

September 22, 2023

Mr. Christopher Maurer Toxics Cleanup Program Washington State Department of Ecology Northwest Regional Office PO Box 330316, Shoreline, WA 98133-9716

RE: FORMER PRIME CLEANERS SITE 18001 BOTHELL EVERETT HIGHWAY BOTHELL, WASHINGTON FACILITY SITE ID NO. 19816 VCP NO. NW2751 CLEANUP SITE ID NO. 11775 PACIFIC CREST NO. 223-002

Dear Mr. Maurer:

Pacific Crest Environmental, LLC (Pacific Crest) has prepared the enclosed Amended Draft Cleanup Action Plan (Amended dCAP) on behalf of Mill Creek Crossing (MCC), LLC for review by the Washington State Department of Ecology (Ecology). This dCAP has been prepared to meet the requirements of the Model Toxics Control Cleanup Act (MTCA) administered by Ecology under Chapter 173-340 of the Washington Administrative Code (WAC).

Please do not hesitate to contact the undersigned at (425) 363-2394 should you have questions or require additional information.

Sincerely,

PACIFIC CREST ENVIRONMENTAL, LLC

William land

William Carroll, L.H.G, L.G. Principal Hydrogeologist

cc: Mr. Nicholas Echelbarger (MCC) Mr. Andy Lakha (Lakha Properties – Mill Creek, LLC) Ms. Chrystene Milner (Fortress Management) Mr. Matt Stock (Hillis Clark Martin & Peterson P.S.) Mr. Matt Adamson (Jameson Pepple Cantu PLLC)



Voluntary Cleanup Program

Washington State Department of Ecology Toxics Cleanup Program

REQUEST FOR OPINION FORM

Use this form to request a written opinion on your planned or completed independent remedial action under the Voluntary Cleanup Program (VCP). Attach to this form the plans or reports documenting the remedial action. Please submit only one form for each request.

Step 1: IDENTIFY HAZARDOUS WASTE SITE

Please identify below the hazardous waste site for which you are requesting a written opinion under the VCP. This information may be found on the VCP Agreement.

Facility/Site Name: Former Prime Cleaners Site

Facility/Site Address: 18001 Bothell Everett Highway

Facility/Site No: 19816

VCP Project No.: NW2751

Step 2: REQUEST WRITTEN OPINION ON PLAN OR REPORT

What type of independent remedial action plan or report are you submitting to Ecology under the VCP? Please check all that apply.	for review					
 Remedial investigation plan Remedial investigation report Feasibility study report Property cleanup* plan (* cleanup of one or more parcels located within the Property cleanup* report Site cleanup plan Site cleanup report Other – please specify: 	Site)					
Do you want Ecology to provide you with a written opinion on the planned or or independent remedial action? ☐ Yes ☐ No	completed					
Please note that Ecology's opinion will be limited to:						
 Whether the planned or completed remedial action at the site meets the substantive requirements of the Model Toxics Control Act (MTCA), and/or 						
Whether further remedial action is necessary at the site under MTCA.						

Step 3: REPRESENTATIONS AND SIGNATURE

The undersigned representative of the Customer hereby certifies that he or she is fully authorized to request services from Ecology under the Agreement for this VCP Project.

Name: William Carroll			-	Title: Principal Hydrogeologist		
Signature: William Carroll					Date: 09-22-23	
Organization: Pacific Crest Environmental, LLC						
Mailing address: PO Box 952						
City: North Bend			State: WA Zip code: 98045		o code: 98045	
Phone: 425-888-4990 Fax: 425-888-4994 E-		E-mail: wcarroll@arrowenv.com				

Step 4: SUBMITTAL

Please mail your completed form and the independent remedial action plan or report that you are requesting Ecology review to the site manager Ecology assigned to your Site. If a site manager has not yet been assigned, please mail your completed form to the Ecology regional office for the County in which your Site is located.



If you need this publication in an alternate format, please call the Toxics Cleanup Program at 360-407-7170. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.



PACIFIC CREST ENVIRONMENTAL 1531 BENDIGO BOULEVARD NORTH PO BOX 952 NORTH BEND, WA 98045 T 425.888.4990 F 425.888.4994

AMENDED CLEANUP ACTION PLAN

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

Prepared by:

William Carroll, LG, LHG Principal Hydrogeologist

Reviewed by:

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Joel Harrington Project Geologist

September 22, 2023



TABLE OF CONTENTS

1.0	INTRO	DDUCTION	1-1
	1.1	PURPOSE	1-1
	1.2	REMEDIAL ACTION RESPONSIBILITIES	1-1
2.0	SITE	DESCRIPTION	2-1
	2.1	BACKGROUND	2-1
		2.1.1 MCC Property Description	2-1
		2.1.2 Physiographic Setting	2-1
		2.1.3 Terrestrial Habitat Setting	2-1
		2.1.4 Geologic Setting	2-1
		2.1.5 Hydrogeology	
	2.2	SITE INVESTIGATION, FEASIBILITY STUDY, AND INTERIM	MEASURE
	0.4		
	2.1 2.2		Z-4 25
	2.2		2-5 2-5
	2.0	CI FANUP STANDARDS	2-8
	2.1	2.4.1 Contaminants of Concern	
		2.4.1 Cleanup Levels	2-8
		2.4.1 Point of Compliance	2-8
	2.5	APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENT	S2-8
3.0	AMEN	IDED CLEANUP ACTION PLAN	3-1
	3.1	CLEANUP ACTION OBJECTIVE	3-1
	3.2	CLEANUP ACTION DESCRIPTION	3-1
	3.3	RESTORATION TIMEFRAME	3-1
4.0	CLEA	NUP ACTION DESIGN AND IMPLEMENTATION	4-1
	4.1	SCHEDULE	4-1
		4.1.1 Implementation	4-1
		4.1.1.1 Restrictive Covenant Implementation	4-1
		4.1.1.2 DPE System Decommissioning	4-1
	4.2		4-1
	4.3		4-2
	4.4	DOCUMENTATION REQUIREMENTS	4-2
		4.4.1 Data Management	4-2
		4.4.2 Health and Salety	
		4.4.0 FIUGIESS REPUILS	4-3 1_3
		4.4.3.2 Closure Report	4- 3 4_3
			0
5.0	REFE	RENCES	5-1

FIGURES

- Figure 1 Site Location Map
- Figure 2 Site Plan
- Figure 3 Site Plan with Potentiometric Surface Elevation Contours and Analytical Results (4/19/2023 4/20/2023)
- Figure 4 Site Plan with Analytical Results Soil Vapor
- Figure 5 Site Plan with Analytical Results Air
- Figure 6 Site Plan with Extent of Contamination Soil and Groundwater
- Figure 7 Site Plan with Restrictive Covenant Area

TABLES

- Table 1 Groundwater Elevation Data Summary
- Table 2Groundwater Quality Parameters Summary
- Table 3
 Laboratory Analytical Results Summary Groundwater
- Table 4
 Laboratory Analytical Results Summary Sub-Slab Soil Vapor
- Table 5 Laboratory Analytical Results Summary Indoor and Ambient Air
- Table 6 Laboratory Analytical Results Summary Soil
- Table 7
 Preliminary Screening Levels and Proposed Cleanup Levels Soil
- Table 8
 Preliminary Screening Levels and Proposed Cleanup Levels Groundwater
- Table 9
 Preliminary Screening Levels and Proposed Cleanup Levels Air and Soil Vapor

APPENDICES

Appendix A Data Gap Investigation Report

EXECUTIVE SUMMARY

This document presents for review by the Washington State Department of Ecology (Ecology) the Amended Draft Cleanup Action Plan (dCAP) for the Former Prime Cleaners Site (the Site) near Bothell, Washington. This dCAP was prepared by Pacific Crest Environmental, LLC (Pacific Crest) on behalf of Mill Creek Crossing (MCC), LLC. This dCAP has been prepared to meet the requirements of the Model Toxics Control Cleanup Act (MTCA) administered by Ecology under Chapter 173-340 of the Washington Administrative Code (WAC). This dCAP describes the proposed cleanup action for this Site and sets forth the requirements that the cleanup must meet.

- Background The Site consists of properties affected by contamination associated with a release of tetrachloroethene (PCE) that occurred at the MCC Center at 18001 Bothell Everett Highway in Bothell Washington (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 (Prime Cleaners) 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 following COPCs in the media of concern that exceed their MTCA cleanup levels presented in this dCAP: PCE and TCE. The Site has been assigned Facility/Site No. 19816 and Voluntary Cleanup Program (VCP) Project No. NW2751 by Ecology.
- Cleanup Action Overview The Remedial Investigation/Feasibility Study (RI/FS) and CAP, dated June 24, 2014, 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. Between 2017 and 2021, MCC's consultant operated the DPE system and conducted groundwater monitoring.
- An investigation conducted in 2023 determined that operation of the DPE system significantly reduced concentrations of PCE and TCE in media of concern at and around the former Prime Cleaners. Samples of indoor air within the former Prime Cleaners tenant space and soil vapor beneath the former Prime Cleaners indicated that concentrations of PCE and TCE were below their respective cleanup and screening levels applicable to commercial workers. Concentrations of PCE and TCE in groundwater also decreased but remained above MTCA Method A cleanup levels.
- In order to achieve the cleanup action objectives within the remaining portions of the Site, the amended cleanup action approach presented in this dCAP consists of implementation of a restrictive covenant on a portion of the MCC Property that prohibits the use of groundwater as a potable water supply and monitored natural attenuation (MNA) of PCE in groundwater beyond the MCC Property boundaries. The reliance on MNA beyond the MCC Property boundaries is appropriate because of the contaminant mass reduction achieved by the DPE system and the decreasing concentrations of PCE in well MW-8, the only affected well located beyond the MCC Property boundaries.

1.0 INTRODUCTION

1.1 PURPOSE

Pacific Crest Environmental, LLC (Pacific Crest) has prepared for review by the Washington State Department of Ecology (Ecology) this Amended Draft Cleanup Action Plan (dCAP) for the Former Prime Cleaners Site (the Site¹) located at the Mill Creek Crossing (MCC) Center at 18001 Bothell Everett Highway in Bothell Washington (MCC Property). The general location of the Site is shown in Figure 1.

A CAP is required as part of the site cleanup process under Model Toxics Control Act (MTCA) Cleanup Regulations (Chapter 173-340 of the Washington Administrative Code [WAC 173-340]). The purpose of the dCAP is to identify the proposed cleanup action for the Site and to provide an explanatory document for public review. More specifically, this plan:

- Describes the Site;
- Summarizes current site conditions;
- Summarizes the cleanup action alternatives considered in the remedy selection process;
- Describes the selected cleanup action for the Site and the rational for selecting this alternative;
- Identifies site-specific cleanup levels and points of compliance for each hazardous substance and medium of concern for the proposed cleanup action;
- Identifies applicable state and federal laws for the proposed cleanup action;
- Identifies residual contamination remaining on the Site after cleanup and restrictions on future uses and activities at the Site to ensure continued protection of human health and the environment;
- Discusses compliance monitoring requirements; and
- Presents the schedule for implementing the dCAP.

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 Echelbarge 31 NW Cherry Loop Shoreline, Washington 98177

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 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

The current property owner is:

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

2.0 SITE DESCRIPTION

The following subsections provide a description of the MCC Property, relevant Site characterization information, and remedial investigation, feasibility study, and interim action activities completed at the Site by Pacific Crest and others, and cleanup levels.

2.1 BACKGROUND

2.1.1 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 2000, 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).

2.1.2 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.

2.1.3 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).

2.1.4 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 melt-

water 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.

2.1.5 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.

2.2 SITE INVESTIGATION, FEASIBILITY STUDY, AND INTERIM MEASURE 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 2014, Zipper Geo Associates (ZGA) submitted a Remedial Investigation Feasibility Study (RI/FS) Report and dCAP to Ecology for review (ZGA 2014a and ZGA 2014b). The RI/FS results are summarized below:

- Soil Laboratory analysis of soil samples detected PCE at concentrations ranging from 1.1 micrograms per kilogram (µg/kg) to 560 µg/kg and TCE concentrations ranging from 9.2 µg/kg to 38 µg/kg. Laboratory analysis of soil samples detected cis-1,2-DCE in two samples at concentrations of 28 µg/kg and 330 µg/kg. Laboratory analysis of soil samples did not detect trans-1,2-DCE or VC at concentrations above their respective practical quantitation limits (PQLs). PCE and TCE are the only COPCs in soil that exceed their respective MTCA Method A cleanup levels. The elevated concentrations of PCE and TCE in soil were located in the vicinity of the former Prime Cleaners dry-cleaning equipment. The extent of PCE and TCE concentrations in soil that exceed their respective MTCA Method A cleanup levels for unrestricted properties is defined within the boundaries of the MCC Property.
- **Groundwater** Laboratory analysis of groundwater samples detected PCE at concentrations ranging from 0.55 micrograms per liter (μ g/L) to 170 μ g/L. Laboratory analysis of groundwater samples detected TCE in one sample at a concentration of 3.22 μ g/L and detected cis-1,2-DCE in two samples at concentrations of 1.4 μ g/L and 4.8 μ g/L,

respectively. Laboratory analysis of groundwater samples did not detect trans-1,2-DCE or VC at concentrations above their respective PQLs. PCE is the only COPC in groundwater that exceeds its MTCA Method A cleanup level. The extent of PCE concentrations in groundwater that exceed the MTCA Method A cleanup level extends beyond the southern boundary of the MCC Property but is delineated by monitoring wells located to the north, south, east, and west.

- Soil Vapor Laboratory analysis of soil samples detected PCE at concentrations ranging from 500 micrograms per cubic meter (µg/m³) to 24,000 µg/m³ and detected TCE at concentrations ranging from 68 µg/m³ to 470 µg/m³. Laboratory analysis of soil vapor samples detected cis-1,2-DCE in one sample at a concentration of 22 µg/m³. Laboratory analysis of soil vapor samples did not detect trans-1,2-DCE or VC at concentrations above their respective PQLs. The elevated concentrations of PCE and TCE in soil vapor were located in the vicinity of the former Prime Cleaners dry-cleaning equipment.
- Indoor Air Laboratory analysis of indoor air samples detected PCE at concentrations ranging from 1.1 μg/m³ to 3.6 μg/m³ and laboratory analysis of representative indoor air samples² detected TCE at concentrations ranging from 1.3 μg/m³ to 2.1 μg/m³. Laboratory analysis of indoor air samples did not detect cis-1,2-DCE, trans-1,2-DCE or VC at concentrations above their respective PQLs.
- **Exposure Pathways –** The RI concluded that direct contact and inhalation pathways were not complete and that the leaching to groundwater and groundwater ingestion pathways were potentially complete, but no water supply wells or ecological receptors were identified within the Site.

The RI/FS and CAP 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. DPE is effective for remediation of shallow permeable material (e.g., sand and silty sand). During operation of a typical DPE system, the concentrations of CVOCs in soil gas and groundwater decrease as the mass of contaminants present in the subsurface is reduced. Over time, the CVOC recovery rate tends to become a function of the rate of desorption of contaminants from soil and recovery rates reach asymptotic levels. The RI/FS Report estimated a restoration timeframe of 1-year to achieve cleanup standards for both soil and groundwater. Ecology approved the CAP 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

² Laboratory analysis of indoor air samples collected on November 21, 2013 detected elevated TCE concentrations that were attributed to TCE-containing "spot cleaner". The concentrations of TCE detected at that time do not appear representative of vapor intrusion by soil vapor.

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.

2.1 RECENT MONITORING AND INVESTIGATION ACTIVITIES

Between April 19, 2023 and April 22, 2023, Pacific Crest, on behalf of MCC, conducted monitoring activities at the Site. The purpose of the scope of work was to assess current groundwater, soil vapor, and indoor air conditions. The DPE system was not operational during the sampling activities. The investigation activities included:

- Collecting groundwater samples from select existing wells and submitting the samples to an independent laboratory for analysis of CVOCs;
- Collecting sub-slab soil vapor samples from existing Vapor Pin[™] sample points for laboratory analysis of CVOCs; and,
- Collecting indoor air samples inside the former Prime Cleaners tenant suite, now the Fusion India and Osaka Grill restaurants, and collecting an ambient air sample outside the former Prime Cleaners tenant space.

The investigation methods and results are presented in the Data Gap Investigation Report, dated August 17, 2023, provided in Appendix A. The recent investigation activities are summarized below:

- On April 19, 2023, the depth to groundwater measured in the monitoring wells ranged from 17.62 feet below top of casing (btoc) (MW-5) to 26.86 feet btoc (MW-9). The groundwater elevations ranged from 272.23 feet (MW-1 and MW-5) to 271.73 feet (MW-8). Groundwater elevation data are presented in Table 1.
- 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 2.
- Groundwater analytical data for the COPCs for the Site are summarized in Table 3. Laboratory analysis of the groundwater samples detected PCE at concentrations ranging from 0.34 µg/L to 21 µg/L. Laboratory analysis of the groundwater samples collected from well MW-4, MW-8, and DPE-3 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 practical quantitation limits (PQLs). A Site Plan illustrating the concentrations of COCs in groundwater from the April 2023 groundwater monitoring event is provided on Figure 3.
- On April 19, 2023, Pacific Crest collected on soil vapor sample from Vapor Pin[™] SPG-5. The tracer and shut-in tests confirmed the integrity of the Vapor Pin installation. Laboratory analysis of soil vapor sample SPG-5 detected PCE, TCE, and trans-1,2-DCE at concentrations of 458 µg/m³, 28.5 µg/m³, and 0.403 µg/m³, respectively. Laboratory analysis did not detect the remaining COCs at concentrations above their respective laboratory PQLs. The detected concentrations of PCE and TCE exceed their respective default sub-slab soil vapor screening levels for residential land use, but not the screening levels for commercial workers. The soil vapor results are summarized in Table 4 and illustrated on Figure 4.
- On April 19, 2023, Pacific Crest deployed three Summa® canisters to collect indoor and ambient air samples. Laboratory analysis of the ambient air sample (AA-042023) did not detect any of the COCs at concentrations above their respective laboratory PQLs. Laboratory analysis of the indoor air samples IA1-042023 and IA2-042023 detected PCE concentrations of 0.284 µg/m³ and 0.234 µg/m³, respectively. The detected concentrations of PCE were below the default MTCA Method B cleanup level that is protective of residential exposure scenarios and the MTCA Method B screening level for commercial workers. The remaining COC were not detected at concentrations above their respective PQLs. The air results are summarized in Table 5 and illustrated on Figure 5.

2.2 REGULATORY FRAMEWORK

In 2012, the Site was entered into Ecology's Voluntary Cleanup Program (VCP) for the purpose of obtaining Opinion Letters from Ecology during the cleanup process. Ecology assigned Facility/Site No. 19816 and VCP Project No. NW2751 to the Site.

In correspondence dated March 6, 2020, ZGA, on behalf of MCC, requested an 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.

2.3 UPDATED CONCEPTUAL SITE MODEL

An updated conceptual site model (CSM) has been developed for the Site that is based upon data collected during the investigation and cleanup activities conducted at the Site by Pacific Crest and others. The updated CSM identifies plausible exposure pathways for human receptors. The updated CSM elements are presented below:

- A release of PCE based dry cleaning solvent occurred on the MCC Property in the former Prime Cleaners tenant space. On the basis of the dry-cleaning operation dates, the release of PCE appears to have occurred between 1984 and 2000. The current tenant in the former Prime Cleaners tenant space is a restaurant (Fusion India).
- The Site COPCs consist of PCE and its reductive dechlorination degradation products TCE, cis-1,2-DCE, trans-1,2-DCE, and VC. The media of concern where concentrations of COPCs have been detected include soil, groundwater, soil vapor, and indoor air. Laboratory analysis of soil, soil vapor, indoor air, and groundwater samples detected PCE at concentrations above its MTCA Method A cleanup level or applicable screening level. Laboratory analysis of soil, soil vapor, and indoor air samples has also detected TCE, a breakdown product of PCE, at concentrations above its MTCA Method A cleanup level or applicable screening levels. Laboratory analysis of soil and soil vapor samples has detected cis-1,2-DCE at concentrations below its applicable screening levels. Laboratory analysis of soil, soil vapor, indoor air, and groundwater samples has not detected trans-1,2-DCE or VC at concentrations above their respective PQLs. The analytical results for the COPCs in the media of concern are summarized in Tables 3, 4, 5, and 6. The applicable preliminary screening levels (PSLs) for the COPCs in soil, groundwater, soil vapor, and air are the applicable MTCA Method A or Method B cleanup levels or screening levels which are presented in Tables 7, 8, and 9. The COCs are those COPCs that have exceeded the applicable cleanup level: PCE and TCE
- The horizontal and vertical extent of concentrations of PCE and TCE in soil and groundwater is defined by samples collected to date and the plan view extent, as delineated in the RI/FS Report, is illustrated on Figure 6.
- The applicable transport mechanisms for the migration of COCs include direct release to soil; migration to subsurface soil; migration/leaching to groundwater; volatilization from soil and groundwater to air; and transport by groundwater flow (advection).
- Between 2017 and 2021, ZGA operated the DPE system. The system was initially scheduled to operate for one year, but operations continued for four years. During operations, the DPE system extracted and discharged to the sanitary sewer 1,164,940 gallons of groundwater. The effectiveness of the DPE system can be assessed on the basis of the reduced concentrations of the COCs in the media of concern. Implementation of DPE resulted in decreases in concentrations of PCE, TCE, and cis-1,2-DCE in all media where they were detected. A comparison of the maximum concentrations of PCE and TCE in the media of concern before and after DPE³ system operations is provided below:

³ The most recent investigation activities in 2023 are representative of post-DPE Site conditions.

Media of	Maximum Concentrations					
Concern	Before DPE C	peration	After DPE Operation			
	PCE	TCE	PCE TCE			
Soil	560 µg/kg	38 µg/kg	Confirmation soil samples were not collected during the 2023 investigation activities, but the soil vapor results provide empirical evidence the indicates that concentrations of PCE and TCE in soil are below their respective cleanup levels. ⁴			
Soil Vapor	24,000 μg/m³	840 µg/m³	458 μg/m ³ 28.5 μg/m ³			
Indoor Air	3.6 µg/m³	2.1 µg/m³	0.284 μg/m ³ <0.00672 μg/m ³			
Groundwater	170 µg/L	3.22 µg/L	23 μg/L <0.20 μg/L			

The change in aerial extent of PCE concentrations in groundwater since operation of the DPE system is illustrated on Figure 6.

