

**Quarterly Groundwater Compliance Monitoring  
Fourth Quarter 2022**

Ultra Custom Cleaners  
2222 NW Bucklin Hill Road  
Silverdale, Washington

CSID 14334  
FSID 18955

*for*  
**Bucklin Place LLC**

March 1, 2024

**Quarterly Groundwater Compliance Monitoring  
Fourth Quarter 2022**

Ultra Custom Cleaners  
2222 NW Bucklin Hill Road  
Silverdale, Washington

CSID 14334  
FSID 18955

*for*  
**Bucklin Place LLC**

March 1, 2024



2101 4<sup>th</sup> Avenue, Suite 950  
Seattle, Washington 98121  
253.383.4940

**Quarterly Groundwater Compliance Monitoring  
Fourth Quarter 2022**

**Ultra Custom Cleaners  
2222 NW Bucklin Hill Road  
Silverdale, Washington**

**CSID 14334  
FSID 18955**

**File No. 22828-001-05**

**March 1, 2024**

Prepared for:

Bucklin Place, LLC  
8192 NW Hidden Cover Road  
Bainbridge Island, Washington 98110

Attention: Bill Matthews

Prepared by:

GeoEngineers, Inc.  
2101 4<sup>th</sup> Avenue, Suite 950  
Seattle, Washington 98121  
253.383.4940



Ian D. Young, LG  
Senior Geologist



Tim L. Syverson, LHG  
Associate

TIMOTHY L. SYVERSON

KJ:IDY:TLS:mce: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

<b>1.0 INTRODUCTION</b> .....	<b>1</b>
<b>2.0 SITE HISTORY</b> .....	<b>1</b>
<b>3.0 GROUNDWATER SAMPLING</b> .....	<b>1</b>
3.1. Groundwater Conditions .....	2
3.2. Groundwater Analytical Results .....	2
<b>4.0 LIMITATIONS</b> .....	<b>2</b>

### LIST OF TABLES

Table 1. Groundwater Chemical Analytical Results

### LIST OF FIGURES

Figure 1. Vicinity Map

Figure 2. Groundwater Elevation Contours – December 2022

Figure 3. Groundwater Analytical Results – December 2022

### APPENDICES

Appendix A. Field Procedures

Appendix B. Laboratory Analytical Data Reports

Appendix C. Report Limitations and Guidelines for Use

## 1.0 INTRODUCTION

This report summarizes the quarterly groundwater compliance monitoring during the Fourth Quarter 2022 (4Q2022) completed for the Model Toxics Control Act (MTCA) cleanup site (Site) known as “Ultra Custom Cleaners” (UCC) located at 2222 NW Bucklin Hill Road in Silverdale, Washington (subject property). The Property consists of a single parcel: Kitsap County tax parcel 162501-4-111-2006. The subject property is shown relative to surrounding physical features, as shown on the Vicinity Map, Figure 1. The Site is located at the Suite 105 tenant space at the strip mall on the property. The northeast border of the property has a retaining wall abutting the higher elevation to the east side of the wall.

## 2.0 SITE HISTORY

Environmental investigations conducted to date at the subject property have identified volatile organic compound (VOC) contamination, including the chlorinated solvents tetrachloroethylene (PCE) in soil and groundwater, and PCE and trichloroethylene (TCE) in indoor air, or sub-slab soil vapor at, or adjacent to, Suite 105. Based on the findings of GeoEngineers’ investigation in 2021, the PCE impacts to soil and perched groundwater appear to be limited in lateral extent to within or just beyond the footprint of the Suite 105 tenant space, and evidence collected to date has not indicated that the VOCs detected at the Site have affected the deeper area-wide groundwater aquifer. The discovery of a release of VOCs to soil, groundwater and indoor air at the UCC Site was reported to the Washington State Department of Ecology (Ecology) Northwest Regional Office (NWRO) in August 2016, and Ecology’s current listed status for the Site is “Awaiting Cleanup.”

An interim cleanup action has been completed for the subject property to meet the requirements of the Ecology MTCA cleanup regulation (Washington Administrative Code [WAC] 173 340). The cleanup action was initiated while Suite 105 was vacant during 2021 to allow focused soil excavation to remove the soil with the highest concentrations of PCE as a source control measure. The source removal was followed by application of an amendment product to facilitate the bioremediation of the contaminants in shallow soil and groundwater beneath the Suite 105 footprint.

The objective of compliance groundwater monitoring is to characterize groundwater conditions and delineate concentrations of chlorinated solvents associated with historical dry-cleaning operations in Site soil and groundwater.

## 3.0 GROUNDWATER SAMPLING

GeoEngineers conducted groundwater sampling and documented groundwater conditions in monitoring wells MW-1 through MW-6 on December 12, 2022. Well MW-3 could not be monitored or sampled during 4Q2022 due to damage to the monument lid that prevented it from opening. Groundwater samples collected from each accessible well were submitted for chemical analysis of the following analytes: PCE, TCE, cis-1,2-DCE, trans-1,2-DCE and vinyl chloride by US Environmental Protection Agency (EPA) Method 8260. Groundwater conditions encountered during sampling and chemical analytical results are described in the sections below. Field procedures are presented in Appendix A.

### 3.1. Groundwater Conditions

Depths to groundwater were measured on December 12, 2022. Depths to groundwater ranged between 5.37 feet below ground surface (bgs) (MW-6) and 7.62 feet bgs (MW-4); MW-1 produced groundwater under artesian pressure. Groundwater elevations ranged from 39.27 feet (MW-4) to 41.10 feet (MW-5) (North American Vertical Datum of 1988 [NAVD88]) and reflect seasonal changes. The groundwater flow direction was generally toward the southwest with a prominent influx coming from the abutment to the east. Depths to groundwater and groundwater elevations are summarized in Table 1. The groundwater elevations and groundwater elevation contours are shown in Figure 2.

### 3.2. Groundwater Analytical Results

Groundwater samples were collected from each of the monitoring wells on December 12, 2022. The chemical analytical results are described below, summarized in Table 1, and shown on Figure 3. A copy of the laboratory analytical report is provided in Appendix B.

PCE was detected at a concentration less than the MTCA Method A cleanup level (5 micrograms per liter [ $\mu\text{g/L}$ ]) at MW-2 (1.53  $\mu\text{g/L}$ ). PCE was not detected at a concentration greater than the laboratory reporting limit at MW-4, MW-5 or MW-6, nor in the deeper aquifer well MW-1. There were no detections of TCE, cis-1,2-DCE, trans-1,2-DCE and vinyl chloride greater than the laboratory reporting limit for MW-1 through MW-6. These analytical results are depicted on Figure 3.

## 4.0 LIMITATIONS

We have prepared this letter report for use by Bucklin Place and their authorized agents as part of their evaluation of environmental conditions at the site. This report may be provided to regulatory agencies for review and information. Our work was completed in accordance with Bucklin Place signed agreement dated March 13, 2017 (GEI File No. 22828-001-00). No other party may rely on the product of our services unless we agree in advance and in writing to such reliance. This is to provide our firm with reasonable protection against open-ended liability claims by third parties with whom there would otherwise be no contractual limits to their actions.

Please refer to Appendix C, titled "Report Limitations and Guidelines for Use," for additional information pertaining to use of this report.



