Groundwater Compliance Monitoring November 2021 and First Quarter 2022

Ultra Custom Cleaners
2222 NW Bucklin Hill Road
Silverdale, Washington

for
Bucklin Place LLC

March 1, 2024

GeoEngineers

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2101 4th Avenue, Suite 950
Seattle, Washington 98121
253.383.4940

Groundwater Compliance Monitoring
November 2021 and First Quarter 2022

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

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 4th Avenue, Suite 950
Seattle, Washington 98121
253.383.4940

Ian D. Young, LG
Senior Geologist

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BRW:KJ:IDY:mce:nl

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1.0 INTRODUCTION

This report summarizes the initial baseline groundwater monitoring and the first round of quarterly groundwater compliance monitoring during the First Quarter 2022 (1Q2022) completed for the Model Toxics Control Act (MTCA) cleanup site (Site) known as "Ultra Custom Cleaners" 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 soil and groundwater investigation conducted between November 2021 to March 2022 was to delineate the lateral and vertical extent of chlorinated solvents associated with historical dry-cleaning operations in soil and groundwater. In order to characterize and monitor PCE-impacted perched groundwater at the Site, five shallow groundwater monitoring wells were installed in November 2021 in the vicinity of Suite 105, in addition to a monitoring well installed in the underlying deep aquifer in 2018. An initial round of groundwater monitoring was conducted in November 2021 to establish a baseline of groundwater conditions prior to the removal of PCE-contaminated soil and application of a bioremediation agent to the completed and restored soil excavation in January 2022. An infiltration system was installed below the restored finished slab within the Suite 105 tenant space to allow later applications of the bioremediation agent.

3.0 GROUNDWATER MONITORING

GeoEngineers conducted groundwater sampling and documented groundwater conditions in monitoring wells MW-1 through MW-6 on November 21, 2021 and March 17, 2022. Groundwater samples collected from each well were submitted for chemical analysis of the following analytes: PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, 1,1-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 ranged between 5.28 feet below ground surface (bgs) (MW-6) and 6.91 feet bgs (MW-2) on November 21, 2021, and from 5.27 bgs (MW-6) and 6.97 feet bgs (MW-2) on March 17, 2022; deep aquifer well MW-1 produced water under artesian pressure during both monitoring events. Groundwater elevations measured on November 21, 2021 and March 17, 2022 ranged from 39.76 feet (MW-2) to 41.29 feet (MW-5), and on March 17, 2022 ranged from 39.70 feet (MW-2) to 40.90 feet (MW-5) (North American Vertical Datum of 1988 [NAVD88]). The groundwater flow direction was generally toward the south-southwest during both monitoring events. Depths to groundwater and groundwater elevations are summarized in Table 1. The groundwater elevations and groundwater elevation contours for November 2021 and March 2022 are shown in Figures 2 and 3, respectively.

3.2. Groundwater Analytical Results

The chemical analytical results are described below, summarized in Table 1, and depicted on Figures 4 and 5. A copy of the laboratory analytical reports are provided in Appendix B.

3.2.1. Pre-Remediation Analytical Results – November 2021

PCE was detected at a concentration less than the MTCA Method A cleanup level (5 micrograms per liter [µg/L]) at both MW-2 (0.840 µg/L), MW-4 (1.24 µg/L) and MW-5 (1.27 µg/L). PCE was not detected at a concentration greater than the laboratory reporting limit at MW-3 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, 1,1-DCE and vinyl chloride greater than the laboratory reporting limit for MW-1 through MW-6. These analytical results are depicted on Figure 4.

3.2.2. Compliance Groundwater Monitoring Analytical Results – March 2022

The bioremediation compound treatment was applied to the open soil remediation excavation in January 2022 prior to backfill and restoration of the excavation. During the March 2022 quarterly groundwater compliance monitoring event, there were no detections of PCE, TCE, cis-1,2 DCE, trans-1,2-DCE, 1,1-DCE and vinyl chloride greater than the laboratory reporting limit for MW-1 through MW-6. These analytical results are depicted on Figure 4.

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.

TABLES

GeoEngineers

Table 1

Groundwater Chemical Analytical Results (VOCs)

Ultra Custom Cleaners

2222 NW Bucklin Hill Road

Silverdale, Washington

Sample ID[1]	Sample Date	Depth to Groundwater (from TOC)	Groundwater Elevation (Feet NAVD88)	VOCs[2] (µg/L)					
				Tetrachloroethene (PCE)	Trichloroethene (TCE)	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride
Quarterly Groundwater Monitoring									
MW-1									
MW-1-211121	11/21/2021	0.00	< 46.46[3]	< 0.400	< 0.500	< 0.500	< 0.500	< 0.500	< 0.200
MW-1-220317	3/17/2022	0.00	< 46.46[3]	< 0.400	< 0.500	< 0.500	< 0.500	< 0.500	< 0.200
MW-2									
MW-2-211121	11/21/2021	6.91	39.76	**0.840**	< 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-3									
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-4									
MW-4-211121	11/21/2021	6.25	40.64	**1.24**	< 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-5									
MW-5-211121	11/21/2021	6.37	41.29	**1.27**	< 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-6									
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
MTCA Method A or B Screening Level Protective of Drinking Water				5	5	16[4]	160[4]	400[4]	0.2

Notes:

[1]Sampling locations shown on Figure 3.

[2]Volatile Organic Compounds (VOCs) analyzed by U.S. Environmental Protection Agency (EPA) Method 8260C.

[3]MW-1 screened in deep groundwater aquifer; groundwater under hydrostatic head and rising above TOC.

[4]Method B Non-Cancer screening level.

