FULCRUM
environmental consulting

Four Star Supply
2024 Second Quater
Groundwater Monitoring
Sampling Report

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

Project Number: 223516.01

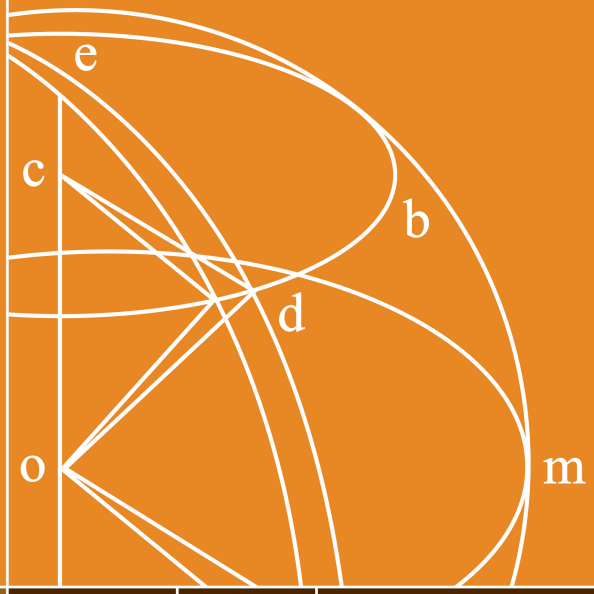
Date: September 20, 2024

Prepared for:

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

Prepared by:

Fulcrum Environmental Consulting, Inc.
207 West Boone Avenue
Spokane, Washington 99201



Report Title: Four Star Supply Second Quarter 2024 Groundwater Monitoring Report

Project Number: 223516.01

Date: September 20, 2024

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

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

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

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

Authored by: _____ Date: 09/20/2024

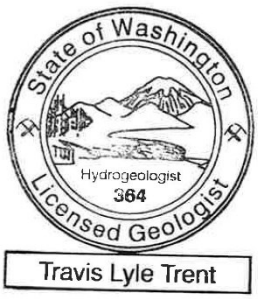
Dominic Casolari
Environmental Technician

Reviewed by: _____ Date: 09/20/2024

Roque Reyes
Senior Industrial Hygienist

Reviewed by: _____ Date: 09/20/2024

Travis Trent, LHG, CIH
Principal



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.

TABLE OF CONTENTS

TABLES

FIGURES

APPENDICES

1.0 INTRODUCTION

On June 28, 2024, Fulcrum Environmental Consulting, Inc. (Fulcrum) conducted a quarterly groundwater monitoring event for three monitoring wells at the Four Star Supply, Inc. (Four Star) site located at 355 NW State Street in Pullman, Washington. The purpose of the monitoring was to evaluate petroleum hydrocarbon impacts to site groundwater associated with a diesel release identified in April of 2022 and with pre-existing petroleum contaminated soil.

Four Star Fuel Supply
355 NW State Street, Pullman, Washington

Site services were completed by Ethan Ducken, a Washington State recognized Geologist-in-Training, assisted by Nick Hays, a Senior Environmental Technician, both with Fulcrum. The work was completed under the direction of Travis Trent, a Washington State Licensed Hydrogeologist with Fulcrum. Relevant professional certifications are presented in Appendix A.

1.1 Scope of Services

Fulcrum was retained by Four Star to conduct quarterly groundwater sampling services at the Four Star site located at 355 NW State Street in Pullman, Washington. Each quarterly sampling event consists of measurement of water depths in the three onsite groundwater monitoring wells followed by collection of water samples from each well. Samples are collected in accordance with industry standard of care and submitted under chain of custody to a Washington State accredited laboratory to be analyzed for benzene, toluene, ethylbenzene, xylene (BTEX), gasoline-range organics, diesel-range organics, and heavy oil-range organics. Results of the investigation and testing from June 28, 2024, are presented in this summary report.

1.2 Site Description

The site is identified as parcel 10850058130001 and is located on the corner of Poplar Street and Northwest State Street in Pullman, Washington directly adjacent to the South Fork Palouse River (SFPR). The subject site was historically used for bulk fuel storage with six above ground storage tanks (AST) containing gasoline and diesel fuel all located within a concrete secondary containment.

Prior to remediation, the property was observed to be covered by concrete or gravel. Beneath the paved surface was approximately 8 feet (ft) of non-native fill material consisting of basalt boulders and cobbles intermixed with sand/silt. Soil transitioned into clayey sand from approximately 8-ft below ground surface (bgs) to 16-ft bgs. A compact clay layer was encountered at approximately 22 ft bgs. Bedrock was not encountered during site excavations. Groundwater was encountered in limited amounts at depths below 18 ft bgs measured from road grade during excavation activities. Groundwater was encountered at approximately 12 ft bgs measured from road grade during the June 2024 groundwater monitoring event.

During site remediation, site soil was removed to a depth of approximately 22-feet bgs and replaced with clean fill. The site was left as a vacant gravel lot and brought to grade.

1.3 Site Hydrogeology

The site is located at approximately 2,332 feet above mean sea level (MSL). Groundwater depth ranges from 11 to 14 feet bgs. Groundwater flow direction is based on data collected during groundwater monitoring and flows north-northeast towards the South Fork Palouse River (SFPR), with a hydraulic gradient of 0.001.

1.4 Background

On April 25, 2022, Four Star identified a diesel fuel leak from an AST located on Parcel 10850058130001 in Pullman, Washington. The diesel leaked into a concrete secondary containment that failed resulting in discharge to site soils beneath the concrete. The leak resulted in a discernable sheen to the adjacent SFPR.

View looking southwest at the site, the six historic AST's can be seen in the background and the SFPR can be seen in the foreground.

Initial response activities consisted of placement of containment booms and sorbent pads within the SFPR and the use of absorbent clay to remove free product from the secondary containment. Reported calculations indicated that approximately 400-gallons of diesel fuel were released from the failed AST. The site is recognized on the Washington State Cleanup Program as Grange Supply Company Pullman (Cleanup Site ID 16631, Facility/Site ID 3394273, UST ID 171).

Emergency services and Department of Ecology staff responded to the accident. Fulcrum was retained by Four Star to respond to the initial event, assist with regulatory permitting documents, oversee independent cleanup actions for the release, conduct confirmatory sampling, and to prepare a Petroleum Spill Remediation Report. Able Clean-up Technologies Inc. (Able) was retained by Four Star to provide spill response and cleanup services. Plateau Archaeological Investigations, LLC (Plateau) was retained by Four Star to conduct Archaeological monitoring during excavation activities.

