

Groundwater Assessment – April 2025

Gold Nugget Market Site
1041 Buena Road
Zillah, Washington

for
Washington State Department of Ecology

June 12, 2025

523 East Second Avenue
Spokane, Washington 99202
509.363.3125

GEOENGINEERS 

Groundwater Assessment – April 2025

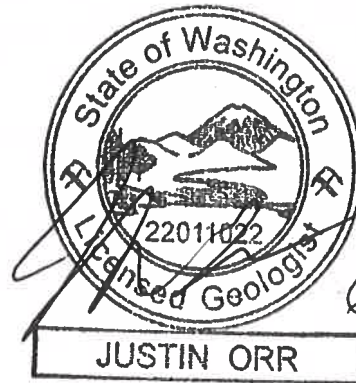
Gold Nugget Market Site
1041 Buena Road
Zillah, Washington

File No. 0504-060-07
June 12, 2025

Prepared for:

Washington State Department of Ecology
Toxics Cleanup Program, Central Region Office
1250 West Alder Street
Union Gap, Washington 98903-0009

Attention: Chelsea Wisotzkey, LUST Site Manager




Prepared by:


GeoEngineers, Inc.
523 East Second Avenue
Spokane, Washington 99202
509.363.3125



Lola T. Otoki
Staff Environmental Scientist



Justin D. Orr, LE
Geologist



Scott H. Lathen, PE
Associate Environmental Engineer

LTO:JDO:SHL:nl

Disclaimer: Any electronic form, facsimile, or hard copy of the original document (email, text, table and/or figure), if provided, and any attachments are only a copy of the original document. The original document is stored by GeoEngineers, Inc. and will serve as the official document of record.

Table of Contents

1.0 Introduction	1
2.0 Site Description and Background.....	1
2.1 Previous Investigations.....	1
2.2 Previous Groundwater Sampling Events	2
3.0 Field Investigation Activities	2
3.1 Groundwater Assessment	2
4.0 Chemical Analytical Results.....	3
4.1 Investigation-derived Waste.....	3
5.0 Summary and Conclusions	4
6.0 Limitations.....	4
7.0 References.....	5

List of Tables

Table 1. Summary of Groundwater Level Measurements

Table 2. Chemical Analytical Results – Groundwater

List of Figures

Figure 1. Vicinity Map

Figure 2. Groundwater Elevations – April 2025

Appendices

Appendix A. Field Assessment Procedures

Appendix B. Chemical Analytical Laboratory Report and Data Validation Report

Appendix C. IDW Disposal Documentation

Appendix D. Report Limitations and Guidelines for Use

1.0 Introduction

This report describes the 2nd Quarter 2025 groundwater sampling activities conducted at the Gold Nugget Market Site located at 1041 Buena Road in Zillah, Washington (herein referred to as “Site”), as shown on the attached Figure 1, Vicinity Map¹. The Washington State Department of Ecology (Ecology) reference numbers for this Site include Facility Site ID (FSID) No. 28575673 and Cleanup Site ID (CSID) No. 5818.

This assessment report has been prepared by GeoEngineers for Ecology under Ecology Master Contract No. C1900044, Amendment No. 7, task work assignment number GEI069. This report describes Site history, field activities, observations, and chemical analytical results associated with groundwater samples collected at the Site in the 2nd Quarter of 2025, the fourth quarterly groundwater sampling event since July 2024. The purpose of this assessment was to monitor groundwater conditions to confirm that contamination associated with the historic release of petroleum products from a former underground storage tank (UST) is no longer present in groundwater at the Site at concentrations greater than the Washington State Model Toxics Control Act (MTCA) Method A cleanup levels for four consecutive quarters. Data generated from this assessment, in combination with previous groundwater sampling data from the Site, will be used to support a No Further Action (NFA) determination.

2.0 Site Description and Background

The Site operated as a service station from at least 1993 to 1998 and as a market and convenience store from 1998 to the present. The Site is bounded by Buena Road to the north, residential properties to the south, Buena Exit Road to the east and the Yakima Valley Highway to the west.

The Site is occupied by the Gold Nugget Market convenience store. The north portion of the Site is paved and used as a parking area; the south and east portions of the Site are unpaved and used as overflow parking. There is a covered carport to the west of the Gold Nugget Market building.

2.1 PREVIOUS INVESTIGATIONS

Assessment and remediation actions have been conducted at the Site since about 1993. These actions included:

- UST closure and contaminated soil removal in 1998 and 2000 (NetCompliance Products & Services, Inc. [NetCompliance] 2000);
- Soil and groundwater sampling from 2010 to 2014 and 2019 (GeoEngineers 2015, 2019); and
- Installation and monitoring of a soil vapor extraction (SVE) and air sparge remediation system in 2013 and 2014 (GeoEngineers 2014).

The previous assessment and remediation actions are described in GeoEngineers’ Work Plan (GeoEngineers 2024a).

¹The Site was identified as located in Buena, Washington, in GeoEngineers reports from 2010 to 2019; however, according to the Yakima County Assessor, the Site is located in Zillah, Washington.

2.2 PREVIOUS GROUNDWATER SAMPLING EVENTS

GeoEngineers installed six monitoring wells (MW-16 through MW-21) in 2010 and conducted groundwater monitoring events between 2010 and 2015, and again in 2019. Groundwater samples were analyzed for diesel-, oil- and gasoline-range petroleum hydrocarbons (DRPH, ORPH and GRPH, respectively), benzene, toluene, ethylbenzene, and total xylenes (BTEX) and naphthalene. The groundwater monitoring events indicated that contaminant of concern (COC) concentrations were likely decreasing over time. However, during the final sampling event in 2019, benzene was detected in monitoring well MW-17 at 55 micrograms per liter ($\mu\text{g/L}$), greater than the MTCA Method A cleanup level of 5 $\mu\text{g/L}$. GRPH also was detected in monitoring wells MW-17 and MW-21 at concentrations greater than the laboratory reporting limit during that event.

In July 2024, monitoring wells MW-16 through MW-21 were redeveloped, and samples were collected and analyzed for GRPH, DRPH, ORPH, BTEX and total organic carbon (TOC). COCs either were not detected or were detected at concentrations less than their respective MTCA Method A cleanup levels. Based on the results of the July 2024 groundwater assessment, Ecology requested three additional quarters of groundwater sampling be conducted to confirm that COC concentrations remain less than their respective MTCA Method A cleanup levels for four consecutive quarters. Additionally, based on the laboratory results, Ecology requested that TOC be removed from the list of analytes during future events (GeoEngineers 2024b).

In October 2024, groundwater samples were collected from monitoring wells MW-16 through MW-21 and analyzed for GRPH, DRPH, ORPH and BTEX. Laboratory results indicated that COCs were either not detected or were detected at concentration levels less than their respective MTCA Method A cleanup levels. Based on the results of the October 2024 groundwater sampling event, Ecology requested that monitoring wells MW-16, MW-18, MW-19 and MW-20 be removed from the sampling program during future events because COCs have either not been detected or detected at concentrations less than the MTCA Method A cleanup levels in those wells for at least four quarters dating back to 2012, and COCs also were not detected during the 3rd or 4th quarters of 2024 (GeoEngineers 2024d).

In January 2025, groundwater samples were collected from monitoring wells MW-17 and MW-21 and analyzed for GRPH, DRPH, ORPH and BTEX. Laboratory results indicated that COCs were either not detected or were detected at concentrations less than their respective MTCA Method A cleanup levels (GeoEngineers 2025).

3.0 Field Investigation Activities

The following sections describe field activities and a discussion of observed groundwater conditions during the April 2025 groundwater assessment.

3.1 GROUNDWATER ASSESSMENT

Depths to groundwater were obtained from monitoring wells MW-16 through MW-21 using an electronic interface probe on April 10, 2025. Depths to groundwater ranged between 1.79 feet below top of casing (BTOC) in MW-20 to 5.22 feet BTOC in MW-19. Groundwater elevations ranged from 785.25 feet in MW-18 to 786.13 feet in MW-16. Groundwater elevations decreased by between 0.10 feet (MW-17) and 0.17 feet

(MW-20) compared to the January 2025 event. Depths to groundwater and groundwater elevations are included in Table 1, Summary of Groundwater Level Measurements.

The groundwater gradient was approximately 0.004 feet per foot to the southeast during the April 2025 groundwater sampling event, as shown in Figure 2, Groundwater Elevations – April 2025.

Groundwater samples were collected from monitoring wells MW-17 and MW-21 on April 10, 2025. The monitoring wells were purged using low-flow techniques and groundwater quality parameters were monitored prior to sampling as described in Appendix A and the Work Plan. Groundwater quality parameters at the time of sample collection are summarized in the table below.

GROUNDWATER QUALITY PARAMETERS

MONITORING WELL LOCATION	DEPTH TO WATER (FEET BTOC)	GROUNDWATER ELEVATION (FEET)	FIELD MEASURED GROUNDWATER QUALITY PARAMETERS					
			PH (PH UNITS)	SPECIFIC CONDUCTIVITY (μS/CM)	ORP (MV)	DISSOLVED OXYGEN (MG/L)	TURBIDITY (NTU)	TEMPERATURE (DEGREES C)
MW-17	4.87	786.02	7.05	953	-123.7	21	1.92	12.3
MW-21	3.48	785.80	4.92	852	33.0	2.4	15.14	11.3

Notes:

BTOC = below top of casing; ORP = oxygen reduction potential; NTU = nephelometric turbidity unit; C = Celsius
 μS/cm = micro-Siemens per centimeter; mV = millivolts; mg/L = milligrams per liter.

4.0 Chemical Analytical Results

Groundwater samples from MW-17 and MW-21 and a duplicate groundwater sample from MW-17 were submitted to Eurofins Environment Testing Northwest (Eurofins) in Spokane Valley, Washington, for chemical analysis. The laboratory report and a data validation report are included in Appendix B. The samples were analyzed for the following COCs:

- GRPH using Northwest Method NWTPH-Gx;
- DRPH and ORPH using Northwest Method NWTPH-Dx; and
- BTEX using U.S. Environmental Protection Agency (EPA) Method 8260D.

Groundwater chemical analytical results are presented and compared to MTCA Method A cleanup levels in Table 2, Chemical Analytical Results – Groundwater. The COCs were either not detected or were detected at concentrations less than their respective MTCA Method A cleanup levels.

4.1 INVESTIGATION-DERIVED WASTE

Investigation-derived waste (IDW), including purge and decontamination water from groundwater sampling activities, was placed in a 55-gallon drum on the west side of the property. Based on the chemical analytical results, the IDW was determined to be non-hazardous. DH Environmental, Inc. (DHE) picked up the IDW from the Site and disposed the IDW at Waste Management's Chemical Waste Management facility in Arlington, Oregon, on June 5, 2025.

