FINAL ADDITIONAL INVESTIGATION REPORT

Coit Services Site
Woodinville, Washington
Facility/Site #36189742
Cleanup Site #16672

August 7, 2024

Prepared for

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Coit Services Site
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LIST OF ABBREVIATIONS AND ACRONYMS

µg/L	micrograms per liter
µg/m^3	micrograms per cubic meter
Adapt	Adapt Engineering, Inc.
Apex	Apex Laboratories, Inc.
bgs	below ground surface
Cascade	Cascade Drilling
cDCE	cis-1,2-dichloroethene
COC	contaminant of concern
CODA	CODA Consulting Group
Coit	Coit Services
CSM	conceptual site model
Ecology	Washington State Department of Ecology
EIM	Environmental Information Management
EPA	US Environmental Protection Agency
ESA	environmental site assessment
FFS	focused feasibility study
ft	feet, foot
HVOC	halogenated volatile organic compound
Landau	Landau Associates, Inc.
MDL	method detection limit
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MRL	method reporting limit
MTCA	Model Toxics Control Act
NAVD88	North American Vertical Datum of 1988
ORP	oxidation-reduction potential
PCE	tetrachloroethene
PID	photoionization detector
PVC	polyvinyl chloride
RDC	reductive dechlorination
RI	remedial investigation
ROW	right-of-way
Seattle Pump	Seattle Pump and Equipment Co.
SF	square feet
SIM	selected ion monitoring
Site	Coit Services Site
SLR	SLR International Corporation
Subject Property	Woodinville West Business Park Building C

LIST OF ABBREVIATIONS AND ACRONYMS (CONTINUED)

TCE ..... trichloroethene
TEE ..... terrestrial ecological evaluation
TOC ..... total organic carbon
VC ..... vinyl chloride
VCP ..... Ecology's Voluntary Cleanup Program
VOC ..... volatile organic compound
WAC ..... Washington Administrative Code

1.0 INTRODUCTION

On behalf of Woodinville CD, LLC, the former owner of the Building C property of the Woodinville West Business Park (Subject Property), Landau Associates, Inc. (Landau) has prepared this report to present the results of an additional investigation designed to respond to the Washington State Department of Ecology's (Ecology's) comments in its opinion letter dated February 8, 2024 (Ecology 2024). The Subject Property is located at 16750 Woodinville-Redmond Road NE in Woodinville, Washington, as shown on Figure 1. Based on the additional investigation results, this report also updates the recommended remedial alternative for the Coit Services (Coit) Site (Site).

1.1 Description of Subject Property

The Subject Property is located at the northern portion of the Woodinville West Business Park (see Figure 1). The business park consists of an approximately 9.76-acre property (King County parcel No. 0926059084), which is located within an industrial area at the southwestern part of Woodinville. Based on a previous review of online King County Assessor records (SLR International Corporation [SLR] 2023), a timeline of the Subject Property owners, including the dates that the property was acquired, is provided below:

- December 2021—Terreno Woodinville II LLC and Terreno Realty Corporation
- July 2020—Woodinville CD, LLC
- June 2015—Woodinville West LLC
- January 2006—Everything Else LLC
- March 1995—Wilcoxon Family Limited Partners
- December 1994—Robert and Marjorie Wilcoxon
- December 1994—Intrawest Properties Partnership.

The Subject Property is developed with a 19,000-square foot (SF) warehouse (designated as Building C). The building was constructed in 1999. Building C contains three suites (C-101, C-102, and C-103) that are currently occupied by the following tenants:

- Suite C-101—Seattle Pump and Equipment Co. (Seattle Pump) provides water pump, high-pressure industrial cleaning equipment, sprayers, "jetters," and pipe cleaning equipment sales, rentals, and repairs. Prior to Seattle Pump, Wincraft, a former tenant, conducted screen and sign printing operations in Suite C-101. Wincraft reportedly used trichloroethene (TCE) in its operations, and during a Phase I Environmental Site Assessment (ESA) in 2008, waste from the print washing operations was observed discharging directly to a floor drain in the print washing area. The floor drain is reportedly connected to the sanitary sewer system (Adapt Engineering, Inc. [Adapt] 2008).
- Suite C-102—Intertek PSI is a construction project services and concrete testing company. Before relocating to Suite C-103, Coit occupied C-102. Coit cleans residential and commercial air ducts, area rugs, carpets, upholstery, and other products, and also provides fire, smoke, and water damage restoration services. Coit formerly operated a dry-cleaning machine along the

east wall of Suite C-102 that used tetrachloroethene (PCE) from approximately 1999 through at least March 2008 (Adapt 2008). An underground oil/water separator and a catch basin that is plumbed to the separator are located within a partially bermed area that is outside a roll-up door of Suite C-102. The oil/water separator discharges to the sanitary sewer system (AECOM 2019). The approximate locations of the former dry-cleaning machine and the oil/water separator are shown on Figure 2.

- Suite C-103 is occupied by Coit.

The Subject Property is bounded to the north by a large office/warehouse building that is occupied by a utility locating service, a biotechnology research company, a specialty metal and titanium supplier to the aerospace industry, and an engineering firm; to the west by a former railroad right-of-way (ROW) currently owned by King County Parks, beyond which is the Woodinville-Redmond Road ROW and a manufacturer of commercial marine deck hatches; to the east by the Sammamish River, beyond which is the Sammamish River Trail and Woodin Creek Park; and to the south by Building D of the Woodinville West Business Park, which is a large warehouse occupied by a manufacturer of a powdered drink mix and an electrical contractor business.

1.2 Previous Investigations

Several previous investigations were conducted at the Subject Property and surrounding area from 2019 through 2023. A summary of the results of those investigations is presented below.

1.2.1 2019 and 2021 Assessments

In November 2019 and December 2021, Phase II ESAs were conducted by AECOM and CODA Consulting Group (CODA), respectively, at the Subject Property as part of environmental and transactional due diligence activities. The AECOM assessment consisted of drilling and sampling five soil borings (GP-1 through GP-5) and installing and sampling a temporary well in each boring. The CODA assessment consisted of drilling and sampling 12 soil borings (B-1 through B-12) and installing and sampling temporary wells in 10 of the borings (B-1 through B-9 and B-11). The approximate locations of the 2019 and 2021 soil borings that are located within Building C and to the north and east of the building are shown on Figure 2. The results of the assessments showed that shallow soil samples (up to 7 feet [ft] below ground surface [bgs]) collected from soil borings (B-11, GP-4, and GP-5), located near the former dry-cleaning machine in Suite C-102, contained PCE concentrations (0.092 to 0.14 milligrams per kilogram [mg/kg]) above Ecology's Model Toxics Control Act (MTCA) Method A cleanup level (0.05 mg/kg). Groundwater samples collected from temporary wells installed in soil borings located near the former dry-cleaning machine (borings B-11 and GP-4), near the oil/water separator (borings B-7 and GP-3), and to the northeast of Building C in an apparent downgradient direction (boring B-4) contained vinyl chloride (VC) concentrations (0.35 to 5.45 micrograms per liter [µg/L]) above the Method A cleanup level (0.2 µg/L; AECOM 2019, CODA 2021).[1]

[1] Groundwater sample analytical results from temporary wells are often biased high due to the presence of suspended solids in the samples and may not be representative of actual groundwater conditions.

In December 2021, CODA also installed sub-slab soil vapor points in borings B-10 and B-12, collected soil vapor samples from the points, and collected six indoor air samples (A-01 through A-04, A-06, and A-07) within Building C, as well as two exterior ambient air samples (A-05 and A 08), to assess the potential soil vapor intrusion risks at the Subject Property. The sub-slab soil vapor sample collected near the former dry-cleaning machine (from B-12) contained PCE, TCE, and VC concentrations (615, 70.2, and 81.3 micrograms per cubic meter [µg/m^3], respectively) above the MTCA Method B sub-slab soil gas screening levels (320, 11, and 9.5 µg/m^3, respectively). However, the indoor air samples collected in the building did not contain PCE, TCE, or VC concentrations above either the Method B indoor air cleanup levels or the laboratory's method reporting limits (MRLs). The 2021 soil vapor and indoor air sample locations are shown on Figure 3 of SLR's Remedial Investigation and Focused Feasibility Study (RI/FFS) Report (SLR 2023).

1.2.2 2022 and 2023 SLR RI and FFS

From April 2022 through January 2023, SLR conducted RI activities at the Subject Property that included the drilling and sampling of 14 soil borings (designated MW-1 through MW-9 and SB-1 through SB-5) and completing borings MW-1 through MW-9 as groundwater monitoring wells. The locations of the soil borings and monitoring wells are shown on Figure 2. The soil sample analytical results from this investigation and the previous assessments at the Subject Property area show that PCE concentrations greater than the MTCA Method A cleanup level and cis-1,2-dichloroethene (cDCE) and VC concentrations greater than the Method B cleanup levels occur at the former dry-cleaning machine area, and cDCE concentrations greater than the Method B cleanup level occur at the oil/water separator area (SLR 2023). Following this sampling, the lateral extents of the PCE-, cDCE-, and VC-impacted soil at the former dry-cleaning machine area was delineated in all directions, except to the east-northeast. The impacted soil at the former dry-cleaning machine area does not extend to a depth greater than 22.5 ft bgs, and the vertical extents have been delineated. The lateral extents of the cDCE-impacted soil at the oil/water separator area were only delineated to the west. The impacted soil at the oil/water separator area extends to depths below 15 ft bgs, and the vertical extents were not delineated.