µg/L = micrograms per liter

ND = Not Detected

TOC = top of casing

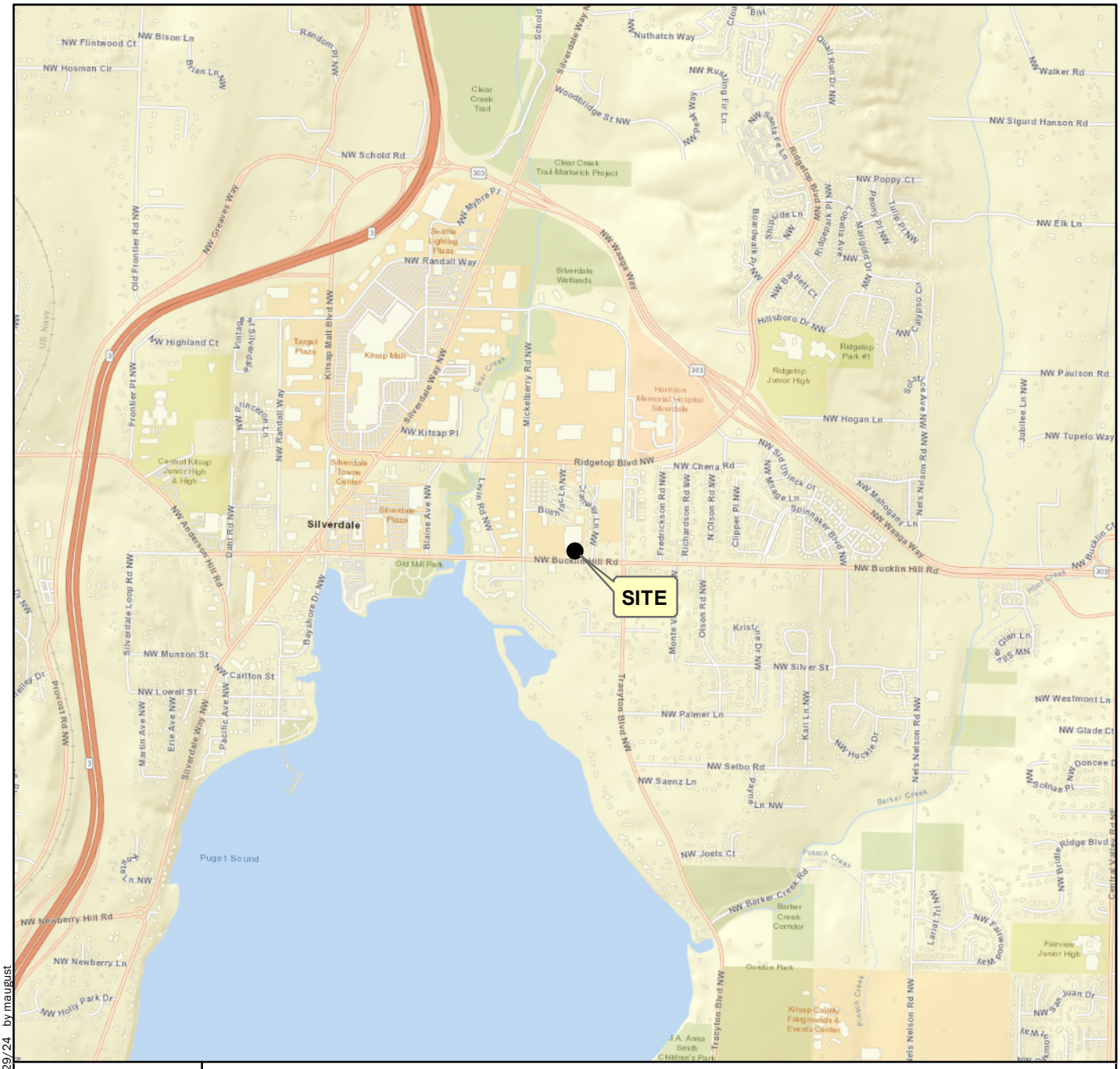
Bolding indicates analyte was detected.

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.

FIGURES

GeoEngineers



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

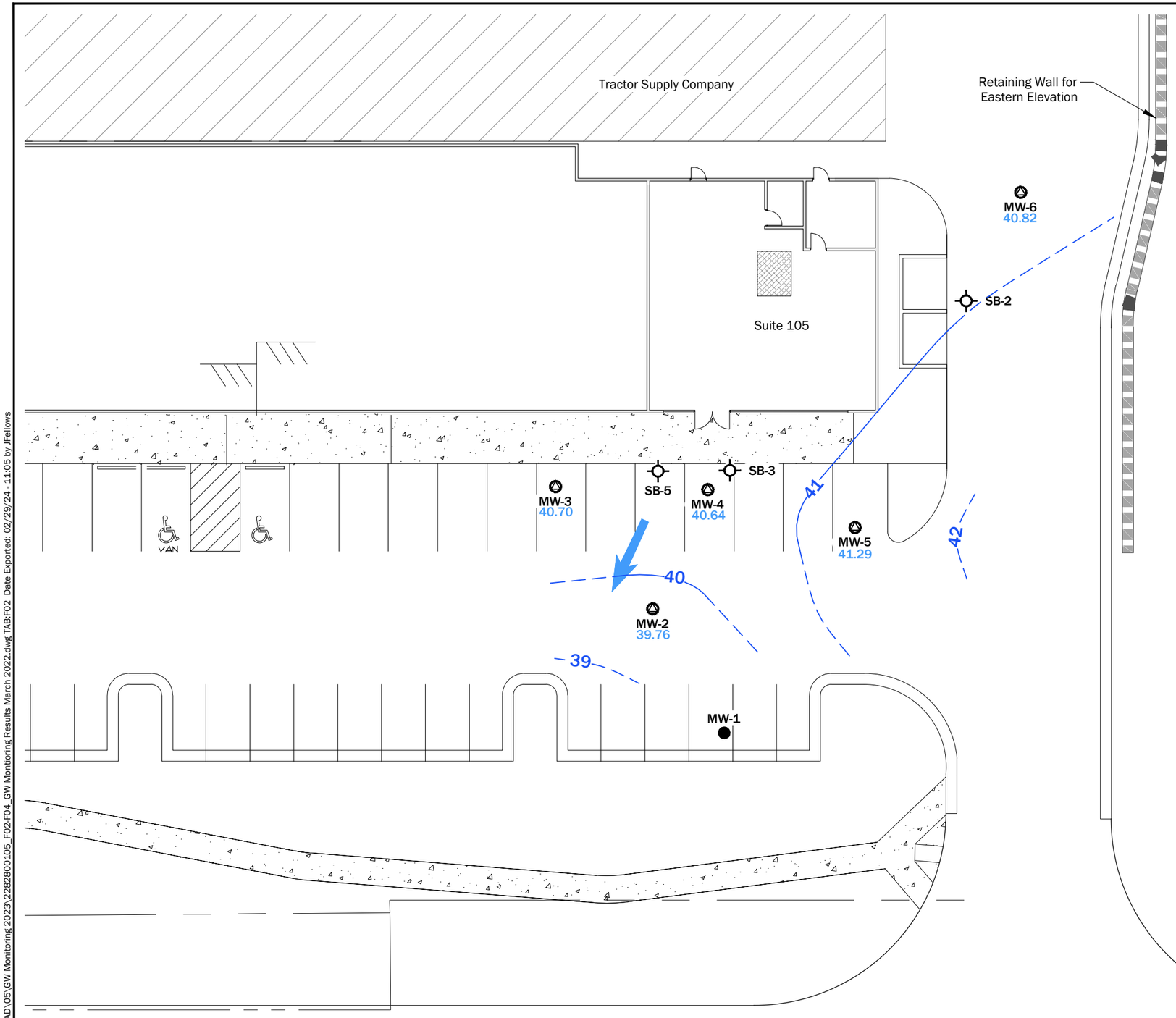
P:\22\22828001\GIS\MXD\228280001_F01_VicinityMap.mxd Date Exported: 02/29/24 by:maugust