**Table 1**  
**Groundwater Chemical Analytical Results (VOCs)**

Ultra Custom Cleaners  
 2222 NW Bucklin Hill Road  
 Silverdale, Washington

Sample ID <sup>1</sup>	Sample Date	Depth to Groundwater (from TOC)	Groundwater Elevation (Feet NAVD88)	VOCs <sup>2</sup> (µg/L)					
				Tetrachloroethene (PCE)	Trichloroethene (TCE)	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride
<b>Quarterly Groundwater Monitoring</b>									
<b>MW-1</b>									
MW-1-211121	11/21/2021	0.00	< 46.46 <sup>3</sup>	< 0.400	< 0.500	< 0.500	< 0.500	< 0.500	< 0.200
MW-1-220317	3/17/2022	0.00	< 46.46 <sup>3</sup>	< 0.400	< 0.500	< 0.500	< 0.500	< 0.500	< 0.200
MW-1-220628	6/28/2022	0.00	< 46.46 <sup>3</sup>	< 0.400	< 0.500	< 0.500	< 0.500	< 0.500	< 0.200
MW-1-221005	10/5/2022	0.00	< 46.46 <sup>3</sup>	< 0.400	< 0.500	< 0.500	< 0.500	< 0.500	< 0.200
MW-1-221212	12/12/2022	0.00	< 46.46 <sup>3</sup>	< 0.350	< 0.400	< 0.500	< 0.350	< 0.500	< 0.200
<b>MW-2</b>									
MW-2-211121	11/21/2021	6.91	39.76	<b>0.840</b>	< 0.500	< 0.500	< 0.500	< 0.500	< 0.200
MW-2-220317	3/17/2022	6.97	39.70	< 0.400	< 0.500	< 0.500	< 0.500	< 0.500	< 0.200
MW-2-220628	6/28/2022	6.96	39.71	<b>4.90</b>	< 0.500	< 0.500	< 0.500	< 0.500	< 0.200
MW-2-221005	10/5/2022	7.47	39.20	<b>0.686</b>	< 0.500	< 0.500	< 0.500	< 0.500	< 0.200
MW-2-221212	12/12/2022	6.82	39.85	<b>1.53</b>	< 0.400	< 0.500	< 0.350	< 0.500	< 0.200
<b>MW-3</b>									
MW-3-211121	11/21/2021	5.96	40.70	< 0.400	< 0.500	< 0.500	< 0.500	< 0.500	< 0.200
MW-3-220316	3/16/2022	5.94	40.72	< 0.400	< 0.500	< 0.500	< 0.500	< 0.500	< 0.200
MW-3-220628	6/28/2022	5.98	40.68	< 0.400	< 0.500	< 0.500	< 0.500	< 0.500	< 0.200
MW-3-221005	10/5/2022	6.91	39.75	< 0.400	< 0.500	< 0.500	< 0.500	< 0.500	< 0.200
	12/12/2022		<b>Well Inaccessible</b>						



Sample ID <sup>1</sup>	Sample Date	Depth to Groundwater (from TOC)	Groundwater Elevation (Feet NAVD88)	VOCs <sup>2</sup> (µg/L)					
				Tetrachloroethene (PCE)	Trichloroethene (TCE)	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride
<b>MW-4</b>									
MW-4-211121	11/21/2021	6.25	40.64	<b>1.24</b>	< 0.500	< 0.500	< 0.500	< 0.500	< 0.200
MW-4-220316	3/16/2022	6.68	40.21	< 0.400	< 0.500	< 0.500	< 0.500	< 0.500	< 0.200
MW-4-220628	6/28/2022	6.72	40.17	<b>0.730</b>	< 0.500	< 0.500	< 0.500	< 0.500	< 0.200
MW-4-221005	10/5/2022	7.41	39.48	< 0.400	< 0.500	< 0.500	< 0.500	< 0.500	< 0.200
MW-4-221212	12/12/2022	7.62	39.27	< 0.350	< 0.400	< 0.500	< 0.350	< 0.500	< 0.200
<b>MW-5</b>									
MW-5-211121	11/21/2021	6.37	41.29	<b>1.27</b>	< 0.500	< 0.500	< 0.500	< 0.500	< 0.200
MW-5-220316	3/16/2022	6.76	40.90	< 0.400	< 0.500	< 0.500	< 0.500	< 0.500	< 0.200
MW-5-220628	6/28/2022	6.25	41.41	<b>9.75</b>	< 0.500	< 0.500	< 0.500	< 0.500	< 0.200
MW-5-221005	10/5/2022	7.78	39.88	<b>0.581</b>	<b>0.575</b>	< 0.500	< 0.500	< 0.500	< 0.200
MW-5-221212	12/12/2022	6.56	41.10	< 0.350	< 0.400	< 0.500	< 0.350	< 0.500	< 0.200
<b>MW-6</b>									
MW-6-212221	11/21/2021	5.28	40.82	< 0.400	< 0.500	< 0.500	< 0.500	< 0.500	< 0.200
MW-6-220316	3/16/2022	5.27	40.83	< 0.400	< 0.500	< 0.500	< 0.500	< 0.500	< 0.200
MW-6-220628	6/28/2022	5.53	40.57	< 0.400	< 0.500	< 0.500	< 0.500	< 0.500	< 0.200
MW-6-221005	10/5/2022	5.94	40.16	< 0.400	< 0.500	< 0.500	< 0.500	< 0.500	< 0.200
MW-6-221212	12/12/2022	5.37	40.73	< 0.350	< 0.400	< 0.500	< 0.350	< 0.500	< 0.200
<b>MTCA Method A or B Screening Level Protective of Drinking Water</b>				5	5	16 <sup>4</sup>	160 <sup>4</sup>	400 <sup>4</sup>	0.2

**Notes:**

<sup>1</sup>Sampling locations shown on Figure 3.

<sup>2</sup>Volatile Organic Compounds (VOCs) analyzed by U.S. Environmental Protection Agency (EPA) Method 8260C.

<sup>3</sup>MW-1 screened in deep groundwater aquifer; groundwater under hydrostatic head and rising above TOC.

<sup>4</sup>Method B Non-Cancer screening level.