DHE additionally pick up two drums containing spent granular activated carbon (GAC) associated with the SVE system from the Site and disposed the GAC drums at Lafarge North America on June 5, 2025. Prior to disposal, DHE collected a sample from the GAC drums and analyzed the sample for volatile organic compounds (VOCs) using EPA Method 8260D and Resource Conservation and Recovery Act (RCRA) metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver) and Washington state Dangerous Waste metals (copper, nickel and zinc) using EPA 6000/7000-series methods for waste profiling purposes. Based on the results of the sample, the GAC was determined to be non-hazardous.

DHE's IDW disposal documentation and the analytical results for the GAC are included in Appendix C.

5.0 Summary and Conclusions

Monitoring wells MW-17 and MW-21 were sampled at the Gold Nugget Market Site in Zillah, Washington, during the 1st Quarter 2025 groundwater sampling event. Groundwater samples collected from the monitoring wells were submitted for chemical analysis.

Laboratory analytical results indicate that petroleum contamination is not present at concentrations greater than the MTCA Method A cleanup levels in the monitoring wells sampled. Groundwater elevations obtained during this groundwater assessment indicate a groundwater gradient to the southeast consistent with previous groundwater monitoring events. The April 2025 groundwater sampling event and other assessments conducted by GeoEngineers indicate the following:

- The April 2025 groundwater sampling event is the fourth consecutive quarter (July 2024, October 2024, January 2025 and April 2025) with concentrations of COCs in MW-17 and MW-21 less than the MTCA Method A cleanup levels. Additionally, COC concentrations in other monitoring wells at the Site have either not been detected or were detected at concentrations less than the MTCA Method A cleanup levels for at least four quarters as of October 2024 (GeoEngineers 2019, GeoEngineers 2024d).
- The vapor intrusion (VI) assessment conducted at the Site in August 2024 indicated GRPH and related compounds were either not present or present at concentrations less than their respective MTCA Method B screening levels (GeoEngineers 2024c).
- The SVE system has been shut down. Additionally, the GAC filtration drums have been removed from the Site and disposed. The shed that houses the SVE system is still present at the Site. Additionally, five air sparge wells, in addition to monitoring wells MW-16 through MW-21, remain at the Site.

6.0 Limitations

We have prepared this report for the exclusive use of the Washington State Department of Ecology and their authorized agents.

Within the limitations of scope, schedule and budget, our services were executed in accordance with generally accepted environmental science practices in this area at the time this report was prepared. The conclusions and opinions presented in this report are based on our professional knowledge, judgment and experience. No warranty or other conditions, express or implied, should be understood.

Please refer to Appendix D, Report Limitations and Guidelines for Use, for additional information pertaining to this report.

7.0 References

- GeoEngineers, Inc. 2014. "Gold Nugget Vapor Capture System, Memo to Mary Monahan, Washington State Department of Ecology." GEI File No. 0504-060-03. March 6, 2014.
- GeoEngineers, Inc. 2015. "Groundwater Monitoring Report, Second Quarter 2015, Gold Nugget Market, Buena, Washington." GEI File No. 0504-060-04. September 22, 2015.
- GeoEngineers, Inc. 2019. "Groundwater Assessment, Gold Nugget Market, Buena, Washington." GEI File No. 0504-060-05. June 26, 2019.
- GeoEngineers, Inc. 2024a. "Work Plan, Gold Nugget Market Site, 1041 Buena Road, Zillah, Washington." File No. 0504-060-07. August 13, 2024.
- GeoEngineers, Inc. 2024b. "Groundwater Assessment, Gold Nugget Market Site, 1041 Buena Road, Zillah, Washington." File No. 0504-060-07. October 17, 2024.
- GeoEngineers, Inc. 2024c. "Vapor Intrusion Report, Gold Nugget Market Site, 1041 Buena Road, Zillah, Washington." File No. 0504-060-07. October 17, 2025.
- GeoEngineers, Inc. 2024d. "Groundwater Assessment, Gold Nugget Market Site, 1041 Buena Road, Zillah, Washington." File No. 0504-060-07. December 23, 2024.
- GeoEngineers, Inc. 2025. "Groundwater Assessment, Gold Nugget Market Site, 1041 Buena Road, Zillah, Washington." File No. 0504-060-07. March 21, 2025.
- NetCompliance Products & Services, Inc. 2000. "Site Cleanup and Environmental Site Assessment at the Gold Nugget Market, Buena Road, Buena, Washington." November 23, 2000.
- Washington State Department of Ecology. 2013. "Model Toxics Control Act Regulation and Statute, Chapter 173-340 WAC and 70.105D RCW." Publication No. 94-06. Revised 2024.

Tables

Table 1
Summary of Groundwater Level Measurements
Gold Nugget Market
Zillah, Washington

Well Number	Top of Casing Elevation ¹ (feet)	Date Measured	Depth to Groundwater ² (feet)	Groundwater Elevation (feet)	Change in Elevation (feet)
MW-16	789.25	07/11/24	3.24	786.01	-
		10/29/24	3.12	786.13	0.12
		01/13/25	2.99	786.26	0.13
		04/10/25	3.12	786.13	-0.13
MW-17	790.89	07/11/24	4.95	785.94	-
		10/29/24	4.82	786.07	0.13
		01/13/25	4.77	786.12	0.05
		04/10/25	4.87	786.02	-0.10
MW-18	789.50	07/11/24	4.30	785.20	-
		10/29/24	4.21	785.29	0.09
		01/13/25	4.08	785.42	0.13
		04/10/25	4.25	785.25	-0.17
MW-19	790.70	07/11/24	5.20	785.50	-
		10/29/24	5.13	785.57	0.07
		01/13/25	5.11	785.59	0.02
		04/10/25	5.22	785.48	-0.11
MW-20	787.44	07/11/24	1.90	785.54	-
		10/29/24	1.75	785.69	0.15
		01/13/25	1.62	785.82	0.13
		04/10/25	1.79	785.65	-0.17
MW-21	789.28	07/11/24	3.58	785.70	-
		10/29/24	3.48	785.80	0.10
		01/13/25	3.34	785.94	0.14
		04/10/25	3.48	785.80	-0.14

Notes:

¹ Survey completed by TD&H Engineering on February 28, 2013.

² Depth to groundwater measured using electric water interface probe.

"-" = not calculated

Table 2
Chemical Analytical Results - Groundwater¹
Gold Nugget Market Site
Zillah, Washington

Monitoring Well	Method	Petroleum Hydrocarbons (µg/L)				VOCs (µg/L) ⁵					
	Sample Date	GRPH ²	DRPH ³	ORPH ³	Combined DRPH/ORPH ⁴	Benzene	Toluene	Ethylbenzene	m, p-Xylene	o-Xylene	Xylenes (total)
MW-16	7/11/2024	54 U	110 U	120 U	ND	0.093 U	0.31 U	0.20 U	0.28 U	0.16 U	0.44 U
	10/28/2024	54 U	120 U	130 U	ND	0.093 U	0.31 U	0.20 U	0.28 U	0.16 U	0.44 U
MW-17	7/11/2024	54 U	110 U	120 U	ND	0.69	0.31 U	0.20 U	0.28 U	0.16 U	0.44 U
	Duplicate	54 U	110 U	120 U	ND	0.83	0.31 U	0.20 U	0.28 U	0.16 U	0.44 U
	10/29/2024	54 U	110 U	120 U	ND	0.51	0.31 U	0.20 U	0.28 U	0.16 U	0.44 U
	Duplicate	54 U	110 U	120 U	ND	0.49	0.31 U	0.20 U	0.28 U	0.16 U	0.44 U
	1/13/2025	65 J	110 U	120 U	ND	1.5	0.31 U	0.20 U	0.28 U	0.16 U	0.44 U
	Duplicate	55 J	110 U	120 U	ND	1.3	0.31 U	0.20 U	0.28 U	0.16 U	0.44 U
	4/10/2025	83 J	110 U	120 U	ND	4.0	0.31 U	0.20 U	0.28 U	0.16 U	0.44 U
MW-18	7/11/2024	54 U	110 U	120 U	ND	0.093 U	0.31 U	0.20 U	0.28 U	0.16 U	0.44 U
	10/29/2024	54 U	110 U	120 U	ND	0.093 U	0.31 U	0.20 U	0.28 U	0.16 U	0.44 U
MW-19	7/11/2024	54 U	110 U	120 U	ND	0.093 U	0.31 U	0.20 U	0.28 U	0.16 U	0.44 U
	10/29/20024	54 U	110 U	130 U	ND	0.093 U	0.31 U	0.20 U	0.28 U	0.16 U	0.44 U
MW-20	7/11/2024	54 U	110 U	120 U	ND	0.093 U	0.31 U	0.20 U	0.28 U	0.16 U	0.44 U
	10/29/2024	54 U	110 U	130 U	ND	0.093 U	0.31 U	0.20 U	0.28 U	0.16 U	0.44 U
MW-21	7/11/2024	200	110 U	120 U	ND	0.093 U	0.31 U	0.36 J	0.28 U	0.16 U	0.44 U
	10/28/2024	110 J	130 J	280 U	130	0.093 U	0.31 U	0.20 U	0.28 U	0.16 U	0.44 U
	1/13/2025	130 J	110 U	120 U	ND	0.093 U	0.31 U	0.20 U	0.28 U	0.16 U	0.44 U
	4/10/2025	100 J	110 U	120 U	ND	0.093 U	0.31 U	0.20 U	0.28 U	0.16 U	0.44 U
MTCA CUL ⁶		800⁷	500⁸			5	1,000	700	1,000		

Notes:

¹Samples analyzed by Eurofins Environment Testing Northwest (Eurofins) located in Spokane Valley, Washington.

²Gasoline-range petroleum hydrocarbons (GRPH) analyzed using Northwest Method NWTPH-Gx.

³Diesel- and oil-range petroleum hydrocarbons (DRPH and ORPH, respectively) analyzed using Northwest Method NWTPH-Dx.

⁴The total concentration of DRPH and ORPH is calculated using DRPH concentration + ORPH concentration. Non-detected results are treated as 0 µg/L for the purposes of calculating the combined DRPH/ORPH concentration.

⁵Volatile organic compounds (VOCs) analyzed using Environmental Protection Agency (EPA) Method 8260D.

⁶Washington State Model Toxics Control Act (MTCA) Method A cleanup levels (CUL).

⁷MTCA Method A cleanup level for GRPH when benzene is present at the Site.

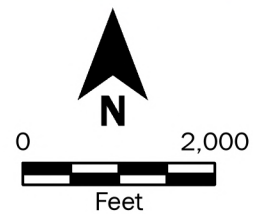
⁸MTCA Method A CUL for the combined total concentrations of DRPH and ORPH.

µg/L = micrograms per liter; NE = not established.

