

GROUNDWATER MONITORING REPORT

JUNE 2022

**FORMER PRIME CLEANERS
18001 BOTHELL EVERETT HWY
BOTHELL, WASHINGTON**

July 26, 2022

ZGA Project No. 1001.25.1

Prepared for:
Mill Creek Crossing, LLC



Prepared by:

ZipperGeo
Geoprofessional Consultants

July 26, 2022

Mill Creek Crossing, LLC
22833 Bothell Everett Highway, Suite 207
Bothell, Washington 98021

Attn: Mr. Nicholas Echelbarger

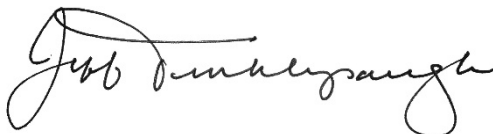
Re: Former Prime Cleaners
June 2022 Groundwater Monitoring Report
18001 Bothell Everett Highway
Bothell, Snohomish County, Washington
ZGA Project No. 1001.25.1
VCP #NW2571

Dear Mr. Echelbarger:

Zipper Geo Associates, LLC (ZGA) is pleased to submit this Groundwater Monitoring Report for the above referenced project site. This investigation was performed in general accordance with the scope of services outlined in our *Work Plan and Cost Estimate*, dated April 26, 2022, authorized June 1, 2022.

We appreciate the opportunity to provide our services. Please contact the undersigned at (425) 582-9928 if you have questions regarding the information provided in the report.

Sincerely,
Zipper Geo Associates, LLC



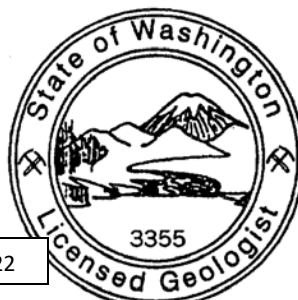
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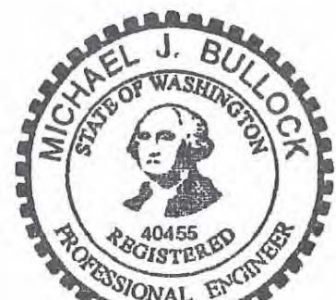


Sean W. Donnan, P.G., L.E.G., L.Hg.
Principal



Signed 7/26/2022

JEFFREY S. TINKLEPAUGH



Signed 7/26/2022

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1.0 INTRODUCTION

This report presents the results of groundwater monitoring and sampling activities conducted at the Former Prime Cleaners project site on June 29 and June 30, 2022. Our conclusions are based on our understanding of the local hydrogeologic setting and a comparison of laboratory data to applicable cleanup standards established by Chapter 70A.305 RCW and its implementing regulations, the Model Toxics Control Act, Chapter 173-340 WAC (collectively, MTCA).

This groundwater monitoring and sampling event included ten monitoring wells (MW-1 through MW-10) located on the subject property and in the west-adjointing Bothell-Everett Highway (State Highway 527) right-of-way. The dual-phase extraction (DPE) in-situ remediation system has been out of operation since the Summer of 2021.

This data set is intended to evaluate the potential rebound of contaminants of concern (COCs) in groundwater and establish a baseline to evaluate the efficacy of future in-situ remediation activities. The primary COCs in groundwater are tetrachloroethylene (PCE) and its degradation products, trichloroethylene (TCE), cis-1,2-dichloroethylene (cis-1,2-DCE), trans-1,2-dichloroethylene (trans-1,2-DCE), 1,1-dichloroethylene, and vinyl chloride (VC).

2.0 METHODOLOGY

2.1 Groundwater Monitoring and Sampling

ZGA visited the Property on June 29 and June 30, 2022 to collect groundwater elevation data and groundwater samples for laboratory analysis. Rapid water levels were recorded prior to sampling. Each well was opened upon arrival and allowed to equilibrate to the ambient barometric pressure for at least 20 minutes. Depth to groundwater was then measured relative to the north rim of the top of the PVC casing with an electronic water level meter.

Groundwater samples were collected from each of the ten monitoring wells. A duplicate sample was collected from MW-8. An equipment blank was collected from deionized water that was used to rinse the submersible pump after decontamination.

Groundwater monitoring wells were purged using a portable bladder pump equipped with a disposable bladder and dedicated tubing. The pump was lowered gently into the water column to a depth that corresponded with the highest concentration of PCE observed in that well in soil during earlier phases of remedial investigations. If no PCE was measured in soil in a well, the pump was set at the mid-point of the screen. Flow rates during purging were maintained at approximately 0.1 to 0.3 liters per minute. During the purging process, groundwater quality parameters including temperature, electrical conductivity (EC), pH, turbidity, dissolved oxygen (DO), and oxidation-reduction potential (ORP) were measured at regular intervals using a Horiba U-22 water-quality meter equipped with a flow cell. Purging at a given well was

considered complete when: DO and turbidity were within +/- 10% variance; pH was within +/- 0.1 variance; EC was with +/- 3% variance; and ORP was within +/- 10 mV. All non-disposable pump components were decontaminated after sampling by rinsing with potable water, scrubbing in a solution of Alconox™ and potable water, and a final rinse with distilled water. Purge water and decontamination water were stored in a sealed, labeled 55-gallon drum located within the chain-link fence of the DPE enclosure. Groundwater sample collection forms are enclosed in Appendix A.

Groundwater samples were collected after parameter stabilization into laboratory-supplied glass 40-mL VOA vials preserved with hydrochloric acid. Sample containers were labeled with a unique sample ID, the project number, and the date and time of collection. Sample containers were immediately stored in a chilled cooler pending transport to the analytical laboratory. Sample containers were transported in a under chain of custody procedures to ALS Environmental Laboratory (ALS), a Washington State-accredited analytical laboratory in Everett, Washington.

2.2 Laboratory Analysis

Groundwater samples were analyzed for halogenated volatile organic compounds (VOCs) by EPA Method 8260D. All analyses were completed on a standard turnaround. Analytical laboratory reports and executed chain-of-custody forms are included in Appendix B.

Analytical results were checked for completeness immediately upon receipt from the laboratory to confirm that data and QA/QC information requested were present. Data quality was assessed by considering hold times, duplicate results, equipment blank results, surrogate recovery, method blanks, matrix spike and matrix spike duplicate (MS/MSD) recovery, and method reporting limits. QA/QC review was completed using guidance described in *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (Draft Final, USEPA, 2017). Our evaluation assumes that the QA/QC is correct as reported by the laboratory, and merely provides an interpretation of the QA/QC results.

- Hold Times. All analyses were completed within specified hold times.
- Duplicate Results. Duplicate sample concentrations were within the anticipated margin of error for the analytical method.
- Equipment Blank. Methylene chloride was detected at a concentration of 7 µg/L in the equipment blank. We interpret that this chemical is most likely a laboratory contaminant and that its presence at low concentrations in the equipment blank does not significantly degrade the quality of the data set. Methylene chloride was not detected in the other samples. Other than methylene chloride, no analytes were detected in the equipment blank above their reporting limits.
- Method Blanks. Analytes were not detected in any of the laboratory method blanks.
- Laboratory Control Sample Results. Recoveries were all within laboratory limits.

- Laboratory Reporting Limits. Laboratory reporting detection limits (RDLs) were below applicable cleanup levels.

Based upon our QA/QC review of laboratory data, it is our opinion that the overall dataset is useable as qualified for the purposes of this *Groundwater Monitoring Report*.

3.0 RESULTS

3.1 Groundwater Elevations and Prevailing Direction of Groundwater Flow

Groundwater elevation data collected during this monitoring event are summarized in Table 1. Interpreted groundwater elevation contours and prevailing direction of groundwater flow are depicted on Figure 1. Based on these data, we interpret that the prevailing direction of groundwater flow within the study area is generally to the south. This prevailing direction of groundwater flow is consistent with previous groundwater monitoring events.

3.2 Analytical Laboratory Results

The following COCs were reported above laboratory reporting detection limits (RDLs) in groundwater samples collected on June 29 and 30, 2022:

- PCE was reported at concentrations of 6.0, 23, and 22 µg/L in samples collected from monitoring wells MW-3, MW-4, and MW-8, respectively. PCE was also reported at a concentration of 22 µg/L in the duplicate sample collected from MW-8.
- Chloroform was reported at a concentration of 8.6 µg/L in the groundwater sample collected from monitoring well MW-10. This concentration does not exceed the MTCA Method B cleanup level of 80 µg/L.

Unless discussed above, COCs were not reported above their respective RDLs.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the data summarized on the enclosed tables and figures and our understanding of the local hydrogeology, we conclude the following:

- Groundwater collected from monitoring wells MW-3, MW-4, and MW-8 on June 29 and 30, 2022, contained PCE at concentrations that exceed the applicable MTCA cleanup level. Further remediation is necessary to achieve project cleanup objectives.
- We interpret that the detection of chloroform in groundwater in monitoring well MW-10 is likely derived from chlorinated public water supplies.
- Groundwater elevations have risen in each well since the previous measurement in September 2021.

- As illustrated on Table 3, PCE concentrations have slightly increased in monitoring wells MW-3, MW-4, and MW-8 since the DPE system was taken offline during the Summer of 2021. This trend suggests that source removal has not been completed to the extent necessary to control potential rebound after remediation.

Based on the trends in PCE concentrations in groundwater on Table 3, we interpret that the DPE system was effective at reducing contaminant concentrations in affected groundwater. However, since operation of the DPE system was halted in the Summer of 2021, PCE concentrations in groundwater have increased in monitoring wells proximal to the source area (MW-3, MW-4, and MW-8). Groundwater cleanup objectives have not been achieved. Additional source removal is warranted to achieve groundwater cleanup objectives (MTCA Method A compliance) and reduce the risk of contaminant rebound after remediation. We recommend continued mechanical source removal using the existing DPE system with modifications as necessary to prevent unplanned shutdowns. We recommend additional groundwater monitoring and sampling be conducted during the remedial action to evaluate the efficacy of the treatment and document its progress relative to cleanup objectives.

5.0 RELIANCE AND LIMITATIONS

The analytical results within this report are based on samples collected from the indicated locations at the time of sample collection and should not be construed as a warranty of the subsurface conditions throughout the site or at other times. No environmental investigation can wholly eliminate uncertainty regarding chemicals of concern in association with a property. This environmental investigation is intended to reduce, but not eliminate, uncertainty regarding the existence of chemicals of concern in the subsurface. No warranty, express or implied, is made.

This report has been prepared for the exclusive use of Mill Creek Crossing, LLC. and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the site) is prohibited without the express written authorization of Mill Creek Crossing, LLC. and ZGA.

TABLES

Table 1. Groundwater Elevations



Well ID	Relative Casing Elevation (ft.)	Date of Measurement	Depth to Groundwater (ft.)	Relative Groundwater Elevation (ft.)
MW-1	296.31	8/25/2010	25.22	271.09
		5/9/2011	21.18	275.13
		5/23/2012	22.73	273.58
		1/9/2017	22.85	273.46
		1/11/2017	22.90	273.41
		3/20/2017	20.35	275.96
		8/17/2017	24.87	271.44
		11/14/2017	24.66	271.65
		2/13/2018	21.65	274.66
		1/14/2019	23.78	272.53
		4/10/2019	24.04	272.27
		12/3/2020	23.95	272.36
		9/3/2021	26.18	270.13
		6/30/2022	23.81	272.50
MW-2	296.47	8/25/2010	25.58	270.89
		5/9/2011	21.61	274.86
		5/23/2012	22.97	273.50
		1/9/2017	23.14	273.33
		1/11/2017	23.22	273.25
		3/20/2017	20.81	275.66
		8/17/2017	25.57	270.90
		11/14/2017	25.15	271.32
		2/13/2018	22.00	274.47
		1/14/2019	24.05	272.42
		4/10/2019	24.40	272.07
		12/3/2020	24.30	272.17
		9/3/2021	26.57	269.90
		6/30/2022	24.18	272.29
MW-3	296.96	8/25/2010	26.17	270.79
		5/9/2011	22.21	274.75
		5/23/2012	23.49	273.47
		1/9/2017	23.66	273.30
		1/12/2017	23.80	273.16
		3/20/2017	21.30	275.66
		8/17/2017	26.10	270.86
		11/14/2017	25.69	271.27
		2/13/2018	22.45	274.51
		1/14/2019	24.53	272.43
		4/10/2019	24.92	272.04
		12/3/2020	24.82	272.14
		9/3/2021	27.15	269.81
		6/30/2022	24.72	272.24
MW-4	296.56	8/25/2010	25.76	270.80
		5/9/2011	21.77	274.79
		5/23/2012	23.10	273.46
		1/9/2017	23.21	273.35
		1/13/2017	23.39	273.17
		3/20/2017	20.91	275.65
		8/17/2017	25.67	270.89
		11/14/2017	25.32	271.24
		2/13/2018	22.10	274.46
		1/14/2019	24.16	272.40
		4/10/2019	24.53	272.03
		12/3/2020	26.12	270.44
		9/3/2021	24.44	272.12
		6/30/2022	24.33	272.23
MW-5	289.85	8/25/2010	18.71	271.14
		5/9/2011	14.96	274.89
		5/23/2012	16.18	273.67
		1/9/2017	17.36	272.49
		1/12/2017	16.46	273.39
		3/20/2017	14.36	275.49
		8/17/2017	18.71	271.14
		11/14/2017	18.51	271.34
		2/13/2018	15.52	274.33
		1/14/2019	17.59	272.26
		4/10/2019	17.64	272.21
		12/3/2020	17.85	272.00
		9/3/2021	19.93	269.92
		6/30/2022	17.28	272.57