µg/L = micrograms per liter

ND = Not Detected

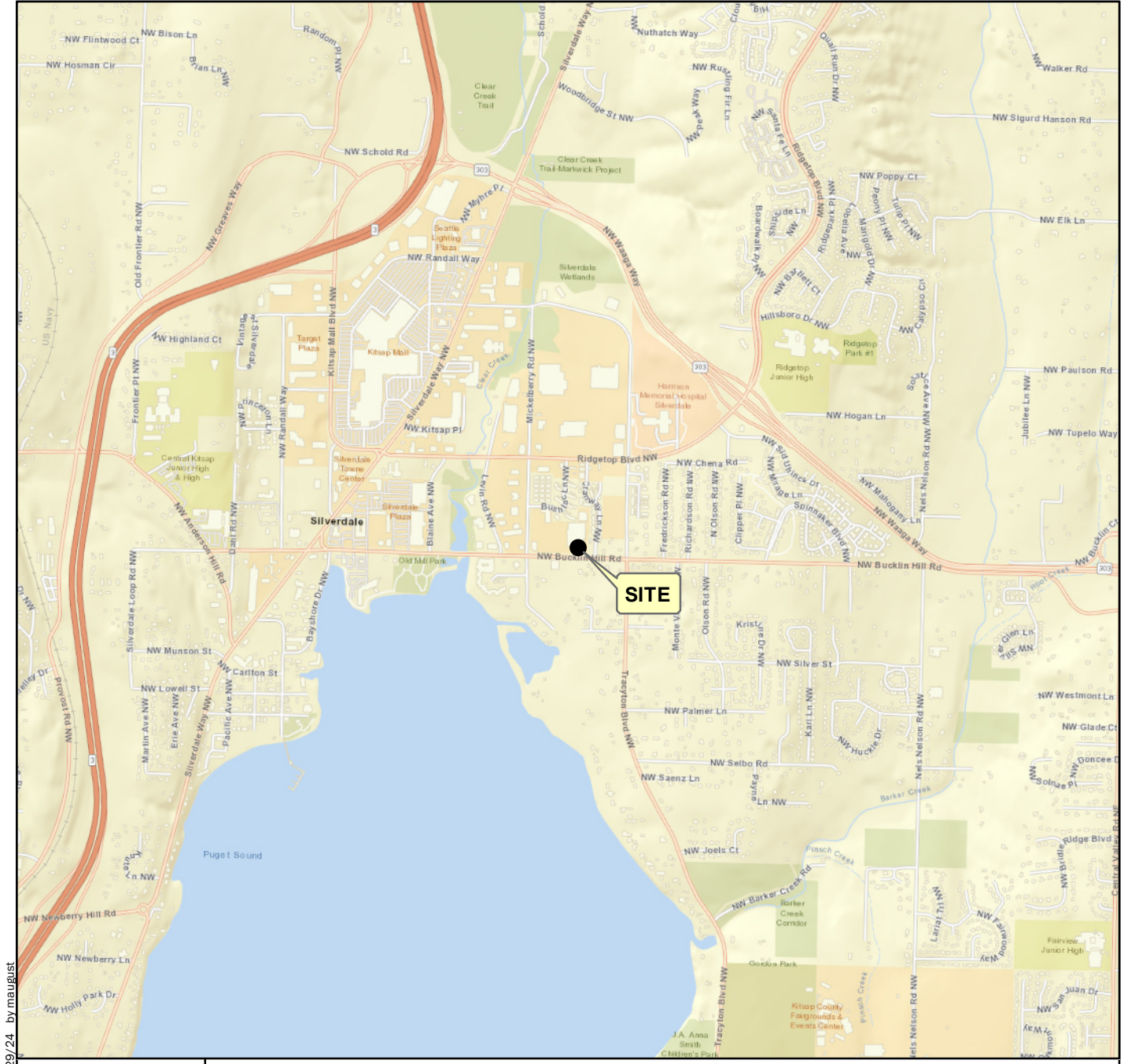
TOC = top of casing

**Bolding** indicates analyte was detected.

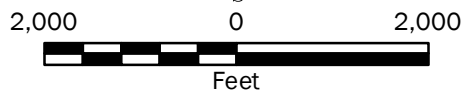
Shading indicates exceedance of Model Toxics Control Act (MTCA) cleanup level.

GeoEngineers' chemical analytical testing by Fremont Analytical in Seattle, Washington. Laboratory analytical reports in Appendix C.





P:\22\22828001\GIS\MXD\22828001\_F01\_VicinityMap.mxd Date Exported: 02/29/24 by maugust



**Notes:**

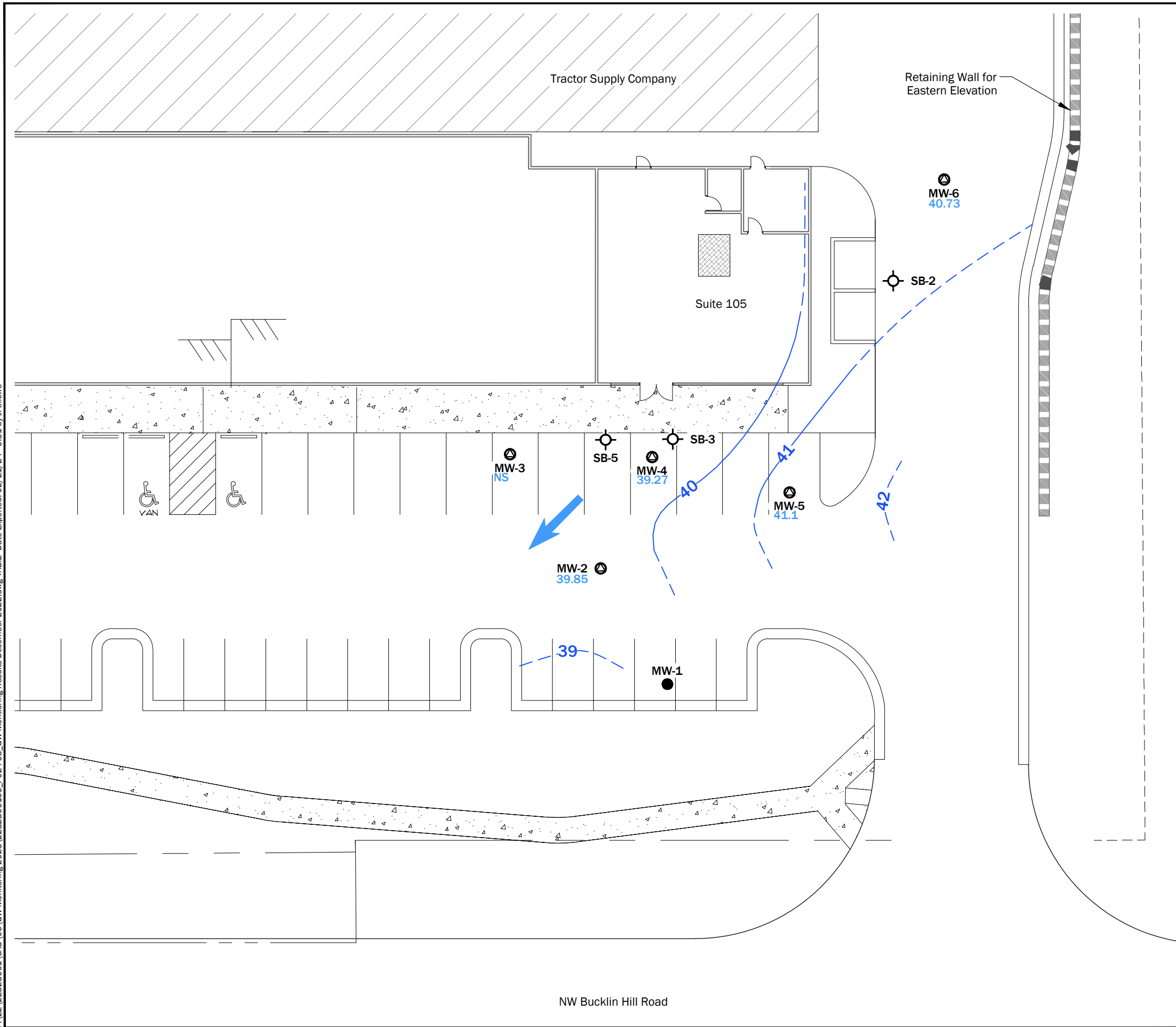
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source: Mapbox Open Street Map, 2017

Projection: NAD 1983 StatePlane Washington North FIPS 4601 Feet

<b>Vicinity Map</b>	
Ultra Custom Cleaners 2222 NW Bucklin Hill Road Silverdale, Washington	
	<b>Figure 1</b>

P:\22\22828001\CAD\05\GW Monitoring 2023\2282800105\_F02-F03\_GW Monitoring Results December 2022.dwg TAB:2 Date Exported: 02/21/24 - 9:51 by JFellows

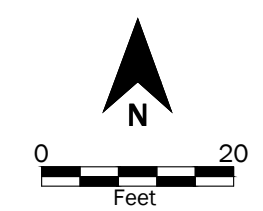


- Legend**
- MW-2 Monitoring Well by GeoEngineers, Inc., 2022
  - MW-1 Monitoring Well by GeoEngineers, Inc., 2018
  - SB-2 Boring by Landau, 2016
  - Approximate Former Location of Dry Cleaning Machine
  - 39.27 Groundwater Elevation
  - 40 Interpreted Groundwater Contour
  - Interpreted Groundwater Flow Direction
  - NS Not Sampled During December 2022 Event