Vicinity Map

Ultra Custom Cleaners
2222 NW Bucklin Hill Road
Silverdale, Washington

GeoEngineers

Figure 1



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
- 39.76 — Groundwater Elevation
- 40 — Interpreted Groundwater Contour
- Interpreted Groundwater Flow Direction

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

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

N

0 20

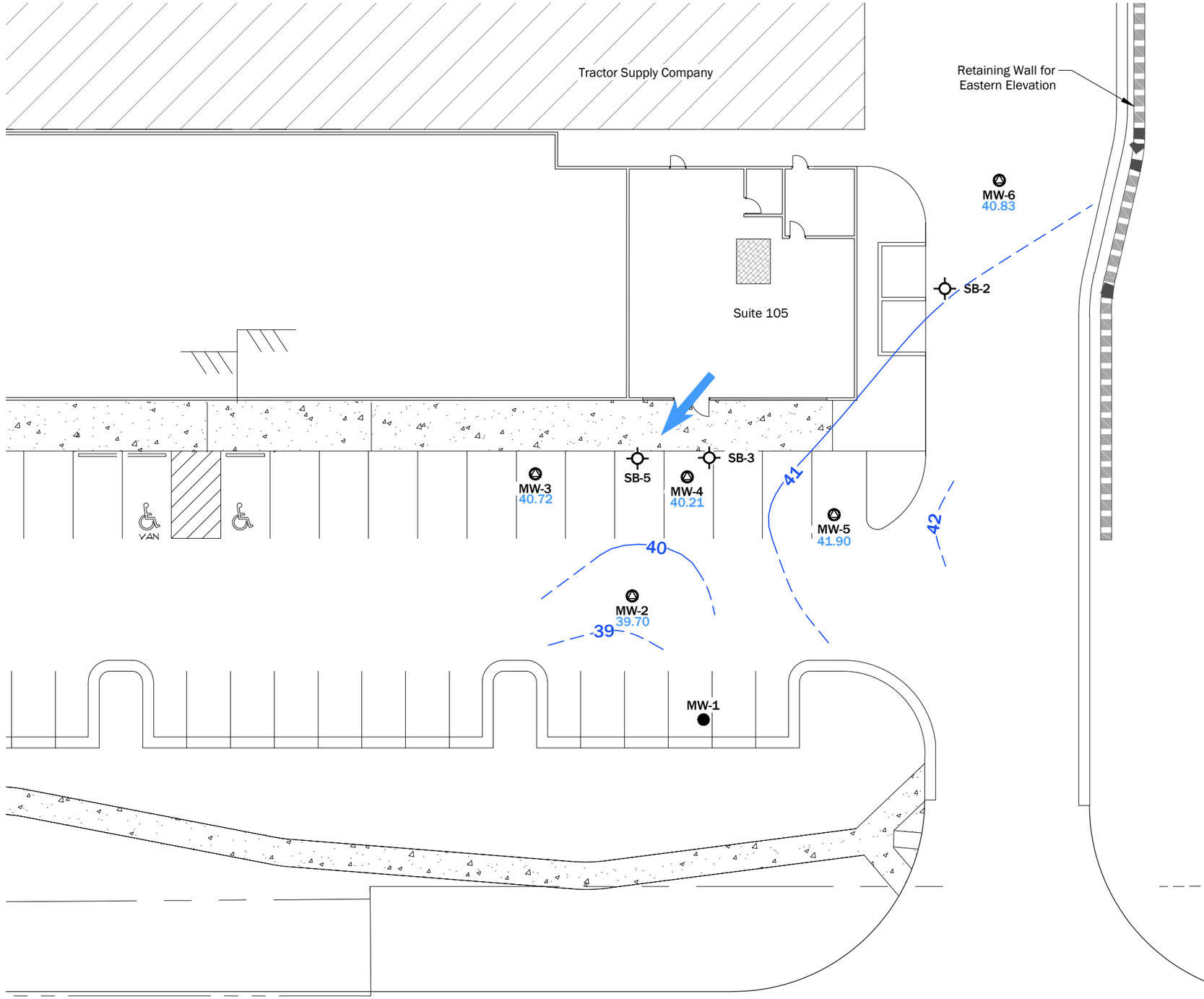
Feet

Groundwater Contour Map
November 2021

Ultra Custom Cleaners
2222 NW Bucklin Hill Road
Silverdale, Washington

GeoEngineers

Figure 2



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
- 39.70 — Groundwater Elevation
- 40 — Interpreted Groundwater Contour
- Interpreted Groundwater Flow Direction

Source(s):