Table 1. Groundwater Elevations



Well ID	Relative Casing Elevation (ft.)	Date of Measurement	Depth to Groundwater (ft.)	Relative Groundwater Elevation (ft.)
MW-6	289.94	8/25/2010	18.91	271.03
		5/9/2011	15.06	274.88
		5/23/2012	16.30	273.64
		1/9/2017	16.44	273.50
		1/12/2017	16.60	273.34
		3/20/2017	14.36	275.58
		8/17/2017	18.81	271.13
		11/14/2017	18.71	271.23
		2/13/2018	15.53	274.41
		1/14/2019	17.64	272.30
		4/10/2019	17.66	272.28
		12/3/2020	17.77	272.17
		9/3/2021	19.92	270.02
		6/30/2022	17.65	272.29
MW-7	289.72	8/25/2010	19.14	270.58
		5/9/2011	15.22	274.50
		5/23/2012	16.41	273.31
		1/9/2017	16.61	273.11
		1/12/2017	16.76	272.96
		3/20/2017	14.40	275.32
		8/17/2017	19.11	270.61
		11/14/2014	18.68	271.04
		2/13/2018	15.51	274.21
		1/14/2019	17.52	272.20
		4/10/2019	17.84	271.88
		12/3/2020	17.84	271.88
		9/3/2021	20.07	269.65
		6/30/2022	17.71	272.01
MW-8	290.56	8/25/2010	Not Installed	
		5/9/2011	16.02	274.54
		5/23/2012	17.21	273.35
		1/9/2017	18.69	271.87
		1/13/2017	17.65	272.91
		3/20/2017	15.17	275.39
		8/17/2017	19.91	270.65
		11/14/2017	19.46	271.10
		2/13/2018	16.30	274.26
		1/14/2019	18.30	272.26
		4/10/2019	18.61	271.95
		12/9/2019	20.28	270.28
		12/3/2020	18.81	271.75
		9/3/2021	20.91	269.65
		6/30/2022	18.58	271.98
MW-9	298.99	8/25/2010	Not Installed	
		5/9/2011		
		5/23/2012		
		1/9/2017	26.30	272.69
		1/11/2017	25.10	273.89
		3/20/2017	27.55	271.44
		8/17/2017	27.55	271.44
		11/14/2017	27.52	271.47
		2/13/2018	24.35	274.64
		1/14/2019	26.43	272.56
		4/10/2019	26.73	272.26
		12/3/2020	26.75	272.24
		9/3/2021	29.09	269.90
		6/30/2022	26.83	272.16
MW-10	297.49	8/25/2010	Not Installed	
		5/9/2011		
		5/23/2012		
		1/9/2017	25.19	272.30
		1/12/2017	24.17	273.32
		3/20/2017	26.21	271.28
		8/18/2017	26.21	271.28
		11/14/2017	25.91	271.58
		2/13/2018	22.85	274.64
		1/14/2019	24.94	272.55
		4/10/2019	25.25	272.24
		12/3/2020	25.19	272.30
		9/3/2021	27.42	270.07
		6/30/2022	25.05	272.44

Table 2. Groundwater Analytical Summary



Date of Collection	Monitoring Well Sample ID	VOCs (ug/L)							
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	VC	Chloroform	Methylene Chloride	Other
MTCA Method A cleanup level =		5	5	NE	NE	0.2	NE	NE	<RDL
MTCA Method B cleanup level =		21 ^c	0.54 ^c	24 ^{nc}	160 ^{nc}	0.029 ^c	80	160	<RDL
06-17-09	MW-1	12 ¹	<1	4.8	<1	<1.0	<2	<5.0	<RDL
08-10-10		<1	3.2 ²	1.4	<1	<1.0	<2	<5.0	<RDL
05-10-11		1.3	<1	<1	<1	<1.0	<2	<5.0	<RDL
05-23-12		<2	<2	<2	<2	<0.2	<2	<5.0	<RDL
03-05-14		<2	<2	<2	<2	<0.2	<2	<5.0	<RDL
01-11-17		0.508	<1	<1	<1	<1.00	<2	<5.0	<RDL
08-18-17		0.431	<1	<1	<1	<0.5	<2	<5.0	<RDL
11-15-17		0.231	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
02-13-18		0.3	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
01-14-19		<0.5	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
04-10-19		<0.5	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
06-30-22		<2.0	<2.0	<2.0	<2.0	<0.2	<2	<5.0	<RDL
06-16-09	MW-2	<1	<1	<1	<1	<0.2	<2	<5.0	<RDL
08-12-10		<1	<1	<1	<1	<1.0	<2	<5.0	<RDL
05-10-11		<1	<1	<1	<1	<1.0	<2	<5.0	<RDL
05-24-12		<2	<2	<2	<2	<0.2	<2	<5.0	<RDL
03-05-14		<2	<2	<2	<2	<0.2	<2	<5.0	<RDL
01-11-17		<1	<1	<1	<1	<1.00	<2	<5.0	<RDL
08-17-17		<1	<1	<1	<1	<0.5	<2	<5.0	<RDL
11-14-17		<0.5	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
02-13-18		<0.5	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
01-14-19		<0.5	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
04-10-19		<0.5	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
06-30-22		<2.0	<2.0	<2.0	<2.0	<0.2	<2	<5.0	<RDL
06-17-09	MW-3	6.6	<1	<1	<1	<0.2	<2	<5.0	<RDL
08-12-10		6.4	<1	<1	<1	<1.0	<2	<5.0	<RDL
05-10-11		9.3	<1	<1	<1	<1.0	<2	<5.0	<RDL
05-24-12		15	<2	<2	<2	<0.2	<2	<5.0	<RDL
03-07-14		5.6	<2	<2	<2	<0.2	<2	<5.0	<RDL
01-12-17		9.28	<1	<1	<1	<1.0	<2	<5.0	<RDL
08-21-17		2.81	<1	<1	<1	<0.5	<2	<5.0	<RDL
11-16-17		4.96	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
02-14-18		6.78	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
01-15-19		4.44	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
04-11-19		2.51	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
12-09-19		3.22	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
12-03-20		23.6	<0.5	<0.5	<0.5	<0.1	<2	<5.0	<RDL
09-03-21		3.1	<0.5	<1	<1	<0.02	<2	<5.0	<RDL
06-30-22		6.0	<2.0	<2.0	<2.0	<0.2	<2	<5.0	<RDL
10-31-07	MW-4	45	<1	<1	<1	<0.2	<2	<5.0	<RDL
06-16-09		170	<1	<1	<1	<0.2	<2	<5.0	<RDL
08-12-10		140	<1	<1	<1	<1.0	<2	<5.0	<RDL
05-10-11		110	<1	<1	<1	<1.0	<2	<5.0	<RDL
05-24-12		140	<2	<2	<2	<0.2	<2	<5.0	<RDL
03-07-14		44	<2	<2	<2	<0.2	<2	<5.0	<RDL
01-13-17		96.1	<1	<1	<1	<1.0	<2	<5.0	<RDL
1-13-2017 (Dup.)		95.8	<1	<1	<1	<1.0	<2	<5.0	<RDL
08-21-17		76.5	<1	<1	<1	<0.5	<2	<5.0	<RDL
11-16-17		50.8	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
11-16-2017 (Dup.)		56.9	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
02-14-18		28.5	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
01-15-19		10.7	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
1-15-2019 (Dup.)		10.6	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
04-11-19		22.5	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
4-11-2019 (Dup.)		21.8	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
12-09-19		42.9	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
12-9-2019 (Dup.)		40.9	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
12-04-20		18.6	<0.5	<0.5	<0.5	<0.1	<2	<5.0	<RDL
12-4-2020 (Dup.)		17.3	<0.5	<0.5	<0.5	<0.1	<2	<5.0	<RDL
09-03-21		20	<0.5	<1	<1	<0.02	<2	<5.0	<RDL
9-3-2021 (Dup.)		19	<0.5	<1	<1	<0.02	<2	<5.0	<RDL
06-30-22		23	<2.0	<2.0	<2.0	<0.2	<2	<5.0	<RDL
08-10-10	MW-5	0.61	<1	<1	<1	<1.0	<2	<5.0	<RDL
05-09-11		0.6	<1	<1	<1	<1.0	<2	<5.0	<RDL
03-06-14		<2	<2	<2	<2	<0.2	<2	<5.0	<RDL
01-12-17		<1	<1	<1	<1	<1.0	<2	<5.0	<RDL
08-18-17		0.281	<1	<1	<1	<0.5	<2	<5.0	<RDL
11-15-17		0.259	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
02-13-18		0.22	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
01-15-19		<0.5	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
04-11-19		<0.5	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
06-30-22		<2.0	<2.0	<2.0	<2.0	<0.2	<2	<5.0	<RDL
08-10-10	MW-6	<1	<1	<1	<1	<1.0	<2	<5.0	<RDL
05-09-11		2.2	<1	<1	<1	<1.0	<2	<5.0	<RDL
03-06-14		4.7	<2	<2	<2	<0.2	<2	<5.0	<RDL
01-12-17		1.07	<1	<1	<1	<1.0	<2	<5.0	<RDL
08-21-17		0.674	<1	<1	<1	<0.5	<2	<5.0	<RDL
11-15-17		2.37	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
02-14-18		3.21	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
01-15-19		2.04	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
04-11-19		<0.5	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
06-30-22		<2.0	<2.0	<2.0	<2.0	<0.20	<2	<5.0	<RDL

Table 2. Groundwater Analytical Summary



Date of Collection	Monitoring Well Sample ID	VOCs (ug/L)							
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	VC	Chloroform	Methylene Chloride	Other
MTCA Method A cleanup level =		5	5	NE	NE	0.2	NE	NE	<RDL
MTCA Method B cleanup level =		21 ^C	0.54 ^C	24 ^{NC}	160 ^{NC}	0.029 ^C	80	160	<RDL
08-10-10	MW-7	0.55	<1	<1	<1	<1.0	<2	<5.0	<RDL
05-09-11		<1	<1	<1	<1	<1.0	<2	<5.0	<RDL
03-06-14		8	<2	<2	<2	<0.2	<2	<5.0	<RDL
01-12-17		0.948	<1	<1	<1	<1.0	<2	<5.0	<RDL
08-21-17		1.49	<1	<1	<1	<0.5	<2	<5.0	<RDL
11-15-17		3.8	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
02-14-18		1.93	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
01-15-19		3.88	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
04-11-19		<0.5	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
09-03-21		<1	<0.5	<1	<1	<0.02	<2	<5.0	<RDL
06-30-22		<2.0	<2.0	<2.0	<2.0	<0.2	<2	<5.0	<RDL
05-10-11	MW-8	22	<1	<1	<1	<1.0	<2	<5.0	<RDL
05-24-12		36	<2	<2	<2	<0.2	<2	<5.0	<RDL
03-07-14		13	<2	<2	<2	<0.2	<2	<5.0	<RDL
01-13-17		26.4	<1	<1	<1	<1.0	<2	<5.0	<RDL
08-21-17		25.1	<1	<1	0.25	<0.5	<2	<5.0	<RDL
11-16-17		19.2	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
02-14-18		16.1	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
2-14-2018 (Dup.)		14.7	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
01-15-19		12.1	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
04-11-19		14.3	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
12-09-19		17.5	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
12-04-20		6.45	<0.5	<0.5	<0.5	<0.1	<2	<5.0	<RDL
09-03-21		13	<0.5	<1	<1	<0.02	<2	<5.0	<RDL
06-30-22		22	<2.0	<2.0	<2.0	<0.2	<2	<5.0	<RDL
6-30-2022 (Dup.)		22	<2.0	<2.0	<2.0	<0.2	<2	<5.0	<RDL
05-10-11	MW-9	<1.0	<1.0	<1.0	<1.0	<1.0	<2	<5.0	<RDL
03-05-14		<2	<2	<2	<2	<0.2	<2	<5.0	<RDL
01-11-17		<1	<1	<1	<1	<1.0	<2	<5.0	<RDL
08-18-17		<1	<1	<1	<1	<0.5	<2	<5.0	<RDL
11-14-17		<0.5	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
02-13-18		<0.5	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
01-14-19		<0.5	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
04-10-19		<0.5	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
06-30-22		<2.0	<2.0	<2.0	<2.0	<0.2	<2	<5.0	<RDL
03-06-14	MW-10	<2	<2	<2	<2	<0.2	<2	<5.0	<RDL
01-12-17		<1	<1	<1	<1	<1.0	<2	<5.0	<RDL
08-18-17		<1	<1	<1	<1	<0.5	<2	<5.0	<RDL
11-14-17		<0.5	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
02-13-18		<0.5	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
01-14-19		<0.5	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
04-10-19		<0.5	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
06-30-22		<2.0	<2.0	<2.0	<2.0	<0.2	8.6	<5.0	<RDL
06-16-09	Equip. Blank	<1.0	<1.0	<1.0	<1.0	<1.0	<2	<5.0	<RDL
08-12-10		<1	<1	<1	<1	<1.0	<2	<5.0	<RDL
01-13-17		<1	<1	<1	<1	<1.0	<2	<5.0	<RDL
11-16-17		<0.5	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
02-14-18		<0.5	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
01-15-19		<0.5	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
04-11-19		<0.5	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
12-03-20		<0.1	<0.04	<0.1	<0.2	<0.1	<2	<5.0	<RDL
09-03-21		<1	<0.5	<1	<1	<0.02	<2	<5.0	<RDL
06-30-22		<2.0	<2.0	<2.0	<2.0	<0.20	<2	7	<RDL
03-08-17	DPE Effluent	0.748	<1	<1	<1	<1.0	<2	<5.0	<RDL
11-12-17		0.286	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
01-11-19		<0.5	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL
05-16-19		<0.5	<0.5	<0.5	<0.5	<0.5	<2	<5.0	<RDL

