FULCRUM
environmental consulting

PRELIMINARY SOIL REMEDIATION WORK PLAN

Four Star Supply, Inc.
355 NW State Street
Pullman, Washington

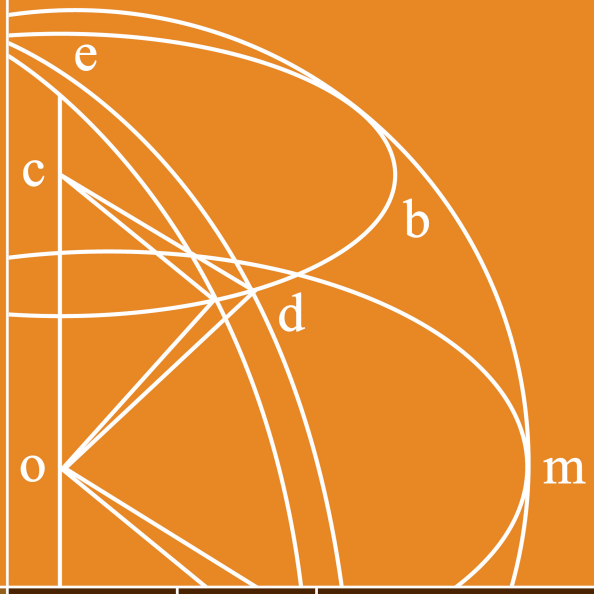
Project Number: 223516.00

May 26, 2022

Prepared for:

Four Star Supply Inc.
Attn: Kevin McDonnell
355 NW State Street
Pullman, Washington 99163

Prepared by:
Travis Trent, CIH, PG
Fulcrum Environmental Consulting, Inc.
207 West Boone Avenue
Spokane, Washington 99201



Report Title: Preliminary Soil Remediation Work Plan

Project Number: 223516.00

Date: May 26, 2022

Site: Four Star Supply Inc.
355 Northwest State Street
Pullman, Washington

Prepared for: Four Star Supply Inc.
Attn: Kevin McDonnell
355 Northwest State Street
Pullman, Washington 99163

Prepared by: Fulcrum Environmental Consulting, Inc.
207 West Boone Avenue
Spokane, Washington 99201
509.459.9220

The professionals who completed site services, prepared, and reviewed this report include but are not limited to:

Authored by: _____ **Date:** 05/26/2022

Scott Groat, GIT, Environmental Geologist
Fulcrum Environmental Consulting, Inc.

Reviewed by: _____ **Date:** 05/26/2022

Travis Trent, CIH, PG, Principal
Fulcrum Environmental Consulting, Inc.

Report Integrity:

Fulcrum Environmental Consulting, Inc.'s scope of service for this project was limited to those services as established in the proposal, contract, verbal direction, and/or agreement. This report is subject to applicable federal, state, and local regulations governing project-specific conditions and was performed using recognized procedures and standards of the industry. Scientific data collected in situ may document conditions that may be specific to the time and day of service, and subject to change as a result of conditions beyond Fulcrum's control or knowledge. Fulcrum makes no warranties, expressed or implied as to the accuracy or completeness of other's work included herein. Fulcrum has performed these services in accordance with generally accepted environmental science standards of care at the time of the inspection. No warranty, expressed or implied, is made.

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1.0 INTRODUCTION

This Remediation Work Plan has been prepared on behalf of Four Star Supply, Inc. (Four Star) by Fulcrum Environmental Consulting, Inc. (Fulcrum) to describe the remediation activities that will be conducted at the Four Star Property Cleanup located at 355 Northwest State Street in Pullman, Washington (site). See Figure 1 for a general site location map.

The loss area portion of the property has operated as a bulk plant from about 1932 to present day. It is located at the top of a stream embankment adjacent to the South Fork Palouse River. An April 2022 fuel release from a 10,000-gallon Above Ground Storage Tank (AST) resulted in impact to underlying site soils and near shore river water.

Able Cleanup Technology (Able) of Spokane, Washington responded to the spill event. Sorbent booms and pads were placed in the near shore river water and a series of capture points were hand excavated along the bank to intercept hydrocarbon impacted groundwater before it entered the river. The spill response was supported by staff from Four Star who provided ongoing monitoring and replacement of spill response media.

Concurrent with the Able/Four Star response efforts, the Washington Department of Ecology (Ecology) provided spill response oversight and coordination that was extremely effective in advancing the spill response in ongoing communication with key stakeholders including the Owner, Washington State Department of Fish and Wildlife, City of Pullman, Environmental Protection Agency (EPA), and Army Corp of Engineers. It is Fulcrum's professional opinion that the spill response was professional, effective, and well-coordinated. Spill containment is complete, and the project is now proceeding to the remedial phase. The tanks and secondary containment have been removed. This plan addresses removal of hydrocarbon impacted soils and site restoration activities.

This Soil Remediation Work Plan has been prepared by Travis Trent, a Washington State Licensed Hydrogeologist (LHG) and Certified Industrial Hygienist (CIH) with over 26-years of experience in the remediation of petroleum impacted soils. Relevant professional certifications are presented as Appendix A. This Health and Safety Plan (HSP) is intended to be a dynamic document and may be subject to change based on encountered site conditions.

1.1 Purpose

The purpose of the work plan is to complete remediation of the April 2022 fuel spill in accordance with applicable regulations. Overall objective is to advance the remedial effort in an expeditious manner that is protective of site workers and the environment while maximizing the potential for the final cleanup effort to be eligible for a "No Further Action" determination upon conclusion.

1.2 Pertinent Regulations and Approach

In March of 1989, the Model Toxics Control Act (MTCA) went into effect in Washington State. The MTCA regulations set standards to ensure quality of cleanup and protection of human health and the environment. A major portion of the MTCA regulation (completed in 1991) was the development of numerical cleanup standards and requirements for cleanup actions. Three options were established under MTCA for site specific cleanup levels: Method A, B and C. Method A defines cleanup levels for 25 of the most common hazardous substances found at sites. Method B levels are set using a site risk assessment, which enables consideration of site-specific characteristics. Method C is similar to Method B, however, the individual substance's cancer risk portion of the assessment is set at 1 in 100,000 rather than 1 in 1,000,000.

Ecology's MTCA Method A cleanup tables were developed to provide conservative cleanup levels for non-complex sites. Fulcrum proposes to use Method A cleanup levels as site screening levels during the remedial action. Fulcrum proposes to use Method A cleanup levels as site screening levels during the remedial action with the expectation that Method B may be identified as the final site cleanup standards.

2.0 SITE LOCATION AND DESCRIPTION

The Four Star facility is located at 355 NW State Street in Pullman, Washington. The fuel spill occurred in a bulk fuel storage facility located on the south side of the South Fork Palouse River at the NE corner of Popular and NW State Streets. See Figure 1 for a site location map. According to Google Earth, the site is located at the following Global Positioning Satellite (GPS) coordinates:

- 46.73251, -114.18119

2.1 General Area of Impact

The remedial work area is identified as the former NW portion of the now removed tank farm and the associated riverbank and river slope. See Figure 2 for a site plan view of the fuel spill

remedial work area. The site is accessible from Northwest State Street in Pullman, Washington and will be secured by a chain-link perimeter fence.

3.0 CHARACTERIZATION

Fulcrum completed two pre-remediation characterization events. During the first event on May 13, 2022, Fulcrum collected soil samples from penetrations through the secondary containment. The objective of this sampling and analysis was to characterize the petroleum contaminated soils for disposal. Removal of the secondary containment was competed on May 18, 2022. On May 19, 2022 Fulcrum completed a second characterization investigation. The second characterization event consisted of trenching through the area of suspect impact to make preliminary determination of the probable extent of contaminant presence. Soils were field screened for contaminant presence using odor, discoloration, and PID readings. Samples were collected and submitted for laboratory analysis to confirm results of field screening.

3.1 Waste Characterization Sampling

On May 13, 2022, Fulcrum conducted an initial characterization event of representative soil located beneath the failed secondary containment. A total of five representative samples were collected. Samples were hand collected directly from exposed near surface soils using clean latex gloves and disposable sampling tools. Samples were collected directly into laboratory provided containers, labeled in indelible ink with unique identification numbers, and placed in a cooler on ice for transport to Test America in Spokane, Washington, for analysis. The characterization samples were analyzed for diesel, heavy oil, and gasoline range petroleum hydrocarbons, benzene, ethylbenzene, toluene, xylene (BTEX), and lead. Lead concentrations were identified in one sample above the acceptance threshold of the selected disposal site (100 ppm total lead). The sample was submitted for further analysis by TCLP methodology. A summary of the initial characterization soil sample results is presented below in Table 1. Complete analytical results are presented in Appendix B. See Figure 3 for the characterization soil sample location map.

Table 1: May 13, 2022 –Soil Analytical Results

Location	Sample Number	Results (ppm)								
		NWTPH-Dx		NWTPH-Gx	BTEX				Total Lead	Leachable Lead
		Diesel	Heavy Oil	Gasoline	Benzene	Ethyl-benzene	Toluene	Xylene		
Northwest area	FS-051322-01	38	ND	ND	ND	ND	ND	ND	24	NA
West area	FS-051322-02	ND	ND	ND	ND	ND	ND	ND	19	NA
Southwest area	FS-051322-03	ND	ND	ND	ND	ND	ND	ND	160	ND
South area	FS-051322-04	34	ND	ND	ND	ND	ND	ND	16	NA
North area	FS-051322-05	**3,700**	ND	**5,200**	ND	0.83	0.49	8.4	ND	NA
MTCA Method A Cleanup		2,000		100	0.03	6.0	7.0	9.0	250	5

Bold **Concentrations above regulatory reference levels**
ND Non-detect
NA Not Analyzed

Laboratory analytical identified detectable concentrations of diesel and gasoline range petroleum hydrocarbons, ethylbenzene, toluene, xylene, and total lead. Only diesel and gasoline range hydrocarbons were above applicable regulatory thresholds.

3.2 Site Characterization Sampling

On May 19, 2022, Fulcrum completed a second characterization investigation. This event consisted of trenching through the area of suspect impact to make a preliminary determination of the probable extent of contaminant presence. Soils were field screened for contaminant presence using odor, discoloration, and PID readings. Samples were collected and submitted for laboratory analysis to confirm results of field screening. A total of 8 representative samples were collected. Samples were hand collected directly from exposed near surface soils or from the excavator bucket using clean latex gloves and disposable sampling tools. Samples were collected directly into laboratory provided containers, labeled in indelible ink with unique identification numbers, and placed in a cooler on ice for transport to Test America in Spokane, Washington, for analysis. The samples were analyzed for diesel, heavy oil, and gasoline range petroleum hydrocarbons, benzene, ethylbenzene, toluene, xylene (BTEX), and lead. A summary of May 19, 2022, characterization soil sample results is presented below in Table 2. Complete analytical results are presented in Appendix B. See Figure 3 for the characterization soil sample location map.

Table 2: May 19, 2022 –Soil Analytical Results

Sample Number	Results (ppm)							
	NWTPH-Dx		NWTPH-Gx	BTEX				Lead
	Diesel	Heavy Oil	Gasoline	Benzene	Ethyl-benzene	Toluene	Xylene	
FS-051922-01-2.0	**9,600**	ND	**250**	ND	ND	ND	ND	170
FS-051922-02-3.0	**28,000**	770	**6,600**	ND	ND	ND	ND	79
FS-051922-03-2.0	**2,900**	ND	**800**	ND	ND	ND	0.59	ND
FS-051922-04-2.0	**3,600**	ND	**2,000**	ND	ND	ND	ND	54
FS-051922-05-2.0	260	ND	ND	ND	ND	ND	ND	170
FS-051922-06-2.0	**2,400**	180	73	ND	ND	ND	1.5	46
FS-051922-07-6.0	93	ND	**710**	ND	ND	ND	ND	ND
FS-051922-08-8.0	**4,900**	ND	**3.900**	ND	0.50	ND	4.6	14
MTCA Method A Cleanup	2,000		100	0.03	6.0	7.0	9.0	250

Bold **Concentrations above regulatory reference levels**
ND Non-detect

Laboratory analytical identified detectable concentrations of diesel and gasoline range petroleum hydrocarbons, ethylbenzene, xylene, and total lead. Only diesel and gasoline range hydrocarbons were above applicable regulatory thresholds.
Fulcrum collected a total of 13 characterization samples. Analytical results indicate that only diesel and gasoline range petroleum hydrocarbons are present at levels of regulatory significance within the fuel spill impacted soils.

Although the fuel spill was reportedly diesel fuel, Fulcrum recognizes that the point of release is a bulk fuel storage facility which has operated at the location for over 90 years. Potential exists for the diesel fuel to have contaminated soils that have been previously impacted by prior releases. As such, Fulcrum conducted additional analysis to determine the full range of potential contaminants within site soils impacted by the April 2022 fuel release.

4.0 REMEDIAL DESIGN

Based on observed conditions at the site, Fulcrum's conceptual model anticipates that the small release of diesel fuel leaked from an onsite AST and pooled in the concrete secondary containment until it encountered a seam, crack, or similar weakness in the containment and then flowed down into the underlying soil. The reported volume of release is less than 365 gallons. The fuel release is anticipated to have flowed vertically down to groundwater estimated to be at a similar elevation to the adjacent river. Some dispersion/diffusion is anticipated in the site soils with extent likely dependent upon presence of areas of clay/silt or other fines that might present a lower permeability zone. Upon encountering groundwater, the diesel is expected to act as a LNAPL moving primarily through advective transport along the groundwater gradient towards the river. The short-time period between when the release was identified and indications of impact to the river (observed sheen), supports this conceptual model. See Figure 4 for a cross section view of the conceptual model. It should be noted that Fulcrum's conceptual model does anticipate that the released diesel fuel may have passed through soils that were impacted by historic releases resulting in a broader range of potential contaminants. Based on the above outlined conceptual model, adverse impact to the river is the primary exposure pathway of concern for this release. If uncontrolled and not remediated, potential exists for contact by people and aquatic organisms.

4.1 Model Remedy Selection

Remedial Action Objectives are narrative goals for a cleanup action that address how the cleanup fits into the overall MTCA cleanup process. For this project Fulcrum has identified Ecology's *Guidance for Remediation of Petroleum Contaminated Sites (2016 Revision).* The following Remedial Action Objectives have been identified for the primary contaminants found at the Site:

1. Removal of all fuel spill contaminated soils to the extent feasible until MTCA cleanup levels have been achieved. If areas are identified where Method A cleanup values cannot be achieved, alternate remedial strategies as allowed under applicable regulations will be evaluated.
2. If needed, placement of monitoring wells following removal of contaminated soil to evaluate potential for residual groundwater impact.

The above proposed remedy presents a permanent solution to the maximum extent practical, and it can be achieved in a reasonable time frame.

5.0 REMEDIATION ACTIVITIES

Following is a brief summation of remedial activities anticipated at the site.

Phase 1 – Spill Response and Containment (Complete) – Capture any free product, place booms and sorbent materials in the impacted portion of the adjacent river shoreline. Hand-excavate capture points along the shoreline and place sorbent materials to intercept contaminants prior to the river's edge.