- Background Data Received 9/08/21

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

N

0 20

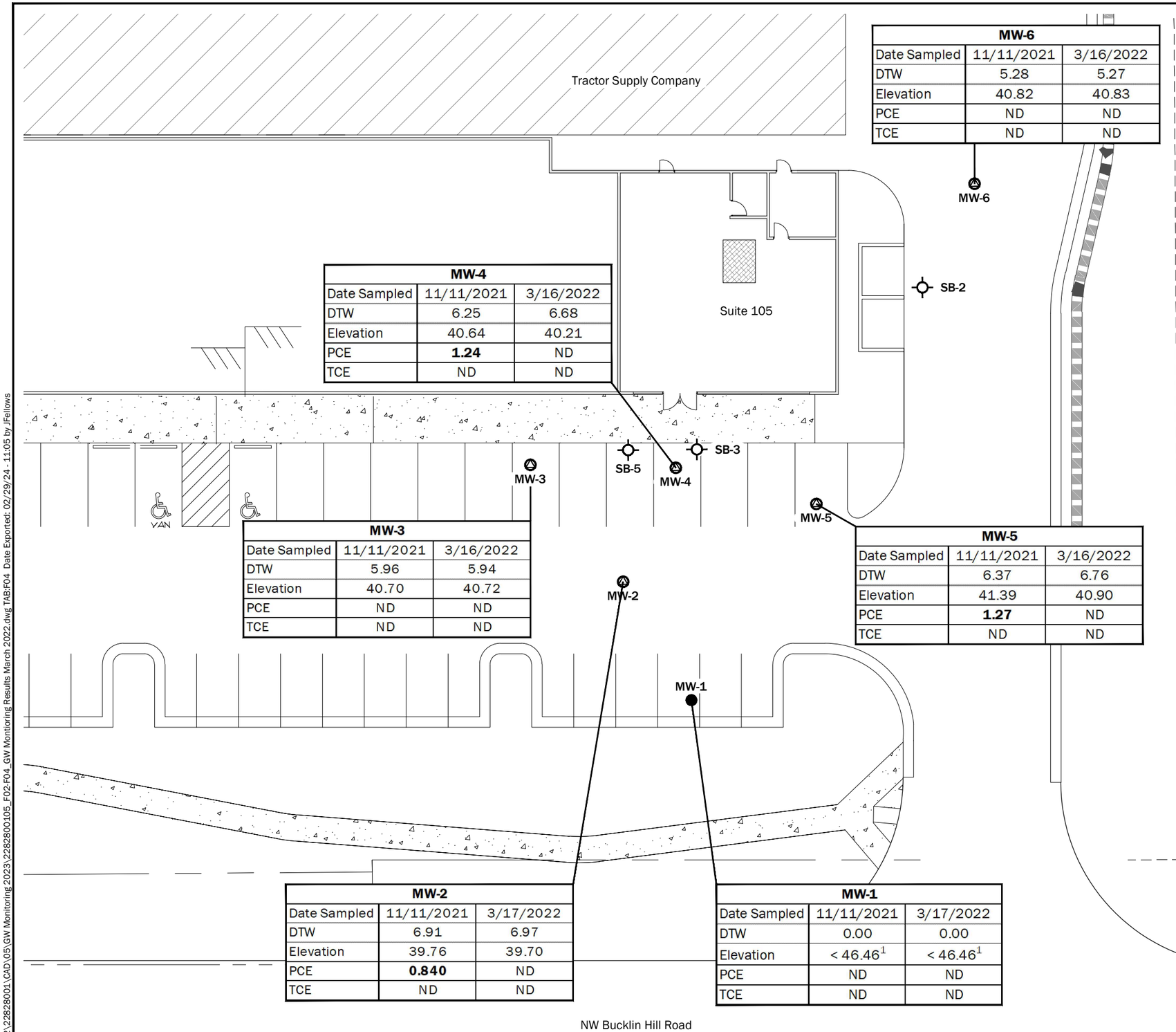
Feet

Groundwater Contour Map March 2022

Ultra Custom Cleaners
2222 NW Bucklin Hill Road
Silverdale, Washington

GeoEngineers

Figure 3



MW-6		
Date Sampled	11/11/2021	3/16/2022
DTW	5.28	5.27
Elevation	40.82	40.83
PCE	ND	ND
TCE	ND	ND

MW-4		
Date Sampled	11/11/2021	3/16/2022
DTW	6.25	6.68
Elevation	40.64	40.21
PCE	**1.24**	ND
TCE	ND	ND

MW-3		
Date Sampled	11/11/2021	3/16/2022
DTW	5.96	5.94
Elevation	40.70	40.72
PCE	ND	ND
TCE	ND	ND

MW-5		
Date Sampled	11/11/2021	3/16/2022
DTW	6.37	6.76
Elevation	41.39	40.90
PCE	**1.27**	ND
TCE	ND	ND

MW-2		
Date Sampled	11/11/2021	3/17/2022
DTW	6.91	6.97
Elevation	39.76	39.70
PCE	**0.840**	ND
TCE	ND	ND

MW-1		
Date Sampled	11/11/2021	3/17/2022
DTW	0.00	0.00
Elevation	< 46.46[1]	< 46.46[1]
PCE	ND	ND
TCE	ND	ND

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

1 — 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

N

0 20

Feet

Groundwater Analytical Results November 2021 and March 2022

Ultra Custom Cleaners
2222 NW Bucklin Hill Road
Silverdale, Washington

GeoEngineers

Figure 4

APPENDICES

GeoEngineers

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 three 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 data quality exception section 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.

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

GeoEngineers
Ian Young
2101 4th Ave, Suite 950
Seattle, WA 98121

RE: Bucklin
Work Order Number: 2203459

March 25, 2022

Attention Ian Young:

Fremont Analytical, Inc. received 7 sample(s) on 3/18/2022 for the analyses presented in the following report.

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

Date: *03/25/2022*

CLIENT: GeoEngineers
Project: Bucklin
Work Order: 2203459

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2203459-001	MW-1-220317	03/17/2022 8:45 AM	03/18/2022 12:54 PM
2203459-002	MW-2-220317	03/17/2022 7:40 AM	03/18/2022 12:54 PM
2203459-003	MW-3-220316	03/16/2022 10:50 AM	03/18/2022 12:54 PM
2203459-004	MW-4-220316	03/16/2022 11:35 AM	03/18/2022 12:54 PM
2203459-005	MW-5-220316	03/16/2022 12:20 PM	03/18/2022 12:54 PM
2203459-006	MW-6-220316	03/16/2022 1:00 PM	03/18/2022 12:54 PM
2203459-007	Trip Blank	03/15/2022 9:13 AM	03/18/2022 12:54 PM

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

Case Narrative

WO#: **2203459**
Date: **3/25/2022**

CLIENT: GeoEngineers
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 & Acronyms

WO#: **2203459**
Date Reported: **3/25/2022**

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

Analytical Report

Work Order: **2203459**
Date Reported: **3/25/2022**

CLIENT: GeoEngineers
Project: Bucklin

Lab ID: 2203459-001 **Collection Date:** 3/17/2022 8:45:00 AM
Client Sample ID: **MW-1-220317** **Matrix:** Groundwater

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 35829		Analyst: MVB
Vinyl chloride	ND	0.200		µg/L	1	3/22/2022 11:32:29 PM
1,1-Dichloroethene	ND	0.500		µg/L	1	3/22/2022 11:32:29 PM
trans-1,2-Dichloroethene	ND	0.500		µg/L	1	3/22/2022 11:32:29 PM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	3/22/2022 11:32:29 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	3/22/2022 11:32:29 PM
Tetrachloroethene (PCE)	ND	0.400		µg/L	1	3/22/2022 11:32:29 PM
Surr: Dibromofluoromethane	106	80 - 120		%Rec	1	3/22/2022 11:32:29 PM
Surr: Toluene-d8	103	80 - 120		%Rec	1	3/22/2022 11:32:29 PM
Surr: 1-Bromo-4-fluorobenzene	99.5	80 - 120		%Rec	1	3/22/2022 11:32:29 PM

Lab ID: 2203459-002 **Collection Date:** 3/17/2022 7:40:00 AM
Client Sample ID: **MW-2-220317** **Matrix:** Groundwater

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 35829		Analyst: MVB
Vinyl chloride	ND	0.200		µg/L	1	3/23/2022 12:02:36 AM
1,1-Dichloroethene	ND	0.500		µg/L	1	3/23/2022 12:02:36 AM
trans-1,2-Dichloroethene	ND	0.500		µg/L	1	3/23/2022 12:02:36 AM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	3/23/2022 12:02:36 AM
Trichloroethene (TCE)	ND	0.500		µg/L	1	3/23/2022 12:02:36 AM
Tetrachloroethene (PCE)	ND	0.400		µg/L	1	3/23/2022 12:02:36 AM
Surr: Dibromofluoromethane	104	80 - 120		%Rec	1	3/23/2022 12:02:36 AM
Surr: Toluene-d8	105	80 - 120		%Rec	1	3/23/2022 12:02:36 AM
Surr: 1-Bromo-4-fluorobenzene	97.1	80 - 120		%Rec	1	3/23/2022 12:02:36 AM