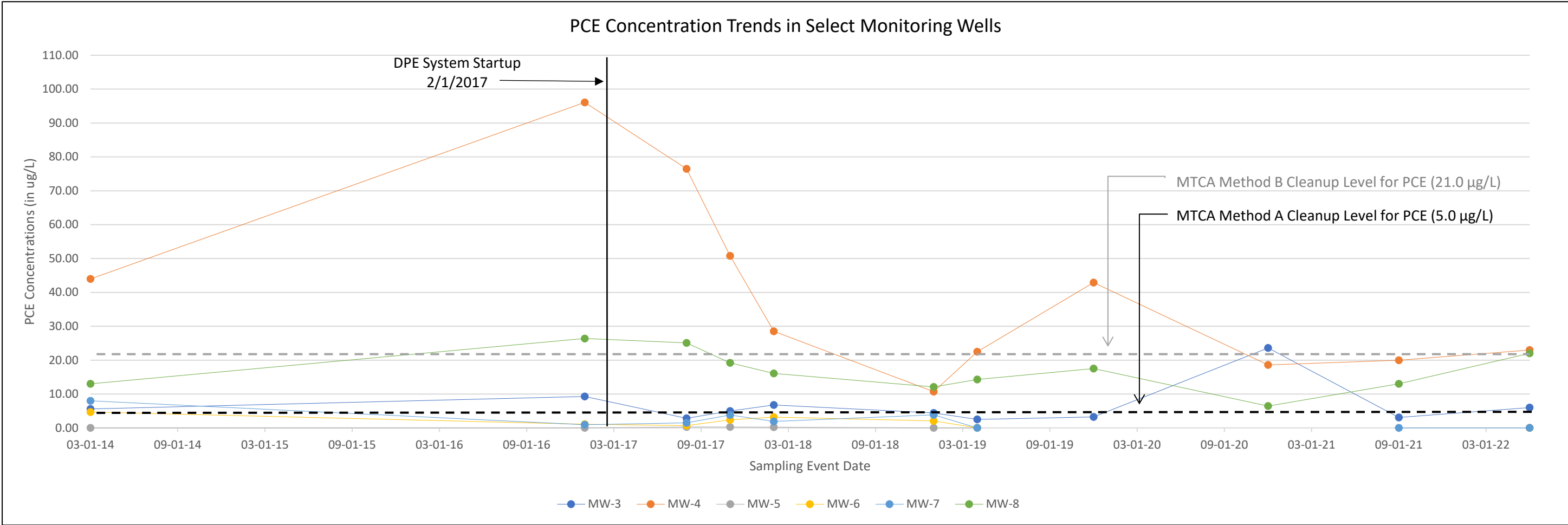
LEGEND			
NE	= Cleanup level not established.	--	= Not analyzed.
NA	= Cleanup level not applicable.	µg/L	= micrograms per liter (parts per billion)
<1.0	=Not detected above laboratory RDL	13	= Analyte detected above laboratory RDL but below MTCA cleanup level.
100	= Most applicable cleanup level.	260	= Analyte detected above MTCA A cleanup level.
		170	= Analyte detected above MTCA B cleanup level.

ACRONYMS	
PCE	Tetrachloroethylene
DCE	Dichloroethylene
Dup.	Duplicate sample
TCE	Trichloroethylene
VC	Vinyl Chloride
MTCA	Chapter 70A.305 RCW a its implementing regulations, the Model Toxics Control Act, Chapter 173-340 WAC.

NOTES	
NC	Constituent does not have an established cancer risk.
c	Value is protective of the excess cancer risk.
1	PCE concentration interpreted to be the result of cross-contamination, not representative of groundwater conditions.
2	Concentration does not exceed MTCA Method A cleanup level.

Red Font indicates that the Method Detecton Limit used by the laboratory exceeds the MTCA Method A Cleanup Level.
Monitoring Well MW-3 was installed by Adapt Engineering in 2007. In 2009 when Terracon installed monitoring wells MW -1 through MW-3, they renamed the Aspect MW-3 to "MW-4."

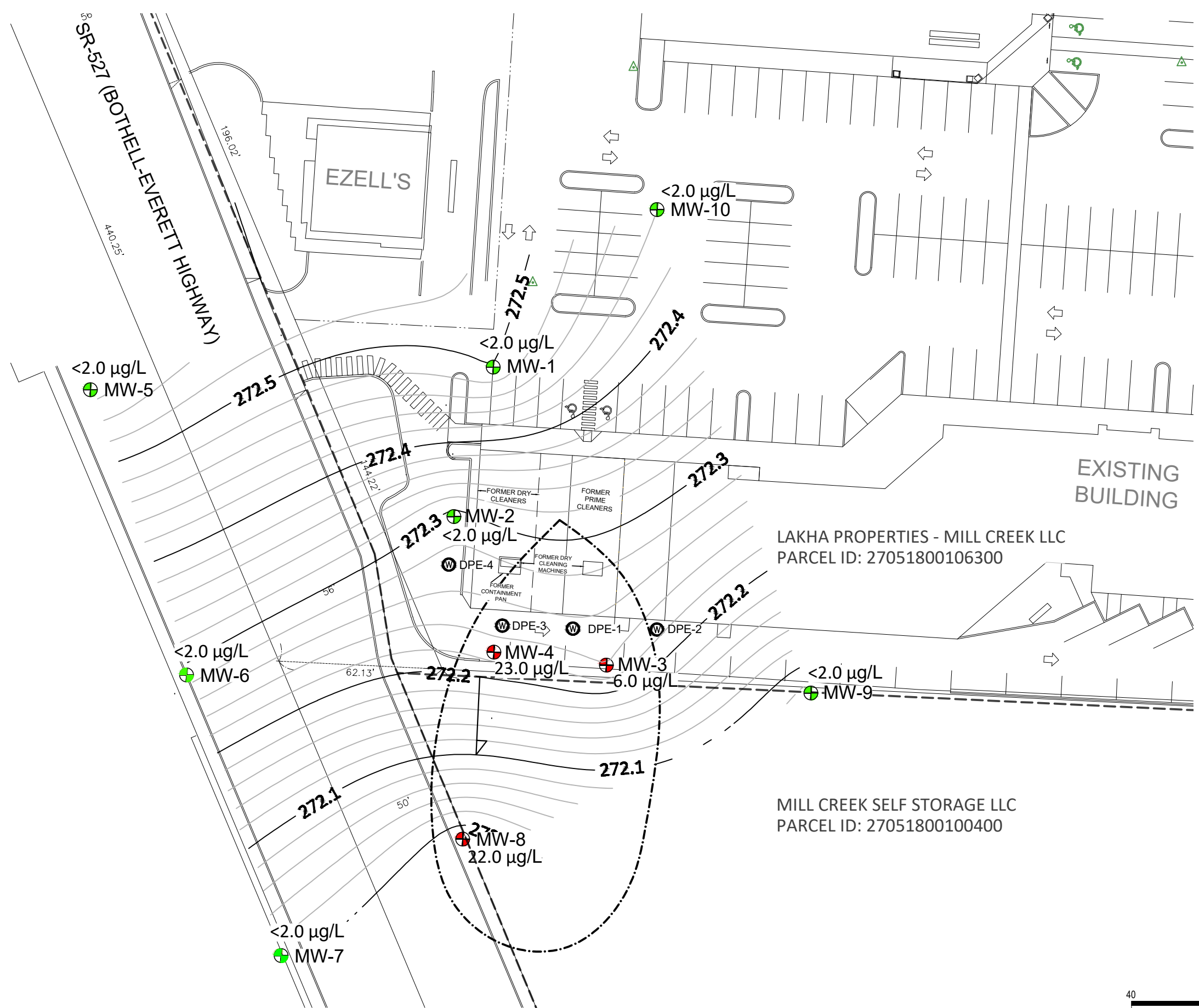
Table 3: PCE Concentration Trends in Select Monitoring Wells



		SAMPLING EVENT DATE										
		03-05-14	01-12-17	08-21-17	11-16-17	02-14-18	01-15-19	04-11-19	12-09-19	12-03-20	09-03-21	06-30-22
WELLS	MW-3	5.60	9.28	2.81	4.96	6.78	4.44	2.51	3.22	23.60	3.10	6.00
	MW-4	44	96.1	76.5	50.8	28.5	10.7	22.5	42.9	18.6	20	23
	MW-5	<2	<1	0.281	0.259	0.22	<0.5	<0.5	--	--	--	<2.0
	MW-6	4.70	1.07	0.67	2.37	3.21	2.04	<0.5	--	--	--	<2.0
	MW-7	8.00	0.95	1.49	3.80	1.93	3.88	<0.5	--	--	<1.0	<2.0
	MW-8	13.00	26.40	25.10	19.20	16.10	12.10	14.30	17.50	6.45	13.00	22.00

NOTES:	
5.60	PCE Concentrations in µg/L
MW-3	Monitoring Wells
44	PCE Concentrations above MTCA Method B Cleanup Levels
5.60	PCE Concentrations above MTCA Method A Cleanup Levels
4.7	PCE Concentrations above Laboratory Detection Level but below MTCA Cleanup Levels
<2	PCE Concentrations below Laboratory Detecton Levels
--	Not analyzed

FIGURES



LEGEND

 <2.0 ug/L MW-1

Approximate location of monitoring well. **Green** indicates PCE not detected above laboratory reporting limit in groundwater. PCE concentration noted next to well ID.

 3.0 ug/L MW-1

Approximate location of monitoring well. **Orange** indicates PCE detected above laboratory reporting limit but below MTCA Cleanup Level in groundwater. PCE concentration noted next to well ID.

 89 ug/L MW-1

Approximate location of monitoring well. **Red** indicates PCE detected above MTCA Method A Cleanup Level in groundwater. PCE concentration noted next to well ID.

 DPE-3

Dual-Phase Extraction Well - Approximate Location



Interpreted prevailing direction of groundwater flow.



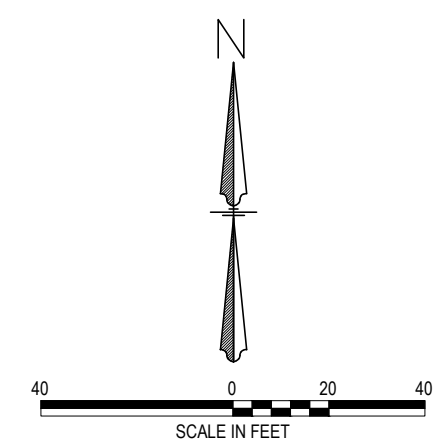
Estimated extent of PCE plume above MTCA.