- Prior to implementation of DPE, inhalation was identified as the only current potentially complete exposure pathway. Based on the zoning classification for the MCC Property (General Commercial) and current commercial land use, the current receptors are commercial workers. Implementation of DPE reduced the concentrations of the COCs in indoor air to below their respective cleanup levels and reduced concentrations of the COCs in soil vapor and groundwater to below their respective screening levels that are protective of indoor air for commercial workers. Future receptors potentially exposed to contaminants in air at the Site will likely still be commercial workers.
- Laboratory analysis of groundwater samples has detected PCE at concentrations that exceed the MTCA Method A cleanup level that is protective of potable groundwater. However, groundwater in the vicinity of the Site is not currently used as a drinking water source. Exposure to PCE in potable water is a complete pathway only if an extraction well was installed and used as a source for potable water.
- MTCA requires an evaluation of the potential impact for the constituents of concern on terrestrial ecological receptors in accordance with the procedures outlined in WAC 173-340-7490. However, 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 (b) and (c)(i); therefore, no further ecological evaluation was conducted.

⁴ PCE and TCE are present in soil vapor due to their chemical properties. In the absence of active vapor recovery, concentrations of PCE and TCE in soil gas should reach equilibrium with concentrations of PCE and TCE in soil. DPE resulted in a 94% decrease in concentrations of PCE in soil vapor. A reduction of this magnitude in soil concentrations results in predicted concentrations below the respective cleanup levels for PCE and TCE.

2.4 CLEANUP STANDARDS

2.4.1 Contaminants of Concern

The Site COPCs consist of PCE and its reductive dechlorination degradation products TCE, cis-1,2-DCE, trans-1,2-DCE, and VC. The COCs are those COPCs that have exceeded the applicable cleanup level: PCE and TCE.

2.4.1 Cleanup Levels

The applicable PSLs for the COPCs in soil, groundwater, soil vapor, and air are the applicable MTCA Method A or Method B cleanup levels or screening levels which are presented in Tables 7, 8, and 9. Proposed cleanup levels were developed in accordance with WAC 173-340-700 through WAC 173-340-760. The resulting cleanup levels for soil, groundwater, and indoor air/soil vapor are presented in Tables 7 through 9, respectively.

2.4.1 Point of Compliance

The point of compliance is defined in WAC 173-340-200 as the point where cleanup levels shall be attained. Once the cleanup levels are attained at the point of compliance, the concentrations of COCs have achieved the regulatory requirements established under MTCA. The media specific points of compliance are summarized below:

- The point of compliance for soil is defined as Site soil from ground surface to the uppermost level of the saturated zone, not to exceed 15 feet bgs. Empirical evidence in the form of sub-slab soil vapor sample results indicate that concentrations of PCE and TCE in soil do not exceed their applicable cleanup levels.
- The point of compliance for groundwater is defined as groundwater throughout the Site, from the uppermost level of the saturated zone extending vertically to the lowest depth that is affected by COCs. Performance monitoring of groundwater will be conducted during the cleanup action to monitor the attenuation of concentrations of COCs in groundwater.
- The point of compliance for indoor air is defined as indoor air throughout the Site where analytical results of soil and groundwater samples have detected concentrations of COCs that, when used to predict indoor air concentrations, exceed cleanup levels. Based on protection of commercial workers, concentrations of the COCs in indoor air do not exceed their respective cleanup levels and concentrations of the COCs in soil vapor do not exceed their respective screening levels.

2.5 APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS

Cleanup activities at the Site will be conducted under Ecology's VCP. Although Ecology will be the lead agency, the cleanup action effort will be conducted in accordance with all applicable local regulations and permitting requirements. The remedial alternatives will comply with the ARARs, including state and federal laws, in accordance with WAC 173-340-350 and WAC 173-340-710. ARARs are often identified as constituent-specific, location-specific, or remedial action-specific. A number of regulations include requirements in more than one of these three categories.

The primary ARARs include:

• MTCA (WAC 173-340);

- Water Quality Standards for Groundwater (WAC 173-200); and
- Hazardous Waste Management Act (Chapter 70.105 of the Revised Code of Washington [RCW 70.105]).

These primary ARARs are anticipated to be the most applicable requirements, since they include the framework for the cleanup action, including applicable and relevant regulatory guidelines, cleanup standards, waste disposal criteria, references for additional ARARs, and standards for documentation.

Additional ARARs for the Site include:

- The Occupational Safety and Health Act (Part 1910 of Title 29 of the Code of Federal Regulations [29 CFR 1910]);
- The State Environmental Policy Act (RCW 43.21);
- General occupational health standards (WAC 296-62);
- Hazardous Waste Operations (WAC 296-843)
- Minimum Standards for Construction and Maintenance of Wells (WAC 173-160); and
- Accreditation of Environmental Laboratories (WAC 174-50).

3.0 AMENDED CLEANUP ACTION PLAN

This section presents a description of the proposed cleanup action and summarizes the restoration timeframe.

3.1 CLEANUP ACTION OBJECTIVE

The cleanup action objectives of the selected cleanup action activities are to:

- Protect human health and the environment;
- Provide a mechanism to minimize the potential for receptors to be exposed to COCs in potable water;
- Provide for compliance monitoring of the concentrations of the COPCs in groundwater beyond the MCC Property boundaries until the concentrations of the COCs are below their respective cleanup levels; and
- Comply with applicable state and federal laws.

3.2 CLEANUP ACTION DESCRIPTION

In order to achieve the cleanup action objectives, the cleanup action approach consists of implementation of institutional controls on the MCC Property and monitored natural attenuation (MNA) of PCE in groundwater beyond the MCC Property boundaries. The reliance on MNA beyond the MCC Property boundaries is appropriate because of the contaminant mass reduction achieved by the DPE system and the decreasing concentrations of PCE in well MW-8, the only affected well located beyond the MCC Property boundaries. The cleanup action components are discussed below:

- **Institutional Control** A proposed Environmental Covenant on the MCC Property includes the following restrictions:
 - Groundwater Use Restriction A Restrictive Covenant will restrict the extraction and use of groundwater from the MCC Property for any purpose other than temporary construction dewatering, investigation, monitoring, or remediation. Drilling of a well for any water supply purpose will be strictly prohibited within the area identified on Figure 7. Groundwater extracted from the MCC Property for any purpose shall be considered potentially contaminated and any discharge of this water shall be done in accordance with state and federal law.
- **Compliance Monitoring** Performance and confirmation monitoring will be conducted during the implementation of the cleanup action in the portions of the Site located beyond the MCC Property boundaries. The implementation procedures for performance and confirmation monitoring are described in Section 4 of this dCAP.

3.3 **RESTORATION TIMEFRAME**

Cleanups should be completed within a reasonable time frame in accordance with WAC 173-340-360(2)(b)(ii) as determined by site-specific criteria in WAC 173-340-360(4)(b). Based on current conditions, the estimated timeframe to achieve cleanup levels in off-property groundwater is between 5 and 10 years.

4.0 CLEANUP ACTION DESIGN AND IMPLEMENTATION

This section provides a detailed description and the specific implementation details of the cleanup action alternative for soil and groundwater.

4.1 SCHEDULE

The critical tasks for implementation of the cleanup action are:

- Restrictive Covenant preparation and approval;
- Compliance Monitoring; and,
- Closure Report

4.1.1 Implementation

4.1.1.1 Restrictive Covenant Implementation

Following the approval of the Amended CAP by Ecology, MCC will submit a copy of the draft Restrictive Covenant to the current property owner and local municipality for review. Upon receipt of written authorization from the local municipality, MCC will arrange to have the Restrictive Covenant recorded with Snohomish County. A copy of the recorded Restrictive Covenant will be submitted to Ecology after it has been recorded with Snohomish County.

4.1.1.2 DPE System Decommissioning

The DPE system components will be decommissioned and removed from the MCC Property after the Restrictive Covenant is recorded with Snohomish County.

4.2 COMPLIANCE MONITORING

Performance and confirmation monitoring will be conducted during the implementation of the cleanup action.

- **Performance Monitoring** The purpose of performance monitoring is to monitor the progress of the cleanup action and demonstrate that the cleanup action has attained the cleanup standards. The media sampled during performance monitoring will include groundwater from off-property monitoring wells that are downgradient of the MCC Property and not included in the potable well restriction area.
 - Groundwater Groundwater sampling will be conducted to monitor decreasing concentrations of COCs in the following monitoring wells: MW-2, MW-3, MW-4, MW-8, MW-7, and MW-6. Groundwater performance monitoring will include the evaluation of groundwater conditions to assess the rate of attenuation of the groundwater plume from natural processes such as biodegradation, dispersion, dilution, sorption, volatilization, or other geochemical reactions (e.g., hydrolysis). The groundwater sampling frequency and locations, procedures for sample collection and handling, analytical testing methods, are presented below.
 - Annual groundwater performance monitoring will be conducted until the data indicate that the applicable cleanup for the COCs have been attained at the points of compliance, for two consecutive events.

- The groundwater samples will be submitted to an independent laboratory for analysis of the COPCs by SW-846 Method 8260.
- **Confirmation Monitoring** Confirmation monitoring will be conducted to confirm the longterm effectiveness of the cleanup action after performance monitoring. Once performance monitoring results demonstrate that the concentration of CVOCs in performance samples are below the applicable cleanup levels for two consecutive sampling events, confirmation monitoring will begin. Four consecutive quarters of confirmation groundwater monitoring will then be conducted to confirm that concentrations of CVOCs in groundwater remain below the cleanup levels. The groundwater sampling locations, procedures for sample collection and handling, and analytical testing methods for groundwater performance monitoring.

4.3 WASTE MANAGEMENT

Based on the historical operations on the Site and data collected during previous investigations, the only hazardous waste anticipated to be present in investigation derived waste is waste code F002, spent halogenated solvents, primarily PCE. Management of investigation derived waste (IDW) materials generated by the remedial action or as a result of surface or subsurface investigative activities, Generated wastes will include:

- Wastewater generated by decontamination of equipment during the cleanup action or generated by monitoring well purging activities. Groundwater, decontamination fluids, and soil cuttings generated during sampling activities will be placed into DOT-approved containers and transported off-site for disposal in accordance with the applicable regulatory requirements.
- Used personal protective equipment (PPE) and disposable equipment will be double bagged and placed in a municipal refuse dumpster. Any PPE and disposable equipment that is to be disposed of which can still be reused will be rendered inoperable before disposal in a refuse dumpster.

4.4 DOCUMENTATION REQUIREMENTS

Documentation of the cleanup action will meet MTCA requirements. Upon client review and approval, all applicable and relevant documentation generated for the cleanup action will be submitted to Ecology. Document copies will be retained in Pacific Crest files for a minimum of three years after completion of the project.

4.4.1 Data Management

An established document control system will be implemented during the cleanup action, which includes the following, as appropriate: field documentation which includes well purging and sampling documentation; chain-of-custody documentation; waste inventory documentation; and waste management labels. Disposal manifests and/or bills-of-lading for the wastes generated at and disposed from the Site will also be maintained and submitted with the project documentation.

4.4.2 Health and Safety

A HASP is required for all cleanup actions (WAC 173-340-810 and WAC 296-62). The HASP must comply with the requirements of the Occupational Safety and Health Act of 1970 and the Washington Industrial Safety and Health Act (RCW 49.17).

4.4.3 **Progress Reports**

4.4.3.1 Annual Progress Reports

Annual progress reports will be prepared following the annual groundwater monitoring events. The progress reports will document the cleanup action progress; groundwater conditions; and attenuation of PCE and other HVOC breakdown product concentrations at the Site. At a minimum, the annual progress report will include:

- A Site background;
- Geologic and hydrologic description of the Site;
- A narrative of the field activities;
- The performance groundwater monitoring results; and
- A discussion including deviations from the dCAP and recommendations for future work at the Site.

4.4.3.2 Closure Report

Once concentrations of CVOCs are demonstrated to be below the cleanup levels in groundwater, and following four quarters of confirmation groundwater monitoring demonstrating that contamination is below applicable cleanup levels, a closure report will be prepared documenting the cleanup action. At a minimum this report will include:

- A Site background;
- Geologic and hydrologic description of the Site;
- A narrative of the field activities describing the monitoring procedures;
- All compliance monitoring results; and
- A discussion including deviations from the dCAP.

A Property-Specific NFA determination will be requested from Ecology upon approval of the Restrictive Covenant and a Site-Specific NFA determination will be requested from Ecology upon completion of confirmation groundwater monitoring activities at the Site.

5.0 REFERENCES

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- ZGA. 2020. December 2019 Groundwater Monitoring Report Former Prime Cleaners, Marketplace Retail Center, Bothell, Washington. February 17.
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ZGA. 2022. Tech Memo - Former Prime Cleaners, Marketplace Retail Center, Bothell, Washington. June 17.

FIGURES

DRAFT FOR ECOLOGY REVIEW AMENDED CLEANUP ACTION PLAN

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

PACIFIC CREST PN: 223-002



9/14/2016 223-002-001.dwg FIG 1 Site Location



<u>Legend</u>		
ç	SGP-1	Soil Vapor Probe
Γ	∕IW-1 ⊕	Monitoring Well
D)PE-1 ⊕	Dual Phase Extraction Well
		Subject Property
_	<u></u>	Parcel Boundary
		Road Centerline
		Road
		Curb
	Fushion In	dia (Prime Cleaners 1984-2000)
(2	Fushion In	dia (Prime Cleaners 2000-2014)
(3) Osaka Gril	l Teriyaki
Notes:		
Source:	Snohomish (County Assessor
	0 Approx	50 Simate Scale in Feet
		Figure 2

Site Plan











TABLES

DRAFT FOR ECOLOGY REVIEW AMENDED CLEANUP ACTION PLAN

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

PACIFIC CREST PN: 223-002

Table 1 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
	Terracon	5/9/2011			21.18	275.13
	EES	6/22/2011			22.24	274.07
	EES FES	9/1/2011			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
	EES	7/16/2013			24.72	271.59
MW-1	ZGA	1/9/2017	296.31	31-41	22.85	273.46
	ZGA	1/11/2017			22.90	273.41
	ZGA	3/20/2017			20.35	275.96
	ZGA	8/17/2017			24 87	271 44
	ZGA	11/14/2017			24.66	271.65
	ZGA	2/13/2018			21.65	274.66
	ZGA	1/14/2019			23.78	272 53
	ZGA	4/10/2019			24.04	272.00
	ZGA	12/3/2020			23.95	272.36
	ZGA	9/3/2021			26.18	270.13
	ZGA	6/30/2022			23.81	272.50
	Pacific Crest	//10/2022			24.08	272.30
	Terracon	8/25/2010			25.58	270.89
	Terracon	5/9/2011			20.00	274.86
	FES	6/22/2011			21.01	273.75
	FES	9/1/2011			25.12	271.33
	ELS	12/6/2011			24.50	271.33
	EEG	2/9/2012			24.59	271.00
		5/0/2012			23.40	273.07
	ZGA	6/27/2012		34-44	22.97	273.30
	EES	0/27/2012			23.03	273.44
	EEG	1/14/2012			20.01	270.00
	EES	1/14/2013			20.59	209.00
MW-2	ZGA	1/9/2017	296.47		23.14	273.33
	ZGA	1/11/2017			23.22	273.25
	ZGA	3/20/2017			20.81	275.00
	ZGA	8/17/2017			25.57	270.90
	ZGA	11/14/2017			25.15	271.32
	ZGA	2/13/2018	-		22.00	2/4.4/
	ZGA	1/14/2019			24.05	2/2.42
	ZGA	4/10/2019	-		24.40	2/2.0/
	ZGA	12/3/2020			24.30	2/2.17
	ZGA	9/3/2021			26.57	269.90
	ZGA	6/30/2022	_		24.18	272.29
	Pacific Crest	4/19/2023			24.47	272.00

Table 1 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			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
MW-3	ZGA	1/12/2017	296.96	29-39	23.80	273.16
	ZGA	3/20/2017			21.30	275.66
	ZGA	8/17/2017			26.10	270.86
	ZGA	11/14/2017			25.69	271.27
	ZGA	2/13/2018			22.45	274.51
	ZGA	1/14/2019			24.53	272.43
	ZGA	4/10/2019			24.92	272.04
	ZGA	12/3/2020			24.82	272.14
	ZGA	9/3/2021	1		27.15	269.81
	ZGA	6/30/2022			24.72	272.24
	Pacific Crest	4/19/2023			25.03	271.93
	Terracon	8/25/2010			25.76	270.80
	Terracon	5/9/2011			21.77	274.79
	EES	6/22/2011			22.96	273.60
	EES	9/1/2011			25.35	271.21
	EES	12/6/2011			24.89	271.67
	EES	3/8/2012			23.30	273.26
	ZGA	5/23/2012			23.10	273.46
	EES	6/27/2012			23.22	273.34
	EES	10/18/2012			25.98	270.58
	EES	1/14/2013		05.05	21.62	274.94
N/04/ 4	ZGA	1/9/2017	000 50		23.21	273.35
10100-4	ZGA	1/13/2017	296.56	25-35	23.39	273.17
	ZGA	3/20/2017			20.91	275.65
	ZGA	8/17/2017			25.67	270.89
	ZGA	11/14/2017			25.32	271.24
	ZGA	2/13/2018			22.10	274.46
	ZGA	1/14/2019	1		24.16	272.40
	ZGA	4/10/2019	1		24.53	272.03
	ZGA	12/3/2020	1		26.12	270.44
	ZGA	9/3/2021	1		24.44	272.12
	ZGA	6/30/2022	-		24.33	272.23
	Pacific Crest	4/19/2023			24.61	271.95
			•			

Table 1 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	Screen Intervař	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
N04/ 5	EES	7/16/2013	000.05	10.00	18.26	271.59
C-VVIVI	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
-	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
MW 6	ZGA	1/9/2017	280.04	10 5 30 5	16.44	273.50
10100-0	ZGA	1/12/2017	209.94	12.0-52.5	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
Table 1 Groundwater Elevation Data Summary Former Prime Cleaners 18001 Bothell Everett Highway Bothell, Washington Pacific Crest No: 223-002

			Relative Casing		Depth to	Relative Potentiometric
Location ID	Sampled By	Sample Date	Elevation ¹	Screen Interval ²	Groundwater ²	Surface (feet)
	Terracon	8/25/2010			19.14	270.58
	Terracon	5/9/2011			15.22	274.50
	EES	6/22/2011			16.36	273.36
	EES	9/1/2011			18.73	270.99
	EES	12/5/2011			15.25	274.47
	EES	3/8/2012			16.62	273.10
	ZGA	5/23/2012			16.41	273.31
	EES	6/27/2012			16.46	273.26
	EES	10/18/2012			19.31	270.41
	ZGA	1/9/2017			16.61	273.11
MW-7	ZGA	1/12/2017	289.72	20-40	16.76	272.96
	ZGA	3/20/2017			14.40	275.32
	ZGA	8/17/2017			19.11	270.61
	ZGA	11/14/2017			18.68	271.04
	ZGA	2/13/2018			15.51	274.21
	ZGA	1/14/2019			17.52	272.20
	ZGA	4/10/2019			17.84	271.88
	ZGA	12/3/2020			17.84	271.88
	ZGA	9/3/2021			20.07	269.65
	ZGA	6/30/2022			17.71	272.01
	Pacific Crest	4/19/2023			17.95	271.77
	Terracon	5/9/2011			16.02	274.54
	EES	6/22/2011			17.22	273.34
	EES	9/1/2011			19.56	271.00
	EES	12/5/2011			19.06	271.50
-	EES	3/8/2012			17.45	273.11
	Terracon	5/23/2012			17.21	273.35
	EES	6/27/2012			17.33	273.23
	EES	10/18/2012			20.19	270.37
	ZGA	1/9/2017			18.69	271.87
	ZGA	1/13/2017			17.65	272.91
MW-8	ZGA	3/20/2017	290.56	38-68	15.17	275.39
	ZGA	8/17/2017			19.91	270.65
	ZGA	11/14/2017			19.46	271.10
	ZGA	2/13/2018			16.30	274.26
	ZGA	1/14/2019			18.30	272.26
	ZGA	4/10/2019			18.61	271.95
	ZGA	12/9/2019			20.28	270.28
	ZGA	12/3/2020			18.81	271.75
	ZGA	9/3/2021			20.91	269.65
	ZGA	6/30/2022			18.58	271.98
	Pacific Crest	4/19/2023			18.83	271.73
	Terracon	1/9/2017			26.30	272.69
	Terracon	1/11/2017			25.10	273.89
	ZGA	3/20/2017			27.55	271.44
	ZGA	8/17/2017			27.55	271.44
	ZGA	11/14/2017	1		27.52	271.47
MW-9	ZGA	2/13/2018	298.99	29-39	24.35	274.64
	ZGA	1/14/2019			26.43	272.56
	ZGA	4/10/2019			26.73	272.26
MW-9	ZGA	12/3/2020			26.75	272.24
	ZGA	9/3/2021			29.09	269.90
	ZGA	6/30/2022			26.83	272.16
	Pacific Crest	4/19/2023			26.86	272.13

Table 1 Groundwater Elevation Data Summary Former Prime Cleaners 18001 Bothell Everett Highway Bothell, Washington Pacific Crest No: 223-002

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	Relative Casing Elevation ¹ Screen Interval Screen Interval Depth to Groundwate 25.19 2017 25.19 24.17 2017 26.21 26.21 2017 26.21 26.21 2017 26.21 26.21 2017 26.21 26.21 2018 297.49 30-40 22.85 2019 202.00 25.19 25.19 2020 25.19 25.19 25.19 2021 25.19 25.19 25.19 2020 25.19 25.19 25.19 2021 25.05 25.30 25.30 2023 NM 24.78 2023 NM 23.28 2023 NM 23.24 2023 NM 23.24 2023 NM 23.24 2023 NM 23.24		25.19	272.30
	Terracon	1/12/2017		24.17	273.32	
	ZGA	Sample Date Relative Casing Elevation ¹ Screen Interval 1/9/2017	26.21	271.28		
	ZGA	8/18/2017			26.21	271.28
	ZGA	11/14/2017			25.91	271.58
MW 10	ZGA	2/13/2018	207.40	20.40	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
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 an arbitrary datum in feet above mean sea level

