50°F, and the average frost-free period is approximately 170 to 220 days.

The surficial geology in the area of the subject property is described in the Washington Department of Natural Resources Geologic Information Portal (WDNR). The site is underlain by geologic map unit Qgdm(e) (Everson Glaciomarine Drift). The unit is described as moderately to poorly indurated unsorted diamicton with lenses and discontinuous beds of gravel, sand, silt, and clay.

2.2 HYDROGEOLOGY

Water was encountered in all soil borings with the exception of B-5. Water was generally encountered between 12 and 15 feet bgs.

3.0 RECOGNIZED ENVIRONMENTAL CONDITIONS

A Phase I ESA prepared on January 6, 2022, revealed evidence of one REC in connection with the subject property (Enviro Assessment, PC, 2022). A fueling/service station was located at the subject property from at least 1948 to 1962. A Ground Penetrating Radar survey was conducted in February 2023 which identified the location of a potential Underground Storage Tank (UST). The installation date of the UST is unknown. The subject property historically being a fueling/service station and the presence of a UST of unknown age is considered a REC.

4.0 SITE INVESTIGATION

Whatcom Environmental personnel were onsite on September 5, 2023, to oversee the drilling of five soil borings (B-1 through B-5) at the location of REC identified in the Phase I ESA and GPR Survey. The soil borings were advanced to a depth of 10 to 20 feet bgs. Soil boring locations are shown on Figure 2. The soil boring logs are included in Appendix A.

The soil borings were drilled on the east side of the property within the small parking area present between the structure and N. 4th Street. Subsurface utilities were located prior to drilling and the boring locations were pre-cleared before initiating each soil boring.

Soil cores were logged in the field and soil descriptions generally followed ASTM D 2487 'Unified Soil Classification System' procedures for description and identification of soils. Immediately after the soil samples were described, a portion of each sample was field screened for indications of petroleum compounds by conducting head space analysis for organic vapors using a PID and by conducting sheen tests. The organic vapor headspace analyses were conducted using a MiniRAE Model 3000 PID equipped with a 10.6 eV lamp. Sheen tests were recorded as: NS – no sheen, VSS – very slight sheen, SS – slight sheen, MS – moderate sheen, and HS – heavy sheen. A note was added if the sheen appeared to be weathered.

Soil samples were collected via EPA Method 5035A and placed in sample containers provided by the laboratory. Soil samples were stored in a cooler, on ice immediately after collection. Standard industry protocols regarding environmental sample collection, preservation, handling, and shipping were followed.

One groundwater sample was collected from a temporary well installed in boring B-3. The temporary well was constructed of a 1-inch PVC well screen inserted into the soil boring to at depth of approximately 13 to 18 feet bgs. The temporary well was purged prior to sampling in order to reduce turbidity of the water sample. A groundwater sample was collected from the temporary well using the low-flow sampling technique.

4.1 SCREENING LEVELS

The selected screening levels for the site are presented in the following sections.

4.1.1 Soil Screening Levels

The Model Toxics Control Act (MTCA) Method A cleanup levels for soil were selected as screening levels for this Phase II ESA. Those levels have been established for unrestricted land use in accordance with WAC 173-340 and can be found in Table 740-1 (Ecology, 2013).

4.1.2 Groundwater Screening Levels

The MTCA Method A cleanup levels for groundwater were selected as screening levels for this Phase II ESA. Those levels have been established for unrestricted land use in accordance with WAC 173-340 and can be found in Table 720-1 (Ecology, 2013).

4.2 LABORATORY ANALYSIS

At least one soil sample was collected from each soil boring location. The samples were identified by both the boring number from which they originated and the depth from which they were collected (i.e. *B-1 14.5-15 ft*). The soil samples were analyzed by ALS Environmental in Everett, Washington. ALS is an accredited environmental laboratory by the Washington State Department of Ecology. Based on the historical use of the site, the following laboratory methods were used to analyze the soil samples:

NWTPH-Gx: Gasoline range total petroleum hydrocarbons (TPH)

NWTPH-Dx: Diesel and oil range TPH

EPA Method 8021: Benzene, toluene, ethylbenzene, and total xylenes (BTEX constituents); MTBE

One sample with the highest field screening indications of petroleum contamination was also analyzed for Lead by the following method:

EPA Method 6010: Lead

One groundwater sample was collected from the temporary well installed in boring B-3. The sample was identified by the boring number from which it was collected. The following laboratory methods were used to analyze the water sample:

NWTPH-Gx: Gasoline range TPH

NWTPH-Dx: Diesel and oil range TPH

EPA Method 8021: BTEX constituents and MTBE

4.3 ANALYTICAL RESULTS

Soil sample descriptions and field screening results are summarized in Table 1. The soil laboratory analytical results are summarized in Table 2, and the groundwater laboratory analytical results are summarized in Table 3. The sample results are summarized on Figure 2. The original soil laboratory analytical data report is included in Appendix B, and the original groundwater laboratory analytical data report is included in Appendix C.

4.3.1 Soil Sample Results

Soil borings B-1 through B-5 were advanced on the eastern portion of the property. Soil borings B-1 and B-3 were advanced to 20 feet bgs, and soil borings B-2 and B-4 were advanced to 15 feet bgs. Soil boring B-5 was only able to reach 10 feet bgs before the drilling equipment began to have recovery issues. Field screening of soil indicated evidence of petroleum contamination in all of the soil borings. Sheen tests showed primarily very slight, weathered sheens, but several samples showed slight to moderate sheens. High organic vapors were detected in the majority of the soil collected for analysis.

Soil samples collected from all boring locations contained gasoline range TPH at concentrations which exceeded the MTCA Method A cleanup level (Table 2). The soil sample collected from boring B-5 also contained benzene at a concentration which exceeded the MTCA Method A cleanup level. No other contaminants of concern were detected in the soil samples. The depth of petroleum contamination identified ranged from at least 9 to 13 feet bgs. Additional deeper soil samples collected from borings B-1 and B-3 contained gasoline range TPH at concentrations below the MTCA Method A cleanup level, indicating that the petroleum contamination may end by 17 to 18 feet bgs.

4.3.2 Groundwater Sample Results

One groundwater sample was collected from boring B-3. Gasoline range TPH at benzene were detected in the water collected from boring B-3 at concentrations which exceeded the MTCA Method A cleanup levels. No other contaminants of concern were detected in the water sample from boring B-3.



Provider Newsflash



A fax bulletin for the Molina Healthcare of Washington Provider Network

Joint MCO Live Training Sessions for Apple Health (Medicaid) Providers: Additional Trainings Added

(Medicaid)

Washington's Managed Care Organizations (MCOs) request your participation in 2023 joint Apple Health Integrated Managed Care (IMC) & Medicare Advantage Provider Training. You will hear from Amerigroup, Community Health Plan of Washington, Coordinated Care of Washington, Inc., Molina Healthcare of Washington, and United Healthcare about this training. Joining one of the training sessions will satisfy your annual attendance requirement under 42 CFR 38.608(a)(1)iv.

Who: Providers servicing Medicaid and Medicare Advantage enrollees.

What is Covered:

- Enrollee Rights & Responsibilities
- Advanced Directives
- Fraud, Waste and Abuse
- False Claims Act
- Cultural Awareness

Where: To register for the webinar, please use the date specific links below. Each webinar is 1 hour in duration.