Phase 2 - Remedial Preparation (Complete) – Empty and remove the ASTs, remove the fuel lines traversing across the river, and remove the concrete secondary containment.

Phase 3 – Characterization (In-Progress) – Collection and analysis of waste characterization samples and initial characterization of extent and nature of subsurface contaminants. Sampling is complete, final analysis is in progress. Based on characterization results, the soil is reportedly suitable for disposal as petroleum contaminated soil at the Roach Construction Land Farm in Genesee, Idaho.

Phase 4 – Bulk Soil Removal (In-Progress) - Removal of contaminated soil from beneath the former bulk fuel storage facility. Fulcrum will oversee removal of contaminated soil. Able will perform soil excavation services and will transport the soil to a nearby land farm permitted to accept petroleum contaminated soil as characterized at the site. Libby Environmental will provide an onsite laboratory to provide analysis. Phase 4 intent is to remove all site soils contaminated by the release, to the extent feasible, without risking adverse impact to the road, bridge, or nearby building. Excavation will proceed based on field screening (PID, discoloration, sheen) and then will be fine-tuned based on sample analysis by the onsite laboratory. Fulcrum anticipates that this phase of work will include excavation past the current groundwater elevation. Preliminary bulk soil removal indicates that it will not be feasible to remove all contaminated soil from the site without potential adverse impact to the adjacent building, bridge, or roads. Bulk soil removal will focus

on the area proximal to the river to allow for placement of a clay aquitard (see Phase 5) and the area of near surface soil impacted by the 2022 fuel spill.

Excavation work during this phase will specifically not impact the riverbank which will be maintained as a natural barrier between the river and the work area. See Figure 5 for a graphic representation of the Phase 4 work area. Turbidity curtain will be staged on site during Phase 4 work in the event that the riverbank becomes unintentionally destabilized during Phase 4 excavation activities.

Phase 5 – Riverbank Impact Removal Option – Depending on results of Phase 4 excavation activities, the Project Team may determine that removal of the impacted area of streambank is advantageous. If so, following completion of Phase 4 activities the excavation area will be rebuilt with clean fill to create a stable working platform to access the riverbank work area. A floating turbidity curtain will be placed just past the existing sorbent booms, parallel to the shoreline to provide a level of protection for the river against sediment load generated during riverbank removal. See Figure 6 for a graphic presentation of the Phase 5 work area. Contaminated sediments will be removed from beneath the riverbank and confirmation samples will be collected for analysis.

Phase 6 – Site Restoration – Following removal of contaminated soils, the excavation will be infilled with like material to what was removed and finished with gravel surfacing. In consideration of the likely presence of contaminants that are not fully excavated, the excavation area immediately proximal to the river will be infilled with an area of compact clay to provide an aquitard between the site and the river. The planned compact clay fill area is estimated at 10-12 feet in depth below the river shoreline, 10-12 feet south from the shoreline, and extending approximately 40 feet along the shoreline. The riverbank and slope will be rebuilt to the pre-existing position and slope and armored with two- to three-foot diameter basalt boulders to water's edge, then top coated with 12-inch minus basalt cobble. The slope and bank will be allowed to revegetate naturally to match the surrounding conditions. See Figure 7 for a graphic representation of planned reconstruction.

Phase 7 – Groundwater Investigation – Fulcrum anticipates that presence of diesel impact to groundwater as evidenced by the capture points along the river's edge may trigger a requirement for a groundwater investigation. If needed, specific details and locations of monitoring well placement and construction will be determined based on observed conditions during the excavation and rebuild process. Generally, Fulcrum would anticipate placement of one up gradient well and two wells in the area of anticipated groundwater impact. All three (3) wells would likely be installed to a depth of 5-10 feet past current groundwater level with a screened interval and construction detail appropriate to characterize groundwater in the near surface unconfined alluvial aquifer. Depending on final site remedial condition, some manner of monitoring wells may be considered for placement on the stream bank as well.

6.0 VALIDATION SAMPLING

Fulcrum will conduct site sampling in accordance with the project specific Sampling and Analysis Plan (SAP). All final verification samples will be analyzed for diesel-range and gasoline-range petroleum hydrocarbons, and BTEX using an appropriately certified laboratory.

Confirmation sampling will be conducted as follows:

6.1 Confirmation Soil Sampling

Final discrete soil samples will be collected from the specific location that, based on field screening, suggests the highest potential for the identified contaminants of concern. Based on limitations in contaminated soil removal as outlined above, Fulcrum anticipates that it may not be possible to excavate to clean sidewalls and pit bottoms in all locations. If so, excavation extents will still be sampled to document site condition.

6.1.1 Pit Bottom Samples

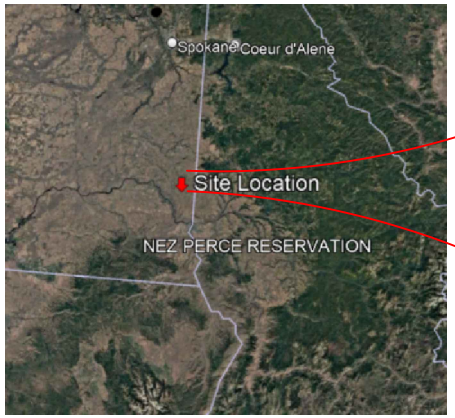
- A minimum of four (4) samples will be collected from the excavation pit bottom.
- Where the total area of the exaction exceeds 500 square feet, then one (1) additional pit bottom sample will be collected for every 1,000 additional square feet.

Fulcrum estimates that up to approximately 6-8 confirmation samples will be collected form the excavation pit bottom.

6.1.2 Sidewall Samples

- A minimum of 12 samples will be collected from the excavation sidewalls. Fulcrum anticipates collection of four samples each for the east, west, and south sidewalls (the north sidewall area constitutes the riverbank slope that will be removed). Samples will be collected from heights and locations identified as most suspect for presence of contaminants of concern.

FIGURES



LEGEND

- Flow direction
- South Fork Palouse River
- Approximate excavation area
- Staging and storage area

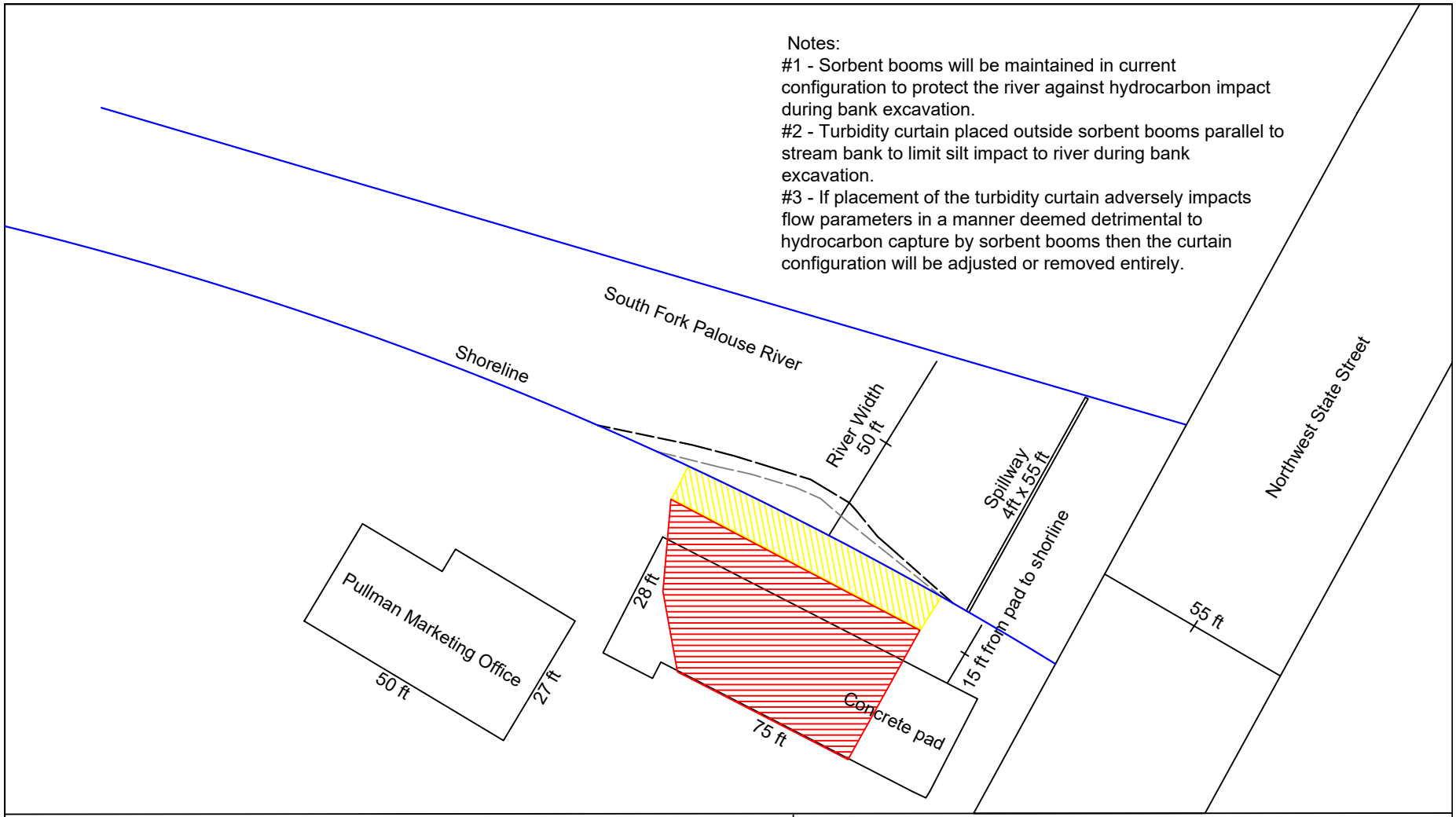
N

Figure 1: General Site Location Map

355 Northwest State Street
Pullman, Washington 99163

FULCRUM ENVIRONMENTAL CONSULTING, INC.
207 W. BOONE AVENUE
SPOKANE, WASHINGTON 99201
(509) 459-9220 www.efulcrum.net

MAP BY: Ethan Ducken	PROJECT NUMBER: 223516.00
DATE: May 25, 2022	REVIEWED BY: Scott Groat



LEGEND

- Phase one excavation area
- Phase two shoreline excavation area
- Turbidity Curtain
- Sorbent Boom

N

0 20

Approximate Scale In Feet

Figure 2: Site Plan View and Remedial Work Area

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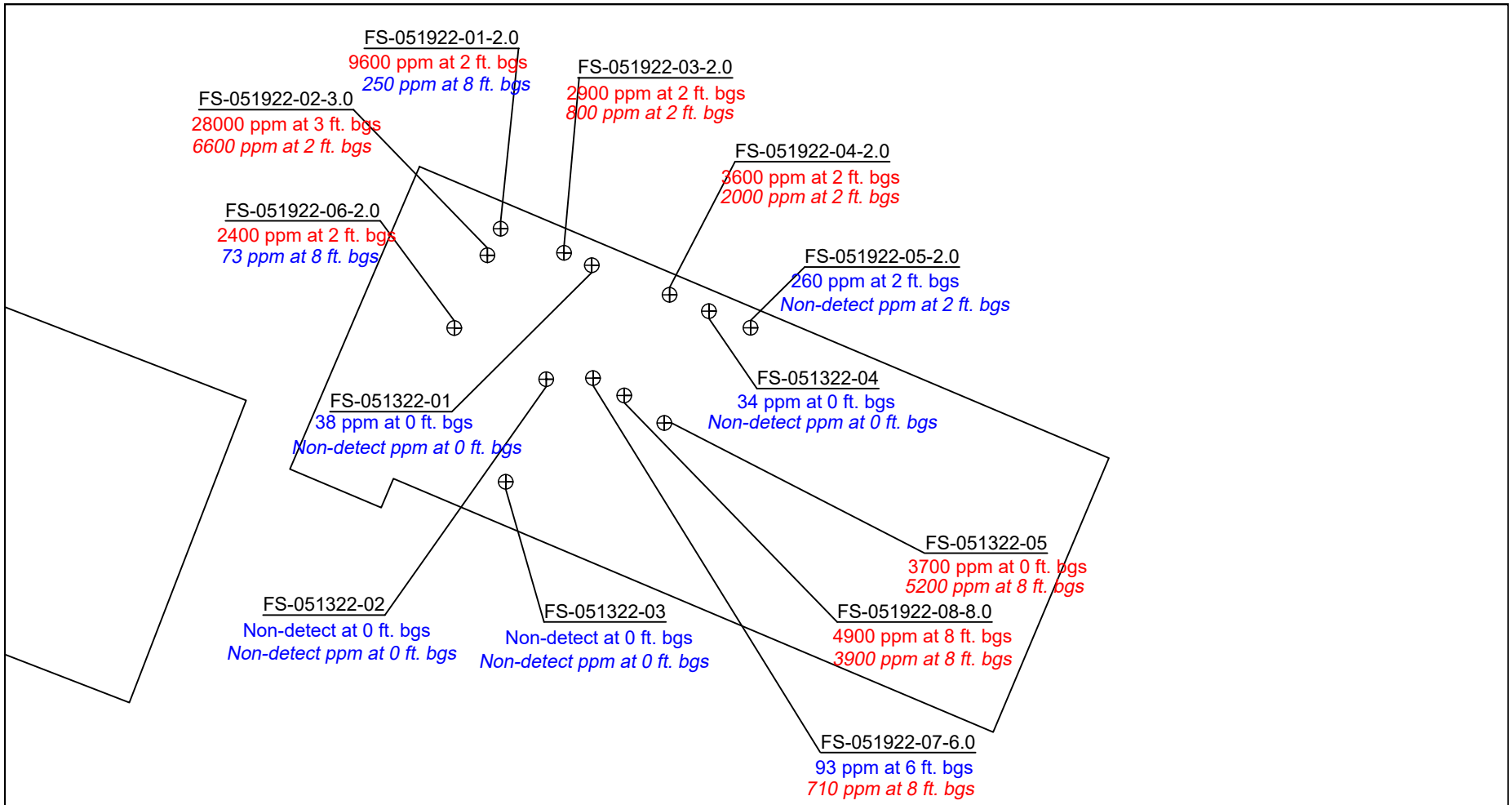

LEGEND

Characterization sample ID
Diesel Concentration Above / Below Cleanup
Gasoline Concentration Above / Below Cleanup