Remedial excavation of contaminated site soils was performed in two phases. Phase I initial remedial excavation for diesel contaminated soil associated with the April 2022 fuel release and Phase II remedial excavation of historical petroleum contaminated soils. Laboratory analysis identified the contaminants of concern; gasoline, diesel, benzene, toluene, ethylbenzene, and xylenes to be above MTCA Method A Cleanup Levels throughout site soils. All current and historic contaminated soil was removed from the subject site except the stream bank. Contaminated soil remained at property margins shared with NW State Street, Poplar Street, and an adjacent building.

A compact clay barrier was placed at the north property boundary between the site and the South Fork Palouse River. The barrier extends from a native compact clay layer that was encountered across the site at approximately 20 feet bgs to approximately 3 feet bgs. It extends the full length of the bank frontage and wraps back to the south at the east and west property boundaries.

Removed soil was transported to Roach Construction Land Farm located in Genesee, Idaho for treatment. A total of 4,246 cubic yards (CY) of petroleum contaminated soil (PCS) was excavated from the site.

2.0 DISCUSSION OF PERTINENT REGULATIONS AND GUIDANCE

2.1 MTCA Regulations

In March 1989, the Model Toxics Control Act (MTCA) went into effect in Washington State. The MTCA regulations, WAC 173-340, 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.

Rule amendments to MTCA became effective August 15, 2001, and changed the cleanup levels of petroleum hydrocarbon contamination. Whereas diesel and heavy oil concentrations were increased, the MTCA Method A cleanup levels for gasoline and gasoline components benzene, toluene, ethylbenzene, and xylene (BTEX) were lowered significantly. Updates since 2001 have been primarily administrative in nature, although review and adjustment of cleanup levels are ongoing.

2.2 MTCA Cleanup Standards

Ecology's MTCA Method A cleanup tables were developed to provide conservative cleanup levels for sites undergoing routine cleanup actions or those sites with relatively few hazardous substances. Method A cleanup levels are specifically designated as appropriate for residential facilities and are appropriate for a conservative approach at schools and public sites. Therefore, Fulcrum has determined that Ecology's MTCA Method A cleanup levels to be the most appropriate regulatory guidance for evaluating the need for site cleanup at the site.

3.0 FIELD ACTIVITIES

3.1 Groundwater Sampling

On June 28, 2024, Fulcrum completed groundwater sampling of the three onsite monitoring wells: MW-01, MW-02, and MW-03. Fulcrum collected groundwater samples from each of the three onsite monitoring wells (FS-062824-MW01, FS-062824-MW-02, and FS-062824-MW-03). One field duplicate (FS-062824-MW-04) was collected for a total of four groundwater samples. Prior to sample collection, Fulcrum measured the depth to groundwater (DTW) and depth to bottom (DTB) utilizing an electronic water level indicator accurate to ± 0.01 foot. Elevation corrections were made using wellhead elevation data from the subject site. Sampling activities were completed using a peristaltic pump and Hanna brand water quality instruments. At each well, water was pumped until a minimum of three well volumes were purged.

Samples were placed in a pre-cooled ice chest and delivered under standard chain-of-custody for analysis to Eurofins Test America Laboratories, Inc, a Washington State certified laboratory located in Spokane Valley, Washington. Personnel conducting analysis are trained in accordance with the laboratory's internal quality assurance/quality control (QA/QC) policy. A site diagram map is presented as Figure 3.

4.0 Groundwater Monitoring RESULTS

4.1 Laboratory Analytical Results

All groundwater samples were analyzed for concentrations of gasoline-range hydrocarbons by Northwest Total Petroleum Hydrocarbons as Gasoline (NWTPH-Gx), diesel-range and heavy oil-range hydrocarbons by Northwest Total Petroleum Hydrocarbons as diesel (NWTPH-Dx), and benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8260c. Table 1 summarizes sample identification, locations, and analyte concentrations, which are reported in micrograms per liter (µg/L). Full laboratory analytical results are presented in Appendix C.

Table 1: Four Star Groundwater Analytical Results – June 28, 2024

Location	Sample Number	Ground-water Elevation	Results (µg/L)						
			NWTPH-Dx		Gasoline	Benzene	Toluene	Ethylbenzene	Xylene
			Diesel	Oil					
MW-01	FS-062824-MW01	2319.82	ND	ND	ND	ND	ND	ND	ND
MW-02	FS-062824-MW02	2319.74	ND	ND	ND	ND	ND	ND	ND
MW-03	FS-062824-MW03	2319.75	ND	ND	ND	ND	ND	6.3	ND
	FS-062824-MW04	2319.75	ND	ND	ND	ND	ND	ND	ND
MTCA Cleanup Levels[1]			500		800*	5	1,000	700	1,000

ND – Non-detect *Established cleanup level when benzene is present in groundwater.

Laboratory analytical results identified non-detect concentrations of diesel, oil-range hydrocarbons, gasoline and BTEX in all collected samples with exception of concentrations of ethylbenzene in sample FS-062824-03. Concentrations of ethylbenzene in sample -03 were identified below the MTCA cleanup levels.

Sample -04 was collected as a duplicate of sample -03; laboratory analytical report identified no concentrations of ethylbenzene in the duplicate sample.

4.2 Hydraulic Results

The groundwater flow direction, as determined by this sampling and monitoring event, is northeast with a hydraulic gradient of 0.001 (0.07-ft change in groundwater depth over 53.8-ft), which is consistent with anticipated site geomorphology and hydrogeology. A groundwater elevation map is presented as Figure 4.

4.3 Data Quality

Samples were shown as received by the laboratory at an acceptable temperature. The results for Fulcrum's field duplicate were within an acceptable range of variance. Qualifiers were not present in the laboratory quality control (QC) sample results report. Based on reported analytical results, identified cleanup standards, and the absence of lab data qualifiers, it is Fulcrum's opinion that field and laboratory data quality results confirm acceptable accuracy of analytical data.