U = analyte was not detected above the laboratory method detection limit (MDL); J = estimated concentration

Bold indicates analyte was detected.

Figures



Vicinity Map

Gold Nugget Market Site
1041 Buena Road
Zillah, Washington

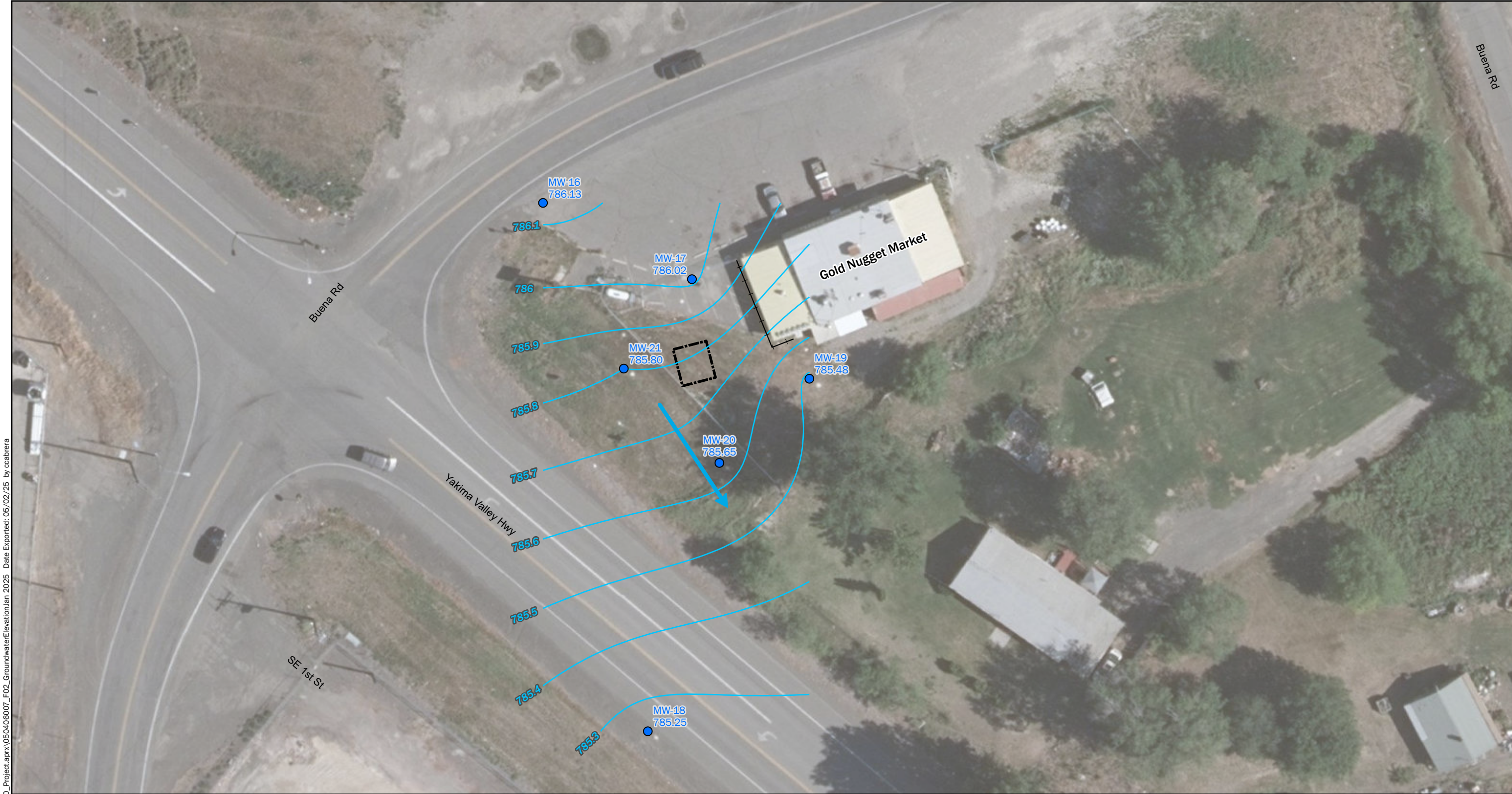


Figure 1

Source(s):
• ESRI

Coordinate System: NAD 1983 UTM Zone 10N

Disclaimer: This figure was created for a specific purpose and project. Any use of this figure for any other project or purpose shall be at the user's sole risk and without liability to GeoEngineers. The locations of features shown may be approximate. GeoEngineers makes no warranty or representation as to the accuracy, completeness, or suitability of the figure, or data contained therein. The file containing this figure is a copy of a master document, the original of which is retained by GeoEngineers and is the official document of record.



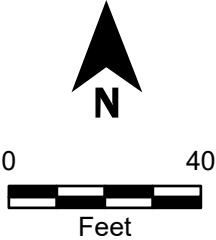
P:\0_0504060\GIS\0504060_Project\0504060_Project.aprx\050406007_F02_GroundwaterElevationJan 2025 Date Exported: 05/02/25 by ccabrera

Source(s):
• ESRI Clarity
• Site boundary and street data from Yakima County parcel data, January 2019.
Coordinate System: NAD 1983 StatePlane Washington South FIPS 4602 Feet

Disclaimer: This figure was created for a specific purpose and project. Any use of this figure for any other project or purpose shall be at the user's sole risk and without liability to GeoEngineers. The locations of features shown may be approximate. GeoEngineers makes no warranty or representation as to the accuracy, completeness, or suitability of the figure, or data contained therein. The file containing this figure is a copy of a master document, the original of which is retained by GeoEngineers and is the official document of record.

Legend

- Monitoring Well Number, Groundwater Elevation and Approximate Location
- Interpolated Groundwater Contour
- Groundwater Flow Direction
- SVE Extraction Trench
- SVE/AS Remediation System Shed



Groundwater Elevations - April 2025

Gold Nugget Market Site
1041 Buena Road
Zillah, Washington



Figure 2

Appendices

Appendix A

Field Assessment Procedures

Appendix A

Field Assessment Procedures

Standard Procedures

This section contains standard procedures for field data collection that were conducted during groundwater sampling activities at the Gold Nugget Market Site located at 1041 Buena Road in Zillah, Washington.

MONITORING WELL SAMPLING

Groundwater samples were collected from groundwater monitoring wells MW-17 and MW-21 and analyzed as described below. Depth to groundwater relative to the top of the polyvinyl chloride (PVC) well casing was measured to the nearest 0.01 foot using an electronic interface probe and recorded in the field notes.

Following depth to groundwater measurement, a groundwater sample was collected from each monitoring well consistent with the U.S. Environmental Protection Agency's (EPA's) low-flow groundwater sampling procedure, as described in EPA (2017) and Puls and Barcelona (1996). Dedicated tubing and a peristaltic pump were used for groundwater purging and sampling. During purging activities, water quality parameters, including pH, conductivity, dissolved oxygen (DO), oxidation-reduction potential (ORP), turbidity and temperature were measured using a multi-parameter meter equipped with a flow-through cell. Depth to water also was measured and recorded when groundwater quality parameters were recorded. Each monitoring well was purged until parameters stabilized, or a maximum of 30 minutes, whichever occurred first, before collecting the sample. Stability was defined as the following:

- pH: ± 0.1 pH units;
- Conductivity: ± 3 percent micro-Siemens per centimeter ($\mu\text{S}/\text{cm}$);
- ORP: ± 10 millivolts (mV);
- DO: ± 0.3 milligrams per Liter (mg/L);
- Turbidity: less than 10 nephelometric turbidity units (NTUs) or ± 10 percent NTUs when turbidity is greater than 10 NTUs; and
- Temperature: ± 3 percent degrees Celsius.

Field water quality measurements and depth-to-water measurements were recorded on a well purging-field water quality measurement form. Groundwater samples were transferred in the field to laboratory-prepared sample containers and kept cool during transport to the testing laboratory. Chain-of-Custody procedures were observed from the time of sample collection to delivery to the testing laboratory consistent with the Quality Assurance Project Plan (QAPP) included in the Work Plan (GeoEngineers 2024).

References

- GeoEngineers, Inc. 2025. "Work Plan, Gold Nugget Market Site, 1041 Buena Road, Zillah, Washington." File No. 0504-060-07. August 13, 2024.
- Puls, R. W. and M.J. Barcelona. 1996. "Low-flow (Minimal Drawdown) Ground-water Sampling Procedures." EPA Ground Water Issue. April. p.1-9.
- U.S. Environmental Protection Agency (EPA). 2017. Region 1, "Low Stress (Low-Flow) Purging and Sampling Procedure for the Collection of Ground Water Samples from Monitoring Wells." EPA SOP No. GW4, Revision No. 4., September 19, 2017.

Appendix B
Chemical Analytical Laboratory Report and Data Validation
Report

Project: Gold Nugget Market – Environmental Services
April 2025 Groundwater Samples

File: 0504-060-07

Date: May 16, 2025

This report documents the results of a United States Environmental Protection Agency (USEPA)-defined Stage 2A data validation (USEPA Document 540-R-08-005; USEPA, 2009) of analytical data from the analyses of water samples collected as part of the April 2025 sampling event, and the associated laboratory and field quality control (QC) samples. The samples were obtained from the Gold Nugget Market facility located at 1041 Buena Road in Zillah, Washington.

Objective and Quality Control Elements

GeoEngineers, Inc. (GeoEngineers) completed the data validation consistent with the USEPA Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review (USEPA, 2020) (National Functional Guidelines) to determine if the laboratory analytical results meet the project objectives and are usable for their intended purpose. Data usability was assessed by determining if:

- The samples were analyzed using well-defined and acceptable methods that provide reporting limits below applicable regulatory criteria;
- The precision and accuracy of the data are well-defined and sufficient to provide defensible data; and
- The quality assurance/quality control (QA/QC) procedures utilized by the laboratory meet acceptable industry practices and standards.

The data validation included review of the following QC elements:

- Data Package Completeness
- Chain-of-Custody Documentation
- Holding Times and Sample Preservation
- Surrogate Recoveries
- Method and Trip Blanks
- Matrix Spikes/Matrix Spike Duplicates
- Laboratory Control Samples/Laboratory Control Sample Duplicates
- Field Duplicates

Validated Sample Delivery Groups

This data validation included review of the sample delivery group (SDG) listed below in Table 1.

TABLE 1. SUMMARY OF VALIDATED SAMPLE DELIVERY GROUPS

LABORATORY SDG	SAMPLES VALIDATED
590-30361-1	GEI069-MW-17-041025, GEI069-MW-DUP-041025, GEI069-MW-21-041025, Trip Blank

Chemical Analysis Performed

Eurofins Environment Testing, Inc. (Eurofins), located in Spokane, Washington, performed laboratory analyses on the samples using one or more of the following methods:

- Gasoline-range Hydrocarbons (NWTPH-Gx) by Method NWTPH-Gx;
- Petroleum Hydrocarbons (NWTPH-Dx) by Method NWTPH-Dx; and
- Volatile Organic Compounds (VOCs) by Method EPA8260D

Data Validation Summary

The results for each of the QC elements are summarized below.