N

0 10

Approximate Scale In Feet

Figure 3: Characterization Soil Sample Location Map

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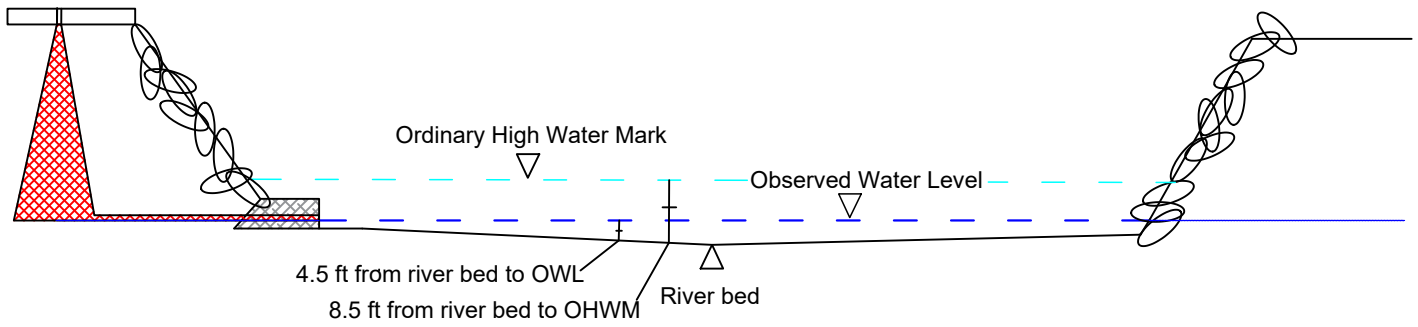

LEGEND

- Concrete pad
- Basalt riprap
- Native soils
- Anticipated diesel impact area
- Approximate groundwater elevation

N

0 20

Approximate Scale In Feet

Figure 4: Cross Section View of Conceptual Model

355 Northwest State Street
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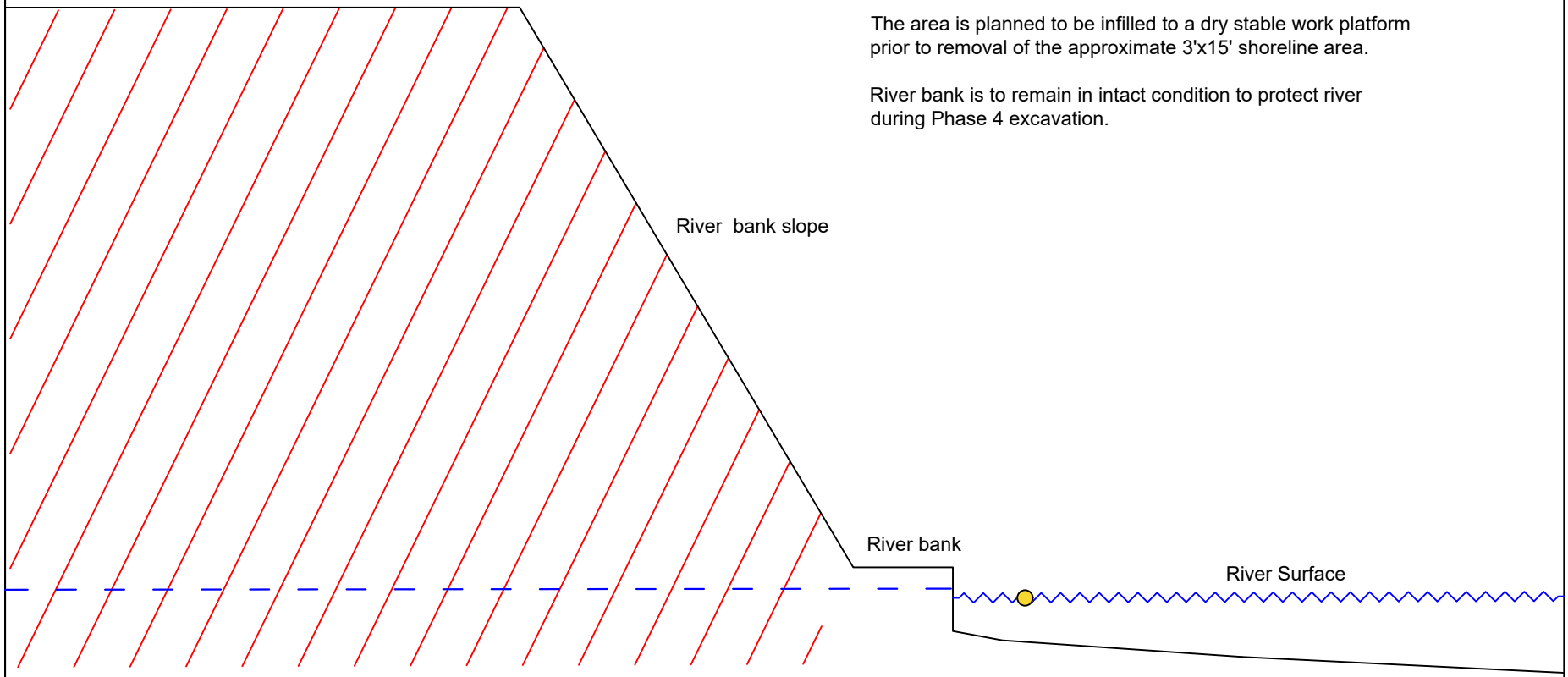

Notes: Indicated area is planned for excavation to clean boundaries, including below anticipated groundwater elevation.

The area is planned to be infilled to a dry stable work platform prior to removal of the approximate 3'x15' shoreline area.

River bank is to remain in intact condition to protect river during Phase 4 excavation.

LEGEND

- Phase One removal area
- Observed water level
- Anticipated groundwater level
- Sorbent boom

N

0 3

Approximate Scale In Feet

Figure 5: Phase 4 Remedial Work Area Site Map

355 Northwest State Street
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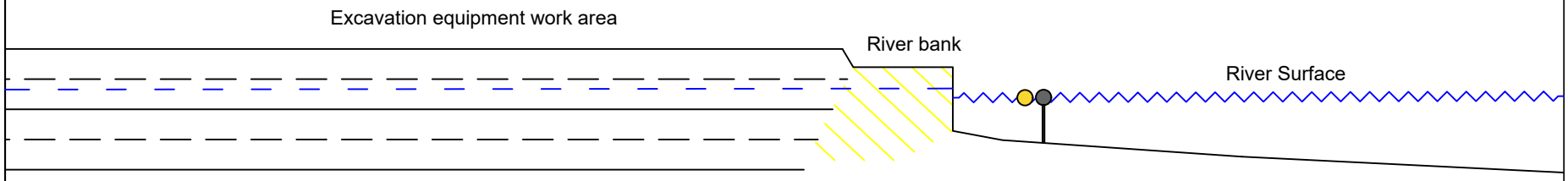
MAP BY: Ethan Ducken	PROJECT NUMBER: 223516.00
DATE: May 25, 2022	REVIEWED BY: Travis Trent

Notes: The Phase 4 excavation area will be filled and compacted to above the water table prior to Phase 5 excavation.



LEGEND

- Fill to required compaction
- Phase two shoreline excavation area
- Observed water level
- Anticipated groundwater level
- Sorbent boom
- Turbidity curtain

N

0 3

Approximate Scale In Feet

Figure 6: Phase 5 Remedial Work Area Site Map

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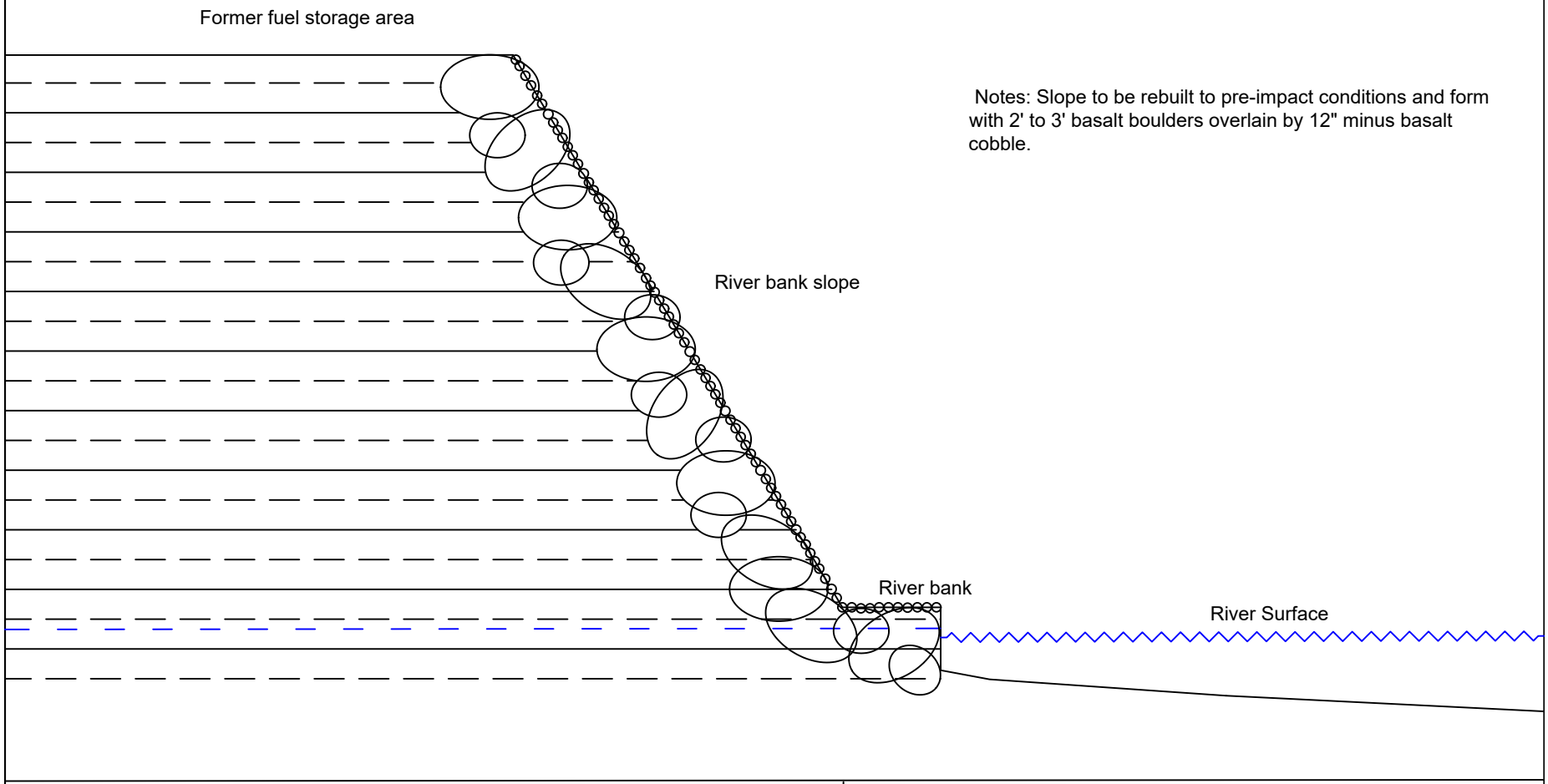

Notes: Slope to be rebuilt to pre-impact conditions and form with 2' to 3' basalt boulders overlain by 12" minus basalt cobble.

LEGEND

- Fill to required compaction
- Observed water level
- Anticipated groundwater level

N

0 3

Approximate Scale In Feet

Figure 7: Site Restoration Map

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MAP BY: Ethan Ducken	PROJECT NUMBER: 223516.00
DATE: May 25, 2022	REVIEWED BY: Travis Trent

APPENDIX A

Applicable Certifications

STATE OF WASHINGTON

DEPARTMENT OF LICENSING – BUSINESS AND PROFESSIONS DIVISION

THIS CERTIFIES THAT THE PERSON OR BUSINESS NAMED BELOW IS AUTHORIZED AS A

WASHINGTON STATE DEPARTMENT OF LICENSING

GEOLOGIST
Hydrogeologist

TRAVIS L TRENT
1127 W 8th Ave
Spokane WA 99204-3107

364	01/08/2002	06/06/2022
License Number	**Issue Date**	**Expiration Date**

Teresa Berntsen

Teresa Berntsen, Director

(R/7/19)

The Board for Global EHS Credentialing (BGC)

through its vested authority, hereby confirms that

Travis L. Trent

has met all requirements of education, experience, and examination, and on-going maintenance set forth through the BGC's American Board of Industrial Hygiene®'s (ABIH®) credentialing division for re-certification in the Comprehensive Practice of Industrial Hygiene and is thereby conferred the credential of

Certified Industrial Hygienist® (CIH®)

The aforenamed individual is given all rights, privileges, and responsibilities as both a diplomate of the BGC and holder of the CIH credential, provided that the credential is not suspended or revoked, and it is renewed annually. Moreover, the holder must meet all recertification requirements, including the obligation to practice ethically as prescribed by the BGC.

Credential Number:	9850 CP
Award Date:	November 19, 2010
Expiration Date:	June 1, 2026

Cynthia Hanko, CIH
Chair of the Board of Directors

Ulric K. Chung, MCS, PhD
Chief Executive Officer and Secretary

APPENDIX B

Laboratory Analytical Results

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Spokane
11922 East 1st Ave
Spokane, WA 99206
Tel: (509)924-9200

Laboratory Job ID: 590-17521-2
Laboratory Sample Delivery Group: Four Star
Client Project/Site: 223516.00/Four Star

For:
Fulcrum Environmental
207 West Boone Avenue
Spokane, Washington 99201

Attn: Scott Groat

Authorized for release by:
5/23/2022 6:13:53 PM

Randee Arrington, Lab Director
(509)924-9200
Randee.Arrington@et.eurofinsus.com

Table of Contents

Case Narrative

Client: Fulcrum Environmental
Project/Site: 223516.00/Four Star

Job ID: 590-17521-2
SDG: Four Star

Job ID: 590-17521-2

Laboratory: Eurofins Spokane

Narrative

Receipt
The samples were received on 5/16/2022 2:55 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 5.2º C.

Receipt Exceptions
The following sample was activated for 6010D TCLP Lead analysis by the client on 05/19/22: FS-051322-03 (590-17521-3). This analysis was not originally requested on the chain-of-custody (COC).