When: Please register for one of the below training sessions.

Date	Time	Zoom Link
Tuesday, October	10:00	Register here:
24, 2023	a.m.	https://centene.zoom.us/webinar/register/WN_Q7nLgr2bS75x5vsyVmXlag
Wednesday,	11:00	Register here:
October 25, 2023	a.m.	https://centene.zoom.us/webinar/register/WN_laSliNUYR9Oy5UMWxR4BLQ
Thursday,	12:00	Register here:
October 26, 2023	p.m.	https://centene.zoom.us/webinar/register/WN_c50lNOBxQPikCrmqV2ox6w
Tuesday,	10:00	Register here:
November 7,	a.m.	https://centene.zoom.us/webinar/register/WN_eDg8udIRSkWTpFZuJ4XOrg
2023		
Tuesday,	5:30	Register here:
November 7,	p.m.	https://centene.zoom.us/webinar/register/WN h4jIUYCXREGd3n8kHR6GSw
2023		
Wednesday,	11:00	Register here:
November 8,	a.m.	https://centene.zoom.us/webinar/register/WN_3t-pF5QNQaOZFxQ4XjLYsg
2023		
Wednesday,	3:00	Register here:
November 8,	p.m.	https://centene.zoom.us/webinar/register/WN_OuQULnvfSpasoNGmWN6w6A
2023		

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Thursday, November 9, 2023	12:00 p.m.	Register here: https://centene.zoom.us/webinar/register/WN oMDtt-dKS KvfPra6CUUaA
Thursday, November 9, 2023	7:00 a.m.	Register here: https://centene.zoom.us/webinar/register/WN 5emx7CXKSsilggRmTVS23g

After the training, you will be asked to complete a short survey, which confirms your participation and provides an opportunity to submit feedback on this presentation.

If you have questions regarding this training requirement, please contact meagan.mcdonald@coordinatedcarehealth.com.

We appreciate your partnership in serving our patients and look forward to your attendance!

5.0 CONCLUSIONS

A Phase II ESA investigation was conducted at 427 N 4th Street in the City of Mount Vernon, Washington on behalf of Northwest Youth Services. This Phase II ESA was conducted in general conformance with the scope and limitations of ASTM Designation E 1903-19.

Seven soil samples and one water sample were collected as part of this Phase II ESA. Soil samples from all boring locations contained gasoline range TPH and/or benzene at concentrations which exceeded the MTCA Method A cleanup levels. One groundwater sample collected from boring B-3 contained gasoline range TPH and benzene at concentrations which exceeded the MTCA Method A cleanup levels.

The most likely source of the contamination is the former underground storage tank pit, which was identified at the eastern edge of the property during a GPR survey. The lateral extent of soil and groundwater contamination was not determined during this investigation. Deep soil samples collected from two soil boring locations indicate the vertical extent may be limited to approximately 17 to 18 feet bgs.

Additional investigation is recommended to evaluate the full extent of contamination in the soil and groundwater at the site. Further site characterization would provide data needed to determine potential cleanup options.

The property is not currently listed as a Confirmed or Suspected Contaminated Site with the Department of Ecology. The MTCA cleanup regulation (WAC 173-340-300) requires that "any owner or operator who has information that a hazardous substance has been released to the environment at the owner or operator's facility and may be a threat to human health or the environment shall report such information to the department within ninety (90) days of discovery." Reporting of this property to Ecology would place the property on the Confirmed and Suspected Contaminated Sites List.

6.0 LIMITATIONS

No site investigation can wholly eliminate uncertainty regarding the potential for contamination in connection with a property. Performance of this investigation by Whatcom Environmental Services, Inc. is intended to reduce, but not eliminate, uncertainty regarding the potential for environmental contamination in connection with the subject property.

The interpretation of subsurface soil conditions is based on field observations and chemical analytical data collected by Whatcom Environmental Services from relatively widely spaced sampling locations at the site. It is possible that contamination exists beneath portions of the site that were not explored, sampled, or analyzed. No warranty, express or implied, is given regarding the presence of hidden or unidentified sources of contamination of the subject property. In addition, no warranty, express or implied is given regarding geotechnical or geologic hazards.

This environmental report is based on conditions that existed at the time the investigation was performed and samples collected. The findings and conclusions of this report may be affected by the passage of time, by manmade events such as construction on or adjacent to the site, or by natural events such as floods, earthquakes, ground instability, or groundwater fluctuations.

Within the limitations of scope, schedule, and budget, our services have been executed in accordance with generally accepted environmental practices in this area at the time this report was prepared. No warranty or other conditions, express or implied, should be understood.

This report has been prepared for use by Northwest Youth Services. Whatcom Environmental prepares a report for the client's exclusive use for a particular project and in accordance with generally accepted practices at the time of investigation. This report was prepared for exclusive use by the client and its agents and may not be used, relied upon, or assigned to a third party without written consent from Whatcom Environmental. This report is not intended for use by others, and the information contained herein is not applicable to other sites. This report may be made available to regulatory agencies.

7.0 ENVIRONMENTAL PROFESSIONAL STATEMENT

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

Aimee Pennell Project Manager Harold Cashman QA/QC Reviewer

HAROLD J. CASHMAN

Sed Geo

8.0 REFERENCES

- American Society for Testing and Materials (ASTM). 2019. Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process (Designation: E-1903-19).
- Enviro Assessment, PC. January 6, 2022. Phase I Environmental Site Assessment, N 4th Street Property, 427 N 4th Street, Mount Vernon, Washington.
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 - $13614761,\!6175591,\!6180153? Surface_Geology,\!500k_Surface_Geology,\!Map_Units$