DATA PACKAGE COMPLETENESS

Eurofins provided the required deliverables for the data validation according to the National Functional Guidelines. The laboratory followed adequate corrective action processes and the identified anomalies were discussed in the relevant laboratory case narrative.

CHAIN-OF-CUSTODY DOCUMENTATION

Chain-of-custody (COC) forms were provided with the laboratory analytical reports. The COCs were accurate and complete when submitted to the laboratory.

HOLDING TIMES AND SAMPLE PRESERVATION

The sample holding time is defined as the time that elapses between sample collection and sample analysis. Maximum holding time criteria exist for each analysis to help ensure that the analyte concentrations found at the time of analysis reflect the concentration present at the time of sample collection. Established holding times were met for each analysis. The sample cooler arrived at the laboratory within the appropriate temperatures of between two and six degrees Celsius.

SURROGATE RECOVERIES

A surrogate compound is a compound that is chemically similar to the organic analytes of interest, but unlikely to be found in an environmental sample. Surrogates are used for organic analyses and are added to the samples, standards, and blanks to serve as an accuracy and specificity check of each analysis. The surrogates are added to the samples at a known concentration and percent recoveries are calculated following analysis. The surrogate percent recoveries for field samples were within the laboratory control limits.

METHOD AND TRIP BLANKS

Method Blanks

Method blanks are analyzed to ensure that laboratory procedures and reagents do not introduce measurable concentrations of the analytes of interest. A method blank was analyzed with each batch of samples, at a frequency of 1 per 20 samples. For each sample batch, method blanks for the applicable methods were analyzed at the required frequency. None of the analytes of interest were detected in the method blanks.

Trip Blanks

Trip blanks are analyzed to provide an indication as to whether volatile compounds have cross-contaminated other like samples within the transportation process to the laboratory. None of the analytes of interest were detected in the trip blank.

MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Since the actual analyte concentration in an environmental sample is not known, the accuracy of a particular analysis is usually inferred by performing a matrix spike (MS) analysis on one sample from the associated batch, known as the parent sample. One aliquot of the sample is analyzed in the normal manner and then a second aliquot of the sample is spiked with a known amount of analyte concentration and analyzed. From these analyses, a percent recovery is calculated. Matrix spike duplicate (MSD) analyses are generally performed for organic analyses as a precision check and analyzed in the same sequence as a matrix spike. Using the result values from the MS and MSD, the relative percent difference (RPD) is calculated. The percent recovery control limits for MS and MSD analyses are specified in the laboratory documents, as are the RPD control limits for MS/MSD sample sets.

There were no MS/MSD sample sets performed on the associated GeoEngineers' field samples.

LABORATORY CONTROL SAMPLES/LABORATORY CONTROL SAMPLE DUPLICATES

A laboratory control sample (LCS) is a blank sample that is spiked with a known amount of analyte and then analyzed. An LCS is similar to an MS, but without the possibility of matrix interference. Given that matrix interference is not an issue, the LCS/LCSD control limits for accuracy and precision are usually more rigorous than for MS/MSD analyses. Additionally, data qualification based on LCS/LCSD analyses would apply to all samples in the associated batch, instead of just the parent sample. The percent recovery control limits for LCS and LCSD analyses are specified in the laboratory documents, as are the RPD control limits for LCS/LCSD sample sets.

One LCS/LCSD analysis should be performed for every analytical batch or every 20 field samples, whichever is more frequent. The frequency requirements were met for each analysis and the percent recovery and RPD values were within the proper control limits.

FIELD DUPLICATES

In order to assess precision, field duplicate samples were collected and analyzed along with the reviewed sample batches. The duplicate samples were analyzed for the same parameters as the associated parent samples. Precision is determined by calculating the RPD between each pair of samples. If one or more of

the sample analytes has a concentration less than five times the reporting limit for that sample, then the absolute difference is used instead of the RPD. The RPD control limit for water samples is 30 percent.

SDG 590-30361-1: One field duplicate sample pair, GEI069-MW-17-041025 and GEI069-MW-DUP-041025, was submitted with this SDG. The precision criteria for the target analytes were met for this sample pair.

Overall Assessment

As was determined by this data validation, the laboratory followed the specified analytical methods. Accuracy was acceptable, as demonstrated by the surrogate and LCS/LCSD percent recovery values. Precision was acceptable, as demonstrated by the LCS/LCSD and field duplicate RPD values.

No analytical results were qualified. The data are acceptable for the intended use.

References

U.S. Environmental Protection Agency (USEPA). "Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use," EPA-540-R-08-005. January 2009.

U.S. Environmental Protection Agency (USEPA). Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review, EPA-540-R-20-005. November 2020.

Disclaimer: Any electronic form, facsimile or hard copy of the original document (email, text, table, and/or figure), if provided, and any attachments are only a copy of the original document. The original document is stored by GeoEngineers, Inc. and will serve as the official document of record.

ANALYTICAL REPORT

PREPARED FOR

Attn: Justin Orr
GeoEngineers Inc
523 East Second Ave
Spokane, Washington 99202

Generated 4/17/2025 4:23:00 PM

JOB DESCRIPTION

Gold Nugget 2nd Quarter GWM

JOB NUMBER

590-30361-1

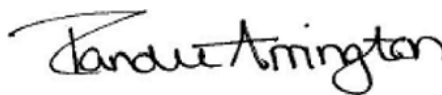
Eurofins Spokane

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
4/17/2025 4:23:00 PM

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



Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Sample Summary	5
Definitions	6
Client Sample Results	7
QC Sample Results	10
Chronicle	13
Certification Summary	14
Method Summary	15
Chain of Custody	16
Receipt Checklists	17

Case Narrative

Client: GeoEngineers Inc
Project: Gold Nugget 2nd Quarter GWM

Job ID: 590-30361-1

Job ID: 590-30361-1

Eurofins Spokane

Job Narrative 590-30361-1

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 4/11/2025 9:10 AM. 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 5.4°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

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

Hydrocarbons

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

Eurofins Spokane

Sample Summary

Client: GeoEngineers Inc
Project/Site: Gold Nugget 2nd Quarter GWM

Job ID: 590-30361-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-30361-1	GEI069-MW-17-041025	Water	04/10/25 12:35	04/11/25 09:10
590-30361-2	GEI069-MW-21-041025	Water	04/10/25 11:40	04/11/25 09:10
590-30361-3	GEI069-MW-DUP-041025	Water	04/10/25 12:00	04/11/25 09:10
590-30361-4	Trip Blank	Water	04/02/25 10:30	04/11/25 09:10

Definitions/Glossary

Client: GeoEngineers Inc
Project/Site: Gold Nugget 2nd Quarter GWM

Job ID: 590-30361-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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: GeoEngineers Inc
Project/Site: Gold Nugget 2nd Quarter GWM

Job ID: 590-30361-1

Client Sample ID: GEI069-MW-17-041025

Lab Sample ID: 590-30361-1

Date Collected: 04/10/25 12:35

Matrix: Water

Date Received: 04/11/25 09:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	4.0		0.40	0.093	ug/L			04/15/25 12:36	1
Ethylbenzene	ND		1.0	0.20	ug/L			04/15/25 12:36	1
m,p-Xylene	ND		2.0	0.28	ug/L			04/15/25 12:36	1
o-Xylene	ND		1.0	0.16	ug/L			04/15/25 12:36	1
Toluene	ND		1.0	0.31	ug/L			04/15/25 12:36	1
Xylenes, Total	ND		3.0	0.44	ug/L			04/15/25 12:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		80 - 120		04/15/25 12:36	1
4-Bromofluorobenzene (Surr)	93		76 - 120		04/15/25 12:36	1
Dibromofluoromethane (Surr)	109		80 - 123		04/15/25 12:36	1
Toluene-d8 (Surr)	103		80 - 120		04/15/25 12:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	83	J	150	54	ug/L			04/15/25 12:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		68.7 - 141		04/15/25 12:36	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		0.24	0.11	mg/L		04/14/25 13:01	04/15/25 14:05	1
Residual Range Organics (RRO) (C25-C36)	ND		0.40	0.12	mg/L		04/14/25 13:01	04/15/25 14:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	86		50 - 150	04/14/25 13:01	04/15/25 14:05	1
n-Triacontane-d62	93		50 - 150	04/14/25 13:01	04/15/25 14:05	1

Client Sample ID: GEI069-MW-21-041025

Lab Sample ID: 590-30361-2

Date Collected: 04/10/25 11:40

Matrix: Water

Date Received: 04/11/25 09:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.40	0.093	ug/L			04/15/25 12:58	1
Ethylbenzene	ND		1.0	0.20	ug/L			04/15/25 12:58	1
m,p-Xylene	ND		2.0	0.28	ug/L			04/15/25 12:58	1
o-Xylene	ND		1.0	0.16	ug/L			04/15/25 12:58	1
Toluene	ND		1.0	0.31	ug/L			04/15/25 12:58	1
Xylenes, Total	ND		3.0	0.44	ug/L			04/15/25 12:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		80 - 120		04/15/25 12:58	1
4-Bromofluorobenzene (Surr)	91		76 - 120		04/15/25 12:58	1
Dibromofluoromethane (Surr)	109		80 - 123		04/15/25 12:58	1
Toluene-d8 (Surr)	103		80 - 120		04/15/25 12:58	1

Eurofins Spokane

Client Sample Results

Client: GeoEngineers Inc
Project/Site: Gold Nugget 2nd Quarter GWM

Job ID: 590-30361-1

Client Sample ID: GEI069-MW-21-041025

Lab Sample ID: 590-30361-2

Date Collected: 04/10/25 11:40

Matrix: Water

Date Received: 04/11/25 09:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	100	J	150	54	ug/L			04/15/25 12:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		68.7 - 141					04/15/25 12:58	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		0.24	0.11	mg/L		04/14/25 13:01	04/15/25 14:26	1
Residual Range Organics (RRO) (C25-C36)	ND		0.40	0.12	mg/L		04/14/25 13:01	04/15/25 14:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	83		50 - 150				04/14/25 13:01	04/15/25 14:26	1
n-Triacontane-d62	90		50 - 150				04/14/25 13:01	04/15/25 14:26	1