5.0 DISCUSSION

Review of current groundwater analytical data indicates the following:

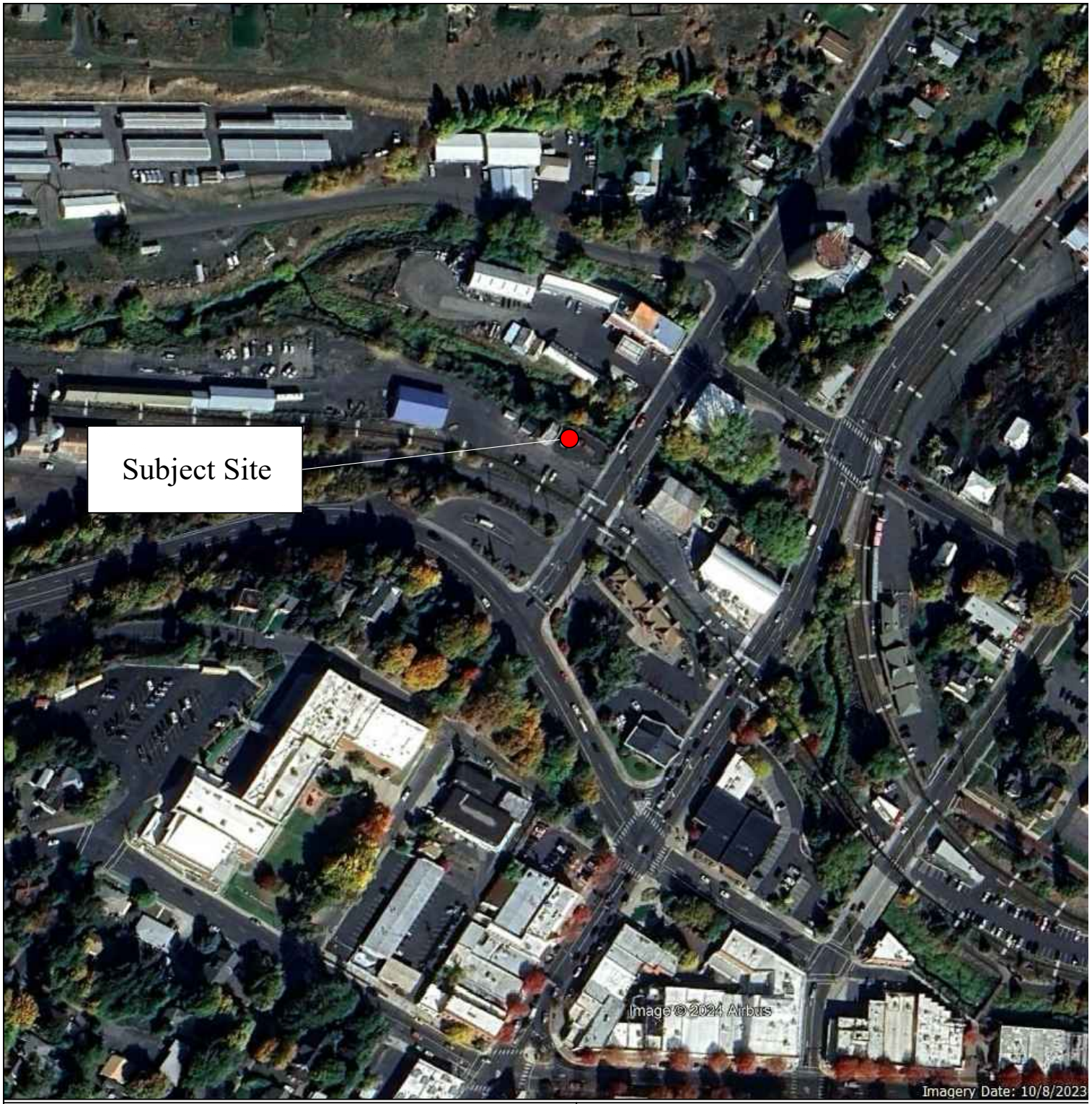
- **MW-01:** Analytical results for groundwater samples collected from MW-01 were non-detect for oil-range hydrocarbons, diesel-range hydrocarbons, gasoline, and BTEX.
- **MW-02:** Analytical results for groundwater samples collected from MW-02 were non-detect for oil-range hydrocarbons, diesel-range hydrocarbons, gasoline, and BTEX.
- **MW-03:** Analytical results for groundwater samples collected from MW-03 were non-detect for oil-range hydrocarbons, diesel-range hydrocarbons, gasoline, and BTEX with exceptions of ethylbenzene below MTCA method A Cleanup Levels.

June 2024 groundwater analytical data indicates contaminant concentrations in all wells to be below MTCA method A cleanup levels.

6.0 RECOMMENDATIONS

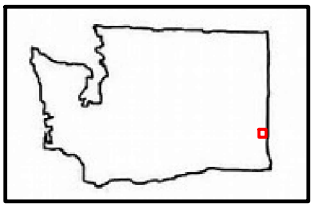
Fulcrum recommends continuing quarterly monitoring of the onsite monitoring wells.