Source(s):  
 • Background Data Received 9/08/21

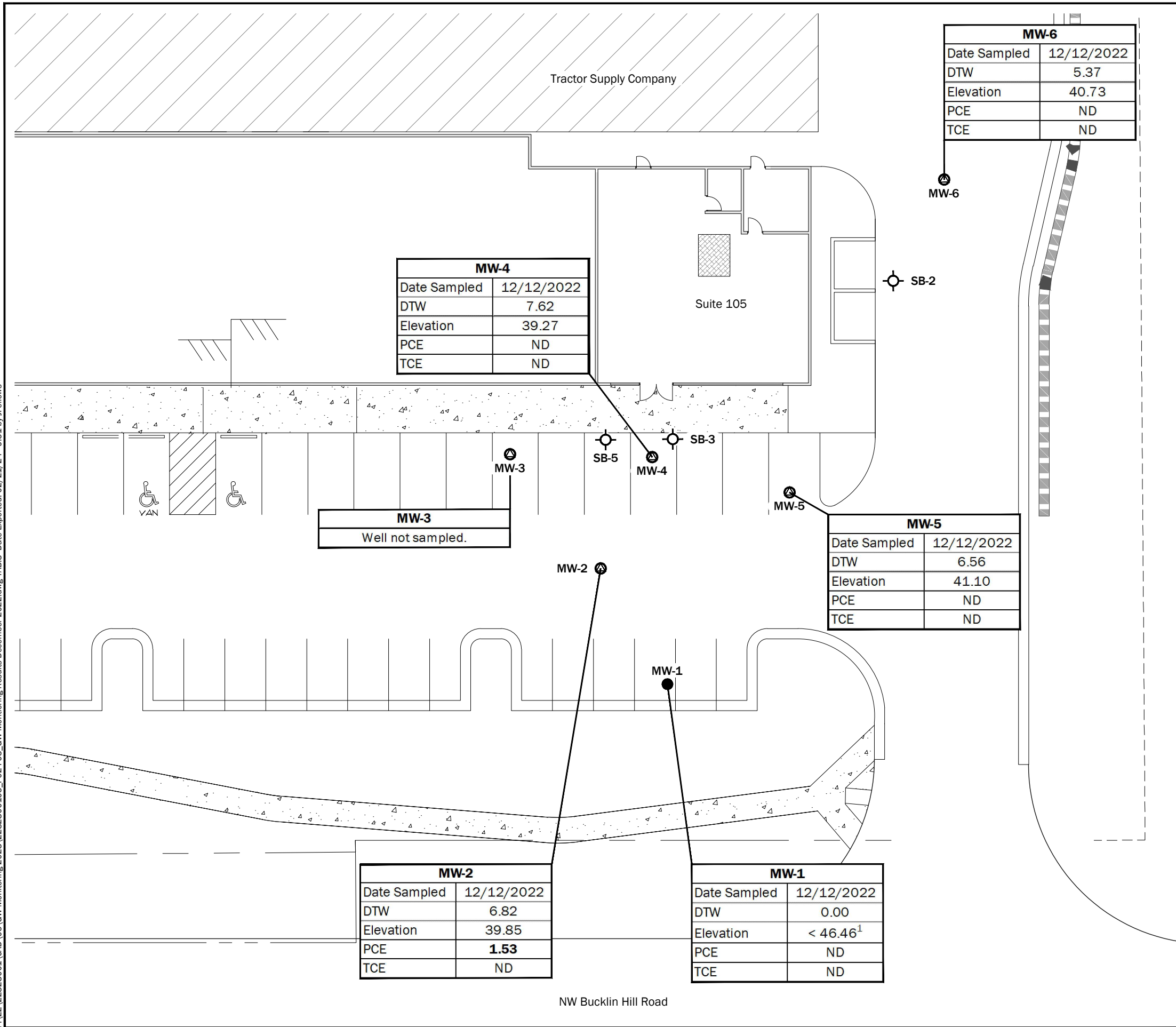
Projection: WA State Plane, North Zone, NAD83, US Foot

**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.



<b>Groundwater Contour Map December 2022</b>	
Ultra Custom Cleaners 2222 NW Bucklin Hill Road Silverdale, Washington	
	<b>Figure 2</b>

P:\22\22828001\CAD\05\GW Monitoring 2023\2282800105\_F02-F03\_GW Monitoring Results December 2022.dwg TAB:3 Date Exported: 02/21/24 - 9:51 by JFellows



**Legend**

- MW-2 Monitoring Well by GeoEngineers, Inc., 2022
- MW-1 Monitoring Well by GeoEngineers, Inc., 2018
- SB-2 Boring by Landau, 2016
- Approximate Former Location of Dry Cleaning Machine

MTCA Method A Cleanup Levels	
PCE	5
TCE	5

DTW = Depth to water from top of well casing

<sup>1</sup> MW-1 screened in deep groundwater aquifer; groundwater under hydrostatic head and rising above TOC

MTCA = Model Toxics Control Act

ND = Analyte not detected at or above laboratory reporting limit

PCE = Tetrachloroethylene

TCE = Trichloroethylene

**1.27** **Bolding** indicates analyte was detected.

Shading indicates a concentration greater than Model Toxics Control Act (MTCA) cleanup level.

Elevations expressed in feet from top of well casing relative NAVD88.

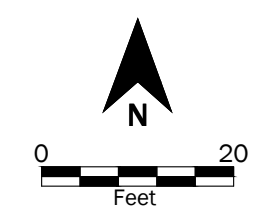
All concentrations expressed in micrograms per liter (µg/L).

Source(s):

- Background Data Received 9/08/21

Projection: WA State Plane, North Zone, NAD83, US Foot

**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.



<b>Groundwater Analytical Results December 2022</b>	
Ultra Custom Cleaners 2222 NW Bucklin Hill Road Silverdale, Washington	
	<b>Figure 3</b>



## **APPENDIX A**

### **Field Procedures**

## **APPENDIX A FIELD PROCEDURES**

### **Groundwater Monitoring**

#### **Depth to Groundwater**

The depths to the groundwater table relative to ground surface were measured using an electric water level indicator (e-tape). The e-tape was cleaned with an Alconox® solution wash and a distilled water rinse prior to use in each well to avoid any potential cross contamination between wells on site. Well lids and caps were removed 20 minutes prior to depth to water measurements to allow for atmospheric equilibration.

#### **Groundwater Sampling**

Groundwater samples were obtained using a low-flow sampling method and a peristaltic pump with new plastic tubing. Purge rates ranged from 100 to 300 milliliters (mL) per minute and a groundwater sample was collected after parameters stabilized or 3 well volumes were removed. The laboratory-provided sample containers were filled completely to eliminate headspace. The water samples were placed on ice in a cooler during transport to Fremont Analytical Laboratory in Seattle, Washington. Chain-of-custody procedures were followed in transporting the water samples to the testing laboratory.

#### **Investigative Waste Storage and Disposal**

Monitoring well purge water was temporarily stored on site in a labeled 55-gallon drum. The purge water was removed from the site and was transported off-site by a subcontractor for disposal to the waste handler's permitted discharge system.



**APPENDIX B**  
**Laboratory Analytical Data Reports**

## **APPENDIX B**

### **LABORATORY ANALYTICAL DATA REPORTS**

#### **Analytical Methods**

Chain-of-custody procedures were followed during the transport of the groundwater samples to the analytical laboratory. The samples were held in cold storage pending extraction and/or analysis. The analytical results, analytical methods reference and laboratory quality control (QC) records are included in this appendix. The analytical results are also summarized in the text and tables of this report.