Property Boundary

ACRONYMS

PCE	Tetrachloroethylene
ug/L	Micrograms per liter
MTCA	Chapter 70A.305 RCW and its implementing regulations, the Model Toxics Control Act, Chapter 173-340 WAC.



APPENDIX A – GROUNDWATER SAMPLE COLLECTION FORMS

ZIPPER GEO ASSOCIATES, LLC
GROUNDWATER SAMPLE COLLECTION FORM

Well ID <u>MW-1</u>	Project Name <u>Prime Cleaners</u>
Sample No. <u>MW1-06292022</u>	Project No. <u>100125.1</u>
Date <u>6/29/22 @ 0811</u>	Sampling Personnel <u>KRN</u>

Well Condition

Monument	☒ Good	☐ Needs Repair	Comments _____
Well Cap	☒ Good	☐ Needs Repair	Comments _____
Lock	☒ Good	☐ Replaced	☐ None
Elevation Mark	☒ No	☐ Yes	Where? _____

Purge Information

Total Well Depth _____ ft.		Depth to Product _____ ft.	
Depth to Water <u>23.81</u> ft. <u>tubing set @ 35'</u>			
Casing Volume _____ ft. x _____ gal/ft. = _____ x3 = _____ gallons for 3 well volumes			
Casing Volumes: ¾"=0.02 gpf 1"=0.04 gpf 2"=0.16 gpf 4"=0.65 gpf 6"=1.47 gpf			
Pump Type	☐ Peristaltic	☒ Bladder	☐ Submersible Other _____
Bailer Type	☐ Disposable	☐ PVC	☐ Teflon ☐ Stainless
Purge Start Time: <u>0741</u> Purge Stop Time: <u>0811</u> Gallons/Liters Purged _____			

Meter	☒ Horiba	☐ QED	Other _____
Flow Cell	☒ Yes	☐ No	

Field Parameters

Time	Temp °C	pH ±/- 0.1	ORP mV ±/- 10	Conductivity mS/cm ±/- 3%	Turbidity NTU ±/- 10%	DO mg/L ±/- 10%	Flow Rate mL/min	DTW ft BTOC	Comments
0741	14.69	5.49	2.19	1.36	108.7	4.86	150	24.57	
0746	14.75	5.32	2.22	1.24	66.4	4.62		24.90	
0751	14.79	5.26	2.26	1.18	49.6	4.08		25.56	
0756	14.86	5.18	2.31	1.09	36.6	4.02		26.22	
0801	14.82	5.06	2.30	1.02	24.1	3.99		26.48	
0806	14.80	5.02	2.29	1.00	19.6	4.01		27.10	
0811	14.76	4.99	2.28	0.99	8.4	4.00		27.52	

Containers

Comments

Number	Type	Preservative	Filtered?	Microns
3	☒ VOA ☐ Amber ☐ Poly	☐ None ☒ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☒ No ☐ Yes	
	☐ VOA ☐ Amber ☐ Poly	☐ None ☐ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☐ No ☐ Yes	
	☐ VOA ☐ Amber ☐ Poly	☐ None ☐ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☐ No ☐ Yes	
	☐ VOA ☐ Amber ☐ Poly	☐ None ☐ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☐ No ☐ Yes	

Well Tag ID <u>BBK 039</u>

Samplers Signature [Signature]

ZIPPER GEO ASSOCIATES, LLC
GROUNDWATER SAMPLE COLLECTION FORM

Well ID <u>MW-2</u>	Project Name <u>Prime Cleaners</u>
Sample No. <u>MW2-06292022</u>	Project No. <u>1001.25.1</u>
Date <u>6/29/27 @ 1013</u>	Sampling Personnel <u>KRN, ENC</u>

Well Condition	Monument	☒ Good	☐ Needs Repair	Comments _____
	Well Cap	☒ Good	☐ Needs Repair	Comments _____
	Lock	☒ Good	☐ Replaced	☐ None
	Elevation Mark	☒ No	☐ Yes	Where? _____

Purge Information	Total Well Depth _____ ft.		Depth to Product _____ ft.	
	Depth to Water <u>24.18</u> ft. <u>tubing set @ 35'</u>			
	Casing Volume _____ ft. x _____ gal/ft. = _____ x3 = _____ gallons for 3 well volumes			
	Casing Volumes: ¾"=0.02 gpf 1"=0.04 gpf 2"=0.16 gpf 4"=0.65 gpf 6"=1.47 gpf			
	Pump Type	☐ Peristaltic	☒ Bladder	☐ Submersible
Bailer Type	☐ Disposable	☐ PVC	☐ Teflon	☐ Stainless
Purge Start Time: <u>0943</u> Purge Stop Time: <u>1013</u> Gallons/Liters Purged _____				

Meter	☒ Horiba	☐ QED	Other _____
Flow Cell	☒ Yes	☐ No	

Field Parameters	Time	Temp °C	pH	ORP mV	Conductivity mS/cm	Turbidity NTU	DO mg/L	Flow Rate mL/min	DTW ft BTOC	Comments
			<u>+/- 0.1</u>	<u>+/- 10</u>	<u>+/- 3%</u>	<u>+/- 10%</u>	<u>+/- 10%</u>			
	0943	15.84	5.62	2.64	1.11	25.1	4.53	150	24.56	
	0948	15.76	5.54	2.55	1.18	20.8	4.26		25.01	
	0953	15.55	5.47	2.46	1.24	16.2	4.18		25.57	
	0958	15.50	5.42	2.35	1.31	11.4	4.00		25.84	
	1003	15.47	5.39	2.32	1.32	6.3	3.99		26.03	
	1008	15.42	5.36	2.27	1.34	3.7	3.98		26.48	
	1013	15.38	5.31	2.20	1.37	1.8	3.82	✓	26.69	

Number	Type	Preservative	Filtered?	Microns
<u>3</u>	☒ VOA ☐ Amber ☐ Poly	☐ None ☒ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☒ No ☐ Yes	_____
_____	☐ VOA ☐ Amber ☐ Poly	☐ None ☐ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☐ No ☐ Yes	_____
_____	☐ VOA ☐ Amber ☐ Poly	☐ None ☐ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☐ No ☐ Yes	_____
_____	☐ VOA ☐ Amber ☐ Poly	☐ None ☐ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☐ No ☐ Yes	_____

Comments	Well Tag ID: <u>BBK 040</u>
	Samplers Signature <u>[Signature]</u>

ZIPPER GEO ASSOCIATES, LLC
GROUNDWATER SAMPLE COLLECTION FORM

Well ID <u>MW-3</u>	Project Name <u>Prime Cleaners</u>
Sample No. <u>MW3-06302022</u>	Project No. <u>1001.25.1</u>
Date <u>6/30/22 @ 1046</u>	Sampling Personnel <u>KRN + EKC</u>

Well Condition

Monument	☒ Good	☐ Needs Repair	Comments _____
Well Cap	☒ Good	☐ Needs Repair	Comments _____
Lock	☒ Good	☐ Replaced	☐ None
Elevation Mark	☒ No	☐ Yes	Where? _____

Purge Information

Total Well Depth _____ ft.		Depth to Product _____ ft.	
Depth to Water <u>24.72</u> ft. <u>tubing set @ 35'</u>			
Casing Volume _____ ft. x _____ gal/ft. = _____	x3 = _____ gallons for 3 well volumes		
Casing Volumes: ¾"=0.02 gpf 1"=0.04 gpf 2"=0.16 gpf 4"=0.65 gpf 6"=1.47 gpf			
Pump Type	☐ Peristaltic	☒ Bladder	☐ Submersible Other _____
Bailer Type	☐ Disposable	☐ PVC	☐ Teflon ☐ Stainless
Purge Start Time: <u>1016</u> Purge Stop Time: <u>1046</u> Gallons/Liters Purged _____			

Meter	☒ Horiba	☐ QED	Other _____
Flow Cell	☒ Yes	☐ No	

Field Parameters

Time	Temp °C	pH +/- 0.1	ORP mV +/- 10	Conductivity mS/cm +/- 3%	Turbidity NTU +/- 10%	DO mg/L +/- 10%	Flow Rate mL/min	DTW ft BTOC	Comments
1016	15.26	5.93	199	0.546	153	5.74	156	25.13	
1021	15.31	5.96	190	0.532	100.8	5.49		25.58	
1026	15.33	5.89	185	0.518	64.3	5.12		25.98	
1031	15.42	5.88	183	0.509	37.4	5.03		26.45	
1036	15.41	5.87	184	0.512	18.4	4.99		26.90	
1041	15.43	5.87	181	0.511	12.6	4.92		27.33	
1046	15.44	5.87	181	0.511	8.2	4.90	✓	27.92	

Containers

Comments

Number	Type	Preservative	Filtered?	Microns
<u>3</u>	☒ VOA ☐ Amber ☐ Poly	☐ None ☒ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☒ No ☐ Yes	
	☐ VOA ☐ Amber ☐ Poly	☐ None ☐ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☐ No ☐ Yes	
	☐ VOA ☐ Amber ☐ Poly	☐ None ☐ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☐ No ☐ Yes	
	☐ VOA ☐ Amber ☐ Poly	☐ None ☐ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☐ No ☐ Yes	

Well Tag: <u>BBX 041</u>

Samplers Signature Kel A

ZIPPER GEO ASSOCIATES, LLC
GROUNDWATER SAMPLE COLLECTION FORM

Well ID <u>MW-4</u>	Project Name <u>Prime Cleaners</u>
Sample No. <u>MW4-06302022</u>	Project No. <u>1001.25.1</u>
Date <u>6/30/22 @ 1133</u>	Sampling Personnel <u>KRN + EKC</u>

Well Condition	Monument	☒ Good	☐ Needs Repair	Comments _____
	Well Cap	☒ Good	☐ Needs Repair	Comments _____
	Lock	☒ Good	☐ Replaced	☐ None
	Elevation Mark	☒ No	☐ Yes	Where? _____

Purge Information	Total Well Depth _____ ft.		Depth to Product _____ ft.	
	Depth to Water <u>24.33</u> ft. <u>tubing set @ 30'</u>			
	Casing Volume _____ ft. x _____ gal/ft. = _____ x3 = _____ gallons for 3 well volumes			
	Casing Volumes: ¾"=0.02 gpf 1"=0.04 gpf 2"=0.16 gpf 4"=0.65 gpf 6"=1.47 gpf			
	Pump Type	☐ Peristaltic	☒ Bladder	☐ Submersible
Bailer Type	☐ Disposable	☐ PVC	☐ Teflon	☐ Stainless
Purge Start Time: <u>1103</u> Purge Stop Time: <u>1133</u> Gallons/Liters Purged _____				

Meter	☒ Horiba	☐ QED	Other _____
Flow Cell	☒ Yes	☐ No	

Field Parameters	Time	Temp °C	pH	ORP mV	Conductivity mS/cm	Turbidity NTU	DO mg/L	Flow Rate mL/min	DTW ft BTOC	Comments
			<u>+/- 0.1</u>	<u>+/- 10</u>	<u>+/- 3%</u>	<u>+/- 10%</u>	<u>+/- 10%</u>			
	1103	15.03	6.24	199	0.194	32.1	8.27	150	24.66	
	1108	15.11	6.24	187	0.197	20.6	8.13		24.81	
	1113	15.29	6.21	182	0.182	10.8	7.84		25.02	
	1118	15.20	6.22	180	0.176	5.6	7.77		25.28	
	1123	15.16	6.18	176	0.183	0.0	7.71		25.51	
	1128	15.11	6.20	175	0.184	0.0	7.68		25.99	
	1133	15.08	6.21	176	0.184	0.0	7.67		26.32	

Number	Type	Preservative	Filtered?	Microns
<u>3</u>	☒ VOA ☐ Amber ☐ Poly	☐ None ☒ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☒ No ☐ Yes	
	☐ VOA ☐ Amber ☐ Poly	☐ None ☐ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☐ No ☐ Yes	
	☐ VOA ☐ Amber ☐ Poly	☐ None ☐ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☐ No ☐ Yes	
	☐ VOA ☐ Amber ☐ Poly	☐ None ☐ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☐ No ☐ Yes	

Comments	<u>No Well Tag ID</u>
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Samplers Signature [Signature]

ZIPPER GEO ASSOCIATES, LLC
GROUNDWATER SAMPLE COLLECTION FORM

Well ID <u>MW-5</u>	Project Name <u>Prime Cleaners</u>
Sample No. <u>MW5-06292022</u>	Project No. <u>1001.25.1</u>
Date <u>6/29/22 @ 1207</u>	Sampling Personnel <u>KRN + EKC</u>