Client Sample ID: GEI069-MW-DUP-041025

Lab Sample ID: 590-30361-3

Date Collected: 04/10/25 12:00

Matrix: Water

Date Received: 04/11/25 09:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	3.9		0.40	0.093	ug/L			04/15/25 13:19	1
Ethylbenzene	ND		1.0	0.20	ug/L			04/15/25 13:19	1
m,p-Xylene	ND		2.0	0.28	ug/L			04/15/25 13:19	1
o-Xylene	ND		1.0	0.16	ug/L			04/15/25 13:19	1
Toluene	ND		1.0	0.31	ug/L			04/15/25 13:19	1
Xylenes, Total	ND		3.0	0.44	ug/L			04/15/25 13:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		80 - 120					04/15/25 13:19	1
4-Bromofluorobenzene (Surr)	94		76 - 120					04/15/25 13:19	1
Dibromofluoromethane (Surr)	112		80 - 123					04/15/25 13:19	1
Toluene-d8 (Surr)	104		80 - 120					04/15/25 13:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	84	J	150	54	ug/L			04/15/25 13:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		68.7 - 141					04/15/25 13:19	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		0.24	0.11	mg/L		04/14/25 13:01	04/15/25 14:47	1
Residual Range Organics (RRO) (C25-C36)	ND		0.40	0.12	mg/L		04/14/25 13:01	04/15/25 14:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	90		50 - 150				04/14/25 13:01	04/15/25 14:47	1
n-Triacontane-d62	96		50 - 150				04/14/25 13:01	04/15/25 14:47	1

Eurofins Spokane

Client Sample Results

Client: GeoEngineers Inc
Project/Site: Gold Nugget 2nd Quarter GWM

Job ID: 590-30361-1

Client Sample ID: Trip Blank

Lab Sample ID: 590-30361-4

Date Collected: 04/02/25 10:30

Matrix: Water

Date Received: 04/11/25 09:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.40	0.093	ug/L			04/15/25 13:41	1
Ethylbenzene	ND		1.0	0.20	ug/L			04/15/25 13:41	1
m,p-Xylene	ND		2.0	0.28	ug/L			04/15/25 13:41	1
o-Xylene	ND		1.0	0.16	ug/L			04/15/25 13:41	1
Toluene	ND		1.0	0.31	ug/L			04/15/25 13:41	1
Xylenes, Total	ND		3.0	0.44	ug/L			04/15/25 13:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		80 - 120		04/15/25 13:41	1
4-Bromofluorobenzene (Surr)	95		76 - 120		04/15/25 13:41	1
Dibromofluoromethane (Surr)	111		80 - 123		04/15/25 13:41	1
Toluene-d8 (Surr)	103		80 - 120		04/15/25 13:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		150	54	ug/L			04/15/25 13:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		68.7 - 141		04/15/25 13:41	1

QC Sample Results

Client: GeoEngineers Inc
Project/Site: Gold Nugget 2nd Quarter GWM

Job ID: 590-30361-1

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

Lab Sample ID: MB 590-53431/8

Matrix: Water

Analysis Batch: 53431

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	0.093	ug/L			04/15/25 11:54	1
Ethylbenzene	ND		1.0	0.20	ug/L			04/15/25 11:54	1
m,p-Xylene	ND		2.0	0.28	ug/L			04/15/25 11:54	1
o-Xylene	ND		1.0	0.16	ug/L			04/15/25 11:54	1
Toluene	ND		1.0	0.31	ug/L			04/15/25 11:54	1
Xylenes, Total	ND		3.0	0.44	ug/L			04/15/25 11:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		80 - 120		04/15/25 11:54	1
4-Bromofluorobenzene (Surr)	91		76 - 120		04/15/25 11:54	1
Dibromofluoromethane (Surr)	108		80 - 123		04/15/25 11:54	1
Toluene-d8 (Surr)	104		80 - 120		04/15/25 11:54	1

Lab Sample ID: LCS 590-53431/1003

Matrix: Water

Analysis Batch: 53431

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	9.88		ug/L		99	80 - 120
Ethylbenzene	10.0	9.90		ug/L		99	80 - 122
m,p-Xylene	10.0	9.23		ug/L		92	80 - 125
o-Xylene	10.0	8.69		ug/L		87	80 - 130
Toluene	10.0	10.1		ug/L		101	80 - 129

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	93		80 - 120
4-Bromofluorobenzene (Surr)	87		76 - 120
Dibromofluoromethane (Surr)	106		80 - 123
Toluene-d8 (Surr)	103		80 - 120

Lab Sample ID: LCSD 590-53431/4

Matrix: Water

Analysis Batch: 53431

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	9.87		ug/L		99	80 - 120	0	15
Ethylbenzene	10.0	9.71		ug/L		97	80 - 122	2	35
m,p-Xylene	10.0	9.26		ug/L		93	80 - 125	0	35
o-Xylene	10.0	8.66		ug/L		87	80 - 130	0	35
Toluene	10.0	9.86		ug/L		99	80 - 129	3	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	93		80 - 120
4-Bromofluorobenzene (Surr)	89		76 - 120
Dibromofluoromethane (Surr)	103		80 - 123
Toluene-d8 (Surr)	103		80 - 120

Eurofins Spokane

QC Sample Results

Client: GeoEngineers Inc
Project/Site: Gold Nugget 2nd Quarter GWM

Job ID: 590-30361-1

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

Lab Sample ID: MB 590-53432/8

Matrix: Water

Analysis Batch: 53432

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	54	ug/L			04/15/25 11:54	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		68.7 - 141					04/15/25 11:54	1

Lab Sample ID: LCS 590-53432/1007

Matrix: Water

Analysis Batch: 53432

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline	1000	912		ug/L		91	80 - 120
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	91		68.7 - 141				

Lab Sample ID: LCSD 590-53432/1020

Matrix: Water

Analysis Batch: 53432

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Gasoline	1000	956		ug/L		96	80 - 120	5	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	93		68.7 - 141						

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

Lab Sample ID: MB 590-53422/1-A

Matrix: Water

Analysis Batch: 53430

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 53422

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		0.24	0.11	mg/L		04/14/25 13:01	04/15/25 09:39	1
Residual Range Organics (RRO) (C25-C36)	ND		0.40	0.12	mg/L		04/14/25 13:01	04/15/25 09:39	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	83		50 - 150				04/14/25 13:01	04/15/25 09:39	1
n-Triacontane-d62	74		50 - 150				04/14/25 13:01	04/15/25 09:39	1

Lab Sample ID: LCS 590-53422/2-A

Matrix: Water

Analysis Batch: 53430

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 53422

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics (DRO) (C10-C25)	1.60	1.42		mg/L		89	50 - 150

Eurofins Spokane

QC Sample Results

Client: GeoEngineers Inc
Project/Site: Gold Nugget 2nd Quarter GWM

Job ID: 590-30361-1

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

Lab Sample ID: LCS 590-53422/2-A

Matrix: Water

Analysis Batch: 53430

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 53422

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Residual Range Organics (RRO) (C25-C36)	1.60	1.58		mg/L		99	50 - 150

	LCS %Recovery	LCS Qualifier	Limits
Surrogate			
<i>o</i> -Terphenyl	95		50 - 150
<i>n</i> -Triacontane-d62	98		50 - 150

Lab Sample ID: LCSD 590-53422/3-A

Matrix: Water

Analysis Batch: 53430

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 53422

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Diesel Range Organics (DRO) (C10-C25)	1.60	1.44		mg/L		90	50 - 150	2	25
Residual Range Organics (RRO) (C25-C36)	1.60	1.67		mg/L		104	50 - 150	5	25

	LCSD %Recovery	LCSD Qualifier	Limits
Surrogate			
<i>o</i> -Terphenyl	97		50 - 150
<i>n</i> -Triacontane-d62	59		50 - 150

Lab Chronicle

Client: GeoEngineers Inc
Project/Site: Gold Nugget 2nd Quarter GWM

Job ID: 590-30361-1

Client Sample ID: GEI069-MW-17-041025

Lab Sample ID: 590-30361-1

Date Collected: 04/10/25 12:35

Matrix: Water

Date Received: 04/11/25 09:10

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	53431	04/15/25 12:36	JSP	EET SPK
Total/NA	Analysis	NWTPH-Gx		1	43 mL	43 mL	53432	04/15/25 12:36	JSP	EET SPK
Total/NA	Prep	3510C			247.4 mL	2 mL	53422	04/14/25 13:01	M1M	EET SPK
Total/NA	Analysis	NWTPH-Dx		1	1 mL	1 mL	53430	04/15/25 14:05	NMI	EET SPK

Client Sample ID: GEI069-MW-21-041025

Lab Sample ID: 590-30361-2

Date Collected: 04/10/25 11:40

Matrix: Water

Date Received: 04/11/25 09:10

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	53431	04/15/25 12:58	JSP	EET SPK
Total/NA	Analysis	NWTPH-Gx		1	43 mL	43 mL	53432	04/15/25 12:58	JSP	EET SPK
Total/NA	Prep	3510C			248.2 mL	2 mL	53422	04/14/25 13:01	M1M	EET SPK
Total/NA	Analysis	NWTPH-Dx		1	1 mL	1 mL	53430	04/15/25 14:26	NMI	EET SPK

Client Sample ID: GEI069-MW-DUP-041025

Lab Sample ID: 590-30361-3

Date Collected: 04/10/25 12:00

Matrix: Water

Date Received: 04/11/25 09:10

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	53431	04/15/25 13:19	JSP	EET SPK
Total/NA	Analysis	NWTPH-Gx		1	43 mL	43 mL	53432	04/15/25 13:19	JSP	EET SPK
Total/NA	Prep	3510C			248.6 mL	2 mL	53422	04/14/25 13:01	M1M	EET SPK
Total/NA	Analysis	NWTPH-Dx		1	1 mL	1 mL	53430	04/15/25 14:47	NMI	EET SPK

Client Sample ID: Trip Blank

Lab Sample ID: 590-30361-4

Date Collected: 04/02/25 10:30

Matrix: Water

Date Received: 04/11/25 09:10

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	53431	04/15/25 13:41	JSP	EET SPK
Total/NA	Analysis	NWTPH-Gx		1	43 mL	43 mL	53432	04/15/25 13:41	JSP	EET SPK

Laboratory References:

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

Eurofins Spokane

Accreditation/Certification Summary

Client: GeoEngineers Inc
Project/Site: Gold Nugget 2nd Quarter GWM

Job ID: 590-30361-1

Laboratory: Eurofins Spokane

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

Authority	Program	Identification Number	Expiration Date
Washington	State	C569	01-06-26

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

Method Summary

Client: GeoEngineers Inc
Project/Site: Gold Nugget 2nd Quarter GWM

Job ID: 590-30361-1

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

Chain of Custody Record

Regulatory Program ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Eurofins Environment Testing America

[illegible]

Login Sample Receipt Checklist

Client: GeoEngineers Inc

Job Number: 590-30361-1

Login Number: 30361

List Source: Eurofins Spokane

List Number: 1

Creator: Desimone, Carson

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Appendix C

IDW Disposal Documentation



14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

May 21, 2025

Travis Forslund
DH Environmental, Inc.
1011 SW Klickitat Way, Suite 107
Seattle, WA 98103

Re: Analytical Data for Project J-1016
Laboratory Reference No. 2505-148

Dear Travis:

Enclosed are the analytical results and associated quality control data for samples submitted on May 12, 2025.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal line extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 21, 2025
Samples Submitted: May 12, 2025
Laboratory Reference: 2505-148
Project: J-1016

Case Narrative

Samples were collected on May 12, 2025 and received by the laboratory on May 12, 2025. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below. However the soil results for the QA/QC samples are reported on a wet-weight basis.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.



