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ANNUAL PROGRESS REPORT

FORMER PRIME CLEANERS SITE 18001 BOTHELL EVERETT HIGHWAY BOTHELL, WASHINGTON FACILITY SITE ID NO. 19816 VCP NO. NW2751 CLEANUP SITE ID NO. 11775

Submitted by:

Pacific Crest Environmental, LLC 1531 Bendigo Boulevard North North Bend, Washington 98045 Pacific Crest PN: 223-002

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April 16, 2025



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1.0 INTRODUCTION

Pacific Crest Environmental, LLC (Pacific Crest) prepared this Annual Progress Report (the Report) on behalf of Mill Creek Crossing LLC (MCC) for the Former Prime Cleaners Site (the Site¹) located at the MCC Center at 18001 Bothell Everett Highway in Bothell, Washington (MCC Property). The Site consists of properties affected by contamination associated with a release of tetrachloroethene (PCE) that occurred at the MCC Property. The Site location is illustrated on Figure 1.

The contaminants of potential concern (COPCs) for the Site consist of the following chlorinated volatile organic compounds (CVOCs) associated with a release of PCE-based dry-cleaning solvent that occurred at the former Prime Cleaners Dry-Cleaner tenant suite on the MCC Property: PCE, trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), trans-1,2-dichloroethene (trans-1,2-DCE) and vinyl chloride (VC). The contaminants of concern (COCs) are the COPCs in the media of concern that exceed their Model Toxics Control Act (MTCA) Cleanup Regulation (Chapter 173-340 of the Washington Administrative Code [WAC 173-340]) cleanup levels presented in the draft Cleanup Action Plan (dCAP) (ZGA 2014b) and approved by Ecology in the Opinion Letter dated September 8, 2014 (Ecology 2014): PCE and TCE. The Site has been assigned Facility/Site No. 19816 and Voluntary Cleanup Program (VCP) Project No. NW2751 by Ecology.

1.1 PURPOSE

This Report describes the methodologies and results of recent groundwater monitoring and insitu chemical reduction (ISCR) pilot test activities that were conducted at the Site between June 2024 and February 2025 (Reporting Period).

1.2 REMEDIAL ACTION RESPONSIBILITIES

Cleanup actions at the Site are being conducted under the direction of the former property owner and potentially liable person (PLP):

Mill Creek Crossing (MCC), LLC Attn: Mr. Nicholas Echelbarger 31 NW Cherry Loop Shoreline, Washington 98177

The environmental consultant for the cleanup action is:

Pacific Crest Environmental, LLC c/o Mr. William Carroll, L.G., L.H.G. P.O. Box 952 1531 Bendigo Boulevard North North Bend, Washington 98045

¹ A "Site" is defined as the areal and vertical extent of the contaminants of concern (COCs) in the media of concern at concentrations that exceed the applicable cleanup levels.

The current property owner is:

Lakah Properties – Mill Creek, LLC 500 108th Ave NE, Suite 2050 Bellevue, WA 98004

1.3 ORGANIZATION

The Report has been organized into the following sections:

- Section 2 Background: Section 2 provides background information, including location, description, and history of the MCC Property; the geologic and hydrogeologic setting; and a summary of previous remedial investigation (RI), feasibility study (FS); and cleanup action activities.
- Section 3 Groundwater Monitoring and Pilot Test Activities: Section 3 provides a summary of groundwater monitoring, and ISCR pilot test activities conducted during the Reporting Period.
- Section 4 Results: Section 4 presents the results of the recent activities.
- Section 5 References: Section 5 presents the documents cited in this Report.

2.0 BACKGROUND

The following subsections provide a description of the MCC Property, relevant Site characterization information, and RI, FS, and cleanup action activities completed at the Site by Pacific Crest and others.

2.1 MCC PROPERTY DESCRIPTION

The MCC Property (Snohomish County Tax Parcel #27051800106300) is approximately 3.15 acres in size and located on the southeast corner of the intersection of 180th Street SE and Bothell Everett Highway in Bothell, Washington. In 1983, the MCC Property was developed as a retail shopping center. Between 1984 and 2014, Prime Cleaners conducted retail dry-cleaning operations in a tenant suite on the southern portion of the MCC Property. In 2015, the former owner, MCC, sold the property to Lakha Properties – Mill Creek LLC (Lakha Properties).

2.2 NATURAL CONDITIONS

2.2.1 Physiographic Setting

The Site is located at an elevation of approximately 290 feet above mean sea level in an area with a topographic slope to the west. The two closest surface water bodies are Silver Creek and North Creek, located approximately 1,800 feet east and 2,800 feet west, respectively. Silver Creek and North Creek discharge into the Sammamish River, located approximately 5 miles south of the Site.

2.2.2 Terrestrial Habitat Setting

Land use within the vicinity of the Site consists of a combination of urban commercial and residential property and does not contain undisturbed terrestrial habitat for wildlife. Contiguous undeveloped land with an area greater than 1.5 acres is not present either on the Site or within 500 feet of the Site. Due to the size of the undeveloped contiguous land located on or within a 500-foot radius of the Site (less than 1.5 acres) and the COCs present, the Site qualifies for an exemption under WAC 173-340-7491(1)(c).

2.2.3 Geologic Setting

The Puget Sound region is underlain by Quaternary sediments deposited by several glacial episodes (Galster and Laprade 1991). The regional subsurface conditions were generated by deposition occurring through a series of glacial advances and retreats. The regional sediments consist primarily of interbedded and/or sequential deposits of alluvial clays, silts, and sands, typically situated over deposits of glacial till consisting of silty sand to sandy silt with gravel. Outwash sediments consisting of stratified sands, silts, clays, and gravels were deposited by rivers, streams, and post-glacial lakes during the glacial retreats. With the exception of the most recent recessional deposits, sediments have been compacted by the historical overriding ice sheets.

Surficial geology in the immediate vicinity of the Site is identified in the United States Geologic Survey (USGS) Geologic Map of Bothell (Minard 1985) as Quaternary age advance outwash deposits (Qva) of the Vashon Stade during the Frasier Glaciation. The Vashon Stade of the Fraser Glaciation occurred approximately 15,000 to 13,000 years ago and consisted of a portion of the

Cordilleran Ice Sheet occupying the Puget lowland area of western Washington. Glacial meltwater drained southwest to the Pacific Ocean due to the dam created by the glacial toe. Qva is sand, silty sand and gravel deposited by streams from the advancing ice sheet and can be as much as 180 feet thick in the area.

In general, the subsurface soil conditions encountered at the Site consist of dense silty sand underlain by dense gravelly sand and sand.

2.2.4 Hydrogeology

Groundwater aquifers in the Puget Sound region generally occur in recent alluvial deposits of sands and gravel, which are stratigraphically delimited by aquitards (low permeability units) consisting of glacial till deposits. Discontinuous perched shallow groundwater zones may be seasonally or locally present above the glacial till deposits (Galster and Laprade 1991).

Shallow unconfined groundwater is first encountered at the Site in sandy layers at depths ranging from between approximately 15 feet below ground surface (bgs) and 25 feet bgs. Saturated conditions continue to the maximum depth explored, 70 feet bgs. The direction of groundwater flow based on potentiometric surface elevations measured in existing wells has been to the south and southwest during groundwater measurement events conducted between 2014 and 2023. Pacific Crest calculated hydraulic gradients of between 0.001 feet per foot (ft/ft) during the November 2017 sampling event and 0.002 ft/ft during the June 2022 sampling event.

2.3 PREVIOUS RI/FS AND CLEANUP ACTION ACTIVITIES

The Site investigation area (Investigation Area) includes: a portion of the MCC Property in the vicinity of the former Prime Cleaners tenant suite; the public rights-of-way adjacent to the MCC Property; and the topographically down-gradient area in the immediate vicinity of the MCC Property.

In 1999, PCE was detected in soil and groundwater below the former Prime Cleaners tenant suite. Between 1999 and 2014, environmental consultants working on behalf of MCC conducted subsurface investigation activities to assess the nature and extent of PCE-contaminated soil and groundwater. In 2012, the Site was entered into Ecology's VCP.

In 2014, Zipper Geo Associates (ZGA) submitted an RI/FS Report and dCAP to Ecology for review (ZGA 2014a and ZGA 2014b). The RI/FS and dCAP selected dual phase extraction (DPE) as the preferred cleanup alternative to remediate soil and groundwater. DPE operates by inducing a vacuum on wells to simultaneously extract CVOCs in soil vapor and groundwater from the subsurface. The RI/FS Report estimated a restoration timeframe of 1-year to achieve cleanup standards for both soil and groundwater. Ecology approved the dCAP for Property Specific Cleanup in an Opinion Letter dated September 8, 2014 (Ecology 2014).

In 2017, ZGA installed a DPE system at the Site that consisted of one 25-horsepower (HP) Dekker Oil-Sealed Liquid Ring Pump, a liquid knock-out drum, and a liquid transfer pump. The DPE system was connected to four 4-inch diameter dedicated vacuum extraction wells (DPE-1 through DPE-4) completed to 40-feet bgs. Groundwater recovered by the system was discharged to the sanitary sewer under an Industrial Waste Discharge Authorization (Authorization No. 1010-02) from the King County Wastewater Treatment Division. Between 2017 and 2021, ZGA operated the DPE system and conducted groundwater monitoring. The results of the system operation and monitoring are presented in reports prepared by ZGA (ZGA 2020, ZGA 2021, ZGA 2022a) and are summarized below:

- The DPE system operated for approximately five years between February 2017 and September 2021. During operations, the DPE system extracted and discharged to the sanitary sewer 1,164,940 gallons of groundwater.
- After DPE system operations, laboratory analysis of groundwater samples collected in June 2022 detected PCE in samples from resource protection wells MW-3, MW-4, and MW-8 at concentrations of 6.0 μg/L, 23 μg/L, and 22 μg/L, respectively.
- Laboratory analysis of indoor air samples collected between January 2019 and January 2020 did not detect PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, or VC at concentrations above their respective cleanup levels.