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: Fulcrum Environmental
Project/Site: 223516.00/Four Star

Job ID: 590-17521-2
SDG: Four Star

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-17521-3	FS-051322-03	Solid	05/13/22 15:30	05/16/22 14:55

Definitions/Glossary

Client: Fulcrum Environmental
Project/Site: 223516.00/Four Star

Job ID: 590-17521-2
SDG: Four Star

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Fulcrum Environmental
Project/Site: 223516.00/Four Star

Job ID: 590-17521-2
SDG: Four Star

Client Sample ID: FS-051322-03
Date Collected: 05/13/22 15:30
Date Received: 05/16/22 14:55

Lab Sample ID: 590-17521-3
Matrix: Solid

Method: 6010D - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.060		mg/L		05/23/22 12:08	05/23/22 17:11	1

QC Sample Results

Client: Fulcrum Environmental
Project/Site: 223516.00/Four Star

Job ID: 590-17521-2
SDG: Four Star

Method: 6010D - Metals (ICP)

Lab Sample ID: LCS 590-36207/1-A
Matrix: Solid
Analysis Batch: 36214

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 36207

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Lead			1.00	1.03		mg/L		103	80 - 120		

Lab Sample ID: LB 590-36174/1-B
Matrix: Solid
Analysis Batch: 36214

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 36207

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.060		mg/L		05/23/22 12:08	05/23/22 16:05	1

Lab Chronicle

Client: Fulcrum Environmental
Project/Site: 223516.00/Four Star

Job ID: 590-17521-2
SDG: Four Star

Client Sample ID: FS-051322-03
Date Collected: 05/13/22 15:30
Date Received: 05/16/22 14:55

Lab Sample ID: 590-17521-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			100.43 g	2000.22 mL	36174	05/19/22 18:00	AMB	TAL SPK
TCLP	Prep	3010A			50 mL	50 mL	36207	05/23/22 12:08	JSP	TAL SPK
TCLP	Analysis	6010D		1			36214	05/23/22 17:11	JSP	TAL SPK

Laboratory References:

TAL SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

Accreditation/Certification Summary

Client: Fulcrum Environmental
Project/Site: 223516.00/Four Star

Job ID: 590-17521-2
SDG: Four Star

Laboratory: Eurofins Spokane

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C569	01-06-23

Method Summary

Client: Fulcrum Environmental
Project/Site: 223516.00/Four Star

Job ID: 590-17521-2
SDG: Four Star

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	TAL SPK
1311	TCLP Extraction	SW846	TAL SPK
3010A	Preparation, Total Metals	SW846	TAL SPK

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

Eurofins TestAmerica, Spokane

Chain of Custody Record

eurofins | Environment Testing America

Regulatory Program ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: sgrout@efulcrum.net	Site Contact.	Date: 5/16/22	COC No:
Fulcrum Environmental Consulting	Email: SCOTT@FULCRUM	Lab Contact.	Carrier	of COCs
207 West Boone Avenue	Tel/Fax:			TALS Project #:
Spokane, Washington 99201	Analysis Turnaround Time			Sampler:
509-459-9220	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
FAX	TAT if different from Below 3 days			Walk-in Client:
Project Name: 223516.00	☐ 2 weeks			Lab Sampling:
Site: Four Star	☐ 1 week			
P O #	☐ 2 days			Job / SDG No.
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	NWTPH-DX	NWTPH-GX	BTEX	Total Lead	Sample Specific Notes:
FS-051322-01	5/13	300	G	S	4			X	X	X	X	
-02		315						X	X	X	X	
-03		330						X	X	X	X	
-04		345						X	X	X	X	
-05	↓	400	↓	↓	↓			X	X	X	X	

590-17521 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal by Lab ☐ Archive for Months

Special Instructions/QC Requirements & Comments:
Email results to sgrout@efulcrum.net and red.graves@efulcrum.net

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.		Cooler Temp. (°C). Obs'd: 5	Corr'd: 5.2	Therm ID No.: IR006
Relinquished by: Red Graves	Company: Fulcrum	Date/Time: 5/16/22 2:30	Received by:	Company: GET SPO	Date/Time: 5/16/22 1455
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev 4.35, dated 10/6/2020

Login Sample Receipt Checklist

Client: Fulcrum Environmental

Job Number: 590-17521-2
SDG Number: Four Star

Login Number: 17521
List Number: 1
Creator: Vaughan, Madison 1

List Source: Eurofins Spokane

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins Spokane
11922 East 1st Ave
Spokane, WA 99206
Tel: (509)924-9200

Laboratory Job ID: 590-17521-1
Laboratory Sample Delivery Group: Four Star
Client Project/Site: 223516.00/Four Star

For:
Fulcrum Environmental
207 West Boone Avenue
Spokane, Washington 99201

Attn: Scott Groat

Authorized for release by:
5/18/2022 3:42:45 PM

Randee Arrington, Lab Director
(509)924-9200
Randee.Arrington@et.eurofinsus.com

Table of Contents

Case Narrative

Client: Fulcrum Environmental
Project/Site: 223516.00/Four Star

Job ID: 590-17521-1
SDG: Four Star

Job ID: 590-17521-1

Laboratory: Eurofins Spokane

Narrative

Receipt
The samples were received on 5/16/2022 2:55 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 5.2º C.

GC/MS VOA
Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 590-36146 and analytical batch 590-36144 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8260D: Surrogate recovery for the following sample was outside control limits: FS-051322-05 (590-17521-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method NWTPH-Dx: Surrogate recovery for the following sample was outside control limits: FS-051322-05 (590-17521-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method 6010D: The post digestion spike % recovery for Lead associated with batch 590-36151 was below the lower control limit. The associated sample is: (590-17521-A-1-A PDS).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: Fulcrum Environmental
Project/Site: 223516.00/Four Star

Job ID: 590-17521-1
SDG: Four Star

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-17521-1	FS-051322-01	Solid	05/13/22 15:00	05/16/22 14:55
590-17521-2	FS-051322-02	Solid	05/13/22 15:15	05/16/22 14:55
590-17521-3	FS-051322-03	Solid	05/13/22 15:30	05/16/22 14:55
590-17521-4	FS-051322-04	Solid	05/13/22 15:45	05/16/22 14:55
590-17521-5	FS-051322-05	Solid	05/13/22 16:00	05/16/22 14:55

Definitions/Glossary

Client: Fulcrum Environmental
Project/Site: 223516.00/Four Star

Job ID: 590-17521-1
SDG: Four Star

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1+	Surrogate recovery exceeds control limits, high biased.

GC Semi VOA

Qualifier	Qualifier Description
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
S1+	Surrogate recovery exceeds control limits, high biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample ID: FS-051322-01

Date Collected: 05/13/22 15:00
Date Received: 05/16/22 14:55

Lab Sample ID: 590-17521-1

Matrix: Solid
Percent Solids: 80.5

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.027		mg/Kg	☼	05/17/22 11:33	05/17/22 12:56	1
Ethylbenzene	ND		0.14		mg/Kg	☼	05/17/22 11:33	05/17/22 12:56	1
m,p-Xylene	ND		0.54		mg/Kg	☼	05/17/22 11:33	05/17/22 12:56	1
o-Xylene	ND		0.27		mg/Kg	☼	05/17/22 11:33	05/17/22 12:56	1
Toluene	ND		0.14		mg/Kg	☼	05/17/22 11:33	05/17/22 12:56	1
Xylenes, Total	ND		0.81		mg/Kg	☼	05/17/22 11:33	05/17/22 12:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 129*	*05/17/22 11:33*	*05/17/22 12:56*	*1*
4-Bromofluorobenzene (Surr)	*104*		*76 - 122*	*05/17/22 11:33*	*05/17/22 12:56*	*1*
Dibromofluoromethane (Surr)	*94*		*80 - 120*	*05/17/22 11:33*	*05/17/22 12:56*	*1*
Toluene-d8 (Surr)	*111*		*80 - 120*	*05/17/22 11:33*	*05/17/22 12:56*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		6.8		mg/Kg	☼	05/17/22 11:33	05/17/22 12:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*41.5 - 162*	*05/17/22 11:33*	*05/17/22 12:56*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	**38**		12		mg/Kg	☼	05/17/22 12:50	05/17/22 19:45	1
Residual Range Organics (RRO) (C25-C36)	ND		30		mg/Kg	☼	05/17/22 12:50	05/17/22 19:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*92*		*50 - 150*	*05/17/22 12:50*	*05/17/22 19:45*	*1*
n-Triacontane-d62	*97*		*50 - 150*	*05/17/22 12:50*	*05/17/22 19:45*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**24**		13		mg/Kg	☼	05/17/22 10:24	05/17/22 14:22	5

Client Sample ID: FS-051322-02

Date Collected: 05/13/22 15:15
Date Received: 05/16/22 14:55

Lab Sample ID: 590-17521-2

Matrix: Solid
Percent Solids: 80.7

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	F1 F2	0.030		mg/Kg	☼	05/17/22 11:33	05/17/22 13:40	1
Ethylbenzene	ND	F1 F2	0.15		mg/Kg	☼	05/17/22 11:33	05/17/22 13:40	1
m,p-Xylene	ND	F1	0.59		mg/Kg	☼	05/17/22 11:33	05/17/22 13:40	1
o-Xylene	ND	F1 F2	0.30		mg/Kg	☼	05/17/22 11:33	05/17/22 13:40	1
Toluene	ND	F1	0.15		mg/Kg	☼	05/17/22 11:33	05/17/22 13:40	1
Xylenes, Total	ND		0.89		mg/Kg	☼	05/17/22 11:33	05/17/22 13:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 129*	*05/17/22 11:33*	*05/17/22 13:40*	*1*
4-Bromofluorobenzene (Surr)	*104*		*76 - 122*	*05/17/22 11:33*	*05/17/22 13:40*	*1*
Dibromofluoromethane (Surr)	*88*		*80 - 120*	*05/17/22 11:33*	*05/17/22 13:40*	*1*

Client Sample ID: FS-051322-02

Date Collected: 05/13/22 15:15
Date Received: 05/16/22 14:55

Lab Sample ID: 590-17521-2

Matrix: Solid
Percent Solids: 80.7

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*110*		*80 - 120*	*05/17/22 11:33*	*05/17/22 13:40*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		7.4		mg/Kg	☼	05/17/22 11:33	05/17/22 13:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*41.5 - 162*	*05/17/22 11:33*	*05/17/22 13:40*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		12		mg/Kg	☼	05/17/22 12:50	05/17/22 20:26	1
Residual Range Organics (RRO) (C25-C36)	ND		30		mg/Kg	☼	05/17/22 12:50	05/17/22 20:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*87*		*50 - 150*	*05/17/22 12:50*	*05/17/22 20:26*	*1*
n-Triacontane-d62	*94*		*50 - 150*	*05/17/22 12:50*	*05/17/22 20:26*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**19**		13		mg/Kg	☼	05/17/22 10:24	05/17/22 14:41	5

Client Sample ID: FS-051322-03

Date Collected: 05/13/22 15:30
Date Received: 05/16/22 14:55

Lab Sample ID: 590-17521-3

Matrix: Solid
Percent Solids: 80.3

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.030		mg/Kg	☼	05/17/22 11:33	05/17/22 14:45	1
Ethylbenzene	ND		0.15		mg/Kg	☼	05/17/22 11:33	05/17/22 14:45	1
m,p-Xylene	ND		0.59		mg/Kg	☼	05/17/22 11:33	05/17/22 14:45	1
o-Xylene	ND		0.30		mg/Kg	☼	05/17/22 11:33	05/17/22 14:45	1
Toluene	ND		0.15		mg/Kg	☼	05/17/22 11:33	05/17/22 14:45	1
Xylenes, Total	ND		0.89		mg/Kg	☼	05/17/22 11:33	05/17/22 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 129*	*05/17/22 11:33*	*05/17/22 14:45*	*1*
4-Bromofluorobenzene (Surr)	*104*		*76 - 122*	*05/17/22 11:33*	*05/17/22 14:45*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*	*05/17/22 11:33*	*05/17/22 14:45*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*	*05/17/22 11:33*	*05/17/22 14:45*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		7.4		mg/Kg	☼	05/17/22 11:33	05/17/22 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*41.5 - 162*	*05/17/22 11:33*	*05/17/22 14:45*	*1*

Client Sample ID: FS-051322-03

Date Collected: 05/13/22 15:30
Date Received: 05/16/22 14:55

Lab Sample ID: 590-17521-3

Matrix: Solid
Percent Solids: 80.3

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		12		mg/Kg	☼	05/17/22 12:50	05/17/22 20:47	1
Residual Range Organics (RRO) (C25-C36)	ND		30		mg/Kg	☼	05/17/22 12:50	05/17/22 20:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*95*		*50 - 150*	*05/17/22 12:50*	*05/17/22 20:47*	*1*
n-Triacontane-d62	*103*		*50 - 150*	*05/17/22 12:50*	*05/17/22 20:47*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**160**		14		mg/Kg	☼	05/17/22 10:24	05/17/22 14:57	5

Client Sample ID: FS-051322-04

Date Collected: 05/13/22 15:45
Date Received: 05/16/22 14:55

Lab Sample ID: 590-17521-4

Matrix: Solid
Percent Solids: 82.1

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.034		mg/Kg	☼	05/17/22 11:33	05/17/22 15:29	1
Ethylbenzene	ND		0.17		mg/Kg	☼	05/17/22 11:33	05/17/22 15:29	1
m,p-Xylene	ND		0.68		mg/Kg	☼	05/17/22 11:33	05/17/22 15:29	1
o-Xylene	ND		0.34		mg/Kg	☼	05/17/22 11:33	05/17/22 15:29	1
Toluene	ND		0.17		mg/Kg	☼	05/17/22 11:33	05/17/22 15:29	1
Xylenes, Total	ND		1.0		mg/Kg	☼	05/17/22 11:33	05/17/22 15:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 129*	*05/17/22 11:33*	*05/17/22 15:29*	*1*
4-Bromofluorobenzene (Surr)	*102*		*76 - 122*	*05/17/22 11:33*	*05/17/22 15:29*	*1*
Dibromofluoromethane (Surr)	*94*		*80 - 120*	*05/17/22 11:33*	*05/17/22 15:29*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*	*05/17/22 11:33*	*05/17/22 15:29*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		8.5		mg/Kg	☼	05/17/22 11:33	05/17/22 15:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*41.5 - 162*	*05/17/22 11:33*	*05/17/22 15:29*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	**34**		12		mg/Kg	☼	05/17/22 12:50	05/17/22 21:07	1
Residual Range Organics (RRO) (C25-C36)	ND		30		mg/Kg	☼	05/17/22 12:50	05/17/22 21:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*97*		*50 - 150*	*05/17/22 12:50*	*05/17/22 21:07*	*1*
n-Triacontane-d62	*99*		*50 - 150*	*05/17/22 12:50*	*05/17/22 21:07*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**16**		12		mg/Kg	☼	05/17/22 10:24	05/17/22 15:01	5

Client Sample Results

Client: Fulcrum Environmental
Project/Site: 223516.00/Four Star

Job ID: 590-17521-1
SDG: Four Star

Client Sample ID: FS-051322-05

Date Collected: 05/13/22 16:00
Date Received: 05/16/22 14:55

Lab Sample ID: 590-17521-5

Matrix: Solid
Percent Solids: 84.1

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.036		mg/Kg	☼	05/17/22 11:33	05/17/22 15:51	1
Ethylbenzene	**0.83**		0.18		mg/Kg	☼	05/17/22 11:33	05/17/22 15:51	1
m,p-Xylene	**3.8**		0.72		mg/Kg	☼	05/17/22 11:33	05/17/22 15:51	1
o-Xylene	**4.6**		0.36		mg/Kg	☼	05/17/22 11:33	05/17/22 15:51	1
Toluene	**0.49**		0.18		mg/Kg	☼	05/17/22 11:33	05/17/22 15:51	1
Xylenes, Total	**8.4**		1.1		mg/Kg	☼	05/17/22 11:33	05/17/22 15:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 129*	*05/17/22 11:33*	*05/17/22 15:51*	*1*
4-Bromofluorobenzene (Surr)	*165*	*S1+*	*76 - 122*	*05/17/22 11:33*	*05/17/22 15:51*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 120*	*05/17/22 11:33*	*05/17/22 15:51*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*	*05/17/22 11:33*	*05/17/22 15:51*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	**5200**		900		mg/Kg	☼	05/17/22 11:33	05/17/22 17:18	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*41.5 - 162*	*05/17/22 11:33*	*05/17/22 17:18*	*100*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	**3700**		110		mg/Kg	☼	05/17/22 12:50	05/17/22 21:28	10
Residual Range Organics (RRO) (C25-C36)	ND		280		mg/Kg	☼	05/17/22 12:50	05/17/22 21:28	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*207*	*S1+*	*50 - 150*	*05/17/22 12:50*	*05/17/22 21:28*	*10*
n-Triacontane-d62	*100*		*50 - 150*	*05/17/22 12:50*	*05/17/22 21:28*	*10*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		12		mg/Kg	☼	05/17/22 10:24	05/17/22 15:05	5