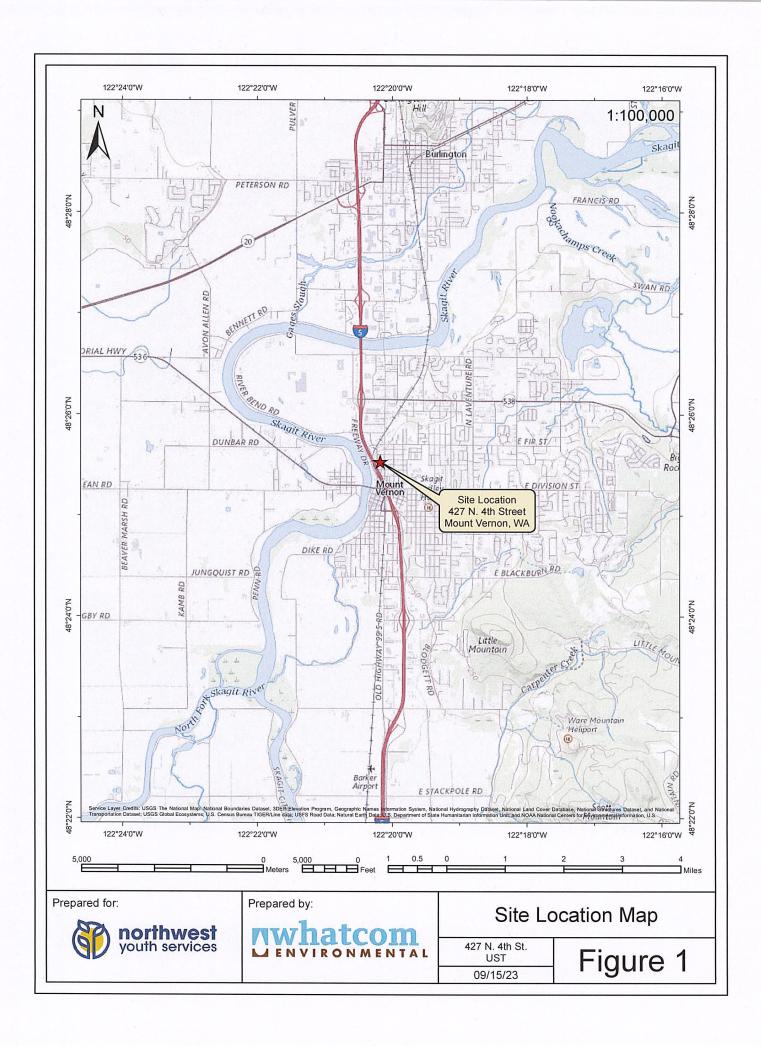




Table 1. Soil Sample Descriptions - 427 N. 4th St., Mount Vernon, WA

	Sample ID	Date	Soil Sample Description	PID (ppm)	Sheen Test ^a
B-1	14.5 - 15ft	9/5/2023	Silty fine sand, gray, firm, wet.	812.0	VSS
B-1	17 - 17.5ft	9/5/2023	Silty fine sand, brown, firm, wet.	31.9	NS
B-2	11.5 - 12ft	9/5/2023	Silty fine sand, gray, firm, wet.	919.7	VSS
В-3	11.5 - 12ft	9/5/2023	Silty fine sandy clay, gray, hard to firm, moist.	1,181	MS
В-3	18.5 - 19ft	9/5/2023	Silty fine sand, brown, firm, wet.	15.7	NS
B-4	13 - 13.5ft	9/5/2023	Silty clayey fine sand, gray, soft, wet.	896.6	VSS
B-5	9.5 - 10ft	9/5/2023	Silty clayey fine sand, brown with orange mottling, firm, moist.	566.4	SS

a - NS = No Sheen; VSS = Very Slight Sheen; SS = Slight Sheen; MS = Moderate Sheen; HS = Heavy Sheen

^b - indicates a weatherd or broken Sheen

Table 2. Soil Sample Petroleum Analytical Results - 427 N. 4th St., Mount Vernon, WA

Sample ID	Date	NWTPH-Gx Volatile Range mg/kg	NWTPH-Dx Diesel Range mg/kg	NWTPH-Dx Oil Range mg/kg	EPA-8021 Benzene mg/kg	EPA-8021 Toluene mg/kg	EPA-8021 Ethylbenzene mg/kg	EPA-8021 Xylenes mg/kg	EPA-8021 MTBE mg/kg	EPA-6010 Lead mg/kg
MTCA Method A Cleanup Levels:		100/30 ^a	2,000	2,000	0.03	7	6	9	0.1	250
B-1 14.5 - 15ft	9/5/2023	870	ND(<25)	ND(<50)	ND(<0.03)	ND(<0.05)	0.39	ND(<0.2)	ND(<0.1)	NA
B-1 17 - 17.5ft	9/5/2023	6.1	ND(<25)	ND(<50)	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.2)	ND(<0.1)	NA
B-2 11.5 - 12ft	9/5/2023	990	30	ND(<50)	ND(<0.03)	ND(<0.05)	1.1	0.46	ND(<0.1)	NA
B-3 11.5 - 12ft	9/5/2023	6,100	130	ND(<50)	ND(<3.0)	ND(<5.0)	ND(<5.0)	ND(<20)	ND(<0.66)	4.3
B-3 18.5 - 19ft	9/5/2023	3.3	ND(<25)	ND(<50)	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.2)	ND(<0.1)	NA
B-4 13 - 13.5ft	9/5/2023	180	ND(<25)	ND(<50)	ND(<0.03)	0.65	0.92	0.86	ND(<0.1)	NA
B-5 9.5 - 10ft	9/5/2023	210	ND(<25)	ND(<50)	0.05	0.07	0.27	ND(<0.2)	ND(<0.1)	NA

 $^{^{\}mathbf{a}}$ - Cleanup level dependent on BTEX concentrations at the site

NA - indicates that the sample was Not Analyzed for the specified analyte **BOLD** and shaded - indicates that the detected concentration exceeded the MTCA Method A target cleanup level

All samples collected using EPA Method 5035A

ND - indicates analyte was Not Detected at level above reporting limit (shown in parentheses)

Table 3. Water Sample Petroleum Analytical Results - 427 N. 4th St., Mount Vernon, WA

Sample ID	Date	NWTPH-Gx Volatile Range μg/L	NWTPH-Dπ Diesel Range μg/L	NWTPH-Dx Oil Range µg/L	EPA-8021 Benzene μg/L	EPA-8021 Toluene μg/L	EPA-8021 Ethylbenzene μg/L	EPA-8021 Xylenes μg/L	EPA-8021 MTBE μg/L
MTCA Method A	Cleanup Levels:	800/1,000 ^a	500	500	5	1,000	700	1,000	20
B-3 Water	9/5/2023	4,400	220	ND(<250)	100	430	180	260	ND(<30)

ND - indicates analyte was Not Detected at level above reporting limit (shown in parentheses) **BOLD** and shaded - indicates that the detected concentration exceeded the MTCA Method A target cleanup level

APPENDIX A

Soil Boring Logs

Project: 427 N. 4th Street, Mt. Vernon, WA

Client: Northwest Youth Services

Boring Number: B-1

Location: South end of tank/GPR anomaly

Date Completed: September 5, 2023

Sheet: 1 of 1

Drilled by: Holocene - Don H. Logged by: WES - Thom D. First Encountered Water: 14 ft

Total Depth: 20 ft

Depth	Description	Screening Depth	PID (ppm)	Sheen	Sample
Surface	~3-in. of concrete				
0.25 to 2.0 ft.	Silty gravelly sand, brown, firm, moist cobbles at ~2 ft bgs		0.0	VSS*	
2.0 to 3.0 ft.	Silty fine sand with minor gravel, brown, firm, dry.		0.0	VSS*	
3.0 to 10.0 ft.	Silty fine sandy clay, brown with orange mottling, hard, moist.		0.0	NS	
10.0 to 14.0 ft.	Silty fine sand, gray and brown, firm, moist.	10'	60.0	NS	
14.0 to 17.0 ft.	Silty fine sand, gray, firm, wet.	12'	38.0	NS	
17.0 to 20.0 ft.	Silty fine sand, brown, firm, wet.	14'	731.6	VSS	14.5-15 ft
		15'	812.0	VSS	
		16'	315.0	VSS	4= 4= E C
		20'	31.9 10.1	NS NS	17-17.5 ft
			10.1	113	
	Soil Sample Collection Depth				
***	* - indicates a broken /weathered sheen	1			

WHATCOM ENVIRONMENTAL SERVICES INC.