In correspondence dated March 6, 2020, ZGA, on behalf of MCC, requested a No Further Action (NFA) determination for the Site. In an Opinion Letter dated September 29, 2021 (Ecology 2021), Ecology stated that cleanup of the Site was insufficient and required either implementation of further cleanup action to remediate off-property contaminated groundwater or implementation of engineering and/or institutional controls as cleanup measures to meet the substantive requirements of the MTCA regulations.

In April 2023, Pacific Crest, on behalf of MCC, collected groundwater samples from existing monitoring wells at the Site and a sub-slab soil vapor sample from one existing vapor pin located inside the MCC Shopping Center building. Laboratory analysis of the groundwater samples detected PCE at concentrations ranging from 0.34 micrograms per liter (μ g/L) to 21 μ g/L. Laboratory analysis of the soil vapor sample detected PCE and TCE at concentrations of 458 micrograms per cubic meter (μ g/m³) and 28.5 μ g/m³. On the basis of the 2023 groundwater monitoring results and Ecology's 2021 Opinion Letter, Pacific Crest prepared an Amended CAP that requested a Property-Specific NFA and proposed a combination of restrictive covenants and monitored natural attenuation as the preferred cleanup action approach (Pacific Crest 2023). The Amended CAP, dated September 22, 2023, was submitted to Ecology for review. Ecology provided preliminary comments in an email dated October 3, 2023 and indicated that a Property-Specific NFA with a restrictive covenant would require a demonstration that groundwater with contaminant concentrations greater than site cleanup levels is confined to the property and is not flowing onto the adjoining property, but the recent monitoring data for wells MW-4, MW-8, and DPE-3 did not meet the criteria for an NFA.

In response to Ecology's October 3, 2023 comments, Pacific Crest prepared a work plan to conduct a pilot test to assess ISCR as a remediation technology capable of reducing concentrations of the COCs in groundwater at the Site to below their MTCA Method A Cleanup Levels (Pacific Crest 2024). Ecology approved the work plan in email correspondence dated July 10, 2024.

3.0 MONITORING AND CLEANUP ACTIVITIES

3.1 SCOPE OF WORK

The monitoring and cleanup activities conducted during the Reporting Period included:

- Submiting an Underground Injection Control (UIC) registration to Ecology prior to conducting the ISCR pilot test;
- Conducting the ISCR pilot test by injecting ISCR materials into four wells;
- Collecting groundwater samples from select existing wells and submitting the samples to an independent laboratory for analysis;

A narrative summary of the activities conducted during the Reporting Period is provided in the following sections.

3.2 PERMITTING

The scope of work for the ISCR pilot test consisted of injecting a solution of ISCR material and water into wells four (4) existing wells (DPE-1, DPE-3, DPE-4, and VM-1). The injection points are considered Class V underground injection wells that are subject to Ecology's UIC Program. Pacific Crest registered the wells as Class V injection wells for groundwater remediation purposes by submitting an on-line application to Ecology for review on July 15, 2024. Ecology's UIC Program authorized the registration in correspondence dated August 20, 2024. A copy of the Conditional Rule Authorization Letter is provided in Appendix A.

3.3 ISCR INJECTION

On December 30 and 31, 2024, after receipt of concurrence from Ecology's VCP and UIC Program, Pacific Crest implemented the pilot test scope of work. During the two day event, Pacific Crest injected a 2.5% solution of sulfidated zero-valent iron (ZVI) and glycerol, S-Micro ZVI manufactured by Regenesis Inc., and water into wells DPE-1, DPE-3, DPE-4, and VM-1. The injection area targeted the highest residual concentrations of PCE in groundwater. The ISCR reagent was applied under pressure via into the injection wells at between 5 to 20 pounds per square inch (psi). Approximately 1,100 gallons of 2.5% ISCR solution was injected into the subsurface during the event. The amount injected into each well is summarized on Table 1 and the well locations are illustrated on Figure 2.

3.4 GROUNDWATER MONITORING EVENT

On February 5, 2025, Pacific Crest conducted a groundwater monitoring and sampling event. The purpose of the monitoring was to assess groundwater conditions during cleanup action implementation. The monitoring procedures are described below:

• Prior to collecting groundwater samples, Pacific Crest collected water elevation measurements from wells MW-1 through MW-10. Groundwater elevation monitoring was conducted by opening the monument and removing the well caps from each of the existing wells and permitting the water level in each well to equilibrate with atmospheric pressure for a minimum of 15 minutes prior to collecting groundwater level data.

• Groundwater levels were measured relative to the north side of each well casing to an accuracy of 0.01-foot using an electronic water level indicator. The water level indicator was raised and lowered a minimum of 3 times to confirm the reading prior to recording the depth to water on the field form.

Groundwater sampling was conducted using U.S. Environmental Protection Agency's (EPA's) *Low-Flow (Minimal Drawdown) Groundwater Sampling Procedures* (Puls and Barcelona 1996) and Pacific Crest's standard operating procedures (SOPs). The groundwater sampling procedure are summarized as follows:

- Pacific Crest collected groundwater samples from wells MW-2, MW-3, MW-4, MW-6, MW-7, and MW-8. Samples were not collected from wells MW-1, MW-5, MW-9, and MW-10 because laboratory analysis of samples from those wells had not detected a COPC at a concentration above its respective cleanup level for at least 4 sampling events. Wells VM-1, DPE-1, DPE-2, DPE-3, and DPE-4 were not sampled because they were used as injection wells during the ISCR pilot test. Prior to groundwater sample collection, each well was purged using a peristaltic pump and dedicated polyethylene tubing at a flow rate of approximately 200 milliliters per minute (0.053 gallons per minute).
- During purging, groundwater geochemical parameters, including temperature, specific conductivity, dissolved oxygen (DO), and oxidation/reduction potential (ORP), were recorded approximately every three minutes using a YSI ProQuatro multi-parameter water quality meter equipped with a flow-through cell.
- Upon stabilization of geochemical parameters, groundwater samples were collected from upstream of the flow-through cell. Prior to sampling for CVOCs, a sample was field screened for ferrous iron using a Hach Ferrous Iron Color Disc Test Kit. Groundwater samples for CVOC analysis were transferred directly from the dedicated tubing into laboratory-prepared 40-milliliter sample vials preserved with hydrochloric acid. The vials were completely filled with water to eliminate potential loss of volatiles to headspace. Each vial was checked to ensure that there were no air bubbles present in the sample, labeled, placed on ice in a cooler, and transported to OnSite Environmental (OnSite) of Redmond Washington under standard chain-of-custody protocols for analysis on a standard turnaround time.
- OnSite analyzed the samples for CVOCs by SW-846 Method 8260D. A copy of the laboratory analytical report is provided in Appendix B.

4.0 RESULTS AND CONCLUSIONS

The results of the recent progress monitoring activities are presented below.

- On December 30 and 31, 2024, approximately 1,100 gallons of 2.5% ISCR solution was injected into the subsurface as a pilot test to assess the effectiveness of ISCR as a remediation technology. The amount injected into each well is summarized on Table 1 and the well locations are illustrated on Figure 2.
- On February 5, 2025, the depth to groundwater measured in the monitoring wells ranged from 17.60 feet below top of casing (btoc) (MW-5) to 26.75 feet btoc (MW-9). The groundwater elevations ranged from 271.79 feet (MW-7) to 272.40 feet (MW-1). Groundwater elevation data are presented in Table 2.
- A Site Plan illustrating the groundwater potentiometric surface contours is provided as Figure 3. The groundwater flow direction is generally toward the south at a gradient of 0.003 ft/ft, which is consistent with the potentiometric surface calculations for previous events.
- The groundwater geochemical parameter data that were collected during well purging are presented in Table 3.
- Groundwater analytical data for the COPCs for the Site are summarized in Table 4. Laboratory analysis of the groundwater samples detected PCE at concentrations ranging from 0.70 µg/L to 21 µg/L. Laboratory analysis of the groundwater samples collected from well MW-4 and MW-8 detected PCE at concentrations that exceeded the MTCA Method A cleanup level of 5 µg/L. Laboratory analysis did not detect TCE, cis-1,2-DCE, trans-1,2-DCE or VC at concentrations above their respective PQLs. A Site Plan illustrating the concentrations of COCs in groundwater from the February 5, 2025 groundwater monitoring event is provided on Figure 3.

4.1 CONCLUSIONS

Conclusions that are based on the results of recent activities are presented below.

- The ISCR pilot test was conducted in 2024 to assess the effectiveness of ISCR as a remediation technology. During the February 2025 sampling event, conducted 36 days after the ISCR injection event, DO concentrations in wells MW-2 and MW-4, the two wells closest to the injection wells, were significantly lower than during prior monitoring events. DO is a leading indicator of ISCR effectiveness. Laboratory analysis of groundwater samples collected during the event detected PCE concentrations slightly lower than during the prior sampling event (Wells MW-3, MW-7, and MW-8) or unchanged compared to the prior sampling event (Well MW-4).
- The ISCR material is expected to have an effective lifespan of between 6 months and two years. Therefore, groundwater monitoring will be conducted on a quarterly basis during 2025 prior to reaching definitive conclusions of ISCR efficacy at this Site.