Well Condition	Monument	☒ Good	☐ Needs Repair	Comments _____
	Well Cap	☒ Good	☐ Needs Repair	Comments _____
	Lock	☒ Good	☐ Replaced	☐ None
	Elevation Mark	☒ No	☐ Yes	Where? _____

Purge Information	Total Well Depth _____ ft.		Depth to Product _____ ft.		
	Depth to Water <u>17.28 ft. tubing set @ 30'</u>				
	Casing Volume _____ ft. x _____ gal/ft. = _____ x3 = _____ gallons for 3 well volumes				
	Casing Volumes: 3/4"=0.02 gpf 1"=0.04 gpf 2"=0.16 gpf 4"=0.65 gpf 6"=1.47 gpf				
	Pump Type	☐ Peristaltic	☒ Bladder	☐ Submersible	Other _____
	Bailer Type	☐ Disposable	☐ PVC	☐ Teflon	☐ Stainless
Purge Start Time: <u>1137</u> Purge Stop Time: <u>1207</u> Gallons/Liters Purged _____					

Meter	☒ Horiba	☐ QED	Other _____
Flow Cell	☒ Yes	☐ No	

Field Parameters	Time	Temp °C	pH	ORP mV	Conductivity mS/cm	Turbidity NTU	DO mg/L	Flow Rate mL/min	DTW ft BTOC	Comments
			+/- 0.1	+/- 10	+/- 3%	+/- 10%	+/- 10%			
	1137	15.13	6.53	1.58	1.428	0	5.24	156	17.94	
	1142	15.28	6.08	1.36	1.866	4.8	4.92		18.35	
	1147	15.36	6.33	1.04	1.942	10.6	4.77		18.67	
	1152	15.49	6.11	0.99	1.277	15.4	4.53		19.02	
	1157	15.35	6.15	1.06	1.272	10.2	4.46		19.46	
	1202	15.02	6.18	1.09	1.270	9.3	4.38		19.84	
	1207	15.26	6.19	1.11	1.269	6.6	4.31	✓	20.02	

Number	Type	Preservative	Filtered?	Microns
<u>3</u>	☒ VOA ☐ Amber ☐ Poly	☐ None ☒ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☒ No ☐ Yes	_____
	☐ VOA ☐ Amber ☐ Poly	☐ None ☐ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☐ No ☐ Yes	_____
	☐ VOA ☐ Amber ☐ Poly	☐ None ☐ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☐ No ☐ Yes	_____
	☐ VOA ☐ Amber ☐ Poly	☐ None ☐ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☐ No ☐ Yes	_____

Comments	<u>Well Tag ID: not accessible (in concrete under water)</u> <u>Samplers Signature</u> <u>[Signature]</u>
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ZIPPER GEO ASSOCIATES, LLC
GROUNDWATER SAMPLE COLLECTION FORM

Well ID <u>MW-6</u>	Project Name <u>Prime Cleaners</u>
Sample No. <u>MW6-06292022</u>	Project No. <u>100L25.1</u>
Date <u>6/29/22 @ 1332</u>	Sampling Personnel <u>KRN, EKC</u>

Well Condition

Monument	☒ Good	☐ Needs Repair	Comments _____
Well Cap	☒ Good	☐ Needs Repair	Comments _____
Lock	☒ Good	☐ Replaced	☐ None
Elevation Mark	☒ No	☐ Yes	Where? _____

Purge Information

Total Well Depth _____ ft.	Depth to Product _____ ft.
Depth to Water <u>17.65</u> ft. <u>tubing set @ 30'</u>	
Casing Volume _____ ft. x _____ gal/ft. = _____ x3 = _____ gallons for 3 well volumes	
Casing Volumes: ¾"=0.02 gpf 1"=0.04 gpf 2"=0.16 gpf 4"=0.65 gpf 6"=1.47 gpf	
Pump Type	☐ Peristaltic ☒ Bladder ☐ Submersible Other _____
Bailer Type	☐ Disposable ☐ PVC ☐ Teflon ☐ Stainless
Purge Start Time: <u>1302</u> Purge Stop Time: <u>1332</u> Gallons/Liters Purged _____	

Field Parameters

Meter	☒ Horiba	☐ QED	Other _____						
Flow Cell	☒ Yes	☐ No							
Time	Temp °C	pH	ORP mV	Conductivity mS/cm	Turbidity NTU	DO mg/L	Flow Rate ml/min	DTW	Comments
		+/- 0.1	+/- 10mv	+/- 3%	+/- 10%	+/- 10%			
1302	13.84	7.04	2.28	1.261	12.2	5.54	150 ↓	18.01	
1307	14.19	7.18	2.19	1.183	8.6	5.06		18.47	
1312	14.36	7.09	2.12	1.032	2.1	4.83		18.86	
1317	14.54	7.02	2.06	0.998	1.9	4.64		19.14	
1322	14.66	6.99	2.01	0.864	0	4.58		19.66	
1327	14.72	6.98	1.99	0.747	0	4.44		20.08	
1332	14.83	6.98	1.84	0.696	0	4.32		20.38	

Containers

Number	Type	Preservative	Filtered?	Microns
<u>3</u>	☒ VOA ☐ Amber	☐ Poly ☐ None ☒ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☒ No ☐ Yes	
	☐ VOA ☐ Amber	☐ Poly ☐ None ☐ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☐ No ☐ Yes	
	☐ VOA ☐ Amber	☐ Poly ☐ None ☐ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☐ No ☐ Yes	
	☐ VOA ☐ Amber	☐ Poly ☐ None ☐ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☐ No ☐ Yes	

Comments: Well Tag ID: BCB 678

Samplers Signature _____

ZIPPER GEO ASSOCIATES, LLC
GROUNDWATER SAMPLE COLLECTION FORM

Well ID <u>MW-7</u>	Project Name <u>Prime Cleaners</u>
Sample No. <u>MW7-06302022</u>	Project No. <u>1001.25.1</u>
Date <u>6/30/22 @ 0848</u>	Sampling Personnel <u>KRN + EKC</u>

Well Condition

Monument	☒ Good	☐ Needs Repair	Comments _____
Well Cap	☒ Good	☐ Needs Repair	Comments _____
Lock	☒ Good	☐ Replaced	☐ None
Elevation Mark	☒ No	☐ Yes	Where? _____

Purge Information

Total Well Depth _____ ft.	Depth to Product _____ ft.
Depth to Water <u>17.71</u> ft. <u>tubing set @ 35'</u>	
Casing Volume _____ ft. x _____ gal/ft. = _____ x3 = _____ gallons for 3 well volumes	
Casing Volumes: ¾"=0.02 gpf 1"=0.04 gpf 2"=0.16 gpf 4"=0.65 gpf 6"=1.47 gpf	
Pump Type	☐ Peristaltic ☒ Bladder ☐ Submersible Other _____
Bailer Type	☐ Disposable ☐ PVC ☐ Teflon ☐ Stainless
Purge Start Time: <u>0818</u> Purge Stop Time: <u>0848</u> Gallons/Liters Purged _____	

Field Parameters

Meter	☒ Horiba	☐ QED	Other _____							
Flow Cell	☒ Yes	☐ No								
Time	Temp °C	pH	ORP mV	Conductivity mS/cm	Turbidity NTU	DO mg/L	Flow Rate ml/min	DTW	Comments	
		+/- 0.1	+/- 10mv	+/- 3%	+/- 10%	+/- 10%				
0818	14.77	7.22	165	0.122	10.7	7.46	150	18.11		
0823	14.72	7.13	160	0.107	9.4	7.02		18.94		
0828	14.65	7.04	162	0.099	8.2	6.94		19.43		
0833	14.61	6.98	158	0.096	5.4	6.78		19.66		
0838	14.59	6.98	154	0.095	3.2	6.63		19.89		
0843	14.59	6.97	150	0.095	1.6	6.55		20.03		
0848	14.62	6.97	147	0.107	0.0	6.51	✓	20.43		

Containers

Number	Type	Preservative	Filtered?	Microns
<u>3</u>	☒ VOA ☐ Amber	☐ Poly ☐ None ☒ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☒ No ☐ Yes	_____
	☐ VOA ☐ Amber	☐ Poly ☐ None ☐ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☐ No ☐ Yes	_____
	☐ VOA ☐ Amber	☐ Poly ☐ None ☐ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☐ No ☐ Yes	_____
	☐ VOA ☐ Amber	☐ Poly ☐ None ☐ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☐ No ☐ Yes	_____

Comments: Well Tag ID: BCB 679

Samplers Signature _____

ZIPPER GEO ASSOCIATES, LLC
GROUNDWATER SAMPLE COLLECTION FORM

Well ID <u>MW-8</u>	Project Name <u>Prime Cleaners</u>
Sample No. <u>MW8-06302022</u>	Project No. <u>1001-25.1</u>
Date <u>6/30/22 @ 0952</u>	Sampling Personnel <u>KRN + EKC</u>

Well Condition

Monument	☒ Good	☐ Needs Repair	Comments _____
Well Cap	☒ Good	☐ Needs Repair	Comments _____
Lock	☒ Good	☐ Replaced	☐ None
Elevation Mark	☒ No	☐ Yes	Where? _____

Purge Information

Total Well Depth _____ ft.	Depth to Product _____ ft.
Depth to Water <u>18.58</u> ft. <u>tubing set @ 40'</u>	
Casing Volume _____ ft. x _____ gal/ft. = _____ x3 = _____ gallons for 3 well volumes	
Casing Volumes: $\frac{3}{4}$ "=0.02 gpf 1"=0.04 gpf 2"=0.16 gpf 4"=0.65 gpf 6"=1.47 gpf	
Pump Type	☒ Peristaltic ☐ Bladder ☐ Submersible Other _____
Bailer Type	☒ Disposable ☐ PVC ☐ Teflon ☐ Stainless
Purge Start Time: <u>0922</u>	Purge Stop Time: <u>0952</u> Gallons/Liters Purged _____

Field Parameters

Meter	☒ Horiba	☐ QED	Other _____						
Flow Cell	☒ Yes	☐ No							
Time	Temp °C	pH	ORP mV	Conductivity mS/cm	Turbidity NTU	DO mg/L	Flow Rate mL/min	DTW	Comments
		+/- 0.1	+/- 10mV	+/- 3%	+/- 10%	+/- 10%			
0922	14.57	6.21	178	0.139	11.6	7.22	150	19.10	
0927	14.57	6.15	176	0.130	8.4	7.14		19.50	
0932	14.49	6.18	172	0.129	4.8	7.01		20.08	
0937	14.46	6.13	169	0.129	0.0	6.96		20.57	
0942	14.45	6.11	165	0.129	0	6.82		20.90	
0947	14.45	6.09	164	0.128	↓	6.73		21.44	
0952	14.42	6.08	164	0.128	↓	6.66	↓	21.72	

Containers

Number	Type	Preservative	Filtered?	Microns
<u>3</u>	☒ VOA ☐ Amber	☐ Poly ☐ None ☒ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☒ No ☐ Yes	_____
_____	☐ VOA ☐ Amber	☐ Poly ☐ None ☐ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☐ No ☐ Yes	_____
_____	☐ VOA ☐ Amber	☐ Poly ☐ None ☐ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☐ No ☐ Yes	_____
_____	☐ VOA ☐ Amber	☐ Poly ☐ None ☐ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☐ No ☐ Yes	_____
Comments: <u>"Dup" collected @ 0900 (3 voa's)</u>				
Well Tag ID: <u>none found</u>				
Samplers Signature <u>KRN</u>				

ZIPPER GEO ASSOCIATES, LLC
GROUNDWATER SAMPLE COLLECTION FORM

Well ID MW-9 Project Name Prime Cleaners
Sample No. MW9-06292022 Project No. 1001.25.1
Date 6/29/22 @ 1108 Sampling Personnel KRN + EKC

Well Condition

Monument ☒ Good ☐ Needs Repair Comments _____
Well Cap ☒ Good ☐ Needs Repair Comments _____
Lock ☒ Good ☐ Replaced ☐ None
Elevation Mark ☒ No ☐ Yes Where? _____

Purge Information

Total Well Depth _____ ft. Depth to Product _____ ft.
Depth to Water 26.83 ft. tubing set @ 35'
Casing Volume _____ ft. x _____ gal/ft. = _____ x3 = _____ gallons for 3 well volumes
Casing Volumes: 3/4"=0.02 gpf 1"=0.04 gpf 2"=0.16 gpf 4"=0.65 gpf 6"=1.47 gpf

Pump Type ☐ Peristaltic ☒ Bladder ☐ Submersible Other _____
Bailer Type ☐ Disposable ☐ PVC ☐ Teflon ☐ Stainless