Analytical Report

Work Order: **2203459**
Date Reported: **3/25/2022**

CLIENT: GeoEngineers
Project: Bucklin

Lab ID: 2203459-003 **Collection Date:** 3/16/2022 10:50:00 AM
Client Sample ID: **MW-3-220316** **Matrix:** Groundwater

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 35829		Analyst: MVB
Vinyl chloride	ND	0.200		µg/L	1	3/23/2022 12:32:44 AM
1,1-Dichloroethene	ND	0.500		µg/L	1	3/23/2022 12:32:44 AM
trans-1,2-Dichloroethene	ND	0.500		µg/L	1	3/23/2022 12:32:44 AM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	3/23/2022 12:32:44 AM
Trichloroethene (TCE)	ND	0.500		µg/L	1	3/23/2022 12:32:44 AM
Tetrachloroethene (PCE)	ND	0.400		µg/L	1	3/23/2022 12:32:44 AM
Surr: Dibromofluoromethane	104	80 - 120		%Rec	1	3/23/2022 12:32:44 AM
Surr: Toluene-d8	104	80 - 120		%Rec	1	3/23/2022 12:32:44 AM
Surr: 1-Bromo-4-fluorobenzene	96.2	80 - 120		%Rec	1	3/23/2022 12:32:44 AM

Lab ID: 2203459-004 **Collection Date:** 3/16/2022 11:35:00 AM
Client Sample ID: **MW-4-220316** **Matrix:** Groundwater

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 35829		Analyst: MVB
Vinyl chloride	ND	0.200		µg/L	1	3/23/2022 1:02:54 AM
1,1-Dichloroethene	ND	0.500		µg/L	1	3/23/2022 1:02:54 AM
trans-1,2-Dichloroethene	ND	0.500		µg/L	1	3/23/2022 1:02:54 AM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	3/23/2022 1:02:54 AM
Trichloroethene (TCE)	ND	0.500		µg/L	1	3/23/2022 1:02:54 AM
Tetrachloroethene (PCE)	ND	0.400		µg/L	1	3/23/2022 1:02:54 AM
Surr: Dibromofluoromethane	102	80 - 120		%Rec	1	3/23/2022 1:02:54 AM
Surr: Toluene-d8	105	80 - 120		%Rec	1	3/23/2022 1:02:54 AM
Surr: 1-Bromo-4-fluorobenzene	95.5	80 - 120		%Rec	1	3/23/2022 1:02:54 AM

Analytical Report

Work Order: **2203459**
Date Reported: **3/25/2022**

CLIENT: GeoEngineers
Project: Bucklin

Lab ID: 2203459-005 **Collection Date:** 3/16/2022 12:20:00 PM
Client Sample ID: **MW-5-220316** **Matrix:** Groundwater

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 35829		Analyst: MVB
Vinyl chloride	ND	0.200		µg/L	1	3/23/2022 1:33:02 AM
1,1-Dichloroethene	ND	0.500		µg/L	1	3/23/2022 1:33:02 AM
trans-1,2-Dichloroethene	ND	0.500		µg/L	1	3/23/2022 1:33:02 AM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	3/23/2022 1:33:02 AM
Trichloroethene (TCE)	ND	0.500		µg/L	1	3/23/2022 1:33:02 AM
Tetrachloroethene (PCE)	ND	0.400		µg/L	1	3/23/2022 1:33:02 AM
Surr: Dibromofluoromethane	103	80 - 120		%Rec	1	3/23/2022 1:33:02 AM
Surr: Toluene-d8	104	80 - 120		%Rec	1	3/23/2022 1:33:02 AM
Surr: 1-Bromo-4-fluorobenzene	94.1	80 - 120		%Rec	1	3/23/2022 1:33:02 AM

Lab ID: 2203459-006 **Collection Date:** 3/16/2022 1:00:00 PM
Client Sample ID: **MW-6-220316** **Matrix:** Groundwater

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 35829		Analyst: MVB
Vinyl chloride	ND	0.200		µg/L	1	3/23/2022 2:03:12 AM
1,1-Dichloroethene	ND	0.500		µg/L	1	3/23/2022 2:03:12 AM
trans-1,2-Dichloroethene	ND	0.500		µg/L	1	3/23/2022 2:03:12 AM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	3/23/2022 2:03:12 AM
Trichloroethene (TCE)	ND	0.500		µg/L	1	3/23/2022 2:03:12 AM
Tetrachloroethene (PCE)	ND	0.400		µg/L	1	3/23/2022 2:03:12 AM
Surr: Dibromofluoromethane	104	80 - 120		%Rec	1	3/23/2022 2:03:12 AM
Surr: Toluene-d8	106	80 - 120		%Rec	1	3/23/2022 2:03:12 AM
Surr: 1-Bromo-4-fluorobenzene	95.9	80 - 120		%Rec	1	3/23/2022 2:03:12 AM

Analytical Report

Work Order: **2203459**
Date Reported: **3/25/2022**

CLIENT: GeoEngineers
Project: Bucklin

Lab ID: 2203459-007 **Collection Date:** 3/15/2022 9:13:00 AM
Client Sample ID: **Trip Blank** **Matrix:** Groundwater

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 35829		Analyst: MVB
Vinyl chloride	ND	0.200		µg/L	1	3/22/2022 8:01:34 PM
1,1-Dichloroethene	ND	0.500		µg/L	1	3/22/2022 8:01:34 PM
trans-1,2-Dichloroethene	ND	0.500		µg/L	1	3/22/2022 8:01:34 PM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	3/22/2022 8:01:34 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	3/22/2022 8:01:34 PM
Tetrachloroethene (PCE)	ND	0.400		µg/L	1	3/22/2022 8:01:34 PM
Surr: Dibromofluoromethane	103	80 - 120		%Rec	1	3/22/2022 8:01:34 PM
Surr: Toluene-d8	103	80 - 120		%Rec	1	3/22/2022 8:01:34 PM
Surr: 1-Bromo-4-fluorobenzene	95.6	80 - 120		%Rec	1	3/22/2022 8:01:34 PM

Date: *3/25/2022*

Work Order: 2203459
CLIENT: GeoEngineers
Project: Bucklin

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-35829** SampType: **LCS** Units: **µg/L** Prep Date: **3/22/2022** RunNo: **74214**
Client ID: **LCSW** Batch ID: **35829** Analysis Date: **3/22/2022** SeqNo: **1522157**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	20.2	0.200	20.00	0	101	52.3	147				
1,1-Dichloroethene	20.5	0.500	20.00	0	102	76.5	136				
trans-1,2-Dichloroethene	20.9	0.500	20.00	0	105	79.1	131				
cis-1,2-Dichloroethene	20.7	0.500	20.00	0	104	78.3	131				
Trichloroethene (TCE)	20.8	0.500	20.00	0	104	75	133				
Tetrachloroethene (PCE)	20.6	0.400	20.00	0	103	78	131				
Surr: Dibromofluoromethane	27.4		25.00		110	80	120				
Surr: Toluene-d8	26.5		25.00		106	80	120				
Surr: 1-Bromo-4-fluorobenzene	26.9		25.00		108	80	120				