5.0 REFERENCES

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FIGURES

ANNUAL PROGRESS REPORT

FORMER PRIME CLEANERS SITE 18001 BOTHELL-EVERETT HIGHWAY BOTHELL, WASHINGTON

PACIFIC CREST PN: 223-002







TABLES

ANNUAL PROGRESS REPORT

FORMER PRIME CLEANERS SITE 18001 BOTHELL-EVERETT HIGHWAY BOTHELL, WASHINGTON

PACIFIC CREST PN: 223-002

Table 1 In-Situ Chemical Reduction Pilot Test Summary Former Prime Cleaners Bothell, Washington Pacific Crest No: 223-002

Location ID	Installed By	Injection Date	ISCR Solution (%)	ZVI Concentrate Volume (gal)	Total Volume of Water Injected (gallons)	Total Volume of Solution Injected (gallons)	Injection Interval (feet)
VM-1	ZGA	12/30/2024	2.5%	1.6	123	125	10 - 20
DPE-1	ZGA	12/31/2024	2.5%	4.2	321	325	25 - 40
DPE-3	ZGA	12/31/2024	2.5%	4.2	321	325	25 - 40
DPE-4	ZGA	12/31/2024	2.5%	4.2	321	325	25 - 40

NOTES:

ISCR=In-situ chemical reduction

ZVI=Zero valent iron

Screen Interval reported in feet below top of well casing

Table 2 Groundwater Elevation Data Summary Former Prime Cleaners 18001 Bothell Everett Highway Bothell, Washington Pacific Crest No: 223-002

						Relative
			Relative Casing		Depth to	Potentiometric
Location ID	Sampled By	Sample Date	Elevation ¹	Screen Interval ²	Groundwater ²	Surface (feet)
	Terracon	8/25/2010	_		25.22	271.09
	lerracon	5/9/2011		-	21.18	275.13
	EES EES	6/22/2011	_	-	22.24	274.07
	FES	12/6/2011	_	-	24.70	271.55
	EES	3/8/2012			22.98	273.33
	ZGA	5/23/2012			22.73	273.58
	EES	6/27/2012			22.79	273.52
	EES	10/18/2012	_		22.52	273.79
	EES	1/14/2013	_		20.54	275.77
	EES	4/24/2013	-		22.29	274.02
	FES	7/16/2013			24 72	271 59
	ZGA	1/9/2017			22.85	273.46
MW-1	ZGA	1/11/2017	296.31	31-41	22.00	273.41
	ZGA	3/20/2017		-	20.35	275.96
	764	8/17/2017	_	-	20.33	273.30
	764	11/14/2017	_	-	24.66	271.44
	ZGA	2/12/2017		-	24.00	271.05
	ZGA	2/13/2010	_	-	21.00	274.00
	ZGA	1/14/2019	_	-	23.70	272.53
	ZGA	4/10/2019	-	-	24.04	272.27
	ZGA	12/3/2020	_	-	23.95	272.30
	ZGA	9/3/2021	-	-	26.18	270.13
	ZGA	6/30/2022	_		23.81	272.50
	Pacific Crest	4/19/2023	_	-	24.08	272.23
	Pacific Crest	2/5/2025			23.91	272.40
	Terracon	8/25/2010	_		25.58	270.89
	Terracon	5/9/2011		-	21.61	274.86
	EES	6/22/2011			22.72	273.75
	EES	9/1/2011			25.14	271.33
	EES	12/6/2011			24.59	271.88
	EES	3/8/2012			23.40	273.07
	ZGA	5/23/2012			22.97	273.50
	EES	6/27/2012			23.03	273.44
	EES	10/18/2012			25.81	270.66
	EES	1/14/2013			26.59	269.88
	ZGA	1/9/2017			23.14	273.33
MW-2	ZGA	1/11/2017	296.47	34-44	23.22	273.25
	ZGA	3/20/2017			20.81	275.66
	ZGA	8/17/2017			25.57	270.90
	ZGA	11/14/2017			25.15	271.32
	ZGA	2/13/2018			22.00	274.47
	ZGA	1/14/2019			24.05	272.42
	ZGA	4/10/2019	1		24.40	272.07
	ZGA	12/3/2020	1		24.30	272.17
	ZGA	9/3/2021	1		26.57	269.90
	ZGA	6/30/2022	-		24.18	272.29
	Pacific Crest	4/19/2023	-		24.47	272.00
	Pacific Crest	2/5/2025	1	l f	24.33	272.14

Location ID	Sampled By	Sample Date	Relative Casing Elevation ¹	Screen Interval ²	Depth to Groundwater ²	Relative Potentiometric Surface (feet)
	Terracon	8/25/2010			26.17	270.79
	Terracon	5/9/2011	-		22.21	274.75
	EES	6/22/2011			23.39	273.57
	EES	9/1/2011			25.76	271.20
	EES	12/6/2011		-	25.28	271.68
	EES	3/8/2012			23.80	273.16
	ZGA	5/23/2012			23.49	273.47
	EES	6/27/2012			23.60	273.36
	EES	10/18/2012			26.36	270.60
	ZGA	1/9/2017			23.66	273.30
	ZGA	1/12/2017			23.80	273 16
MW-3	ZGA	3/20/2017	296.96	29-39	21.30	275.66
	ZGA	8/17/2017	-		26.10	270.86
	ZGA	11/14/2017	-		25.69	271.00
	ZGA	2/13/2018	-		22.45	274.51
	ZGA	1/14/2019		-	24.53	272.43
	ZGA	4/10/2019			24.00	272.40
	ZGA	12/3/2020	-		24.32	272.04
	ZGA	9/3/2021	-		27.15	269.81
	ZGA	6/30/2022	-		24.70	272.24
	Pacific Crest	4/19/2023	-		25.03	272.24
	Pacific Crest	2/5/2025	-		20.00	272.02
	Terracon	8/25/2010			25.76	270.80
	Terracon	5/9/2011	-		21.77	274.79
	FES	6/22/2011	-		22.96	273.60
	EES	9/1/2011	-		25.35	270.00
	EES	12/6/2011	-		23.33	271.21
	EES	3/8/2012	-		23.30	273.26
	764	5/23/2012	-		23.30	273.46
	EES	6/27/2012	_		23.10	273.40
	EES	10/18/2012	_	-	25.22	270.58
	EES	1/14/2012	-	-	23.90	270.30
	764	1/9/2017	-	-	21.02	274.34
	ZGA	1/12/2017	206 56	25.35	23.21	273.33
10100-4	ZGA	3/20/2017	230.30	20-00	20.01	275.65
	ZGA	9/17/2017	_	-	20.91	275.05
	ZGA	11/11/2017	_	-	25.07	270.09
	ZGA	2/12/2017	_	-	23.32	271.24
	ZGA	1/1//2010	-		22.10	279.40
	ZGA 7C ^	1/14/2019	-1		24.10	272.40
	ZGA	12/3/2020	-1		24.00	270.44
	20A	0/2/2020	-		20.12	270.44
	ZGA ZCA	8/30/2021			24.44	212.12
	LGA Depific Creat	4/10/2022	-		24.00	212.23
	Pacific Crest	4/19/2023	4		24.01	271.90
	Pacific Urest	2/3/2023		1	∠4.0U	212.00

						Relative
			Relative Casing		Depth to	Potentiometric
Location ID	Sampled By	Sample Date	Elevation'	Screen Interval ²	Groundwater ²	Surface (feet)
	Terracon	8/25/2010	-		18.71	271.14
	Terracon	5/9/2011	-		14.96	274.89
	EES	6/22/2011	-		16.00	273.85
	EES	9/1/2011			18.30	271.55
	EES	12/6/2011			18.00	271.85
	EES	3/8/2012			16.65	273.20
	ZGA	5/23/2012			16.18	273.67
	EES	6/27/2012			16.26	273.59
	EES	10/18/2012			18.95	270.90
	EES	1/14/2013			14.45	275.40
	EES	4/24/2013			15.86	273.99
	EES	7/16/2013			18.26	271.59
MW-5	ZGA	1/9/2017	289.85	13-33	17.36	272.49
	ZGA	1/12/2017			16.46	273.39
	ZGA	3/20/2017			14.36	275.49
	ZGA	8/17/2017			18.71	271.14
	ZGA	11/14/2017			18.51	271.34
	ZGA	2/13/2018			15.52	274.33
	ZGA	1/14/2019			17.59	272.26
	ZGA	4/10/2019			17.64	272.21
	ZGA	12/3/2020			17.85	272.00
	ZGA	9/3/2021			19.93	269.92
	ZGA	6/30/2022			17.28	272.57
	Pacific Crest	4/19/2023			17.62	272.23
	Pacific Crest	2/5/2025		-	17.60	272.25
	Terracon	8/25/2010			18.91	271.03
	Terracon	5/9/2011	-		15.06	274.88
	EES	6/22/2011			16.14	273.80
	EES	9/1/2011		-	18.48	271.46
	EES	12/6/2011			18.25	271.69
	EES	3/8/2012			16.70	273.24
	ZGA	5/23/2012			16.30	273.64
	EES	6/27/2012			16.50	273.44
	EES	10/18/2012			19.17	270.77
	EES	1/14/2013			14.46	275.48
	ZGA	1/9/2017			16.44	273.50
MW-6	ZGA	1/12/2017	289.94	12.5-32.5	16.60	273.34
	ZGA	3/20/2017			14.36	275.58
	ZGA	8/17/2017			18.81	271.13
	ZGA	11/14/2017			18.71	271.23
	ZGA	2/13/2018			15.53	274.41
	ZGA	1/14/2019			17.64	272.30
	ZGA	4/10/2019			17.66	272.28
	ZGA	12/3/2020			17.77	272.17
	ZGA	9/3/2021			19.92	270.02
	ZGA	6/30/2022			17.65	272.29
	Pacific Crest	4/19/2023			17.79	272.15
	Pacific Crest	2/5/2025			17.73	272.21