To monitor any seasonal effects on the groundwater flow directions and the halogenated volatile organic compound (HVOC) concentrations in the groundwater, SLR conducted four quarterly groundwater sampling events at the Subject Property from April 2022 through January 2023. Based on the groundwater monitoring data collected from monitoring wells MW-1, MW-2, and MW-3 during 2022 and early 2023, the groundwater table was present at depths from approximately 8.7 to 16.5 ft bgs. From April 2022 through January 2023, the groundwater table seasonally fluctuated up to 2.94 ft. The seasonal groundwater elevation fluctuations may be at least partly due to hydrologic influence of the neighboring Sammamish River; the location of the Sammamish River is shown on Figure 2. In January 2023, following installation of MW-4 through MW-9, groundwater monitoring results indicated that the general flow direction of the shallow groundwater is to the east-northeast, toward the river (SLR 2023).

To assess any seasonal effects, account for temporal variability, and to further evaluate the potential vapor intrusion risks within Building C, SLR collected two indoor air samples (designated IA-1 and IA-2) from office spaces within Suites C-101 and C-102 in July 2022. The indoor air sample locations are shown

on Figure 3 of SLR's RI/FFS Report (SLR 2023). The indoor air sample analytical results showed that none of the samples contained volatile organic compound (VOC) analytes at concentrations above either the MTCA Method B indoor air cleanup levels or the laboratory's MRLs (SLR 2023). Based on the results of the 2021 and 2022 indoor air sampling events, the potential risks associated with the impacted soil vapors beneath Building C appear to be low.

After completing the RI, SLR conducted an FFS to develop and evaluate three potential remedial action alternatives for the Site. The primary objectives for the remedial action are to reduce the HVOC concentrations in the soil and groundwater to below the MTCA Method A or Method B cleanup levels, and to obtain a no further action opinion from Ecology. Based on the results of a disproportionate cost analysis, Alternative 1, which consisted of enhanced reductive dechlorination (RDC), was the recommended alternative (SLR 2023).

1.2.3 2023 Landau Investigation

To address remaining data gaps, Landau conducted an additional investigation at the Subject Property and surrounding area from May through August 2023 (Landau 2023). A total of 10 soil borings (designated SB-6, SB-7, SB-8, DMW-1, DMW-2, and MW-10 through MW-14) were initially drilled and sampled; six of the borings were completed as shallow groundwater monitoring wells (MW-10 through MW-15), and two of the borings were completed as deep groundwater monitoring wells (DMW-1 and DMW-2). The locations of the borings and wells are shown on Figure 2. Landau conducted a groundwater monitoring event on June 7 and 8, 2023 that included all of the groundwater monitoring wells at the Site. Following receipt of the June 2023 groundwater sample analytical results, monitoring well MW-15 was drilled and installed to try to delineate the downgradient (east-northeast) extent of the northern VC plume. Landau collected a groundwater sample from MW-15 and measured depths to groundwater in all monitoring wells at the Subject Property on August 1, 2023.

The soil sample analytical results showed that the samples collected from boring DMW-1, at depths of approximately 10 and 20 ft bgs, contained cDCE concentrations (0.023 and 0.058 mg/kg) that exceeded the MTCA Method B cleanup level based on protection of groundwater in the saturated zone (0.0052 mg/kg). The deepest soil sample from DMW-1, collected at a depth of approximately 47.5 ft bgs, was analyzed outside the analytical method's required holding time, and the results are not usable; however, the groundwater sample from DMW-1 did not contain detectable HVOC concentrations, and it appears that any soil concentrations at the bottom of boring DMW-1 are protective of groundwater. The soil samples from borings DMW-2, MW-10, MW-11, SB-6, SB-7, and SB-8 did not contain analyte concentrations above either the MRLs or the Method A or B cleanup levels. The soil sample analytical results from this investigation and the previous investigations at the Site are presented in Table 1.

The groundwater sample analytical results from the June/August 2023 sampling events showed that the samples collected from shallow monitoring wells MW-2, MW-4, MW-8, MW-9, MW-13, MW-14, and MW-15 contained VC concentrations (1.19, 1.85, 0.86, 0.36, 1.34, 1.52, and 0.22 µg/L, respectively) that exceeded the MTCA Method A cleanup level (0.20 µg/L). The groundwater samples from the other shallow monitoring wells and the deep monitoring wells did not contain any VOC analyte concentrations above either the MRLs or the MTCA Method A or B cleanup levels; however, the laboratory's MRL for VC

(0.40 µg/L) exceeded the Method A cleanup level. The groundwater sample analytical results from this investigation, as well as the previous investigations, are presented in Table 2.

Landau also collected seven surface water samples (SW-1 through SW-7) from the neighboring Sammamish River on August 24, 2023, to assess if the groundwater contamination extended into the river. One sample was collected approximately 200 ft upstream from the southern VC groundwater plume, one sample was collected approximately 200 ft downstream of the northern VC groundwater plume, one sample was collected to the east-northeast of the southern VC plume, and four samples were evenly distributed at approximate 20-ft intervals adjacent to the northern VC plume. The locations of the surface water samples are shown on Figure 2. The surface water sample analytical results from this investigation showed that none of the samples contained VOC analyte concentrations greater than the MRLs.

The soil sample analytical results from previous investigations at the Subject Property show that there are two areas that contain PCE concentrations greater than the MTCA Method A cleanup level and/or cDCE and VC concentrations greater than the Method B cleanup level. The areas are located adjacent to the former dry-cleaning machine area and at the oil/water separator area. The lateral extents of both areas of HVOC-impacted soil are shown on Figure 3 and described in more detail in Section 4.0.

The groundwater sample analytical results from the 2022 through 2023 monitoring events at the Subject Property show that there are two areas that contain VC concentrations greater than the MTCA Method A cleanup level (Landau 2023, SLR 2023). The areas of VC-impacted groundwater appear to originate at the former dry-cleaning machine area (the southern VC plume) and at the oil/water separator area (the northern VC plume); the impacts extend to the northeast of both of these source areas. The lateral extents of both areas of VC-impacted groundwater are shown on Figure 4 and are described in more detail in Section 4.0.

Based on the investigation results, Landau updated the scope of work and estimated cost for the recommended remedial alternative, enhanced RDC, from SLR's FFS (Landau 2023).

1.2.4 Entry Into Ecology's Voluntary Cleanup Program

On June 20, 2023, Landau formally applied for entry into Ecology's Voluntary Cleanup Program (VCP) in order to obtain Ecology's opinions regarding the previous investigation results and an updated recommended remedial alternative for the Site. Landau submitted the previous analytical and monitoring data into Ecology's Environmental Information Management (EIM) database, and the data from the additional investigation described in this report will be submitted into the EIM database by July 31, 2024.

2.0 ADDITIONAL INVESTIGATION ACTIVITIES

In response to Landau's entry into Ecology's VCP and request for opinions regarding the previous investigation results and the updated recommended remedial alternative for the Site, Ecology prepared an opinion letter (Ecology 2024) that requested the installation of additional shallow groundwater monitoring wells to the north and south of well MW-15 to fully delineate the lateral extents of the VC-impacted groundwater at that area. Ecology also stated that a completed terrestrial ecological evaluation (TEE) form is needed to complete SLR's prior evaluation of a simplified TEE for the Site. Furthermore, Ecology is requiring that the groundwater cleanup levels for the Site be based on protection of surface water beneficial uses and that the appropriate groundwater cleanup level for VC is 0.020 µg/L.

To address Ecology's request to fully delineate the lateral extents of the VC-impacted groundwater near MW-15, Landau conducted additional investigation activities from March through May 2024. Cascade Drilling (Cascade) of Woodinville, Washington, drilled and sampled a total of two soil borings (designated MW-16 and MW-17) at the Site area, which were completed as shallow groundwater monitoring wells (MW-16 and MW-17). The drilling and well installation work was conducted on March 25, 2024.

To further assess the groundwater conditions, Landau conducted a groundwater monitoring event at the Site on April 2 and 3, 2024. All the investigation work that was not performed directly by Landau personnel was conducted under the direction of a Landau geologist.

2.1 Drilling and Soil Sampling

Prior to conducting the drilling activities, private and public utility locates were conducted to identify and mark any underground utilities near the drilling locations. Pre-drilling utility clearance was completed at all the drilling locations to a depth of approximately 5 ft bgs by using a vacuum truck and air-knife methods.

Cascade drilled and sampled the soil borings by using a hollow-stem auger rig. The depths of borings MW-16 and MW-17 were approximately 19 and 20.5 ft bgs, respectively. During the drilling of the borings, soil samples were collected at approximate 2.5-ft intervals by using a split-spoon sampler. Landau personnel screened each soil sample for the potential presence of HVOCs by using visual appearance, odors, and photoionization detector (PID) readings. Soil samples were not collected for laboratory analysis from either boring because there was no field evidence of contamination and the locations of the borings were not near the source areas. The soil lithology, field screening results, and moisture content in each boring are included on the soil boring logs presented in Appendix A.

2.2 Well Installation

After drilling and sampling, Cascade completed borings MW-16 and MW-17 as shallow groundwater monitoring wells. Each well was constructed with 2-inch-diameter Schedule 40 polyvinyl chloride (PVC) casing and a 15-ft-long screen (0.010-inch-wide slots). Each well screen was installed at depths that

intercepted the groundwater table. The 15-ft-long screen allows for the known seasonal groundwater elevation fluctuations.