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 590-36146/1-A
Matrix: Solid
Analysis Batch: 36144

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 36146

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.020		mg/Kg		05/17/22 11:33	05/17/22 11:50	1
Ethylbenzene	ND		0.10		mg/Kg		05/17/22 11:33	05/17/22 11:50	1
m,p-Xylene	ND		0.40		mg/Kg		05/17/22 11:33	05/17/22 11:50	1
o-Xylene	ND		0.20		mg/Kg		05/17/22 11:33	05/17/22 11:50	1
Toluene	ND		0.10		mg/Kg		05/17/22 11:33	05/17/22 11:50	1
Xylenes, Total	ND		0.60		mg/Kg		05/17/22 11:33	05/17/22 11:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 129*	*05/17/22 11:33*	*05/17/22 11:50*	*1*
4-Bromofluorobenzene (Surr)	*103*		*76 - 122*	*05/17/22 11:33*	*05/17/22 11:50*	*1*
Dibromofluoromethane (Surr)	*91*		*80 - 120*	*05/17/22 11:33*	*05/17/22 11:50*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*	*05/17/22 11:33*	*05/17/22 11:50*	*1*

Lab Sample ID: LCS 590-36146/2-A
Matrix: Solid
Analysis Batch: 36144

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 36146

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.500	0.482		mg/Kg		96	76 - 139
Ethylbenzene	0.500	0.491		mg/Kg		98	77 - 135
m,p-Xylene	0.500	0.476		mg/Kg		95	78 - 130
o-Xylene	0.500	0.488		mg/Kg		98	77 - 129
Toluene	0.500	0.530		mg/Kg		106	77 - 131

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 129*
4-Bromofluorobenzene (Surr)	*103*		*76 - 122*
Dibromofluoromethane (Surr)	*94*		*80 - 120*
Toluene-d8 (Surr)	*105*		*80 - 120*

Lab Sample ID: 590-17521-2 MS
Matrix: Solid
Analysis Batch: 36144

Client Sample ID: FS-051322-02
Prep Type: Total/NA
Prep Batch: 36146

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND	F1 F2	0.739	0.465	F1	mg/Kg	☼	63	76 - 139
Ethylbenzene	ND	F1 F2	0.739	0.459	F1	mg/Kg	☼	62	77 - 135
m,p-Xylene	ND	F1	0.739	ND	F1	mg/Kg	☼	61	78 - 130
o-Xylene	ND	F1 F2	0.739	0.485	F1	mg/Kg	☼	61	77 - 129
Toluene	ND	F1	0.739	0.552	F1	mg/Kg	☼	69	77 - 131

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 129*
4-Bromofluorobenzene (Surr)	*108*		*76 - 122*
Dibromofluoromethane (Surr)	*91*		*80 - 120*
Toluene-d8 (Surr)	*106*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 590-17521-2 MSD
Matrix: Solid
Analysis Batch: 36144

Client Sample ID: FS-051322-02
Prep Type: Total/NA
Prep Batch: 36146

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND	F1 F2	0.739	0.539	F1 F2	mg/Kg	☼	73	76 - 139	15	14
Ethylbenzene	ND	F1 F2	0.739	0.554	F1 F2	mg/Kg	☼	75	77 - 135	19	13
m,p-Xylene	ND	F1	0.739	0.619	F1	mg/Kg	☼	73	78 - 130	14	23
o-Xylene	ND	F1 F2	0.739	0.572	F1 F2	mg/Kg	☼	72	77 - 129	16	15
Toluene	ND	F1	0.739	0.619		mg/Kg	☼	78	77 - 131	11	14

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 129*
4-Bromofluorobenzene (Surr)	*99*		*76 - 122*
Dibromofluoromethane (Surr)	*97*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*

Lab Sample ID: 590-17521-1 DU
Matrix: Solid
Analysis Batch: 36144

Client Sample ID: FS-051322-01
Prep Type: Total/NA
Prep Batch: 36146

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Benzene	ND			ND		mg/Kg	☼			NC	25
Ethylbenzene	ND			ND		mg/Kg	☼			NC	25
m,p-Xylene	ND			ND		mg/Kg	☼			NC	23
o-Xylene	ND			ND		mg/Kg	☼			NC	25
Toluene	ND			ND		mg/Kg	☼			NC	25
Xylenes, Total	ND			ND		mg/Kg	☼			NC	25

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 129*
4-Bromofluorobenzene (Surr)	*105*		*76 - 122*
Dibromofluoromethane (Surr)	*90*		*80 - 120*
Toluene-d8 (Surr)	*108*		*80 - 120*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC/MS)

Lab Sample ID: MB 590-36146/1-A
Matrix: Solid
Analysis Batch: 36143

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 36146

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		5.0		mg/Kg		05/17/22 11:33	05/17/22 11:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*41.5 - 162*	*05/17/22 11:33*	*05/17/22 11:50*	*1*

Lab Sample ID: LCS 590-36146/3-A
Matrix: Solid
Analysis Batch: 36143

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 36146

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline			50.2	49.3		mg/Kg		98	74.4 - 124		

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC/MS) (Continued)

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		41.5 - 162

Lab Sample ID: 590-17521-1 DU — **Client Sample ID: FS-051322-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 36143 — **Prep Batch: 36146**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Gasoline	ND			ND		mg/Kg	☼			NC	32.3

Surrogate	DU %Recovery	DU Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		41.5 - 162

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 590-36149/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 36136 — **Prep Batch: 36149**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		10		mg/Kg		05/17/22 12:50	05/17/22 19:05	1
Residual Range Organics (RRO) (C25-C36)	ND		25		mg/Kg		05/17/22 12:50	05/17/22 19:05	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	83		50 - 150	05/17/22 12:50	05/17/22 19:05	1
n-Triacontane-d62	90		50 - 150	05/17/22 12:50	05/17/22 19:05	1

Lab Sample ID: LCS 590-36149/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 36136 — **Prep Batch: 36149**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics (DRO) (C10-C25)			66.7	62.6		mg/Kg		94	50 - 150		
Residual Range Organics (RRO) (C25-C36)			66.7	73.7		mg/Kg		110	50 - 150		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl	101		50 - 150
n-Triacontane-d62	101		50 - 150

Lab Sample ID: 590-17521-1 DU — **Client Sample ID: FS-051322-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 36136 — **Prep Batch: 36149**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Diesel Range Organics (DRO) (C10-C25)	38			33.7		mg/Kg	☼			11	40
Residual Range Organics (RRO) (C25-C36)	ND			ND	F5	mg/Kg	☼			44	40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: 590-17521-1 DU
Matrix: Solid
Analysis Batch: 36136

Client Sample ID: FS-051322-01
Prep Type: Total/NA
Prep Batch: 36149

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
o-Terphenyl	*94*		*50 - 150*
n-Triacontane-d62	*95*		*50 - 150*

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 590-36141/2-A
Matrix: Solid
Analysis Batch: 36151

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 36141

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		3.0		mg/Kg		05/17/22 10:24	05/17/22 14:10	1

Lab Sample ID: LCS 590-36141/1-A
Matrix: Solid
Analysis Batch: 36151

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 36141

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Lead			50.0	50.6		mg/Kg		101	80 - 120		

Lab Sample ID: 590-17521-1 MS
Matrix: Solid
Analysis Batch: 36151

Client Sample ID: FS-051322-01
Prep Type: Total/NA
Prep Batch: 36141

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Lead	24		58.6	74.3		mg/Kg	☼	86	75 - 125		

Lab Sample ID: 590-17521-1 MSD
Matrix: Solid
Analysis Batch: 36151

Client Sample ID: FS-051322-01
Prep Type: Total/NA
Prep Batch: 36141

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	24		60.9	74.3		mg/Kg	☼	83	75 - 125	0	20

Lab Sample ID: 590-17521-1 DU
Matrix: Solid
Analysis Batch: 36151

Client Sample ID: FS-051322-01
Prep Type: Total/NA
Prep Batch: 36141

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Lead	24			24.2		mg/Kg	☼			2	20

Lab Chronicle

Client: Fulcrum Environmental
Project/Site: 223516.00/Four Star

Job ID: 590-17521-1
SDG: Four Star

Client Sample ID: FS-051322-01
Date Collected: 05/13/22 15:00
Date Received: 05/16/22 14:55

Lab Sample ID: 590-17521-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			36142	05/17/22 10:37	NMI	TAL SPK

Client Sample ID: FS-051322-01
Date Collected: 05/13/22 15:00
Date Received: 05/16/22 14:55

Lab Sample ID: 590-17521-1
Matrix: Solid
Percent Solids: 80.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			11.201 g	10 mL	36146	05/17/22 11:33	JSP	TAL SPK
Total/NA	Analysis	8260D		1	0.86 mL	43 mL	36144	05/17/22 12:56	JSP	TAL SPK
Total/NA	Prep	5035			11.201 g	10 mL	36146	05/17/22 11:33	JSP	TAL SPK
Total/NA	Analysis	NWTPH-Gx		1	0.86 mL	43 mL	36143	05/17/22 12:56	JSP	TAL SPK
Total/NA	Prep	3550C			15.33 g	5 mL	36149	05/17/22 12:50	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		1			36136	05/17/22 19:45	NMI	TAL SPK
Total/NA	Prep	3050B			1.41 g	50 mL	36141	05/17/22 10:24	AMB	TAL SPK
Total/NA	Analysis	6010D		5	10 mL	10 mL	36151	05/17/22 14:22	AMB	TAL SPK

Client Sample ID: FS-051322-02
Date Collected: 05/13/22 15:15
Date Received: 05/16/22 14:55

Lab Sample ID: 590-17521-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			36142	05/17/22 10:37	NMI	TAL SPK

Client Sample ID: FS-051322-02
Date Collected: 05/13/22 15:15
Date Received: 05/16/22 14:55

Lab Sample ID: 590-17521-2
Matrix: Solid
Percent Solids: 80.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			10.019 g	10 mL	36146	05/17/22 11:33	JSP	TAL SPK
Total/NA	Analysis	8260D		1	0.86 mL	43 mL	36144	05/17/22 13:40	JSP	TAL SPK
Total/NA	Prep	5035			10.019 g	10 mL	36146	05/17/22 11:33	JSP	TAL SPK
Total/NA	Analysis	NWTPH-Gx		1	0.86 mL	43 mL	36143	05/17/22 13:40	JSP	TAL SPK
Total/NA	Prep	3550C			15.40 g	5 mL	36149	05/17/22 12:50	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		1			36136	05/17/22 20:26	NMI	TAL SPK
Total/NA	Prep	3050B			1.45 g	50 mL	36141	05/17/22 10:24	AMB	TAL SPK
Total/NA	Analysis	6010D		5			36151	05/17/22 14:41	AMB	TAL SPK

Client Sample ID: FS-051322-03
Date Collected: 05/13/22 15:30
Date Received: 05/16/22 14:55

Lab Sample ID: 590-17521-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			36142	05/17/22 10:37	NMI	TAL SPK

Lab Chronicle

Client: Fulcrum Environmental
Project/Site: 223516.00/Four Star

Job ID: 590-17521-1
SDG: Four Star

Client Sample ID: FS-051322-03
Date Collected: 05/13/22 15:30
Date Received: 05/16/22 14:55

Lab Sample ID: 590-17521-3
Matrix: Solid
Percent Solids: 80.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			10.091 g	10 mL	36146	05/17/22 11:33	JSP	TAL SPK
Total/NA	Analysis	8260D		1	0.86 mL	43 mL	36144	05/17/22 14:45	JSP	TAL SPK
Total/NA	Prep	5035			10.091 g	10 mL	36146	05/17/22 11:33	JSP	TAL SPK
Total/NA	Analysis	NWTPH-Gx		1	0.86 mL	43 mL	36143	05/17/22 14:45	JSP	TAL SPK
Total/NA	Prep	3550C			15.59 g	5 mL	36149	05/17/22 12:50	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		1			36136	05/17/22 20:47	NMI	TAL SPK
Total/NA	Prep	3050B			1.37 g	50 mL	36141	05/17/22 10:24	AMB	TAL SPK
Total/NA	Analysis	6010D		5			36151	05/17/22 14:57	AMB	TAL SPK

Client Sample ID: FS-051322-04
Date Collected: 05/13/22 15:45
Date Received: 05/16/22 14:55

Lab Sample ID: 590-17521-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			36142	05/17/22 10:37	NMI	TAL SPK

Client Sample ID: FS-051322-04
Date Collected: 05/13/22 15:45
Date Received: 05/16/22 14:55

Lab Sample ID: 590-17521-4
Matrix: Solid
Percent Solids: 82.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8.198 g	10 mL	36146	05/17/22 11:33	JSP	TAL SPK
Total/NA	Analysis	8260D		1	0.86 mL	43 mL	36144	05/17/22 15:29	JSP	TAL SPK
Total/NA	Prep	5035			8.198 g	10 mL	36146	05/17/22 11:33	JSP	TAL SPK
Total/NA	Analysis	NWTPH-Gx		1	0.86 mL	43 mL	36143	05/17/22 15:29	JSP	TAL SPK
Total/NA	Prep	3550C			15.36 g	5 mL	36149	05/17/22 12:50	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		1			36136	05/17/22 21:07	NMI	TAL SPK
Total/NA	Prep	3050B			1.58 g	50 mL	36141	05/17/22 10:24	AMB	TAL SPK
Total/NA	Analysis	6010D		5			36151	05/17/22 15:01	AMB	TAL SPK

Client Sample ID: FS-051322-05
Date Collected: 05/13/22 16:00
Date Received: 05/16/22 14:55

Lab Sample ID: 590-17521-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			36142	05/17/22 10:37	NMI	TAL SPK

Client Sample ID: FS-051322-05
Date Collected: 05/13/22 16:00
Date Received: 05/16/22 14:55

Lab Sample ID: 590-17521-5
Matrix: Solid
Percent Solids: 84.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.358 g	10 mL	36146	05/17/22 11:33	JSP	TAL SPK
Total/NA	Analysis	8260D		1	0.86 mL	43 mL	36144	05/17/22 15:51	JSP	TAL SPK
Total/NA	Prep	5035			7.358 g	10 mL	36146	05/17/22 11:33	JSP	TAL SPK
Total/NA	Analysis	NWTPH-Gx		100	0.86 mL	43 mL	36143	05/17/22 17:18	JSP	TAL SPK