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

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

				Groundwater Quality Parameters ¹					
Location ID	Sample ID	Sampled Bv	Sample Date	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	рН	Oxidation Reduction Potential (mV)	
	NA	Terracon	6/17/2009	NA	NA	13	5 24	212	
	NA	Terracon	8/10/2010	NA	NA	2 25	5.34	-55	
	NA	Terracon	5/10/2011	NA	NA	7 11	5.32	292	
	NA	FES	6/22/2011	NA	0 194	3 19	5.7	129	
	NA	FES	9/1/2011	NA	0.184	1 79	6.5	110	
	NA	FES	12/5/2011	NA	0.218	2 20	6.0	65	
	NΔ	FES	3/8/2012	NA	0.180	2.13	53	200	
MW-1	NA	ZGA	5/23/2012	NA	NA	2.55	5.06	318	
	NA	FES	6/27/2012	NA	0.280	2.50	5.3	221	
	NA	FES	10/18/2012	NA	0.203	0.91	5.8	170	
	NA	FES	1/14/2013	NA	0.190	3 29	5.3	190	
	NA	FES	4/24/2013	NA	0.100	3.01	5.3	217	
	NA	FFS	7/16/2013	NA	0.384	1 13	6.0	151	
	NA	ZGA	3/5/2014	NA	NA	4 82	6.57	136	
	MW1-06292022	ZGA	6/29/2022	14.76	0.99	4.00	4.99	2.28	
	NA	Terracon	6/16/2009	NA	NA	1.5	6.08	97	
	NA	Terracon	8/12/2010	NA	NA	3.75	5.79	329	
	NA	Terracon	5/10/2011	NA	NA	2.04	5.97	226	
	NA	EES	6/22/2011	NA	0.346	0.36	6.4	78	
	NA	EES	9/1/2011	NA	0.305	4.72	7.3	75	
	NA	EES	12/5/2011	NA	0.270	2.40	6.2	274	
MW-2	NA	EES	3/8/2012	NA	0.270	1.69	6.2	165	
MVV-2	NA	ZGA	5/24/2012	NA	NA	1.03	6.10	236	
	NA	EES	6/27/2012	NA	0.290	0.6	6.2	156	
	NA	EES	10/18/2012	NA	0.276	0.35	6.6	144	
	NA	EES	1/14/2013	NA	0.280	0.90	6.1	113	
	NA	ZGA	3/5/2014	NM	NM	NM	NM	NM	
	MW2-06292022	ZGA	6/29/2022	15.38	1.37	3.82	5.31	2.20	
	NA	Terracon	6/17/2009	NA	NA	2.3	5.86	186	
	NA	Terracon	8/12/2010	NA	NA	4.64	5.89	326	
	NA	Terracon	5/10/2011	NA	NA	5.34	5.97	275	
MW-3	NA	ZGA	5/24/2012	NA	NA	5.01	5.93	247	
	NA	ZGA	3/7/2014	NA	NA	7.02	6.90	236	
	MW3-06302022	ZGA	6/30/2022	15.44	0.511	4.90	5.87	181	
	MW3-042023	Pacific Crest	4/20/2023	14.0	0.539	5.93	6.31	135.8	
	NA	Terracon	6/16/2009	NA	NA	2.6	5.63	211	
	NA	Terracon	8/12/2010	NA	NA	6.48	5.75	400	
	NA	Terracon	5/10/2011	NA	NA	6.10	5.83	291	
	NA	EES	6/22/2011	NA	0.259	3.71	6.3	90	
	NA	EES	9/1/2011	NA	0.24	4.11	7.1	68	
	NA	EES	12/5/2011	NA	0.310	6.65	6.0	293	
MW-4	NA	EES	3/8/2012	NA	0.230	5.87	6.0	182	
	NA	ZGA	5/24/2012	NA	NA	5.86	5.88	244	
	NA	EES	6/27/2012	NA	0.250	5.65	6.1	144	
	NA	LES	10/18/2012	NA	0.239	6.44	6.4	163	
	NA	EES 704	1/14/2013	NA	0.310	6.09	6.6	100	
	NA	ZGA	3/7/2014	NA 15.00	NA	7.66	1.44	213	
	IVIVV4-06302022	ZGA	6/30/2022	15.08	0.184	1.07	6.21	1/6	
	101004-042023	Pacific Crest	4/20/2023	13.3	0.669	12.21	6.28	154.3	

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

				Groundwater Quality Parameters ¹					
Location ID	Sample ID	Sampled By	Sample Date	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	рН	Oxidation Reduction Potential (mV)	
	NA	Terracon	8/10/2010	NA	NA	3.56	5.41	-49	
	NA	Terracon	5/9/2011	NA	NA	1.87	5.27	204	
	NA	EES	6/22/2011	NA	0.416	0.83	6.0	123	
	NA	EES	9/1/2011	NA	0.356	0.27	6.3	132	
	NA	EES	12/5/2011	NA	0.300	1.19	5.4	198	
	NA	EES	3/8/2012	NA	0.330	0.72	5.4	175	
MW-5	NA	EES	6/27/2012	NA	0.350	2.42	5.4	240	
	NA	EES	10/18/2012	NA	0.245	0.30	6.0	119	
	NA	EES	1/14/2013	NA	0.290	0.94	5.4	179	
	NA	EES	4/24/2013	NA	0.454	2.50	5.5	213	
	NA	EES	7/16/2013	NA	0.298	0.51	5.5	133	
	NA	ZGA	3/6/2014	NA	NA	8.71	7.10	215	
	MW5-06292022	ZGA	6/29/2022	15.26	1.269	4.31	6.19	1.11	
	NA	Terracon	8/10/2010	NA	NA	3.85	5.86	-14	
	NA	Terracon	5/9/2011	NA	NA	2.96	5.64	276	
	NA	EES	6/22/2011	NA	0.362	2.39	6.1	104	
	NA	EES	9/1/2011	NA	0.393	1.60	6.7	98	
	NA	EES	12/5/2011	NA	0.280	0.66	5.8	217	
MW-6	NA	EES	3/8/2012	NA	0.240	0.80	5.8	183	
MW-6	NA	EES	6/27/2012	NA	0.350	3.08	5.8	216	
	NA	EES	10/18/2012	NA	0.344	0.43	6.4	115	
	NA	EES	1/14/2013	NA	0.290	0.98	5.8	168	
	NA	ZGA	3/6/2014	NA	NA	7.16	7.15	216	
	MW6-06292022	ZGA	6/29/2022	14.83	0.696	4.32	6.98	1.84	
	MW6-041923	Pacific Crest	4/19/2023	14.0	0.3967	3.51	6.15	145.8	
	NA	Terracon	8/10/2010	NA	NA	4.10	5.86	13	
	NA	Terracon	5/9/2011	NA	NA	5.80	5.94	285	
MW-7	NA	ZGA	3/6/2014	NA	NA	7.35	7.27	202	
	MW7-06302022	ZGA	6/30/2022	14.62	0.107	0.0	6.97	147	
	MW7-041923	Pacific Crest	4/19/2023	13.9	0.3093	7.20	6.14	146.3	
	NA	Terracon	8/10/2010	NA	NA	3.39	6.21	180	
	NA	ZGA	5/24/2012	NA	NA	5.24	5.79	244	
MW-8	NA	ZGA	3/6/2014	NA	NA	7.90	7.17	228	
	MW8-06302022	ZGA	6/30/2022	14.42	0.128	6.66	6.08	164	
	MW8-041923	Pacific Crest	4/19/2023	13.3	0.2351	4.42	6.40	130.5	
M\//_9	NA	ZGA	3/5/2014	NA	NA	8.89	6.93	163	
11111-5	MW9-06292022	ZGA	6/29/2022	14.52	0.122	5.59	6.22	148	
MW-10	NA	ZGA	3/6/2014	NA	NA	6.82	6.75	227	
1010	MW10-06292022	ZGA	6/29/2022	14.79	1.23	4.19	5.46	2.17	
DPE-1	DPE1-041923	Pacific Crest	4/19/2023	15.0	0.3074	5.45	6.40	117.6	
DPE-2	DPE2-042023	Pacific Crest	4/20/2023	14.5	0.2567	0.83	6.50	134.1	
DPE-3	DPE3-042023	Pacific Crest	4/20/2023	12.9	0.3362	11.69	5.83	186.2	
DPE-4	DPE4-042023	Pacific Crest	4/20/2023	13.5	0.2409	0.69	6.48	127.7	

NOTES:

 INCLES.

 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	MW1-06292022	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-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			
MW-2	MW-2	ZGA	1/11/2017	<1	<1	<1	<1	<1.00			
MW-2	MW-2	ZGA	8/17/2017	<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			
MW-2	MW-2	ZGA	4/10/2019	<0.5	<0.5	<0.5	<0.5	<0.5			
MW-2	MW2-06292022	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			

				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	Terracon	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		
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	MW3-09032021	ZGA	9/3/2021	3.1	<0.5	<1	<1	<0.02		
MW-3	MW3-06302022	ZGA	6/30/2022	6.0	<2.0	<2.0	<2.0	<0.2		
MW-3	MW3-042023	Pacific Crest	4/20/2023	2.9	<0.20	<0.20	<0.20	<0.20		
MW-4	MW-3	Adapt	10/31/2007	45	<1	<1	<1	<0.2		
MW-4	MW-4	Terracon	6/16/2009	170	<1	<1	<1	<0.2		
MW-4	MW-4	Terracon	8/12/2010	140	<1	<1	<1	<1.0		
MW-4	MW-4	Terracon	5/10/2011	110	<1	<1	<1	<1.0		
MW-4	TMW-4	EES	9/1/2011	77	<1	<1	<1	<0.2		
MW-4	TMW-4	EES	12/5/2011	68	<1	<1	<1	<0.2		
MW-4	TMW-4	EES	3/8/2012	73	<1	<1	<1	<0.2		
MW-4	MW-4	ZGA	5/24/2012	140	<2	<2	<2	<0.2		
MW-4	TMW-4	EES	6/27/2012	80	<1	<1	<1	<0.2		
MW-4	TMW-4	EES	10/18/2012	110	<1	<1	<1	<0.2		
MW-4	TMW-4	EES	1/14/2013	84	<1	<1	<1	<0.2		
MW-4	MW-4	ZGA	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	MW4-09032021	ZGA	9/3/2021	20	<0.5	<1	<1	<0.02		
MW-4	MW4-06302022	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		

				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	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	TMW-5	EES	6/27/2012	<1	<1	<1	<1	<0.2		
MW-5	TMW-5	EES	10/18/2012	<1	<1	<1	<1	<0.2		
MW-5	TMW-5	EES	1/14/2013	<1	<1	<1	<1	<0.2		
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	MW5-06292022	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-6	MW-6	Terracon	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	TMW-6	EES	10/18/2012	<1	<1	<1	<1	<0.2		
MW-6	TMW-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		
MW-6	MW-6	ZGA	1/12/2017	1.07	<1	<1	<1	<1.0		
MW-6	MW-6	ZGA	8/21/2017	0.674	<1	<1	<1	<0.5		
MW-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	MW6-06292022	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		

				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-7	MW-7	Terracon	8/10/2010	0.55	<1	<1	<1	<1.0			
MW-7	MW-7	Terracon	5/9/2011	<1	<1	<1	<1	<1.0			
MW-7	MW-7	ZGA	3/6/2014	8	<2	<2	<2	<0.2			
MW-7	MW-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	MW7-09032021	ZGA	9/3/2021	<1	<0.5	<1	<1	<0.02			
MW-7	MW7-06302022	ZGA	6/30/2022	<2.0	<2.0	<2.0	<2.0	<0.2			
MW-7	MW7-041923	Pacific Crest	4/19/2023	0.89	<0.20	<0.20	<0.20	<0.20			
MW-8	MW-8	Terracon	5/10/2011	22	<1	<1	<1	<1.0			
MW-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			
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	MW8-09032021	ZGA	9/3/2021	13	<0.5	<1	<1	<0.02			
MW-8	MW8-06302022	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-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	MW9-06302022	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			

				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
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
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
	Effluent	ZGA	3/8/2017	0.748	<1	<1	<1	<1.0
	Effluent	ZGA	11/12/2017	0.286	<0.5	<0.5	<0.5	<0.5
	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
MTCA	Noncancer	Potable Water		48	4	16	160	24
Method B	Cancer			20.8	0.54	-	-	0.029
MTCA	Noncancer	Vapor Intrusion -		48	3.9	-	77	54
Method B	Cancer	Residential		25	1.4	-		0.33
MTCA	Noncancer	Vapor Intrusion -		410	32	-	650	460
Method B	Cancer	Commercial		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.

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

NA = not analyzed

NS = not sampled

¹ Analyzed 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

Table 4 Laboratory Analytical Results Summary - Sub-Slab Soil Vapor Former Prime Cleaners 18001 Bothell Everett Highway Bothell, Washington Pacific Crest No. 223-002

Soil Vapor Analytical Results (micrograms per									
						С	ubic meter) ¹	
Location ID	Location	Date	Sample ID	Sampled By	Tetrachloroethene	Trichloroethene	(cis) 1,2-Dichloroethene	(trans) 1,2-Dichloroethene	Vinyl chloride
	Former Money	11/25/2013	SPG-1	ZGA	500	<1.3	<0.94	<0.94	<0.61
SPG-1	Tree/Prime Cleaners	6/3/2014	SPG-1	ZGA	1,600	<12	<8.9	<8.9	<5.7
	(Fusion India)	4/20/2023	NS ³	Pacific Crest	NS	NS	NS	NS	NS
	Former Money	11/25/2013	SPG-2	ZGA	7,700	440	22	<19	<12
SPG-2	Tree/Prime Cleaners	6/3/2014	SPG-2	ZGA	9,900	470	<190	<190	<120
	(Fusion India)	4/20/2023	NS ³	Pacific Crest	NS	NS	NS	NS	NS
	Former Drime Cleanere	12/6/2013	SPG-3	ZGA	11,000	68	<22	<22	<14
SPG-3	(Eusion India)	6/3/2014	SPG-3	ZGA	24,000	160	<38	<38	<25
	(i usion inula)	4/20/2023	NS ³	Pacific Crest	NS	NS	NS	NS	NS
	Former Brime Cleaners	12/6/2013	SPG-4	ZGA	3,400	420	<5.5	6.8	<3.6
SPG-4	(Fusion India)	6/3/2014	SPG-4	ZGA	5,400	840	<19	<19	<12
	(i usion india)	4/20/2023	NS ³	Pacific Crest	NS	NS	NS	NS	NS
		11/25/2013	SPG-5	ZGA	5,400	220	<13	<13	<8.2
SPG-5	Osaka Grill	6/3/2014	SPG-5	ZGA	8,700	360	<19	<19	<12
		4/20/2023	SPG-5	Pacific Crest	458	28.5	<0.389	0.403	<0.791
		11/25/2013	SPG-6 ²	ZGA	<790	<630	<460	<460	<300
SPG-6	Osaka Grill	6/3/2014	SPG-6 ²	ZGA	<40,000	<32,000	<24,000	<24,000	<15,000
		4/20/2023	NS ³	Pacific Crest	NS	NS	NS	NS	NS
	1,500	95		5200	44				
	Sub-Slab Screening Level - Residential 320 11 620 9.5								

NOTES:

BOLD denotes concentration above applicable commercial subslab screening level

< denotes result is less than laboratory practical quantitation limit listed or analyte not detected at or above the reporting limit

¹ Analyzed by U.S. Environmental Protection Agency (EPA) Method TO-15

² denotes probe failed leak test during sampling

³ sample probe could not be located, possibly removed or destroyed during renovations

NS = not analyzed

MTCA = Model Toxics Control Act

Pacific Crest = Pacific Crest Environmental, LLC

ZGA = Zipper Geo Associates

					Air Analyt	ical Result	ts (μg/m³) ¹	
Location ID	Sample ID	Date	Sampled By	Tetrachloroethene	Trichloroethene	(cis) 1,2-Dichloroethene	(trans) 1,2-Dichloroethene	Vinyl Chloride
	Prime Cleaners	11/21/2013	ZGA	1.1	280	<0.39	<2.0	<0.13
	Prime Cleaners	6/3/2014	ZGA	3.5	2.1	<0.13	<0.65	<0.042
Former Prime Cleaners (Fusion India)	Prime Cleaners	8/22/2018	ZGA	0.73	<0.27	<0.4	<0.4	<0.26
Former Prime Cleaners	Prime Cleaners	1/14/2019	ZGA	<6.8	<0.27	<0.4	<0.4	<0.26
(Fusion India)	Prime Cleaners	4/18/2019	ZGA	<6.8	<0.27	<0.4	<0.4	<0.26
	Prime Cleaners	1/24/2020	ZGA	<6.8	<0.27	<0.4	<0.4	<0.26
	IA2-042023	4/20/2023	Pacific Crest	0.284	< 0.00672	<0.0972	<0.0977	<0.198
	Money Tree	11/21/2013	ZGA	<0.20	1.3	<0.12	<0.59	<0.038
Former Money Tree/Prime Cleaners (Fusion India)	Money Tree	6/3/2014	ZGA	<1.1	<0.88	<0.65	<3.2	<0.21
	Money Tree	8/22/2018	ZGA	<0.68	1.1	<0.4	<0.4	<0.26
	money nee	0/22/2010	20/1	<0.68	0.82	<0.4	<0.4	<0.26
Cleaners (Fusion India)	Money Tree	1/14/2019	ZGA	<6.8	<0.27	<0.4	<0.4	<0.26
	Money Tree	4/18/2019	ZGA	<6.8	<0.27	<0.4	<0.4	<0.26
	Money Tree	1/24/2020	ZGA	<6.8	<0.27	<0.4	<0.4	<0.26
	NS	4/20/2023	Pacific Crest	NS	NS	NS	NS	NS
	Osaka Grill	11/21/2013	ZGA	3.6	210	<0.28	<1.4	<0.090
	Osaka Grill	6/3/2014	ZGA	3.2	0.37	<0.27	<1.4	<0.087
	Osaka Grill	8/22/2018	ZGA	<0.68	<0.27	<0.4	<0.4	<0.26
Osaka Grill	Osaka Grill	1/14/2019	ZGA	<6.8	<0.27	<0.4	<0.4	<0.26
	Osaka Grill	4/18/2019	ZGA	<6.8	<0.27	<0.4	<0.4	<0.26
	Osaka Grill	1/24/2020	ZGA	<6.8	<0.27	<0.4	<0.4	<0.26
	IA1-042023	4/20/2023	Pacific Crest	0.234	<0.00672	<0.0972	<0.0977	<0.198
	Ambient	11/21/2013	ZGA	<0.21	<0.17	<0.12	<0.62	<0.040
	Ambient	6/3/2014	ZGA	<0.23	<0.18	<0.14	<0.68	<0.044
	Ambient	8/22/2018	ZGA	<0.68	0.28	< 0.4	< 0.4	< 0.26
Ambient	Ambient	1/14/2019	ZGA	<6.8	<0.27	< 0.4	< 0.4	< 0.26
Amplent	Ambient	4/18/2019	ZGA	<6.8	<0.27	< 0.4	< 0.4	< 0.26
	Ambient	1/24/2020	ZGA	<6.8	<0.27	< 0.4	< 0.4	<0.26
	AA-042023	4/20/2023	Pacific Crest	<0.0753	< 0.00672	<0.0972	<0.0977	<0.198
MTCA Method B Cleanup Level for Air ²					0.3		18.29	0.28
MTCA Method B Screenin	g Level - Commer	rcial Worker		44.9	2.8		155.7	1.3

NOTES:

¹Analyzed by EPA Method TO-15

²Cleanup Levels and Risk Calculations (CLARC) under the Method B MTCA Cleanup Regulation (January 2023 Update). For analytes with both Cancer and Noncancer values, the lower of the two values was used.

Bold = concentration exceeds applicable MTCA cleanup level

< = analyte was not above the practical quantitation limit

italicized denotes that laboratory practical quantitation limit is above the applicable MTCA cleanup level.