A filter pack consisting of 10/20 Colorado® silica sand or equivalent extends from the bottom of each boring to at least 6 inches above the uppermost screen slot. A hydrated bentonite chip seal was installed above the filter pack to approximately 1 ft bgs, and a traffic-rated steel monument was installed (in concrete) flush with the ground surface to protect each well. The well construction details are presented on the soil boring logs in Appendix A. After installation, Cascade developed each of the newly installed wells by using surging and pumping methods to ensure hydraulic continuity between the well screen and formation materials. Signature Surveying of Shoreline, Washington, surveyed the ground surface and top-of-casing elevations of the wells relative to the North American Vertical Datum of 1988 (NAVD88).

2.3 Groundwater Monitoring

On April 2, 2024, Landau personnel measured the depths to groundwater in all monitoring wells at the Site by using an electronic water level indicator. After measuring the depths to groundwater, Landau collected groundwater samples from newly installed monitoring wells MW-16 and MW-17, and from existing monitoring wells MW-1, MW-2, MW-3, MW-4, MW-6, MW-7, MW-14, and MW-15 on April 2 and 3, 2024. Landau used a peristaltic pump with new tubing to purge and sample each of the wells by using low-flow pumping methods. The pump intake was set at approximately 2 ft below the groundwater level in each of the wells. During the purging of each well, the pH, conductivity, temperature, oxidation-reduction potential (ORP), and dissolved oxygen of the extracted water were measured. The groundwater sample field parameter measurements are presented in Table 3. After stabilization of the field parameter measurements, a groundwater sample was collected from each well. The groundwater samples were submitted to Apex Laboratories, Inc. (Apex) for analysis of VC by US Environmental Protection Agency (EPA) Method 8260D selected ion monitoring (SIM; except the samples from MW-15, MW-16, and MW-17, which were mistakenly analyzed for VC by EPA Method 8260D). Additionally, the samples were analyzed for ethene, ethane, and methane by RSK 175; nitrate and sulfate by EPA Method 300.0; and total organic carbon by Standard Method 5310C to assess the geochemical conditions of the shallow groundwater.

As described in Section 3.1, the VC concentration in the groundwater sample from MW-17 was below the method detection limit (MDL); however, because the analysis did not include SIM, the MDL exceeded the MTCA Method B cleanup level based on protection of surface water. As a result, Landau resampled MW-17 on May 8, 2024, by using the procedures described above, and the sample was analyzed for VC by EPA Method 8260D SIM. Copies of the groundwater sample collection forms from the April monitoring event and the resampling of MW-17 are presented in Appendix B.

2.4 Waste Disposal

The soil generated by the drilling activities and the wastewater generated from the decontamination of the drilling and sampling equipment, as well as the development and purging of the monitoring wells, were temporarily stored at the Subject Property in properly labeled 55-gallon drums. On June 7, 2024,

the four 55-gallon drums of soil cuttings and wastewater were disposed as non-hazardous waste at the LRI Subtitle D Landfill in Puyallup, Washington (soil) and the Heritage-Crystal Clean facility in Tacoma, Washington (wastewater).

3.0 RESULTS

The groundwater sample analytical results and the groundwater monitoring results are presented below.

3.1 Groundwater Sample Analytical Results

The groundwater sample analytical results from the April 2024 sampling event showed that the samples collected from shallow monitoring wells MW-1, MW-2, MW-4, MW-14, MW-15, and MW-16 contained VC concentrations (0.0343, 0.0358, 5.06, 1.45, 0.100, and 0.170 µg/L, respectively) that exceeded the MTCA Method B cleanup level (0.02 µg/L). The groundwater samples from the other sampled shallow monitoring wells (MW-3, MW-6, MW-7, and MW-17) did not contain any VOC analyte concentrations above the MDLs (less than 0.01 µg/L for MW-3, less than 0.03 µg/L for MW-6 and MW-7, and less than 0.10 µg/L for MW-17). The MDLs for the samples from MW-6, MW-7, and MW-17 exceeded the Method B cleanup level, and because MW-17 was located near the Sammamish River, Landau resampled that well on May 8, 2024. The May sample from MW-17 did not contain a VC concentration greater than the MDL, and the MDL (0.020 µg/L) equaled the Method B cleanup level. Copies of the laboratory reports for the April/May 2024 groundwater samples are included in Appendix C. The groundwater sample analytical results from this investigation (HVOCs only), as well as the previous investigations, are presented in Table 2.

The groundwater samples from the April 2024 event were also analyzed for the groundwater redox parameters nitrate, sulfate, ethene, ethane, methane, and total organic carbon. The analytical results, presented in Table 4, confirm the naturally reduced shallow groundwater conditions that are demonstrated by VC at the Site which results from the RDC and natural attenuation of PCE, TCE, and cDCE. Redox parameters indicate anaerobic conditions at all wells, ranging from mildly reducing (MW-3 with low detected nitrate) to highly reducing (methanogenic) conditions. Sulfate concentrations are low (ranging from less than 1 milligram per liter [mg/L] to 13 mg/L), indicating conditions are at least sulfate-reducing. Methane was detected at all wells and the concentrations above 1,000 µg/L at five of the 10 wells indicate the strongly methanogenic conditions needed for continued degradation of VC to non-toxic end products ethene and ethane. Total organic carbon (TOC), detected at all wells ranging from 3 to 10 mg/L, is supporting the reduced redox conditions at the Site and reductive dechlorination of parent product PCE to VC. However, TOC concentrations less than 10 mg/L are considered sub-optimal for enhanced RDC of the remaining VC.

3.1.1 Groundwater Monitoring Results

On April 2, 2024, the depths to groundwater in the shallow monitoring wells (MW-1 through MW-17) ranged from 9.34 to 14.73 ft below the top of each well casing. Based on the surveyed well elevations, the groundwater elevations in the wells ranged from 20.68 to 22.42 ft above the NAVD88 datum. Based on the groundwater elevations on April 2, 2024, the general shallow groundwater flow direction beneath the Subject Property area was to the northeast with eastern flow components. A groundwater elevation contour map of the data collected on April 2, 2024 is presented on Figure 5.

On April 2, 2024, the depths to groundwater in deep groundwater monitoring wells DMW-1 and DMW-2 were 14.73 and 9.77 ft, respectively. Based on the surveyed well elevations, the groundwater elevations in DMW-1 and DMW-2 were 21.67 and 22.16 ft above the NAVD88 datum, respectively. The depth to groundwater measurements and the groundwater elevations in the monitoring wells on April 2, 2024, as well as on May 8, 2024 (MW-17 only), and during the previous groundwater monitoring events, are presented in Table 5.

4.0 NATURE AND EXTENT OF CONTAMINATION

As described in SLR's conceptual site model (CSM; SLR 2023) and Landau's Additional Investigation Report (Landau 2023), the soil and groundwater contaminants of concern (COCs) at the Site are chlorinated solvents (PCE and daughter products cDCE and VC) associated with the previous dry-cleaning operations in Suite C-102. The sources of contamination appear to be releases of PCE at the former dry-cleaning machine area in Suite C-102 and from the underground oil/water separator or the associated bermed area catch basin or line that drain into the separator.

The soil COCs are PCE, cDCE, and VC, and the only groundwater COC is VC. Therefore, the PCE, cDCE, and VC concentrations were used to evaluate the extents of the HVOC-impacted soil at the Site, and the VC concentrations were used to evaluate the extents of the HVOC-impacted groundwater.

The extents of HVOC-impacted soil and groundwater are shown on Figures 3 and 4, respectively. Geologic cross sections depicting subsurface conditions and the vertical extents of soil impacts are shown on Figures 6–8.

4.1 Former Dry-Cleaning Machine Area

4.1.1 Soil

The soil sample analytical results from this investigation and the previous investigations at the Subject Property show that PCE concentrations greater than the MTCA Method A cleanup level and cDCE and VC concentrations greater than the Method B cleanup levels occur at the former dry-cleaning machine area. The horizontal extents of the HVOC-impacted soil at the former dry-cleaning machine area have been delineated in all directions. The vertical extents of the impacted soil have been delineated, except at DMW-1 where the deepest sample, collected at a depth of approximately 47.5 ft bgs, was analyzed outside the analytical method's required holding time. Shallower soil samples from DMW-1, collected at depths of approximately 10 and 20 ft bgs, contained cDCE concentrations greater than the MTCA Method B cleanup levels based on protection of groundwater. Because the groundwater sample from deep well DMW-1, which is screened from approximately 42.5 to 47.5 ft bgs, did not contain detectable HVOC concentrations, it appears that the soil at the bottom of boring DMW-1 does not contain cDCE concentrations greater than the Method B cleanup level. The vertical extents of HVOC-impacted soil near and downgradient (northeast) of the former dry-cleaning machine are depicted on geologic cross section B-B' (see Figure 8). The location of the cross-section B-B' is shown on Figure 6.

The estimated area of HVOC-impacted soil at the former dry-cleaning machine area is shown on Figure 3. Prior this investigation, SLR (2023) and Landau (2023) conservatively assumed that the area of HVOC-impacted soil extended to the south, beneath the entire area of an existing soil testing room, which prevented drilling and soil sampling at the former location of the dry-cleaning machine. Landau recently adjusted the estimated southern extent of HVOC-impacted soil to the north by approximately 15 ft based on 1) a lack of HVOCs above the MTCA Method A or Method B cleanup levels in the soil samples from boring B-10, which is located hydraulically downgradient of the previously depicted southern area of HVOC-impacted soil, and 2) there has been limited groundwater contamination at

monitoring well MW-3, which is located hydraulically downgradient of the previously depicted southern area of HVOC-impacted soil. The previous and current depictions of the estimated area of HVOC-impacted soil at the former dry-cleaning machine area are shown on Figure 3.