Date of Report: May 21, 2025
 Samples Submitted: May 12, 2025
 Laboratory Reference: 2505-148
 Project: J-1016

VOLATILE ORGANICS EPA 8260D

page 1 of 2

Matrix: Carbon

Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: WASDOE-Carbon						
Laboratory ID: 05-148-01						
Dichlorodifluoromethane	ND	0.084	EPA 8260D	5-13-25	5-13-25	
Chloromethane	ND	0.30	EPA 8260D	5-13-25	5-13-25	
Vinyl Chloride	ND	0.060	EPA 8260D	5-13-25	5-13-25	
Bromomethane	ND	0.30	EPA 8260D	5-13-25	5-13-25	
Chloroethane	ND	0.30	EPA 8260D	5-13-25	5-13-25	
Trichlorofluoromethane	ND	0.060	EPA 8260D	5-13-25	5-13-25	
1,1-Dichloroethene	ND	0.060	EPA 8260D	5-13-25	5-13-25	
Acetone	1.5	0.60	EPA 8260D	5-13-25	5-13-25	
Iodomethane	ND	0.49	EPA 8260D	5-13-25	5-13-25	
Carbon Disulfide	ND	0.078	EPA 8260D	5-13-25	5-13-25	
Methylene Chloride	ND	0.30	EPA 8260D	5-13-25	5-13-25	
(trans) 1,2-Dichloroethene	ND	0.060	EPA 8260D	5-13-25	5-13-25	
Methyl t-Butyl Ether	ND	0.060	EPA 8260D	5-13-25	5-13-25	
1,1-Dichloroethane	ND	0.060	EPA 8260D	5-13-25	5-13-25	
Vinyl Acetate	ND	0.30	EPA 8260D	5-13-25	5-13-25	
2,2-Dichloropropane	ND	0.060	EPA 8260D	5-13-25	5-13-25	
(cis) 1,2-Dichloroethene	ND	0.060	EPA 8260D	5-13-25	5-13-25	
2-Butanone	0.46	0.30	EPA 8260D	5-13-25	5-13-25	
Bromochloromethane	ND	0.060	EPA 8260D	5-13-25	5-13-25	
Chloroform	ND	0.060	EPA 8260D	5-13-25	5-13-25	
1,1,1-Trichloroethane	ND	0.060	EPA 8260D	5-13-25	5-13-25	
Carbon Tetrachloride	ND	0.060	EPA 8260D	5-13-25	5-13-25	
1,1-Dichloropropene	ND	0.060	EPA 8260D	5-13-25	5-13-25	
Benzene	ND	0.060	EPA 8260D	5-13-25	5-13-25	
1,2-Dichloroethane	ND	0.060	EPA 8260D	5-13-25	5-13-25	
Trichloroethene	ND	0.060	EPA 8260D	5-13-25	5-13-25	
1,2-Dichloropropane	ND	0.060	EPA 8260D	5-13-25	5-13-25	
Dibromomethane	ND	0.060	EPA 8260D	5-13-25	5-13-25	
Bromodichloromethane	ND	0.060	EPA 8260D	5-13-25	5-13-25	
2-Chloroethyl Vinyl Ether	ND	0.60	EPA 8260D	5-13-25	5-13-25	
(cis) 1,3-Dichloropropene	ND	0.060	EPA 8260D	5-13-25	5-13-25	
Methyl Isobutyl Ketone	ND	0.30	EPA 8260D	5-13-25	5-13-25	
Toluene	ND	0.30	EPA 8260D	5-13-25	5-13-25	



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 21, 2025
 Samples Submitted: May 12, 2025
 Laboratory Reference: 2505-148
 Project: J-1016

VOLATILE ORGANICS EPA 8260D

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		WASDOE-Carbon				
Laboratory ID:		05-148-01				
(trans) 1,3-Dichloropropene	ND	0.060	EPA 8260D	5-13-25	5-13-25	
1,1,2-Trichloroethane	ND	0.060	EPA 8260D	5-13-25	5-13-25	
Tetrachloroethene	ND	0.060	EPA 8260D	5-13-25	5-13-25	
1,3-Dichloropropane	ND	0.060	EPA 8260D	5-13-25	5-13-25	
2-Hexanone	ND	0.30	EPA 8260D	5-13-25	5-13-25	
Dibromochloromethane	ND	0.060	EPA 8260D	5-13-25	5-13-25	
1,2-Dibromoethane	ND	0.060	EPA 8260D	5-13-25	5-13-25	
Chlorobenzene	ND	0.060	EPA 8260D	5-13-25	5-13-25	
1,1,1,2-Tetrachloroethane	ND	0.060	EPA 8260D	5-13-25	5-13-25	
Ethylbenzene	0.15	0.060	EPA 8260D	5-13-25	5-13-25	
m,p-Xylene	1.3	0.12	EPA 8260D	5-13-25	5-13-25	
o-Xylene	2.3	0.060	EPA 8260D	5-13-25	5-13-25	
Styrene	ND	0.060	EPA 8260D	5-13-25	5-13-25	
Bromoform	ND	0.30	EPA 8260D	5-13-25	5-13-25	
Isopropylbenzene	0.090	0.060	EPA 8260D	5-13-25	5-13-25	
Bromobenzene	ND	0.060	EPA 8260D	5-13-25	5-13-25	
1,1,2,2-Tetrachloroethane	ND	0.060	EPA 8260D	5-13-25	5-13-25	
1,2,3-Trichloropropane	ND	0.060	EPA 8260D	5-13-25	5-13-25	
n-Propylbenzene	0.10	0.060	EPA 8260D	5-13-25	5-13-25	
2-Chlorotoluene	ND	0.060	EPA 8260D	5-13-25	5-13-25	
4-Chlorotoluene	ND	0.060	EPA 8260D	5-13-25	5-13-25	
1,3,5-Trimethylbenzene	1.1	0.060	EPA 8260D	5-13-25	5-13-25	
tert-Butylbenzene	ND	0.060	EPA 8260D	5-13-25	5-13-25	
1,2,4-Trimethylbenzene	0.24	0.060	EPA 8260D	5-13-25	5-13-25	
sec-Butylbenzene	ND	0.060	EPA 8260D	5-13-25	5-13-25	
1,3-Dichlorobenzene	ND	0.060	EPA 8260D	5-13-25	5-13-25	
p-Isopropyltoluene	ND	0.060	EPA 8260D	5-13-25	5-13-25	
1,4-Dichlorobenzene	ND	0.060	EPA 8260D	5-13-25	5-13-25	
1,2-Dichlorobenzene	ND	0.060	EPA 8260D	5-13-25	5-13-25	
n-Butylbenzene	ND	0.060	EPA 8260D	5-13-25	5-13-25	
1,2-Dibromo-3-chloropropane	ND	0.30	EPA 8260D	5-13-25	5-13-25	
1,2,4-Trichlorobenzene	ND	0.060	EPA 8260D	5-13-25	5-13-25	
Hexachlorobutadiene	ND	0.30	EPA 8260D	5-13-25	5-13-25	
Naphthalene	ND	0.30	EPA 8260D	5-13-25	5-13-25	
1,2,3-Trichlorobenzene	ND	0.060	EPA 8260D	5-13-25	5-13-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>102</i>	<i>75-129</i>				
<i>Toluene-d8</i>	<i>109</i>	<i>80-118</i>				
<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>79-123</i>				



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 21, 2025
 Samples Submitted: May 12, 2025
 Laboratory Reference: 2505-148
 Project: J-1016

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL
 page 1 of 2

Matrix: Solid
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0513S1					
Dichlorodifluoromethane	ND	0.0014	EPA 8260D	5-13-25	5-13-25	
Chloromethane	ND	0.0050	EPA 8260D	5-13-25	5-13-25	
Vinyl Chloride	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
Bromomethane	ND	0.0050	EPA 8260D	5-13-25	5-13-25	
Chloroethane	ND	0.0050	EPA 8260D	5-13-25	5-13-25	
Trichlorofluoromethane	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
1,1-Dichloroethene	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
Acetone	ND	0.010	EPA 8260D	5-13-25	5-13-25	
Iodomethane	ND	0.0081	EPA 8260D	5-13-25	5-13-25	
Carbon Disulfide	ND	0.0013	EPA 8260D	5-13-25	5-13-25	
Methylene Chloride	ND	0.0050	EPA 8260D	5-13-25	5-13-25	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
1,1-Dichloroethane	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
Vinyl Acetate	ND	0.0050	EPA 8260D	5-13-25	5-13-25	
2,2-Dichloropropane	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
2-Butanone	ND	0.0050	EPA 8260D	5-13-25	5-13-25	
Bromochloromethane	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
Chloroform	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
Carbon Tetrachloride	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
1,1-Dichloropropene	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
Benzene	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
1,2-Dichloroethane	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
Trichloroethene	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
1,2-Dichloropropane	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
Dibromomethane	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
Bromodichloromethane	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
2-Chloroethyl Vinyl Ether	ND	0.010	EPA 8260D	5-13-25	5-13-25	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
Methyl Isobutyl Ketone	ND	0.0050	EPA 8260D	5-13-25	5-13-25	
Toluene	ND	0.0050	EPA 8260D	5-13-25	5-13-25	



Date of Report: May 21, 2025
 Samples Submitted: May 12, 2025
 Laboratory Reference: 2505-148
 Project: J-1016

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0513S1					
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
1,1,2-Trichloroethane	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
Tetrachloroethene	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
1,3-Dichloropropane	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
2-Hexanone	ND	0.0050	EPA 8260D	5-13-25	5-13-25	
Dibromochloromethane	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
1,2-Dibromoethane	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
Chlorobenzene	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
Ethylbenzene	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
m,p-Xylene	ND	0.0020	EPA 8260D	5-13-25	5-13-25	
o-Xylene	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
Styrene	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
Bromoform	ND	0.0050	EPA 8260D	5-13-25	5-13-25	
Isopropylbenzene	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
Bromobenzene	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
n-Propylbenzene	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
2-Chlorotoluene	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
4-Chlorotoluene	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
1,3,5-Trimethylbenzene	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
tert-Butylbenzene	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
1,2,4-Trimethylbenzene	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
sec-Butylbenzene	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
p-Isopropyltoluene	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
n-Butylbenzene	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260D	5-13-25	5-13-25	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
Hexachlorobutadiene	ND	0.0050	EPA 8260D	5-13-25	5-13-25	
Naphthalene	ND	0.0050	EPA 8260D	5-13-25	5-13-25	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260D	5-13-25	5-13-25	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>96</i>	<i>75-129</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>80-118</i>				
<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>79-123</i>				