Location ID	Sampled By	Sample Date	Relative Casing	Screen Interval ²	Depth to Groundwater ²	Relative Potentiometric Surface (feet)
Location ID	Terracon	8/25/2010	Lievation	ocreen interval	10.1/	270.58
	Terracon	5/9/2011	-	-	15.22	270.50
	FES	6/22/2011	-		16.36	273.36
	EES	9/1/2011	-		18.73	270.00
	FES	12/5/2011	-	-	15.25	276.00
	EES	3/8/2012	-		16.62	273.10
	ZGA	5/23/2012	-	-	16.41	273.31
	FES	6/27/2012	-		16.46	273.26
	FES	10/18/2012	-	-	10.40	270.20
	ZGA	1/9/2017	-	-	16.61	273.11
	ZGA	1/12/2017	-	-	16.76	272.96
MW-7	ZGA	3/20/2017	289.72	20-40	14 40	275 32
	ZGA	8/17/2017	-		19.11	270.61
	ZGA	11/1//2017	-		18.68	270.01
	ZGA	2/13/2018	-	-	15.51	271.04
	ZGA	1/1//2010	-		17.52	274.21
	ZGA	1/14/2019	-		17.52	272.20
	ZGA	4/10/2019	-		17.04	271.00
	ZGA	0/2/2020	-		20.07	271.00
	ZGA	9/3/2021 6/20/2022	-	-	20.07	209.00
	ZGA Decific Crost	4/10/2022	_	-	17.71	272.01
	Pacific Crest	4/ 19/2023	_	-	17.95	271.77
		2/5/2025			17.93	271.79
	Terracon	5/9/2011	-	-	10.02	274.54
	EES	0/22/2011	_	-	17.22	273.34
	EES	9/1/2011	-		19.50	271.00
	EES	12/5/2011	-		19.00	271.50
	EES	3/8/2012	-	-	17.45	273.11
		5/23/2012	_	-	17.21	273.35
	EES	0/27/2012	_	-	17.33	273.23
	EES 7CA	1/0/2012		-	20.19	270.37
	ZGA	1/9/2017	_	38-68	17.65	271.07
	ZGA	1/13/2017	_		17.00	272.91
MW-8	ZGA	3/20/2017 9/17/2017	290.56		10.17	275.39
	ZGA	0/17/2017	-		10.46	270.05
	ZGA	2/12/2017	_		19.40	271.10
	ZGA	1/14/2010	-		10.30	274.20
	ZGA	1/14/2019	-		10.30	272.20
	ZGA	4/10/2019	-		20.29	271.95
	ZGA	12/9/2019	_	-	19.91	270.20
	ZGA	0/3/2020	-		20.01	271.75
	764	6/30/2021	-	-	18 58	203.00
	Pacific Crest	//10/2022	-	-	18.83	271.90
	Pacific Crest	2/5/2025	-	-	18.75	271.73
	Terracon	1/0/2017			26.30	271.01
	Terracon	1/3/2017	-		20.30	212.09
		2/20/2017	_	-	23.10	273.69
	ZGA	9/17/2017	-		27.55	271.44
	ZGA 7GA	11/1/2017	-1		21.00	271.44
	ZGA 7CA	2/13/2018	-		21.02	211.41
M/N/_O	704	1/11/2010	208.00	20-30	24.00	214.04
10100-9		1/14/2019	230.33	29-39	20.43	212.00
		4/10/2019	-		20.13	212.20
		12/3/2020	-		20.75	212.24
	ZGA	9/3/2021			29.09	209.90
	LGA Depific Creat	0/30/2022	4		20.03	272.10
		4/19/2023	-		20.00	212.13
	Pacific Crest	2/5/2025			20.75	272.24

Location ID	Sampled By	Sample Date	Relative Casing Elevation ¹	Screen Interval ²	Depth to Groundwater ²	Relative Potentiometric Surface (feet)
	Terracon	1/9/2017			25.19	272.30
	Terracon	1/12/2017			24.17	273.32
	ZGA	3/20/2017			26.21	271.28
	ZGA	8/18/2017			26.21	271.28
	ZGA	11/14/2017			25.91	271.58
	ZGA	2/13/2018			22.85	274.64
MW-10	ZGA	1/14/2019	297.49	30-40	24.94	272.55
	ZGA	4/10/2019			25.25	272.24
	ZGA	12/3/2020			25.19	272.30
	ZGA	9/3/2021		-	27.42	270.07
	ZGA	6/30/2022			25.05	272.44
	Pacific Crest	4/19/2023			25.30	272.19
	Pacific Crest	2/5/2025			25.18	272.31
DPE-1	Pacific Crest	4/19/2023	NM	5-39	23.98	NM
DPE-2	Pacific Crest	4/19/2023	NM		24.78	NM
DPE-3	Pacific Crest	4/19/2023	NM		23.28	NM
DPE-4	Pacific Crest	4/19/2023	NM		23.47	NM
VM-1	Pacific Crest	4/19/2023	NM	10-20	DRY	NM

<u>NOTES:</u> ¹Elevation of top of casing relative to datum in feet above mean sea level established by Terracon

²Depth below top of well casing in feet

NM = not measured

NS = not sampled

"-" = not reported

Terracon = Terracon Consultants Inc

ZGA = Zipper Geo Associates

Pacific Crest = Pacific Crest Environmental, LLC

			Groundwater Quality Parameters ¹						
Location ID	Sampled Bv	Sample Date	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	рН	Oxidation Reduction Potential (mV)		
MW-1	Terracon	6/17/2009	NA	NA	1.3	5.24	212		
MW-1	Terracon	8/10/2010	NA	NA	2.25	5.34	-55		
MW-1	Terracon	5/10/2011	NA	NA	7.11	5.32	292		
MW-1	EES	6/22/2011	NA	0.194	3.19	5.7	129		
MW-1	EES	9/1/2011	NA	0.184	1.79	6.5	110		
MW-1	EES	12/5/2011	NA	0.218	2.20	6.4	65		
MW-1	EES	3/8/2012	NA	0.180	2.13	5.3	200		
MW-1	ZGA	5/23/2012	NA	NA	2.55	5.06	318		
MW-1	EES	6/27/2012	NA	0.280	2.57	5.3	221		
MW-1	EES	10/18/2012	NA	0.203	0.91	5.8	170		
MW-1	EES	1/14/2013	NA	0.190	3.29	5.3	190		
MW-1	EES	4/24/2013	NA	0.241	3.01	5.3	217		
MW-1	EES	7/16/2013	NA	0.384	1.13	6.0	151		
MW-1	ZGA	3/5/2014	NA	NA	4.82	6.57	136		
MW-1	ZGA	6/29/2022	14.76	0.99	4.00	4.99	2.28		
MW-2	Terracon	6/16/2009	NA	NA	1.5	6.08	97		
MW-2	Terracon	8/12/2010	NA	NA	3.75	5.79	329		
MW-2	Terracon	5/10/2011	NA	NA	2.04	5.97	226		
MW-2	EES	6/22/2011	NA	0.346	0.36	6.4	78		
MW-2	EES	9/1/2011	NA	0.305	4.72	7.3	75		
MW-2	EES	12/5/2011	NA	0.270	2.40	6.2	274		
MW-2	EES	3/8/2012	NA	0.270	1.69	6.2	165		
MW-2	ZGA	5/24/2012	NA	NA	1.03	6.10	236		
MW-2	EES	6/27/2012	NA	0.290	0.6	6.2	156		
MW-2	EES	10/18/2012	NA	0.276	0.35	6.6	144		
MW-2	EES	1/14/2013	NA	0.280	0.90	6.1	113		
MW-2	ZGA	3/5/2014	NM	NM	NM	NM	NM		
MW-2	ZGA	6/29/2022	15.38	1.37	3.82	5.31	2.2		
MW-2	Pacific Crest	2/5/2025	12.9	0.3391	0.26	6.73	179.8		
MW-3	Terracon	6/17/2009	NA	NA	2.3	5.86	186		
MW-3	Terracon	8/12/2010	NA	NA	4.64	5.89	326		
MW-3	Terracon	5/10/2011	NA	NA	5.34	5.97	275		
MW-3	ZGA	5/24/2012	NA	NA	5.01	5.93	247		
MW-3	ZGA	3/7/2014	NA	NA	7.02	6.90	236		
MW-3	ZGA	6/30/2022	15.44	0.511	4.90	5.87	181		
MW-3	Pacific Crest	4/20/2023	14.0	0.539	5.93	6.31	135.8		
MW-3	Pacific Crest	2/5/2025	13.5	0.748	3.59	6.59	218.9		
MW-4	Terracon	6/16/2009	NA	NA	2.6	5.63	211		
MW-4	Terracon	8/12/2010	NA	NA	6.48	5.75	400		
MW-4	Terracon	5/10/2011	NA	NA	6.10	5.83	291		
MW-4	EES	6/22/2011	NA	0.259	3.71	6.3	90		
MW-4	EES	9/1/2011	NA	0.24	4.11	7.1	68		
MW-4	EES	12/5/2011	NA	0.310	6.65	6.0	293		