#### **Analytical Data Review**

The laboratory maintains an internal quality assurance program as documented in its laboratory quality assurance manual. The laboratory uses a combination of blanks, surrogate recoveries, duplicates, matrix spike recoveries, matrix spike duplicate recoveries, blank spike recoveries and blank spike duplicate recoveries to evaluate the validity of the analytical results. The laboratory also uses data quality goals for individual chemicals or groups of chemicals based on the long-term performance of the test methods. The data quality goals were included in the laboratory reports. The laboratory compared each group of samples with the existing data quality goals and noted any exceptions in the laboratory report. Data quality exceptions documented by the accredited laboratory were reviewed by GeoEngineers and are addressed in the analytical data review summary of this appendix.

#### **Analytical Data Review Summary**

There were no data quality exceptions noted in the laboratory report. Based on our data quality review, it is our opinion that the sample results are considered of acceptable quality for their intended use in this report.



**GeoEngineers - Tacoma**

Ian Young  
1101 S Fawcett Ave  
Tacoma, WA 98401

**RE: Bucklin**

**Work Order Number: 2212377**

December 23, 2022

**Attention Ian Young:**

Fremont Analytical, Inc. received 6 sample(s) on 12/16/2022 for the analyses presented in the following report.

***Total Organic Carbon by SM 5310C***

***Volatile Organic Compounds by EPA Method 8260D***

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes  
Project Manager



---

**CLIENT:** GeoEngineers - Tacoma  
**Project:** Bucklin  
**Work Order:** 2212377

---

**Work Order Sample Summary**

---

<b>Lab Sample ID</b>	<b>Client Sample ID</b>	<b>Date/Time Collected</b>	<b>Date/Time Received</b>
2212377-001	MW-1-221216	12/12/2022 9:15 AM	12/16/2022 4:37 PM
2212377-002	MW-2-221216	12/12/2022 6:45 AM	12/16/2022 4:37 PM
2212377-003	MW-4-221216	12/12/2022 7:35 AM	12/16/2022 4:37 PM
2212377-004	MW-5-221216	12/12/2022 8:30 AM	12/16/2022 4:37 PM
2212377-005	MW-6-221216	12/12/2022 10:25 AM	12/16/2022 4:37 PM
2212377-006	Trip Blank	12/12/2022 5:15 PM	12/16/2022 4:37 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned



---

**CLIENT:** GeoEngineers - Tacoma

**Project:** Bucklin

---

**I. SAMPLE RECEIPT:**

Samples receipt information is recorded on the attached Sample Receipt Checklist.

**II. GENERAL REPORTING COMMENTS:**

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

**III. ANALYSES AND EXCEPTIONS:**

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

---

### Qualifiers:

- \* - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

### Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- DUP - Sample Duplicate
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MCL - Maximum Contaminant Level
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- REP - Sample Replicate
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



**Client:** GeoEngineers - Tacoma

**Collection Date:** 12/12/2022 9:15:00 AM

**Project:** Bucklin

**Lab ID:** 2212377-001

**Matrix:** Groundwater

**Client Sample ID:** MW-1-221216

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

**Volatile Organic Compounds by EPA Method 8260D**

Batch ID: 38880

Analyst: MS

Vinyl chloride	ND	0.200		µg/L	1	12/21/2022 2:28:48 AM
1,1-Dichloroethene	ND	0.500		µg/L	1	12/21/2022 2:28:48 AM
trans-1,2-Dichloroethene	ND	0.350		µg/L	1	12/21/2022 2:28:48 AM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	12/21/2022 2:28:48 AM
Trichloroethene (TCE)	ND	0.400		µg/L	1	12/21/2022 2:28:48 AM
Tetrachloroethene (PCE)	ND	0.350		µg/L	1	12/21/2022 2:28:48 AM
Surr: Dibromofluoromethane	102	80 - 120		%Rec	1	12/21/2022 2:28:48 AM
Surr: Toluene-d8	101	80 - 120		%Rec	1	12/21/2022 2:28:48 AM
Surr: 1-Bromo-4-fluorobenzene	96.5	80 - 120		%Rec	1	12/21/2022 2:28:48 AM



**Client:** GeoEngineers - Tacoma

**Collection Date:** 12/12/2022 6:45:00 AM

**Project:** Bucklin

**Lab ID:** 2212377-002

**Matrix:** Groundwater

**Client Sample ID:** MW-2-221216

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

**Volatile Organic Compounds by EPA Method 8260D**

Batch ID: 38880

Analyst: MS

Vinyl chloride	ND	0.200		µg/L	1	12/21/2022 3:30:26 AM
1,1-Dichloroethene	ND	0.500		µg/L	1	12/21/2022 3:30:26 AM
trans-1,2-Dichloroethene	ND	0.350		µg/L	1	12/21/2022 3:30:26 AM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	12/21/2022 3:30:26 AM
Trichloroethene (TCE)	ND	0.400		µg/L	1	12/21/2022 3:30:26 AM
Tetrachloroethene (PCE)	1.53	0.350		µg/L	1	12/21/2022 3:30:26 AM
Surr: Dibromofluoromethane	103	80 - 120		%Rec	1	12/21/2022 3:30:26 AM
Surr: Toluene-d8	102	80 - 120		%Rec	1	12/21/2022 3:30:26 AM
Surr: 1-Bromo-4-fluorobenzene	96.4	80 - 120		%Rec	1	12/21/2022 3:30:26 AM

**Total Organic Carbon by SM 5310C**

Batch ID: R80697

Analyst: AT

Total Organic Carbon	31.7	2.80	D	mg/L	4	12/22/2022 6:04:00 AM
----------------------	------	------	---	------	---	-----------------------





**Client:** GeoEngineers - Tacoma

**Collection Date:** 12/12/2022 7:35:00 AM

**Project:** Bucklin

**Lab ID:** 2212377-003

**Matrix:** Groundwater

**Client Sample ID:** MW-4-221216

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

**Volatile Organic Compounds by EPA Method 8260D**

Batch ID: 38931

Analyst: CC

Vinyl chloride	ND	0.200		µg/L	1	12/22/2022 5:49:21 PM
1,1-Dichloroethene	ND	0.500		µg/L	1	12/22/2022 5:49:21 PM
trans-1,2-Dichloroethene	ND	0.350		µg/L	1	12/22/2022 5:49:21 PM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	12/22/2022 5:49:21 PM
Trichloroethene (TCE)	ND	0.400		µg/L	1	12/22/2022 5:49:21 PM
Tetrachloroethene (PCE)	ND	0.350		µg/L	1	12/22/2022 5:49:21 PM
Surr: Dibromofluoromethane	104	80 - 120		%Rec	1	12/22/2022 5:49:21 PM
Surr: Toluene-d8	91.7	80 - 120		%Rec	1	12/22/2022 5:49:21 PM
Surr: 1-Bromo-4-fluorobenzene	93.2	80 - 120		%Rec	1	12/22/2022 5:49:21 PM

**Total Organic Carbon by SM 5310C**

Batch ID: R80697

Analyst: AT

Total Organic Carbon	3.43	0.700		mg/L	1	12/22/2022 6:36:00 AM
----------------------	------	-------	--	------	---	-----------------------