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 21, 2025
 Samples Submitted: May 12, 2025
 Laboratory Reference: 2505-148
 Project: J-1016

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL
 page 1 of 2

Matrix: Solid
 Units: mg/kg

Analyte	Result		Spike Level		Percent		Recovery		RPD	
					Recovery		Limits	RPD	Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0513S1									
	SB	SBD	SB	SBD	SB	SBD				
Dichlorodifluoromethane	0.0360	0.0336	0.0500	0.0500	72	67	14-171	7	28	
Chloromethane	0.0420	0.0398	0.0500	0.0500	84	80	40-142	5	27	
Vinyl Chloride	0.0449	0.0441	0.0500	0.0500	90	88	65-136	2	20	
Bromomethane	0.0427	0.0412	0.0500	0.0500	85	82	35-161	4	31	
Chloroethane	0.0468	0.0443	0.0500	0.0500	94	89	62-141	5	28	
Trichlorofluoromethane	0.0501	0.0489	0.0500	0.0500	100	98	77-132	2	18	
1,1-Dichloroethene	0.0482	0.0470	0.0500	0.0500	96	94	79-133	3	16	
Acetone	0.0480	0.0509	0.0500	0.0500	96	102	59-157	6	37	
Iodomethane	0.0310	0.0373	0.0500	0.0500	62	75	25-153	18	34	
Carbon Disulfide	0.0384	0.0399	0.0500	0.0500	77	80	30-140	4	34	
Methylene Chloride	0.0483	0.0484	0.0500	0.0500	97	97	63-135	0	23	
(trans) 1,2-Dichloroethene	0.0496	0.0488	0.0500	0.0500	99	98	78-133	2	15	
Methyl t-Butyl Ether	0.0513	0.0521	0.0500	0.0500	103	104	76-131	2	15	
1,1-Dichloroethane	0.0503	0.0486	0.0500	0.0500	101	97	74-129	3	15	
Vinyl Acetate	0.0579	0.0484	0.0500	0.0500	116	97	63-155	18	21	
2,2-Dichloropropane	0.0524	0.0520	0.0500	0.0500	105	104	78-142	1	16	
(cis) 1,2-Dichloroethene	0.0507	0.0504	0.0500	0.0500	101	101	79-133	1	15	
2-Butanone	0.0502	0.0465	0.0500	0.0500	100	93	59-147	8	26	
Bromochloromethane	0.0543	0.0525	0.0500	0.0500	109	105	78-130	3	15	
Chloroform	0.0497	0.0497	0.0500	0.0500	99	99	75-129	0	15	
1,1,1-Trichloroethane	0.0497	0.0484	0.0500	0.0500	99	97	73-130	3	15	
Carbon Tetrachloride	0.0484	0.0477	0.0500	0.0500	97	95	69-132	1	15	
1,1-Dichloropropene	0.0510	0.0493	0.0500	0.0500	102	99	73-130	3	15	
Benzene	0.0484	0.0481	0.0500	0.0500	97	96	79-127	1	15	
1,2-Dichloroethane	0.0500	0.0496	0.0500	0.0500	100	99	80-130	1	15	
Trichloroethene	0.0516	0.0511	0.0500	0.0500	103	102	80-127	1	15	
1,2-Dichloropropane	0.0516	0.0511	0.0500	0.0500	103	102	78-129	1	16	
Dibromomethane	0.0531	0.0512	0.0500	0.0500	106	102	72-134	4	20	
Bromodichloromethane	0.0527	0.0530	0.0500	0.0500	105	106	80-130	1	15	
(cis) 1,3-Dichloropropene	0.0554	0.0544	0.0500	0.0500	111	109	80-134	2	15	
Methyl Isobutyl Ketone	0.0548	0.0541	0.0500	0.0500	110	108	68-140	1	25	
Toluene	0.0486	0.0469	0.0500	0.0500	97	94	79-125	4	15	
(trans) 1,3-Dichloropropene	0.0527	0.0519	0.0500	0.0500	105	104	80-135	2	15	



Date of Report: May 21, 2025
 Samples Submitted: May 12, 2025
 Laboratory Reference: 2505-148
 Project: J-1016

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL
 page 2 of 2

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits		RPD	RPD Limit	Flags
SPIKE BLANKS											
Laboratory ID:	SB0513S1										
	SB	SBD	SB	SBD	SB	SBD					
1,1,2-Trichloroethane	0.0490	0.0493	0.0500	0.0500	98	99	79-128	1	15		
Tetrachloroethene	0.0487	0.0489	0.0500	0.0500	97	98	80-131	0	16		
1,3-Dichloropropane	0.0494	0.0491	0.0500	0.0500	99	98	80-127	1	15		
2-Hexanone	0.0515	0.0513	0.0500	0.0500	103	103	64-143	0	26		
Dibromochloromethane	0.0506	0.0504	0.0500	0.0500	101	101	80-132	0	15		
1,2-Dibromoethane	0.0503	0.0510	0.0500	0.0500	101	102	80-132	1	15		
Chlorobenzene	0.0479	0.0469	0.0500	0.0500	96	94	80-122	2	15		
1,1,1,2-Tetrachloroethane	0.0480	0.0480	0.0500	0.0500	96	96	80-130	0	15		
Ethylbenzene	0.0483	0.0473	0.0500	0.0500	97	95	80-126	2	15		
m,p-Xylene	0.0964	0.0949	0.100	0.100	96	95	80-126	2	15		
o-Xylene	0.0482	0.0473	0.0500	0.0500	96	95	80-126	2	15		
Styrene	0.0493	0.0485	0.0500	0.0500	99	97	80-133	2	15		
Bromoform	0.0497	0.0508	0.0500	0.0500	99	102	74-135	2	17		
Isopropylbenzene	0.0500	0.0492	0.0500	0.0500	100	98	80-130	2	17		
Bromobenzene	0.0482	0.0455	0.0500	0.0500	96	91	78-128	6	15		
1,1,2,2-Tetrachloroethane	0.0490	0.0469	0.0500	0.0500	98	94	74-134	4	17		
1,2,3-Trichloropropane	0.0512	0.0491	0.0500	0.0500	102	98	72-132	4	17		
n-Propylbenzene	0.0487	0.0460	0.0500	0.0500	97	92	79-132	6	16		
2-Chlorotoluene	0.0499	0.0470	0.0500	0.0500	100	94	80-129	6	15		
4-Chlorotoluene	0.0492	0.0455	0.0500	0.0500	98	91	80-129	8	15		
1,3,5-Trimethylbenzene	0.0503	0.0469	0.0500	0.0500	101	94	79-132	7	15		
tert-Butylbenzene	0.0501	0.0472	0.0500	0.0500	100	94	79-131	6	15		
1,2,4-Trimethylbenzene	0.0496	0.0464	0.0500	0.0500	99	93	78-130	7	15		
sec-Butylbenzene	0.0500	0.0467	0.0500	0.0500	100	93	80-132	7	15		
1,3-Dichlorobenzene	0.0486	0.0457	0.0500	0.0500	97	91	80-130	6	15		
p-Isopropyltoluene	0.0496	0.0469	0.0500	0.0500	99	94	80-134	6	16		
1,4-Dichlorobenzene	0.0486	0.0454	0.0500	0.0500	97	91	79-129	7	15		
1,2-Dichlorobenzene	0.0476	0.0456	0.0500	0.0500	95	91	79-128	4	15		
n-Butylbenzene	0.0497	0.0464	0.0500	0.0500	99	93	77-143	7	18		
1,2-Dibromo-3-chloropropane	0.0502	0.0493	0.0500	0.0500	100	99	65-141	2	24		
1,2,4-Trichlorobenzene	0.0504	0.0471	0.0500	0.0500	101	94	80-144	7	17		
Hexachlorobutadiene	0.0475	0.0445	0.0500	0.0500	95	89	77-138	7	17		
Naphthalene	0.0483	0.0453	0.0500	0.0500	97	91	71-143	6	19		
1,2,3-Trichlorobenzene	0.0511	0.0469	0.0500	0.0500	102	94	80-139	9	16		
Surrogate:											
Dibromofluoromethane					98	99	75-129				
Toluene-d8					103	102	80-118				
4-Bromofluorobenzene					103	103	79-123				



Date of Report: May 21, 2025
 Samples Submitted: May 12, 2025
 Laboratory Reference: 2505-148
 Project: J-1016

TOTAL METALS
EPA 6010D/7471B

Matrix: Solid
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: WASDOE-Carbon						
Laboratory ID: 05-148-01						
Arsenic	ND	10	EPA 6010D	5-13-25	5-13-25	
Barium	43	2.5	EPA 6010D	5-13-25	5-13-25	
Cadmium	ND	0.50	EPA 6010D	5-13-25	5-13-25	
Chromium	3.7	0.50	EPA 6010D	5-13-25	5-13-25	
Copper	67	1.0	EPA 6010D	5-13-25	5-13-25	
Lead	ND	5.0	EPA 6010D	5-13-25	5-13-25	
Mercury	0.34	0.25	EPA 7471B	5-13-25	5-14-25	
Nickel	3.9	2.5	EPA 6010D	5-13-25	5-13-25	
Selenium	ND	10	EPA 6010D	5-13-25	5-13-25	
Silver	ND	1.0	EPA 6010D	5-13-25	5-13-25	
Zinc	7.9	2.5	EPA 6010D	5-13-25	5-13-25	



Date of Report: May 21, 2025
 Samples Submitted: May 12, 2025
 Laboratory Reference: 2505-148
 Project: J-1016

**TOTAL METALS
 EPA 6010D/7471B
 QUALITY CONTROL**

Matrix: Solid
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0513SHA1					
Arsenic	ND	10	EPA 6010D	5-13-25	5-13-25	
Barium	ND	2.5	EPA 6010D	5-13-25	5-13-25	
Cadmium	ND	0.50	EPA 6010D	5-13-25	5-13-25	
Chromium	ND	0.50	EPA 6010D	5-13-25	5-13-25	
Copper	ND	1.0	EPA 6010D	5-13-25	5-13-25	
Lead	ND	5.0	EPA 6010D	5-13-25	5-13-25	
Nickel	ND	2.5	EPA 6010D	5-13-25	5-13-25	
Selenium	ND	10	EPA 6010D	5-13-25	5-13-25	
Silver	ND	1.0	EPA 6010D	5-13-25	5-13-25	
Zinc	ND	2.5	EPA 6010D	5-13-25	5-13-25	
<hr/>						
Laboratory ID:	MB0513S1					
Mercury	ND	0.25	EPA 7471B	5-13-25	5-14-25	