MTCA = Model Toxics Control Act

 μ g/m³ = micrograms per cubic meter

ZGA=ZipperGeo

					Soil Anal	ytical Resu	ults (micro	grams per	kilogram) ¹
					Select C	hlorinated	Volatile O	rganic Con	npounds
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				Sample	itre	ict	2	sus	'n
Location ID	Sample ID	Sampled By	Sample Date	Depth ²	Te	Ļ	cia	tra	<br </th
B-1	B-1	EA	3/9/1999	22.5	200	<57	330	ND	ND
B-2	B-2	EA	3/9/1999	20	<57	<57	<57	ND	ND
SP-1	SP-1	EA	3/9/1999	5	240	<54	<54	ND	ND
SP-2	SP-2	EA	3/9/1999	1	560	<53	<53	ND	ND
B-7	B-7	Adapt	10/24/2007	30	63	<30	<50	<50	<50
B1	B1	Terracon	5/17/2009	3	160	38	<1.5	<1.5	<1.5
B2	B2	Terracon	5/17/2009	3	1.1	18	<1.0	<1.0	<1.0
B3	B3	Terracon	5/17/2009	2.5	1.9	20	<1.0	<1.0	<1.0
B4	B4	Terracon	5/17/2009	2.5	17	29	<1.1	<1.1	<1.1
B5	B5	Terracon	5/17/2009	3	<1.1	24	<1.1	<1.1	<1.1
B6	B6	Terracon	5/17/2009	3	1.2	15	<1.0	<1.0	<1.0
B7	B7	Terracon	5/17/2009	3	15	22	<1.1	<1.1	<1.1
B8	B8	Terracon	5/17/2009	3	28	30	28	<1.1	<1.1
DO	B9	Terracon	5/17/2009	2.5	110	9.2	<1.1	<1.1	<1.1
БЭ	B9	Terracon	5/17/2009	5	4.1	27	<1.1	<1.1	<1.1
P10	B10	Terracon	5/17/2009	3	5.2	14	<1.1	<1.1	<1.1
BIU	B10	Terracon	5/17/2009	5.5	160	10	<1.1	<1.1	<1.1
B11	B11	Terracon	5/17/2009	3	<1.0	<1.0	<1.0	<1.0	<1.0
B12	B12	Terracon	5/17/2009	3	3.8	38	<1.1	<1.1	<1.1
B13	B13	Terracon	5/17/2009	3.5	16	33	<1.0	<1.0	<1.0
	MW1-1	Terracon	5/28/2009	7.5	<1.1	<1.1	<1.1	<1.1	<1.1
	MW1-2	Terracon	5/28/2009	17.5	<1.1	<1.1	<1.1	<1.1	<1.1
MW1	MW1-3	Terracon	5/28/2009	25	2.1	<1.1	<1.1	<1.1	<1.1
	MW1-4	Terracon	5/28/2009	37	<1.3	<1.3	<1.3	<1.3	<1.3
	MW1-5	Terracon	5/28/2009	41	<1.2	<1.2	<1.2	<1.2	<1.2
	MW2-6	Terracon	5/28/2009	7.5	<1.1	<1.1	<1.1	<1.1	<1.1
	MW2-7	Terracon	5/28/2009	18	<1.0	<1.0	<1.0	<1.0	<1.0
MW2	MW2-8	Terracon	5/28/2009	23	<1.1	<1.1	<1.1	<1.1	<1.1
	MW2-9	Terracon	5/28/2009	44	<1.1	<1.1	<1.1	<1.1	<1.1
	MW2-10	Terracon	5/28/2009	33	<1.0	<1.0	<1.0	<1.0	<1.0
	MW3-11	Terracon	5/29/2009	7.5	4.5	<1.2	<1.2	<1.2	<1.2
	MW3-12	Terracon	5/29/2009	13	3.9	<1.1	<1.1	<1.1	<1.1
MW3	MW3-13	Terracon	5/29/2009	27.5	9.3	<1.1	<1.1	<1.1	<1.1
	MW3-14	Terracon	5/29/2009	31	2.3	<1.1	<1.1	<1.1	<1.1
	MW3-15	Terracon	5/29/2009	37	<1.1	<1.1	<1.1	<1.1	<1.1
	MW5 S-1	Terracon	7/12/2010	12.5	<1.2	<1.2	<1.2	<1.2	<1.2
	MW5 S-2	Terracon	7/12/2010	20	<1.2	<1.2	<1.2	<1.2	<1.2
MW5	MW5 S-3	Terracon	7/12/2010	25	<1.1	<1.1	<1.1	<1.1	<1.1
	MW5 S-4	Terracon	7/12/2010	30	<1.2	<1.2	<1.2	<1.2	<1.2
	MW5 S-5	Terracon	7/12/2010	35	<1.2	<1.2	<1.2	<1.2	<1.2
	MW6 S-1	Terracon	7/13/2010	15	<1.2	<1.2	<1.2	<1.2	<1.2
	MW6 S-2	Terracon	7/13/2010	20	<1.0	<1.0	<1.0	<1.0	<1.0
MW6	MW6 S-3	Terracon	7/13/2010	26	<1.1	<1.1	<1.1	<1.1	<1.1
	MW6 S-4	Terracon	7/13/2010	30	<1.1	<1.1	<1.1	<1.1	<1.1
	MW6 S-5	Terracon	7/13/2010	35	1.3	<1.1	<1.1	<1.1	<1.1
	MW7 S-1	Terracon	7/13/2010	16	<1.2	<1.2	<1.2	<1.2	<1.2
	MW7 S-2	Terracon	7/13/2010	20	<1.1	<1.1	<1.1	<1.1	<1.1
MW7	MW7 S-3	Terracon	7/13/2010	26	<1.1	<1.1	<1.1	<1.1	<1.1
	MW7 S-4	Terracon	7/13/2010	32.5	<1.1	<1.1	<1.1	<1.1	<1.1
	MW7 S-5	Terracon	7/13/2010	40	13	<1.2	<1.2	<1.2	<1.2

					_				1
					Soil Analytical Results (micrograms per kilogram) ¹				
					Select Chlorinated Volatile Organic Compounds				npounds
				Sample	strachloroethene	ichloroethene	s-1,2-Dichloroethene	ans-1,2-Dichloroethene	nyl Chloride
Location ID	Sample ID	Sampled By	Sample Date	Depth ²	Ĕ	μ	ö	tra	Ś
	MW-8 S1	ZGA	4/26/2011	10	1.8	<1.2	<1.2	<1.2	<1.2
	MW-8 S2	ZGA	4/26/2011	15	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-8 S3	ZGA	4/26/2011	20	8.9	<1.2	<1.2	<1.2	<1.2
	MW-8 S4	ZGA	4/26/2011	25	7.3	<1.1	<1.1	<1.1	<1.1
	MW-8 S5	ZGA	4/26/2011	30	45	<1.2	<1.2	<1.2	<1.2
MW/8	MW-8 S6	ZGA	4/26/2011	35	16	<1.2	<1.2	<1.2	<1.2
111110	MW-8 S7	ZGA	4/26/2011	40	25	<1.1	<1.1	<1.1	<1.1
	MW-8 S8	ZGA	4/26/2011	45	12	<1.1	<1.1	<1.1	<1.1
	MW-8 S9	ZGA	4/26/2011	50	16	<1.1	<1.1	<1.1	<1.1
	MW-8 S10	ZGA	4/26/2011	55	<1.0	<1.1	<1.1	<1.1	<1.1
	MW-8 S11	ZGA	4/26/2011	60	8.7	<1.1	<1.1	<1.1	<1.1
	MW-8 S12	ZGA	4/26/2011	70	7	<1.2	<1.2	<1.2	<1.2
	MW 9-1	ZGA	9/30/2013	3	<10	<10	<10	<10	<10
	MW 9-2	ZGA	9/30/2013	8	<10	<10	<10	<10	<10
	MW 9-3	ZGA	9/30/2013	13	<10	<10	<10	<10	<10
	MW 9-4	ZGA	9/30/2013	18	<10	<10	<10	<10	<10
101009	MW 9-5	ZGA	9/30/2013	23	<10	<10	<10	<10	<10
	MW 9-6	ZGA	9/30/2013	28.5	<10	<10	<10	<10	<10
	MW 9-7	ZGA	9/30/2013	34	<10	<10	<10	<10	<10
	MW 9-8	ZGA	9/30/2013	38.5	<10	<10	<10	<10	<10
	MW 10-1	ZGA	9/30/2013	3.5	<10	<10	<10	<10	<10
MW10	MW 10-2	ZGA	9/30/2013	9	<10	<10	<10	<10	<10
	MW 10-3	ZGA	9/30/2013	13.5	<10	<10	<10	<10	<10
	MW 10-4	ZGA	9/30/2013	18	<10	<10	<10	<10	<10
	MW 10-5	ZGA	9/30/2013	23.5	<10	<10	<10	<10	<10
	MW 10-6	ZGA	9/30/2013	28	<10	<10	<10	<10	<10
	MW 10-7	ZGA	9/30/2013	33.5	<10	<10	<10	<10	<10
	MW 10-8	ZGA	9/30/2013	38.5	<10	<10	<10	<10	<10
MTCA Method A Cleanup Levels for Soil 50						30	NE	NE	NE

NOTES:

¹Analyzed by SW846 method 8260

²Depth in feet below ground surface

NE = not established

ND = Reported as not detected. Detection limit not listed.

< = concentration not detected at or above the laboratory detection limit

Bold = concentration exceeds the applicable Cleanup Level

CVOCs = Chlorinated Volatile Organic Compounds

MTCA = Model Toxics Control Act

Pacific Crest = Pacific Crest Environmental, LLC

EA = Environmental Associates, Inc.

Adapt = Adapt Engineering, Inc.

Terracon = Terracon, Inc.

ZGA = Zipper Geo Associates, Inc.

Table 7Preliminary Screening Levels and Proposed Cleanup Levels - SoilFormer Prime Cleaners18001 Bothell Everett HighwayBothell, WashingtonPacific Crest No. 223-002

	COPCs				
Screening Level Description	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
MTCA Method A Cleanup Level	0.05	0.03	-		
MTCA Method B, Carcinogen, Direct Contact (ingestion only) unrestricted	480	12	ł		0.67
MTCA Method B, Non-Carcinogen, Direct Contact (ingestion only) unrestricted	480	40	160	1,600	240
MTCA Method B, Three-Phase Model, Soil Leaching to Groundwater	0.05	0.025	0.079	0.52	0.0017
Final Cleanup Level for COCs only	0.05	0.03			

NOTE:

COPCs=Contaminants of Potential Concern

"--" = Not applicable or not calculated by Pacific Crest

COCs = Contaminants of concern

Screening Levels in milligrams per kilogram (mg/kg)

Table 8 Preliminary Screening Levels and Proposed Cleanup Levels - Groundwater Former Prime Cleaners 18001 Bothell Everett Highway Bothell, Washington Pacific Crest No. 223-002

	COPCs				
Screening Level Description	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
MTCA Method A Cleanup Levels for Groundwater - Ingestion	5	5	-		0.2
MTCA Method B Cleanup Levels for Groundwater - Ingestion	21	4	16	160	0.029
MTCA Method B Screening Levels for Groundwater - Vapor Intrusion - Residential	25	1.4		77	0.33
MTCA Method B Screening Levels for Groundwater - Vapor Intrusion - Commercial	120	12		650	1.6
Cleanup Level for COCs only	5	5			

NOTE:

COCs=Contaminants of Concern

"--" = Not applicable or not calculated by Pacific Crest

COCs = Contaminants of concern

Screening Levels in micrograms per liter (ug/L)

Table 9 Preliminary Screening Levels and Proposed Cleanup Levels - Air and Soil Vapor Former Prime Cleaners 18001 Bothell Everett Highway Bothell, Washington Pacific Crest No. 223-002

			СОР	Cs	
Screening Level Description	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroether	Vinyl Chloride
MTCA Method B Cleanup Level - Indoor Air - Residential	9.6	0.33		18.29	0.28
MTCA Method B Screening Level - Indoor Air - Commercial Worker	44.9	2.8		155.7	1.3
MTCA Method B Screening Level - Subslab Soil Vapor - Residential	320	11	-	610	9.5
MTCA Method B Screening Level - Subslab Soil Vapor - Commercial Worker	1500	95		5200	44
Cleanup Levels for COCs only	9.6	0.33			

NOTE:

COPCs=Contaminants of Potential Concern "--" = Not applicable or not calculated COCs = Contaminants of concern

Screening Levels in micrograms per cubic meter (ug/m^3)

APPENDIX A DATA GAP INVESTIGATION REPORT

DRAFT FOR ECOLOGY REVIEW AMENDED CLEANUP ACTION PLAN

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

PACIFIC CREST PN: 223-00



PACIFIC CREST ENVIRONMENTAL 1531 BENDIGO BOULEVARD NORTH PO BOX 952 NORTH BEND, WA 98045 T 425.888.4990 F 425.888.4994

DATA GAP INVESTIGATION 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

Prepared by:

William Carroll, LG, LHG Principal Hydrogeologist

Reviewed by:

Kann Canan for JH

Joel Harrington Project Geologist

August 17, 2023



TABLE OF CONTENTS

1.0	INTRO	DDUCTION	. 1-1
	1.1	PURPOSE	1-1
	1.2	REMEDIAL ACTION RESPONSIBILITIES	. 1-1
	1.3	ORGANIZATION	. 1-2
2.0	BACK	GROUND	2-1
	2.1	MCC PROPERTY DESCRIPTION	2-1
	2.2	NATURAL CONDITIONS	2-1
		2.2.1 Physiographic Setting	2-1
		2.2.2 Terrestrial Habitat Setting	2-1
		2.2.3 Geologic Setting	2-1
		2.2.4 Hydrogeology	2-2
	2.3	PREVIOUS RI/FS AND INTERIM CLEANUP ACTION ACTIVITIES	. 2-2
3.0	RECE	NT INVESTIGATION ACTIVITIES AND RESULTS	. 3-1
	3.1	SCOPE OF WORK	3-1
	3.2	GROUNDWATER MONITORING EVENT	. 3-1
	3.3	SOIL VAPOR MONITORING EVENT	3-2
	3.4	INDOOR AND AMBIENT AIR MONITORING EVENT	. 3-2
	3.5	RESULTS	3-3
	3.6	UPDATED CONCEPTUAL SITE MODEL	3-4
	3.7	CONCLUSIONS	3-6
4.0	REFE	RENCES	4-1

FIGURES

- Figure 1 Site Location Map
- Figure 2 Site Plan
- Figure 3 Site Plan with Potentiometric Surface Elevation Contours and Analytical Results (4/19/2023 4/20/2023)
- Figure 4 Site Plan with Analytical Results Soil Vapor
- Figure 5 Site Plan with Analytical Results Air
- Figure 6 Site Plan with Extent of Contamination Soil and Groundwater

TABLES

- Table 1Groundwater Elevation Data Summary
- Table 2Groundwater Quality Parameters Summary
- Table 3Laboratory Analytical Results Summary Groundwater
- Table 4
 Laboratory Analytical Results Summary Sub-Slab Soil Vapor
- Table 5
 Laboratory Analytical Results Summary Indoor and Ambient Air
- Table 6
 Laboratory Analytical Results Summary Soil
- Table 7 Preliminary Screening Levels and Proposed Cleanup Levels Soil
- Table 8
 Preliminary Screening Levels and Proposed Cleanup Levels Groundwater
- Table 9Preliminary Screening Levels and Proposed Cleanup Levels Air and Soil Vapor

APPENDICES

- Appendix A DPE System Configuration Documents
- Appendix B Laboratory Analytical Report Groundwater
- Appendix C Laboratory Analytical Report Soil Vapor and Air

1.0 INTRODUCTION

Pacific Crest Environmental, LLC (Pacific Crest) has prepared this Data Gap Investigation Report (the Report) on behalf of Mill Creek Crossing (MCC), LLC 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 following 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 site investigation activities that were conducted to assess the current Site conditions. The purpose of this Report is to provide sufficient information to document the activities conducted by Pacific Crest at the Site in 2023.

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 Echelbarge 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 interim cleanup action activities.
- Section 3 Recent Investigation Activities and Results: Section 3 provides a summary of investigation and monitoring activities conducted in 2023 and an updated Conceptual Site Model (CSM).
- Section 4 References: The documents cited in this Report are presented in Section 4.

2.0 BACKGROUND

The following subsections provide a description of the MCC Property, relevant Site characterization information, and remedial investigation, feasibility study, and interim 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.

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 INTERIM 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 results are summarized below:

- Soil Laboratory analysis of soil samples detected PCE at concentrations ranging from 1.1 micrograms per kilogram (µg/kg) to 560 µg/kg and TCE concentrations ranging from 9.2 µg/kg to 38 µg/kg. Laboratory analysis of soil samples detected cis-1,2-DCE in two samples at concentrations of 28 µg/kg and 330 µg/kg. Laboratory analysis of soil samples did not detect trans-1,2-DCE or VC at concentrations above their respective practical quantitation limits (PQLs). PCE and TCE are the only COPCs in soil that exceed their respective MTCA Method A cleanup levels. The elevated concentrations of PCE and TCE in soil were located in the vicinity of the former Prime Cleaners dry-cleaning equipment. The extent of PCE and TCE concentrations in soil that exceed their respective MTCA Method A cleanup levels for unrestricted properties is defined within the boundaries of the MCC Property.
- Groundwater Laboratory analysis of groundwater samples detected PCE at concentrations ranging from 0.55 micrograms per liter (μg/L) to 170 μg/L. Laboratory analysis of groundwater samples detected TCE in one sample at a concentration of 3.22 μg/L and detected cis-1,2-DCE in two samples at concentrations of 1.4 μg/L and 4.8 μg/L,

respectively. Laboratory analysis of groundwater samples did not detect trans-1,2-DCE or VC at concentrations above their respective PQLs. PCE is the only COPC in groundwater that exceeds it MTCA Method A cleanup level. The extent of PCE concentrations in groundwater that exceed the MTCA Method A cleanup level extends beyond the southern boundary of the MCC Property but is delineated by monitoring wells located to the north, south, east, and west.

- Soil Vapor Laboratory analysis of soil samples detected PCE at concentrations ranging from 500 micrograms per cubic meter (µg/m³) to 24,000 µg/m³ and detected TCE at concentrations ranging from 68 µg/m³ to 470 µg/m³. Laboratory analysis of soil vapor samples detected cis-1,2-DCE in one sample at a concentration of 22 µg/m³. Laboratory analysis of soil vapor samples did not detect trans-1,2-DCE or VC at concentrations above their respective PQLs. The elevated concentrations of PCE and TCE in soil vapor were located in the vicinity of the former Prime Cleaners dry-cleaning equipment.
- Indoor Air Laboratory analysis of indoor air samples detected PCE at concentrations ranging from 1.1 μg/m³ to 3.6 μg/m³ and laboratory analysis of representative indoor air samples² detected TCE at concentrations ranging from 1.3 μg/m³ to 2.1 μg/m³. Laboratory analysis of indoor air samples did not detect cis-1,2-DCE, trans-1,2-DCE or VC at concentrations above their respective PQLs.
- **Exposure Pathways** The RI concluded that direct contact and inhalation pathways were not complete and that the leaching to groundwater and groundwater ingestion pathways were potentially complete, but no water supply wells or ecological receptors were identified within the Site.

The RI/FS and CAP 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. DPE is effective for remediation of shallow permeable material (e.g., sand and silty sand). During operation of a typical DPE system, the concentrations of CVOCs in soil gas and groundwater decrease as the mass of contaminants present in the subsurface is reduced. Over time, the CVOC recovery rate tends to become a function of the rate of desorption of contaminants from soil and recovery rates reach asymptotic levels. The RI/FS Report estimated a restoration timeframe of 1-year to achieve cleanup standards for both soil and groundwater. Ecology approved the CAP 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. Copies of the Site Plan illustrating the DPE system location, a process flow diagram of the DPE system, and the Industrial Wastewater Discharge Authorization are provided in Appendix A. Between 2017 and 2021, ZGA operated the

² Laboratory analysis of indoor air samples collected on November 21, 2013 detected elevated TCE concentrations that were attributed to TCE-containing "spot cleaner". The concentrations of TCE detected at that time do not appear representative of vapor intrusion by soil vapor.

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.

3.0 RECENT INVESTIGATION ACTIVITIES AND RESULTS

3.1 SCOPE OF WORK

Between April 19, 2023 and April 22, 2023, Pacific Crest, on behalf of MCC, conducted monitoring activities at the Site. The purpose of the scope of work was to assess current groundwater, soil vapor, and indoor air conditions. The DPE system was not operational during the sampling activities. The investigation activities included:

- Collecting groundwater samples from select existing wells and submitting the samples to an independent laboratory for analysis of CVOCs;
- Collecting sub-slab soil vapor samples from existing Vapor Pin[™] sample points for laboratory analysis of CVOCs; and,
- Collecting indoor air samples inside the former Prime Cleaners tenant suite, now the Fusian India and Osaka Grill restaurants, and collecting an ambient air sample outside the former Prime Cleaners tenant space.

A narrative summary of the recent investigation field activities is provided in the following sections.

3.2 GROUNDWATER MONITORING EVENT

On April 19, 2023 and April 20, 2023, 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 and DPE-1 through DPE-4. 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-3, MW-4, MW-6, MW-7, MW-8, DPE-1, DPE-2, DPE-3, and DPE-4. Samples were not collected from wells MW-1, MW-2, 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. 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. Groundwater samples 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.

3.3 SOIL VAPOR MONITORING EVENT

On April 20, 2023, Pacific Crest collected one sub-slab soil vapor sample from the pre-existing Vapor Pin[™] (SPG-5) in the Osaka Grill tenant space in accordance with manufacturer instructions and Ecology's Guidance for Evaluating Vapor Intrusion in Washington State. Pacific Crest was unable to locate Vapor Pins[™] SPG-1, SPG-2, SPG-3, SPG-4, or SPG-6, which appear to have been destroyed or covered during modifications to the leased spaces by the MCC Property tenants.

Prior to collecting the soil vapor sample, the Vapor Pin[™] was checked for leakage by conducting a shut-in test and a helium tracer test. The Vapor Pin[™] was purged of three volumes of air at a rate of approximately 200 milliliters per minute prior to sample collection. The Vapor Pin[™] location is illustrated on Figure 2.

One vapor sample was collected into a one-liter evacuated laboratory-prepared stainless-steel SUMMA® canister. The sample was submitted to Fremont Analytical, Inc. (Fremont) of Seattle, Washington for analysis of CVOCs by EPA Method TO-15. A copy of the laboratory analytical report is provided in Appendix C.

3.4 INDOOR AND AMBIENT AIR MONITORING EVENT

On April 19, 2023, concurrent with sub-slab soil vapor sampling, Pacific Crest deployed three SUMMA® canisters equipped with 8-hour flow regulators to collect the following samples: one indoor air sample (IA2-042023) from former Prime Cleaners tenant suite, now the Fusian Indian restaurant; one indoor air sample in the Osaka Grill tenant suite (IA1-042023); and one ambient air sample from outside the former Prime Cleaners tenant suite (AA-042023).³ The indoor and

³ A portion of the former Prime Cleaners space (former Money Tree) was not sampled due to ongoing renovations.

ambient air samples were collected using six-liter evacuated laboratory-prepared stainless-steel SUMMA® canisters with flow regulators set to collect over an 8-hour period. The SUMMA® canisters were deployed during regular business hours to collect representative samples under working exposure conditions. The ambient air sample was collected up-wind of the former Prime Cleaners tenant space. The SUMMA® canisters were collected on April 20, 2023 and transported to Fremont, under standard chain of-custody procedures. Fremont analyzed the samples for CVOCs by EPA Method TO-15 and prepared reports documenting the results. A copy of the laboratory analytical report is provided in Appendix c.

3.5 RESULTS

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

- On April 19, 2023, the depth to groundwater measured in the monitoring wells ranged from 17.62 feet below top of casing (btoc) (MW-5) to 26.86 feet btoc (MW-9). The groundwater elevations ranged from 272.23 feet (MW-1 and MW-5) to 271.73 feet (MW-8). Groundwater elevation data are presented in Table 1.
- 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 2.
- Groundwater analytical data for the COPCs for the Site are summarized in Table 3. Laboratory analysis of the groundwater samples detected PCE at concentrations ranging from 0.34 µg/L to 21 µg/L. Laboratory analysis of the groundwater samples collected from well MW-4, MW-8, and DPE-3 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 April 2023 groundwater monitoring event is provided on Figure 3.
- On April 19, 2023, Pacific Crest collected on soil vapor sample from Vapor Pin[™] SPG-5. The tracer and shut-in tests confirmed the integrity of the Vapor Pin installation. Laboratory analysis of soil vapor sample SPG-5 detected PCE, TCE, and trans-1,2-DCE at concentrations of 458 µg/m³, 28.5 µg/m³, and 0.403 µg/m³, respectively. Laboratory analysis did not detect the remaining COCs at concentrations above their respective laboratory PQLs. The detected concentrations of PCE and TCE exceed their respective default sub-slab soil vapor screening levels for residential land use, but not the screening levels for commercial workers. The soil vapor results are summarized in Table 4 and illustrated on Figure 4.
- On April 19, 2023, Pacific Crest deployed three Summa® canisters to collect indoor and ambient air samples. Laboratory analysis of the ambient air sample (AA-042023) did not detect any of the COCs at concentrations above their respective laboratory PQLs. Laboratory analysis of the indoor air samples IA1-042023 and IA2-042023 detected PCE concentrations of 0.284 µg/m³ and 0.234 µg/m³, respectively. The detected concentrations of PCE were below the default MTCA Method B cleanup level that is protective of residential exposure scenarios and the MTCA Method B screening level for commercial

workers. The remaining COC were not detected at concentrations above their respective PQLs. The air results are summarized in Table 5 and illustrated on Figure 5.