Figures



LEGEND

Site Location



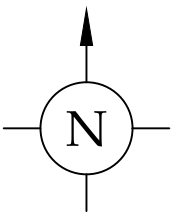
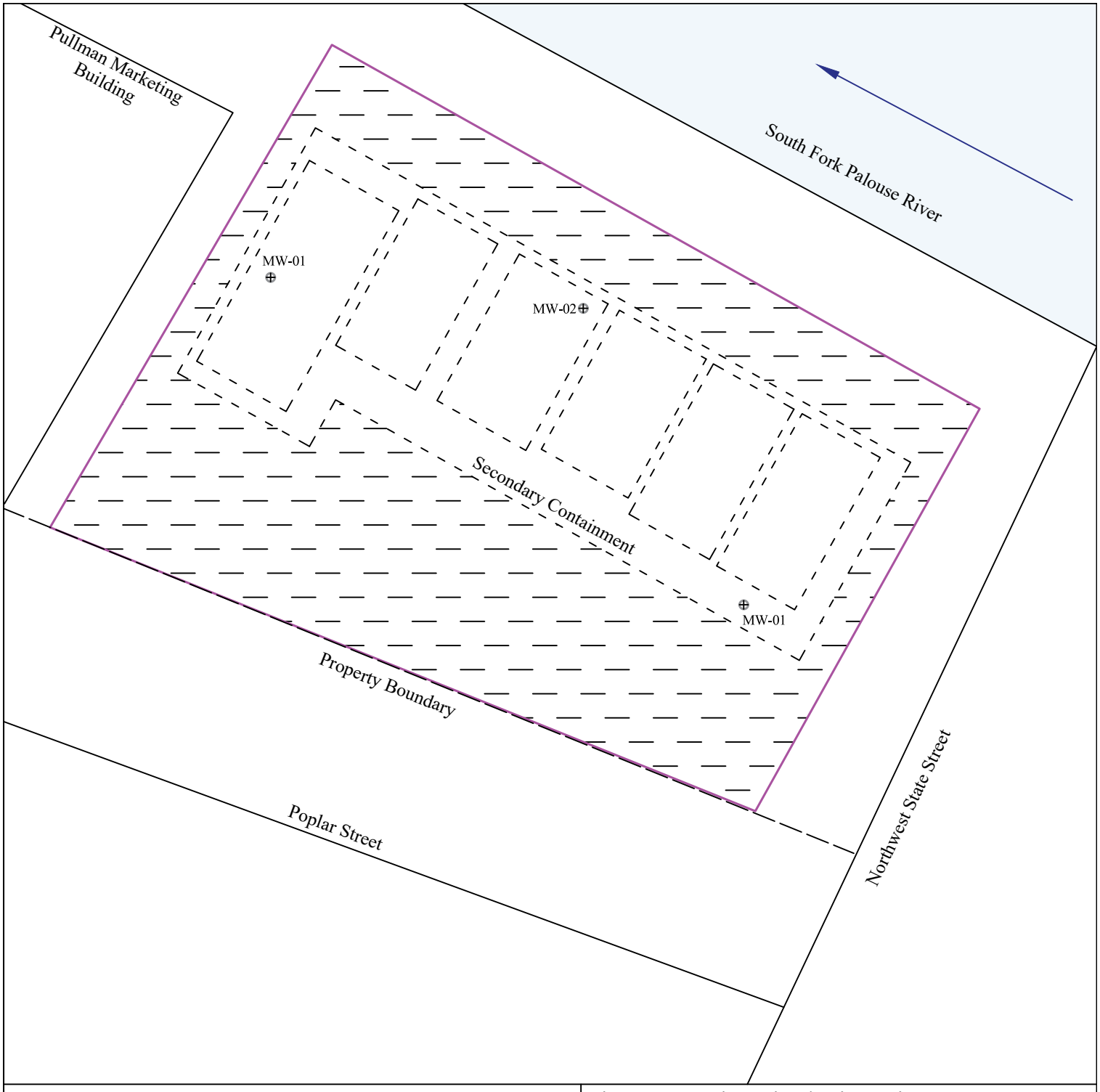


Figure 1: Site Location Map

June 2024 Groundwater Sampling Event
Four Star Supply
355 NW State Street
Pullman, Washington

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

MAP BY: Dominic Casolari	PROJECT NUMBER: 223516.01
DATE: July 23, 2024	REVIEWED BY: S. Groat



LEGEND

- Approximate Extent of Soil Excavation
- Historical ASTs and Secondary Containment Removed from Site
- ⊕ Existing Onsite Monitoring Well

N

0 10

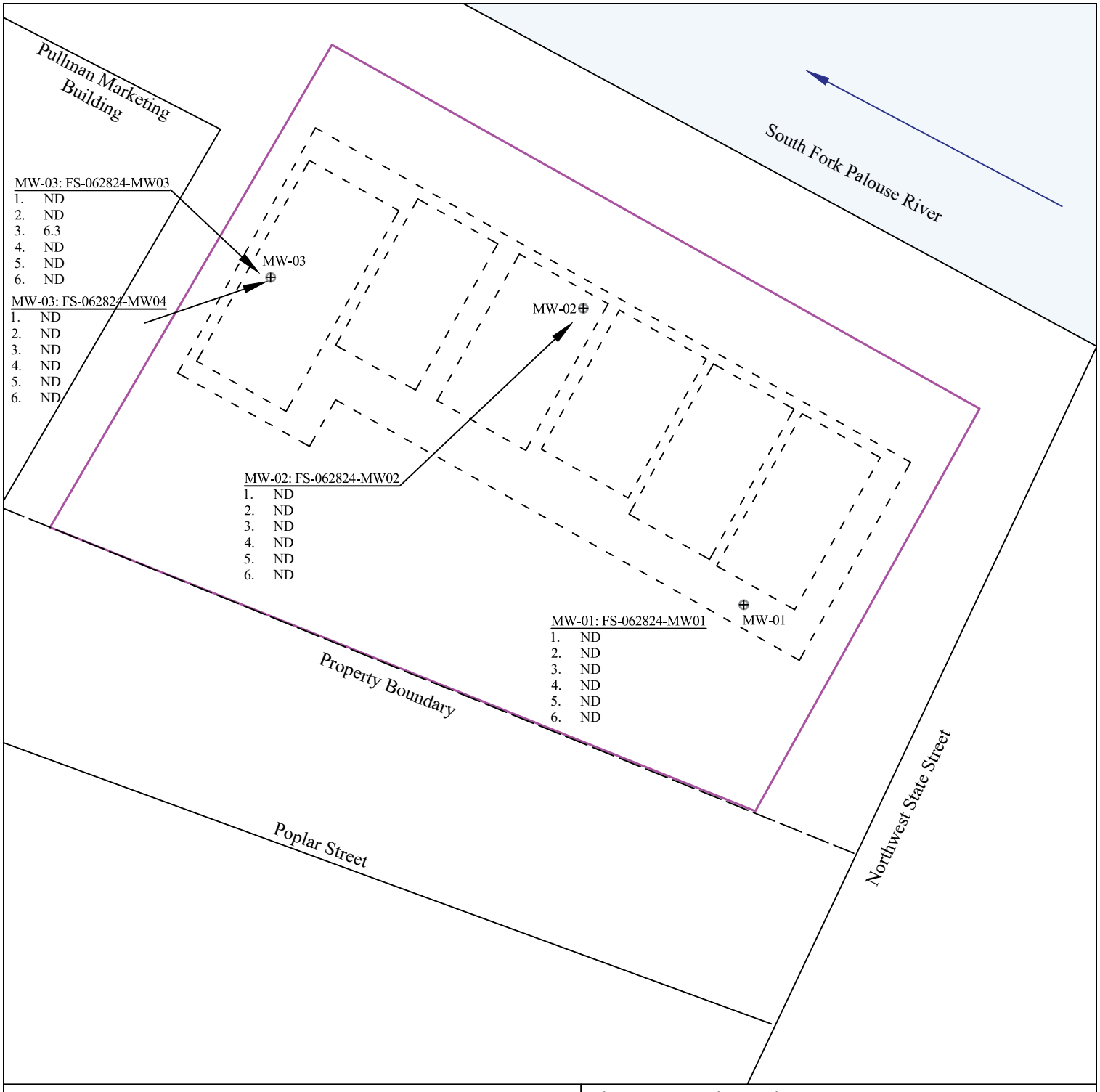
Approximate Scale In Feet

Figure 2: Historical Site Diagram Map

June 2024 Groundwater Sampling Event
Four Star Supply
355 NW State Street
Pullman, Washington