Sample ID: **MB-35829** SampType: **MBLK** Units: **µg/L** Prep Date: **3/22/2022** RunNo: **74214**
Client ID: **MBLKW** Batch ID: **35829** Analysis Date: **3/22/2022** SeqNo: **1522156**

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	0.500									
cis-1,2-Dichloroethene	ND	0.500									
Trichloroethene (TCE)	ND	0.500									
Tetrachloroethene (PCE)	ND	0.400									
Surr: Dibromofluoromethane	25.7		25.00		103	80	120				
Surr: Toluene-d8	26.1		25.00		104	80	120				
Surr: 1-Bromo-4-fluorobenzene	23.6		25.00		94.2	80	120				

Sample ID: **2203458-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **3/22/2022** RunNo: **74214**
Client ID: **BATCH** Batch ID: **35829** Analysis Date: **3/22/2022** SeqNo: **1522141**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	ND	0.200						0		30	

Fremont Analytical

Date: *3/25/2022*

Work Order: 2203459
CLIENT: GeoEngineers
Project: Bucklin

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2203458-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **3/22/2022** RunNo: **74214**
Client ID: **BATCH** Batch ID: **35829** Analysis Date: **3/22/2022** SeqNo: **1522141**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	ND	0.500						0		30	
trans-1,2-Dichloroethene	ND	0.500						0		30	
cis-1,2-Dichloroethene	ND	0.500						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	
Tetrachloroethene (PCE)	ND	0.400						0		30	
Surr: Dibromofluoromethane	25.9		25.00		104	80	120		0		
Surr: Toluene-d8	26.0		25.00		104	80	120		0		
Surr: 1-Bromo-4-fluorobenzene	23.5		25.00		93.9	80	120		0		

Sample ID: **2203496-001BMS** SampType: **MS** Units: **µg/L** Prep Date: **3/22/2022** RunNo: **74214**
Client ID: **BATCH** Batch ID: **35829** Analysis Date: **3/23/2022** SeqNo: **1522152**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	22.1	0.200	20.00	0	110	52.3	147				
1,1-Dichloroethene	22.4	0.500	20.00	0	112	76.5	136				
trans-1,2-Dichloroethene	22.0	0.500	20.00	0	110	79.1	131				
cis-1,2-Dichloroethene	21.8	0.500	20.00	0	109	78.3	131				
Trichloroethene (TCE)	21.5	0.500	20.00	0	108	75	133				
Tetrachloroethene (PCE)	21.5	0.400	20.00	0	107	78	131				
Surr: Dibromofluoromethane	27.6		25.00		110	80	120				
Surr: Toluene-d8	27.0		25.00		108	80	120				
Surr: 1-Bromo-4-fluorobenzene	27.1		25.00		108	80	120				

Sample Log-In Check List

Client Name:	**GEI**	Work Order Number:	**2203459**
Logged by:	**Clare Griggs**	Date Received:	**3/18/2022 12:54:00 PM**

Chain of Custody

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

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: Date:

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

19. Additional remarks:

Item Information

Item #	Temp ºC
Sample	4.3

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

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 3/17/22 Page: 1 of: 1

Laboratory Project No (internal): 2203459

Project Name: BUCKLIN

Special Remarks: *VOCs: PCE, TCE, 1,1-DCE, cis & trans DCE, VC

Project No: 22828-001-05

Client: GEOENGINEERS

Collected by: PAUL ROBINETTE

Address: 2101 4th AVE S. #950

Location: SILVERDALE, WA

City, State, Zip: Seattle, WA

Report To (PM): Ian Young

Telephone: 206 5185142

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Fax: 206 ~~728~~ 728 2732

PM Email: iyoung@geoengineers.com

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	VOCs (EPA 8260 / 624) *	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8) Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	MW-1-220317	3/17/22	845	GW	3	X											
2	MW-2-220317	3/17/22	740	GW	3	X											
3	MW-3-220316	3/16/22	1050	GW	3	X											
4	MW-4-220316	3/16/22	1135	GW	3	X											
5	MW-5-220316	3/16/22	1220	GW	3	X											
6	MW-6-220316	3/16/22	1300	GW	3	X											
7	TRIP BLANK	3/15/22		W	1	X											
8																	
9																	
10																	

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☑ Standard ☐ Next Day ☐ 3 Day ☐ Same Day ☐ 2 Day _____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x	PAUL ROBINETTE	3/18/22 0700	x	Alex Trejo	3/18/22 12:54
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

GeoEngineers
Ian Young
2101 4th Ave, Suite 950
Seattle, WA 98121

RE: Bucklin
Work Order Number: 2111467

November 29, 2021

Attention Ian Young:

Fremont Analytical, Inc. received 7 sample(s) on 11/22/2021 for the analyses presented in the following report.

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

Date: *12/01/2021*

CLIENT: GeoEngineers
Project: Bucklin
Work Order: 2111467

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2111467-001	MW-1-211121	11/21/2021 3:30 PM	11/22/2021 3:15 PM
2111467-002	MW-2-211121	11/21/2021 4:25 PM	11/22/2021 3:15 PM
2111467-003	MW-3-211121	11/21/2021 3:15 PM	11/22/2021 3:15 PM
2111467-004	MW-4-211121	11/21/2021 1:15 PM	11/22/2021 3:15 PM
2111467-005	MW-5-211121	11/21/2021 2:35 PM	11/22/2021 3:15 PM
2111467-006	MW-6-211121	11/21/2021 12:20 PM	11/22/2021 3:15 PM
2111467-007	Trip Blank		11/22/2021 3:15 PM

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

Revision v1

Case Narrative

WO#: **2111467**
Date: **11/29/2021**

CLIENT: GeoEngineers
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.