			Groundwater Quality Parameters ¹					
Location ID	Sampled By	Sample Date	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	рН	Oxidation Reduction Potential (mV)	
MW-4	EES	3/8/2012	NA	0.230	5.87	6.0	182	
MW-4	ZGA	5/24/2012	NA	NA	5.86	5.88	244	
MW-4	EES	6/27/2012	NA	0.250	5.65	6.1	144	
MW-4	EES	10/18/2012	NA	0.239	6.44	6.4	163	
MW-4	EES	1/14/2013	NA	0.310	6.09	6.6	100	
MW-4	ZGA	3/7/2014	NA	NA	7.66	7.44	213	
MW-4	ZGA	6/30/2022	15.08	0.184	7.67	6.21	176	
MW-4	Pacific Crest	4/20/2023	13.3	0.669	12.21	6.28	154.3	
MW-4	Pacific Crest	2/5/2025	12.7	0.542	0.29	6.84	60.8	
MW-5	Terracon	8/10/2010	NA	NA	3.56	5.41	-49	
MW-5	Terracon	5/9/2011	NA	NA	1.87	5.27	204	
MW-5	EES	6/22/2011	NA	0.416	0.83	6.0	123	
MW-5	EES	9/1/2011	NA	0.356	0.27	6.3	132	
MW-5	EES	12/5/2011	NA	0.300	1.19	5.4	198	
MW-5	EES	3/8/2012	NA	0.330	0.72	5.4	175	
MW-5	EES	6/27/2012	NA	0.350	2.42	5.4	240	
MW-5	EES	10/18/2012	NA	0.245	0.30	6.0	119	
MW-5	EES	1/14/2013	NA	0.290	0.94	5.4	179	
MW-5	EES	4/24/2013	NA	0.454	2.50	5.5	213	
MW-5	EES	7/16/2013	NA	0.298	0.51	5.5	133	
MW-5	ZGA	3/6/2014	NA	NA	8.71	7.10	215	
MW-5	ZGA	6/29/2022	15.26	1.269	4.31	6.19	1.11	
MVV-6	l erracon	8/10/2010	NA	NA	3.85	5.86	-14	
IVIVV-6	Terracon	5/9/2011	NA	NA	2.96	5.64	276	
IVIVV-6	EES	6/22/2011	NA	0.362	2.39	6.1	104	
	EES	9/1/2011		0.393	1.60	0.7	98	
	EES	12/3/2011		0.260	0.00	D.0	<u>217</u>	
	EES	5/0/2012 6/27/2012		0.240	0.00	5.0	216	
M\\/_6	EES	10/18/2012		0.330	0.43	5.0 6.4	115	
M\\/_6	EES	1/14/2013	ΝΔ	0.344	0.43	5.8	168	
MW-6	ZGA	3/6/2014	NA	NA	7 16	7 15	216	
MW-6	ZGA	6/29/2022	14.83	0.696	4.32	6.98	1 84	
MW-6	Pacific Crest	4/19/2023	14 0	0.3967	3.51	6 15	145.8	
MW-6	Pacific Crest	2/5/2025	14.0	0.878	5 59	6.18	216.6	
MW-7	Terracon	8/10/2010	NA	NA	4.10	5.86	13	
MW-7	Terracon	5/9/2011	NA	NA	5.80	5.94	285	
MW-7	ZGA	3/6/2014	NA	NA	7.35	7.27	202	
MW-7	ZGA	6/30/2022	14.62	0.107	0.0	6.97	147	
MW-7	Pacific Crest	4/19/2023	13.9	0.3093	7.20	6.14	146.3	
MW-7	Pacific Crest	2/5/2025	13.2	0.4003	6.16	6.43	190	
MW-8	Terracon	8/10/2010	NA	NA	3.39	6.21	180	

			Groundwater Quality Parameters ¹						
Location ID	Sampled By	Sample Date	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	рН	Oxidation Reduction Potential (mV)		
MW-8	ZGA	5/24/2012	NA	NA	5.24	5.79	244		
MW-8	ZGA	3/6/2014	NA	NA	7.90	7.17	228		
MW-8	ZGA	6/30/2022	14.42	0.128	6.66	6.08	164		
MW-8	Pacific Crest	4/19/2023	13.3	0.2351	4.42	6.40	130.5		
MW-8	Pacific Crest	2/5/2025	11.7	0.2823	2.33	6.71	194.9		
MW-9	ZGA	3/5/2014	NA	NA	8.89	6.93	163		
MW-9	ZGA	6/29/2022	14.52	0.122	5.59	6.22	148		
MW-10	ZGA	3/6/2014	NA	NA	6.82	6.75	227		
MW-10	ZGA	6/29/2022	14.79	1.23	4.19	5.46	2.17		
DPE-1	Pacific Crest	4/19/2023	15.0	0.3074	5.45	6.40	117.6		
DPE-2	Pacific Crest	4/20/2023	14.5	0.2567	0.83	6.50	134.1		
DPE-3	Pacific Crest	4/20/2023	12.9	0.3362	11.69	5.83	186.2		
DPE-4	Pacific Crest	4/20/2023	13.5	0.2409	0.69	6.48	127.7		

NOTES:

¹Measured using YSI 556 Water Quality Meter

C = celsius

mS/cm = millisiemens per centimeter

mg/L = milligrams per liter

mV = millivolts

NM = not measured

NA = not available

Pacific Crest = Pacific Crest Environmental, LLC

R=Denotes results that exceed normal DO measurements and are likely the result of instrument error

				Groundwater Analytical Results (micrograms per liter) ¹				
Well ID	Sample ID	Sampled By	Date	Tetrachloroethene	Trichloroethene	(cis) 1,2-Dichloroethene	(trans) 1,2-Dichloroethene	Vinyl chloride
MW-1	MW-1	Terracon	6/17/2009	12	<1	4.8	<1	<1.0
MW-1	MW-1	Terracon	8/10/2010	<1	3.22	1.4	<1	<1.0
MW-1	MW-1	Terracon	5/10/2011	1.3	<1	<1	<1	<1.0
MW-1	TMW-1	EES	9/1/2011	<1	<1	<1	<1	<0.2
MW-1	TMW-1	EES	12/5/2011	1.1	<1	<1	<1	<0.2
MW-1	TMW-1	EES	3/8/2012	<1	<1	<1	<1	<0.2
MW-1	MW-1	ZGA	5/23/2012	<2	<2	<2	<2	<0.2
MW-1	TMW-1	EES	6/27/2012	<1	<1	<1	<1	<0.2
MW-1	TMW-1	EES	10/18/2012	1.1	<1	<1	<1	<0.2
MW-1	TMW-1	EES	1/14/2013	<1	<1	<1	<1	<0.2
MW-1	MW-1	ZGA	3/5/2014	<2	<2	<2	<2	<0.2
MW-1	MW-1	ZGA	1/11/2017	0.508	<1	<1	<1	<1.00
MW-1	MW-1	ZGA	8/18/2017	0.431	<1	<1	<1	<0.5
MW-1	MW-1	ZGA	11/15/2017	0.231	<0.5	<0.5	<0.5	<0.5
MW-1	MW-1	ZGA	2/13/2018	0.3	<0.5	<0.5	<0.5	<0.5
MW-1	MW-1	ZGA	1/14/2019	<0.5	<0.5	<0.5	<0.5	<0.5
MW-1	MW-1	ZGA	4/10/2019	<0.5	<0.5	<0.5	<0.5	<0.5
MW-1	MW-1	ZGA	6/30/2022	<2.0	<2.0	<2.0	<2.0	<0.2
MW-1	NS	Pacific Crest	4/19/2023	NS	NS	NS	NS	NS
MW-1	NS	Pacific Crest	2/5/2025	NS	NS	NS	NS	NS
MW-2	MW-2	Terracon	6/16/2009	<1	<1	<1	<1	<0.2
MW-2	MW-2	Terracon	8/12/2010	<1	<1	<1	<1	<1.0
MW-2	MW-2	Terracon	5/10/2011	<1	<1	<1	<1	<1.0
MW-2	TMW-2	EES	9/1/2011	<1	<1	<1	<1	<0.2
MW-2	TMW-2	EES	12/5/2011	<1	<1	<1	<1	<0.2
MW-2	TMW-2	EES	3/8/2012	<1	<1	<1	<1	<0.2
MW-2	MW-2	ZGA	5/24/2012	<2	<2	<2	<2	<0.2
MW-2	TMW-2	EES	6/27/2012	<1	<1	<1	<1	<0.2
MW-2	TMW-2	EES	10/18/2012	<1	<1	<1	<1	<0.2
MW-2	TMW-2	EES	1/14/2013	<1	<1	<1	<1	<0.2
MW-2	MW-2	ZGA	3/5/2014	<2	<2	<2	<2	< 0.2
MVV-2	MW-2	ZGA	1/11/2017	<1	<1	<1	<1	<1.00
MW-2	MW-2	ZGA	8/1//2017	<1	<1	<1	<1	<0.5
MW-2	MW-2	ZGA	11/14/2017	<0.5	<0.5	<0.5	<0.5	<0.5
MW-2	MW-2	ZGA	2/13/2018	<0.5	<0.5	<0.5	<0.5	<0.5
MW-2	MW-2	ZGA	1/14/2019	<0.5	<0.5	< 0.5	< 0.5	<0.5
MVV-2	MW-2	ZGA	4/10/2019	<0.5	<0.5	<0.5	<0.5	<0.5
MW-2	MW-2	ZGA	6/30/2022	<2.0	<2.0	<2.0	<2.0	<0.2
MW-2	NS	Pacific Crest	4/19/2023	NS	NS	NS	NS	NS
MVV-2	MW2-020525	Pacific Crest	2/5/2025	< 0.20	< 0.20	<0.20	<0.20	< 0.20
MVV-3	MVV-3	Ierracon	6/17/2009	6.6	<1	<1	<1	<0.2
MW-3	MW-3	Terracon	8/12/2010	6.4	<1	<1	<1	<1.0
MW-3	MW-3	Terracon	5/10/2011	9.3	<1	<1	<1	<1.0
MW-3	MW-3	ZGA	5/24/2012	15	<2	<2	<2	<0.2
MW-3	MW-3	ZGA	3/7/2014	5.6	<2	<2	<2	<0.2