4.1.2 Groundwater

The groundwater sample analytical results from this investigation and the previous assessments at the Site indicated that the southern VC plume has been delineated in all directions, except in the downgradient direction (northeast; see Figure 4). The VC concentration (0.17 µg/L) at downgradient monitoring well MW-16 exceeded the MTCA Method B cleanup level based on protection of surface water (0.02 µg/L). However, the lack of detectable HVOC analytes in previous surface water sample SW-3, located downgradient of the southern VC plume, provides evidence that the plume does not extend to the Sammamish River. The locations of SW-3 and the estimated downgradient extent of the southern VC plume are shown on Figure 4.

Prior this investigation, SLR (2023) and Landau (2023) estimated that the southern VC plume was wider based on the assumed southern extent of the HVOC-impacted soil, described above, and that it did not extend to monitoring well MW-3 due to the groundwater concentrations at that location. However, after the installation of MW-16, Landau re-evaluated the area of the southern VC plume based on the groundwater sample analytical results and the flow directions at the southern VC plume area, as well as the lower Method B groundwater cleanup level based on protection of surface water. Based on the VC concentrations greater than the Method B cleanup level in the groundwater samples from B-4 and MW-16 and the general flow direction to the northeast, Landau believes that the southern VC plume extends from the former dry-cleaning machine area to the northeast, just beyond MW-16. Based on two previous VC concentrations greater than the Method B cleanup level in 2022, MW-3 is located at the southern edge of the plume. The length of the southern VC plume is now comparable to the northern VC plume, which makes sense because the PCE releases at both source areas likely occurred during the same time period. The previous and current depictions of the area of the southern VC plume are shown on Figure 4.

The lack of detected VOC analytes in the groundwater sample from deep well DMW-1 indicates that the HVOC-impacted groundwater does not extend to the bottom of the perched groundwater zone and that the vertical extent of the HVOC-impacted groundwater has been defined.

4.2 Oil/Water Separator Area

4.2.1 Soil

The soil sample analytical results from this investigation and the previous investigations at the Subject Property indicate that there is a localized area near the oil/water separator where cDCE concentrations exceed the MTCA Method B cleanup level. The lateral extents of the impacted soil have been delineated in all directions and the vertical extent has been defined. The soil sample analytical results from boring DMW-2 indicate that the impacted soil does not extend to 20 ft bgs. The estimated area of HVOC-impacted soil at the oil/water separator area is shown on Figure 3. The vertical extents of HVOC-

impacted soil near and downgradient (northeast) of the oil/water separator area are depicted on geologic cross section A-A' (see Figure 7). The location of the cross-section A-A' is shown on Figure 6.

4.2.2 Groundwater

The groundwater sample analytical results from this investigation and the previous assessments at the Site indicate that the northern VC plume has been delineated in all directions, except in the downgradient direction (northeast). Based on the lack of detectable HVOC concentrations in any of surface water samples (SW-3 through SW-6) located directly downgradient of the northern VC plume, it appears that the plume does not extend to the Sammamish River. The estimated area of the northern VC plume and the locations of the surface water samples are shown on Figure 4. The lack of detected VOC analytes in the groundwater sample from deep well DMW-2 indicates that the HVOC-impacted groundwater does not extend to the bottom of the perched groundwater zone and that the vertical extent of the HVOC-impacted groundwater has been defined.

Due to the lower MTCA Method B cleanup level based on protection of surface water, the northern VC plume was extended to the southwest, hydraulically upgradient, by approximately 20 ft, due to a January 2023 groundwater sample from monitoring well MW-7 that contained a VC concentration (0.045 µg/L) that exceeded the cleanup level (0.02 µg/L). The previous and current depictions of the area of the northern VC plume are shown on Figure 4.

4.3 Terrestrial Ecological Evaluation

Landau conducted a TEE to evaluate if the Site is likely to pose a significant threat to ecological receptors. Steps in the evaluation include the following (Ecology 2017):

1. **Evaluation of Exclusions (Washington Administrative Code [WAC] 173-340-7491).** Exclusions include 1) point of compliance (all soil contamination present below 15 ft bgs or 6 ft bgs with institutional controls), 2) barriers to exposure (all contaminated soil covered with physical barriers), 3) undeveloped land (for the Site, less than 1.5 acres of contiguous undeveloped land on or within 500 ft of any area of the Site), and 4) background concentrations (soil contamination does not exceed natural background concentrations). The Site does not qualify for these exclusions due to shallow contaminated soil depth, potential lack of physical barriers in the future, undeveloped land near the Site, and soil concentrations above background levels.
2. **Selection of Evaluation Method.** WAC 173-340-7490(2)(b and c) specify two TEE methods: a site-specific TEE and a simplified TEE. A site-specific TEE is required if 1) a site is located on or directly adjacent to areas where native or semi-native vegetation is being restored, 2) a site is used by a threatened or endangered species, a priority species or species of concern, or an endangered, threatened, or sensitive plant species, 3) a site is located on a property that contains at least 10 acres of native vegetation within 500 ft, or 4) Ecology determines that a site may present a risk to significant wildlife populations. If these conditions are not present, a site qualifies for a simplified TEE. The conditions requiring a site-specific TEE do not apply at the Site because there is a buffer between the Site and the river; the Site is commercial and is covered by buildings, pavement, or commercial vegetation; and there are not 10 acres of native vegetation within 500 ft of the Site (see Appendix D). Landau therefore conducted a simplified TEE.

3. **TEE Implementation.** A simplified TEE consists of three components that can be evaluated in any order, with any of the three components indicating that a site is not likely to pose a significant threat to ecological receptors: 1) exposure analysis (limited contaminant area or likelihood of wildlife exposure), 2) pathways analysis (barriers present to limit wildlife exposure), and 3) contaminant analysis (lack of priority contaminants at a site, primarily metals, pesticides, carcinogenic polycyclic aromatic hydrocarbons, and petroleum hydrocarbons). Based on a lack of the priority contaminants at the Site, the Site is not likely to pose a significant threat to ecological receptors and a Site-specific TEE is not needed.

Appendix D provides a completed form documenting the TEE. Based on the TEE, the Site is not likely to pose a significant threat to ecological receptors.

5.0 REVISIONS TO RECOMMENDED REMEDIAL ACTION ALTERNATIVE: ENHANCED RDC

After completing the RI, SLR conducted an FFS to develop and evaluate three potential remedial action alternatives for the Site. The primary objectives for the remedial action are to reduce the HVOC concentrations in the soil and groundwater to below the MTCA Method A or Method B cleanup levels, and to obtain a no further action opinion from Ecology. Based on the results of a disproportionate cost analysis, Alternative 1, which consists of enhanced RDC, was the recommended alternative (SLR 2023). After completing an additional investigation in 2023, Landau updated the scope of work and revised the cost estimate of Alternative 1 (Landau 2023).

Based on the results of this investigation, including the redox parameter concentrations in the shallow groundwater (Section 3.2.1), Landau re-evaluated the scope of work and cost estimate of Alternative 1. The updated approach for Alternative 1 is described below, and the revised cost estimate is presented in Table 6.

Alternative 1 includes the injection of emulsified vegetable oil to further enhance the existing reduced shallow groundwater conditions and provide an electron donor (i.e., food) to stimulate the existing dechlorinating bacteria to further degrade the remaining HVOCs in the soil and groundwater at the Site. After the injections have been completed, the RDC performance in the groundwater will be monitored until the MTCA Method B cleanup levels are met. After the groundwater cleanup levels have been consistently attained, a confirmation soil boring will be drilled in the vicinity of previous boring GP-4 to verify that the remaining PCE concentrations in the soil are below the Method A cleanup level. The cDCE and VC concentrations in the soil exceed MTCA Method B cleanup levels based on protection of groundwater, so an empirical demonstration (groundwater concentrations below the cleanup levels) will be used to show that the remaining cDCE and VC concentrations in the soil are protective of human health and the environment.

5.1 Pre-Remediation Activities

An injection pilot test was previously proposed to evaluate the effectiveness of the injection of an emulsified vegetable oil and bioaugmentation solution. However, Landau currently believes that a pilot test is not necessary. Full-scale treatment is appropriate given the demonstrated reductive dechlorination of PCE to VC under natural conditions, and the natural shallow groundwater conditions being generally conducive to further VC degradation, but with inadequate TOC for optimal treatment. Bioaugmentation, sometimes needed for reductive dechlorination to progress through cDCE to VC, is also not necessary because VC is the target of the continued treatment.

The predominance of sandy soils within the treatment areas are conducive to injection and downgradient transport of emulsified vegetable oil. Landau completed a desktop evaluation of groundwater flow rates at the Site, and the calculated groundwater seepage rates are approximately 490 to 630 ft per year. Prior to completing the design of the injection approach, Landau will conduct slug tests in at least four shallow groundwater monitoring wells within the VC plumes to calculate Site-

specific hydraulic conductivity values and refine the estimated seepage rates. Potential preferential flow pathways associated with the existing stormwater and sanitary sewer infrastructure near the plumes will also be evaluated.

5.2 Updated Approach for Enhanced RDC

The two areas of HVOC-impacted soil and groundwater at the Site will be remediated by enhanced RDC using an inject and drift approach. A dilute solution of emulsified vegetable oil will be injected into a row of injection points located at the upgradient end of each VC plume. A row of four injection points will be located near the northern VC plume and a row of three injection points will be located near the southern VC plume (see Figure 9). The injection points in each row will be spaced approximately 15 ft apart; however, the spacing and number of injection points may be modified based on the results of the slug tests, as well as physical constraints such as utilities or building features. Based on the groundwater seepage rates, injection near the source areas instead of the previous grid injection approach will minimize the potential for emulsified vegetable oil to discharge into the Sammamish River.