**Client:** GeoEngineers - Tacoma

**Collection Date:** 12/12/2022 8:30:00 AM

**Project:** Bucklin

**Lab ID:** 2212377-004

**Matrix:** Groundwater

**Client Sample ID:** MW-5-221216

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

**Volatile Organic Compounds by EPA Method 8260D**

Batch ID: 38931

Analyst: CC

Vinyl chloride	ND	0.200		µg/L	1	12/22/2022 6:49:36 PM
1,1-Dichloroethene	ND	0.500		µg/L	1	12/22/2022 6:49:36 PM
trans-1,2-Dichloroethene	ND	0.350		µg/L	1	12/22/2022 6:49:36 PM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	12/22/2022 6:49:36 PM
Trichloroethene (TCE)	ND	0.400		µg/L	1	12/22/2022 6:49:36 PM
Tetrachloroethene (PCE)	ND	0.350		µg/L	1	12/22/2022 6:49:36 PM
Surr: Dibromofluoromethane	103	80 - 120		%Rec	1	12/22/2022 6:49:36 PM
Surr: Toluene-d8	91.8	80 - 120		%Rec	1	12/22/2022 6:49:36 PM
Surr: 1-Bromo-4-fluorobenzene	94.5	80 - 120		%Rec	1	12/22/2022 6:49:36 PM

**Total Organic Carbon by SM 5310C**

Batch ID: R80697

Analyst: AT

Total Organic Carbon	19.2	0.700		mg/L	1	12/22/2022 6:56:00 AM
----------------------	------	-------	--	------	---	-----------------------



**Client:** GeoEngineers - Tacoma

**Collection Date:** 12/12/2022 10:25:00 AM

**Project:** Bucklin

**Lab ID:** 2212377-005

**Matrix:** Groundwater

**Client Sample ID:** MW-6-221216

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

**Volatile Organic Compounds by EPA Method 8260D**

Batch ID: 38931

Analyst: CC

Vinyl chloride	ND	0.200		µg/L	1	12/22/2022 7:19:46 PM
1,1-Dichloroethene	ND	0.500		µg/L	1	12/22/2022 7:19:46 PM
trans-1,2-Dichloroethene	ND	0.350		µg/L	1	12/22/2022 7:19:46 PM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	12/22/2022 7:19:46 PM
Trichloroethene (TCE)	ND	0.400		µg/L	1	12/22/2022 7:19:46 PM
Tetrachloroethene (PCE)	ND	0.350		µg/L	1	12/22/2022 7:19:46 PM
Surr: Dibromofluoromethane	104	80 - 120		%Rec	1	12/22/2022 7:19:46 PM
Surr: Toluene-d8	90.4	80 - 120		%Rec	1	12/22/2022 7:19:46 PM
Surr: 1-Bromo-4-fluorobenzene	93.9	80 - 120		%Rec	1	12/22/2022 7:19:46 PM

**Total Organic Carbon by SM 5310C**

Batch ID: R80697

Analyst: AT

Total Organic Carbon	1.53	0.700		mg/L	1	12/22/2022 8:11:00 AM
----------------------	------	-------	--	------	---	-----------------------



**Client:** GeoEngineers - Tacoma

**Collection Date:** 12/12/2022 5:15:00 PM

**Project:** Bucklin

**Lab ID:** 2212377-006

**Matrix:** Water

**Client Sample ID:** Trip Blank

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

**Volatile Organic Compounds by EPA Method 8260D**

Batch ID: 38931

Analyst: CC

Vinyl chloride	ND	0.200		µg/L	1	12/22/2022 5:19:13 PM
1,1-Dichloroethene	ND	0.500		µg/L	1	12/22/2022 5:19:13 PM
trans-1,2-Dichloroethene	ND	0.350		µg/L	1	12/22/2022 5:19:13 PM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	12/22/2022 5:19:13 PM
Trichloroethene (TCE)	ND	0.400		µg/L	1	12/22/2022 5:19:13 PM
Tetrachloroethene (PCE)	ND	0.350		µg/L	1	12/22/2022 5:19:13 PM
Surr: Dibromofluoromethane	99.9	80 - 120		%Rec	1	12/22/2022 5:19:13 PM
Surr: Toluene-d8	91.0	80 - 120		%Rec	1	12/22/2022 5:19:13 PM
Surr: 1-Bromo-4-fluorobenzene	95.0	80 - 120		%Rec	1	12/22/2022 5:19:13 PM

Work Order: 2212377  
 CLIENT: GeoEngineers - Tacoma  
 Project: Bucklin

**QC SUMMARY REPORT**  
**Total Organic Carbon by SM 5310C**

Sample ID: <b>LCS-80697</b>	SampType: <b>LCS</b>	Units: <b>mg/L</b>			Prep Date: <b>12/22/2022</b>	RunNo: <b>80697</b>					
Client ID: <b>LCSW</b>	Batch ID: <b>R80697</b>				Analysis Date: <b>12/22/2022</b>	SeqNo: <b>1669271</b>					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	5.19	0.700	5.000	0	104	90	110				

Sample ID: <b>2212377-005BDUP</b>	SampType: <b>DUP</b>	Units: <b>mg/L</b>			Prep Date: <b>12/22/2022</b>	RunNo: <b>80697</b>					
Client ID: <b>MW-6-221216</b>	Batch ID: <b>R80697</b>				Analysis Date: <b>12/22/2022</b>	SeqNo: <b>1669278</b>					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	1.55	0.700						1.526	1.75	20	

Sample ID: <b>2212377-005BMS</b>	SampType: <b>MS</b>	Units: <b>mg/L</b>			Prep Date: <b>12/22/2022</b>	RunNo: <b>80697</b>					
Client ID: <b>MW-6-221216</b>	Batch ID: <b>R80697</b>				Analysis Date: <b>12/22/2022</b>	SeqNo: <b>1669279</b>					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	6.68	0.700	5.000	1.526	103	68.3	120				

Sample ID: <b>2212377-005BMSD</b>	SampType: <b>MSD</b>	Units: <b>mg/L</b>			Prep Date: <b>12/22/2022</b>	RunNo: <b>80697</b>					
Client ID: <b>MW-6-221216</b>	Batch ID: <b>R80697</b>				Analysis Date: <b>12/22/2022</b>	SeqNo: <b>1669280</b>					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	6.65	0.700	5.000	1.526	103	68.3	120	6.675	0.345	30	

Sample ID: <b>2212348-003DDUP</b>	SampType: <b>DUP</b>	Units: <b>mg/L</b>			Prep Date: <b>12/22/2022</b>	RunNo: <b>80697</b>					
Client ID: <b>BATCH</b>	Batch ID: <b>R80697</b>				Analysis Date: <b>12/22/2022</b>	SeqNo: <b>1669303</b>					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	0.778	0.700						0.7610	2.21	20	

**Work Order:** 2212377  
**CLIENT:** GeoEngineers - Tacoma  
**Project:** Bucklin

**QC SUMMARY REPORT**  
**Total Organic Carbon by SM 5310C**

Sample ID: <b>2212348-003DMS</b>	SampType: <b>MS</b>	Units: <b>mg/L</b>	Prep Date: <b>12/22/2022</b>	RunNo: <b>80697</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>R80697</b>		Analysis Date: <b>12/22/2022</b>	SeqNo: <b>1669304</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	5.95	0.700	5.000	0.7610	104	68.3	120				