Project: 427 N. 4th Street, Mt. Vernon, WA

Client: Northwest Youth Services

Boring Number: B-2

Location: Southwest side of tank/GPR anomaly

Date Completed: September 5, 2023

Sheet: 1 of 1

Drilled by: Holocene - Don H.
Logged by: WES - Thom D.
First Encountered Water: ~12 ft

Total Depth: 15 ft

Depth	Description	Screening Depth	PID (ppm)	Sheen	Sample
Surface	~3-in. of concrete	 			
0.25 to 2.5 ft.	Fine sandy silt with gravel, reddish-brown, soft, moist.	-	0.0	VSS*	
2.5 to 4.0 ft.	Silty fine sand, brown, firm, moist.	-	0.0	VSS*	
4.0 to 10.0 ft.	Silty clay, brown with orange mottling, hard, moist	5'	0.5	VSS*	
10.0 to 12.0 ft.	Silty fine sand, gray, firm, moist.	7'	5.0	VSS	
12.0 to 15.0 ft.	Silty fine sand, gray, firm, wet.	10'	5.7	VSS	44.5.40.6
		12'	919.7	VSS	11.5-12 f
		15'	735.9	VSS	
		_			
	Soil Sample Collection Depth				
	* - indicates a broken /weathered sheen				

WHATCOM ENVIRONMENTAL SERVICES INC.

Project: 427 N. 4th Street, Mt. Vernon, WA

Client: Northwest Youth Services

Boring Number: B-3

Location: Northwest side of tank/GPR anomaly

Date Completed: September 5, 2023

Sheet: 1 of 1

Drilled by: Holocene - Don H. Logged by: WES - Thom D. First Encountered Water: 15 ft

Total Depth: 20 ft

Depth	Description	Screening Depth	PID (ppm)	Sheen	Sample
Surface	~3-in. of concrete				
0.25 to 3.0 ft.	Silty gravelly organic sand with woody debris, dark brown, firm, moist.		0.0	VSS*	
		3'	1.3	VSS*	
3.0 to 5.0 ft.	Silty fine sand, light gray with minor orange mottling, firm, dry.	5'	20.7	VSS	¥.
5.0 to 7.0 ft.	Silty fine sandy clay, gray with orange mottling, firm, moist.	7'	10.2	VSS*	
7.0 to 15.0 ft.	Silty fine sandy clay, gray, hard to firm, moist.	10'	31.7	VSS	
15.0 to 18.0 ft.	Silty fine sand, gray, firm, wet.	11'	1181.0	MS	11.5-12
18.0 to 20.0 ft.	Silty fine sand, brown, firm, wet.	13'	675.0	MS	
		14'	500.0	MS	
		15'	800.0	SS	WATER
		17'	300.0	VSS	
		19'	15.7	NS	18.5-19
	Set temporary PVC Screen in boring from 13 to 18 ft bgs				
	Water Sample Collected	,e ii)	- 0	1	
	Soil Sample Collection Depth				L' -1 4
	* - indicates a broken /weathered sheen			1 7	

WHATCOM ENVIRONMENTAL SERVICES INC.

Project: 427 N. 4th Street, Mt. Vernon, WA

Client: Northwest Youth Services

Boring Number: B-4

Location: North end of tank/GPR anomaly

Date Completed: September 5, 2023

Sheet: 1 of 1

Drilled by: Holocene - Don H. Logged by: WES - Thom D. First Encountered Water: 13 ft

Total Depth: 15 ft

Depth	Description	Screening Depth	PID (ppm)	Sheen	Sample
Surface	~3-in. of concrete				
0.25 to 3.0 ft.	Gravelly silty sand, reddish-brown to brown, firm, moist.	2¹	0.0	VSS*	
		3'	8.4	VSS*	
3.0 to 5.0 ft.	Silty clay with fine sand, brown with minor orange mottling, hard, moist.	5'	30.7	VSS*	
5.0 to 10.0 ft.	Silty clay with fine sand, gray, hard, moist.	6'	50.0	VSS	
10.0 to 13.0 ft.	Silty clayey fine sand, gray, firm, moist.	7.5'	635.7	ss	
13.0 to 15.0 ft.	Silty clayey fine sand, gray, soft, wet.	9.5'	50.0	ss	
13.0 to 13.0 it.	Sitty clayey fille sand, gray, sort, wet.	11'	621.8	vss	
		13'	896.6	VSS	13-13.5 f
		15'	55.1	vss	
			:		
			•		
	Soil Sample Collection Depth				
	* - indicates a broken /weathered sheen				

WHATCOM ENVIRONMENTAL SERVICES INC.

Project: 427 N. 4th Street, Mt. Vernon, WA

Client: Northwest Youth Services

Boring Number: B-5

Location: North end of parking lot area, NW of tank/GPR anomaly

Date Completed: September 5, 2023

Sheet: 1 of 1

Drilled by: Holocene - Don H. Logged by: WES - Thom D. First Encountered Water: N/A

Total Depth: 10 ft

Depth	Description	Screening Depth	PID (ppm)	Sheen	Sample
Surface	~4-in. of concrete				
0.33 to 3.5 ft	Silty sandy gravel, reddish-brown to brown, firm, dry.		0.0	NS	
3.5 to 5.0 ft.	Silty fine sandy clay, brown, hard, dry.		0.0	NS	
note	e: The 5-10 foot interval core sleeve got stuck in the rods and could not be removed. The bottom portion of the soil core was able to get hammered out onto plastic. The sample was collected from this material.				
9.5 to 10.0 ft.	Silty clayey fine sand, brown with orange mottling, firm, moist.		566.4	SS	9.5-10 f
not	e: The driller did not want to risk getting another stuck sleeve and decided to abandon the hole at 10 ft.				
	Soil Sample Collection Depth				

WHATCOM ENVIRONMENTAL SERVICES INC.

APPENDIX B

Soil Sample Analytical Data Report



September 14, 2023

Mr. Thom Davis Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225

Dear Mr. Davis,

On September 6th, 7 samples were received by our laboratory and assigned our laboratory project number EV23090019. The project was identified as your 427 N. 4th St., Mt. Vernon - Subsurface Investigation. The sample identification and requested analyses are outlined on the attached chain of custody record.

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

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

Sincerely,

ALS Laboratory Group

Rob Greer

Laboratory Director



CLIENT:

Whatcom Environmental Svcs., Inc.

228 E. Champion St., Suite 101

Bellingham, WA 98225

CLIENT CONTACT: Thom Davis

CLIENT PROJECT:

CLIENT SAMPLE ID

427 N. 4th St., Mt. Vernon - Subsurface

Investigation

B-1 14.5 to 15ft

DATE: 9/14/2023

ALS JOB#:

EV23090019 EV23090019-01

ALS SAMPLE#: DATE RECEIVED:

COLLECTION DATE:

09/06/2023

C601

9/5/2023 10:55:00 AM

WDOE ACCREDITATION: SAMPLE DATA RESULTS

		OAIVII LL	DATA NEGULIO			and the second second	
ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	870	300	100	MG/KG	09/07/2023	MNC
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	09/07/2023	MNC
Benzene	EPA-8021	U	0.030	1	MG/KG	09/07/2023	MNC
Toluene	EPA-8021	U	0.050	1	MG/KG	09/07/2023	MNC
Ethylbenzene	EPA-8021	0.39	0.050	1	MG/KG	09/07/2023	MNC
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/07/2023	MNC
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	09/12/2023	DHM
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	09/12/2023	DHM

			ANALYSIS	ANALYSIS
SURROGATE	METHOD	%REC	DATE	BY
TFT 100X Dilution	NWTPH-GX	U, GS2	09/07/2023	MNC
TFT	EPA-8021	107	09/07/2023	MNC
C25	NWTPH-DX	86.7	09/12/2023	DHM

U - Analyte analyzed for but not detected at level above reporting limit.