A licensed driller will use hollow-stem auger drilling methods to drill each of the seven injection point borings to a depth of approximately 35 ft bgs. Each point will be constructed with a screen that extends from approximately 20 to 35 ft bgs. Emulsified vegetable oil (diluted to a 10 percent solution with tap water) will be injected into each of the seven points. For cost-estimating purposes, Landau assumes that a total of approximately 32,000 gallons of injection solution containing 3,150 gallons of vegetable oil will be injected during each injection event. For cost-estimating purposes, Landau assumes that two injection events will be conducted over the course of 2 years. An injection rate of 5 gallons per minute is assumed for each injection point with the three or four points in each row being manifolded together for concurrent injection.

5.3 Groundwater Monitoring

The two injection events are anticipated to result in 4 years of enhanced treatment. The groundwater at the Subject Property area will be monitored over that 4-year period to assess the effectiveness of the remedial action and to monitor the RDC of the remaining groundwater COC concentrations. The groundwater monitoring events will be conducted on a quarterly basis.

During each groundwater monitoring event, the depths to groundwater will be measured in all 17 shallow groundwater monitoring wells and two deep groundwater monitoring wells at the Subject Property. A groundwater sample will be collected from each of the wells by using a peristaltic pump with new tubing (low-flow sampling methods). The samples will be submitted to Apex for analysis for full-list VOCs by EPA Method 8260D (including VC by EPA Method 8260D SIM). Additionally, the samples from MW-1, MW-2, MW-3, MW-4, MW-7, MW-8, MW-9, MW-13, MW-14, MW-15, and MW-16 will also be analyzed for dissolved ethene by Method RSK 175 on an annual basis to monitor the progress of the final dechlorination stage of VC. The locations of the monitoring wells are shown on Figure 9.

5.4 Estimated Cost

Based on the modified scope of work described above, Landau revised the estimated cost for Alternative 1. As shown in Table 6, the revised estimated cost to complete Alternative 1 is $690,000.

6.0 CONCLUSIONS

From March through May 2024, Landau conducted an additional investigation at the Subject Property and surrounding area that was designed to respond to Ecology's comments in its opinion letter dated February 8, 2024 (Ecology 2024). After evaluating the additional investigation results, Landau updated the scope of work and cost estimate for the recommended remedial alternative (Alternative 1—Enhanced RDC) in SLR's FFS (SLR 2023) and Landau's subsequent Additional Investigation Report (Landau 2023). Based on the results of the additional investigation and the previous assessments at the Subject Property area, Landau presents the following conclusions:

- Based on the areas of HVOC-impacted soil and groundwater at the Subject Property, the sources of the contamination appear to be previous releases of PCE at the former dry-cleaning machine area and from the underground oil/water separator or the associated bermed area catch basin or line that drain into the separator. The former dry-cleaning machine was located at the eastern end of Suite C-102. The oil/water separator and associated catch basin are located within a partially bermed area outside a roll-up door of Suite C-102 (see Figure 2). For the oil/water separator or the associated catch basin or line to be a source of HVOC contamination, there are several possible ways that PCE from the dry cleaning operations could have been in the bermed area that drains into the separator (e.g., used dry cleaning solvents may have been poured into the bermed area, dry-cleaning machine filters could have been cleaned in the bermed area, phase separator water from the dry-cleaning machine could have been swept or poured into the bermed area, and/or solvent vapors emitted from the dry-cleaning machine could have landed on the bermed surface).
- Coit discontinued the use of dry-cleaning solvents that contained PCE in 2007; therefore, the sources of the HVOC-impacted soil and groundwater at the former dry-cleaning machine area and the oil/water separator area were eliminated 17 years ago.
- Based on the results of this investigation and the previous assessments, there are two areas of soil beneath the Subject Property that contain HVOC concentrations (PCE, cDCE, and/or VC) greater than the MTCA Method A or Method B cleanup levels. The lateral and vertical extents of the HVOC-impacted soil at the oil/water separator area have been delineated, and the lateral extents of the HVOC-impacted soil at the former dry-cleaning machine area have been defined. The vertical extents of the impacted soil at the former dry-cleaning machine area have been delineated, except at DMW-1. The cDCE-impacted soil at DMW-1 extends below 20 ft bgs; however, because the groundwater sample from deep well DMW-1, which is screened at depths of approximately 42.5 to 47.5 ft bgs, did not contain detectable HVOC concentrations, it appears that the soil at the bottom of boring DMW-1 does not contain cDCE concentrations greater than the Method B cleanup level, which is based on protection of groundwater. The estimated areas of HVOC-impacted soil at the oil/water separator area and the former dry-cleaning machine area are shown on Figure 3.
- VC is the only groundwater COC at the Site, and VC concentrations greater than the MTCA Method A groundwater cleanup level occur in the shallow groundwater at the former dry-cleaning machine area (the southern VC plume) and at the oil/water separator area (the northern VC plume). Both plumes extend to the northeast (hydraulically downgradient) of the source areas, and the lateral extents of the plumes have been delineated. Surface water sampling was required to demonstrate that the plumes do not extend to the Sammamish River. The estimated areas of the VC-impacted groundwater are shown on Figure 4.

- The groundwater elevations during the previous groundwater monitoring events at the Subject Property area indicate that the shallow groundwater flow direction is consistently to the northeast with eastern flow components toward the Sammamish River.
- The presence of cDCE and VC in the soil and VC in the shallow groundwater (VC is the only groundwater COC) demonstrate that RDC and natural attenuation of the HVOCs are occurring in the soil and groundwater at the Site.
- Enhanced RDC (Alternative 1 of the FFS) is still the recommended remediation alternative for the Site; however, the scope of the alternative has been modified to only inject emulsified vegetable oil and the injection locations are focused on the source areas. The revised estimated cost to complete Alternative 1 is $690,000.

7.0 USE OF THIS REPORT

This report has been prepared for the exclusive use of Woodinville CD, LLC and applicable regulatory agencies for specific application to the investigation at the Coit Services Site. No other party is entitled to rely on the information, conclusions, and recommendations included in this document without the express written consent of Landau. Further, the reuse of information, conclusions, and recommendations provided herein for extensions of the project or for any other project, without review and authorization by Landau, shall be at the user's sole risk. Landau warrants that within the limitations of the scope, schedule, and budget, our services have been provided in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions at this project. Landau makes no other warranty, either express or implied.

8.0 REFERENCES

Adapt. 2008. Phase I Environmental Site Assessment, Woodinville Buildings, 16650, 16750, 16928, 16932 Woodinville Redmond Road NE, Woodinville, Washington 98072. Adapt Engineering, Inc. March 20.

AECOM. 2019. Phase II Environmental Site Assessment, Woodinville West Business Park, Building C, 16750 Redmond-Woodinville Road Northeast, Woodinville, Washington. December 16.

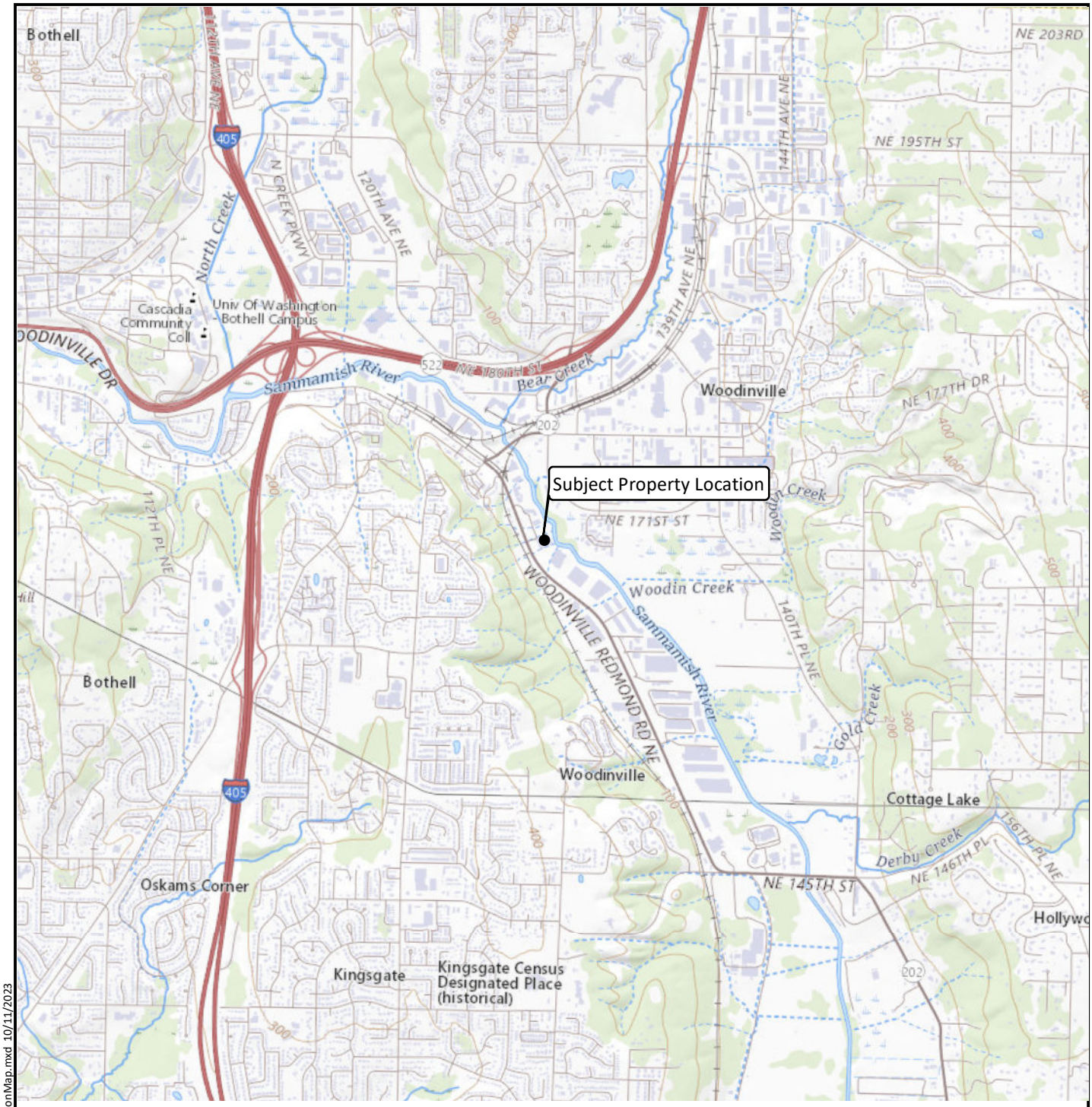
CODA. 2021. Phase II Indoor Air Quality and Subsurface Assessment, Industrial Building, 16750 Woodinville Redmond Road, Woodinville, WA. CODA Consulting Group. December 29.