3.6 UPDATED CONCEPTUAL SITE MODEL

An updated CSM has been developed for the Site that is based upon data collected during the investigation and cleanup activities conducted at the Site by Pacific Crest and others. The updated CSM identifies plausible exposure pathways for human receptors. The updated CSM elements are presented below:

- A release of PCE based dry cleaning solvent occurred on the MCC Property in the former Prime Cleaners tenant space. On the basis of the dry-cleaning operation dates, the release of PCE appears to have occurred between 1984 and 2000. The current tenant in the former Prime Cleaners tenant space is a restaurant (India Fusian).
- The Site COPCs consist of PCE and its reductive dechlorination degradation products • TCE, cis-1,2-DCE, trans-1,2-DCE, and VC. The media of concern where concentrations of COPCs have been detected include soil, groundwater, soil vapor, and indoor air. Laboratory analysis of soil, soil vapor, indoor air, and groundwater samples detected PCE at concentrations above its MTCA Method A cleanup level or applicable screening level. Laboratory analysis of soil, soil vapor, and indoor air samples has also detected TCE, a breakdown product of PCE, at concentrations above its MTCA Method A cleanup level or applicable screening levels. Laboratory analysis of soil and soil vapor samples has detected cis-1,2-DCE at concentrations below its applicable screening levels. Laboratory analysis of soil, soil vapor, indoor air, and groundwater samples has not detected trans-1,2-DCE or VC at concentrations above their respective PQLs. The analytical results for the COPCs in the media of concern are summarized in Tables 3, 4, 5, and 6. The applicable preliminary screening levels (PSLs) for the COPCs in soil, groundwater, soil vapor, and air are the applicable MTCA Method A or Method B cleanup levels or screening levels which are presented in Tables 7, 8, and 9. The COCs are those COPCs that have exceeded the applicable cleanup level: PCE and TCE
- The horizontal and vertical extent of concentrations of PCE and TCE in soil and groundwater is defined by samples collected to date and the plan view extent, as delineated in the RI/FS Report, is illustrated on Figure 6.
- The applicable transport mechanisms for the migration of COCs include direct release to soil; migration to subsurface soil; migration/leaching to groundwater; volatilization from soil and groundwater to air; and transport by groundwater flow (advection).
- Between 2017 and 2021, ZGA operated the DPE system. The system was initially scheduled to operate for one year, but operations continued for four years. During operations, the DPE system extracted and discharged to the sanitary sewer 1,164,940 gallons of groundwater. The effectiveness of the DPE system can be assessed on the basis of the reduced concentrations of the COCs in the media of concern. Implementation of DPE resulted in decreases in concentrations of PCE, TCE, and cis-1,2-DCE in all media

where they were detected. A comparison of the maximum concentrations of PCE and TCE in the media of concern before and after DPE⁴ system operations is provided below:

Media of	Maximum Concentrations						
Concern	Before DPE C	Operation	After DPE Operation				
	PCE	TCE	PCE	TCE			
Soil	560 µg/kg	38 µg/kg	38 μg/kg Confirmation soil samples were not collected during the 2023 investigation activities, but the soil vapor results provide empirical evidence the indicates that concentrations of PCE and TCE in soil are below their respective cleanup levels. ⁵				
Soil Vapor	24,000 μg/m³	840 µg/m³	458 µg/m³	28.5 µg/m³			
Indoor Air	3.6 µg/m³	2.1 µg/m³	0.284 µg/m ³	<0.00672 µg/m³			
Groundwater	170 µg/L	3.22 µg/L	23 μg/L <0.20 μg/L				

The change in aerial extent of PCE concentrations in groundwater since operation of the DPE system is illustrated on Figure 6.

- Prior to implementation of DPE, inhalation was identified as the only current potentially complete exposure pathway. Based on the zoning classification for the MCC Property (General Commercial) and current commercial land use, the current receptors are commercial workers. Implementation of DPE reduced the concentrations of the COCs in indoor air to below their respective cleanup levels and reduced concentrations of the COCs in soil vapor and groundwater to below their respective screening levels that are protective of indoor air for commercial workers. Unless zoning changes, future receptors potentially exposed to contaminants in air at the Site will still be commercial workers.
- Laboratory analysis of groundwater samples has detected PCE at concentrations that exceed the MTCA Method A cleanup level that is protective of potable groundwater. However, groundwater in the vicinity of the Site is not currently used as a drinking water source. Exposure to PCE in potable water is a complete pathway only if an extraction well was installed and used as a source for potable water.
- MTCA requires an evaluation of the potential impact for the constituents of concern on terrestrial ecological receptors in accordance with the procedures outlined in WAC 173-340-7490. However, due to the size of the undeveloped contiguous land located on or

⁴ The most recent investigation activities in 2023 are representative of post-DPE Site conditions.

⁵ PCE and TCE are present in soil vapor due to their chemical properties. In the absence of active vapor recovery, concentrations of PCE and TCE in soil gas should reach equilibrium with concentrations of PCE and TCE in soil. DPE resulted in a 94% decrease in concentrations of PCE in soil vapor. A reduction of this magnitude in soil concentrations results in predicted concentrations below the respective cleanup levels for PCE and TCE.

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 (b) and (c)(i); therefore, no further ecological evaluation was conducted.

3.7 CONCLUSIONS

Conclusions that are based on the results of recent monitoring activities and the updated CSM are presented below.

The 2023 investigation results demonstrate that operation of the DPE system significantly reduced concentrations of the COCs (i.e., PCE and TCE) and their breakdown products in the media of concern at and around the former Prime Cleaners tenant space. Laboratory analysis of recent indoor air samples collected from the current tenant spaces did not detect the COCs at concentrations above their respective MTCA Method B cleanup levels applicable to commercial workers. Laboratory analysis of recent soil vapor samples collected from below the slab of the building also did not detect the COCs at concentrations above their applicable screening levels used to assess vapor intrusion into indoor air that is protective of commercial workers. Based on the soil vapor results, the concentrations of the COCs in soil in the vicinity of former dry-cleaning equipment are presumed to be below their respective MTCA Method A cleanup levels. PCE concentrations in groundwater samples from three closely placed wells exceed the MTCA Method A cleanup level for PCE that is protective of drinking water use. However, a prohibition on extraction of groundwater for use as drinking water would meet the substantive requirements of MTCA to prevent exposure to PCE in groundwater on the MCC Property.

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FIGURES

DATA GAP INVESTIGATION REPORT

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

PACIFIC CREST PN: 223-002














TABLES

DATA GAP INVESTIGATION REPORT

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

PACIFIC CREST PN: 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
	Terracon	5/9/2011			21.18	275.13
	EES	6/22/2011			22.24	274.07
	EES FES	9/1/2011			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
	EES	7/16/2013			24.72	271.59
MW-1	ZGA	1/9/2017	296.31	31-41	22.85	273.46
	ZGA	1/11/2017			22.90	273.41
	ZGA	3/20/2017			20.35	275.96
	ZGA	8/17/2017			24 87	271 44
	ZGA	11/14/2017			24.66	271.65
	ZGA	2/13/2018			21.65	274.66
	ZGA	1/14/2019			23.78	272 53
	ZGA	4/10/2019			24.04	272.00
	ZGA	12/3/2020			23.95	272.36
	ZGA	9/3/2021			26.18	270.13
	ZGA	6/30/2022			23.81	272.50
	Pacific Crest	4/10/2022			24.08	272.30
	Terracon	8/25/2010			24.00	272.23
	Terracon	5/0/2011			23.30	270.05
	EES	6/22/2011			21.01	274.00
	EEG	0/22/2011			22.72	273.73
	EEG	9/1/2011			23.14	271.33
	EES	12/0/2011			24.59	271.00
	EES	5/6/2012			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
MW-2	ZGA	1/9/2017	296.47	34-44	23.14	273.33
	ZGA	1/11/2017			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			24.40	272.07
	ZGA	12/3/2020			24.30	272.17
	ZGA	9/3/2021			26.57	269.90
	ZGA	6/30/2022]		24.18	272.29
	Pacific Crest	4/19/2023			24.47	272.00

						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			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
MW-3	ZGA	1/12/2017	296.96	29-39	23.80	273.16
	ZGA	3/20/2017			21.30	275.66
	ZGA	8/17/2017			26.10	270.86
	ZGA	11/14/2017			25.69	271.27
	ZGA	2/13/2018			22.45	274.51
	ZGA	1/14/2019			24.53	272.43
	ZGA	4/10/2019			24.92	272.04
	ZGA	12/3/2020			24.82	272.14
	ZGA	9/3/2021			27.15	269.81
	ZGA	6/30/2022			24.72	272.24
	Pacific Crest	4/19/2023			25.03	271.93
	Terracon	8/25/2010			25.76	270.80
	Terracon	5/9/2011			21.77	274.79
	EES	6/22/2011			22.96	273.60
	EES	9/1/2011			25.35	271.21
	EES	12/6/2011			24.89	271.67
	EES	3/8/2012			23.30	273.26
	ZGA	5/23/2012			23.10	273.46
	EES	6/27/2012			23.22	273.34
	EES	10/18/2012			25.98	270.58
	EES	1/14/2013			21.62	274.94
N410/ 4	ZGA	1/9/2017	206 56	25.25	23.21	273.35
10100-4	ZGA	1/13/2017	290.30	25-35	23.39	273.17
	ZGA	3/20/2017			20.91	275.65
	ZGA	8/17/2017			25.67	270.89
	ZGA	11/14/2017			25.32	271.24
	ZGA	2/13/2018			22.10	274.46
	ZGA	1/14/2019	1		24.16	272.40
	ZGA	4/10/2019	1		24.53	272.03
	ZGA	12/3/2020	1		26.12	270.44
	ZGA	9/3/2021	1		24.44	272.12
	ZGA	6/30/2022	1		24.33	272.23
	Pacific Crest	4/19/2023	1		24.61	271.95

						Relative
			Relative Casing		Depth to	Potentiometric
Location ID	Sampled By	Sample Date	Elevation	Screen Intervař	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	000.05	10.00	18.26	271.59
C-VVIVI	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
-	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
MW 6	ZGA	1/9/2017	280.04	125325	16.44	273.50
10100-0	ZGA	1/12/2017	209.94	12.0-52.5	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

			Relative Casing		Depth to	Relative Potentiometric
Location ID	Sampled By	Sample Date	Elevation ¹	Screen Interval ²	Groundwater ²	Surface (feet)
	Terracon	8/25/2010			19.14	270.58
	Terracon	5/9/2011			15.22	274.50
	EES	6/22/2011			16.36	273.36
	EES	9/1/2011			18.73	270.99
	EES	12/5/2011			15.25	274.47
	EES	3/8/2012			16.62	273.10
	ZGA	5/23/2012			16.41	273.31
	EES	6/27/2012			16.46	273.26
	EES	10/18/2012			19.31	270.41
	ZGA	1/9/2017			16.61	273.11
MW-7	ZGA	1/12/2017	289.72	20-40	16.76	272.96
	ZGA	3/20/2017			14.40	275.32
	ZGA	8/17/2017			19.11	270.61
	ZGA	11/14/2017			18.68	271.04
	ZGA	2/13/2018			15.51	274.21
	ZGA	1/14/2019			17.52	272.20
	ZGA	4/10/2019			17.84	271.88
	ZGA	12/3/2020			17.84	271.88
	ZGA	9/3/2021			20.07	269.65
	ZGA	6/30/2022			17.71	272.01
	Pacific Crest	4/19/2023			17.95	271.77
	Terracon	5/9/2011			16.02	274.54
	EES	6/22/2011			17.22	273.34
	EES	9/1/2011			19.56	271.00
	EES	12/5/2011			19.06	271.50
	EES	3/8/2012			17.45	273.11
	Terracon	5/23/2012			17.21	273.35
	EES	6/27/2012			17.33	273.23
	EES	10/18/2012			20.19	270.37
	ZGA	1/9/2017			18.69	271.87
	ZGA	1/13/2017			17.65	272.91
MW-8	ZGA	3/20/2017	290.56	38-68	15.17	275.39
	ZGA	8/17/2017			19.91	270.65
	ZGA	11/14/2017			19.46	271.10
	ZGA	2/13/2018			16.30	274.26
	ZGA	1/14/2019			18.30	272.26
	ZGA	4/10/2019			18.61	271.95
	ZGA	12/9/2019			20.28	270.28
	ZGA	12/3/2020			18.81	271.75
	ZGA	9/3/2021			20.91	269.65
	ZGA	6/30/2022			18.58	271.98
	Pacific Crest	4/19/2023			18.83	271.73
	Terracon	1/9/2017			26.30	272.69
	Terracon	1/11/2017			25.10	273.89
	ZGA	3/20/2017			27.55	271.44
	ZGA	8/17/2017			27.55	271.44
	ZGA	11/14/2017	1		27.52	271.47
MW-9	ZGA	2/13/2018	298.99	29-39	24.35	274.64
	ZGA	1/14/2019			26.43	272.56
	ZGA	4/10/2019			26.73	272.26
	ZGA	12/3/2020			26.75	272.24
	ZGA	9/3/2021			29.09	269.90
	ZGA	6/30/2022			26.83	272.16
	Pacific Crest	4/19/2023			26.86	272.13

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		30-40	25.91	271.58
MW 10	ZGA	2/13/2018	207.40		22.85	274.64
MW-10	ZGA	1/14/2019	237.43	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
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 an arbitrary datum in feet above mean sea level

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

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

					Groundwater	Quality Para	ameters ¹	
Location ID	Sample ID	Sampled Bv	Sample Date	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	рН	Oxidation Reduction Potential (mV)
	NA	Terracon	6/17/2009	NA	NA	13	5 24	212
	NA	Terracon	8/10/2010	NA	NA	2 25	5.34	-55
	NA	Terracon	5/10/2011	NA	NA	7 11	5.32	292
	NA	FES	6/22/2011	NA	0 194	3 19	5.7	129
	NA	FES	9/1/2011	NA	0.184	1 79	6.5	110
	NA	FES	12/5/2011	NA	0.218	2 20	6.0	65
	NΔ	FES	3/8/2012	NA	0.180	2.13	53	200
MW-1	NA	ZGA	5/23/2012	NA	NA	2.55	5.06	318
	NA	FES	6/27/2012	NA	0.280	2.50	5.3	221
	NA	FES	10/18/2012	NA	0.203	0.91	5.8	170
	NA	FES	1/14/2013	NA	0.190	3 29	5.3	190
	NA	FES	4/24/2013	NA	0.100	3.01	5.3	217
	NA	FFS	7/16/2013	NA	0.384	1 13	6.0	151
	NA	ZGA	3/5/2014	NA	NA	4 82	6.57	136
	MW1-06292022	ZGA	6/29/2022	14.76	0.99	4.00	4.99	2.28
	NA	Terracon	6/16/2009	NA	NA	1.5	6.08	97
	NA	Terracon	8/12/2010	NA	NA	3.75	5.79	329
	NA	Terracon	5/10/2011	NA	NA	2.04	5.97	226
	NA	EES	6/22/2011	NA	0.346	0.36	6.4	78
	NA	EES	9/1/2011	NA	0.305	4.72	7.3	75
	NA	EES	12/5/2011	NA	0.270	2.40	6.2	274
MW-2	NA	EES	3/8/2012	NA	0.270	1.69	6.2	165
	NA	ZGA	5/24/2012	NA	NA	1.03	6.10	236
	NA	EES	6/27/2012	NA	0.290	0.6	6.2	156
	NA	EES	10/18/2012	NA	0.276	0.35	6.6	144
	NA	EES	1/14/2013	NA	0.280	0.90	6.1	113
	NA	ZGA	3/5/2014	NM	NM	NM	NM	NM
	MW2-06292022	ZGA	6/29/2022	15.38	1.37	3.82	5.31	2.20
	NA	Terracon	6/17/2009	NA	NA	2.3	5.86	186
	NA	Terracon	8/12/2010	NA	NA	4.64	5.89	326
	NA	Terracon	5/10/2011	NA	NA	5.34	5.97	275
MW-3	NA	ZGA	5/24/2012	NA	NA	5.01	5.93	247
	NA	ZGA	3/7/2014	NA	NA	7.02	6.90	236
	MW3-06302022	ZGA	6/30/2022	15.44	0.511	4.90	5.87	181
	MW3-042023	Pacific Crest	4/20/2023	14.0	0.539	5.93	6.31	135.8
	NA	Terracon	6/16/2009	NA	NA	2.6	5.63	211
	NA	Terracon	8/12/2010	NA	NA	6.48	5.75	400
	NA	Terracon	5/10/2011	NA	NA	6.10	5.83	291
	NA	EES	6/22/2011	NA	0.259	3.71	6.3	90
	NA	EES	9/1/2011	NA	0.24	4.11	7.1	68
	NA	EES	12/5/2011	NA	0.310	6.65	6.0	293
MW-4	NA	EES	3/8/2012	NA	0.230	5.87	6.0	182
	NA	ZGA	5/24/2012	NA	NA	5.86	5.88	244
	NA	EES	6/27/2012	NA	0.250	5.65	6.1	144
	NA	LES	10/18/2012	NA	0.239	6.44	6.4	163
	NA	EES 704	1/14/2013	NA	0.310	6.09	6.6	100
	NA	ZGA	3/7/2014	NA 15.00	NA	7.66	1.44	213
	IVIVV4-06302022	ZGA	6/30/2022	15.08	0.184	1.07	6.21	1/6
	101004-042023	Pacific Crest	4/20/2023	13.3	0.669	12.21	6.28	154.3

				Groundwater Quality Parameters ¹					
Location ID	Sample ID	Sampled By	Sample Date	Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	рН	Oxidation Reduction Potential (mV)	
	NA	Terracon	8/10/2010	NA	NA	3.56	5.41	-49	
	NA	Terracon	5/9/2011	NA	NA	1.87	5.27	204	
	NA	EES	6/22/2011	NA	0.416	0.83	6.0	123	
	NA	EES	9/1/2011	NA	0.356	0.27	6.3	132	
	NA	EES	12/5/2011	NA	0.300	1.19	5.4	198	
	NA	EES	3/8/2012	NA	0.330	0.72	5.4	175	
MW-5	NA	EES	6/27/2012	NA	0.350	2.42	5.4	240	
	NA	EES	10/18/2012	NA	0.245	0.30	6.0	119	
	NA	EES	1/14/2013	NA	0.290	0.94	5.4	179	
	NA	EES	4/24/2013	NA	0.454	2.50	5.5	213	
	NA	EES	7/16/2013	NA	0.298	0.51	5.5	133	
	NA	ZGA	3/6/2014	NA	NA	8.71	7.10	215	
	MW5-06292022	ZGA	6/29/2022	15.26	1.269	4.31	6.19	1.11	
	NA	Terracon	8/10/2010	NA	NA	3.85	5.86	-14	
	NA	Terracon	5/9/2011	NA	NA	2.96	5.64	276	
	NA	EES	6/22/2011	NA	0.362	2.39	6.1	104	
	NA	EES	9/1/2011	NA	0.393	1.60	6.7	98	
	NA	EES	12/5/2011	NA	0.280	0.66	5.8	217	
MW-6	NA	EES	3/8/2012	NA	0.240	0.80	5.8	183	
10100-0	NA	EES	6/27/2012	NA	0.350	3.08	5.8	216	
	NA	EES	10/18/2012	NA	0.344	0.43	6.4	115	
	NA	EES	1/14/2013	NA	0.290	0.98	5.8	168	
	NA	ZGA	3/6/2014	NA	NA	7.16	7.15	216	
	MW6-06292022	ZGA	6/29/2022	14.83	0.696	4.32	6.98	1.84	
	MW6-041923	Pacific Crest	4/19/2023	14.0	0.3967	3.51	6.15	145.8	
	NA	Terracon	8/10/2010	NA	NA	4.10	5.86	13	
	NA	Terracon	5/9/2011	NA	NA	5.80	5.94	285	
MW-7	NA	ZGA	3/6/2014	NA	NA	7.35	7.27	202	
	MW7-06302022	ZGA	6/30/2022	14.62	0.107	0.0	6.97	147	
	MW7-041923	Pacific Crest	4/19/2023	13.9	0.3093	7.20	6.14	146.3	
	NA	Terracon	8/10/2010	NA	NA	3.39	6.21	180	
	NA	ZGA	5/24/2012	NA	NA	5.24	5.79	244	
MW-8	NA	ZGA	3/6/2014	NA	NA	7.90	7.17	228	
	MW8-06302022	ZGA	6/30/2022	14.42	0.128	6.66	6.08	164	
	MW8-041923	Pacific Crest	4/19/2023	13.3	0.2351	4.42	6.40	130.5	
M\//_9	NA	ZGA	3/5/2014	NA	NA	8.89	6.93	163	
11111-5	MW9-06292022	ZGA	6/29/2022	14.52	0.122	5.59	6.22	148	
MW-10	NA	ZGA	3/6/2014	NA	NA	6.82	6.75	227	
1010	MW10-06292022	ZGA	6/29/2022	14.79	1.23	4.19	5.46	2.17	
DPE-1	DPE1-041923	Pacific Crest	4/19/2023	15.0	0.3074	5.45	6.40	117.6	
DPE-2	DPE2-042023	Pacific Crest	4/20/2023	14.5	0.2567	0.83	6.50	134.1	
DPE-3	DPE3-042023	Pacific Crest	4/20/2023	12.9	0.3362	11.69	5.83	186.2	
DPE-4	DPE4-042023	Pacific Crest	4/20/2023	13.5	0.2409	0.69	6.48	127.7	

NOTES:

 INCLES.