Work Order: 2212377  
 CLIENT: GeoEngineers - Tacoma  
 Project: Bucklin

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260D**

Sample ID: <b>LCS-38880</b>	SampType: <b>LCS</b>	Units: <b>µg/L</b>			Prep Date: <b>12/19/2022</b>	RunNo: <b>80664</b>					
Client ID: <b>LCSW</b>	Batch ID: <b>38880</b>				Analysis Date: <b>12/20/2022</b>	SeqNo: <b>1668443</b>					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	16.7	0.200	20.00	0	83.4	80	120				
1,1-Dichloroethene	21.7	0.500	20.00	0	108	80	120				
trans-1,2-Dichloroethene	21.2	0.350	20.00	0	106	80	120				
cis-1,2-Dichloroethene	21.0	0.500	20.00	0	105	80	120				
Trichloroethene (TCE)	19.5	0.400	20.00	0	97.7	80	120				
Tetrachloroethene (PCE)	20.1	0.350	20.00	0	100	80	120				
Surr: Dibromofluoromethane	26.8		25.00		107	80	120				
Surr: Toluene-d8	26.0		25.00		104	80	120				
Surr: 1-Bromo-4-fluorobenzene	23.9		25.00		95.4	80	120				

Sample ID: <b>MB-38880</b>	SampType: <b>MBLK</b>	Units: <b>µg/L</b>			Prep Date: <b>12/19/2022</b>	RunNo: <b>80664</b>					
Client ID: <b>MBLKW</b>	Batch ID: <b>38880</b>				Analysis Date: <b>12/20/2022</b>	SeqNo: <b>1668441</b>					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	ND	0.200									
1,1-Dichloroethene	ND	0.500									
trans-1,2-Dichloroethene	ND	0.350									
cis-1,2-Dichloroethene	ND	0.500									
Trichloroethene (TCE)	ND	0.400									
Tetrachloroethene (PCE)	ND	0.350									
Surr: Dibromofluoromethane	25.9		25.00		104	80	120				
Surr: Toluene-d8	26.1		25.00		104	80	120				
Surr: 1-Bromo-4-fluorobenzene	24.2		25.00		96.9	80	120				

Sample ID: <b>2212353-001ADUP</b>	SampType: <b>DUP</b>	Units: <b>µg/L</b>			Prep Date: <b>12/19/2022</b>	RunNo: <b>80664</b>					
Client ID: <b>BATCH</b>	Batch ID: <b>38880</b>				Analysis Date: <b>12/20/2022</b>	SeqNo: <b>1668424</b>					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	ND	0.200						0		30	
1,1-Dichloroethene	ND	0.500						0		30	
trans-1,2-Dichloroethene	ND	0.350						0		30	

Work Order: 2212377  
 CLIENT: GeoEngineers - Tacoma  
 Project: Bucklin

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260D**

Sample ID: <b>2212353-001ADUP</b>	SampType: <b>DUP</b>	Units: <b>µg/L</b>	Prep Date: <b>12/19/2022</b>	RunNo: <b>80664</b>							
Client ID: <b>BATCH</b>	Batch ID: <b>38880</b>	Analysis Date: <b>12/20/2022</b>	SeqNo: <b>1668424</b>								
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,2-Dichloroethene	ND	0.500						0		30	
Trichloroethene (TCE)	ND	0.400						0		30	
Tetrachloroethene (PCE)	ND	0.350						0		30	
Surr: Dibromofluoromethane	25.4		25.00		102	80	120		0		
Surr: Toluene-d8	25.4		25.00		102	80	120		0		
Surr: 1-Bromo-4-fluorobenzene	24.2		25.00		96.8	80	120		0		

Sample ID: <b>2212377-001ADUP</b>	SampType: <b>DUP</b>	Units: <b>µg/L</b>	Prep Date: <b>12/19/2022</b>	RunNo: <b>80664</b>							
Client ID: <b>MW-1-221216</b>	Batch ID: <b>38880</b>	Analysis Date: <b>12/21/2022</b>	SeqNo: <b>1668435</b>								
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	ND	0.200						0		30	
1,1-Dichloroethene	ND	0.500						0		30	
trans-1,2-Dichloroethene	ND	0.350						0		30	
cis-1,2-Dichloroethene	ND	0.500						0		30	
Trichloroethene (TCE)	ND	0.400						0		30	
Tetrachloroethene (PCE)	ND	0.350						0		30	
Surr: Dibromofluoromethane	25.3		25.00		101	80	120		0		
Surr: Toluene-d8	25.4		25.00		102	80	120		0		
Surr: 1-Bromo-4-fluorobenzene	24.3		25.00		97.3	80	120		0		

Sample ID: <b>2212377-002AMS</b>	SampType: <b>MS</b>	Units: <b>µg/L</b>	Prep Date: <b>12/19/2022</b>	RunNo: <b>80664</b>							
Client ID: <b>MW-2-221216</b>	Batch ID: <b>38880</b>	Analysis Date: <b>12/21/2022</b>	SeqNo: <b>1668437</b>								
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	19.5	0.200	20.00	0	97.6	52.3	147				
1,1-Dichloroethene	22.8	0.500	20.00	0	114	68	152				
trans-1,2-Dichloroethene	22.7	0.350	20.00	0	114	79.1	131				
cis-1,2-Dichloroethene	21.1	0.500	20.00	0	106	78.3	131				
Trichloroethene (TCE)	21.0	0.400	20.00	0	105	75	133				
Tetrachloroethene (PCE)	23.8	0.350	20.00	1.534	111	78	131				



Work Order: 2212377  
 CLIENT: GeoEngineers - Tacoma  
 Project: Bucklin

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260D**

Sample ID: <b>2212377-002AMS</b>	SampType: <b>MS</b>	Units: <b>µg/L</b>	Prep Date: <b>12/19/2022</b>	RunNo: <b>80664</b>							
Client ID: <b>MW-2-221216</b>	Batch ID: <b>38880</b>		Analysis Date: <b>12/21/2022</b>	SeqNo: <b>1668437</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	25.8		25.00		103	80	120				
Surr: Toluene-d8	25.6		25.00		103	80	120				
Surr: 1-Bromo-4-fluorobenzene	24.6		25.00		98.2	80	120				

Sample ID: <b>LCS-38931</b>	SampType: <b>LCS</b>	Units: <b>µg/L</b>	Prep Date: <b>12/22/2022</b>	RunNo: <b>80696</b>							
Client ID: <b>LCSW</b>	Batch ID: <b>38931</b>		Analysis Date: <b>12/22/2022</b>	SeqNo: <b>1669283</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	22.0	0.200	20.00	0	110	80	120				
1,1-Dichloroethene	22.1	0.500	20.00	0	111	80	120				
trans-1,2-Dichloroethene	23.3	0.350	20.00	0	117	80	120				
cis-1,2-Dichloroethene	21.1	0.500	20.00	0	106	80	120				
Trichloroethene (TCE)	20.6	0.400	20.00	0	103	80	120				
Tetrachloroethene (PCE)	21.3	0.350	20.00	0	107	80	120				
Surr: Dibromofluoromethane	22.6		25.00		90.3	80	120				
Surr: Toluene-d8	23.3		25.00		93.3	80	120				
Surr: 1-Bromo-4-fluorobenzene	28.6		25.00		114	80	120				

Sample ID: <b>MB-38931</b>	SampType: <b>MBLK</b>	Units: <b>µg/L</b>	Prep Date: <b>12/22/2022</b>	RunNo: <b>80696</b>							
Client ID: <b>MBLKW</b>	Batch ID: <b>38931</b>		Analysis Date: <b>12/22/2022</b>	SeqNo: <b>1669282</b>							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	ND	0.200									
1,1-Dichloroethene	ND	0.500									
trans-1,2-Dichloroethene	ND	0.350									
cis-1,2-Dichloroethene	ND	0.500									
Trichloroethene (TCE)	ND	0.400									
Tetrachloroethene (PCE)	ND	0.350									
Surr: Dibromofluoromethane	24.7		25.00		98.7	80	120				
Surr: Toluene-d8	22.7		25.00		90.8	80	120				
Surr: 1-Bromo-4-fluorobenzene	23.8		25.00		95.4	80	120				