Ecology. 2017. Technical Document: Terrestrial Ecological Evaluations Under the Model Toxics Control Act. Draft Publication No. 19-09-051. Washington State Department of Ecology. February.

Ecology. 2024. Letter: Opinion Pursuant to WAC 173-340-515(5) on Remedial Action for the Coit Services Site. From David Unruh, Washington State Department of Ecology, to David Yuchasz, Woodinville CD, LLC. February 8.

Landau 2023. Additional Investigation Report, Building C at Woodinville West Business Park, Woodinville, Washington. Landau Associates, Inc. October 12.

SLR. 2023. Remedial Investigation and Focused Feasibility Study Report, Building C at Woodinville West Business Park, 16750 Woodinville-Redmond Road NE, Woodinville, Washington, Facility/Site #36189742, Cleanup Site #16672. SLR International Corporation. February.



Data Source: Esri.

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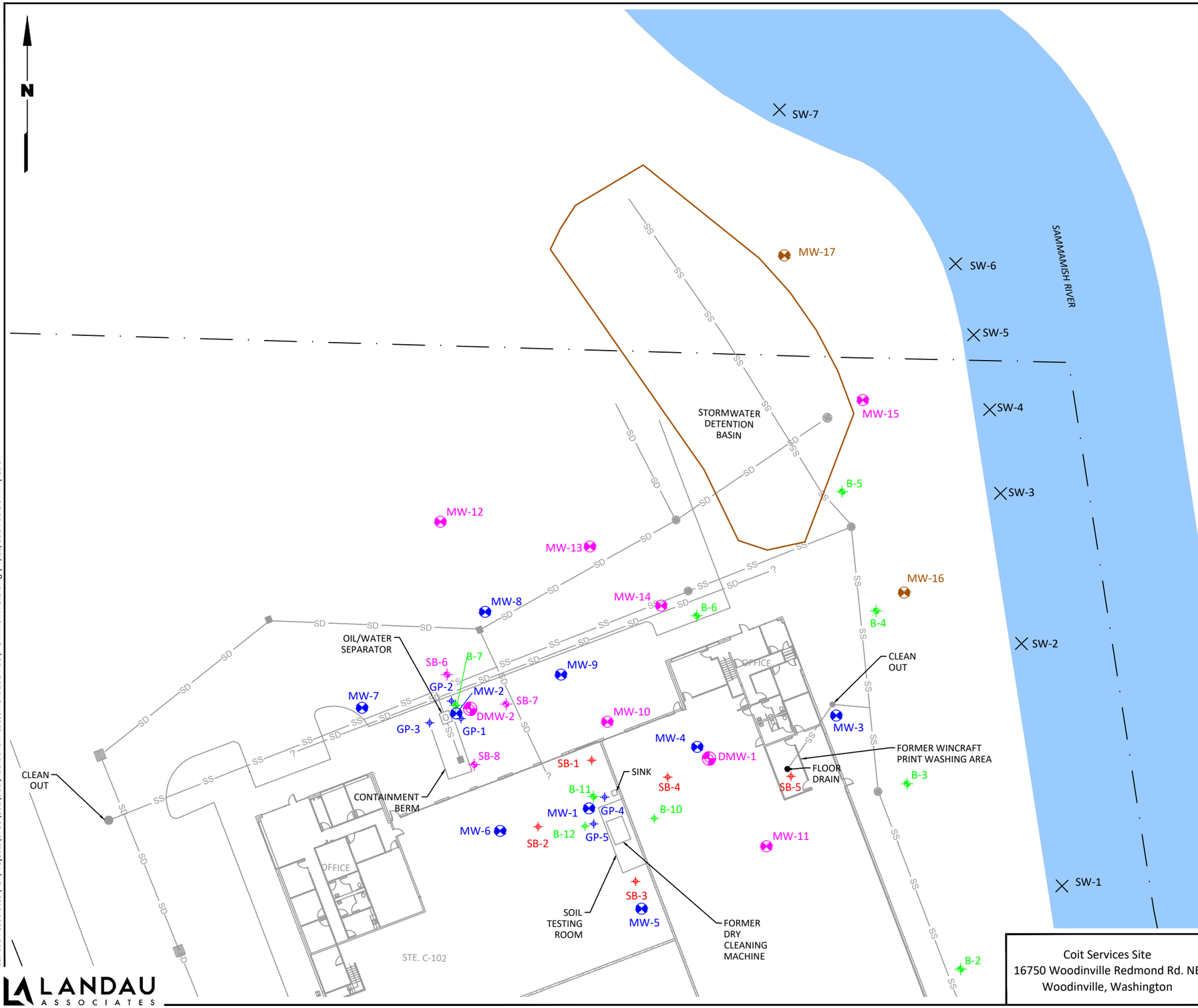
Building C Woodinville West Business Park 16750 Woodinville Redmond Rd. NE Woodinville, Washington	**Subject Property Location Map**	Figure 1



Notes

1. BUILDING FLOOR PLAN BASED ON CODA CONSULTING GROUP'S 2021 SAMPLE PLAN.
2. LOCATIONS OF FEATURES ARE APPROXIMATE.
3. BLACK AND WHITE REPRODUCTION OF THIS COLOR ORIGINAL MAY REDUCE ITS EFFECTIVENESS AND LEAD TO INCORRECT INTERPRETATION.

LEGEND

MW-17	2024 SHALLOW GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
MW-11	MAY THROUGH JULY 2023 SHALLOW GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
SB-7	MAY 2023 SOIL BORING LOCATION AND DESIGNATION
DMW-1	2023 DEEP GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
SB-1	APRIL 2022 SOIL BORING LOCATION AND DESIGNATION
MW-6	EXISTING SHALLOW GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
GP-1	2019 SOIL BORING AND TEMPORARY WELL LOCATION AND DESIGNATION
B-6	2021 SOIL BORING AND TEMPORARY WELL LOCATION AND DESIGNATION
B-10	2021 SOIL BORING LOCATION AND DESIGNATION
SW-1	2023 SURFACE WATER SAMPLE LOCATION AND DESIGNATION
	UNDERGROUND OIL/WATER SEPARATOR
	STORM DRAIN MANHOLE
SD	STORM DRAIN LINE
	STORMWATER CATCH BASIN
	SANITARY SEWER MANHOLE
SS	SANITARY SEWER LINE
	PROPERTY LINE

0 40 80
Scale in Feet

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Coit Services Site
16750 Woodinville Redmond Rd. NE
Woodinville, Washington

Soil, Groundwater, and Surface Water Investigation Locations

Figure 2

N

STORMWATER DETENTION BASIN

MW-15

B-5

MW-12

MW-13

MW-14

MW-8

B-6

B-4

OIL/WATER SEPARATOR

SB-6

B-7

GP-2

MW-9

CLEAN OUT

OFFICE

MW-7

SB-7

DMW-2

GP-3

GP-1

ESTIMATED AREA OF HVOC-IMPACTED SOIL

MW-10

MW-3

MW-2

SB-8

FORMER WINCRAFT PRINT WASHING AREA

FLOOR DRAIN

CONTAINMENT BERM

SB-1

GP-4

SINK

MW-4

DMW-1

SB-4

B-3

B-11

MW-1

SB-5

SB-2

B-10

ESTIMATED AREA OF HVOC-IMPACTED SOIL

MW-6

MW-11

B-12

GP-5

SB-3

OFFICE

SOIL TESTING ROOM

MW-5

FORMER DRY CLEANING MACHINE

STE. C-102

B-2

Notes

1. BUILDING FLOOR PLAN BASED ON CODA CONSULTING GROUP'S 2021 SAMPLE PLAN.
2. LOCATIONS OF FEATURES ARE APPROXIMATE.
3. HVOC = HALOGENATED VOLATILE ORGANIC COMPOUNDS
4. BLACK AND WHITE REPRODUCTION OF THIS COLOR ORIGINAL MAY REDUCE ITS EFFECTIVENESS AND LEAD TO INCORRECT INTERPRETATION.