 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	MW1-06292022	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-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	
MW-2	MW-2	ZGA	1/11/2017	<1	<1	<1	<1	<1.00	
MW-2	MW-2	ZGA	8/17/2017	<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	
MW-2	MW-2	ZGA	4/10/2019	<0.5	<0.5	<0.5	<0.5	<0.5	
MW-2	MW2-06292022	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	

				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	Terracon	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	
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	MW3-09032021	ZGA	9/3/2021	3.1	<0.5	<1	<1	<0.02	
MW-3	MW3-06302022	ZGA	6/30/2022	6.0	<2.0	<2.0	<2.0	<0.2	
MW-3	MW3-042023	Pacific Crest	4/20/2023	2.9	<0.20	<0.20	<0.20	<0.20	
MW-4	MW-3	Adapt	10/31/2007	45	<1	<1	<1	<0.2	
MW-4	MW-4	Terracon	6/16/2009	170	<1	<1	<1	<0.2	
MW-4	MW-4	Terracon	8/12/2010	140	<1	<1	<1	<1.0	
MW-4	MW-4	Terracon	5/10/2011	110	<1	<1	<1	<1.0	
MW-4	TMW-4	EES	9/1/2011	77	<1	<1	<1	<0.2	
MW-4	TMW-4	EES	12/5/2011	68	<1	<1	<1	<0.2	
MW-4	TMW-4	EES	3/8/2012	73	<1	<1	<1	<0.2	
MW-4	MW-4	ZGA	5/24/2012	140	<2	<2	<2	<0.2	
MW-4	TMW-4	EES	6/27/2012	80	<1	<1	<1	<0.2	
MW-4	TMW-4	EES	10/18/2012	110	<1	<1	<1	<0.2	
MW-4	TMW-4	EES	1/14/2013	84	<1	<1	<1	<0.2	
MW-4	MW-4	ZGA	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	MW4-09032021	ZGA	9/3/2021	20	<0.5	<1	<1	<0.02	
MW-4	MW4-06302022	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	

				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
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	TMW-5	EES	6/27/2012	<1	<1	<1	<1	<0.2
MW-5	TMW-5	EES	10/18/2012	<1	<1	<1	<1	<0.2
MW-5	TMW-5	EES	1/14/2013	<1	<1	<1	<1	<0.2
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	MW5-06292022	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-6	MW-6	Terracon	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	TMW-6	EES	10/18/2012	<1	<1	<1	<1	<0.2
MW-6	TMW-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
MW-6	MW-6	ZGA	1/12/2017	1.07	<1	<1	<1	<1.0
MW-6	MW-6	ZGA	8/21/2017	0.674	<1	<1	<1	<0.5
MW-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	MW6-06292022	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

				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-7	MW-7	Terracon	8/10/2010	0.55	<1	<1	<1	<1.0	
MW-7	MW-7	Terracon	5/9/2011	<1	<1	<1	<1	<1.0	
MW-7	MW-7	ZGA	3/6/2014	8	<2	<2	<2	<0.2	
MW-7	MW-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	MW7-09032021	ZGA	9/3/2021	<1	<0.5	<1	<1	<0.02	
MW-7	MW7-06302022	ZGA	6/30/2022	<2.0	<2.0	<2.0	<2.0	<0.2	
MW-7	MW7-041923	Pacific Crest	4/19/2023	0.89	<0.20	<0.20	<0.20	<0.20	
MW-8	MW-8	Terracon	5/10/2011	22	<1	<1	<1	<1.0	
MW-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	
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	MW8-09032021	ZGA	9/3/2021	13	<0.5	<1	<1	<0.02	
MW-8	MW8-06302022	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-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	MW9-06302022	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	

				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
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
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
	Effluent	ZGA	3/8/2017	0.748	<1	<1	<1	<1.0
	Effluent	ZGA	11/12/2017	0.286	<0.5	<0.5	<0.5	<0.5
	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
MTCA	Noncancer	Potable Water		48	4	16	160	24
Method B	Cancer			20.8	0.54	-	-	0.029
MTCA	Noncancer	Vapor Intrusion -		48	3.9	-	77	54
Method B	Cancer	Residential		25	1.4	-		0.33
MTCA	Noncancer	Vapor Intrusion -		410	32	-	650	460
Method B	Cancer	Commercial		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

¹ Analyzed 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

Table 4 Laboratory Analytical Results Summary - Sub-Slab Soil Vapor Former Prime Cleaners 18001 Bothell Everett Highway Bothell, Washington Pacific Crest No. 223-002

					Soil Va	oor Analyti	cal Results	s (microgra	ams per
						С	ubic meter) ¹	
Location ID	Location	Date	Sample ID	Sampled By	Tetrachloroethene	Trichloroethene	(cis) 1,2-Dichloroethene	(trans) 1,2-Dichloroethene	Vinyl chloride
	Former Money	11/25/2013	SPG-1	ZGA	500	<1.3	<0.94	<0.94	<0.61
SPG-1	Tree/Prime Cleaners	6/3/2014	SPG-1	ZGA	1,600	<12	<8.9	<8.9	<5.7
	(Fusion India)	4/20/2023	NS ³	Pacific Crest	NS	NS	NS	NS	NS
	Former Money	11/25/2013	SPG-2	ZGA	7,700	440	22	<19	<12
SPG-2	Tree/Prime Cleaners	6/3/2014	SPG-2	ZGA	9,900	470	<190	<190	<120
	(Fusion India)	4/20/2023	NS ³	Pacific Crest	NS	NS	NS	NS	NS
	Former Drime Cleanere	12/6/2013	SPG-3	ZGA	11,000	68	<22	<22	<14
SPG-3	(Eusion India)	6/3/2014	SPG-3	ZGA	24,000	160	<38	<38	<25
	(i usion inula)	4/20/2023	NS ³	Pacific Crest	NS	NS	NS	NS	NS
	Former Prime Cleaners	12/6/2013	SPG-4	ZGA	3,400	420	<5.5	6.8	<3.6
SPG-4	(Fusion India)	6/3/2014	SPG-4	ZGA	5,400	840	<19	<19	<12
	(i usion india)	4/20/2023	NS ³	Pacific Crest	NS	NS	NS	NS	NS
		11/25/2013	SPG-5	ZGA	5,400	220	<13	<13	<8.2
SPG-5	Osaka Grill	6/3/2014	SPG-5	ZGA	8,700	360	<19	<19	<12
		4/20/2023	SPG-5	Pacific Crest	458	28.5	<0.389	0.403	<0.791
		11/25/2013	SPG-6 ²	ZGA	<790	<630	<460	<460	<300
SPG-6	Osaka Grill	6/3/2014	SPG-6 ²	ZGA	<40,000	<32,000	<24,000	<24,000	<15,000
		4/20/2023	NS ³	Pacific Crest	NS	NS	NS	NS	NS
	Su	b-Slab Screen	ing Level - Co	ommercial Worker	1,500	95		5200	44
		Sub-Sla	b Screening I	evel - Residential	320	11		620	9.5

NOTES:

BOLD denotes concentration above applicable commercial subslab screening level

< denotes result is less than laboratory practical quantitation limit listed or analyte not detected at or above the reporting limit

¹ Analyzed by U.S. Environmental Protection Agency (EPA) Method TO-15

² denotes probe failed leak test during sampling

³ sample probe could not be located, possibly removed or destroyed during renovations

NS = not analyzed

MTCA = Model Toxics Control Act

Pacific Crest = Pacific Crest Environmental, LLC

ZGA = Zipper Geo Associates

				Air Analytical Results (µg/m³) ¹				
Location ID	Sample ID	Date	Sampled By	Tetrachloroethene	Trichloroethene	(cis) 1,2-Dichloroethene	(trans) 1,2-Dichloroethene	Vinyl Chloride
	Prime Cleaners	11/21/2013	ZGA	1.1	280	<0.39	<2.0	<0.13
	Prime Cleaners	6/3/2014	ZGA	3.5	2.1	<0.13	<0.65	<0.042
	Prime Cleaners	8/22/2018	ZGA	0.73	<0.27	<0.4	<0.4	<0.26
Former Prime Cleaners	Prime Cleaners	1/14/2019	ZGA	<6.8	<0.27	<0.4	<0.4	<0.26
(Fusion India)	Prime Cleaners	4/18/2019	ZGA	<6.8	<0.27	<0.4	<0.4	<0.26
	Prime Cleaners	1/24/2020	ZGA	<6.8	<0.27	<0.4	<0.4	<0.26
	IA2-042023	4/20/2023	Pacific Crest	0.284	< 0.00672	<0.0972	<0.0977	<0.198
	Money Tree	11/21/2013	ZGA	<0.20	1.3	<0.12	<0.59	<0.038
	Money Tree	6/3/2014	ZGA	<1.1	<0.88	<0.65	<3.2	<0.21
	Money Tree	8/22/2018	ZGA	<0.68	1.1	<0.4	<0.4	<0.26
Former Money Tree/Prime			20/1	<0.68	0.82	<0.4	<0.4	<0.26
Cleaners (Fusion India)	Money Tree	1/14/2019	ZGA	<6.8	<0.27	<0.4	<0.4	<0.26
	Money Tree	4/18/2019	ZGA	<6.8	<0.27	<0.4	<0.4	<0.26
	Money Tree	1/24/2020	ZGA	<6.8	<0.27	<0.4	<0.4	<0.26
	NS	4/20/2023	Pacific Crest	NS	NS	NS	NS	NS
	Osaka Grill	11/21/2013	ZGA	3.6	210	<0.28	<1.4	<0.090
	Osaka Grill	6/3/2014	ZGA	3.2	0.37	<0.27	<1.4	<0.087
	Osaka Grill	8/22/2018	ZGA	<0.68	<0.27	<0.4	<0.4	<0.26
Osaka Grill	Osaka Grill	1/14/2019	ZGA	<6.8	<0.27	<0.4	<0.4	<0.26
	Osaka Grill	4/18/2019	ZGA	<6.8	<0.27	<0.4	<0.4	<0.26
	Osaka Grill	1/24/2020	ZGA	<6.8	<0.27	<0.4	<0.4	<0.26
	IA1-042023	4/20/2023	Pacific Crest	0.234	<0.00672	<0.0972	<0.0977	<0.198
	Ambient	11/21/2013	ZGA	<0.21	<0.17	<0.12	<0.62	<0.040
	Ambient	6/3/2014	ZGA	<0.23	<0.18	<0.14	<0.68	<0.044
	Ambient	8/22/2018	ZGA	<0.68	0.28	< 0.4	< 0.4	< 0.26
Ambient	Ambient	1/14/2019	ZGA	<6.8	<0.27	< 0.4	< 0.4	< 0.26
	Ambient	4/18/2019	ZGA	<6.8	<0.27	< 0.4	< 0.4	< 0.26
	Ambient	1/24/2020	ZGA	<6.8	<0.27	< 0.4	< 0.4	< 0.26
	AA-042023	4/20/2023	Pacific Crest	<0.0753	< 0.00672	<0.0972	<0.0977	<0.198
MTCA Method B Cleanup	Level for Air ²			9.6	0.3		18.29	0.28
MTCA Method B Screenin	g Level - Commer	rcial Worker		44.9	2.8		155.7	1.3

NOTES:

¹Analyzed by EPA Method TO-15

²Cleanup Levels and Risk Calculations (CLARC) under the Method B MTCA Cleanup Regulation (January 2023 Update). For analytes with both Cancer and Noncancer values, the lower of the two values was used.

Bold = concentration exceeds applicable MTCA cleanup level

< = analyte was not above the practical quantitation limit

italicized denotes that laboratory practical quantitation limit is above the applicable MTCA cleanup level.

MTCA = Model Toxics Control Act

 μ g/m³ = micrograms per cubic meter

ZGA=ZipperGeo

					Soil Anal	ytical Resu	ults (micro	grams per	kilogram) ¹
					Select C	hlorinated	Volatile O	rganic Con	npounds
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				Sample	itre	ict	2	sus	'n
Location ID	Sample ID	Sampled By	Sample Date	Depth ²	Te	Ļ	cia	tra	<br </th
B-1	B-1	EA	3/9/1999	22.5	200	<57	330	ND	ND
B-2	B-2	EA	3/9/1999	20	<57	<57	<57	ND	ND
SP-1	SP-1	EA	3/9/1999	5	240	<54	<54	ND	ND
SP-2	SP-2	EA	3/9/1999	1	560	<53	<53	ND	ND
B-7	B-7	Adapt	10/24/2007	30	63	<30	<50	<50	<50
B1	B1	Terracon	5/17/2009	3	160	38	<1.5	<1.5	<1.5
B2	B2	Terracon	5/17/2009	3	1.1	18	<1.0	<1.0	<1.0
B3	B3	Terracon	5/17/2009	2.5	1.9	20	<1.0	<1.0	<1.0
B4	B4	Terracon	5/17/2009	2.5	17	29	<1.1	<1.1	<1.1
B5	B5	Terracon	5/17/2009	3	<1.1	24	<1.1	<1.1	<1.1
B6	B6	Terracon	5/17/2009	3	1.2	15	<1.0	<1.0	<1.0
B7	B7	Terracon	5/17/2009	3	15	22	<1.1	<1.1	<1.1
B8	B8	Terracon	5/17/2009	3	28	30	28	<1.1	<1.1
DO	B9	Terracon	5/17/2009	2.5	110	9.2	<1.1	<1.1	<1.1
БЭ	B9	Terracon	5/17/2009	5	4.1	27	<1.1	<1.1	<1.1
P10	B10	Terracon	5/17/2009	3	5.2	14	<1.1	<1.1	<1.1
BIU	B10	Terracon	5/17/2009	5.5	160	10	<1.1	<1.1	<1.1
B11	B11	Terracon	5/17/2009	3	<1.0	<1.0	<1.0	<1.0	<1.0
B12	B12	Terracon	5/17/2009	3	3.8	38	<1.1	<1.1	<1.1
B13	B13	Terracon	5/17/2009	3.5	16	33	<1.0	<1.0	<1.0
	MW1-1	Terracon	5/28/2009	7.5	<1.1	<1.1	<1.1	<1.1	<1.1
	MW1-2	Terracon	5/28/2009	17.5	<1.1	<1.1	<1.1	<1.1	<1.1
MW1	MW1-3	Terracon	5/28/2009	25	2.1	<1.1	<1.1	<1.1	<1.1
	MW1-4	Terracon	5/28/2009	37	<1.3	<1.3	<1.3	<1.3	<1.3
	MW1-5	Terracon	5/28/2009	41	<1.2	<1.2	<1.2	<1.2	<1.2
	MW2-6	Terracon	5/28/2009	7.5	<1.1	<1.1	<1.1	<1.1	<1.1
	MW2-7	Terracon	5/28/2009	18	<1.0	<1.0	<1.0	<1.0	<1.0
MW2	MW2-8	Terracon	5/28/2009	23	<1.1	<1.1	<1.1	<1.1	<1.1
	MW2-9	Terracon	5/28/2009	44	<1.1	<1.1	<1.1	<1.1	<1.1
	MW2-10	Terracon	5/28/2009	33	<1.0	<1.0	<1.0	<1.0	<1.0
	MW3-11	Terracon	5/29/2009	7.5	4.5	<1.2	<1.2	<1.2	<1.2
	MW3-12	Terracon	5/29/2009	13	3.9	<1.1	<1.1	<1.1	<1.1
MW3	MW3-13	Terracon	5/29/2009	27.5	9.3	<1.1	<1.1	<1.1	<1.1
	MW3-14	Terracon	5/29/2009	31	2.3	<1.1	<1.1	<1.1	<1.1
	MW3-15	Terracon	5/29/2009	37	<1.1	<1.1	<1.1	<1.1	<1.1
	MW5 S-1	Terracon	7/12/2010	12.5	<1.2	<1.2	<1.2	<1.2	<1.2
	MW5 S-2	Terracon	7/12/2010	20	<1.2	<1.2	<1.2	<1.2	<1.2
MW5	MW5 S-3	Terracon	7/12/2010	25	<1.1	<1.1	<1.1	<1.1	<1.1
	MW5 S-4	Terracon	7/12/2010	30	<1.2	<1.2	<1.2	<1.2	<1.2
	MW5 S-5	Terracon	7/12/2010	35	<1.2	<1.2	<1.2	<1.2	<1.2
	MW6 S-1	Terracon	7/13/2010	15	<1.2	<1.2	<1.2	<1.2	<1.2
	MW6 S-2	Terracon	7/13/2010	20	<1.0	<1.0	<1.0	<1.0	<1.0
MW6	MW6 S-3	Terracon	7/13/2010	26	<1.1	<1.1	<1.1	<1.1	<1.1
	MW6 S-4	Terracon	7/13/2010	30	<1.1	<1.1	<1.1	<1.1	<1.1
	MW6 S-5	Terracon	7/13/2010	35	1.3	<1.1	<1.1	<1.1	<1.1
	MW7 S-1	Terracon	7/13/2010	16	<1.2	<1.2	<1.2	<1.2	<1.2
	MW7 S-2	Terracon	7/13/2010	20	<1.1	<1.1	<1.1	<1.1	<1.1
MW7	MW7 S-3	Terracon	7/13/2010	26	<1.1	<1.1	<1.1	<1.1	<1.1
	MW7 S-4	Terracon	7/13/2010	32.5	<1.1	<1.1	<1.1	<1.1	<1.1
	MW7 S-5	Terracon	7/13/2010	40	13	<1.2	<1.2	<1.2	<1.2

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					Soil Anal	ytical Resu	ults (micro	grams per	kilogram)'
					Select C	hlorinated	Volatile O	rganic Con	npounds
				Sample	strachloroethene	ichloroethene	s-1,2-Dichloroethene	ans-1,2-Dichloroethene	nyl Chloride
Location ID	Sample ID	Sampled By	Sample Date	Depth ²	Ĕ	μ	ö	tra	Ś
	MW-8 S1	ZGA	4/26/2011	10	1.8	<1.2	<1.2	<1.2	<1.2
	MW-8 S2	ZGA	4/26/2011	15	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-8 S3	ZGA	4/26/2011	20	8.9	<1.2	<1.2	<1.2	<1.2
	MW-8 S4	ZGA	4/26/2011	25	7.3	<1.1	<1.1	<1.1	<1.1
	MW-8 S5	ZGA	4/26/2011	30	45	<1.2	<1.2	<1.2	<1.2
M\\/8	MW-8 S6	ZGA	4/26/2011	35	16	<1.2	<1.2	<1.2	<1.2
101000	MW-8 S7	ZGA	4/26/2011	40	25	<1.1	<1.1	<1.1	<1.1
	MW-8 S8	ZGA	4/26/2011	45	12	<1.1	<1.1	<1.1	<1.1
	MW-8 S9	ZGA	4/26/2011	50	16	<1.1	<1.1	<1.1	<1.1
	MW-8 S10	ZGA	4/26/2011	55	<1.0	<1.1	<1.1	<1.1	<1.1
	MW-8 S11	ZGA	4/26/2011	60	8.7	<1.1	<1.1	<1.1	<1.1
	MW-8 S12	ZGA	4/26/2011	70	7	<1.2	<1.2	<1.2	<1.2
	MW 9-1	ZGA	9/30/2013	3	<10	<10	<10	<10	<10
	MW 9-2	ZGA	9/30/2013	8	<10	<10	<10	<10	<10
	MW 9-3	ZGA	9/30/2013	13	<10	<10	<10	<10	<10
	MW 9-4	ZGA	9/30/2013	18	<10	<10	<10	<10	<10
101009	MW 9-5	ZGA	9/30/2013	23	<10	<10	<10	<10	<10
	MW 9-6	ZGA	9/30/2013	28.5	<10	<10	<10	<10	<10
	MW 9-7	ZGA	9/30/2013	34	<10	<10	<10	<10	<10
	MW 9-8	ZGA	9/30/2013	38.5	<10	<10	<10	<10	<10
	MW 10-1	ZGA	9/30/2013	3.5	<10	<10	<10	<10	<10
	MW 10-2	ZGA	9/30/2013	9	<10	<10	<10	<10	<10
	MW 10-3	ZGA	9/30/2013	13.5	<10	<10	<10	<10	<10
	MW 10-4	ZGA	9/30/2013	18	<10	<10	<10	<10	<10
IVIV10	MW 10-5	ZGA	9/30/2013	23.5	<10	<10	<10	<10	<10
	MW 10-6	ZGA	9/30/2013	28	<10	<10	<10	<10	<10
	MW 10-7	ZGA	9/30/2013	33.5	<10	<10	<10	<10	<10
	MW 10-8	ZGA	9/30/2013	38.5	<10	<10	<10	<10	<10
		MTCA Metho	d A Cleanup Lev	els for Soil	50	30	NE	NE	NE

NOTES:

¹Analyzed by SW846 method 8260

²Depth in feet below ground surface

NE = not established

ND = Reported as not detected. Detection limit not listed.

< = concentration not detected at or above the laboratory detection limit

Bold = concentration exceeds the applicable Cleanup Level

CVOCs = Chlorinated Volatile Organic Compounds

MTCA = Model Toxics Control Act

Pacific Crest = Pacific Crest Environmental, LLC

EA = Environmental Associates, Inc.

Adapt = Adapt Engineering, Inc.

Terracon = Terracon, Inc.

ZGA = Zipper Geo Associates, Inc.