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

MAP BY: Dominic Casolari	PROJECT NUMBER: 233516.01
DATE: July 23, 2024	REVIEWED BY: S. Groat



LEGEND

Parameters (µg/L)

1. Benzene
2. Toluene
3. Ethylbenzene
4. Xylenes
5. NWTPH-GX
6. Combined Diesel-range and Heavy Oil-range Hydrocarbons

⊕ Monitoring Well

* Analyte Concentration Exceeds MTCA Method A Cleanup Level

Historical ASTs and Secondary Containment Removed from Site

N

0 10

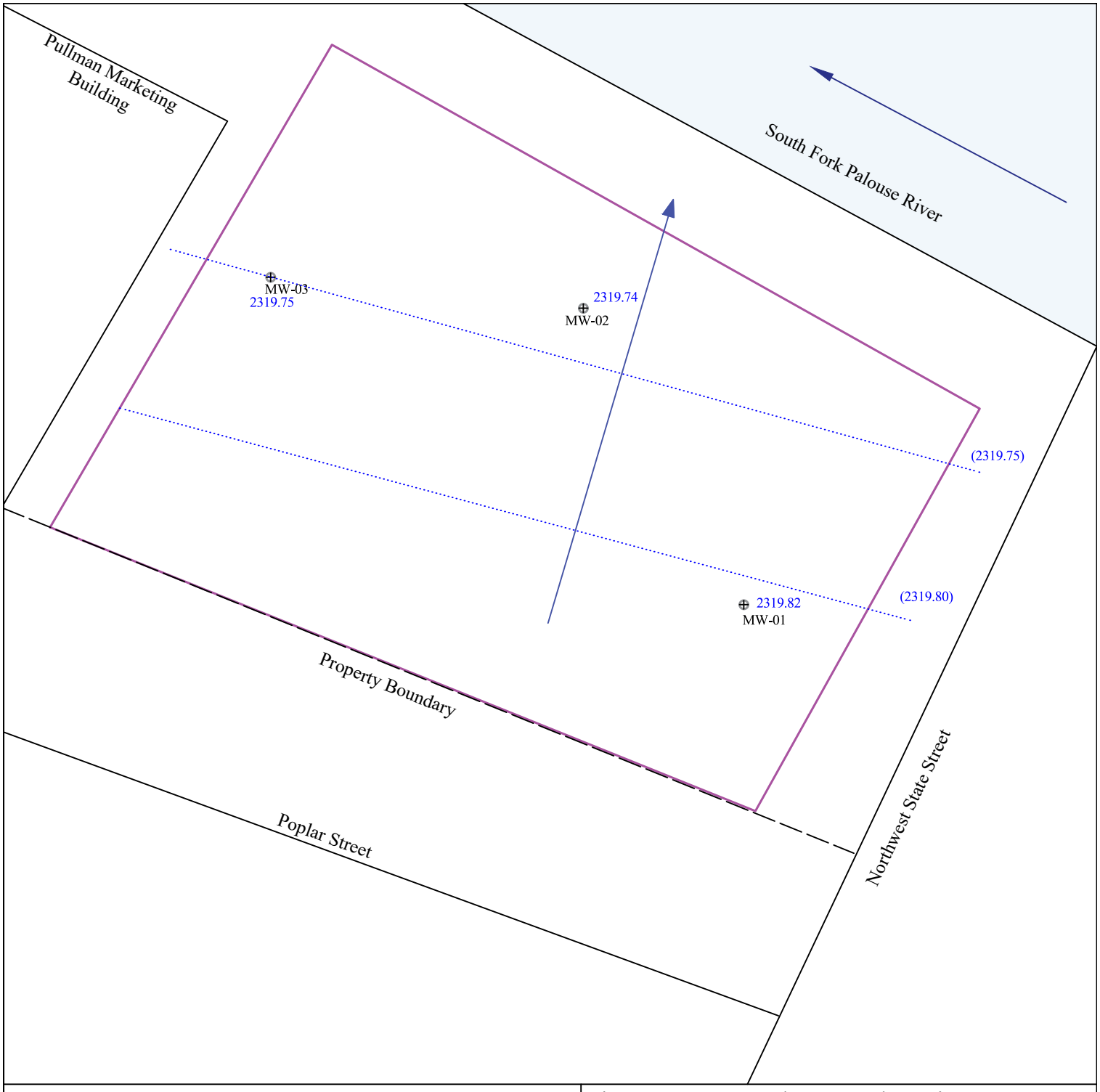
Approximate Scale In Feet

Figure 3: Site Diagram Map

June 2024 Groundwater Sampling Event
Four Star Supply
355 NW State Street
Pullman, Washington

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

MAP BY: Dominic Casolari	PROJECT NUMBER: 223516.01
DATE: July 23, 2024	REVIEWED BY: S. Groat



LEGEND

- Approximate Groundwater Direction and Gradient
- (2320.00) Groundwater Elevation Contour (In Feet)
- 2320.00 Monitoring Well Groundwater Elevation (In Feet)
- Monitoring Well

N

0 10

Approximate Scale In Feet

Figure 4: Groundwater Elevation Map

June 2024 Groundwater Sampling Event
Four Star Supply
355 NW State Street
Pullman, Washington

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

MAP BY: Abby Whitmore	PROJECT NUMBER: 223516.01
DATE: September 18, 2024	REVIEWED BY: T.Trent