Work Order: 2212377  
 CLIENT: GeoEngineers - Tacoma  
 Project: Bucklin

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260D**

Sample ID: <b>MB-38931</b>	SampType: <b>MBLK</b>	Units: <b>µg/L</b>	Prep Date: <b>12/22/2022</b>	RunNo: <b>80696</b>							
Client ID: <b>MBLKW</b>	Batch ID: <b>38931</b>	Analysis Date: <b>12/22/2022</b>	SeqNo: <b>1669282</b>								
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: <b>2212377-003ADUP</b>	SampType: <b>DUP</b>	Units: <b>µg/L</b>	Prep Date: <b>12/22/2022</b>	RunNo: <b>80696</b>							
Client ID: <b>MW-4-221216</b>	Batch ID: <b>38931</b>	Analysis Date: <b>12/22/2022</b>	SeqNo: <b>1669225</b>								
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	ND	0.200						0		30	
1,1-Dichloroethene	ND	0.500						0		30	
trans-1,2-Dichloroethene	ND	0.350						0		30	
cis-1,2-Dichloroethene	ND	0.500						0		30	
Trichloroethene (TCE)	ND	0.400						0		30	
Tetrachloroethene (PCE)	ND	0.350						0		30	
Surr: Dibromofluoromethane	26.1		25.00		104	80	120		0		
Surr: Toluene-d8	22.6		25.00		90.4	80	120		0		
Surr: 1-Bromo-4-fluorobenzene	23.2		25.00		92.6	80	120		0		

Sample ID: <b>2212377-005AMS</b>	SampType: <b>MS</b>	Units: <b>µg/L</b>	Prep Date: <b>12/22/2022</b>	RunNo: <b>80696</b>							
Client ID: <b>MW-6-221216</b>	Batch ID: <b>38931</b>	Analysis Date: <b>12/22/2022</b>	SeqNo: <b>1669228</b>								
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	25.6	0.200	20.00	0	128	52.3	147				
1,1-Dichloroethene	24.3	0.500	20.00	0	121	68	152				
trans-1,2-Dichloroethene	24.6	0.350	20.00	0	123	79.1	131				
cis-1,2-Dichloroethene	23.1	0.500	20.00	0	115	78.3	131				
Trichloroethene (TCE)	21.9	0.400	20.00	0	110	75	133				
Tetrachloroethene (PCE)	23.1	0.350	20.00	0	115	78	131				
Surr: Dibromofluoromethane	23.3		25.00		93.1	80	120				
Surr: Toluene-d8	24.1		25.00		96.2	80	120				
Surr: 1-Bromo-4-fluorobenzene	29.4		25.00		117	80	120				

Client Name: GEIT	Work Order Number: 2212377
Logged by: Elisabeth Samoray	Date Received: 12/16/2022 4:37:00 PM

**Chain of Custody**

1. Is Chain of Custody complete?      Yes       No       Not Present
2. How was the sample delivered?      Client

**Log In**

3. Coolers are present?      Yes       No       NA
4. Shipping container/cooler in good condition?      Yes       No
5. Custody Seals present on shipping container/cooler?  
(Refer to comments for Custody Seals not intact)      Yes       No       Not Present
6. Was an attempt made to cool the samples?      Yes       No       NA
7. Were all items received at a temperature of >2°C to 6°C \*      Yes       No       NA
8. Sample(s) in proper container(s)?      Yes       No
9. Sufficient sample volume for indicated test(s)?      Yes       No
10. Are samples properly preserved?      Yes       No
11. Was preservative added to bottles?      Yes       No       NA
12. Is there headspace in the VOA vials?      Yes       No       NA
13. Did all samples containers arrive in good condition(unbroken)?      Yes       No
14. Does paperwork match bottle labels?      Yes       No
15. Are matrices correctly identified on Chain of Custody?      Yes       No
16. Is it clear what analyses were requested?      Yes       No
17. Were all holding times able to be met?      Yes       No

**Special Handling (if applicable)**

18. Was client notified of all discrepancies with this order?      Yes       No       NA

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

19. Additional remarks:

**Item Information**

Item #	Temp °C
Sample 1	6.0

\* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C



**APPENDIX C**  
**Report Limitations and Guidelines for Use**

## **APPENDIX C**

### **REPORT LIMITATIONS AND GUIDELINES FOR USE<sup>1</sup>**

This appendix provides information to help you manage your risks with respect to the use of this report. Please confer with GeoEngineers if you need to know more about how these “Report Limitations and Guidelines for Use” apply to your project or property.

#### **Read These Provisions Closely**

It is important to recognize that environmental engineering and geoscience practices (geotechnical engineering, geology and environmental science) are less exact than other engineering and natural science disciplines. GeoEngineers includes these explanatory “limitations” provisions in our reports to help reduce the risk of misunderstandings or unrealistic expectations that lead to disappointments, claims and disputes.

#### **Environmental Services Are Performed for Specific Purposes, Persons and Projects**

GeoEngineers has performed Groundwater Compliance Monitoring for use by Bucklin Place for the Ultra Custom Cleaners Site located at 2222 NW Bucklin Hill in Silverdale, Washington in general accordance with the scope and limitations of our proposal dated October 15, 2021. This report has been prepared for the exclusive use of Bucklin Place. This report is not intended for use by others, and the information contained herein is not applicable to other properties.

GeoEngineers structures its services to meet the specific needs of its clients. For example, an ESA 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 property. Use of this report is not recommended for any purpose or project other than as expressly stated in this report.

#### **This Environmental Report is Based on a Unique Set of Project-Specific Factors**

This report has been prepared for Bucklin Place. GeoEngineers considered a number of unique, project-specific factors when establishing the scope of services for this Project. Unless GeoEngineers specifically indicates otherwise, it is important not to 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 Project changes were made.

If changes to the Project or property occur after the date of this report, GeoEngineers cannot be responsible for any consequences of such changes in relation to this report unless we have been given the opportunity

---

<sup>1</sup> Developed based on material provided by GBA, GeoProfessional Business Association; [www.geoprofessional.org](http://www.geoprofessional.org).

to review our interpretations and recommendations in the context of such changes. Based on that review, we can provide written modifications or confirmation, as appropriate.

### **Reliance Conditions for Third Parties**

This report was prepared for the exclusive use of the party to whom this report is addressed. No other party may rely on the product of our services unless we agree to such reliance in advance and in writing. Within the limitations of the agreed Project scope, schedule and budget, our services have been executed in accordance with our Agreement with the Client and generally accepted environmental practices in this area at the time this report was prepared.

### **Environmental Regulations Change and Evolve**

Some substances may be present in the vicinity of the Site in quantities or under conditions that may have led, or may lead, to contamination of the 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 substances, change or if more stringent environmental standards are developed in the future.

### **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 man-made events such as construction on or adjacent to the Site, by new releases of hazardous substances, new information or technology that become available subsequent to the report date, or by natural events such as floods, earthquakes, slope instability or groundwater fluctuations. Please contact GeoEngineers before applying this report for its intended purpose so that GeoEngineers may evaluate whether changed conditions affect the continued applicability of the report.

### **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 its professional judgment to render an informed opinion about subsurface conditions throughout the property. Actual subsurface conditions may differ significantly from those indicated in this report. Our report, conclusions and interpretations should not be construed as a warranty of the subsurface conditions.

### **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.

A Client that desires these specialized services is advised to obtain them from a consultant who offers services in this specialized field.