Lab Chronicle

Client: Fulcrum Environmental
Project/Site: 223516.00/Four Star

Job ID: 590-17521-1
SDG: Four Star

Client Sample ID: FS-051322-05

Date Collected: 05/13/22 16:00
Date Received: 05/16/22 14:55

Lab Sample ID: 590-17521-5

Matrix: Solid
Percent Solids: 84.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.89 g	5 mL	36149	05/17/22 12:50	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		10			36136	05/17/22 21:28	NMI	TAL SPK
Total/NA	Prep	3050B			1.47 g	50 mL	36141	05/17/22 10:24	AMB	TAL SPK
Total/NA	Analysis	6010D		5			36151	05/17/22 15:05	AMB	TAL SPK

Laboratory References:

TAL SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

Accreditation/Certification Summary

Client: Fulcrum Environmental
Project/Site: 223516.00/Four Star

Job ID: 590-17521-1
SDG: Four Star

Laboratory: Eurofins Spokane

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Washington	State	C569	01-06-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: Fulcrum Environmental
Project/Site: 223516.00/Four Star

Job ID: 590-17521-1
SDG: Four Star

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	TAL SPK
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC/MS)	NWTPH	TAL SPK
NWTPH-Dx	Northwest - Semi-Volatile Petroleum Products (GC)	NWTPH	TAL SPK
6010D	Metals (ICP)	SW846	TAL SPK
Moisture	Percent Moisture	EPA	TAL SPK
3050B	Preparation, Metals	SW846	TAL SPK
3550C	Ultrasonic Extraction	SW846	TAL SPK
5035	Closed System Purge and Trap	SW846	TAL SPK

Protocol References:

EPA = US Environmental Protection Agency

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

Eurofins TestAmerica, Spokane

Chain of Custody Record

eurofins | Environment Testing America

Regulatory Program ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: sgrant@efulcrum.net	Site Contact.	Date: 5/16/22	COC No:
Fulcrum Environmental Consulting	Email: SCOTT@FULCRUM	Lab Contact.	Carrier	of COCs
207 West Boone Avenue	Tel/Fax:			TALS Project #:
Spokane, Washington 99201	Analysis Turnaround Time			Sampler:
509-459-9220	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
FAX	TAT if different from Below 3 days			Walk-in Client:
Project Name: 223516.00	☐ 2 weeks			Lab Sampling:
Site: Four Star	☐ 1 week			
P O #	☐ 2 days			Job / SDG No.
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	NWTPH-DX	NWTPH-GX	BTEX	Total Lead	Sample Specific Notes:
FS-051322-01	5/13	300	G	S	4			X	X	X	X	
-02		315						X	X	X	X	
-03		330						X	X	X	X	
-04		345						X	X	X	X	
-05	↓	400	↓	↓	↓			X	X	X	X	

590-17521 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:
Email results to sgrant@efulcrum.net and red.graves@efulcrum.net

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.		Cooler Temp. (°C). Obs'd: 5	Corr'd: 5.2	Therm ID No.: IR006
Relinquished by: Red Graves	Company: Fulcrum	Date/Time: 5/16/22 2:30	Received by:	Company: GET SPO	Date/Time: 5/16/22 1455
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev 4.35, dated 10/6/2020

Login Sample Receipt Checklist

Client: Fulcrum Environmental

Job Number: 590-17521-1
SDG Number: Four Star

Login Number: 17521
List Number: 1
Creator: Vaughan, Madison 1

List Source: Eurofins Spokane

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Spokane
11922 East 1st Ave
Spokane, WA 99206
Tel: (509)924-9200

Laboratory Job ID: 590-17564-1
Client Project/Site: Four Star/223516.00

For:
Fulcrum Environmental
207 West Boone Avenue
Spokane, Washington 99201

Attn: Scott Groat

Randee Arrington

Authorized for release by:
5/23/2022 5:25:09 PM

Randee Arrington, Lab Director
(509)924-9200
Randee.Arrington@et.eurofinsus.com

Table of Contents

Case Narrative

Client: Fulcrum Environmental
Project/Site: Four Star/223516.00

Job ID: 590-17564-1

Job ID: 590-17564-1

Laboratory: Eurofins Spokane

Narrative

Receipt
The samples were received on 5/19/2022 4:51 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 8.2º C.

Receipt Exceptions
The following samples were received at the laboratory outside the required temperature criteria: FS-051922-01-2.0 (590-17564-1), FS-051922-02-3.0 (590-17564-2), FS-051922-03-2.0 (590-17564-3), FS-051922-04-2.0 (590-17564-4), FS-051922-05-2.0 (590-17564-5), FS-051922-06-2.0 (590-17564-6), FS-051922-07-6.0 (590-17564-7) and FS-051922-08-8.0 (590-17564-8). The samples are considered acceptable since they were collected and submitted to the laboratory on the same day and there is evidence that the chilling process has begun.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
Method NWTPH-Dx: The continuing calibration verification (CCV) associated with batch 590-36206 recovered above the upper control limit for Diesel Range Organics (DRO) (C10-C25). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method NWTPH-Dx: Detected hydrocarbons in the oil range appear to be due to diesel overlap in the following samples: FS-051922-02-3.0 (590-17564-2), FS-051922-03-2.0 (590-17564-3), FS-051922-06-2.0 (590-17564-6) and (590-17564-A-1-C DU).

Method NWTPH-Dx: Surrogate recovery for the following samples were outside control limits: FS-051922-01-2.0 (590-17564-1), FS-051922-04-2.0 (590-17564-4), FS-051922-08-8.0 (590-17564-8) and (590-17564-A-1-C DU). Evidence of matrix interference due to high target analytes is present; therefore, re-extraction and/or re-analysis was not performed.

Method NWTPH-Dx: Detected hydrocarbons in the diesel range appear to be due to heavily weathered diesel and/or a light weight oil in the following sample: FS-051922-05-2.0 (590-17564-5).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: Fulcrum Environmental
Project/Site: Four Star/223516.00

Job ID: 590-17564-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-17564-1	FS-051922-01-2.0	Solid	05/19/22 10:00	05/19/22 16:51
590-17564-2	FS-051922-02-3.0	Solid	05/19/22 10:15	05/19/22 16:51
590-17564-3	FS-051922-03-2.0	Solid	05/19/22 10:30	05/19/22 16:51
590-17564-4	FS-051922-04-2.0	Solid	05/19/22 10:45	05/19/22 16:51
590-17564-5	FS-051922-05-2.0	Solid	05/19/22 11:00	05/19/22 16:51
590-17564-6	FS-051922-06-2.0	Solid	05/19/22 11:15	05/19/22 16:51
590-17564-7	FS-051922-07-6.0	Solid	05/19/22 14:00	05/19/22 16:51
590-17564-8	FS-051922-08-8.0	Solid	05/19/22 14:15	05/19/22 16:51

Definitions/Glossary

Client: Fulcrum Environmental
Project/Site: Four Star/223516.00

Job ID: 590-17564-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1+	Surrogate recovery exceeds control limits, high biased.

GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample ID: FS-051922-01-2.0

Date Collected: 05/19/22 10:00
Date Received: 05/19/22 16:51

Lab Sample ID: 590-17564-1

Matrix: Solid
Percent Solids: 76.2

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.047		mg/Kg	☼	05/20/22 10:00	05/20/22 12:18	1
Ethylbenzene	ND		0.24		mg/Kg	☼	05/20/22 10:00	05/20/22 12:18	1
m,p-Xylene	ND		0.95		mg/Kg	☼	05/20/22 10:00	05/20/22 12:18	1
o-Xylene	ND		0.47		mg/Kg	☼	05/20/22 10:00	05/20/22 12:18	1
Toluene	ND		0.24		mg/Kg	☼	05/20/22 10:00	05/20/22 12:18	1
Xylenes, Total	ND		1.4		mg/Kg	☼	05/20/22 10:00	05/20/22 12:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*75 - 129*	*05/20/22 10:00*	*05/20/22 12:18*	*1*
4-Bromofluorobenzene (Surr)	*97*		*76 - 122*	*05/20/22 10:00*	*05/20/22 12:18*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*	*05/20/22 10:00*	*05/20/22 12:18*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*	*05/20/22 10:00*	*05/20/22 12:18*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	**250**		12		mg/Kg	☼	05/20/22 10:00	05/20/22 12:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*41.5 - 162*	*05/20/22 10:00*	*05/20/22 12:18*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	**9600**		130		mg/Kg	☼	05/23/22 10:33	05/23/22 12:34	10
Residual Range Organics (RRO) (C25-C36)	ND		320		mg/Kg	☼	05/23/22 10:33	05/23/22 12:34	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*379*	*S1+*	*50 - 150*	*05/23/22 10:33*	*05/23/22 12:34*	*10*
n-Triacontane-d62	*89*		*50 - 150*	*05/23/22 10:33*	*05/23/22 12:34*	*10*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**170**		12		mg/Kg	☼	05/20/22 08:05	05/23/22 14:48	5

Client Sample ID: FS-051922-02-3.0

Date Collected: 05/19/22 10:15
Date Received: 05/19/22 16:51

Lab Sample ID: 590-17564-2

Matrix: Solid
Percent Solids: 75.1

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	F1	0.57		mg/Kg	☼	05/20/22 10:00	05/20/22 13:01	10
Ethylbenzene	ND	F2 F1	2.8		mg/Kg	☼	05/20/22 10:00	05/20/22 13:01	10
m,p-Xylene	ND	F1	11		mg/Kg	☼	05/20/22 10:00	05/20/22 13:01	10
o-Xylene	ND	F1	5.7		mg/Kg	☼	05/20/22 10:00	05/20/22 13:01	10
Toluene	ND	F2 F1	2.8		mg/Kg	☼	05/20/22 10:00	05/20/22 13:01	10
Xylenes, Total	ND		17		mg/Kg	☼	05/20/22 10:00	05/20/22 13:01	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 129*	*05/20/22 10:00*	*05/20/22 13:01*	*10*
4-Bromofluorobenzene (Surr)	*117*		*76 - 122*	*05/20/22 10:00*	*05/20/22 13:01*	*10*
Dibromofluoromethane (Surr)	*106*		*80 - 120*	*05/20/22 10:00*	*05/20/22 13:01*	*10*

Client Sample ID: FS-051922-02-3.0

Lab Sample ID: 590-17564-2
Date Collected: 05/19/22 10:15
Matrix: Solid
Date Received: 05/19/22 16:51
Percent Solids: 75.1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*	*05/20/22 10:00*	*05/20/22 13:01*	*10*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	**6600**		140		mg/Kg	☼	05/20/22 10:00	05/20/22 13:01	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*41.5 - 162*	*05/20/22 10:00*	*05/20/22 13:01*	*10*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	**28000**		130		mg/Kg	☼	05/23/22 10:33	05/23/22 13:15	10
Residual Range Organics (RRO) (C25-C36)	**770**		330		mg/Kg	☼	05/23/22 10:33	05/23/22 13:15	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*63*		*50 - 150*	*05/23/22 10:33*	*05/23/22 13:15*	*10*
n-Triacontane-d62	*107*		*50 - 150*	*05/23/22 10:33*	*05/23/22 13:15*	*10*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**79**		13		mg/Kg	☼	05/20/22 08:05	05/23/22 14:52	5

Client Sample ID: FS-051922-03-2.0

Lab Sample ID: 590-17564-3
Date Collected: 05/19/22 10:30
Matrix: Solid
Date Received: 05/19/22 16:51
Percent Solids: 82.9

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.040		mg/Kg	☼	05/20/22 10:00	05/20/22 14:06	1
Ethylbenzene	ND		0.20		mg/Kg	☼	05/20/22 10:00	05/20/22 14:06	1
m,p-Xylene	ND		0.80		mg/Kg	☼	05/20/22 10:00	05/20/22 14:06	1
o-Xylene	**0.59**		0.40		mg/Kg	☼	05/20/22 10:00	05/20/22 14:06	1
Toluene	ND		0.20		mg/Kg	☼	05/20/22 10:00	05/20/22 14:06	1
Xylenes, Total	ND		1.2		mg/Kg	☼	05/20/22 10:00	05/20/22 14:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 129*	*05/20/22 10:00*	*05/20/22 14:06*	*1*
4-Bromofluorobenzene (Surr)	*121*		*76 - 122*	*05/20/22 10:00*	*05/20/22 14:06*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*	*05/20/22 10:00*	*05/20/22 14:06*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*	*05/20/22 10:00*	*05/20/22 14:06*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	**800**		10		mg/Kg	☼	05/20/22 10:00	05/20/22 14:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*41.5 - 162*	*05/20/22 10:00*	*05/20/22 14:06*	*1*

Client Sample ID: FS-051922-03-2.0

Date Collected: 05/19/22 10:30
Date Received: 05/19/22 16:51

Lab Sample ID: 590-17564-3

Matrix: Solid
Percent Solids: 82.9

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	**2900**		57		mg/Kg	☼	05/23/22 10:33	05/23/22 13:34	5
Residual Range Organics (RRO) (C25-C36)	ND		140		mg/Kg	☼	05/23/22 10:33	05/23/22 13:34	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*119*		*50 - 150*	*05/23/22 10:33*	*05/23/22 13:34*	*5*
n-Triacontane-d62	*91*		*50 - 150*	*05/23/22 10:33*	*05/23/22 13:34*	*5*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		12		mg/Kg	☼	05/20/22 08:05	05/23/22 15:08	5

Client Sample ID: FS-051922-04-2.0

Date Collected: 05/19/22 10:45
Date Received: 05/19/22 16:51

Lab Sample ID: 590-17564-4

Matrix: Solid
Percent Solids: 82.2

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.44		mg/Kg	☼	05/20/22 10:00	05/20/22 14:49	10
Ethylbenzene	ND		2.2		mg/Kg	☼	05/20/22 10:00	05/20/22 14:49	10
m,p-Xylene	ND		8.8		mg/Kg	☼	05/20/22 10:00	05/20/22 14:49	10
o-Xylene	ND		4.4		mg/Kg	☼	05/20/22 10:00	05/20/22 14:49	10
Toluene	ND		2.2		mg/Kg	☼	05/20/22 10:00	05/20/22 14:49	10
Xylenes, Total	ND		13		mg/Kg	☼	05/20/22 10:00	05/20/22 14:49	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 129*	*05/20/22 10:00*	*05/20/22 14:49*	*10*
4-Bromofluorobenzene (Surr)	*99*		*76 - 122*	*05/20/22 10:00*	*05/20/22 14:49*	*10*
Dibromofluoromethane (Surr)	*96*		*80 - 120*	*05/20/22 10:00*	*05/20/22 14:49*	*10*
Toluene-d8 (Surr)	*104*		*80 - 120*	*05/20/22 10:00*	*05/20/22 14:49*	*10*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	**2000**		110		mg/Kg	☼	05/20/22 10:00	05/20/22 14:49	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*41.5 - 162*	*05/20/22 10:00*	*05/20/22 14:49*	*10*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	**3600**		59		mg/Kg	☼	05/23/22 10:33	05/23/22 13:54	5
Residual Range Organics (RRO) (C25-C36)	ND		150		mg/Kg	☼	05/23/22 10:33	05/23/22 13:54	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*274*	*S1+*	*50 - 150*	*05/23/22 10:33*	*05/23/22 13:54*	*5*
n-Triacontane-d62	*93*		*50 - 150*	*05/23/22 10:33*	*05/23/22 13:54*	*5*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**54**		12		mg/Kg	☼	05/20/22 08:05	05/23/22 15:12	5