				Groundwater Analytical Results (micrograms per liter) ¹						
Well ID	Sample ID	Sampled By	Date	Tetrachloroethene	Trichloroethene	(cis) 1,2-Dichloroethene	(trans) 1,2-Dichloroethene	Vinyl chloride		
MW-3	MW-3	ZGA	1/12/2017	9.28	<1	<1	<1	<1.0		
MW-3	MW-3	ZGA	8/21/2017	2.81	<1	<1	<1	<0.5		
MW-3	MW-3	ZGA	11/16/2017	4.96	<0.5	<0.5	<0.5	<0.5		
MW-3	MW-3	ZGA	2/14/2018	6.78	<0.5	<0.5	<0.5	<0.5		
MW-3	MW-3	ZGA	1/15/2019	4.44	<0.5	<0.5	<0.5	<0.5		
MW-3	MW-3	ZGA	4/11/2019	2.51	<0.5	<0.5	<0.5	<0.5		
MW-3	MW-3	ZGA	12/9/2019	3.22	<0.5	<0.5	<0.5	<0.5		
MW-3	MW-3	ZGA	12/3/2020	23.6	<0.5	<0.5	<0.5	<0.1		
MW-3	MW-3	ZGA	9/3/2021	3.1	<0.5	<1	<1	<0.02		
MVV-3	MW-3	ZGA	6/30/2022	6.0	<2.0	<2.0	<2.0	<0.2		
MVV-3	MW3-042023	Pacific Crest	4/20/2023	2.9	<0.20	<0.20	<0.20	<0.20		
	IVIVV 3-020525	Pacific Crest	2/5/2025	2.0	<0.20	<0.20	<0.20	<0.20		
	IVIVV-3	Adapt	6/16/2007	40	<1	<1	<1	<0.2		
		Terracon	0/10/2009	170	<1	<1	<1	<0.2		
	IVIVV-4	Terracon	0/12/2010	140	<1	<1	<1	<1.0		
			0/1/2011	77	<1	<1	<1	<1.0		
		EES	9/1/2011	69	<1	<1	<1	<0.2		
		EES	3/8/2011	73	<1	<1	<1	<0.2		
	N/\/_/		5/0/2012	140	<1	<1	<1	<0.2		
M\A/_4		EES	6/27/2012	80	<1	<1	<1	<0.2		
MW-4	TM//_/	EES	10/18/2012	110	<1	<1	<1	<0.2		
MW-4	TMW-4	FES	1/14/2013	84	<1	<1	<1	<0.2		
MW-4	M\\\/_4		3/7/2014	44	<2	<2	<2	<0.2		
MW-4	MW-4	ZGA	1/13/2017	96.1	<1	<1	<1	<1.0		
MW-4	MW-4	ZGA	8/21/2017	76.5	<1	<1	<1	<0.5		
MW-4	MW-4	ZGA	11/16/2017	50.8	<0.5	<0.5	<0.5	<0.5		
MW-4	MW-4	ZGA	2/14/2018	28.5	<0.5	<0.5	<0.5	<0.5		
MW-4	MW-4	ZGA	1/15/2019	10.7	<0.5	<0.5	<0.5	<0.5		
MW-4	MW-4	ZGA	4/11/2019	22.5	<0.5	< 0.5	<0.5	<0.5		
MW-4	MW-4	ZGA	12/9/2019	42.9	<0.5	< 0.5	<0.5	<0.5		
MW-4	MW-4	ZGA	12/4/2020	18.6	<0.5	<0.5	<0.5	<0.1		
MW-4	MW-4	ZGA	9/3/2021	20	<0.5	<1	<1	<0.02		
MW-4	MW-4	ZGA	6/30/2022	23	<2.0	<2.0	<2.0	<0.2		
MW-4	MW4-042023	Pacific Crest	4/20/2023	21	<0.20	<0.20	<0.20	<0.20		
MW-4	MW4-020525	Pacific Crest	2/5/2025	21	<0.20	<0.20	<0.20	<0.20		
MW-5	MW-5	Terracon	8/10/2010	0.61	<1	<1	<1	<1.0		
MW-5	MW-5	Terracon	5/9/2011	0.6	<1	<1	<1	<1.0		
MW-5	TMW-5	EES	9/1/2011	<1	<1	<1	<1	<0.2		
MW-5	TMW-5	EES	12/5/2011	<1	<1	<1	<1	<0.2		
MW-5	TMW-5	EES	3/8/2012	<1	<1	<1	<1	<0.2		
MW-5	I MW-5	EES	6/27/2012	<1	<1	<1	<1	< 0.2		
MVV-5	I MW-5	EES	10/18/2012	<1	<1	<1	<1	< 0.2		
IVIVV-5	1 1/1/1/0-5	EE2	1/14/2013	<'	< [<]	<	<0.Z		

				Groundwater Analytical Results (micrograms per liter) ¹						
Well ID	Sample ID	Sampled By	Date	Tetrachloroethene	Trichloroethene	(cis) 1,2-Dichloroethene	(trans) 1,2-Dichloroethene	Vinyl chloride		
MW-5	MW-5	ZGA	3/6/2014	<2	<2	<2	<2	<0.2		
MW-5	MW-5	ZGA	1/12/2017	<1	<1	<1	<1	<1.0		
MW-5	MW-5	ZGA	8/18/2017	0.281	<1	<1	<1	<0.5		
MW-5	MW-5	ZGA	11/15/2017	0.259	<0.5	<0.5	<0.5	<0.5		
MW-5	MW-5	ZGA	2/13/2018	0.22	<0.5	<0.5	<0.5	<0.5		
MW-5	MW-5	ZGA	1/15/2019	<0.5	<0.5	<0.5	<0.5	<0.5		
MW-5	MW-5	ZGA	4/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5		
MW-5	MW-5	ZGA	6/29/2022	<2.0	<2.0	<2.0	<2.0	<0.2		
MW-5	NS	Pacific Crest	4/19/2023	NS	NS	NS	NS	NS		
MW-5	NS	Pacific Crest	2/5/2025	NS	NS	NS	NS	NS		
MW-6	MW-6	lerracon	8/10/2010	<1	<1	<1	<1	<1.0		
MW-6	MW-6	Terracon	5/9/2011	2.2	<1	<1	<1	<1.0		
MW-6	TMW-6	EES	9/1/2011	<1	<1	<1	<1	<0.2		
MW-6	TMW-6	EES	12/5/2011	3.3	<1	<1	<1	<0.2		
MW-6	TMW-6	EES	3/8/2012	4.1	<1	<1	<1	<0.2		
MW-6	TMW-6	EES	6/27/2012	<1	<1	<1	<1	<0.2		
MW-6	IMW-6	EES	10/18/2012	<1	<1	<1	<1	<0.2		
MW-6	I MW-6	EES	1/14/2013	5.0	<1	<1	<1	< 0.2		
MW-6	MW-6	ZGA	3/6/2014	4.7	<2	<2	<2	<0.2		
MVV-6	MVV-6	ZGA	1/12/2017	1.07	<1	<1	<1	<1.0		
MVV-6	MVV-6	ZGA	8/21/2017	0.674	<1	<1	<1	<0.5		
MVV-6	MW-6	ZGA	11/15/2017	2.37	<0.5	<0.5	<0.5	<0.5		
MW-6	MW-6	ZGA	2/14/2018	3.21	<0.5	<0.5	<0.5	<0.5		
MW-6	MW-6	ZGA	1/15/2019	2.04	<0.5	<0.5	<0.5	<0.5		
MW-6	MW-6	ZGA	4/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5		
MW-6	MW-6	ZGA	6/30/2022	<2.0	<2.0	<2.0	<2.0	<0.20		
MW-6	MW6-041923	Pacific Crest	4/19/2023	0.34	<0.20	<0.20	<0.20	<0.20		
MW-6	MW6-020525	Pacific Crest	2/5/2025	<0.20	<0.20	<0.20	<0.20	<0.20		
MVV-7	MVV-7		8/10/2010	0.55	<1	<1	<1	<1.0		
MW-7	MW-7	Terracon	5/9/2011	<1	<1	<1	<1	<1.0		
MVV-7	MW-7	ZGA	3/6/2014	8	<2	<2	<2	<0.2		
MVV-7	MVV-7	ZGA	1/12/2017	0.948	<1	<1	<1	<1.0		
MW-7	MW-7	ZGA	8/21/2017	1.49	<1	<1	<1	<0.5		
MW-7	MW-7	ZGA	11/15/2017	3.8	<0.5	<0.5	<0.5	<0.5		
MW-7	MW-7	ZGA	2/14/2018	1.93	<0.5	<0.5	<0.5	<0.5		
MW-7	MW-7	ZGA	1/15/2019	3.88	<0.5	<0.5	<0.5	<0.5		
MW-7	MW-7	ZGA	4/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5		
MW-7	MW-7	ZGA	9/3/2021	<1	< 0.5	<1	<1	< 0.02		
MW-7	MW-7	ZGA	6/30/2022	<2.0	<2.0	<2.0	<2.0	<0.2		
MVV-7	MW7-041923	Pacific Crest	4/19/2023	0.89	< 0.20	< 0.20	< 0.20	< 0.20		
MVV-7	MW7-020525	Pacific Crest	2/5/2025	0.70	<0.20	<0.20	<0.20	<0.20		
MW-8	MW-8	Ierracon	5/10/2011	22	<1	<1	<1	<1.0		
MVV-8	MW-8	ZGA	5/24/2012	36	<2	<2	<2	<0.2		
MW-8	MW-8	ZGA	3/7/2014	13	<2	<2	<2	<0.2		
MW-8	MW-8	ZGA	1/13/2017	26.4	<1	<1	<1	<1.0		