Purge Start Time: 1038 Purge Stop Time: 1108 Gallons/Liters Purged _____

Meter ☒ Horiba ☐ QED Other _____
Flow Cell ☒ Yes ☐ No

Field Parameters

Time	Temp °C	pH ±/- 0.1	ORP mV ±/- 10	Conductivity mS/cm ±/- 3%	Turbidity NTU ±/- 10%	DO mg/L ±/- 10%	Flow Rate mL/min	DTW ft BTOC	Comments
1038	14.99	6.69	171	0.123	35.4	6.51	150	27.33	
1043	14.64	6.60	165	0.115	20.8	6.02		27.89	
1048	14.76	6.54	162	0.102	11.2	5.99		28.42	
1053	14.56	6.49	155	0.113	0.0	5.87		28.96	
1058	14.42	6.41	150	0.118	0	5.76		29.57	
1103	14.49	6.37	147	0.119	↓	5.62		29.98	
1108	14.52	6.22	148	0.122	↓	5.59	↓	30.13	

Containers

Number	Type	Preservative	Filtered?	Microns
3	☒ VOA ☐ Amber ☐ Poly	☐ None ☒ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☒ No ☐ Yes	
	☐ VOA ☐ Amber ☐ Poly	☐ None ☐ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☐ No ☐ Yes	
	☐ VOA ☐ Amber ☐ Poly	☐ None ☐ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☐ No ☐ Yes	
	☐ VOA ☐ Amber ☐ Poly	☐ None ☐ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☐ No ☐ Yes	

Comments

Well Tag ID: BH2 070
Samplers Signature [Signature]

ZIPPER GEO ASSOCIATES, LLC
GROUNDWATER SAMPLE COLLECTION FORM

Well ID <u>MW-10</u>	Project Name <u>Prime Cleaners</u>
Sample No. <u>MW10-06292022</u>	Project No. <u>1001.25.i</u>
Date <u>6/29/22 @ 0909</u>	Sampling Personnel <u>KRN+EKC</u>

Well Condition	Monument	☒ Good	☐ Needs Repair	Comments _____
	Well Cap	☒ Good	☐ Needs Repair	Comments _____
	Lock	☒ Good	☐ Replaced	☐ None
	Elevation Mark	☒ No	☐ Yes	Where? _____

Purge Information	Total Well Depth _____ ft.		Depth to Product _____ ft.	
	Depth to Water <u>25.05</u> ft. <u>tubing set @ 35'</u>			
	Casing Volume _____ ft. x _____ gal/ft. = _____ x3 = _____ gallons for 3 well volumes			
	Casing Volumes: ¾"=0.02 gpf 1"=0.04 gpf 2"=0.16 gpf 4"=0.65 gpf 6"=1.47 gpf			
	Pump Type	☐ Peristaltic	☒ Bladder	☐ Submersible
Bailer Type	☐ Disposable	☐ PVC	☐ Teflon	☐ Stainless
Purge Start Time: <u>0839</u> Purge Stop Time: <u>0909</u> Gallons/Liters Purged _____				

Meter	☒ Horiba	☐ QED	Other _____
Flow Cell	☒ Yes	☐ No	

Field Parameters	Time	Temp °C	pH	ORP mV	Conductivity mS/cm	Turbidity NTU	DO mg/L	Flow Rate mL/min	DTW ft BTOC	Comments
			<u>+/- 0.1</u>	<u>+/- 10</u>	<u>+/- 3%</u>	<u>+/- 10%</u>	<u>+/- 10%</u>			
	0839	14.82	5.43	2.10	1.16	16.2	5.39	150	25.25	
	0844	14.80	5.44	2.11	1.17	18.0	5.18		25.25	
	0849	14.78	5.44	2.11	1.20	18.7	4.84		25.22	
	0854	14.79	5.42	2.14	1.21	19.4	4.66		25.23	
	0859	14.80	5.42	2.15	1.22	21.3	4.29		25.23	
	0904	14.77	5.41	2.17	1.22	15.6	4.23		25.25	
	0909	14.79	5.46	2.17	1.23	12.1	4.19		25.25	

Number	Type	Preservative	Filtered?	Microns
<u>3</u>	☒ VOA ☐ Amber ☐ Poly	☐ None ☒ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☒ No ☐ Yes	_____
	☐ VOA ☐ Amber ☐ Poly	☐ None ☐ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☐ No ☐ Yes	_____
	☐ VOA ☐ Amber ☐ Poly	☐ None ☐ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☐ No ☐ Yes	_____
	☐ VOA ☐ Amber ☐ Poly	☐ None ☐ HCL ☐ Nitric ☐ Sulfuric ☐ Other	☐ No ☐ Yes	_____

Comments	Well Tag ID: <u>BHZ 071</u>
	Samplers Signature <u>[Signature]</u>

APPENDIX B – ANALYTICAL LABORATORY REPORTS



July 8, 2022

Mr. Jeff Tinklepaugh
Zipper Geo Associates
19019 - 36th Ave W., Suite E
Lynnwood, WA 98036

Dear Mr. Tinklepaugh,

On June 30th, 12 samples were received by our laboratory and assigned our laboratory project number EV22060178. The project was identified as your 1001.25.1. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Glen Perry
Laboratory Director



CERTIFICATE OF ANALYSIS

CLIENT:	Zipper Geo Associates	DATE:	7/8/2022
	19019 - 36th Ave W., Suite E	ALS JOB#:	EV22060178
	Lynnwood, WA 98036	ALS SAMPLE#:	EV22060178-01
CLIENT CONTACT:	Jeff Tinklepaugh	DATE RECEIVED:	06/30/2022
CLIENT PROJECT:	1001.25.1	COLLECTION DATE:	6/29/2022 8:11:00 AM
CLIENT SAMPLE ID	MW1-06292022	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	07/06/2022	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	07/06/2022	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	07/06/2022	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC

CERTIFICATE OF ANALYSIS

CLIENT:	Zipper Geo Associates 19019 - 36th Ave W., Suite E Lynnwood, WA 98036	DATE:	7/8/2022
		ALS JOB#:	EV22060178
		ALS SAMPLE#:	EV22060178-01
CLIENT CONTACT:	Jeff Tinklepaugh	DATE RECEIVED:	06/30/2022
CLIENT PROJECT:	1001.25.1	COLLECTION DATE:	6/29/2022 8:11:00 AM
CLIENT SAMPLE ID	MW1-06292022	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	07/06/2022	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	100	07/06/2022	DLC
4-Bromofluorobenzene	EPA-8260	114	07/06/2022	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Zipper Geo Associates
19019 - 36th Ave W., Suite E
Lynnwood, WA 98036
DATE: 7/8/2022
ALS JOB#: EV22060178
ALS SAMPLE#: EV22060178-02
CLIENT CONTACT: Jeff Tinklepaugh
DATE RECEIVED: 06/30/2022
CLIENT PROJECT: 1001.25.1
COLLECTION DATE: 6/29/2022 10:13:00 AM
CLIENT SAMPLE ID: MW2-06292022
WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	07/06/2022	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	07/06/2022	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	07/06/2022	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC

CERTIFICATE OF ANALYSIS

CLIENT:	Zipper Geo Associates 19019 - 36th Ave W., Suite E Lynnwood, WA 98036	DATE:	7/8/2022
		ALS JOB#:	EV22060178
		ALS SAMPLE#:	EV22060178-02
CLIENT CONTACT:	Jeff Tinklepaugh	DATE RECEIVED:	06/30/2022
CLIENT PROJECT:	1001.25.1	COLLECTION DATE:	6/29/2022 10:13:00 AM
CLIENT SAMPLE ID	MW2-06292022	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	07/06/2022	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	99.9	07/06/2022	DLC
4-Bromofluorobenzene	EPA-8260	113	07/06/2022	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Zipper Geo Associates 19019 - 36th Ave W., Suite E Lynnwood, WA 98036	DATE:	7/8/2022
CLIENT CONTACT:	Jeff Tinklepaugh	ALS JOB#:	EV22060178
CLIENT PROJECT:	1001.25.1	ALS SAMPLE#:	EV22060178-03
CLIENT SAMPLE ID	MW3-06302022	DATE RECEIVED:	06/30/2022
		COLLECTION DATE:	6/30/2022 10:46:00 AM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	07/06/2022	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	07/06/2022	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Tetrachloroethylene	EPA-8260	6.0	2.0	1	UG/L	07/06/2022	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	07/06/2022	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC

CERTIFICATE OF ANALYSIS

CLIENT:	Zipper Geo Associates 19019 - 36th Ave W., Suite E Lynnwood, WA 98036	DATE:	7/8/2022
		ALS JOB#:	EV22060178
		ALS SAMPLE#:	EV22060178-03
CLIENT CONTACT:	Jeff Tinklepaugh	DATE RECEIVED:	06/30/2022
CLIENT PROJECT:	1001.25.1	COLLECTION DATE:	6/30/2022 10:46:00 AM
CLIENT SAMPLE ID	MW3-06302022	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	07/06/2022	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	99.8	07/06/2022	DLC
4-Bromofluorobenzene	EPA-8260	113	07/06/2022	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Zipper Geo Associates
19019 - 36th Ave W., Suite E
Lynnwood, WA 98036
DATE: 7/8/2022
ALS JOB#: EV22060178
ALS SAMPLE#: EV22060178-04
CLIENT CONTACT: Jeff Tinklepaugh
DATE RECEIVED: 06/30/2022
CLIENT PROJECT: 1001.25.1
COLLECTION DATE: 6/30/2022 11:33:00 AM
CLIENT SAMPLE ID: MW4-06302022
WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	07/06/2022	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	07/06/2022	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Tetrachloroethylene	EPA-8260	23	2.0	1	UG/L	07/06/2022	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	07/06/2022	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC

CERTIFICATE OF ANALYSIS

CLIENT:	Zipper Geo Associates 19019 - 36th Ave W., Suite E Lynnwood, WA 98036	DATE:	7/8/2022
		ALS JOB#:	EV22060178
		ALS SAMPLE#:	EV22060178-04
CLIENT CONTACT:	Jeff Tinklepaugh	DATE RECEIVED:	06/30/2022
CLIENT PROJECT:	1001.25.1	COLLECTION DATE:	6/30/2022 11:33:00 AM
CLIENT SAMPLE ID	MW4-06302022	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	07/06/2022	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	101	07/06/2022	DLC
4-Bromofluorobenzene	EPA-8260	112	07/06/2022	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Zipper Geo Associates
19019 - 36th Ave W., Suite E
Lynnwood, WA 98036
DATE: 7/8/2022
ALS JOB#: EV22060178
ALS SAMPLE#: EV22060178-05
CLIENT CONTACT: Jeff Tinklepaugh
DATE RECEIVED: 06/30/2022
CLIENT PROJECT: 1001.25.1
COLLECTION DATE: 6/29/2022 12:07:00 PM
CLIENT SAMPLE ID: MW5-06292022
WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	07/06/2022	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	07/06/2022	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	07/06/2022	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC

CERTIFICATE OF ANALYSIS

CLIENT:	Zipper Geo Associates 19019 - 36th Ave W., Suite E Lynnwood, WA 98036	DATE:	7/8/2022
		ALS JOB#:	EV22060178
		ALS SAMPLE#:	EV22060178-05
CLIENT CONTACT:	Jeff Tinklepaugh	DATE RECEIVED:	06/30/2022
CLIENT PROJECT:	1001.25.1	COLLECTION DATE:	6/29/2022 12:07:00 PM
CLIENT SAMPLE ID	MW5-06292022	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	07/06/2022	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	102	07/06/2022	DLC
4-Bromofluorobenzene	EPA-8260	116	07/06/2022	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Zipper Geo Associates 19019 - 36th Ave W., Suite E Lynnwood, WA 98036	DATE:	7/8/2022
		ALS JOB#:	EV22060178
		ALS SAMPLE#:	EV22060178-06
CLIENT CONTACT:	Jeff Tinklepaugh	DATE RECEIVED:	06/30/2022
CLIENT PROJECT:	1001.25.1	COLLECTION DATE:	6/29/2022 1:32:00 PM
CLIENT SAMPLE ID	MW6-06292022	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	07/06/2022	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	07/06/2022	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	07/06/2022	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC

CERTIFICATE OF ANALYSIS

CLIENT:	Zipper Geo Associates 19019 - 36th Ave W., Suite E Lynnwood, WA 98036	DATE:	7/8/2022
		ALS JOB#:	EV22060178
		ALS SAMPLE#:	EV22060178-06
CLIENT CONTACT:	Jeff Tinklepaugh	DATE RECEIVED:	06/30/2022
CLIENT PROJECT:	1001.25.1	COLLECTION DATE:	6/29/2022 1:32:00 PM
CLIENT SAMPLE ID	MW6-06292022	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	07/06/2022	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/06/2022	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	101	07/06/2022	DLC
4-Bromofluorobenzene	EPA-8260	114	07/06/2022	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Zipper Geo Associates 19019 - 36th Ave W., Suite E Lynnwood, WA 98036	DATE:	7/8/2022
		ALS JOB#:	EV22060178
		ALS SAMPLE#:	EV22060178-07
CLIENT CONTACT:	Jeff Tinklepaugh	DATE RECEIVED:	06/30/2022
CLIENT PROJECT:	1001.25.1	COLLECTION DATE:	6/30/2022 8:48:00 AM
CLIENT SAMPLE ID	MW7-06302022	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	07/07/2022	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	07/07/2022	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	07/07/2022	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC

CERTIFICATE OF ANALYSIS

CLIENT:	Zipper Geo Associates 19019 - 36th Ave W., Suite E Lynnwood, WA 98036	DATE:	7/8/2022
		ALS JOB#:	EV22060178
		ALS SAMPLE#:	EV22060178-07
CLIENT CONTACT:	Jeff Tinklepaugh	DATE RECEIVED:	06/30/2022
CLIENT PROJECT:	1001.25.1	COLLECTION DATE:	6/30/2022 8:48:00 AM
CLIENT SAMPLE ID	MW7-06302022	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	07/07/2022	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	101	07/07/2022	DLC
4-Bromofluorobenzene	EPA-8260	116	07/07/2022	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Zipper Geo Associates
19019 - 36th Ave W., Suite E
Lynnwood, WA 98036
DATE: 7/8/2022
ALS JOB#: EV22060178
ALS SAMPLE#: EV22060178-08
CLIENT CONTACT: Jeff Tinklepaugh
DATE RECEIVED: 06/30/2022
CLIENT PROJECT: 1001.25.1
COLLECTION DATE: 6/30/2022 9:52:00 AM
CLIENT SAMPLE ID: MW8-06302022
WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	07/07/2022	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	07/07/2022	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Tetrachloroethylene	EPA-8260	22	2.0	1	UG/L	07/07/2022	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	07/07/2022	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC

CERTIFICATE OF ANALYSIS

CLIENT:	Zipper Geo Associates 19019 - 36th Ave W., Suite E Lynnwood, WA 98036	DATE:	7/8/2022
		ALS JOB#:	EV22060178
		ALS SAMPLE#:	EV22060178-08
CLIENT CONTACT:	Jeff Tinklepaugh	DATE RECEIVED:	06/30/2022
CLIENT PROJECT:	1001.25.1	COLLECTION DATE:	6/30/2022 9:52:00 AM
CLIENT SAMPLE ID	MW8-06302022	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	07/07/2022	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	102	07/07/2022	DLC
4-Bromofluorobenzene	EPA-8260	116	07/07/2022	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Zipper Geo Associates 19019 - 36th Ave W., Suite E Lynnwood, WA 98036	DATE:	7/8/2022
		ALS JOB#:	EV22060178
		ALS SAMPLE#:	EV22060178-09
CLIENT CONTACT:	Jeff Tinklepaugh	DATE RECEIVED:	06/30/2022
CLIENT PROJECT:	1001.25.1	COLLECTION DATE:	6/29/2022 11:08:00 AM
CLIENT SAMPLE ID	MW9-06292022	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	07/07/2022	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	07/07/2022	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	07/07/2022	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC

CERTIFICATE OF ANALYSIS

CLIENT:	Zipper Geo Associates 19019 - 36th Ave W., Suite E Lynnwood, WA 98036	DATE:	7/8/2022
		ALS JOB#:	EV22060178
		ALS SAMPLE#:	EV22060178-09
CLIENT CONTACT:	Jeff Tinklepaugh	DATE RECEIVED:	06/30/2022
CLIENT PROJECT:	1001.25.1	COLLECTION DATE:	6/29/2022 11:08:00 AM
CLIENT SAMPLE ID	MW9-06292022	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	07/07/2022	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	102	07/07/2022	DLC
4-Bromofluorobenzene	EPA-8260	115	07/07/2022	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Zipper Geo Associates
19019 - 36th Ave W., Suite E
Lynnwood, WA 98036
DATE: 7/8/2022
ALS JOB#: EV22060178
ALS SAMPLE#: EV22060178-10
CLIENT CONTACT: Jeff Tinklepaugh
DATE RECEIVED: 06/30/2022
CLIENT PROJECT: 1001.25.1
COLLECTION DATE: 6/29/2022 9:09:00 AM
CLIENT SAMPLE ID: MW10-06292022
WDOE ACCREDITATION: C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	07/07/2022	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	07/07/2022	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Chloroform	EPA-8260	8.6	2.0	1	UG/L	07/07/2022	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	07/07/2022	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC

CERTIFICATE OF ANALYSIS

CLIENT:	Zipper Geo Associates 19019 - 36th Ave W., Suite E Lynnwood, WA 98036	DATE:	7/8/2022
		ALS JOB#:	EV22060178
		ALS SAMPLE#:	EV22060178-10
CLIENT CONTACT:	Jeff Tinklepaugh	DATE RECEIVED:	06/30/2022
CLIENT PROJECT:	1001.25.1	COLLECTION DATE:	6/29/2022 9:09:00 AM
CLIENT SAMPLE ID	MW10-06292022	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	07/07/2022	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	102	07/07/2022	DLC
4-Bromofluorobenzene	EPA-8260	116	07/07/2022	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Zipper Geo Associates 19019 - 36th Ave W., Suite E Lynnwood, WA 98036	DATE:	7/8/2022
		ALS JOB#:	EV22060178
		ALS SAMPLE#:	EV22060178-11
CLIENT CONTACT:	Jeff Tinklepaugh	DATE RECEIVED:	06/30/2022
CLIENT PROJECT:	1001.25.1	COLLECTION DATE:	6/29/2022 2:07:00 PM
CLIENT SAMPLE ID	Equip Blank	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	07/07/2022	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Methylene Chloride	EPA-8260	7.0	5.0	1	UG/L	07/07/2022	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Tetrachloroethylene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	07/07/2022	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC

CERTIFICATE OF ANALYSIS

CLIENT:	Zipper Geo Associates 19019 - 36th Ave W., Suite E Lynnwood, WA 98036	DATE:	7/8/2022
		ALS JOB#:	EV22060178
		ALS SAMPLE#:	EV22060178-11
CLIENT CONTACT:	Jeff Tinklepaugh	DATE RECEIVED:	06/30/2022
CLIENT PROJECT:	1001.25.1	COLLECTION DATE:	6/29/2022 2:07:00 PM
CLIENT SAMPLE ID	Equip Blank	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	07/07/2022	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	103	07/07/2022	DLC
4-Bromofluorobenzene	EPA-8260	116	07/07/2022	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Zipper Geo Associates 19019 - 36th Ave W., Suite E Lynnwood, WA 98036	DATE:	7/8/2022
		ALS JOB#:	EV22060178
CLIENT CONTACT:	Jeff Tinklepaugh	ALS SAMPLE#:	EV22060178-12
CLIENT PROJECT:	1001.25.1	DATE RECEIVED:	06/30/2022
CLIENT SAMPLE ID	Dup.	COLLECTION DATE:	6/30/2022
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Chloromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Vinyl Chloride	EPA-8260	U	0.20	1	UG/L	07/07/2022	DLC
Bromomethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Chloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Carbon Tetrachloride	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Trichlorofluoromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Methylene Chloride	EPA-8260	U	5.0	1	UG/L	07/07/2022	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
2,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Bromochloromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Chloroform	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1,1-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2-Dichloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Trichloroethene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Dibromomethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Bromodichloromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1,2-Trichloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,3-Dichloropropane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Tetrachloroethylene	EPA-8260	22	2.0	1	UG/L	07/07/2022	DLC
Dibromochloromethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2-Dibromoethane	EPA-8260	U	0.010	1	UG/L	07/07/2022	DLC
Chlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1,1,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Bromoform	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2,3-Trichloropropane	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Bromobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
2-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
4-Chlorotoluene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,3-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,4-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC

CERTIFICATE OF ANALYSIS

CLIENT:	Zipper Geo Associates 19019 - 36th Ave W., Suite E Lynnwood, WA 98036	DATE:	7/8/2022
		ALS JOB#:	EV22060178
		ALS SAMPLE#:	EV22060178-12
CLIENT CONTACT:	Jeff Tinklepaugh	DATE RECEIVED:	06/30/2022
CLIENT PROJECT:	1001.25.1	COLLECTION DATE:	6/30/2022
CLIENT SAMPLE ID	Dup.	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
1,2-Dichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	10	1	UG/L	07/07/2022	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
Hexachlorobutadiene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	2.0	1	UG/L	07/07/2022	DLC

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
1,2-Dichloroethane-d4	EPA-8260	103	07/07/2022	DLC
4-Bromofluorobenzene	EPA-8260	117	07/07/2022	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Zipper Geo Associates 19019 - 36th Ave W., Suite E Lynnwood, WA 98036	DATE:	7/8/2022
		ALS SDG#:	EV22060178
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Jeff Tinklepaugh		
CLIENT PROJECT:	1001.25.1		

LABORATORY BLANK RESULTS

MB-070622W - Batch 180860 - Water by EPA-8260

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Dichlorodifluoromethane	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
Chloromethane	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
Vinyl Chloride	EPA-8260	U	UG/L	0.20	07/06/2022	DLC
Bromomethane	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
Chloroethane	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
Carbon Tetrachloride	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
Trichlorofluoromethane	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
1,1-Dichloroethene	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
Methylene Chloride	EPA-8260	U	UG/L	5.0	07/06/2022	DLC
Trans-1,2-Dichloroethene	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
1,1-Dichloroethane	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
Cis-1,2-Dichloroethene	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
2,2-Dichloropropane	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
Bromochloromethane	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
Chloroform	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
1,1,1-Trichloroethane	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
1,1-Dichloropropene	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
1,2-Dichloroethane	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
Trichloroethene	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
1,2-Dichloropropane	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
Dibromomethane	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
Bromodichloromethane	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
Trans-1,3-Dichloropropene	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
Cis-1,3-Dichloropropene	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
1,1,2-Trichloroethane	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
1,3-Dichloropropane	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
Tetrachloroethylene	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
Dibromochloromethane	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
1,2-Dibromoethane	EPA-8260	U	UG/L	0.010	07/06/2022	DLC
Chlorobenzene	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
1,1,1,2-Tetrachloroethane	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
Bromoform	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
1,1,2,2-Tetrachloroethane	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
1,2,3-Trichloropropane	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
Bromobenzene	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
2-Chlorotoluene	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
4-Chlorotoluene	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
1,3-Dichlorobenzene	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
1,4-Dichlorobenzene	EPA-8260	U	UG/L	2.0	07/06/2022	DLC

CERTIFICATE OF ANALYSIS

CLIENT:	Zipper Geo Associates 19019 - 36th Ave W., Suite E Lynnwood, WA 98036	DATE:	7/8/2022
		ALS SDG#:	EV22060178
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Jeff Tinklepaugh		
CLIENT PROJECT:	1001.25.1		

LABORATORY BLANK RESULTS
MB-070622W - Batch 180860 - Water by EPA-8260

1,2-Dichlorobenzene	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
1,2-Dibromo 3-Chloropropane	EPA-8260	U	UG/L	10	07/06/2022	DLC
1,2,4-Trichlorobenzene	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
Hexachlorobutadiene	EPA-8260	U	UG/L	2.0	07/06/2022	DLC
1,2,3-Trichlorobenzene	EPA-8260	U	UG/L	2.0	07/06/2022	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT:	Zipper Geo Associates 19019 - 36th Ave W., Suite E Lynnwood, WA 98036	DATE:	7/8/2022
		ALS SDG#:	EV22060178
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Jeff Tinklepaugh		
CLIENT PROJECT:	1001.25.1		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 180860 - Water by EPA-8260