Client Sample ID: FS-051922-05-2.0

Lab Sample ID: 590-17564-5
Date Collected: 05/19/22 11:00
Matrix: Solid
Date Received: 05/19/22 16:51
Percent Solids: 87.3

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.046		mg/Kg	☼	05/20/22 10:00	05/20/22 15:11	1
Ethylbenzene	ND		0.23		mg/Kg	☼	05/20/22 10:00	05/20/22 15:11	1
m,p-Xylene	ND		0.93		mg/Kg	☼	05/20/22 10:00	05/20/22 15:11	1
o-Xylene	ND		0.46		mg/Kg	☼	05/20/22 10:00	05/20/22 15:11	1
Toluene	ND		0.23		mg/Kg	☼	05/20/22 10:00	05/20/22 15:11	1
Xylenes, Total	ND		1.4		mg/Kg	☼	05/20/22 10:00	05/20/22 15:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 129*	*05/20/22 10:00*	*05/20/22 15:11*	*1*
4-Bromofluorobenzene (Surr)	*101*		*76 - 122*	*05/20/22 10:00*	*05/20/22 15:11*	*1*
Dibromofluoromethane (Surr)	*90*		*80 - 120*	*05/20/22 10:00*	*05/20/22 15:11*	*1*
Toluene-d8 (Surr)	*111*		*80 - 120*	*05/20/22 10:00*	*05/20/22 15:11*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		12		mg/Kg	☼	05/20/22 10:00	05/20/22 15:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*41.5 - 162*	*05/20/22 10:00*	*05/20/22 15:11*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	**260**		54		mg/Kg	☼	05/23/22 10:33	05/23/22 14:12	5
Residual Range Organics (RRO) (C25-C36)	ND		140		mg/Kg	☼	05/23/22 10:33	05/23/22 14:12	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*97*		*50 - 150*	*05/23/22 10:33*	*05/23/22 14:12*	*5*
n-Triacontane-d62	*93*		*50 - 150*	*05/23/22 10:33*	*05/23/22 14:12*	*5*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**170**		11		mg/Kg	☼	05/20/22 08:05	05/23/22 15:16	5

Client Sample ID: FS-051922-06-2.0

Lab Sample ID: 590-17564-6
Date Collected: 05/19/22 11:15
Matrix: Solid
Date Received: 05/19/22 16:51
Percent Solids: 78.5

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.046		mg/Kg	☼	05/20/22 10:00	05/20/22 15:33	1
Ethylbenzene	ND		0.23		mg/Kg	☼	05/20/22 10:00	05/20/22 15:33	1
m,p-Xylene	ND		0.91		mg/Kg	☼	05/20/22 10:00	05/20/22 15:33	1
o-Xylene	ND		0.46		mg/Kg	☼	05/20/22 10:00	05/20/22 15:33	1
Toluene	ND		0.23		mg/Kg	☼	05/20/22 10:00	05/20/22 15:33	1
Xylenes, Total	ND		1.4		mg/Kg	☼	05/20/22 10:00	05/20/22 15:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 129*	*05/20/22 10:00*	*05/20/22 15:33*	*1*
4-Bromofluorobenzene (Surr)	*102*		*76 - 122*	*05/20/22 10:00*	*05/20/22 15:33*	*1*
Dibromofluoromethane (Surr)	*92*		*80 - 120*	*05/20/22 10:00*	*05/20/22 15:33*	*1*

Client Sample ID: FS-051922-06-2.0

Lab Sample ID: 590-17564-6
Date Collected: 05/19/22 11:15
Matrix: Solid
Date Received: 05/19/22 16:51
Percent Solids: 78.5

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*111*		*80 - 120*	*05/20/22 10:00*	*05/20/22 15:33*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	**73**		11		mg/Kg	☼	05/20/22 10:00	05/20/22 15:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*102*		*41.5 - 162*	*05/20/22 10:00*	*05/20/22 15:33*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	**2400**		61		mg/Kg	☼	05/23/22 10:33	05/23/22 14:32	5
Residual Range Organics (RRO) (C25-C36)	**180**		150		mg/Kg	☼	05/23/22 10:33	05/23/22 14:32	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	*107*		*50 - 150*	*05/23/22 10:33*	*05/23/22 14:32*	*5*
n-Triacontane-d62	*93*		*50 - 150*	*05/23/22 10:33*	*05/23/22 14:32*	*5*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**46**		11		mg/Kg	☼	05/20/22 08:05	05/23/22 15:20	5

Client Sample ID: FS-051922-07-6.0

Lab Sample ID: 590-17564-7
Date Collected: 05/19/22 14:00
Matrix: Solid
Date Received: 05/19/22 16:51
Percent Solids: 78.8

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.049		mg/Kg	☼	05/20/22 10:00	05/20/22 15:54	1
Ethylbenzene	ND		0.25		mg/Kg	☼	05/20/22 10:00	05/20/22 15:54	1
m,p-Xylene	ND		0.98		mg/Kg	☼	05/20/22 10:00	05/20/22 15:54	1
o-Xylene	**0.65**		0.49		mg/Kg	☼	05/20/22 10:00	05/20/22 15:54	1
Toluene	ND		0.25		mg/Kg	☼	05/20/22 10:00	05/20/22 15:54	1
Xylenes, Total	**1.5**		1.5		mg/Kg	☼	05/20/22 10:00	05/20/22 15:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 129*	*05/20/22 10:00*	*05/20/22 15:54*	*1*
4-Bromofluorobenzene (Surr)	*119*		*76 - 122*	*05/20/22 10:00*	*05/20/22 15:54*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 120*	*05/20/22 10:00*	*05/20/22 15:54*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*	*05/20/22 10:00*	*05/20/22 15:54*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	**710**		12		mg/Kg	☼	05/20/22 10:00	05/20/22 15:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*119*		*41.5 - 162*	*05/20/22 10:00*	*05/20/22 15:54*	*1*

Client: Fulcrum Environmental
Project/Site: Four Star/223516.00

Job ID: 590-17564-1

Client Sample ID: FS-051922-07-6.0

Date Collected: 05/19/22 14:00
Date Received: 05/19/22 16:51

Lab Sample ID: 590-17564-7

Matrix: Solid
Percent Solids: 78.8

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	**93**		12		mg/Kg	☼	05/23/22 10:33	05/23/22 14:50	1
Residual Range Organics (RRO) (C25-C36)	ND		30		mg/Kg	☼	05/23/22 10:33	05/23/22 14:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*104*		*50 - 150*	*05/23/22 10:33*	*05/23/22 14:50*	*1*
n-Triacontane-d62	*104*		*50 - 150*	*05/23/22 10:33*	*05/23/22 14:50*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		10		mg/Kg	☼	05/20/22 08:05	05/23/22 15:24	5

Client Sample ID: FS-051922-08-8.0

Date Collected: 05/19/22 14:15
Date Received: 05/19/22 16:51

Lab Sample ID: 590-17564-8

Matrix: Solid
Percent Solids: 70.8

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.061		mg/Kg	☼	05/20/22 10:00	05/20/22 16:15	1
Ethylbenzene	**0.50**		0.30		mg/Kg	☼	05/20/22 10:00	05/20/22 16:15	1
m,p-Xylene	**2.3**		1.2		mg/Kg	☼	05/20/22 10:00	05/20/22 16:15	1
o-Xylene	**2.3**		0.61		mg/Kg	☼	05/20/22 10:00	05/20/22 16:15	1
Toluene	ND		0.30		mg/Kg	☼	05/20/22 10:00	05/20/22 16:15	1
Xylenes, Total	**4.6**		1.8		mg/Kg	☼	05/20/22 10:00	05/20/22 16:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 129*	*05/20/22 10:00*	*05/20/22 16:15*	*1*
4-Bromofluorobenzene (Surr)	*123*	*S1+*	*76 - 122*	*05/20/22 10:00*	*05/20/22 16:15*	*1*
Dibromofluoromethane (Surr)	*110*		*80 - 120*	*05/20/22 10:00*	*05/20/22 16:15*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*	*05/20/22 10:00*	*05/20/22 16:15*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	**3900**		150		mg/Kg	☼	05/20/22 10:00	05/20/22 19:05	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*41.5 - 162*	*05/20/22 10:00*	*05/20/22 19:05*	*10*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	**4900**		140		mg/Kg	☼	05/23/22 10:33	05/23/22 15:11	10
Residual Range Organics (RRO) (C25-C36)	ND		340		mg/Kg	☼	05/23/22 10:33	05/23/22 15:11	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*180*	*S1+*	*50 - 150*	*05/23/22 10:33*	*05/23/22 15:11*	*10*
n-Triacontane-d62	*86*		*50 - 150*	*05/23/22 10:33*	*05/23/22 15:11*	*10*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**14**		10		mg/Kg	☼	05/20/22 08:05	05/23/22 15:28	5

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 590-36200/1-A
Matrix: Solid
Analysis Batch: 36199

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 36200

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.020		mg/Kg		05/20/22 10:00	05/20/22 11:13	1
Ethylbenzene	ND		0.10		mg/Kg		05/20/22 10:00	05/20/22 11:13	1
m,p-Xylene	ND		0.40		mg/Kg		05/20/22 10:00	05/20/22 11:13	1
o-Xylene	ND		0.20		mg/Kg		05/20/22 10:00	05/20/22 11:13	1
Toluene	ND		0.10		mg/Kg		05/20/22 10:00	05/20/22 11:13	1
Xylenes, Total	ND		0.60		mg/Kg		05/20/22 10:00	05/20/22 11:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*75 - 129*	*05/20/22 10:00*	*05/20/22 11:13*	*1*
4-Bromofluorobenzene (Surr)	*88*		*76 - 122*	*05/20/22 10:00*	*05/20/22 11:13*	*1*
Dibromofluoromethane (Surr)	*107*		*80 - 120*	*05/20/22 10:00*	*05/20/22 11:13*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*	*05/20/22 10:00*	*05/20/22 11:13*	*1*

Lab Sample ID: LCS 590-36200/2-A
Matrix: Solid
Analysis Batch: 36199

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 36200

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.500	0.512		mg/Kg		102	76 - 139
Ethylbenzene	0.500	0.491		mg/Kg		98	77 - 135
m,p-Xylene	0.500	0.493		mg/Kg		99	78 - 130
o-Xylene	0.500	0.491		mg/Kg		98	77 - 129
Toluene	0.500	0.525		mg/Kg		105	77 - 131

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 129*
4-Bromofluorobenzene (Surr)	*91*		*76 - 122*
Dibromofluoromethane (Surr)	*105*		*80 - 120*
Toluene-d8 (Surr)	*102*		*80 - 120*

Lab Sample ID: 590-17564-2 MS
Matrix: Solid
Analysis Batch: 36199

Client Sample ID: FS-051922-02-3.0
Prep Type: Total/NA
Prep Batch: 36200

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND	F1	14.2	9.86	F1	mg/Kg	☼	69	76 - 139
Ethylbenzene	ND	F2 F1	14.2	9.46	F1	mg/Kg	☼	67	77 - 135
m,p-Xylene	ND	F1	14.2	ND	F1	mg/Kg	☼	65	78 - 130
o-Xylene	ND	F1	14.2	10.1	F1	mg/Kg	☼	71	77 - 129
Toluene	ND	F2 F1	14.2	9.21	F1	mg/Kg	☼	65	77 - 131

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 129*
4-Bromofluorobenzene (Surr)	*112*		*76 - 122*
Dibromofluoromethane (Surr)	*101*		*80 - 120*
Toluene-d8 (Surr)	*96*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 590-17564-2 MSD
Matrix: Solid
Analysis Batch: 36199

Client Sample ID: FS-051922-02-3.0
Prep Type: Total/NA
Prep Batch: 36200

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND	F1	14.2	11.2		mg/Kg	☼	79	76 - 139	13	14
Ethylbenzene	ND	F2 F1	14.2	11.2	F2	mg/Kg	☼	79	77 - 135	17	13
m,p-Xylene	ND	F1	14.2	ND	F1	mg/Kg	☼	77	78 - 130	16	23
o-Xylene	ND	F1	14.2	11.7		mg/Kg	☼	83	77 - 129	15	15
Toluene	ND	F2 F1	14.2	11.0	F2	mg/Kg	☼	77	77 - 131	17	14

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 129*
4-Bromofluorobenzene (Surr)	*108*		*76 - 122*
Dibromofluoromethane (Surr)	*101*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: 590-17564-1 DU
Matrix: Solid
Analysis Batch: 36199

Client Sample ID: FS-051922-01-2.0
Prep Type: Total/NA
Prep Batch: 36200

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Benzene	ND			ND		mg/Kg	☼			NC	25
Ethylbenzene	ND			ND		mg/Kg	☼			NC	25
m,p-Xylene	ND			ND		mg/Kg	☼			NC	23
o-Xylene	ND			ND		mg/Kg	☼			NC	25
Toluene	ND			ND		mg/Kg	☼			NC	25
Xylenes, Total	ND			ND		mg/Kg	☼			NC	25

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 129*
4-Bromofluorobenzene (Surr)	*99*		*76 - 122*
Dibromofluoromethane (Surr)	*103*		*80 - 120*
Toluene-d8 (Surr)	*102*		*80 - 120*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC/MS)

Lab Sample ID: MB 590-36200/1-A
Matrix: Solid
Analysis Batch: 36198

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 36200

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		5.0		mg/Kg		05/20/22 10:00	05/20/22 11:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*41.5 - 162*	*05/20/22 10:00*	*05/20/22 11:13*	*1*

Lab Sample ID: LCS 590-36200/3-A
Matrix: Solid
Analysis Batch: 36198

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 36200

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline			50.2	48.6		mg/Kg		97	74.4 - 124		

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC/MS) (Continued)

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		41.5 - 162

Lab Sample ID: 590-17564-1 DU — **Client Sample ID: FS-051922-01-2.0**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 36198 — **Prep Batch: 36200**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Gasoline	250			276		mg/Kg	☼			10	32.3

Surrogate	DU %Recovery	DU Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		41.5 - 162

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 590-36205/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 36206 — **Prep Batch: 36205**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		10		mg/Kg		05/23/22 10:33	05/23/22 11:35	1
Residual Range Organics (RRO) (C25-C36)	ND		25		mg/Kg		05/23/22 10:33	05/23/22 11:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	92		50 - 150	05/23/22 10:33	05/23/22 11:35	1
n-Triacontane-d62	96		50 - 150	05/23/22 10:33	05/23/22 11:35	1