GS2 - Surrogate outside of control limits due to dilution.

Chromatogram indicates that it is likely that sample contains an unidentified gasoline range product.



CLIENT:

Whatcom Environmental Svcs., Inc.

228 E. Champion St., Suite 101

Bellingham, WA 98225

Thom Davis

CLIENT CONTACT: **CLIENT PROJECT:**

427 N. 4th St., Mt. Vernon - Subsurface

Investigation

DATE:

9/14/2023

ALS JOB#:

EV23090019

ALS SAMPLE#:

EV23090019-02

DATE RECEIVED:

09/06/2023

9/5/2023 11:00:00 AM

CLIENT SAMPLE ID B-1 17 to 17.5ft WDOE ACCREDITATION:

COLLECTION DATE:

C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS A	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	6.1	3.0	1	MG/KG	09/07/2023	MNC
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	09/07/2023	MNC
Benzene	EPA-8021	U	0.030	1	MG/KG	09/07/2023	MNC
Toluene	EPA-8021	U	0.050	1	MG/KG	09/07/2023	MNC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	09/07/2023	MNC
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/07/2023	MNC
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	09/12/2023	DHM
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	09/12/2023	DHM

			ANALYSIS ANALYSIS
SURROGATE	METHOD	%REC	DATE BY
TFT	NWTPH-GX	80.5	09/07/2023 MNC
TFT	EPA-8021	77.9	09/07/2023 MNC
C25	NWTPH-DX	81.6	09/12/2023 DHM

U - Analyte analyzed for but not detected at level above reporting limit.

Chromatogram indicates that it is likely that sample contains an unidentified gasoline range product.



CLIENT:

Whatcom Environmental Svcs., Inc.

228 E. Champion St., Suite 101

Bellingham, WA 98225

Thom Davis

CLIENT CONTACT: CLIENT PROJECT:

427 N. 4th St., Mt. Vernon - Subsurface

Investigation

CLIENT SAMPLE ID B-2 11.5 to 12ft DATE: 9/14/2023

EV23090019

ALS JOB#: ALS SAMPLE#: EV23090019-03

DATE RECEIVED: 09/06/2023

9/5/2023 11:30:00 AM

WDOE ACCREDITATION: C601

COLLECTION DATE:

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS A	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	990	300	100	MG/KG	09/07/2023	MNC
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	09/07/2023	MNC
Benzene	EPA-8021	U	0.030	1	MG/KG	09/07/2023	MNC
Toluene	EPA-8021	U	0.050	1	MG/KG	09/07/2023	MNC
Ethylbenzene	EPA-8021	1.1	0.050	1	MG/KG	09/07/2023	MNC
Xylenes	EPA-8021	0.46	0.20	1	MG/KG	09/07/2023	MNC
TPH-Diesel Range	NWTPH-DX	30	25	1	MG/KG	09/12/2023	DHM
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	09/12/2023	DHM

			ANALYSIS	ANALYSIS
SURROGATE	METHOD	%REC	DATE	BY
TFT 100X Dilution	NWTPH-GX	U, GS2	09/07/2023	MNC
TFT	EPA-8021	111	09/07/2023	MNC
C25	NWTPH-DX	87.6	09/12/2023	DHM

U - Analyte analyzed for but not detected at level above reporting limit.

Diesel range product results biased high due to gasoline range product overlap.

GS2 - Surrogate outside of control limits due to dilution.

Chromatogram indicates that it is likely that sample contains an unidentified gasoline range product and an unidentified diesel range product.



CLIENT:

Whatcom Environmental Svcs., Inc.

228 E. Champion St., Suite 101

Bellingham, WA 98225

CLIENT CONTACT: Thom Davis

CLIENT PROJECT:

CLIENT SAMPLE ID

427 N. 4th St., Mt. Vernon - Subsurface

Investigation

B-3 11.5 to 12ft

DATE:

9/14/2023 EV23090019

ALS JOB#: ALS SAMPLE#:

EV23090019-04

DATE RECEIVED: 09/06/2023 **COLLECTION DATE:**

9/5/2023 12:10:00 PM

WDOE ACCREDITATION: C601

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ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	6100	300	100	MG/KG	09/07/2023	MNC
Methyl T-Butyl Ether	EPA-8021	U	0.66	100	MG/KG	09/07/2023	MNC
Benzene	EPA-8021	U	3.0	100	MG/KG	09/07/2023	MNC
Toluene	EPA-8021	U	5.0	100	MG/KG	09/07/2023	MNC
Ethylbenzene	EPA-8021	U	5.0	100	MG/KG	09/07/2023	MNC
Xylenes	EPA-8021	U	20	100	MG/KG	09/07/2023	MNC
TPH-Diesel Range	NWTPH-DX	130	25	1	MG/KG	09/12/2023	DHM
TPH-Oil Range	NWTPH-DX	U	50	, 1	MG/KG	09/12/2023	DHM
Lead	EPA-6020	4.3	0.10	1	MG/KG	09/13/2023	EBS

			ANALYSIS	ANALYSIS
SURROGATE	METHOD	%REC	DATE	ВҮ
TFT 100X Dilution	NWTPH-GX	U, GS2	09/07/2023	MNC
TFT 100X Dilution	EPA-8021	1220 GS2	09/07/2023	MNC
C25	NWTPH-DX	90.7	09/12/2023	DHM

U - Analyte analyzed for but not detected at level above reporting limit. GS2 - Surrogate outside of control limits due to dilution.

Diesel range product results biased high due to gasoline range product overlap.

Chromatogram indicates that it is likely that sample contains an unidentified gasoline range product and an unidentified diesel range product.



CLIENT: Whatcom Environmental Svcs., Inc.

228 E. Champion St., Suite 101

Bellingham, WA 98225

CLIENT CONTACT: Thom Davis

CLIENT PROJECT: 427 N. 4th St., Mt. Vernon - Subsurface

Investigation

CLIENT SAMPLE ID B-3 18.5 to 19ft DATE: 9/14/2023

ALS JOB#: EV23090019

EV23090019-05

ALS SAMPLE#: DATE RECEIVED:

09/06/2023

COLLECTION DATE: 9/5/2023 12:15:00 PM

WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

	Ø 1101 ==	DITTITUEGGETG				
METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
NWTPH-GX	3.3	3.0	1	MG/KG	09/07/2023	MNC
EPA-8021	U	0.10	1	MG/KG	09/07/2023	MNC
EPA-8021	U	0.030	1	MG/KG	09/07/2023	MNC
EPA-8021	U	0.050	1	MG/KG	09/07/2023	MNC
EPA-8021	U	0.050	1	MG/KG	09/07/2023	MNC
EPA-8021	U	0.20	1	MG/KG	09/07/2023	MNC
NWTPH-DX	U	25	1	MG/KG	09/12/2023	DHM
NWTPH-DX	U	50	1	MG/KG	09/12/2023	DHM
	NWTPH-GX EPA-8021 EPA-8021 EPA-8021 EPA-8021 EPA-8021 NWTPH-DX	METHOD RESULTS NWTPH-GX 3.3 EPA-8021 U EPA-8021 U EPA-8021 U EPA-8021 U EPA-8021 U EPA-8021 U NWTPH-DX U	METHOD RESULTS LIMITS NWTPH-GX 3.3 3.0 EPA-8021 U 0.10 EPA-8021 U 0.030 EPA-8021 U 0.050 EPA-8021 U 0.050 EPA-8021 U 0.20 NWTPH-DX U 25	METHOD RESULTS REPORTING LIMITS DILUTION FACTOR NWTPH-GX 3.3 3.0 1 EPA-8021 U 0.10 1 EPA-8021 U 0.030 1 EPA-8021 U 0.050 1 EPA-8021 U 0.050 1 EPA-8021 U 0.20 1 NWTPH-DX U 25 1	METHOD RESULTS LIMITS DILUTION FACTOR UNITS NWTPH-GX 3.3 3.0 1 MG/KG EPA-8021 U 0.10 1 MG/KG EPA-8021 U 0.030 1 MG/KG EPA-8021 U 0.050 1 MG/KG EPA-8021 U 0.050 1 MG/KG EPA-8021 U 0.20 1 MG/KG NWTPH-DX U 25 1 MG/KG	METHOD RESULTS LIMITS DILUTION FACTOR ANALYSIS DATE NWTPH-GX 3.3 3.0 1 MG/KG 09/07/2023 EPA-8021 U 0.10 1 MG/KG 09/07/2023 EPA-8021 U 0.030 1 MG/KG 09/07/2023 EPA-8021 U 0.050 1 MG/KG 09/07/2023 EPA-8021 U 0.050 1 MG/KG 09/07/2023 EPA-8021 U 0.050 1 MG/KG 09/07/2023 EPA-8021 U 0.20 1 MG/KG 09/07/2023 NWTPH-DX U 25 1 MG/KG 09/12/2023

			ANALYSIS ANALYSIS
SURROGATE	METHOD	%REC	DATE BY
TFT	NWTPH-GX	84.6	09/07/2023 MNC
TFT	EPA-8021	81.3	09/07/2023 MNC
C25	NWTPH-DX	93.3	09/12/2023 DHM

U - Analyte analyzed for but not detected at level above reporting limit. Chromatogram indicates that it is likely that sample contains highly weathered gasoline.



CLIENT:

Whatcom Environmental Svcs., Inc.

228 E. Champion St., Suite 101

Bellingham, WA 98225

CLIENT CONTACT: **CLIENT PROJECT:**

CLIENT SAMPLE ID

Thom Davis

B-4 13 to 13.5ft

427 N. 4th St., Mt. Vernon - Subsurface

Investigation

WDOE ACCREDITATION:

C601

9/14/2023

EV23090019

09/06/2023

EV23090019-06

9/5/2023 1:30:00 PM

DATE:

ALS JOB#:

ALS SAMPLE#:

DATE RECEIVED:

COLLECTION DATE:

SAMPLE DATA RESULTS

		OAM LL	DATATILOULIS				
ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	180	30	10	MG/KG	09/08/2023	MNC
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	09/07/2023	MNC
Benzene	EPA-8021	U	0.030	1	MG/KG	09/07/2023	MNC
Toluene	EPA-8021	0.65	0.050	1	MG/KG	09/07/2023	MNC
Ethylbenzene	EPA-8021	0.92	0.050	1	MG/KG	09/07/2023	MNC
Xylenes	EPA-8021	0.86	0.20	1	MG/KG	09/07/2023	MNC
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	09/12/2023	DHM
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	09/12/2023	DHM

			ANALYSIS A	MALYSIS
SURROGATE	METHOD	%REC	DATE	BY
TFT 10X Dilution	NWTPH-GX	U, GS2	09/08/2023	MNC
TFT	EPA-8021	108	09/07/2023	MNC
C25	NWTPH-DX	89.2	09/12/2023	DHM

U - Analyte analyzed for but not detected at level above reporting limit.

GS2 - Surrogate outside of control limits due to dilution.

Chromatogram indicates that it is likely that sample contains an unidentified gasoline range product.



CLIENT:

Whatcom Environmental Svcs., Inc.

228 E. Champion St., Suite 101

Bellingham, WA 98225

CLIENT CONTACT: Thom Davis

CLIENT PROJECT: 427 N. 4th St., Mt. Vernon - Subsurface

Investigation

CLIENT SAMPLE ID B-5 9.5 to 10ft

DATE: 9/14/2023

ALS JOB#:

EV23090019

ALS SAMPLE#:

EV23090019-07

DATE RECEIVED:

COLLECTION DATE:

09/06/2023

9/5/2023 2:00:00 PM

WDOE ACCREDITATION:

C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS A DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	210	30	10	MG/KG	09/08/2023	MNC
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	09/07/2023	MNC
Benzene	EPA-8021	0.050	0.030	1	MG/KG	09/07/2023	MNC
Toluene	EPA-8021	0.070	0.050	1	MG/KG	09/07/2023	MNC
Ethylbenzene	EPA-8021	0.27	0.050	1	MG/KG	09/07/2023	MNC
Xylenes	EPA-8021	U	0.20	1	MG/KG	09/07/2023	MNC
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	09/12/2023	DHM
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	09/12/2023	DHM

SURROGATE				ANALYSIS ANALYSIS		
	METHOD	%REC		DATE	BY	
TFT 10X Dilution	NWTPH-GX	U, GS2		09/08/2023	MNC	
TFT	EPA-8021	88.0		09/07/2023	MNC	
C25	NWTPH-DX	86.7		09/12/2023	DHM	

U - Analyte analyzed for but not detected at level above reporting limit.

GS2 - Surrogate outside of control limits due to dilution.

Chromatogram indicates that it is likely that sample contains an unidentified gasoline range product.



CLIENT:

Whatcom Environmental Svcs., Inc.

228 E. Champion St., Suite 101

Bellingham, WA 98225

DATE:

9/14/2023

C601

ALS SDG#: WDOE ACCREDITATION:

EV23090019

CLIENT CONTACT:

Thom Davis

CLIENT PROJECT:

427 N. 4th St., Mt. Vernon - Subsurface

Investigation

LABORATORY BLANK RESULTS

MBG-090723S - Batch 200327 - Soil by NWTPH-GX

				REPORTING	ANALYSIS	ANALYSIS
ANALYTE	METHOD	RESULTS	UNITS	LIMITS	DATE	BY
TPH-Volatile Range	NWTPH-GX	U	MG/KG	3.0	09/07/2023	MNC

U - Analyte analyzed for but not detected at level above reporting limit.

MB-090723S - Batch 200327 - Soil by EPA-8021

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Methyl T-Butyl Ether	EPA-8021	U	MG/KG	0.10	09/07/2023	MNC
Benzene	EPA-8021	U	MG/KG	0.030	09/07/2023	MNC
Toluene	EPA-8021	U	MG/KG	0.050	09/07/2023	MNC
Ethylbenzene	EPA-8021	U	MG/KG	0.050	09/07/2023	MNC
Xylenes	EPA-8021	U	MG/KG	0.20	09/07/2023	MNC

U - Analyte analyzed for but not detected at level above reporting limit.

MB-091123S - Batch 200286 - Soil by NWTPH-DX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range	NWTPH-DX	U	MG/KG	25	09/12/2023	DHM
TPH-Oil Range	NWTPH-DX	U	MG/KG	50	09/12/2023	DHM

U - Analyte analyzed for but not detected at level above reporting limit.