12/1/2021: Revision 1 includes an updated select list for VOCs

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
Project: Bucklin

Lab ID: 2111467-001 **Collection Date:** 11/21/2021 3:30:00 PM
Client Sample ID: **MW-1-211121** **Matrix:** Groundwater

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 34547		Analyst: TN
Vinyl chloride	ND	0.200		µg/L	1	11/24/2021 12:47:36 AM
1,1-Dichloroethene	ND	0.500		µg/L	1	11/24/2021 12:47:36 AM
trans-1,2-Dichloroethene	ND	0.500		µg/L	1	11/24/2021 12:47:36 AM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	11/24/2021 12:47:36 AM
Trichloroethene (TCE)	ND	0.500		µg/L	1	11/24/2021 12:47:36 AM
Tetrachloroethene (PCE)	ND	0.400		µg/L	1	11/24/2021 12:47:36 AM
Surr: Dibromofluoromethane	113	80 - 120		%Rec	1	11/24/2021 12:47:36 AM
Surr: Toluene-d8	101	80 - 120		%Rec	1	11/24/2021 12:47:36 AM
Surr: 1-Bromo-4-fluorobenzene	95.3	80 - 120		%Rec	1	11/24/2021 12:47:36 AM

Lab ID: 2111467-002 **Collection Date:** 11/21/2021 4:25:00 PM
Client Sample ID: **MW-2-211121** **Matrix:** Groundwater

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 34547		Analyst: TN
Vinyl chloride	ND	0.200		µg/L	1	11/24/2021 1:17:43 AM
1,1-Dichloroethene	ND	0.500		µg/L	1	11/24/2021 1:17:43 AM
trans-1,2-Dichloroethene	ND	0.500		µg/L	1	11/24/2021 1:17:43 AM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	11/24/2021 1:17:43 AM
Trichloroethene (TCE)	ND	0.500		µg/L	1	11/24/2021 1:17:43 AM
Tetrachloroethene (PCE)	0.840	0.400		µg/L	1	11/24/2021 1:17:43 AM
Surr: Dibromofluoromethane	111	80 - 120		%Rec	1	11/24/2021 1:17:43 AM
Surr: Toluene-d8	99.8	80 - 120		%Rec	1	11/24/2021 1:17:43 AM
Surr: 1-Bromo-4-fluorobenzene	94.7	80 - 120		%Rec	1	11/24/2021 1:17:43 AM

CLIENT: GeoEngineers
Project: Bucklin

Lab ID: 2111467-003 **Collection Date:** 11/21/2021 3:15:00 PM
Client Sample ID: **MW-3-211121** **Matrix:** Groundwater

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 34547		Analyst: TN
Vinyl chloride	ND	0.200		µg/L	1	11/24/2021 1:47:51 AM
1,1-Dichloroethene	ND	0.500		µg/L	1	11/24/2021 1:47:51 AM
trans-1,2-Dichloroethene	ND	0.500		µg/L	1	11/24/2021 1:47:51 AM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	11/24/2021 1:47:51 AM
Trichloroethene (TCE)	ND	0.500		µg/L	1	11/24/2021 1:47:51 AM
Tetrachloroethene (PCE)	ND	0.400		µg/L	1	11/24/2021 1:47:51 AM
Surr: Dibromofluoromethane	113	80 - 120		%Rec	1	11/24/2021 1:47:51 AM
Surr: Toluene-d8	102	80 - 120		%Rec	1	11/24/2021 1:47:51 AM
Surr: 1-Bromo-4-fluorobenzene	95.3	80 - 120		%Rec	1	11/24/2021 1:47:51 AM

Lab ID: 2111467-004 **Collection Date:** 11/21/2021 1:15:00 PM
Client Sample ID: **MW-4-211121** **Matrix:** Groundwater

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 34547		Analyst: TN
Vinyl chloride	ND	0.200		µg/L	1	11/24/2021 2:18:00 AM
1,1-Dichloroethene	ND	0.500		µg/L	1	11/24/2021 2:18:00 AM
trans-1,2-Dichloroethene	ND	0.500		µg/L	1	11/24/2021 2:18:00 AM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	11/24/2021 2:18:00 AM
Trichloroethene (TCE)	ND	0.500		µg/L	1	11/24/2021 2:18:00 AM
Tetrachloroethene (PCE)	1.24	0.400		µg/L	1	11/24/2021 2:18:00 AM
Surr: Dibromofluoromethane	113	80 - 120		%Rec	1	11/24/2021 2:18:00 AM
Surr: Toluene-d8	101	80 - 120		%Rec	1	11/24/2021 2:18:00 AM
Surr: 1-Bromo-4-fluorobenzene	95.3	80 - 120		%Rec	1	11/24/2021 2:18:00 AM

CLIENT: GeoEngineers
Project: Bucklin

Lab ID: 2111467-005 **Collection Date:** 11/21/2021 2:35:00 PM
Client Sample ID: **MW-5-211121** **Matrix:** Groundwater

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 34547		Analyst: TN
Vinyl chloride	ND	0.200		µg/L	1	11/24/2021 2:48:06 AM
1,1-Dichloroethene	ND	0.500		µg/L	1	11/24/2021 2:48:06 AM
trans-1,2-Dichloroethene	ND	0.500		µg/L	1	11/24/2021 2:48:06 AM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	11/24/2021 2:48:06 AM
Trichloroethene (TCE)	ND	0.500		µg/L	1	11/24/2021 2:48:06 AM
Tetrachloroethene (PCE)	1.27	0.400		µg/L	1	11/24/2021 2:48:06 AM
Surr: Dibromofluoromethane	115	80 - 120		%Rec	1	11/24/2021 2:48:06 AM
Surr: Toluene-d8	103	80 - 120		%Rec	1	11/24/2021 2:48:06 AM
Surr: 1-Bromo-4-fluorobenzene	96.2	80 - 120		%Rec	1	11/24/2021 2:48:06 AM

Lab ID: 2111467-006 **Collection Date:** 11/21/2021 12:20:00 PM
Client Sample ID: **MW-6-211121** **Matrix:** Groundwater

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 34547		Analyst: TN
Vinyl chloride	ND	0.200		µg/L	1	11/24/2021 3:18:14 AM
1,1-Dichloroethene	ND	0.500		µg/L	1	11/24/2021 3:18:14 AM
trans-1,2-Dichloroethene	ND	0.500		µg/L	1	11/24/2021 3:18:14 AM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	11/24/2021 3:18:14 AM
Trichloroethene (TCE)	ND	0.500		µg/L	1	11/24/2021 3:18:14 AM
Tetrachloroethene (PCE)	ND	0.400		µg/L	1	11/24/2021 3:18:14 AM
Surr: Dibromofluoromethane	114	80 - 120		%Rec	1	11/24/2021 3:18:14 AM
Surr: Toluene-d8	103	80 - 120		%Rec	1	11/24/2021 3:18:14 AM
Surr: 1-Bromo-4-fluorobenzene	95.3	80 - 120		%Rec	1	11/24/2021 3:18:14 AM

Work Order: 2111467
CLIENT: GeoEngineers
Project: Bucklin

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-34547** SampType: **LCS** Units: **µg/L** Prep Date: **11/23/2021** RunNo: **71536**
Client ID: **LCSW** Batch ID: **34547** Analysis Date: **11/23/2021** SeqNo: **1457244**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	21.3	0.200	20.00	0	107	80	120				
1,1-Dichloroethene	20.4	0.500	20.00	0	102	80	120				
trans-1,2-Dichloroethene	19.8	0.500	20.00	0	98.8	80	120				
cis-1,2-Dichloroethene	20.8	0.500	20.00	0	104	80	120				
Trichloroethene (TCE)	19.8	0.500	20.00	0	98.8	80	120				
Tetrachloroethene (PCE)	19.9	0.400	20.00	0	99.4	80	120				
Surr: Dibromofluoromethane	26.1		25.00		104	80	120				
Surr: Toluene-d8	25.9		25.00		104	80	120				
Surr: 1-Bromo-4-fluorobenzene	25.5		25.00		102	80	120				