APPENDIX A

Professional Certifications

STATE OF WASHINGTON

DEPARTMENT OF LICENSING - BUSINESS AND PROFESSIONS DIVISION

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

WASHINGTON STATE DEPARTMENT OF LICENSING

GEOLOGIST
HYDROGEOLOGIST

TRAVIS L TRENT

364	01/08/2002	06/06/2025
License Number	Issue Date	Expiration Date

Marcus J Glasper, Director

APPENDIX B

Summary of Historical Data

HISTORICAL GROUNDWATER ELEVATION AND ANALYTICAL DATA

Four Star Fuel supply

355 NW State Street
Pullman, Washington

Well ID	Sampling Date	ERP (feet)	DTW (feet)	GWE (feet)	Diesel-range hydrocarbons (µg/L)	Heavy oil-range hydrocarbons (µg/L)	Combined Diesel-range and Heavy oil-range (µg/L)	NWTPH-Gx (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW-01	6/29/2023	2332.769	13.109	2319.660	ND	ND	ND	ND	ND	ND	ND	ND
	9/22/2023	2332.769	14.080	2318.689	450.00	**500.00**	**950.00**	ND	ND	ND	ND	ND
	12/13/2023	2332.769	12.270	2320.499	240.00	ND	240.00	ND	ND	ND	ND	ND
	3/28/2024	2332.769	11.920	2320.849	ND	ND	ND	ND	ND	ND	ND	ND
	6/28/2024	2332.769	12.950	2319.819	ND	ND	ND	ND	ND	ND	ND	ND
MW-02	6/29/2023	2,332.704	13.115	2319.589	ND	ND	ND	ND	ND	ND	ND	ND
	9/22/2023	2,332.704	14.000	2318.704	340.00	ND	340.00	ND	ND	ND	ND	ND
	12/13/2023	2,332.704	12.240	2320.464	ND	ND	ND	ND	ND	ND	ND	ND
	3/28/2024	2,332.704	11.890	2320.814	ND	ND	ND	ND	ND	ND	ND	ND
	6/28/2024	2,332.704	12.960	2319.744	ND	ND	ND	ND	ND	ND	ND	ND
MW-03	6/29/2023	2,332.518	12.934	2319.584	ND	ND	ND	410.00	4.20	ND	29.00	5.30
	9/22/2023	2,332.518	13.830	2318.688	310.00	ND	310.00	320.00	3.20	ND	18.00	2.20
	12/13/2023	2,332.518	12.070	2320.448	330.00	ND	330.00	ND	1.00	ND	ND	ND
	3/28/2024	2,332.518	11.720	2320.798	ND	ND	ND	ND	ND	ND	ND	ND
	6/28/2024	2,332.518	12.770	2319.748	ND	ND	ND	ND	ND	ND	6.30	ND
2001 MTCA Method A Cleanup Levels for Groundwater					**500**			**800**	**5**	**1000**	**700**	**1000**

Notes :

Bold	Sample identified above respective MTCA Method A Cleanup Level
DTW	Depth to water
GWE	Groundwater elevation based on mean sea level elevation
NWTPH-Gx	Northwest total petroleum hydrocarbons as gasoline
BTEX	Benzene, toluene, ethylbenzene and total xylenes
µg/L	micrograms per liter or parts per billion
ND	Not detected in concentrations exceeding laboratory method detection limit
---	Not available, not tested, not measured

APPENDIX C

Laboratory Analytical Results

eurofins | Environment Testing

1 2 3 4 5 6 7 8 9 10 11 12

ANALYTICAL REPORT

PREPARED FOR

Attn: Scott Groat
Fulcrum Environmental Consulting Inc
207 West Boone Avenue
Spokane, Washington 99201

Generated 7/8/2024 3:43:37 PM

JOB DESCRIPTION

Four Star

JOB NUMBER

590-25621-1

Eurofins Spokane
11922 East 1st Ave
Spokane WA 99206

See page two for job notes and contact information.

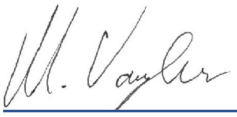
myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

Authorization



Generated
7/8/2024 3:43:37 PM

Authorized for release by
Madison Vaughan, Analyst I
Madison.Vaughan@et.eurofinsus.com
Designee for
Randee Arrington, Business Unit Manager
Randee.Arrington@et.eurofinsus.com
(509)924-9200

Table of Contents

Job ID: 590-25621-1 — Eurofins Spokane

Job Narrative
590-25621-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 6/28/2024 3:14 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 time was 23.3°C.

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

GC/MS VOA
Method 8260D: Surrogate recovery for the following sample was outside the upper control limit: (MB 590-48244/8). This sample did not contain any target analytes; 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.

Hydrocarbons
Method NWTPH_Dx: Surrogate recovery for the following sample was outside control limits: FS-062824-MW04 (590-25621-4). 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.

Sample Summary

Client: Fulcrum Environmental Consulting Inc
Project/Site: Four Star

Job ID: 590-25621-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-25621-1	FS-062824-MW01	Water	06/28/24 10:00	06/28/24 15:14
590-25621-2	FS-062824-MW02	Water	06/28/24 11:00	06/28/24 15:14
590-25621-3	FS-062824-MW03	Water	06/28/24 12:00	06/28/24 15:14
590-25621-4	FS-062824-MW04	Water	06/28/24 13:00	06/28/24 15:14

Definitions/Glossary

Client: Fulcrum Environmental Consulting Inc
Job ID: 590-25621-1
Project/Site: Four Star

Qualifiers

GC/MS VOA

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

GC Semi VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low 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: Fulcrum Environmental Consulting Inc
Job ID: 590-25621-1
Project/Site: Four Star

Client Sample ID: FS-062824-MW01
Lab Sample ID: 590-25621-1
Date Collected: 06/28/24 10:00
Matrix: Water
Date Received: 06/28/24 15:14

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.40		ug/L			07/03/24 21:33	1
Ethylbenzene	ND		1.0		ug/L			07/03/24 21:33	1
m-Xylene & p-Xylene	ND		2.0		ug/L			07/03/24 21:33	1
o-Xylene	ND		1.0		ug/L			07/03/24 21:33	1
Toluene	ND		1.0		ug/L			07/03/24 21:33	1
Xylenes, Total	ND		3.0		ug/L			07/03/24 21:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*80 - 120*		*07/03/24 21:33*	*1*
4-Bromofluorobenzene (Surr)	*89*		*76 - 120*		*07/03/24 21:33*	*1*
Dibromofluoromethane (Surr)	*114*		*80 - 123*		*07/03/24 21:33*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*07/03/24 21:33*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		150		ug/L			07/03/24 21:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*68.7 - 141*		*07/03/24 21:33*	*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)	ND		0.23		mg/L		07/01/24 13:00	07/02/24 19:14	1
Residual Range Organics (RRO) (C25-C36)	ND		0.38		mg/L		07/01/24 13:00	07/02/24 19:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*77*		*50 - 150*	*07/01/24 13:00*	*07/02/24 19:14*	*1*
n-Triacontane-d62	*83*		*50 - 150*	*07/01/24 13:00*	*07/02/24 19:14*	*1*