Legend

SB-7	MAY 2023 SOIL BORING LOCATION AND DESIGNATION
MW-11	MAY THROUGH JULY 2023 SHALLOW GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
DMW-1	2023 DEEP GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
SB-1	APRIL 2022 SOIL BORING LOCATION AND DESIGNATION
MW-6	EXISTING SHALLOW GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
GP-1	2019 SOIL BORING AND TEMPORARY WELL LOCATION AND DESIGNATION
B-6	2021 SOIL BORING AND TEMPORARY WELL LOCATION AND DESIGNATION
B-10	2021 SOIL BORING LOCATION AND DESIGNATION
	UNDERGROUND OIL/WATER SEPARATOR
	STORM DRAIN MANHOLE
SD	STORM DRAIN LINE
	STORMWATER CATCH BASIN
	SANITARY SEWER MANHOLE
SS	SANITARY SEWER LINE
	PROPERTY LINE
	PREVIOUS ESTIMATED AREA OF HVOC-IMPACTED SOIL
	REVISED ESTIMATED AREA OF HVOC-IMPACTED SOIL

0 30 60

Scale in Feet

Landau Associates | G:\Projects\1789\002\020\Additional Assessment 2024-06\F HVOCImpactedSoil.dwg | 7/22/2024 10:57 PM | ezick

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Coit Services Site
16750 Woodinville Redmond Rd. NE
Woodinville, Washington

Estimated Areas of HVOC-Impacted Soil

Figure
3

N

SW-7

SAMMAMISH RIVER

SW-6

SW-5

SW-4

SW-3

SW-2

SW-1

MW-17

MW-15

MW-12

MW-13

MW-8

MW-14

MW-16

MW-9

MW-7

MW-2

DMW-2

MW-10

MW-4

DMW-1

MW-3

MW-1

MW-6

MW-11

MW-5

B-5

B-6

B-4

B-7

GP-2

GP-3

GP-1

B-11

GP-4

GP-5

B-3

B-2

STORMWATER DETENTION BASIN

OIL/WATER SEPARATOR

OFFICE

CLEAN OUT

CONTAINMENT BERM

SINK

FLOOR DRAIN

FORMER WINCRAFT PRINT WASHING AREA

SOIL TESTING ROOM

FORMER DRY CLEANING MACHINE

STE. C-102

ESTIMATED AREAS OF VINYL CHLORIDE CONCENTRATIONS GREATER THAN MTCA METHOD B CLEANUP LEVEL (0.020 MICROGRAMS PER LITER)

NOTES

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2. LOCATIONS OF FEATURES ARE APPROXIMATE.
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LEGEND

- MW-17 — 2024 SHALLOW GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- MW-11 — MAY THROUGH JULY 2023 SHALLOW GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- SB-7 — MAY 2023 SOIL BORING LOCATION AND DESIGNATION
- DMW-1 — 2023 DEEP GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- MW-6 — EXISTING SHALLOW GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- GP-1 — 2019 SOIL BORING AND TEMPORARY WELL LOCATION AND DESIGNATION
- B-6 — 2021 SOIL BORING AND TEMPORARY WELL LOCATION AND DESIGNATION
- SW-1 — 2023 SURFACE WATER SAMPLE LOCATION AND DESIGNATION
- PREVIOUS ESTIMATED AREA OF VINYL CHLORIDE-IMPACTED GROUNDWATER
- REVISED ESTIMATED AREA OF VINYL CHLORIDE-IMPACTED GROUNDWATER
- UNDERGROUND OIL/WATER SEPARATOR
- STORM DRAIN MANHOLE
- SD — STORM DRAIN LINE
- STORMWATER CATCH BASIN
- SANITARY SEWER MANHOLE
- SS — SANITARY SEWER LINE
- PROPERTY LINE
- GROUNDWATER FLOW DIRECTION

0 40 80

Scale in Feet

Landau Associates | G:\Projects\1789\002\020\Additional Assessment 2024-06\F AreasVCgw.dwg | 7/22/2024 10:57 PM | ezick

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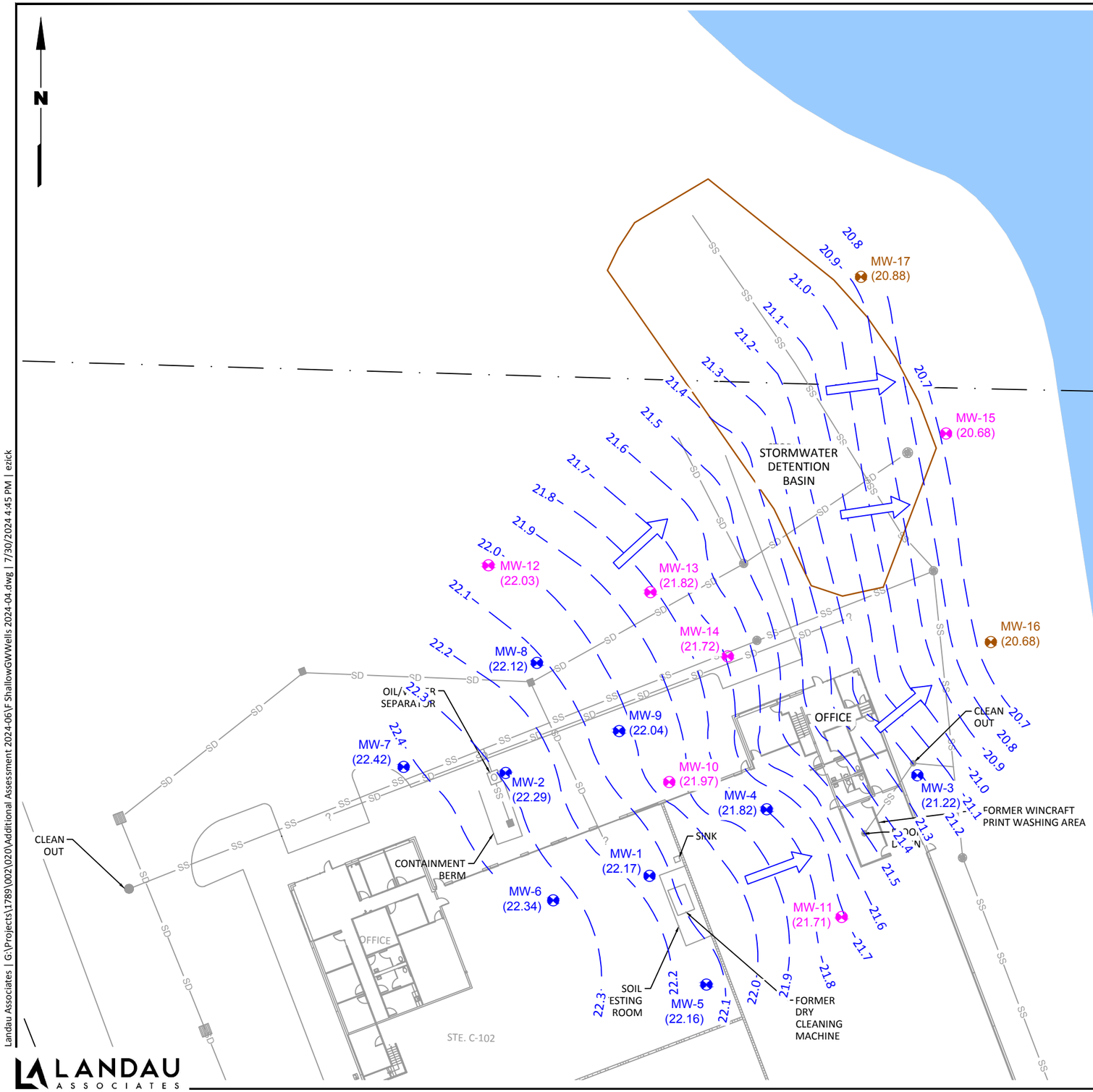
Coit Services Site
16750 Woodinville Redmond Rd. NE
Woodinville, Washington

Estimated Areas of Vinyl Chloride-Impacted Groundwater

Figure 4



Notes

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LEGEND

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- MW-11 — MAY THROUGH JULY 2023 SHALLOW GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- MW-6 — EXISTING SHALLOW GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- UNDERGROUND OIL/WATER SEPARATOR
- STORM DRAIN MANHOLE
- SD — STORM DRAIN LINE
- STORMWATER CATCH BASIN
- SANITARY SEWER MANHOLE
- SS — SANITARY SEWER LINE
- PROPERTY LINE
- (20.68) — GROUNDWATER ELEVATION ON APRIL 2, 2024 (IN FEET ABOVE NAVD88 DATUM)
- 20.8 — GROUNDWATER CONTOUR AND ELEVATION (IN FEET ABOVE NAVD88 DATUM)
- GENERAL GROUNDWATER FLOW DIRECTION

0 40 80
Scale in Feet

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Coit Services Site
16750 Woodinville Redmond Rd. NE
Woodinville, Washington

Shallow Groundwater Elevation Contour Map - April 2, 2024

Figure 5

Notes

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LEGEND

- MW-17 — 2024 SHALLOW GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- MW-11 — MAY THROUGH JULY 2023 SHALLOW GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- SB-7 — MAY 2023 SOIL BORING LOCATION AND DESIGNATION
- DMW-1 — 2023 DEEP GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- SB-1 — APRIL 2022 SOIL BORING LOCATION AND DESIGNATION
- MW-6 — EXISTING SHALLOW GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- GP-1 — 2019 SOIL BORING AND TEMPORARY WELL LOCATION AND DESIGNATION
- B-6 — 2021 SOIL BORING AND TEMPORARY WELL LOCATION AND DESIGNATION
- B-10 — 2021 SOIL BORING LOCATION AND DESIGNATION
- SW-1 — 2023 SURFACE WATER SAMPLE LOCATION AND DESIGNATION
- UNDERGROUND OIL/WATER SEPARATOR
- STORM DRAIN MANHOLE
- SD — STORM DRAIN LINE
- STORMWATER CATCH BASIN
- SANITARY SEWER MANHOLE
- SS — SANITARY SEWER LINE
- PROPERTY LINE
- A — A' CROSS SECTION LOCATION AND DESIGNATION