Sample ID: **MB-34547** SampType: **MBLK** Units: **µg/L** Prep Date: **11/23/2021** RunNo: **71536**
Client ID: **MBLKW** Batch ID: **34547** Analysis Date: **11/23/2021** SeqNo: **1457243**

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	0.500									
cis-1,2-Dichloroethene	ND	0.500									
Trichloroethene (TCE)	ND	0.500									
Tetrachloroethene (PCE)	ND	0.400									
Surr: Dibromofluoromethane	28.9		25.00		116	80	120				
Surr: Toluene-d8	25.5		25.00		102	80	120				
Surr: 1-Bromo-4-fluorobenzene	24.1		25.00		96.3	80	120				

Sample ID: **2111447-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/23/2021** RunNo: **71536**
Client ID: **BATCH** Batch ID: **34547** Analysis Date: **11/23/2021** SeqNo: **1457222**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	ND	0.200						0		30	

Work Order: 2111467
CLIENT: GeoEngineers
Project: Bucklin

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2111447-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/23/2021** RunNo: **71536**
Client ID: **BATCH** Batch ID: **34547** Analysis Date: **11/23/2021** SeqNo: **1457222**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	ND	0.500						0		30	
trans-1,2-Dichloroethene	ND	0.500						0		30	
cis-1,2-Dichloroethene	ND	0.500						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	
Tetrachloroethene (PCE)	ND	0.400						0		30	
Surr: Dibromofluoromethane	27.9		25.00		112	80	120		0		
Surr: Toluene-d8	25.1		25.00		100	80	120		0		
Surr: 1-Bromo-4-fluorobenzene	23.5		25.00		94.0	80	120		0		

Sample ID: **2111467-006ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/23/2021** RunNo: **71536**
Client ID: **MW-6-211121** Batch ID: **34547** Analysis Date: **11/24/2021** SeqNo: **1457238**

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	0.500						0		30	
cis-1,2-Dichloroethene	ND	0.500						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	
Tetrachloroethene (PCE)	ND	0.400						0		30	
Surr: Dibromofluoromethane	28.4		25.00		114	80	120		0		
Surr: Toluene-d8	25.4		25.00		102	80	120		0		
Surr: 1-Bromo-4-fluorobenzene	23.5		25.00		94.1	80	120		0		

Sample ID: **2111467-005AMS** SampType: **MS** Units: **µg/L** Prep Date: **11/23/2021** RunNo: **71536**
Client ID: **MW-5-211121** Batch ID: **34547** Analysis Date: **11/24/2021** SeqNo: **1457236**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	19.6	0.200	20.00	0	97.9	44.9	151				
1,1-Dichloroethene	18.7	0.500	20.00	0	93.3	73.3	134				

Work Order: 2111467
CLIENT: GeoEngineers
Project: Bucklin

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2111467-005AMS** SampType: **MS** Units: **µg/L** Prep Date: **11/23/2021** RunNo: **71536**
Client ID: **MW-5-211121** Batch ID: **34547** Analysis Date: **11/24/2021** SeqNo: **1457236**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,2-Dichloroethene	17.5	0.500	20.00	0	87.4	77.2	131				
cis-1,2-Dichloroethene	17.0	0.500	20.00	0	85.2	77.6	130				
Trichloroethene (TCE)	16.3	0.500	20.00	0	81.5	72.5	130				
Tetrachloroethene (PCE)	17.8	0.400	20.00	1.270	82.9	77.7	126				
Surr: Dibromofluoromethane	26.5		25.00		106	80	120				
Surr: Toluene-d8	26.1		25.00		104	80	120				
Surr: 1-Bromo-4-fluorobenzene	24.9		25.00		99.6	80	120				

Sample Log-In Check List

Client Name:	**GEI**	Work Order Number:	**2111467**
Logged by:	**Gabrielle Coeuille**	Date Received:	**11/22/2021 3:15:00 PM**

Chain of Custody

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

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: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

19. Additional remarks:

Item Information

Item #	Temp ºC
Sample 1	3.9

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

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 11/21/21 Page: 1 of: 1

Laboratory Project No (internal): 2111467

Project Name: BUCKLIN

Special Remarks:

Project No: 22828-001-05

Client: GEOENGINEERS

Collected by: PBL

Address: 2101 4th Ave #950

Location: SILVERDALE, WA

City, State, Zip: SEATTLE, WA 98121

Report To (PM): IAN YOUNG

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Telephone: 206 568 5142

PM Email: Iyoung@GEOENGINEERS.com

Fax: 206 728 2732

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	VOCs (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8) Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	HVOCs				Comments
1	MW-1-211121	11/21/21	1530	GW	3											X					
2	MW-2-211121		1625		3											X					
3	MW-3-211121		1515		3											X					
4	MW-4-211121		1315		3											X					
5	MW-5-211121		1435		3											X					
6	MW-6-211121		1220		3											X					
7																					
8																					
9																					
10																					

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☒ Standard ☐ Next Day
☐ 3 Day ☐ Same Day
☐ 2 Day ☐ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x	PAUL ROBICHEAU	11/22/21 1240	x	Antonia Jones	11/22/21 12:40
x			x	Justine Mante	11/22 15:15

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 11/21/21 Page: 1 of: 1

Laboratory Project No (internal): 211467

Project Name: BUCKLEY

Special Remarks: Report PCE & Breakdown only per I.Y. 11/29/21 -CG

Project No: 22828-001-05

Client: GEOENGINEERS

Collected by: PBL

Address: 2101 4th Ave #950

Location: SILVERDALE, WA

City, State, Zip: SEATTLE, WA 98121

Report To (PM): IAN YOUNG

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Telephone: 206 568 5142

PM Email: Iyoung@GEOENGINEERS.com

Fax: 206 728 2732

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	VOCs (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8) Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	HVOCs				Comments
1	MW-1-211121	11/21/21	1530	GW	3											X					
2	MW-2-211121		1625		3											X					
3	MW-3-211121		1515		3											X					
4	MW-4-211121		1315		3											X					
5	MW-5-211121		1435		3											X					
6	MW-6-211121		1220		3											X					
7																					
8																					
9																					
10																					

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☒ Standard ☐ Next Day
☐ 3 Day ☐ Same Day
☐ 2 Day (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x	PAUL ROBICHEAU	11/22/21 1240	x	Antonia Jones	11/22/21 12:40
x			x	Justine Mante	11/22 15:15

APPENDIX C
Report Limitations and Guidelines for Use

APPENDIX C
REPORT LIMITATIONS AND GUIDELINES FOR USE[1]

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

[1] Developed based on material provided by ASFE, Professional Firms Practicing in the Geosciences; www.asfe.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.

GeoEngineers