Client Sample ID: FS-062824-MW02
Lab Sample ID: 590-25621-2
Date Collected: 06/28/24 11:00
Matrix: Water
Date Received: 06/28/24 15:14

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.40		ug/L			07/03/24 21:55	1
Ethylbenzene	ND		1.0		ug/L			07/03/24 21:55	1
m-Xylene & p-Xylene	ND		2.0		ug/L			07/03/24 21:55	1
o-Xylene	ND		1.0		ug/L			07/03/24 21:55	1
Toluene	ND		1.0		ug/L			07/03/24 21:55	1
Xylenes, Total	ND		3.0		ug/L			07/03/24 21:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*80 - 120*		*07/03/24 21:55*	*1*
4-Bromofluorobenzene (Surr)	*89*		*76 - 120*		*07/03/24 21:55*	*1*
Dibromofluoromethane (Surr)	*114*		*80 - 123*		*07/03/24 21:55*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*07/03/24 21:55*	*1*

Client Sample ID: FS-062824-MW02
Lab Sample ID: 590-25621-2

Date Collected: 06/28/24 11:00
Matrix: Water
Date Received: 06/28/24 15:14

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		150		ug/L			07/03/24 21:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*68.7 - 141*		*07/03/24 21:55*	*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		0.23		mg/L		07/01/24 13:00	07/02/24 19:35	1
Residual Range Organics (RRO) (C25-C36)	ND		0.38		mg/L		07/01/24 13:00	07/02/24 19:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*73*		*50 - 150*	*07/01/24 13:00*	*07/02/24 19:35*	*1*
n-Triacontane-d62	*79*		*50 - 150*	*07/01/24 13:00*	*07/02/24 19:35*	*1*

Client Sample ID: FS-062824-MW03
Lab Sample ID: 590-25621-3

Date Collected: 06/28/24 12:00
Matrix: Water
Date Received: 06/28/24 15:14

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.40		ug/L			07/03/24 22:17	1
Ethylbenzene	**6.3**		1.0		ug/L			07/03/24 22:17	1
m-Xylene & p-Xylene	ND		2.0		ug/L			07/03/24 22:17	1
o-Xylene	ND		1.0		ug/L			07/03/24 22:17	1
Toluene	ND		1.0		ug/L			07/03/24 22:17	1
Xylenes, Total	ND		3.0		ug/L			07/03/24 22:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*80 - 120*		*07/03/24 22:17*	*1*
4-Bromofluorobenzene (Surr)	*90*		*76 - 120*		*07/03/24 22:17*	*1*
Dibromofluoromethane (Surr)	*114*		*80 - 123*		*07/03/24 22:17*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*07/03/24 22:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		150		ug/L			07/03/24 22:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*68.7 - 141*		*07/03/24 22:17*	*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		0.23		mg/L		07/01/24 13:00	07/02/24 19:57	1
Residual Range Organics (RRO) (C25-C36)	ND		0.38		mg/L		07/01/24 13:00	07/02/24 19:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*82*		*50 - 150*	*07/01/24 13:00*	*07/02/24 19:57*	*1*
n-Triacontane-d62	*89*		*50 - 150*	*07/01/24 13:00*	*07/02/24 19:57*	*1*

Client: Fulcrum Environmental Consulting Inc
Project/Site: Four Star

Job ID: 590-25621-1

Client Sample ID: FS-062824-MW04

Date Collected: 06/28/24 13:00
Date Received: 06/28/24 15:14

Lab Sample ID: 590-25621-4

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.40		ug/L			07/03/24 22:39	1
Ethylbenzene	**6.0**		1.0		ug/L			07/03/24 22:39	1
m-Xylene & p-Xylene	ND		2.0		ug/L			07/03/24 22:39	1
o-Xylene	ND		1.0		ug/L			07/03/24 22:39	1
Toluene	ND		1.0		ug/L			07/03/24 22:39	1
Xylenes, Total	ND		3.0		ug/L			07/03/24 22:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*80 - 120*		*07/03/24 22:39*	*1*
4-Bromofluorobenzene (Surr)	*88*		*76 - 120*		*07/03/24 22:39*	*1*
Dibromofluoromethane (Surr)	*115*		*80 - 123*		*07/03/24 22:39*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*07/03/24 22:39*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		150		ug/L			07/03/24 22:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*68.7 - 141*		*07/03/24 22:39*	*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		0.23		mg/L		07/01/24 13:00	07/02/24 20:18	1
Residual Range Organics (RRO) (C25-C36)	ND		0.38		mg/L		07/01/24 13:00	07/02/24 20:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*17*	*S1-*	*50 - 150*	*07/01/24 13:00*	*07/02/24 20:18*	*1*
n-Triacontane-d62	*17*	*S1-*	*50 - 150*	*07/01/24 13:00*	*07/02/24 20:18*	*1*

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

Lab Sample ID: MB 590-48244/8
Matrix: Water
Analysis Batch: 48244

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.40		ug/L			07/03/24 16:00	1
Ethylbenzene	ND		1.0		ug/L			07/03/24 16:00	1
m-Xylene & p-Xylene	ND		2.0		ug/L			07/03/24 16:00	1
o-Xylene	ND		1.0		ug/L			07/03/24 16:00	1
Toluene	ND		1.0		ug/L			07/03/24 16:00	1
Xylenes, Total	ND		3.0		ug/L			07/03/24 16:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*		*07/03/24 16:00*	*1*
4-Bromofluorobenzene (Surr)	*90*		*76 - 120*		*07/03/24 16:00*	*1*
Dibromofluoromethane (Surr)	*125*	*S1+*	*80 - 123*		*07/03/24 16:00*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/03/24 16:00*	*1*

Lab Sample ID: LCS 590-48244/1003
Matrix: Water
Analysis Batch: 48244

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			10.0	9.83		ug/L		98	80 - 120		
Ethylbenzene			10.0	10.2		ug/L		102	80 - 122		
m-Xylene & p-Xylene			10.0	11.3		ug/L		113	80 - 125		
o-Xylene			10.0	10.1		ug/L		101	80 - 130		
Toluene			10.0	10.3		ug/L		103	80 - 129		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*
4-Bromofluorobenzene (Surr)	*88*		*76 - 120*
Dibromofluoromethane (Surr)	*119*		*80 - 123*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: LCSD 590-48244/4
Matrix: Water
Analysis Batch: 48244