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
Dichlorodifluoromethane - BS	EPA-8260	109			50	150	07/06/2022	DLC
Dichlorodifluoromethane - BSD	EPA-8260	98.8	10		50	150	07/06/2022	DLC
Chloromethane - BS	EPA-8260	82.5			50	150	07/06/2022	DLC
Chloromethane - BSD	EPA-8260	75.0	10		50	150	07/06/2022	DLC
Vinyl Chloride - BS	EPA-8260	122			50	150	07/06/2022	DLC
Vinyl Chloride - BSD	EPA-8260	111	9		50	150	07/06/2022	DLC
Bromomethane - BS	EPA-8260	96.0			50	150	07/06/2022	DLC
Bromomethane - BSD	EPA-8260	93.6	3		50	150	07/06/2022	DLC
Chloroethane - BS	EPA-8260	129			50	150	07/06/2022	DLC
Chloroethane - BSD	EPA-8260	118	9		50	150	07/06/2022	DLC
Carbon Tetrachloride - BS	EPA-8260	112			50	150	07/06/2022	DLC
Carbon Tetrachloride - BSD	EPA-8260	103	8		50	150	07/06/2022	DLC
Trichlorofluoromethane - BS	EPA-8260	121			50	150	07/06/2022	DLC
Trichlorofluoromethane - BSD	EPA-8260	111	9		50	150	07/06/2022	DLC
1,1-Dichloroethene - BS	EPA-8260	124			72.5	136	07/06/2022	DLC
1,1-Dichloroethene - BSD	EPA-8260	114	9		72.5	136	07/06/2022	DLC
Methylene Chloride - BS	EPA-8260	108			50	150	07/06/2022	DLC
Methylene Chloride - BSD	EPA-8260	103	5		50	150	07/06/2022	DLC
Trans-1,2-Dichloroethene - BS	EPA-8260	120			50	150	07/06/2022	DLC
Trans-1,2-Dichloroethene - BSD	EPA-8260	111	8		50	150	07/06/2022	DLC
1,1-Dichloroethane - BS	EPA-8260	125			50	150	07/06/2022	DLC
1,1-Dichloroethane - BSD	EPA-8260	115	8		50	150	07/06/2022	DLC
Cis-1,2-Dichloroethene - BS	EPA-8260	126			50	150	07/06/2022	DLC
Cis-1,2-Dichloroethene - BSD	EPA-8260	116	8		50	150	07/06/2022	DLC
2,2-Dichloropropane - BS	EPA-8260	134			50	150	07/06/2022	DLC
2,2-Dichloropropane - BSD	EPA-8260	121	10		50	150	07/06/2022	DLC
Bromochloromethane - BS	EPA-8260	122			50	150	07/06/2022	DLC
Bromochloromethane - BSD	EPA-8260	114	7		50	150	07/06/2022	DLC
Chloroform - BS	EPA-8260	124			50	150	07/06/2022	DLC
Chloroform - BSD	EPA-8260	115	8		50	150	07/06/2022	DLC
1,1,1-Trichloroethane - BS	EPA-8260	119			50	150	07/06/2022	DLC
1,1,1-Trichloroethane - BSD	EPA-8260	109	9		50	150	07/06/2022	DLC
1,1-Dichloropropene - BS	EPA-8260	126			50	150	07/06/2022	DLC
1,1-Dichloropropene - BSD	EPA-8260	116	8		50	150	07/06/2022	DLC
1,2-Dichloroethane - BS	EPA-8260	121			50	150	07/06/2022	DLC
1,2-Dichloroethane - BSD	EPA-8260	113	7		50	150	07/06/2022	DLC
Trichloroethene - BS	EPA-8260	123			74.4	141	07/06/2022	DLC
Trichloroethene - BSD	EPA-8260	113	8		74.4	141	07/06/2022	DLC
1,2-Dichloropropane - BS	EPA-8260	132			50	150	07/06/2022	DLC



CERTIFICATE OF ANALYSIS

CLIENT: Zipper Geo Associates
19019 - 36th Ave W., Suite E
Lynnwood, WA 98036

CLIENT CONTACT: Jeff Tinklepaugh
CLIENT PROJECT: 1001.25.1

DATE: 7/8/2022
ALS SDG#: EV22060178
WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
1,2-Dichloropropane - BSD	EPA-8260	122	8		50	150	07/06/2022	DLC
Dibromomethane - BS	EPA-8260	122			50	150	07/06/2022	DLC
Dibromomethane - BSD	EPA-8260	114	7		50	150	07/06/2022	DLC
Bromodichloromethane - BS	EPA-8260	126			50	150	07/06/2022	DLC
Bromodichloromethane - BSD	EPA-8260	117	8		50	150	07/06/2022	DLC
Trans-1,3-Dichloropropene - BS	EPA-8260	124			50	150	07/06/2022	DLC
Trans-1,3-Dichloropropene - BSD	EPA-8260	117	5		50	150	07/06/2022	DLC
Cis-1,3-Dichloropropene - BS	EPA-8260	138			50	150	07/06/2022	DLC
Cis-1,3-Dichloropropene - BSD	EPA-8260	127	8		50	150	07/06/2022	DLC
1,1,2-Trichloroethane - BS	EPA-8260	120			50	150	07/06/2022	DLC
1,1,2-Trichloroethane - BSD	EPA-8260	114	5		50	150	07/06/2022	DLC
1,3-Dichloropropane - BS	EPA-8260	117			50	150	07/06/2022	DLC
1,3-Dichloropropane - BSD	EPA-8260	111	5		50	150	07/06/2022	DLC
Tetrachloroethylene - BS	EPA-8260	91.0			50	150	07/06/2022	DLC
Tetrachloroethylene - BSD	EPA-8260	84.9	7		50	150	07/06/2022	DLC
Dibromochloromethane - BS	EPA-8260	103			50	150	07/06/2022	DLC
Dibromochloromethane - BSD	EPA-8260	97.8	5		50	150	07/06/2022	DLC
1,2-Dibromoethane - BS	EPA-8260	110			50	150	07/06/2022	DLC
1,2-Dibromoethane - BSD	EPA-8260	105	5		50	150	07/06/2022	DLC
Chlorobenzene - BS	EPA-8260	116			73	131	07/06/2022	DLC
Chlorobenzene - BSD	EPA-8260	109	6		73	131	07/06/2022	DLC
1,1,1,2-Tetrachloroethane - BS	EPA-8260	109			50	150	07/06/2022	DLC
1,1,1,2-Tetrachloroethane - BSD	EPA-8260	102	6		50	150	07/06/2022	DLC
Bromoform - BS	EPA-8260	102			50	150	07/06/2022	DLC
Bromoform - BSD	EPA-8260	97.5	5		50	150	07/06/2022	DLC
1,1,2,2-Tetrachloroethane - BS	EPA-8260	127			50	150	07/06/2022	DLC
1,1,2,2-Tetrachloroethane - BSD	EPA-8260	124	3		50	150	07/06/2022	DLC
1,2,3-Trichloropropane - BS	EPA-8260	118			50	150	07/06/2022	DLC
1,2,3-Trichloropropane - BSD	EPA-8260	116	2		50	150	07/06/2022	DLC
Bromobenzene - BS	EPA-8260	113			50	150	07/06/2022	DLC
Bromobenzene - BSD	EPA-8260	109	3		50	150	07/06/2022	DLC
2-Chlorotoluene - BS	EPA-8260	118			50	150	07/06/2022	DLC
2-Chlorotoluene - BSD	EPA-8260	113	4		50	150	07/06/2022	DLC
4-Chlorotoluene - BS	EPA-8260	122			50	150	07/06/2022	DLC
4-Chlorotoluene - BSD	EPA-8260	117	4		50	150	07/06/2022	DLC
1,3-Dichlorobenzene - BS	EPA-8260	118			50	150	07/06/2022	DLC
1,3-Dichlorobenzene - BSD	EPA-8260	113	4		50	150	07/06/2022	DLC
1,4-Dichlorobenzene - BS	EPA-8260	118			50	150	07/06/2022	DLC
1,4-Dichlorobenzene - BSD	EPA-8260	114	4		50	150	07/06/2022	DLC
1,2-Dichlorobenzene - BS	EPA-8260	112			50	150	07/06/2022	DLC

CERTIFICATE OF ANALYSIS

CLIENT:	Zipper Geo Associates 19019 - 36th Ave W., Suite E Lynnwood, WA 98036	DATE:	7/8/2022
		ALS SDG#:	EV22060178
		WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Jeff Tinklepaugh		
CLIENT PROJECT:	1001.25.1		

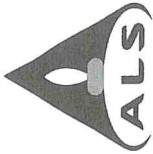
LABORATORY CONTROL SAMPLE RESULTS

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	LIMITS		ANALYSIS DATE	ANALYSIS BY
					MIN	MAX		
1,2-Dichlorobenzene - BSD	EPA-8260	108	4		50	150	07/06/2022	DLC
1,2-Dibromo 3-Chloropropane - BS	EPA-8260	106			50	150	07/06/2022	DLC
1,2-Dibromo 3-Chloropropane - BSD	EPA-8260	104	2		50	150	07/06/2022	DLC
1,2,4-Trichlorobenzene - BS	EPA-8260	113			50	150	07/06/2022	DLC
1,2,4-Trichlorobenzene - BSD	EPA-8260	110	3		50	150	07/06/2022	DLC
Hexachlorobutadiene - BS	EPA-8260	114			50	150	07/06/2022	DLC
Hexachlorobutadiene - BSD	EPA-8260	109	4		50	150	07/06/2022	DLC
1,2,3-Trichlorobenzene - BS	EPA-8260	115			50	150	07/06/2022	DLC
1,2,3-Trichlorobenzene - BSD	EPA-8260	113	2		50	150	07/06/2022	DLC

APPROVED BY



Laboratory Director



ALS Environmental
8620 Holly Drive, Suite 100
Everett, WA 98208
Phone (425) 356-2600
Fax (425) 356-2626
http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job#

(Laboratory Use Only)

EV22060178

Date 6/29/22 Page 1 Of 2

PROJECT ID: 1001.25.1				ANALYSIS REQUESTED										OTHER (Specify)														
REPORT TO COMPANY: ZGA				PROJECT MANAGER: Jeff Tinklepaugh										ADDRESS: 19019 36th Ave W Suite E Lynnwood, WA 98036														
PHONE: 425-582-9978				P.O. #:										E-MAIL: jtinklepaugh@zippergeo.com														
INVOICE TO COMPANY: ZGA				ATTENTION:										ADDRESS:														
SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA 8021	MTBE by EPA 8021	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA 8270 SIM	Pesticides by EPA 8081	Metals-MTCA-5	RCRA-8	Pt Pol	TAL	Metals Other (Specify)	TCLP-Metals	VOA	Semi-Vol	Pest	Herbs	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. MW 1-06292022	6/29/22	08:11	water	1																								
2. MW 2-06292022	6/29/22	10:13	water	2																								
3. MW 3-06292022	6/30/22	10:14	water	3																								
4. MW 4-06302022	6/30/22	11:33	water	4																								
5. MW 5-06292022	6/29/22	12:07	water	5																								
6. MW 6-06292022	6/29/22	13:32	water	6																								
7. MW 7-06302022	6/30/22	08:48	water	7																								
8. MW 8-06302022	6/30/22	09:52	water	8																								
9. MW 9-06292022	6/29/22	11:08	water	9																								
10. MW 10-06292022	6/29/22	09:09	water	10																								

SPECIAL INSTRUCTIONS

6/30/22 - Jeff changed from VOCs to HVOCS

SIGNATURES (Name, Company, Date, Time):

- Relinquished By: Kaelin Newiman, ZGA, 6/30/22, 11:43
- Received By: Elizabeth Cobb, ZGA, 6/30/22, 11:43
- Relinquished By: Elizabeth Cobb, ZGA
- Received By: Shawn ALIS 6/30/22 12:00

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis
Specify: ☐ 10 ☐ 1 ☐ 2 ☐ 3 ☐ 5 ☐ SAME DAY

Fuels & Hydrocarbon Analysis
Specify: ☐ 1 ☐ 3 ☐ 5 ☐ SAME DAY

*Turnaround request less than standard may incur Rush Charges



Chain Of Custody/ Laboratory Analysis Recd

ALS Job# (Laboratory Use Only)

EV2260178

Date 6/29/22 Page 2 Of 2

PROJECT ID: 1001251

REPORT TO
COMPANY: ZGVA

PROJECT
MANAGER: Jeff Tinkler

ADDRESS: 19019 36th Ave W Suite e

Lynnwood, WA 98036

PHONE: PO. #

E-MAIL:

INVOICE TO
COMPANY: ZGA

ATTENTION:

ADDRESS:

SAMPLE I.D.	DATE	TIME	TYPE	LAB#
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1.	Equis Blank	6/26/22	11:11	water	5
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2	Q. 2	1/30/22	def. 14	17
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[illegible]

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SPECIAL INSTRUCTIONS

6/30/22 - J_{eff} changed from VOC to HVOcs

SIGNATURES (Name, Company, Date, Time):

Relinquished By: Kaelin Newman 75A 6/30/22 11:43

Received By: Elizabeth Cobb, ZGA, 6/30/22, 11:43

Relinquished By: Dr. Elizabeth Cole, ZGA

Received By: Swiffr ALS 6/30/2022 1206

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Fuels & Hydrocarbon Analysis

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Turnaround request less than standard may incur Rush Charges