Date of Report: May 21, 2025
 Samples Submitted: May 12, 2025
 Laboratory Reference: 2505-148
 Project: J-1016

**TOTAL METALS
 EPA 6010D/7471B
 QUALITY CONTROL**

Matrix: Solid
 Units: mg/Kg (ppm)

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	05-104-01							
	ORIG	DUP						
Arsenic	ND	ND	NA	NA	NA	NA	NA	20
Barium	8.06	7.85	NA	NA	NA	NA	3	20
Cadmium	ND	ND	NA	NA	NA	NA	NA	20
Chromium	11.2	11.0	NA	NA	NA	NA	2	20
Copper	5.87	5.67	NA	NA	NA	NA	4	20
Lead	ND	ND	NA	NA	NA	NA	NA	20
Nickel	11.2	11.1	NA	NA	NA	NA	1	20
Selenium	ND	ND	NA	NA	NA	NA	NA	20
Silver	ND	ND	NA	NA	NA	NA	NA	20
Zinc	19.1	17.6	NA	NA	NA	NA	8	20

Laboratory ID:	05-085-02							
Mercury	ND	ND	NA	NA	NA	NA	NA	20

MATRIX SPIKES

Laboratory ID:	05-104-01									
	MS	MSD	MS	MSD		MS	MSD			
Arsenic	91.1	91.5	100	100	ND	91	92	75-125	0	20
Barium	96.7	100	100	100	8.06	89	92	75-125	4	20
Cadmium	40.7	41.1	50.0	50.0	ND	82	82	75-125	1	20
Chromium	94.7	95.6	100	100	11.2	84	84	75-125	1	20
Copper	50.8	51.3	50.0	50.0	5.87	90	91	75-125	1	20
Lead	203	204	250	250	ND	81	82	75-125	1	20
Nickel	93.9	96.1	100	100	11.2	83	85	75-125	2	20
Selenium	88.7	90.2	100	100	ND	89	90	75-125	2	20
Silver	22.4	22.5	25.0	25.0	ND	90	90	75-125	0	20
Zinc	105	105	100	100	19.1	86	86	75-125	0	20

Laboratory ID:	05-085-02									
Mercury	0.513	0.507	0.500	0.500	0.00780	101	100	80-120	1	20





Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in diesel range are impacting lube oil range results.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical _____.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.
- X2 - Sample extract treated with a silica gel cleanup procedure.
- Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
- Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.
- Z -
- ND - Not Detected at PQL
- PQL - Practical Quantitation Limit
- RPD - Relative Percent Difference



NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number <i>Non-Hazardous</i>	2. Page 1 of <i>1</i>	3. Emergency Response Phone <i>(800) 317-7455</i>	4. Waste Tracking Number <i>DOE-ZILLAH-6525</i>
Generator's Name and Mailing Address <i>Washington State Dept of Ecology 1500 W Alder St Union Gap, WA 98033 509 571 4708 Attn: Chelsea Wootkey</i>		Generator's Site Address (if different than mailing address) <i>1041 Buena Rd Zillah, WA 98953</i>		
Generator's Phone: Transporter 1 Company Name <i>CHI Environmental, Inc.</i>		U.S. EPA ID Number <i>WAH000047217</i>		
Transporter 2 Company Name <i>Chemical Waste Management</i>		U.S. EPA ID Number <i>CR0089452353</i>		
Designated Facility Name and Site Address <i>Chemical Waste Management 17629 Cedar Springs Lane Arlington, OR 97812 503 554 3543</i>		U.S. EPA ID Number <i>CR0089452353</i>		
Facility's Phone:				
9. Waste Shipping Name and Description	10. Containers		11. Total Quantity	12. Unit Wt./Vol.
	No.	Type		
1. <i>Non-RCRA, Non-DOT (DDW Water)</i>	<i>01</i>	<i>DM</i>	<i>100</i>	<i>P</i>
2. <i>Non-RCRA, Non-DOT (GAC)</i>	<i>02</i>	<i>DM</i>	<i>860</i>	<i>P</i>
3.				
4.				
Special Handling Instructions and Additional Information <i>- 55 gal</i> <i>1) Profiled CR263899</i> <i>2) Profiled CR364029</i> <i>- 85 gal</i>				
GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.				
Generator's/Officer's Printed/Typed Name <i>On behalf of WADSWORTH</i> <i>Jake Heatherly</i>		Signature <i>[Signature]</i>		Month Day Year <i>06 05 25</i>
International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. <input type="checkbox"/>		Port of entry/exit: Date leaving U.S.:		
Transporter Signature (for exports only):				
Transporter Acknowledgment of Receipt of Materials				
Transporter 1 Printed/Typed Name <i>Jake Heatherly</i>		Signature <i>[Signature]</i>		Month Day Year <i>06 05 25</i>
Transporter 2 Printed/Typed Name		Signature		Month Day Year
Discrepancy				
1. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection				
Manifest Reference Number:				
Alternate Facility (or Generator)		U.S. EPA ID Number		
Facility's Phone:				
Signature of Alternate Facility (or Generator)				
Month Day Year				
Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a				
Printed/Typed Name		Signature		Month Day Year

Appendix D

Report Limitations and Guidelines for Use

Appendix D

Report Limitations and Guidelines for Use²

This appendix provides information to help you manage your risks with respect to the use of this report.

ENVIRONMENTAL SERVICES ARE PERFORMED FOR SPECIFIC PURPOSES, PERSONS AND PROJECTS

This report has been prepared for the exclusive use of the Washington State Department of Ecology (Ecology). This report is not intended for use by others, and the information contained herein is not applicable to other sites.

GeoEngineers structures our services to meet the specific needs of our clients. For example, an environmental site assessment study conducted for a property owner may not fulfill the needs of a prospective purchaser of the same property. Because each environmental study is unique, each environmental report is unique, prepared solely for the specific client and project site. No one except Ecology should rely on this environmental report without first conferring with GeoEngineers. This report should not be applied for any purpose or project except the one originally contemplated.

THIS ENVIRONMENTAL REPORT IS BASED ON A UNIQUE SET OF PROJECT-SPECIFIC FACTORS

This report has been prepared for the Gold Nugget Market Site located at 1041 Buena Road in Zillah, Washington (the "Site"). GeoEngineers considered a number of unique, project-specific factors when establishing the scope of services for this project and report. Unless GeoEngineers specifically indicates otherwise, do not rely on this report if it was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

If important changes are made after the date of this report, GeoEngineers should be given the opportunity to review our interpretations and recommendations and provide written modifications or confirmation, as appropriate.

RELIANCE CONDITIONS FOR THIRD PARTIES

Our report was prepared for the exclusive use of Ecology. No other party may rely on the product of our services unless we agree in advance to such reliance in writing. This is to provide our firm and Ecology with reasonable protection against open-ended liability claims by third parties with whom there would otherwise be no contractual limits to their actions. Within the limitations of scope, schedule and budget, our services

² Developed based on material provided by GBA, GeoProfessional Business Association; www.geoprofessional.org.

have been executed in accordance with our Agreement with Ecology and generally accepted environmental practices in this area at the time this report was prepared.

ENVIRONMENTAL REGULATIONS ARE ALWAYS EVOLVING

Some substances may be present in the Site vicinity in quantities or under conditions that may have led, or may lead, to contamination of the subject Site, but are not included in current local, state or federal regulatory definitions of hazardous substances or do not otherwise present current potential liability. GeoEngineers cannot be responsible if the standards for appropriate inquiry, or regulatory definitions of hazardous substance, change or if more stringent environmental standards are developed in the future.

UNCERTAINTY MAY REMAIN EVEN AFTER THIS PHASE II ESA IS COMPLETED

No environmental site assessment can wholly eliminate uncertainty regarding the potential for contamination in connection with a property. Our interpretation of subsurface conditions in this study is based on field observations and chemical analytical data from widely spaced sampling locations. It is always possible that contamination exists in areas that were not explored, sampled or analyzed.

SUBSURFACE CONDITIONS CAN CHANGE

This environmental report is based on conditions that existed at the time the study was performed. The findings and conclusions of this report may be affected by the passage of time, by manmade events such as construction on or adjacent to the site, by new releases of hazardous substances, or by natural events such as floods, earthquakes, slope instability or groundwater fluctuations. Always contact GeoEngineers before applying this report to determine if it is still applicable.

MOST ENVIRONMENTAL FINDINGS ARE PROFESSIONAL OPINIONS

Our interpretations of subsurface conditions are based on field observations and chemical analytical data from widely spaced sampling locations at the Site. Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted, or samples are taken. GeoEngineers reviewed field and laboratory data and then applied our professional judgment to render an opinion about subsurface conditions throughout the Site. Actual subsurface conditions may differ – sometimes significantly – from those indicated in this report. Our report, conclusions and interpretations should not be construed as a warranty of the subsurface conditions.

DO NOT REDRAW THE EXPLORATION LOGS

Environmental scientists prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in an environmental report should never be redrawn for inclusion in other design drawings. Only photographic or electronic reproductions are acceptable but recognize that separating logs from the report can elevate risk.

READ THESE PROVISIONS CLOSELY

Some clients, design professionals and contractors may not recognize that the geoscience practices (geotechnical engineering, geology and environmental science) are far less exact than other engineering and natural science disciplines. This lack of understanding can create unrealistic expectations that could

lead to disappointments, claims and disputes. GeoEngineers includes these explanatory “limitations” provisions in our reports to help reduce such risks. Please confer with GeoEngineers if you are unclear how these “Report Limitations and Guidelines for Use” apply to your project or site.

GEOTECHNICAL, GEOLOGIC AND GEOENVIRONMENTAL REPORTS SHOULD NOT BE INTERCHANGED

The equipment, techniques and personnel used to perform an environmental study differ significantly from those used to perform a geotechnical or geologic study and vice versa. For that reason, a geotechnical engineering or geologic report does not usually relate any environmental findings, conclusions or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. Similarly, environmental reports are not used to address geotechnical or geologic concerns regarding a specific project.

BIOLOGICAL POLLUTANTS

GeoEngineers’ Scope of Work specifically excludes the investigation, detection, prevention or assessment of the presence of Biological Pollutants. Accordingly, this report does not include any interpretations, recommendations, findings, or conclusions regarding the detecting, assessing, preventing or abating of Biological Pollutants and no conclusions or inferences should be drawn regarding Biological Pollutants, as they may relate to this project. The term “Biological Pollutants” includes, but is not limited to, molds, fungi, spores, bacteria and viruses, and/or any of their byproducts.

If Ecology desires these specialized services, they should be obtained from a consultant who offers services in this specialized field.