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			10.0	9.91		ug/L		99	80 - 120	1	15
Ethylbenzene			10.0	10.2		ug/L		102	80 - 122	0	35
m-Xylene & p-Xylene			10.0	11.3		ug/L		113	80 - 125	1	35
o-Xylene			10.0	10.1		ug/L		101	80 - 130	0	35
Toluene			10.0	10.3		ug/L		103	80 - 129	0	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*88*		*76 - 120*
Dibromofluoromethane (Surr)	*117*		*80 - 123*
Toluene-d8 (Surr)	*102*		*80 - 120*

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

Lab Sample ID: MB 590-48243/8
Matrix: Water
Analysis Batch: 48243

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		150		ug/L			07/03/24 16:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*68.7 - 141*		*07/03/24 16:00*	*1*

Lab Sample ID: LCS 590-48243/1007
Matrix: Water
Analysis Batch: 48243

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline			1000	1020		ug/L		102	80 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*68.7 - 141*

Lab Sample ID: LCSD 590-48243/1018
Matrix: Water
Analysis Batch: 48243

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline			1000	1010		ug/L		101	80 - 120	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*68.7 - 141*

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

Lab Sample ID: MB 590-48158/1-A
Matrix: Water
Analysis Batch: 48197

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 48158

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		0.24		mg/L		07/01/24 13:00	07/02/24 13:11	1
Residual Range Organics (RRO) (C25-C36)	ND		0.40		mg/L		07/01/24 13:00	07/02/24 13:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*83*		*50 - 150*	*07/01/24 13:00*	*07/02/24 13:11*	*1*
n-Triacontane-d62	*96*		*50 - 150*	*07/01/24 13:00*	*07/02/24 13:11*	*1*

Lab Sample ID: LCS 590-48158/2-A
Matrix: Water
Analysis Batch: 48197

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 48158

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics (DRO) (C10-C25)			1.60	1.41		mg/L		88	50 - 150		

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

Lab Sample ID: LCS 590-48158/2-A
Matrix: Water
Analysis Batch: 48197

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 48158

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Residual Range Organics (RRO) (C25-C36)			1.60	1.57		mg/L		98	50 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*91*		*50 - 150*
n-Triacontane-d62	*101*		*50 - 150*

Lab Sample ID: LCSD 590-48158/3-A
Matrix: Water
Analysis Batch: 48197

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 48158

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Diesel Range Organics (DRO) (C10-C25)			1.60	1.34		mg/L		84	50 - 150	5	25
Residual Range Organics (RRO) (C25-C36)			1.60	1.61		mg/L		100	50 - 150	2	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl	*91*		*50 - 150*
n-Triacontane-d62	*103*		*50 - 150*

Lab Chronicle

Client: Fulcrum Environmental Consulting Inc
Job ID: 590-25621-1
Project/Site: Four Star

Client Sample ID: FS-062824-MW01
Lab Sample ID: 590-25621-1
Date Collected: 06/28/24 10:00
Matrix: Water
Date Received: 06/28/24 15:14

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	43 mL	43 mL	48244	07/03/24 21:33	JSP	EET SPK
Total/NA	Analysis	NWTPH-Gx		1	43 mL	43 mL	48243	07/03/24 21:33	JSP	EET SPK
Total/NA	Prep	3510C			261.2 mL	2 mL	48158	07/01/24 13:00	MRV	EET SPK
Total/NA	Analysis	NWTPH-Dx		1	1 mL	1 mL	48197	07/02/24 19:14	NMI	EET SPK

Client Sample ID: FS-062824-MW02
Lab Sample ID: 590-25621-2
Date Collected: 06/28/24 11:00
Matrix: Water
Date Received: 06/28/24 15:14

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	43 mL	43 mL	48244	07/03/24 21:55	JSP	EET SPK
Total/NA	Analysis	NWTPH-Gx		1	43 mL	43 mL	48243	07/03/24 21:55	JSP	EET SPK
Total/NA	Prep	3510C			262.2 mL	2 mL	48158	07/01/24 13:00	MRV	EET SPK
Total/NA	Analysis	NWTPH-Dx		1	1 mL	1 mL	48197	07/02/24 19:35	NMI	EET SPK

Client Sample ID: FS-062824-MW03
Lab Sample ID: 590-25621-3
Date Collected: 06/28/24 12:00
Matrix: Water
Date Received: 06/28/24 15:14

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	43 mL	43 mL	48244	07/03/24 22:17	JSP	EET SPK
Total/NA	Analysis	NWTPH-Gx		1	43 mL	43 mL	48243	07/03/24 22:17	JSP	EET SPK
Total/NA	Prep	3510C			266 mL	2 mL	48158	07/01/24 13:00	MRV	EET SPK
Total/NA	Analysis	NWTPH-Dx		1	1 mL	1 mL	48197	07/02/24 19:57	NMI	EET SPK

Client Sample ID: FS-062824-MW04
Lab Sample ID: 590-25621-4
Date Collected: 06/28/24 13:00
Matrix: Water
Date Received: 06/28/24 15:14

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	43 mL	43 mL	48244	07/03/24 22:39	JSP	EET SPK
Total/NA	Analysis	NWTPH-Gx		1	43 mL	43 mL	48243	07/03/24 22:39	JSP	EET SPK
Total/NA	Prep	3510C			265.4 mL	2 mL	48158	07/01/24 13:00	MRV	EET SPK
Total/NA	Analysis	NWTPH-Dx		1	1 mL	1 mL	48197	07/02/24 20:18	NMI	EET SPK

Laboratory References:

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

Accreditation/Certification Summary

Client: Fulcrum Environmental Consulting Inc
Job ID: 590-25621-1
Project/Site: Four Star

Laboratory: Eurofins Spokane

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

Authority	Program	Identification Number	Expiration Date
Washington	State	C569	01-07-25

Method Summary

Client: Fulcrum Environmental Consulting Inc
Project/Site: Four Star

Job ID: 590-25621-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET SPK
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC/MS)	NWTPH	EET SPK
NWTPH-Dx	Northwest - Semi-Volatile Petroleum Products (GC)	NWTPH	EET SPK
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET SPK
5030C	Purge and Trap	SW846	EET SPK

Protocol References:

NWTPH = Northwest Total Petroleum Hydrocarbon

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

Laboratory References:

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

Login Sample Receipt Checklist

Client: Fulcrum Environmental Consulting Inc

Job Number: 590-25621-1

Login Number: 25621
List Number: 1
Creator: Morris, Mackenzie 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.	True	
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.	False	Received same day of collection; chilling process has begun.
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	