Lab Sample ID: LCS 590-36205/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 36206 — **Prep Batch: 36205**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics (DRO) (C10-C25)			66.7	63.8		mg/Kg		96	50 - 150		
Residual Range Organics (RRO) (C25-C36)			66.7	77.1		mg/Kg		116	50 - 150		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl	95		50 - 150
n-Triacontane-d62	89		50 - 150

Lab Sample ID: 590-17564-1 DU — **Client Sample ID: FS-051922-01-2.0**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 36206 — **Prep Batch: 36205**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Diesel Range Organics (DRO) (C10-C25)	9600			9420		mg/Kg	☼			2	40
Residual Range Organics (RRO) (C25-C36)	ND			329		mg/Kg	☼			5	40

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: 590-17564-1 DU
Matrix: Solid
Analysis Batch: 36206

Client Sample ID: FS-051922-01-2.0
Prep Type: Total/NA
Prep Batch: 36205

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
o-Terphenyl	*288*	*S1+*	*50 - 150*
n-Triacontane-d62	*90*		*50 - 150*

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 590-36193/2-A
Matrix: Solid
Analysis Batch: 36214

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 36193

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		3.0		mg/Kg		05/20/22 08:05	05/23/22 14:20	1

Lab Sample ID: LCS 590-36193/1-A
Matrix: Solid
Analysis Batch: 36214

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 36193

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	50.0	51.4		mg/Kg		103	80 - 120

Lab Chronicle

Client: Fulcrum Environmental
Project/Site: Four Star/223516.00

Job ID: 590-17564-1

Client Sample ID: FS-051922-01-2.0
Date Collected: 05/19/22 10:00
Date Received: 05/19/22 16:51

Lab Sample ID: 590-17564-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			36197	05/20/22 09:22	M1V	TAL SPK

Client Sample ID: FS-051922-01-2.0
Date Collected: 05/19/22 10:00
Date Received: 05/19/22 16:51

Lab Sample ID: 590-17564-1
Matrix: Solid
Percent Solids: 76.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.403 g	10 mL	36200	05/20/22 10:00	JSP	TAL SPK
Total/NA	Analysis	8260D		1	0.86 mL	43 mL	36199	05/20/22 12:18	JSP	TAL SPK
Total/NA	Prep	5035			6.403 g	10 mL	36200	05/20/22 10:00	JSP	TAL SPK
Total/NA	Analysis	NWTPH-Gx		1	0.86 mL	43 mL	36198	05/20/22 12:18	JSP	TAL SPK
Total/NA	Prep	3550C			15.36 g	5 mL	36205	05/23/22 10:33	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		10			36206	05/23/22 12:34	NMI	TAL SPK
Total/NA	Prep	3050B			1.66 g	50 mL	36193	05/20/22 08:05	JSP	TAL SPK
Total/NA	Analysis	6010D		5			36214	05/23/22 14:48	JSP	TAL SPK

Client Sample ID: FS-051922-02-3.0
Date Collected: 05/19/22 10:15
Date Received: 05/19/22 16:51

Lab Sample ID: 590-17564-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			36197	05/20/22 09:22	M1V	TAL SPK

Client Sample ID: FS-051922-02-3.0
Date Collected: 05/19/22 10:15
Date Received: 05/19/22 16:51

Lab Sample ID: 590-17564-2
Matrix: Solid
Percent Solids: 75.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.318 g	10 mL	36200	05/20/22 10:00	JSP	TAL SPK
Total/NA	Analysis	8260D		10	0.86 mL	43 mL	36199	05/20/22 13:01	JSP	TAL SPK
Total/NA	Prep	5035			5.318 g	10 mL	36200	05/20/22 10:00	JSP	TAL SPK
Total/NA	Analysis	NWTPH-Gx		10	0.86 mL	43 mL	36198	05/20/22 13:01	JSP	TAL SPK
Total/NA	Prep	3550C			15.04 g	5 mL	36205	05/23/22 10:33	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		10			36206	05/23/22 13:15	NMI	TAL SPK
Total/NA	Prep	3050B			1.50 g	50 mL	36193	05/20/22 08:05	JSP	TAL SPK
Total/NA	Analysis	6010D		5			36214	05/23/22 14:52	JSP	TAL SPK

Client Sample ID: FS-051922-03-2.0
Date Collected: 05/19/22 10:30
Date Received: 05/19/22 16:51

Lab Sample ID: 590-17564-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			36197	05/20/22 09:22	M1V	TAL SPK

Lab Chronicle

Client: Fulcrum Environmental
Project/Site: Four Star/223516.00

Job ID: 590-17564-1

Client Sample ID: FS-051922-03-2.0
Date Collected: 05/19/22 10:30
Date Received: 05/19/22 16:51

Lab Sample ID: 590-17564-3
Matrix: Solid
Percent Solids: 82.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.742 g	10 mL	36200	05/20/22 10:00	JSP	TAL SPK
Total/NA	Analysis	8260D		1	0.86 mL	43 mL	36199	05/20/22 14:06	JSP	TAL SPK
Total/NA	Prep	5035			6.742 g	10 mL	36200	05/20/22 10:00	JSP	TAL SPK
Total/NA	Analysis	NWTPH-Gx		1	0.86 mL	43 mL	36198	05/20/22 14:06	JSP	TAL SPK
Total/NA	Prep	3550C			15.86 g	5 mL	36205	05/23/22 10:33	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		5			36206	05/23/22 13:34	NMI	TAL SPK
Total/NA	Prep	3050B			1.47 g	50 mL	36193	05/20/22 08:05	JSP	TAL SPK
Total/NA	Analysis	6010D		5			36214	05/23/22 15:08	JSP	TAL SPK

Client Sample ID: FS-051922-04-2.0
Date Collected: 05/19/22 10:45
Date Received: 05/19/22 16:51

Lab Sample ID: 590-17564-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			36197	05/20/22 09:22	M1V	TAL SPK

Client Sample ID: FS-051922-04-2.0
Date Collected: 05/19/22 10:45
Date Received: 05/19/22 16:51

Lab Sample ID: 590-17564-4
Matrix: Solid
Percent Solids: 82.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.124 g	10 mL	36200	05/20/22 10:00	JSP	TAL SPK
Total/NA	Analysis	8260D		10	0.86 mL	43 mL	36199	05/20/22 14:49	JSP	TAL SPK
Total/NA	Prep	5035			6.124 g	10 mL	36200	05/20/22 10:00	JSP	TAL SPK
Total/NA	Analysis	NWTPH-Gx		10	0.86 mL	43 mL	36198	05/20/22 14:49	JSP	TAL SPK
Total/NA	Prep	3550C			15.54 g	5 mL	36205	05/23/22 10:33	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		5			36206	05/23/22 13:54	NMI	TAL SPK
Total/NA	Prep	3050B			1.54 g	50 mL	36193	05/20/22 08:05	JSP	TAL SPK
Total/NA	Analysis	6010D		5			36214	05/23/22 15:12	JSP	TAL SPK

Client Sample ID: FS-051922-05-2.0
Date Collected: 05/19/22 11:00
Date Received: 05/19/22 16:51

Lab Sample ID: 590-17564-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			36197	05/20/22 09:22	M1V	TAL SPK

Client Sample ID: FS-051922-05-2.0
Date Collected: 05/19/22 11:00
Date Received: 05/19/22 16:51

Lab Sample ID: 590-17564-5
Matrix: Solid
Percent Solids: 87.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.253 g	10 mL	36200	05/20/22 10:00	JSP	TAL SPK
Total/NA	Analysis	8260D		1	0.86 mL	43 mL	36199	05/20/22 15:11	JSP	TAL SPK
Total/NA	Prep	5035			5.253 g	10 mL	36200	05/20/22 10:00	JSP	TAL SPK
Total/NA	Analysis	NWTPH-Gx		1	0.86 mL	43 mL	36198	05/20/22 15:11	JSP	TAL SPK

Lab Chronicle

Client: Fulcrum Environmental
Project/Site: Four Star/223516.00

Job ID: 590-17564-1

Client Sample ID: FS-051922-05-2.0
Date Collected: 05/19/22 11:00
Date Received: 05/19/22 16:51

Lab Sample ID: 590-17564-5
Matrix: Solid
Percent Solids: 87.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.86 g	5 mL	36205	05/23/22 10:33	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		5			36206	05/23/22 14:12	NMI	TAL SPK
Total/NA	Prep	3050B			1.54 g	50 mL	36193	05/20/22 08:05	JSP	TAL SPK
Total/NA	Analysis	6010D		5			36214	05/23/22 15:16	JSP	TAL SPK

Client Sample ID: FS-051922-06-2.0
Date Collected: 05/19/22 11:15
Date Received: 05/19/22 16:51

Lab Sample ID: 590-17564-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			36197	05/20/22 09:22	M1V	TAL SPK

Client Sample ID: FS-051922-06-2.0
Date Collected: 05/19/22 11:15
Date Received: 05/19/22 16:51

Lab Sample ID: 590-17564-6
Matrix: Solid
Percent Solids: 78.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.354 g	10 mL	36200	05/20/22 10:00	JSP	TAL SPK
Total/NA	Analysis	8260D		1	0.86 mL	43 mL	36199	05/20/22 15:33	JSP	TAL SPK
Total/NA	Prep	5035			6.354 g	10 mL	36200	05/20/22 10:00	JSP	TAL SPK
Total/NA	Analysis	NWTPH-Gx		1	0.86 mL	43 mL	36198	05/20/22 15:33	JSP	TAL SPK
Total/NA	Prep	3550C			15.66 g	5 mL	36205	05/23/22 10:33	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		5			36206	05/23/22 14:32	NMI	TAL SPK
Total/NA	Prep	3050B			1.75 g	50 mL	36193	05/20/22 08:05	JSP	TAL SPK
Total/NA	Analysis	6010D		5			36214	05/23/22 15:20	JSP	TAL SPK

Client Sample ID: FS-051922-07-6.0
Date Collected: 05/19/22 14:00
Date Received: 05/19/22 16:51

Lab Sample ID: 590-17564-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			36197	05/20/22 09:22	M1V	TAL SPK

Client Sample ID: FS-051922-07-6.0
Date Collected: 05/19/22 14:00
Date Received: 05/19/22 16:51

Lab Sample ID: 590-17564-7
Matrix: Solid
Percent Solids: 78.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.808 g	10 mL	36200	05/20/22 10:00	JSP	TAL SPK
Total/NA	Analysis	8260D		1	0.86 mL	43 mL	36199	05/20/22 15:54	JSP	TAL SPK
Total/NA	Prep	5035			5.808 g	10 mL	36200	05/20/22 10:00	JSP	TAL SPK
Total/NA	Analysis	NWTPH-Gx		1	0.86 mL	43 mL	36198	05/20/22 15:54	JSP	TAL SPK
Total/NA	Prep	3550C			16.00 g	5 mL	36205	05/23/22 10:33	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		1			36206	05/23/22 14:50	NMI	TAL SPK
Total/NA	Prep	3050B			1.90 g	50 mL	36193	05/20/22 08:05	JSP	TAL SPK
Total/NA	Analysis	6010D		5			36214	05/23/22 15:24	JSP	TAL SPK

Lab Chronicle

Client: Fulcrum Environmental
Project/Site: Four Star/223516.00

Job ID: 590-17564-1

Client Sample ID: FS-051922-08-8.0

Lab Sample ID: 590-17564-8
Date Collected: 05/19/22 14:15
Matrix: Solid
Date Received: 05/19/22 16:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			36197	05/20/22 09:24	M1V	TAL SPK

Client Sample ID: FS-051922-08-8.0

Lab Sample ID: 590-17564-8
Date Collected: 05/19/22 14:15
Matrix: Solid
Date Received: 05/19/22 16:51
Percent Solids: 70.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.378 g	10 mL	36200	05/20/22 10:00	JSP	TAL SPK
Total/NA	Analysis	8260D		1	0.86 mL	43 mL	36199	05/20/22 16:15	JSP	TAL SPK
Total/NA	Prep	5035			5.378 g	10 mL	36200	05/20/22 10:00	JSP	TAL SPK
Total/NA	Analysis	NWTPH-Gx		10	0.86 mL	43 mL	36198	05/20/22 19:05	JSP	TAL SPK
Total/NA	Prep	3550C			15.45 g	5 mL	36205	05/23/22 10:33	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		10			36206	05/23/22 15:11	NMI	TAL SPK
Total/NA	Prep	3050B			2.03 g	50 mL	36193	05/20/22 08:05	JSP	TAL SPK
Total/NA	Analysis	6010D		5			36214	05/23/22 15:28	JSP	TAL SPK

Laboratory References:

TAL SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

Accreditation/Certification Summary

Client: Fulcrum Environmental
Project/Site: Four Star/223516.00

Job ID: 590-17564-1

Laboratory: Eurofins Spokane

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Washington	State	C569	01-06-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: Fulcrum Environmental
Project/Site: Four Star/223516.00

Job ID: 590-17564-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	TAL SPK
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC/MS)	NWTPH	TAL SPK
NWTPH-Dx	Northwest - Semi-Volatile Petroleum Products (GC)	NWTPH	TAL SPK
6010D	Metals (ICP)	SW846	TAL SPK
Moisture	Percent Moisture	EPA	TAL SPK
3050B	Preparation, Metals	SW846	TAL SPK
3550C	Ultrasonic Extraction	SW846	TAL SPK
5035	Closed System Purge and Trap	SW846	TAL SPK

Protocol References:

EPA = US Environmental Protection Agency

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

Chain of Custody Record

560375 eurofins | Environment Testing TestAmerica

Address. _____

Regulatory Program ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TAL-8210

Client Contact	Project Manager: Scott Grout	Site Contact:	Date	COC No
Company Name: Fulcrum Environmental	Tel/Email	Lab Contact:	Carrier:	____ of ____ COCs
Address 207 W Boone Ave	Analysis Turnaround Time			Sampler:
City/State/Zip: Spokane, WA 99201	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone 509 455 9220	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling
Project Name Four Star	☐ 1 week			
Site Pullman WA	☐ 2 days			Job / SDG No
P O # 2223516 00	☒ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	NWTPH - Dx	NWTPH - Gx	BTEX	Total Lead	Sample Specific Notes.
FS-051922-01-20	05/19/22	1000	G	Soil	3			X	X	X	X	
-02-SC		1015										
-03-20		1030										
-04-CC		1045										
-05-20		1100										
-06-20		1115										
-07-60		1400										
-08-8.0		1415										

590-17564 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments Results to ethan.durken@fulcrum.net, rob.groves@fulcrum.net, & sgrout@fulcrum.net

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No | Cooler Temp (°C). Obs'd 8.1 Corr'd 8.2 | Therm ID No IR006

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Ethan Durken	Fulcrum	4:45pm 5/19/22	M. Vaughn	~~UCT~~ SAO	5/19/22 16:51
Relinquished by	Company	Date/Time:	Received by	Company	Date/Time
Relinquished by	Company	Date/Time	Received in Laboratory by	Company	Date/Time

Login Sample Receipt Checklist

Client: Fulcrum Environmental

Job Number: 590-17564-1
SDG Number:

Login Number: 17564
List Number: 1
Creator: Vaughan, Madison 1

List Source: Eurofins Spokane

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	