				Groundwater Analytical Results (micrograms per liter) ¹						
Well ID	Sample ID	Sampled By	Date	Tetrachloroethene	Trichloroethene	(cis) 1,2-Dichloroethene	(trans) 1,2-Dichloroethene	Vinyl chloride		
MW-8	MW-8	ZGA	8/21/2017	25.1	<1	<1	0.25	<0.5		
MW-8	MW-8	ZGA	11/16/2017	19.2	<0.5	<0.5	<0.5	<0.5		
MW-8	MW-8	ZGA	2/14/2018	16.1	<0.5	<0.5	<0.5	<0.5		
MW-8	MW-8	ZGA	1/15/2019	12.1	<0.5	<0.5	<0.5	<0.5		
MW-8	MW-8	ZGA	4/11/2019	14.3	<0.5	<0.5	<0.5	<0.5		
MW-8	MW-8	ZGA	12/9/2019	17.5	<0.5	<0.5	<0.5	<0.5		
MW-8	MW-8	ZGA	12/4/2020	6.45	<0.5	<0.5	<0.5	<0.1		
MW-8	MW-8	ZGA	9/3/2021	13	<0.5	<1	<1	<0.02		
MW-8	MW-8	ZGA	6/30/2022	22	<2.0	<2.0	<2.0	<0.2		
MW-8	MW8-041923	Pacific Crest	4/20/2023	12	<0.20	<0.20	<0.20	<0.20		
MW-8	MW8-020525	Pacific Crest	2/5/2025	11	<0.20	<0.20	<0.20	<0.20		
MW-9	MW-9	Terracon	5/10/2011	<1.0	<1.0	<1.0	<1.0	<1.0		
MW-9	MW-9	ZGA	3/5/2014	<2	<2	<2	<2	<0.2		
MW-9	MW-9	ZGA	1/11/2017	<1	<1	<1	<1	<1.0		
MW-9	MW-9	ZGA	8/18/2017	<1	<1	<1	<1	<0.5		
MW-9	MW-9	ZGA	11/14/2017	<0.5	<0.5	<0.5	<0.5	< 0.5		
MW-9	MW-9	ZGA	2/13/2018	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5		
MW-9	MW-9	ZGA	1/14/2019	<0.5	<0.5	<0.5	<0.5	<0.5		
MW-9	MW-9	ZGA	4/10/2019	<0.5	<0.5	<0.5	<0.5	<0.5		
MW-9	MW-9	ZGA	6/30/2022	<2.0	<2.0	<2.0	<2.0	<0.2		
MW-9	NS	Pacific Crest	4/20/2023	NS	NS	NS	NS	NS		
MW-9	NS	Pacific Crest	2/5/2025	NS	NS	NS	NS	NS		
MW-10	MW-10	ZGA	3/6/2014	<2	<2	<2	<2	<0.2		
MW-10	MW-10	ZGA	1/12/2017	<1	<1	<1	<1	<1.0		
MW-10	MW-10	ZGA	8/18/2017	<1	<1	<1	<1	<0.5		
MW-10	MW-10	ZGA	11/14/2017	<0.5	<0.5	<0.5	<0.5	<0.5		
MW-10	MW-10	ZGA	2/13/2018	<0.5	<0.5	<0.5	<0.5	<0.5		
MW-10	MW-10	ZGA	1/14/2019	<0.5	<0.5	<0.5	<0.5	<0.5		
MW-10	MW-10	ZGA	4/10/2019	<0.5	<0.5	<0.5	<0.5	<0.5		
MW-10	MW10-06302022	ZGA	6/30/2022	<2.0	<2.0	<2.0	<2.0	<0.2		
MW-10	NS	Pacific Crest	4/20/2023	NS	NS	NS	NS	NS		
MW-10	NS	Pacific Crest	2/5/2025	NS	NS	NS	NS	NS		
DPE-1	DPE1-041923	Pacific Crest	4/19/2023	0.76	<0.20	<0.20	<0.20	<0.20		
DPE-2	DPE2-042023	Pacific Crest	4/20/2023	<0.20	<0.20	<0.20	<0.20	<0.20		
DPE-3	DPE3-042023	Pacific Crest	4/20/2023	11	<0.20	<0.20	<0.20	<0.20		
DPE-4	DPE4-042023	Pacific Crest	4/20/2023	<0.20	<0.20	<0.20	<0.20	<0.20		

				Groundwa	ater Analytic	al Results (micrograms	per liter) ¹
Well ID	Sample ID	Sampled By	Date	Tetrachloroethene	Trichloroethene	(cis) 1,2-Dichloroethene	(trans) 1,2-Dichloroethene	Vinyl chloride
	Effluent	ZGA	3/8/2017	0.748	<1	<1	<1	<1.0
DPE	Effluent	ZGA	11/12/2017	0.286	<0.5	<0.5	<0.5	<0.5
Effluent	Effluent	ZGA	1/11/2019	<0.5	<0.5	<0.5	<0.5	<0.5
	Effluent	ZGA	5/16/2019	<0.5	<0.5	<0.5	<0.5	<0.5
	MTCA Method	A Cleanup Level		5	5	-	-	0.2
		Potable Water	Noncancer	48	4	16	160	24
		Polable Walei	Cancer	20.8	0.54	-	-	0.029
MTCA Method B		Vapor Intrusion -	Noncancer	48	3.9	-	77	54
		Residential	Cancer	25	1.4	-		0.33
		Vapor Intrusion -	Noncancer	410	32	-	650	460
		Commercial	Cancer	120	12	-		1.6

NOTES:

BOLD = concentration exceeds MTCA Method A or B Cleanup Level

(<) = result is less than laboratory practical quantitation limit listed or analyte not detected at or above the reporting limit.

ITALICS = laboratory practical quantitation limit exceeds the applicable cleanup/screening level.

NA = not analyzed

NS = not sampled

¹Analyzed by U.S. Environmental Protection Agency (EPA) Method 8260B/8260C

² Table 720-1, Method A Cleanup Levels for Groundwater, Model Toxics Control Act (MTCA) Cleanup Regulation Chapter 173-340 of the Washington Administrative ³ Cleanup Levels and Risk Calculations (CLARC) under the Method B Model Toxics Control Act Cleanup Regulation

Adapt = Adapt Engineering, Inc.

Pacific Crest = Pacific Crest Environmental, LLC

Terracon = Terracon ConusIting Engineers & Scientists

ZGA = ZipperGeo Associates

APPENDIX A UIC CONDITIONAL RULE AUTHORIZATION LETTER

ANNUAL PROGRESS REPORT

FORMER PRIME CLEANERS SITE 18001 BOTHELL-EVERETT HIGHWAY BOTHELL, WASHINGTON

PACIFIC CREST PN: 223-002



STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

PO Box 47600, Olympia, WA 98504-7600 • 360-407-6000

August 20, 2024

Nicholas Echelbarger Mill Creek Crossing LLC 31 NW Cherry Loop Shoreline, WA 98177 Sent via email: <u>nick@ech-cpm.com</u>

Re: UIC Site 38840 – Underground Injection Control (UIC) Program Well Registration for Voluntary or Independent Cleanup Sites, Mill Creek Crossing (Site), 18001 Bothell Everett Highway, Bothell, WA

Dear Nicholas Echelbarger:

Ecology's UIC Program has reviewed your UIC registration for the above-mentioned Site. Based on the information provided in the registration and the additional information provided per Ecology's request, the UIC wells are **Conditionally Rule-Authorized**, and a State Waste Discharge Permit is not required to operate the wells under WAC 173-218 authorities.

The UIC registration number is 38840. The Site has been undergoing Ecology's Voluntary Cleanup Program (VCP) technical reviews and assistance for assessment and remediation of tetrachloroethene (PCE) impacts to soil and groundwater associated with release(s) of chlorinated solvents from a former dry-cleaning facility. The scope of work for the proposed insitu chemical reduction (ISCR) injection event was not submitted to Ecology's VCP for review and approval. If the ISCR work is to be eventually evaluated by the State to make a determination whether the ISCR has met the substantive requirements of the Model Toxics Control Act (MTCA), the Voluntary Cleanup Program (VCP) will make that evaluation. The Facility Site Identification Number is 19816.

Review of the 223-002 – UIC Registration Site – Facility Info 2024-07-15 document, uploaded to UIC registration 38840 on July 15, 2024, prepared by Pacific Crest Environmental LLC (Work Plan) and other information provided in UIC registration 38840, indicates that a total volume of 16 gallons of zero valent iron (ZVI) will be mixed with 1,179 gallons of potable water (2.5% ZVI mixture) for a total injectate mass of 1,195 pounds that will be injected at four well locations. The proposed injections will be targeted to depth range of 10- to 20-feet below ground surface (bgs) at the location of UIC well VMW-1, 5- to 39-feet bgs at the location of UIC well DPE-1, 5-

Nicholas Echelbarger August 20, 2024 Page 2

to 37-feet bgs at the location of UIC well DPE-3, and 5- to 38-feet bgs at the location of UIC well DPE-4. The ISCR injectate will be applied via gravity flow into each UIC well.

The injections are an approved one-time injection event estimated to be completed in one day. Information provided by the applicant in UIC registration 38840 indicates that a repeat injection event may be performed based on performance monitoring results. Any repeat injection events would require additional review and rule authorization from Ecology's UIC Program before being completed.

The groundwater monitoring program will include the following:

- Groundwater samples are proposed to be collected from monitoring wells MW-2, MW-3, MW-4, MW-6, MW-7, and MW-8 following approximately 30-days, 120-days, 210days, and 300-days after completion of the injection event. Water level measurements will be collected in the monitoring wells prior to sampling.
- Groundwater samples will be field screened for ferrous iron using a Hach Ferrous Iron Color Disc Test Kit in accordance with the manufacturer's guidelines. The collected groundwater samples will be analyzed for tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (c-DCE), trans-1,2-dichloroethene (t-DCE), and vinyl chloride (VC).

Conditional Rule-Authorization - Conditions of Use

There are inherent environmental risks associated with injecting compounds into groundwater. It is incumbent upon the owner and their representative to carefully characterize, manage, and monitor the Site surface and subsurface conditions to minimize risk and prevent unforeseen degradation of groundwater quality and other environmental risks.

Ecology will Rule-Authorize a UIC registration to operate when the two UIC Program requirements for Rule Authorization are met:

- 1. Registration of UIC wells (prior to use), and
- 2. The UIC well must meet the nonendangerment standard (WAC 173-218-080).

As stand-alone UIC wells, the wells do not meet the nonendangerment standard for Rule Authorization. Additional conditions are needed to allow for conditional rule-authorization and the remedial work to proceed. Nicholas Echelbarger August 20, 2024 Page 3

The following Site-specific UIC Program requirements for **Conditional Rule-Authorization** include:

- The injections are a one-time event. Should additional injections be needed, the owner must notify Ecology's UIC Program of proposed additional work and receive an additional Conditionally Rule-Authorization for any additional injection events.
- Onsite groundwater is not approved for use to mix with the remediation products for injection into the UIC wells.
- The injection activities must follow the proposed Work Plan and the scope of work presented in UIC registration 38840. Any deviations from the approved work plans or other agreements are not allowed unless Ecology's UIC Program has pre-approved those changes in writing.
- The injections must not cause a further degradation to groundwater quality criteria at the down-gradient monitoring points per state or federal applicable criteria. If such groundwater degradation occurs, the injection activities must discontinue; any environmental release must be reported no later than 24-hours from the release discovery at <u>Reporting An Environmental Issue</u>¹ or call 1-800-645-7911.
- Additionally, notification to Ecology's UIC Program of any change in UIC well status is a required element of this registration.
- The planned injection event start date is for September 10, 2024.