Table 7Preliminary Screening Levels and Proposed Cleanup Levels - SoilFormer Prime Cleaners18001 Bothell Everett HighwayBothell, WashingtonPacific Crest No. 223-002

			COP	Cs	
Screening Level Description	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
MTCA Method A Cleanup Level	0.05	0.03			
MTCA Method B, Carcinogen, Direct Contact (ingestion only) unrestricted	480	12	I		0.67
MTCA Method B, Non-Carcinogen, Direct Contact (ingestion only) unrestricted	480	40	160	1,600	240
MTCA Method B, Three-Phase Model, Soil Leaching to Groundwater	0.05	0.025	0.079	0.52	0.0017
Final Cleanup Level for COCs only	0.05	0.03			

NOTE:

COPCs=Contaminants of Potential Concern

"--" = Not applicable or not calculated by Pacific Crest

COCs = Contaminants of concern

Screening Levels in milligrams per kilogram (mg/kg)

Table 8 Preliminary Screening Levels and Proposed Cleanup Levels - Groundwater Former Prime Cleaners 18001 Bothell Everett Highway Bothell, Washington Pacific Crest No. 223-002

			COP	Cs	
Screening Level Description	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
MTCA Method A Cleanup Levels for Groundwater - Ingestion	5	5	-		0.2
MTCA Method B Cleanup Levels for Groundwater - Ingestion	21	4	16	160	0.029
MTCA Method B Screening Levels for Groundwater - Vapor Intrusion - Residential	25	1.4	-	77	0.33
MTCA Method B Screening Levels for Groundwater - Vapor Intrusion - Commercial	120	12	-	650	1.6
Cleanup Level for COCs only	5	5			

NOTE:

COCs=Contaminants of Concern

"--" = Not applicable or not calculated by Pacific Crest

COCs = Contaminants of concern

Screening Levels in micrograms per liter (ug/L)

Table 9 Preliminary Screening Levels and Proposed Cleanup Levels - Air and Soil Vapor Former Prime Cleaners 18001 Bothell Everett Highway Bothell, Washington Pacific Crest No. 223-002

			СОР	Cs	
Screening Level Description	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroether	Vinyl Chloride
MTCA Method B Cleanup Level - Indoor Air - Residential	9.6	0.33		18.29	0.28
MTCA Method B Screening Level - Indoor Air - Commercial Worker	44.9	2.8		155.7	1.3
MTCA Method B Screening Level - Subslab Soil Vapor - Residential	320	11	-	610	9.5
MTCA Method B Screening Level - Subslab Soil Vapor - Commercial Worker	1500	95		5200	44
Cleanup Levels for COCs only	9.6	0.33			

NOTE:

COPCs=Contaminants of Potential Concern "--" = Not applicable or not calculated COCs = Contaminants of concern

Screening Levels in micrograms per cubic meter (ug/m^3)

APPENDIX A DPE SYSTEM CONFIGURATION DOCUMENTS

DATA GAP INVESTIGATION REPORT

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

PACIFIC CREST PN: 223-002







Wastewater Treatment Division Industrial Waste Program Department of Natural Resources and Parks 201 South Jackson Street, Suite 5513 Seattle, WA 98104-3855 206-477-5300 Fax 206-263-3001 TTY Relay: 711

May 24, 2021

SENT VIA EMAIL ONLY ELECTRONIC READ RECEIPT REQUESTED

Dee Spector Fortress Development 10400 NE 4th Street, Suite 2200 Bellevue, WA 98004 <u>dee@fortressdevelopment.com</u>

Issuance of renewed Wastewater Discharge Authorization No. 1010-02 to Lakha Properties -Mill Creek, LLC - Prime Cleaners Remediation

Dear Ms. Spector:

The King County Industrial Waste Program (KCIW) has reviewed your application to discharge industrial wastewater to the sewer system from the Lakha Properties - Mill Creek, LLC - Prime Cleaners Remediation facility located at 18001 Bothell Everett Highway, Bothell, Washington, and has issued the enclosed Minor Discharge Authorization.

This discharge authorization permits your facility to discharge limited amounts of industrial wastewater into King County's sewer system in accordance with the effluent limitations and other requirements and conditions set forth in the document and the regulations outlined in King County Code 28.84.060 (enclosed). As long as you maintain compliance with regulations and do not change the nature and volume of your discharge, KCIW will not require you to apply for an industrial wastewater discharge permit, a type of approval that would result in additional requirements, oversight, and increased fees.

If you propose to increase the volume of your discharge or change the type or quantities of substances discharged, you must contact KCIW at least 60 days before making these changes.

King County Code 28.84 authorizes a fee for each Minor Discharge Authorization issued by the King County Department of Natural Resources and Parks. The current fee for issuance of a renewed Minor Discharge Authorization is \$1500. King County will send you an invoice for this amount.

Dee Spector May 24, 2021 Page 2

If you have any questions about this discharge authorization or your wastewater discharge, please call me at 206-263-9765 or email me at michael.scullywest@kingcounty.gov. To learn more about King County's industrial wastewater regulations, visit our program's website at: www.kingcounty.gov/industrialwaste.

Thanks in advance for supporting our mission to protect workers, the local and regional sanitary sewer system, our treatment plant infrastructure, and the environment.

Sincerely,

Michael Scullywest Industrial Waste Compliance Investigator

Enclosures

e-cc: Jon Einarsen, Zipper Geo Associates LLC, <u>jeinarsen@zippergeo.com</u> Mike Oleson, Alderwood Water District, <u>MOleson@awwd.com</u>



MINOR DISCHARGE AUTHORIZATION

King County Industrial Waste Program 201 S. Jackson Street, Suite 513 Seattle, WA 98104-3855

NUMBER 1010-02

for

Lakha Properties - Mill Creek, LLC - Prime Cleaners Remediation

- Facility address:18001 Bothell Everett Highway
Bothell, WA 98012
- Mailing address:10400 NE 4th Street, Suite 2200
Bellevue, WA 98004

Phone: (425) 462-2505

Emergency (24-hour) phone: 425-582-9928

Industry type: Groundwater Remediation - Organics

SIC code: 7216 EPA Id. No.: NA

Discharge to: Brightwater

*Note: This authorization is valid only for the specific discharges shown below:

Discharge process: Wastewater generated by Groundwater Remediation - Organics operation

Effective date:June 1, 2021Expiration date:May 31, 2026

DESCRIPTION OF SAMPLE SITES AND DISCHARGE VOLUMES

Sample	Description	Maximum Volume (gallons per day)		
Site No.		Industrial	Total	
IW1285A	Effluent pipe after treatment	8,000	8,000	

Permission is hereby granted to discharge industrial wastewater from the above-identified facility into the King County sewer system in accordance with the effluent limitations and monitoring requirements set forth in this authorization.

If the industrial user wishes to continue to discharge after the expiration date, an application must be filed for re-issuance of this discharge authorization at least 90 days prior to the expiration date. For information concerning this King County Discharge Authorization, please call Industrial Waste Compliance Investigator Michael Scullywest at 206-263-9765.

24-HOUR EMERGENCY NOTIFICATION Brightwater Treatment Plant: 206-263-9500 Washington State Department of Ecology: 425-649-7000

I. SPECIAL CONDITIONS

- A. Lakha Properties Mill Creek, LLC Prime Cleaners Remediation shall notify KCIW prior to discharging wastewater to the sanitary sewer system so that a preoperative inspection may be completed.
- B. If concentrations of organic compounds exceed 50 percent of screening levels the permittee shall notify KCIW within 24 hours of receiving analytical data. KCIW will review information submitted and may require installation of a granulated activated carbon filtration system (GAC) or other operational changes as deemed necessary.
- C. Record Keeping and Retention:

1. The permittee shall maintain records relating to all permitted discharges to the King County sewerage system, including routine maintenance, waste disposal dates, manifests, self-monitoring reports, analytical lab results, pH monitoring records, and flow records.

2. All records required by this authorization shall be available for review at reasonable times by authorized representatives of KCIW.

3. Records of all such testing shall be retained for a period of three years unless litigation or the direction of KCIW requires an extension of that time.

- D. For each measurement or sample taken to comply with this authorization, the permittee shall record the following information:
 - 1. Date, exact place, and time of sampling
 - 2. Dates the analyses were performed
 - 3. Person who performed the analyses
 - 4. Analytical techniques or methods used
 - 5. Results of all analyses

REPORTING REQUIREMENTS

There are no required reports unless the permittee exceeds discharge limits, operating criteria, is unable to comply with the conditions of this discharge authorization, or if concentrations of organic compounds exceed 50% of KCIW screening level limits. See special condition B.

II. GENERAL DISCHARGE LIMITATIONS

A. Operating Criteria

There shall be no odor of solvent, gasoline, or hydrogen sulfide (rotten egg odor), oil sheen, unusual color, or visible turbidity. The discharge must remain translucent. If any of the discharge limits are exceeded, you must stop discharging and notify KCIW at 206-477-5300.

B. Corrosive Substances

Limits		
Instantaneous minimum:	pН	5.0 (s.u.)
Daily minimum:	pН	5.5 (s.u.)
Maximum:	pН	12.0 (s.u.)
s.u. = standard units	-	

The instantaneous minimum pH limit is violated whenever any single grab sample or any instantaneous recording is less than pH 5.0.

The daily minimum pH limit is violated whenever any continuous recording of 15 minutes or longer remains below pH 5.5 or when each pH value of four consecutive grab samples collected at 15-minute intervals or longer within a 24-hour period remains below pH 5.5.

Discharges of caustic solutions greater than pH 12.0 are prohibited unless King County provides prior written authorization. For these situations, the authorized caustic solution discharges above pH 12.0 must be less than pH 12.5 and must not contain an equivalent weight of sodium hydroxide (NaOH) that exceeds a daily loading rate of 21 pounds/day. The authorized discharge of caustic solutions greater than pH 12.0 shall be subject to special conditions to protect worker safety and the POTW.

C. Fats, Oils, and Grease

FOG Accumulations and Obstructions

Discharges of FOG shall not result in significant accumulations which, either alone or in combination with other wastes, are capable of obstructing flow or interfering with the operations or performance of the POTW.

Nonpolar FOG (mineral/petroleum origin)

Nonpolar FOG limit: 100 mg/L

The limit for nonpolar FOG is violated when either:

• the arithmetic mean of the concentration from the individual analyses of three grab samples, taken no more frequently than 5-minute intervals, exceeds the limitation, or

• the concentration of a single composite sample of three grab samples, taken no more frequently than 5-minute intervals, exceeds the limitation.

Industrial users that violate the nonpolar FOG limit may be required to complete, for King County review and approval, a FOG control plan.

Polar FOG (Animal and Vegetable Origin)

Industrial users that have the potential to discharge polar FOG shall minimize free-floating polar FOG. Industrial users must minimize the use of emulsifying agents, such as cleaners or detergents, to only the quantity needed to maintain industrial activities at their facility and to not impact the POTW.

Industrial users may not add emulsifying agents prior to or within FOG-removal devices, exclusively for the purposes of emulsifying free-floating FOG.

Industrial users that discharge free-floating polar FOG will be required to complete, for King County review and approval, a FOG control plan.

King County has the authority to include aqueous concentration-based discharge limits for polar FOG or total FOG (i.e., the sum of polar and nonpolar FOG) in permits and discharge authorizations issued to industrial users that primarily discharge FOG of animal or vegetable origin. The concentration-based limits shall be based on what can be achieved through implementation of a treatment technology that the Wastewater Treatment Division Director determines represents all known, available, and reasonable methods of prevention, control, and treatment.

D. Flammable or Explosive Materials

No person shall discharge any pollutant, as defined in 40 CFR 403.5, that creates a fire or explosion hazard in any sewer or treatment works, including, but not limited to, waste streams with a closed cup flashpoint of less than 140° Fahrenheit or 60° Centigrade using the test methods specified in 40 CFR 261.21.

At no time shall two successive readings on an explosion hazard meter, at the point of discharge into the system (or at any point in the system), be more than 5% nor any single reading be more than 10% of the lower explosive limit (LEL) of the meter.

Pollutants subject to this prohibition include, but are not limited to, gasoline, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, ketones, aldehydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides, and sulfides, and any other substances that King County, the fire department, Washington State, or the U.S. Environmental Protection Agency has notified the user are a fire hazard or a hazard to the system.

Petroleum	Maximum Concentration
Compounds	ppm (mg/L)
Benzene	0.07
Ethylbenzene	1.7
Toluene	1.4
Total xylenes	2.2

Heavy Metals/Cyanide

The industrial user shall not discharge wastes, which exceed the following limitations:

Heavy Metals	Instantaneous Maximum	Daily Average
& Cyanide	ppm (mg/L) ¹	ppm (mg/L)²
Arsenic	4.0	1.0
Cadmium	0.6	0.5
Chromium	5.0	2.75
Copper	8.0	3.0
Lead	4.0	2.0
Mercury	0.2	0.1
Nickel	5.0	2.5
Silver	3.0	1.0
Zinc	10.0	5.0
Cyanide	3.0	2.0

¹The instantaneous maximum is violated whenever the concentration of any sample, including a grab within a series used to calculate daily average concentrations, exceeds the limitation.

² The daily average limit is violated: a) for a continuous flow system when a composite sample consisting of four or more consecutive samples collected during a 24-hour period over intervals of 15 minutes or greater exceeds the limitation, or b) for a batch system when any sample exceeds the limitation. A composite sample is defined as at least four grab samples of equal volume taken throughout the processing day from a well-mixed final effluent chamber and analyzed as a single sample.

E. High Temperature

The industrial user shall not discharge material with a temperature in excess of 65° C or 150° F.

F. Hydrogen Sulfide

The following are atmospheric hydrogen sulfide limits as measured at a monitoring location designated by King County:

- Short-Term Limit: 15.0 parts per million volume (ppmv) as a 15-minute average
- 8-Hour Limit: 10.0 ppmv as an 8-hour average
- Weekly Limit: 3.0 ppmv as a 7-day average

More stringent weekly atmospheric hydrogen sulfide limits may be developed and imposed on a case-by-case basis depending on nuisance conditions or risks to workers and sewer infrastructure.

Aqueous soluble sulfide limits may be established on a case-by-case basis depending on the volume of discharge and conditions in the receiving sewer, including oxygen content, pH, and existing sulfide concentrations.

G. Organic Compounds

No person shall discharge any organic pollutants that result in the presence of toxic gases, vapors, or fumes within a public or private sewer or treatment works in a quantity that may cause acute worker health and safety problems. Organic pollutants subject to this restriction include, but are not limited to, the following:

- Any organic compound listed in the "Total Toxic Organics (TTO)" definition provided in 40 CFR Section 433.11(e) and 40 CFR Section 413.02(i)
- Acetone, 2-butanone (MEK), 4-methyl-2-pentanone (MIBK), xylenes

Industrial users are required to implement source control strategies and best management practices to minimize the concentration of any of the aforementioned organic pollutants.

Organic compound screening levels

Tetrachloroethylene (Perchloroethylene/PCE)	0.24 mg/L
Trichloroethylene (TCE)	0.5 mg/L
Vinyl chloride	0.012 mg/L
Chloroform (Trichloromethane)	0.060 mg/L

H. Settleable Solids

Settleable solids concentrations: 7.0 ml/L
III. GENERAL CONDITIONS

- A. All requirements of King County Code pertaining to the discharge of wastes into the municipal sewer system are hereby made a condition of this discharge authorization.
- B. All pretreatment systems used to bring the permittee's discharge into compliance with King County's discharge limitations and all compliance monitoring equipment shall be maintained continuously in satisfactory and effective operations by the permittee at the permittee's expense, and shall be subject to periodic inspections by authorized KCIW personnel. These systems shall be attended at all times during discharge to the King County sewerage system. In the event that such equipment fails, the permittee must notify KCIW immediately and take spill prevention precautions.
- C. The industrial discharger shall implement measures to prevent accidental spills or discharges of prohibited substances to the municipal sewer system. Such measures include, but are not limited to, secondary containment of chemicals and wastes, elimination of connections to the municipal sewer system, and spill response equipment.
- D. Any facility changes, which will result in a change in the character or volume of the pollutants discharged to the municipal sewer system, must be reported to your KCIW representative. Any facility changes that will cause the violation of the effluent limitations specified herein will not be allowed.
- E. In the event the permittee is unable to comply with any of the conditions of this discharge authorization because of breakdown of equipment or facilities, an accident caused by human error, negligence, or any other cause, such as an act of nature the company shall:
 - 1. Take immediate action to stop, contain, and clean up the unauthorized discharges and correct the problem.
 - 2. Immediately notify KCIW and, if after 5 p.m. weekdays and on weekends, call the emergency King County treatment plant phone number on Page 1 so steps can be taken to prevent damage to the sewer system.
 - 3. For discharge violations, collect a sample and submit new data to KCIW within 14 days of becoming aware of the violation.
 - 4. Submit a written report within 14 days of the event (*14-Day Report*) describing the breakdown, the actual quantity and quality of resulting waste discharged, corrective action taken, and the steps taken to prevent recurrence.
- F. Compliance with these requirements does not relieve the permittee from responsibility to maintain continuous compliance with the conditions of this discharge authorization or the resulting liability for failure to comply.
- G. The permittee shall, at all reasonable times, allow authorized representatives of KCIW to enter that portion of the premises where an effluent source or disposal system is located or in which any records are required to be kept under the terms and conditions of this authorization.
- H. Nothing in this discharge authorization shall be construed as excusing the permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations including discharge into waters of the state. Any such discharge is subject to regulation and enforcement action by the Washington State Department of Ecology.

I. This discharge authorization does not authorize discharge after its expiration date. If the permittee wishes to continue to discharge after the expiration date, an application must be filed for reissuance of this discharge authorization at least 90 days prior to the expiration date. If the permittee submits its reapplication in the time specified herein, the permittee shall be deemed to have an effective wastewater discharge authorization until KCIW issues or denies the new wastewater discharge authorization. If the permittee fails to file its reapplication in the time period specified herein, the permittee will be deemed to be discharging without authorization.

Compliance Investigator:_____ Date:_____ Date:_____

APPENDIX B LABORATORY ANALYTICAL REPORT - GROUNDWATER

DATA GAP INVESTIGATION REPORT

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

PACIFIC CREST PN: 223-002



April 28, 2023

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

Re: Analytical Data for Project 223-002 Laboratory Reference No. 2304-228

Dear Bill:

Enclosed are the analytical results and associated quality control data for samples submitted on April 20, 2023.

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: April 28, 2023 Samples Submitted: April 20, 2023 Laboratory Reference: 2304-228 Project: 223-002

Case Narrative

Samples were collected on April 20, 2023 and received by the laboratory on April 20, 2023. 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.

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:	MW3-042023					
Laboratory ID:	04-228-01					
Vinyl Chloride	ND	0.20	EPA 8260D	4-25-23	4-25-23	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
Trichloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
Tetrachloroethene	2.9	0.20	EPA 8260D	4-25-23	4-25-23	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	97	75-127				
Toluene-d8	98	80-127				
4-Bromofluorobenzene	81	78-125				

Client ID:	MW4-042023					
Laboratory ID:	04-228-02					
Vinyl Chloride	ND	0.20	EPA 8260D	4-25-23	4-25-23	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
Trichloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
Tetrachloroethene	21	0.20	EPA 8260D	4-25-23	4-25-23	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	99	75-127				
Toluene-d8	100	80-127				
4-Bromofluorobenzene	84	78-125				

Client ID:	MW6-041923					
Laboratory ID:	04-228-03					
Vinyl Chloride	ND	0.20	EPA 8260D	4-25-23	4-25-23	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
Trichloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
Tetrachloroethene	0.34	0.20	EPA 8260D	4-25-23	4-25-23	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	98	75-127				
Toluene-d8	99	80-127				
4-Bromofluorobenzene	84	78-125				



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:	MW7-041923					
Laboratory ID:	04-228-04					
Vinyl Chloride	ND	0.20	EPA 8260D	4-25-23	4-25-23	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
Trichloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
Tetrachloroethene	0.89	0.20	EPA 8260D	4-25-23	4-25-23	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	97	75-127				
Toluene-d8	98	80-127				
4-Bromofluorobenzene	83	78-125				

Client ID:	MW8-041923					
Laboratory ID:	04-228-05					
Vinyl Chloride	ND	0.20	EPA 8260D	4-25-23	4-25-23	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
Trichloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
Tetrachloroethene	12	0.20	EPA 8260D	4-25-23	4-25-23	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	97	75-127				
Toluene-d8	98	80-127				
4-Bromofluorobenzene	82	78-125				

Client ID:	DPE1-041923					
Laboratory ID:	04-228-06					
Vinyl Chloride	ND	0.20	EPA 8260D	4-25-23	4-25-23	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
Trichloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
Tetrachloroethene	0.76	0.20	EPA 8260D	4-25-23	4-25-23	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	97	75-127				
Toluene-d8	99	80-127				
4-Bromofluorobenzene	83	78-125				



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:	DPE2-042023					
Laboratory ID:	04-228-07					
Vinyl Chloride	ND	0.20	EPA 8260D	4-25-23	4-25-23	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
Trichloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
Tetrachloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	96	75-127				
Toluene-d8	98	80-127				
4-Bromofluorobenzene	83	78-125				

Client ID:	DPE3-042023					
Laboratory ID:	04-228-08					
Vinyl Chloride	ND	0.20	EPA 8260D	4-25-23	4-25-23	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
Trichloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
Tetrachloroethene	11	0.20	EPA 8260D	4-25-23	4-25-23	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	95	75-127				
Toluene-d8	98	80-127				
4-Bromofluorobenzene	84	78-125				

Client ID:	DPE4-042023					
Laboratory ID:	04-228-09					
Vinyl Chloride	ND	0.20	EPA 8260D	4-25-23	4-25-23	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
Trichloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
Tetrachloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	97	75-127				
Toluene-d8	98	80-127				
4-Bromofluorobenzene	82	78-125				



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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:	MB0425W1					
Vinyl Chloride	ND	0.20	EPA 8260D	4-25-23	4-25-23	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
Trichloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
Tetrachloroethene	ND	0.20	EPA 8260D	4-25-23	4-25-23	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	96	75-127				
Toluene-d8	99	80-127				
4-Bromofluorobenzene	80	78-125				
4-Bromofluorobenzene	99 80	80-127 78-125				

					Per	Percent			RPD	
Analyte	lyte Result Spike Level		Rec	Recovery		RPD	Limit	Flags		
SPIKE BLANKS										
Laboratory ID:	SB042	25W1								
	SB	SBD	SB	SBD	SB	SBD				
Vinyl Chloride	8.97	9.66	10.0	10.0	90	97	71-135	7	20	
(trans) 1,2-Dichloroethene	9.28	9.66	10.0	10.0	93	97	80-125	4	17	
(cis) 1,2-Dichloroethene	9.26	9.69	10.0	10.0	93	97	80-129	5	17	
Trichloroethene	10.6	11.3	10.0	10.0	106	113	80-122	6	18	
Tetrachloroethene	10.7	11.3	10.0	10.0	107	113	80-124	5	18	
Surrogate:										
Dibromofluoromethane					96	94	75-127			
Toluene-d8					101	100	80-127			
4-Bromofluorobenzene					89	86	78-125			



6



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



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

Reviewed/Date	Received	Relinquished	Received	Relinquished	Received Nichell Tolk	Relinquished	Signature		9 DOEY - orrors	8 DPE3 - ornors	7 Drol - 042023	6 DPEI - 041923	5 MW 8 - 04/1913	4 KN27-041923	3 MW6 - 041923	2 MW4 - 042023	1 MW3 - 042023	Lab ID Sample Identification	M BUACH	W CARLOLL	Project Manager	Aus vot 223-002	Project Number: DA What	14648 NE 95th Street • Redmond, WA 98052 Phone: (425) 883-3881 • www.onsite-env.com	Analytical Laboratory Testing Services	Environmental Inc.	
Reviewed/Date						PALIFIC CAUST	Company	-	Ymas onno J	4/20/23 1115	420/23 0858	4/19/13/15/10	4/19/23 1735	4/14/13/1400	4/19/23 1330	2011 21/m/4	4/10/12 1235 H.O	Date Time Sampled Sampled Matrix	(other)		Standard (7 Days)	2 Days 3 Days	Same Day 1 Day	(in working days) (Check One)	Turnaround Request	Chain of	
					4/20/23 1428	4/10/23 1428	Date Time		X	×	X	×	X	X	X	X		NWTF NWTF NWTF NWTF Volatil Halog	PH-HCII PH-Gx/F PH-Gx/F PH-Gx PH-Dx (les 8260 enated EPA 801	Ontain D BTEX (8 SG Cle D Volatile 1 (Wat	8021 8 8021 8 ean-up 9 ess 8260 9	3260 []) X S) HOP LIST			^c ustody	
Chromatograms with final report	Data Package: Standard Level III Level IV				11 1	* PCF. TCF CIS/JJZANS-DCE, VC	Comments/Special Instructions											Semiv (with I PAHs PCBs Organ Organ Chlori Total f Total f TCLP HEM (rolatiles ow-leve 8270/S 8082 ochlorin ophosp nated A RCRA M MTCA M MTCA M Metals oil and	8270/5 81 PAHs 10 (Iow ne Pesi 10 (Iow 10 (Iow) 10 (Iow 10 (Iow) 10 (Iow 10 (Iow) 10 (Iow 10 (Iow) 10 (I	SIM SIM)level) ticides 8 Pesticides rbicides	081 es 827(8151	0/SIM	·· 04 - 220		Page of	

APPENDIX C LABORATORY ANALYTICAL REPORT – SOIL VAPOR AND AIR

DATA GAP INVESTIGATION REPORT

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

PACIFIC CREST PN: 223-002



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

Pacific Crest William Carroll 1531 Bendigo BLVD N North Bend, WA 98045

RE: Prime Cleaners Work Order Number: 2304481

April 27, 2023

Attention William Carroll:

Fremont Analytical, Inc. received 4 sample(s) on 4/20/2023 for the analyses presented in the following report.