MB-091223S2 - Batch 200291 - Soil by EPA-6020

				REPORTING	ANALYSIS	ANALYSIS
ANALYTE	METHOD	RESULTS	UNITS	LIMITS	DATE	BY
Lead	EPA-6020	U	MG/KG	0.10	09/13/2023	EBS

U - Analyte analyzed for but not detected at level above reporting limit.



CLIENT:

Whatcom Environmental Svcs., Inc.

228 E. Champion St., Suite 101

Bellingham, WA 98225

DATE: ALS SDG#: 9/14/2023

WDOE ACCREDITATION:

EV23090019 C601

CLIENT CONTACT:

Thom Davis

CLIENT PROJECT:

427 N. 4th St., Mt. Vernon - Subsurface

Investigation

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 200327 -	Soil by	NWTPH-GX
-----------------------------	---------	----------

				LIM	ITS	ANALYSIS	ANALYSIS BY
SPIKED COMPOUND	METHOD	%REC	RPD QUAL	MIN	MAX	DATE	
TPH-Volatile Range - BS	NWTPH-GX	97.2		66.5	122.7	09/07/2023	MNC
TPH-Volatile Range - BSD	NWTPH-GX	99.2	2	66.5	122.7	09/07/2023	MNC

ALS Test Batch ID: 200327 - Soil by EPA-8021

				LIN	IITS	ANALYSIS	ANALYSIS BY	
SPIKED COMPOUND	METHOD	METHOD %REC	RPD QUAL	MIN	MAX	DATE		
Methyl T-Butyl Ether - BS	EPA-8021	79.5		66	120	09/07/2023	MNC	
Methyl T-Butyl Ether - BSD	EPA-8021	80.0	1	66	120	09/07/2023	MNC	
Benzene - BS	EPA-8021	91.8		67.7	124	09/07/2023	MNC	
Benzene - BSD	EPA-8021	93.3	2	67.7	124	09/07/2023	MNC	
Toluene - BS	EPA-8021	93.1		71	123	09/07/2023	MNC	
Toluene - BSD	EPA-8021	95.7	3	71	123	09/07/2023	MNC	
Ethylbenzene - BS	EPA-8021	93.3		69.8	120	09/07/2023	MNC	
Ethylbenzene - BSD	EPA-8021	95.8	3	69.8	120	09/07/2023	MNC	
Xylenes - BS	EPA-8021	92.1		70	120	09/07/2023	MNC	
Xylenes - BSD	EPA-8021	94.6	3	70	120	09/07/2023	MNC	

ALS Test Batch ID: 200286 - Soil by NWTPH-DX

				LIN	IITS	ANALYSIS	ANALYSIS BY
SPIKED COMPOUND	METHOD	%REC	RPD QUAL	MIN	MAX	DATE	
TPH-Diesel Range - BS	NWTPH-DX	115		75.5	122.1	09/12/2023	DHM
TPH-Diesel Range - BSD	NWTPH-DX	118	2	75.5	122.1	09/12/2023	DHM

ALS Test Batch ID: 200291 - Soil by EPA-6020

					MITS	ANALYSIS	ANALYSIS BY	
SPIKED COMPOUND	METHOD	%REC	RPD QUAL	MIN	MAX	DATE		
Lead - BS	EPA-6020	96.3		80	120	09/13/2023	EBS	
Lead - BSD	EPA-6020	94.4	2	80	120	09/13/2023	EBS	

APPROVED BY

Rob Greer Laboratory Director

Chain of Custody



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Work Order No.: Enz3090019

														-			
Q1145	1				R	H'FREESE	D	49	Mb/27@ 1134	300	0/2	12		A	- Louis		Mon
Date/Time	re	Signature		Vame	Print Name				Time	Date/Time	-0		Signature	Sig		Print Name	Print
		RECEIVED BY						in in the second) BY	RELINQUISHED BY	RELI		
Upon Request			Sr, Tl, V, Zn,		b, Se, S	Hg, K, Mg, Mn, Mo, Na, Ni, Pb, Sb, Se, Sn,	Na, N	n, Mo,	1g, M	, , ,	e, Hg	Cr, Cu, Fe,	Ca, Cd, Co,	Ag, Al, As, Ba, Be,	Ag		Total
Additional Methods Available	Addition		Sr, Tl, V, Zn,		s, Se, S	li,Pb, St	Na, N	n, Mo,	1g, M	, , ,	e, Hg	Cr, Cu, F	Ag, Al, As, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Mg, Mn, Mo, Na, Ni,Pb, Sb, Se, Sn,	, Al, As, Ba, B	Ag		Dissolved
											N S						
								×	×	×	×	2	1400	9/5/23	Soil		B-5 9.5 to 10ft
								×	×	×	×	6		9/5/23	Soil	ft	
								×	×	×	×	5 2	1215	9/5/23	Soil	ft	B-3 18.5 to 19ft
							X	×	×	×	×	<u>۲</u> 2	1210	9/5/23	Soil	ft	B-3 11.5 to 12ft
								×	×	×	×	3 2	1130	9/5/23	Soil	ft	B-2 11.5 to 12ft
								×	×	×	×	2 2	11am	9/5/23	Soil	ft	B-1 17 to 17.5ft
								×	×	×	×	1 2	1055	9/5/23	Soil	ft	B-1 14.5 to 15ft
Due Date: Comments							Lead,	NWTPH-Dx	MTBE (8021)	BTEX (8021)	NWTPH-Gx	F - - - - - - - - - - - - - - - - - - -	Time La	Date Sampled	Matrix	ification	Sample Identification
availability							Pb)				District S		Total Containers:	N/A	Yes No	als:	Cooler Custody Seals:
											44 21	Ice	(Wet Ice / Blue Ice	N/A	Yes No		Received Intact:
5 day* 50%				4						T 1		7.1900			h.b		Temperature (°C):
3 Day* 60%						-		-51			14,00			IPT .	SAMPLE RECEIPT	SAN	
48 hours* 80%																Thom Davis	Sampler's Name:
24 hours * 100%											GH) A						P.O. Number:
Routine 10 Day							4				avist.						Project Number:
TAT			D ANALYSIS	TED	REQUESTE	RE						on	427 N. 4th St., Mt. Vernon - Subsurface Investigation	on - Subsurfa	t, Mt. Vern	427 N. 4th S	Project Name:
				5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5			1905/81					ite:	State:	on, WA	t., Mt. Vern	427 N. 4th St., Mt. Vernon, WA	Project Site:
	PO#					Email:	I					Phone:	Ph	ш	tcom-es.co	tdavis@whatcom-es.com	Email:
					ate ZIP	City, State ZIP:	10								WA 98225	Bellingham,. WA 98225	City, State ZIP:
				944 244	S:	Address:	I 🔾								pion #101	228 E Champion #101	Address:
			WES	_	ıy:	Company:	10							l Services	vironmenta	Whatcom Environmental Services	Client Name:
		l	< Same			Bill to:	-								Ь	Thom-Harold	Project Manager:

ALS ENVIRONMENTAL Sample Receiving Checklist

Client: WHATCOM ENVIRONMENTAL STRUCES ALS Job #: EY23090019
Project: 427 N. 4TH St., MT. VERNON - SUBSURFACE JOUESTECHTEON
Received Date: <u>O9-06-23</u> Received Time: <u>1140</u> By: <u>1145</u>
Type of shipping container: Cooler _x Box Other
Shipped via: FedEx Ground UPS Mail Courier _x Hand Delivered
Were custody seals on outside of shipping container? If yes, how many? Where? Custody seal date: Seal name:
Was Chain of Custody properly filled out (ink, signed, dated, etc.)?
Did all bottles have labels?
Did all bottle labels and tags agree with Chain of Custody?
Were samples received within hold time?
Did all bottles arrive in good condition (unbroken, etc.)?
Was sufficient amount of sample sent for the tests indicated?
Was correct preservation added to samples?
If no, Sample Control added preservative to the following: Sample Number Reagent Analyte Hi-Kits
Were VOA vials checked for absence of air bubbles? Bubbles present in sample #:
Temperature of cooler upon receipt: 9,4°C Cold Cool Ambient N/A
Explain any discrepancies:
Was client contacted? Who was called? By whom? Date: Outcome of call:

APPENDIX C

Groundwater Sample Analytical Data Report



September 13, 2023

Mr. Thom Davis Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225

Dear Mr. Davis,

On September 6th, 1 sample was received by our laboratory and assigned our laboratory project number EV23090018. The project was identified as your 427 N. 4th St., Mt. Vernon - Subsurface Investigation. The sample identification and requested analyses are outlined on the attached chain of custody record.

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

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

Sincerely,

ALS Laboratory Group

Rob Greer

Laboratory Director



CLIENT:

Whatcom Environmental Svcs., Inc.

228 E. Champion St., Suite 101

Bellingham, WA 98225

CLIENT CONTACT: **CLIENT PROJECT:**

TPH-Diesel Range

TPH-Oil Range

Thom Davis

427 N. 4th St., Mt. Vernon - Subsurface

Investigation

NWTPH-DX

NWTPH-DX

CLIENT SAMPLE ID B-3 Water DATE:

9/13/2023

ALS JOB#:

EV23090018

ALS SAMPLE#:

EV23090018-01

DATE RECEIVED: **COLLECTION DATE:**

09/06/2023

UG/L

UG/L

9/5/2023 12:45:00 PM

DHM

DHM

09/12/2023

09/12/2023

WDOE ACCREDITATION: C601

1

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	4400	500	10	UG/L	09/11/2023	MNC
Methyl T-Butyl Ether	EPA-8021	U	30	10	UG/L	09/11/2023	MNC
Benzene	EPA-8021	100	10	10	UG/L	09/11/2023	MNC
Toluene	EPA-8021	430	10	10	UG/L	09/11/2023	MNC
Ethylbenzene	EPA-8021	180	10	10	UG/L	09/11/2023	MNC
Xylenes	EPA-8021	260	30	10	UG/L	09/11/2023	MNC

130

250

SAMPLE DATA RESULTS

				ANALYSIS ANALYSIS
SURROGATE	METHOD	%REC		DATE BY
TFT 10X Dilution	NWTPH-GX	86.9		09/11/2023 MNC
TFT 10X Dilution	EPA-8021	92.2	1	09/11/2023 MNC
C25	NWTPH-DX	84.4		09/12/2023 DHM

U - Analyte analyzed for but not detected at level above reporting limit.

Chromatogram indicates that it is likely that sample contains lightly weathered gasoline and an unidentified diesel range product. Diesel range product results biased high due to gasoline range product overlap.

220

U



CLIENT:

Whatcom Environmental Svcs., Inc.

228 E. Champion St., Suite 101

Bellingham, WA 98225

DATE: ALS SDG#: 9/13/2023

WDOE ACCREDITATION:

EV23090018

C601

CLIENT CONTACT: Thom Davis

CLIENT PROJECT:

427 N. 4th St., Mt. Vernon - Subsurface

Investigation

LABORATORY BLANK RESULTS

MBG-090623W2 - Batch 200195 - Water by NWTPH-GX

				REPORTING	ANALYSIS	ANALYSIS
ANALYTE	METHOD	RESULTS	UNITS	LIMITS	DATE	BY
TPH-Volatile Range	NWTPH-GX	U	UG/L	50	09/06/2023	MNC

U - Analyte analyzed for but not detected at level above reporting limit.

MB-090623W2 - Batch 200195 - Water by EPA-8021

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Methyl T-Butyl Ether	EPA-8021	U	UG/L	3.0	09/06/2023	MNC
Benzene	EPA-8021	U	UG/L	1.0	09/06/2023	MNC
Toluene	EPA-8021	U	UG/L	1.0	09/06/2023	MNC
Ethylbenzene	EPA-8021	U	UG/L	1.0	09/06/2023	MNC
Xylenes	EPA-8021	U	UG/L	3.0	09/06/2023	MNC

U - Analyte analyzed for but not detected at level above reporting limit.

MB-090823W - Batch 200212 - Water by NWTPH-DX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range	NWTPH-DX	U	UG/L	130	09/08/2023	DHM
TPH-Oil Range	NWTPH-DX	U	UG/L	250	09/08/2023	DHM

U - Analyte analyzed for but not detected at level above reporting limit.



CLIENT:

Whatcom Environmental Svcs., Inc.

228 E. Champion St., Suite 101

DATE: ALS SDG#: 9/13/2023

Bellingham, WA 98225

WDOE ACCREDITATION:

EV23090018 C601

CLIENT CONTACT:

Thom Davis

CLIENT PROJECT:

427 N. 4th St., Mt. Vernon - Subsurface

Investigation

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 200195 - Water by NWTPH-GX

				LIIV	1115	ANALYSIS	ANALYSIS BY
SPIKED COMPOUND	METHOD	%REC	RPD QUAL	MIN	MAX	DATE	
TPH-Volatile Range - BS	NWTPH-GX	87.4		66.5	122.7	09/06/2023	MNC
TPH-Volatile Range - BSD	NWTPH-GX	99.2	13	66.5	122.7	09/07/2023	MNC

ALS Test Batch ID: 200195 - Water by EPA-8021

					 LIN	IITS	ANALYSIS	ANALYSIS BY
SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	MIN	MAX	DATE	
Methyl T-Butyl Ether - BS	EPA-8021	85.0			69.2	133	09/06/2023	MNC
Methyl T-Butyl Ether - BSD	EPA-8021	87.2	3		69.2	133	09/06/2023	MNC
Benzene - BS	EPA-8021	85.2			85	120	09/06/2023	MNC
Benzene - BSD	EPA-8021	85.6	0		85	120	09/06/2023	MNC
Toluene - BS	EPA-8021	88.7			85	120	09/06/2023	MNC
Toluene - BSD	EPA-8021	89.0	0		85	120	09/06/2023	MNC
Ethylbenzene - BS	EPA-8021	90.2			85	120	09/06/2023	MNC
Ethylbenzene - BSD	EPA-8021	90.5	0		85	120	09/06/2023	MNC
Xylenes - BS	EPA-8021	88.9			85	120	09/06/2023	MNC
Xylenes - BSD	EPA-8021	89.3	0		85	120	09/06/2023	MNC

ALS Test Batch ID: 200212 - Water by NWTPH-DX

				LIN	IITS	ANALYSIS	ANALYSIS BY
SPIKED COMPOUND	METHOD	%REC	RPD QUAL	MIN	MAX	DATE	
TPH-Diesel Range - BS	NWTPH-DX	95.9		67	125.2	09/08/2023	DHM
TPH-Diesel Range - BSD	NWTPH-DX	96.0	0	67	125.2	09/08/2023	DHM

APPROVED BY

Rob Greer Laboratory Director