The Site will be **Conditionally Rule-Authorized** for as long as the nonendangerment standard of WAC 173-218-080 will continue to be met and the above items have been completed. Failure to capture any of the performance data required or cause a violation of the applicable cleanup standards may result in a denial, modification, or termination of the UIC registration.

The VCP Site Cleanup Manager will have final authority to determine if the IRCA described in the work plan have met the substantive requirement of the MTCA if such an opinion is requested. Ecology's UIC Program will not make that determination.

At any time if the nonendangerment standard cannot be met, Ecology may require you to apply for, and obtain, a State Waste Discharge Permit for the continued use of the proposed treatment compounds. You would need to obtain a formal waste discharge approval for this project through Ecology's State Waste Discharge Permit Program or Toxics Cleanup Program.

The owner is responsible to keep the UIC registration information current and retain all registration documents, plans, modeling, monitoring results, interim, and final reports. Upon Ecology request, the owner shall provide these documents to the UIC Program.

¹ https://ecology.wa.gov/footer-pages/report-an-environmental-issue

Nicholas Echelbarger August 20, 2024 Page 4

This UIC registration was evaluated under the presumptive approach, Ecology's UIC Program has determined the conditions described in the UIC registration and other submitted documents to be truthful and factual when making the determination the injections will be protective of the Site groundwater quality and will meet the nonendangerment standard requirements of WAC 173-218-080. Any material misrepresentations or omissions of fact supplied in this application may result in the denial or revocation of this registration authorization. Ecology's UIC Program has the authority to rescind a rule authorization if Ecology determines the system no longer meets the nonendangerment standard.

Please contact John Bhend at <u>UICwells@ecy.wa.gov</u> if you have any questions. You can find additional information on the UIC Program can at our website:

Ecology's Underground Injection Control Program

Sincerely,

John Bleise

John Bhend, LG Statewide UIC Program Coordinator Water Quality Program

cc: Andy Lakha, Lakha Properties Mill Creek LLC, <u>andy@lakhainvestments.com</u> William Carroll, Pacific Crest Environmental LLC, <u>w.carroll@pcenv.com</u> Christopher Maurer, Ecology VCP, <u>cmau461@ecy.wa.gov</u>

APPENDIX B LABORATORY ANALYTICAL REPORT - GROUNDWATER

ANNUAL PROGRESS REPORT

FORMER PRIME CLEANERS SITE 18001 BOTHELL-EVERETT HIGHWAY BOTHELL, WASHINGTON

PACIFIC CREST PN: 223-002



February 13, 2025

Bill Carroll Pacific Crest Environmental, LLC P.O. Box 952 North Bend, WA 98045

Re: Analytical Data for Project 223-002 Laboratory Reference No. 2502-060

Dear Bill:

Enclosed are the analytical results and associated quality control data for samples submitted on February 5, 2025.

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

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

Sincerely,

David Baumeister Project Manager

Enclosures



Date of Report: February 13, 2025 Samples Submitted: February 5, 2025 Laboratory Reference: 2502-060 Project: 223-002

Case Narrative

Samples were collected on February 5, 2025 and received by the laboratory on February 5, 2025. They were maintained at the laboratory at a temperature of 2° C to 6° C.

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

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



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

VOLATILE ORGANICS EPA 8260D

Matrix: Water Units: ug/L

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	MW2-020525					
Laboratory ID:	02-060-01					
Vinyl Chloride	ND	0.20	EPA 8260D	2-7-25	2-7-25	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-7-25	2-7-25	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-7-25	2-7-25	
Trichloroethene	ND	0.20	EPA 8260D	2-7-25	2-7-25	
Tetrachloroethene	ND	0.20	EPA 8260D	2-7-25	2-7-25	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	89	68-133				
Toluene-d8	101	79-123				
4-Bromofluorobenzene	103	78-117				

Client ID:	MW3-020525					
Laboratory ID:	02-060-02					
Vinyl Chloride	ND	0.20	EPA 8260D	2-7-25	2-7-25	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-7-25	2-7-25	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-7-25	2-7-25	
Trichloroethene	ND	0.20	EPA 8260D	2-7-25	2-7-25	
Tetrachloroethene	2.6	0.20	EPA 8260D	2-7-25	2-7-25	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	87	68-133				
Toluene-d8	100	79-123				
4-Bromofluorobenzene	100	78-117				

Client ID:	MW4-020525					
Laboratory ID:	02-060-03					
Vinyl Chloride	ND	0.20	EPA 8260D	2-7-25	2-7-25	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-7-25	2-7-25	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-7-25	2-7-25	
Trichloroethene	ND	0.20	EPA 8260D	2-7-25	2-7-25	
Tetrachloroethene	21	0.20	EPA 8260D	2-7-25	2-7-25	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	88	68-133				
Toluene-d8	99	79-123				
4-Bromofluorobenzene	103	78-117				



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VOLATILE ORGANICS EPA 8260D

Matrix: Water Units: ug/L

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	MW6-020525					
Laboratory ID:	02-060-04					
Vinyl Chloride	ND	0.20	EPA 8260D	2-7-25	2-7-25	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-7-25	2-7-25	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-7-25	2-7-25	
Trichloroethene	ND	0.20	EPA 8260D	2-7-25	2-7-25	
Tetrachloroethene	ND	0.20	EPA 8260D	2-7-25	2-7-25	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	87	68-133				
Toluene-d8	101	79-123				
4-Bromofluorobenzene	102	78-117				

Client ID:	MW7-020525					
Laboratory ID:	02-060-05					
Vinyl Chloride	ND	0.20	EPA 8260D	2-7-25	2-7-25	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-7-25	2-7-25	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-7-25	2-7-25	
Trichloroethene	ND	0.20	EPA 8260D	2-7-25	2-7-25	
Tetrachloroethene	0.70	0.20	EPA 8260D	2-7-25	2-7-25	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	91	68-133				
Toluene-d8	101	79-123				
4-Bromofluorobenzene	101	78-117				

Client ID:	MW8-020525					
Laboratory ID:	02-060-06					
Vinyl Chloride	ND	0.20	EPA 8260D	2-7-25	2-7-25	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-7-25	2-7-25	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-7-25	2-7-25	
Trichloroethene	ND	0.20	EPA 8260D	2-7-25	2-7-25	
Tetrachloroethene	11	0.20	EPA 8260D	2-7-25	2-7-25	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	90	68-133				
Toluene-d8	102	79-123				
4-Bromofluorobenzene	102	78-117				



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VOLATILE ORGANICS EPA 8260D QUALITY CONTROL

Matrix: Water Units: ug/L

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0207W1					
Vinyl Chloride	ND	0.20	EPA 8260D	2-7-25	2-7-25	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-7-25	2-7-25	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-7-25	2-7-25	
Trichloroethene	ND	0.20	EPA 8260D	2-7-25	2-7-25	
Tetrachloroethene	ND	0.20	EPA 8260D	2-7-25	2-7-25	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	86	68-133				
Toluene-d8	100	79-123				
4-Bromofluorobenzene	99	78-117				

					Source	Pe	rcent	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Result	Rec	overy	Limits	RPD	Limit	Flags
MATRIX SPIKES											
Laboratory ID:	02-05	59-04									
	MS	MSD	MS	MSD		MS	MSD				
Vinyl Chloride	8.59	8.32	10.0	10.0	ND	86	83	62-121	3	15	
(trans) 1,2-Dichloroethene	9.00	8.95	10.0	10.0	ND	90	90	79-120	1	16	
(cis) 1,2-Dichloroethene	9.24	9.13	10.0	10.0	ND	92	91	81-128	1	16	
Trichloroethene	11.0	10.5	10.0	10.0	ND	110	105	80-130	5	12	
Tetrachloroethene	9.94	9.42	10.0	10.0	ND	99	94	84-126	5	19	
Surrogate:											
Dibromofluoromethane						85	88	68-133			
Toluene-d8						101	101	79-123			
4-Bromofluorobenzene						100	105	78-117			



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Data Qualifiers and Abbreviations

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

Ζ-

ND - Not Detected at PQL PQL - Practical Quantitation Limit RPD - Relative Percent Difference



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Reviewed/Date	Received	Relinquished	Received	Relinquished	Received	Relinquished	Signature		×	6 MW 8 - 020525	5 MW 7 - 020525	4 MW 6 - 020525	3 MW4 - 020525	2 MW3 - 020525	1 MWZ - 020525	Lab ID Sample Identification	M BLACK	W. CALADUL	Project Name: PAIME CLÉANERS	223-002	Company ACIFIC CREST	Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052 Phone: (425) 883-3881 • www.onsite-env.com	OnSite Environmental Inc.
Reviewed/Date					- CORE JUST	DACIFIC CRUSI 45/25	Company Date			1405	1250	1325			45/25 1455 H20 3	Date Time Sampled Sampled NWTP NWTP NWTP NWTP	(other) er of C H-HCIE H-GX/E H-GX (f	ontain D STEX (8	Standard (7 Days) ers 021 8 an-up	2 Days	Same Day	(Check One)	Chain of Custody
Chromatograms with final report	Data Package: Standard Level III Level IV	$\frac{X}{X} = \frac{1}{12}$ Time Comments/Special Instructions $\frac{X}{U74k} \neq PCE; TCE; c-DCE; k-DCE; VC ONLYER $										NWTPH-Dx (SG Clean-up]) Volatiles 8260 Halogenated Volatiles 8260 EDB EPA 8011 (Waters Only) Semivolatiles 8270/SIM (with low-level PAHs) PAHs 8270/SIM (low-level) PCBs 8082 Organochlorine Pesticides 8081 Organophosphorus Pesticides 8151 Total RCRA Metals Total MTCA Metals TCLP Metals HEM (oil and grease) 1664							by Page <u>' of '</u>				