Helium by GC/TCD

Volatile Organic Compounds by EPA Method TO-15

This report consists of the following:

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

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

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes Project Manager

DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.3 for Environmental Testing ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing Washington State Department of Ecology Accredited for Environmental Testing, Lab ID C910



CLIENT: Project: Work Order:	Pacific Crest Prime Cleaners 2304481	Work Order S	Sample Summary
Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2304481-001	AA-042023	04/20/2023 9:45 AM	04/20/2023 1:46 PM
2304481-002	IA1-042023	04/20/2023 9:50 AM	04/20/2023 1:46 PM
2304481-003	IA2-042023	04/20/2023 10:45 AM	04/20/2023 1:46 PM
2304481-004	SPG5-042023	04/20/2023 10:35 AM	04/20/2023 1:46 PM



Case Narrative

WO#: **2304481** Date: **4/27/2023**

CLIENT:Pacific CrestProject:Prime Cleaners

I. SAMPLE RECEIPT:

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

II. GENERAL REPORTING COMMENTS: Air samples are reported in ppbv and ug/m3.

The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

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

Standard temperature and pressure assumes 24.45 = (25C and 1 atm).

Qualifiers & Acronyms



 WO#:
 2304481

 Date Reported:
 4/27/2023

Qualifiers:

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

Acronyms:

%Rec - Percent Recovery CCB - Continued Calibration Blank CCV - Continued Calibration Verification DF - Dilution Factor DUP - Sample Duplicate HEM - Hexane Extractable Material ICV - Initial Calibration Verification LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate MCL - Maximum Contaminant Level

MB or MBLANK - Method Blank

- MDL Method Detection Limit
- MS/MSD Matrix Spike / Matrix Spike Duplicate
- PDS Post Digestion Spike
- Ref Val Reference Value
- **REP Sample Replicate**
- RL Reporting Limit
- **RPD** Relative Percent Difference
- SD Serial Dilution
- SGT Silica Gel Treatment
- SPK Spike
- Surr Surrogate



Analytical Report

 Work Order:
 2304481

 Date Reported:
 4/27/2023

Client:	Pacific Crest				Collectior	Date: 4	/20/2023 10:35:00 AM
Project: Lab ID:	Prime Cleaners 2304481-004				Matrix: Se	oil Gas	
Client Sa	ample ID: SPG5-042023						
Analyses	5	Result	RL	Qual	Units	DF	Date Analyzed
<u>Helium</u>	by GC/TCD				Batcl	n ID: R8	3480 Analyst: AM
Helium		ND	0.300	D	%	1.5	4/25/2023 12:00:00 PM



Client:	Pacific	Crest								
WorkOrder:	230448	1								
Project:	Prime (Cleaners								
Client Sample	ə ID:	AA-042023					Date Sa	mpled: 4/20/	/2023	
Lab ID:		2304481-001A					Date Re	ceived: 4/20/	2023	
Sample Type:		Summa Caniste	er							
Analyte			Concen	tration	Reportir	ng Limit	Qual	Method	Date/Analy	st
Volatile Orga	nic Com	bounds by EPA	Method TC	<u>D-15</u>						
			(ppbv)	(ug/m³)	(ppbv)	(ug/m³)				
cis-1,2-Dichloroe	thene		<0.0245	<0.0972	0.0245	0.0972		EPA-TO-15	04/22/2023	LB
Tetrachloroethen	e (PCE)		<0.0111	<0.0753	0.0111	0.0753		EPA-TO-15	04/22/2023	LB
trans-1,2-Dichlor	oethene		<0.0246	<0.0977	0.0246	0.0977		EPA-TO-15	04/22/2023	LB
Trichloroethene (TCE)		<0.00125	<0.00672	0.00125	0.00672		EPA-TO-15	04/22/2023	LB
Vinyl chloride			<0.0774	<0.198	0.0774	0.198		EPA-TO-15	04/22/2023	LB
Surr: 4-Bromo	fluorobenze	ene	93.6 %Rec		70-130			EPA-TO-15	04/22/2023	LB



Client:	Pacific	Crest								
WorkOrder:	230448	1								
Project:	Prime (Cleaners								
Client Sample	e ID:	IA1-042023					Date Sa	mpled: 4/20/	2023	
Lab ID:		2304481-002A					Date Re	ceived: 4/20/	2023	
Sample Type		Summa Caniste	er							
Analyte			Concen	tration	Reportir	ng Limit	Qual	Method	Date/Analy	st
Volatile Orga	nic Com	pounds by EPA	Method TC	<u>D-15</u>						
			(ppbv)	(ug/m³)	(ppbv)	(ug/m³)				
cis-1,2-Dichloroe	ethene		<0.0245	<0.0972	0.0245	0.0972		EPA-TO-15	04/22/2023	LB
Tetrachloroethen	e (PCE)		0.0345	0.234	0.0111	0.0753		EPA-TO-15	04/22/2023	LB
trans-1,2-Dichlor	oethene		<0.0246	<0.0977	0.0246	0.0977		EPA-TO-15	04/22/2023	LB
Trichloroethene	(TCE)		<0.00125	<0.00672	0.00125	0.00672		EPA-TO-15	04/22/2023	LB
Vinyl chloride			<0.0774	<0.198	0.0774	0.198		EPA-TO-15	04/22/2023	LB
Surr: 4-Bromo	fluorobenz	ene	96.0 %Rec		70-130			EPA-TO-15	04/22/2023	LB



Surr: 4-Bromofluorobenzene

Client:	Pacific	: Crest								
WorkOrder:	230448	31								
Project:	Prime	Cleaners								
Client Sample	D:	IA2-042023					Date Sar	npled: 4/20/	2023	
Lab ID:		2304481-003A					Date Rec	ceived: 4/20/	2023	
Sample Type:		Summa Caniste	r							
Analyte			Concent	tration	Reportin	g Limit	Qual	Method	Date/Analy	st
Volatile Organ	nic Com	pounds by EPA	Method TC	<u>)-15</u>						
			(ppbv)	(ug/m³)	(ppbv)	(ug/m³)				
cis-1,2-Dichloroe	thene		<0.0245	<0.0972	0.0245	0.0972		EPA-TO-15	04/22/2023	LB
Tetrachloroethen	e (PCE)		0.0419	0.284	0.0111	0.0753		EPA-TO-15	04/22/2023	LB
trans-1,2-Dichlore	oethene		<0.0246	<0.0977	0.0246	0.0977		EPA-TO-15	04/22/2023	LB
Trichloroethene (TCE)		<0.00125	<0.00672	0.00125	0.00672		EPA-TO-15	04/22/2023	LB
Vinyl chloride			<0.0774	<0.198	0.0774	0.198		EPA-TO-15	04/22/2023	LB

70-130

--

77.0 %Rec

EPA-TO-15

04/22/2023 LB



Client:	Pacific	c Crest								
WorkOrder:	230448	31								
Project:	Prime	Cleaners								
Client Sample	e ID:	SPG5-042023					Date Sa	mpled: 4/20,	/2023	
Lab ID:		2304481-004A					Date Re	ceived: 4/20	/2023	
Sample Type:	:	Summa Canister								
Analyte			Concen	tration	Reporti	ng Limit	Qual	Method	Date/Analy	vst
Volatile Orga	nic Com	pounds by EPA N	Method TC	<u>D-15</u>						
			(ppbv)	(ug/m³)	(ppbv)	(ug/m³)				
cis-1,2-Dichloroe	ethene		<0.0981	<0.389	0.0981	0.389		EPA-TO-15	04/23/2023	LB

Tetrachloroethene (PCE)	67.5	458	0.0444	0.301	EPA-TO-15	04/23/2023	LB
trans-1,2-Dichloroethene	0.102	0.403	0.0985	0.391	EPA-TO-15	04/23/2023	LB
Trichloroethene (TCE)	5.30	28.5	0.00500	0.0269	EPA-TO-15	04/23/2023	LB
Vinyl chloride	<0.310	<0.791	0.310	0.791	EPA-TO-15	04/23/2023	LB
Surr: 4-Bromofluorobenzene	74.8 %Rec		70-130		EPA-TO-15	04/23/2023	LB



Work Order: CLIENT: Project:	2304481 Pacific Crest Prime Cleane	ers					QC	SUMMARY REPORT Helium by GC/TCD
Sample ID: LCS-R Client ID: LCSW	83480	SampType: LCS Batch ID: R83480			Units: %		Prep Date: 4/25/2023 Analysis Date: 4/25/2023	RunNo: 83480 SeqNo: 1739080
Helium		5.91	0.200	5.000	O	30REC	80 120	
Sample ID: MB-Ra Client ID: MBLK Analyte	33480 W	SampType: MBLK Batch ID: R83480 Result	RL	SPK value	Units: %	%REC	Prep Date: 4/25/2023 Analysis Date: 4/25/2023 LowLimit HighLimit RPD Ref Val	RunNo: 83480 SeqNo: 1739081 %RPD RPDLimit Qual
Helium		ND	0.200					
Sample ID: 23044 Client ID: SPG5 Analyte	81-004AREP -042023	SampType: REP Batch ID: R83480 Result	RL	SPK value	Units: %	%REC	Prep Date: 4/25/2023 Analysis Date: 4/25/2023 LowLimit HighLimit RPD Ref Val	RunNo: 83480 SeqNo: 1739079 %RPD RPDLimit Qual
Helium		ND	0.300				0	30 D



Work Order: 2304481

CLIENT: Pacific Crest

Project: Prime Cleaners

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID: LCS-R83444	SampType: LCS			Units: ppbv		Prep Date	e: 4/22/20	23	RunNo: 834	44	
Client ID: LCSW	Batch ID: R83444					Analysis Date	e: 4/22/20	23	SeqNo: 173	8038	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	1.89	0.0774	2.000	0	94.7	70	130				
trans-1,2-Dichloroethene	2.17	0.0246	2.000	0	108	70	130				
cis-1,2-Dichloroethene	2.09	0.0245	2.000	0	104	70	130				
Trichloroethene (TCE)	2.01	0.00125	2.000	0	100	70	130				
Tetrachloroethene (PCE)	2.23	0.0111	2.000	0	111	70	130				
Surr: 4-Bromofluorobenzene	4.06		4.000		102	70	130				
Sample ID: MB-R83444	SampType: MBLK			Units: ppbv		Prep Date	e: 4/22/20	23	RunNo: 834	44	
Client ID: MBLKW	Batch ID: R83444					Analysis Date	e: 4/22/20	23	SeqNo: 173	8039	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	ND	0.0774									
trans-1,2-Dichloroethene	ND	0.0246									
cis-1,2-Dichloroethene	ND	0.0245									
Trichloroethene (TCE)	ND	0.00125									
Tetrachloroethene (PCE)	ND	0.0111									
Surr: 4-Bromofluorobenzene	3.79		4.000		94.8	70	130				
Sample ID: 2304481-004AREP	SampType: REP			Units: ppbv		Prep Date	e: 4/23/20	23	RunNo: 834	44	
Client ID: SPG5-042023	Batch ID: R83444					Analysis Date	e: 4/23/20	23	SeqNo: 173	8395	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

, and y to	Result			JUILO		Ignenni		Joixi D		Quai
Vinyl chloride	ND	0.310					0		25	
trans-1,2-Dichloroethene	ND	0.0985					0.1018	9.99	25	
cis-1,2-Dichloroethene	ND	0.0981					0		25	
Trichloroethene (TCE)	5.45	0.00500					5.298	2.83	25	
Tetrachloroethene (PCE)	70.1	0.0444					67.48	3.87	25	
Surr: 4-Bromofluorobenzene	14.8		16.00	92.4	70	130		0		



Sample Log-In Check List

Client Nar	ne: PACIFIC		Work Order Num	ber: 2304481		
Logged by	: Clare Gr	ggs	Date Received:	4/20/2023	3 1:46:00 PM	
Chain of (Custody					
1 le Chai	n of Custody cor	nolete?	Vec 🖌	No 🗌		
	n of Custody cor	npiere:				
Z. ⊓∪w wa	as the sample de		Client			
<u>Log In</u>						
3. Coolers	are present?		Yes 🗌	No 🗹	NA 🗌	
			Air Samples			
4. Shippin	g container/cool	er in good condition?	Yes 🖌	No 🗌		
5. Custod (Refer t	y Seals present to comments for	on shipping container/cooler? Custody Seals not intact)	Yes	No 🗌	Not Present 🗹	
6. Was ar	n attempt made t	o cool the samples?	Yes	No 🗌	NA 🗹	
7. Were a	II items received	at a temperature of >2°C to 6°C *	Yes 🗌	No 🗌	NA 🔽	
8. Sample	e(s) in proper co	ntainer(s)?	Yes 🖌	No 🗌		
9. Sufficie	nt sample volum	ne for indicated test(s)?	Yes 🖌	No 🗌		
10. Are sar	nples properly p	reserved?	Yes 🖌	No 🗌		
11. Was pr	eservative adde	d to bottles?	Yes 🗌	No 🖌	NA 🗌	
12. Is there	headspace in the	ne VOA vials?	Yes	No 🗌	NA 🗹	
13. Did all	samples contain	ers arrive in good condition(unbroken)?	Yes 🖌	No 🗌		
14. Does p	aperwork match	bottle labels?	Yes 🗹	No 🗌		
15. Are ma	trices correctly i	dentified on Chain of Custody?	Yes 🗹	No 🗌		
16. Is it cle	ar what analyses	s were requested?	Yes 🖌	No 🗌		
17. Were a	II holding times a	able to be met?	Yes 🖌	No 🗌		
Special H	andling (if aj	oplicable)				
18. Was cli	ent notified of al	I discrepancies with this order?	Yes 🖌	No 🗌		
Pe	erson Notified:	Michael Black Date	:	4/20/2023		
By	/ Whom:	Clare Griggs Via:	🖌 eMail 🗌 Ph	none 🗌 Fax	In Person	
R	egarding:	Confirming select list.				
CI	ient Instructions	See revised COC.				
L						l

19. Additional remarks:

Item Information

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

(NELLE K.CO)		Air Chain of Custody Record	& Laboratory Services	Agreement
Fremonu	3600 Fremont Ave N. Seattle, WA 98103 Tel: 206-352-3790	Date: 4/1.0/13 Bane: (of (Laboratory Project No (Internal):	4481
Analytical	Fax: 206-352-7178	Project Name: PAIME CLEANERS	Special Remarks:	
client: Pacific Crest		Project No: 723 - 031		
Address: VO Box 932		Location: Botherly with		
city, state, zip: MOLTH GOVID, WAR 980	5	collected by: MAR		
Telephone: 415 & & 4990		Reports to (PM): UNICARCINC	Air samples are disposed of one week after report is otherwise requested. OK to Dispose	Hold (fees may apply)
Fax: 415 868 4994		Email (PM): VS CARULOL (ALLOWENN . (OM		
		5	Analysis	Internal
Canister / Flow Reg Sample T Sample Name Serial # (Matrix	ype Container Trave/Fiow ,* Type** Rate	Date & Time ("Hg) Date & Time ("Hg) Date & Time Sample Stat Field Initial Sample End Pressure Sample End Pressure ("Hg) Date & Time ("Hg) Date & Time A Pressure Sample End Pressure Sample Full list VOCs TO15 Select VOCs TO15 Select VOCs TO15 Siloxanes TO15	Sulfur T015 Major Gases 3C Helium 3C Mod VOCs 8260 GX/BTEX 8260	Final Pressure ("Hg)
AA - 042023 1488 FREMO AN	6L 8hr	4/14/23 30 4/20/23 -1 X	CNDC	7
1 1 - 041023 44 - 140-26 11	6L 8hr	4/14/13 -30 4/10/13 -1 X	6	2
JAZ- ONTRY 14287 11/	6L 8hr	4/19/23 - 30 4/20/13 - 2 X	H.	3
47236 FR8-24	6L 8hr			
SPLAS-OHINTY K-200 ECTOR 2	1L 150mL/ min	4/10/03 - 30 4/10/13 - 3	4.	2
 Matrix Codes: AA = Ambient Air OA = Outdoor Air Container Codes: BV = 1 Liter Bottle Vac 6L = 6L Canist 	IA = Indoor Air S = er 1L = 1L Canister	Subslab / Soll Gas SVE = SVE L = Landfill D = Digester CYL = High Pressure Cylinder F = Filter S = Sorbent Tube TB = Te	tiar Bag Standard	4round Time:
*** Select one: BTEXN & APH APCE & Breakdow	n Dother, specify in	comments	3 Day	Same Day
I represent that I am authorized to enter into this Agreement with F backside of this Agreement.	remont Analytical on behalt	of the Client named above, that I have verified Client's agreement to each of t	he terms on the front and	specify
Relinguished (Signature) Print N	ime BLAU ime	Date/Time Received (Signaluft) 4/-12 / 2 / 3 × 4/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2	Print Name Date/Tim 4/20/23 (3) Print Name Date/Tim	3h
×		×		
COC Air 1.6 - 2.15.21				Page 1 c

Page 1 of 2

		Air Ch	nain of C	ustody Recor	rd & Laborato	rv Services Agree	ement
Fremont	Southermont Ave N. Seattle, WA 98103 Tel: 206-352-3790	Date: 4/10/23		Dare: (of. (Laboratory Project No (Inte	101: 232448	27
4 Analytical	Fax: 206-352-7178	Project Name: PA	IME CLE	AND S	Special Remarks:		
client: Pacific Crest		Project No: 727	100-5		edit per Mib 4	121/23 -CG	
Address: PD Box ASI		Location: 65/Ht	al, wr				
city, state, zip: woll the bould, whe 98045		Collected by: MAR	-				
Telephone: 415 828 4990		Reports to (PM): W.C	ALAUL		Air samples are disposed c otherwise requested.	one week after report is submitted to OK to Dispose Hoid (fees	nay apply)
Fax: 415 868 4794		Email (PM): VS (A)	Mour (a.A	Lowens . (om			
				:	Analysis		Internal
Canister / Flow Reg Sample Type Sample Name Serial # (Matrix) *	Container Time / Flow Type ** Rate	Field Initial Sample Start Pressure Date & Time (" Hg)	F Sample End Date & Time	Full list VOCs TO15 Select VOCs TO15 Select VOCs TO15 Siloxanes TO15	Sulfur TO15 Major Gases 3C Helium 3C Mod VOCs 8260 GX/BTEX 8260	Comments	Final Pressure ("Hg)
AA - 042023 125 FREMO AVA	6L 8hr	1515 - 30	4/20/23	×		CNOCS	H
1 1 - 041023 44 - 1700-06 11	6L 8hr	4/19/13 -30	4/10/23	-		5	2
JAZ- 047063 148 FR8-26 1A	6L ^{8hr}	4/19/23 - 30	4/20/13	r		11	3
47236 FR8-24	6L 8hr		4				
SUSS-others trans 2	1L 150mL/ min	4/10/63 - 30	410/13	3	×	11	2
* Matrix Codes: AA = Ambient Air OA = Outdoor Air IA ** Container Codes: BV = 1 Liter Bottle Vac 6L = 6L Canister	1L = 1L Canister	Subslab / Soil Gas SV CYL = High Pressure Cylind	rE = SVE L = er F = Filter	Landfill D = Digester S = Sorbent Tube TB =	Tediar Bag	Turn-Around Time	t: Day
*** Select one: BTEXN & APH PCE & Breakdown	Other, specify in	comments				3 Day Same	Day
I represent that I am authorized to enter into this Agreement with Fremo backside of this Agreement.	nt Analytical on behalf	of the Client named above,	that I have verified	d Client's agreement to each o	of the terms on the front and	2 Day speed	N
Relinguished (Senarup) Print Name x Image: Comparison of the senarup of	5 CALL	Date/Time	Received (Signature	Multin	Print Name	23 (346) Date/Time	
COC A# 16 - 2 15 21							Page 1 o

Page 1 of 2