N

SAMMAMISH RIVER

SW-7 SW-6 SW-5 SW-4 SW-3 SW-2 SW-1

MW-17 MW-15 MW-12 MW-13 MW-14 MW-16 MW-8 MW-9 MW-7 MW-2 DMW-2 MW-10 MW-4 DMW-1 MW-6 MW-1 MW-11 MW-5

B-5 B-6 B-4 B-3 B-2 B-7 B-10 B-11 B-12

SB-6 GP-2 GP-3 GP-1 SB-7 SB-8 SB-1 SB-4 SB-5 SB-2 GP-4 GP-5 SB-3

STORMWATER DETENTION BASIN

OIL/WATER SEPARATOR

CLEAN OUT

CONTAINMENT BERM

SINK

FLOOR DRAIN

FORMER WINCRAFT PRINT WASHING AREA

TOP OF BANK

SOIL TESTING ROOM

FORMER DRY CLEANING MACHINE

OFFICE

STE. C-102

0 40 80
Scale in Feet

Coit Services Site 16750 Woodinville Redmond Rd. NE Woodinville, Washington	**Locations of Geologic Cross Sections**	Figure 6

LANDAU ASSOCIATES

A
SOUTHWEST

A'
NORTHEAST

ELEVATION (FT, NAVD88)

50
25
0
-25

MW-7
Offset 16' N

GP-3
Offset 4' S

MW-2
Offset 7' S

DMW-2
Offset 8' S

SB-7
Offset 15' S

MW-9
Offset 17' S

MW-13
Offset 18' N

EXISTING GROUND SURFACE

STORMWATER DETENTION BASIN

B-5
Offset 21' S

MW-15
Offset 4' N

SAND TO SILTY SAND
SILT
ORGANIC SILT
SAND

P: <0.026
C: <0.021
P: <0.039
C: <0.039
P: <0.028
C: <0.022
P: <0.0447
C: <0.0456
P: <0.0297
C: <0.0297
P: <0.005
C: <0.005

D=23'
D=20'
D=23'
D=20'
D=23'
D=18'
D=20'
D=20'
D=49'

0 20 40
Horizontal Scale: 1" = 20'
Vertical Scale: 1" = 10'

GEOLOGY/LITHOLOGY KEY

- CONCRETE
- ASPHALT
- SAND TO SILTY SAND
- SILT
- ORGANIC SILT

EXPLORATION KEY

- LOCATION ID / OFFSET DISTANCE (FT)
- INFERRED GEOLOGIC CONTACT
- ESTIMATED GEOLOGIC CONTACT
- HIGH WATER TABLE (APRIL 2024)
- LOW WATER TABLE (AUGUST 2023)
- SCREENED INTERVAL
- SOIL SAMPLE — P: <0.005 PCE CONCENTRATION (MG/KG) / C: <0.005 cis-1,2-DCE CONCENTRATION (MG/KG)
- D = 20' BOTTOM DEPTH OF EXPLORATION

Notes

1. Concentrations in bold and **red** exceed the site soil cleanup level.
2. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

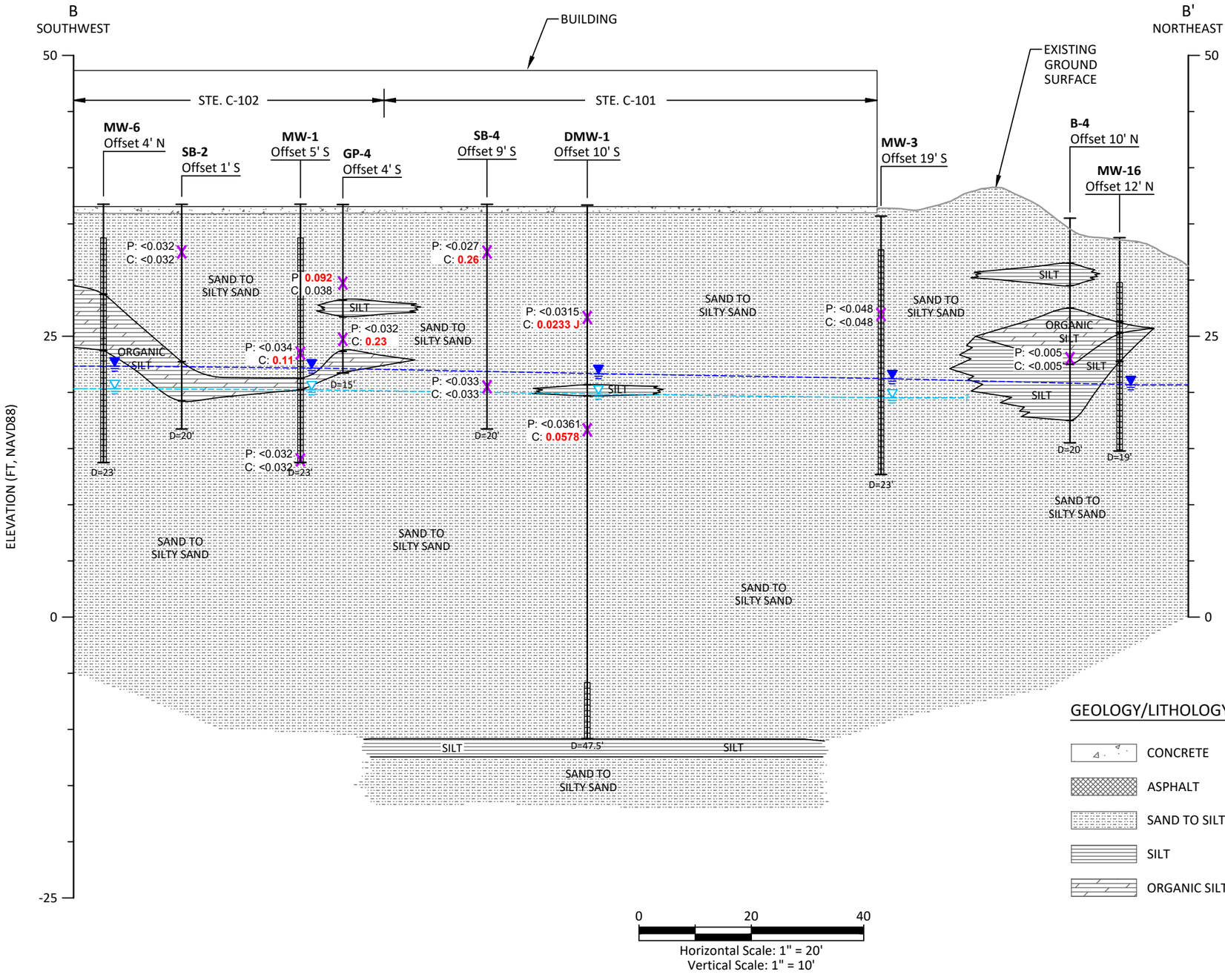
Source: King County LiDAR, 2017

Coit Services Site
16750 Woodinville Redmond Rd. NE
Woodinville, Washington

Cross Section A-A'

Figure 7

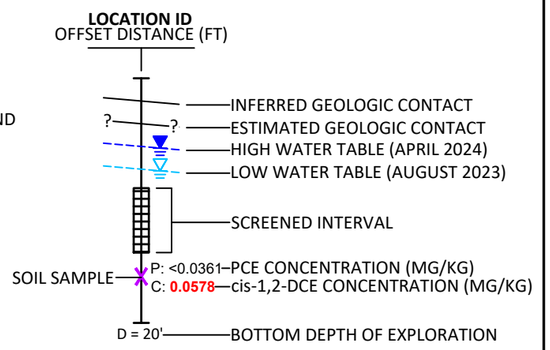
LANDAU ASSOCIATES



GEOLOGY/LITHOLOGY KEY

- CONCRETE
- ASPHALT
- SAND TO SILTY SAND
- SILT
- ORGANIC SILT

EXPLORATION KEY



Notes

1. Concentrations in bold and **red** exceed the site soil cleanup level.
2. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Source: King County LiDAR, 2017

Coit Services Site 16750 Woodinville Redmond Rd. NE Woodinville, Washington	**Cross Section B-B'**	Figure 8

LANDAU ASSOCIATES

N

SW-7

SW-6

SW-5

SW-4

SW-3

SW-2

SW-1

SAMMAMISH RIVER

MW-17

MW-15

MW-12

MW-13

MW-8

MW-14

MW-16

MW-9

MW-7

MW-2

DMW-2

MW-10

MW-4

DMW-1

MW-3

MW-1

MW-6

MW-11

MW-5

B-5

B-6

B-4

B-7

GP-2

GP-3

GP-1

B-11

GP-4

GP-5

B-10

B-12

SB-1

SB-4

SB-2

SB-3

SB-5

B-3

B-2

STORMWATER DETENTION BASIN

OIL/WATER SEPARATOR

CONTAINMENT BERM

OFFICE

CLEAN OUT

SINK

FLOOR DRAIN

FORMER WINCRAFT PRINT WASHING AREA

SOIL TESTING ROOM

FORMER DRY CLEANING MACHINE

STE. C-102

ESTIMATED AREAS OF VINYL CHLORIDE CONCENTRATIONS GREATER THAN MTCA METHOD B CLEANUP LEVEL (0.020 MICROGRAMS PER LITER)

NOTES

1. BUILDING FLOOR PLAN BASED ON CODA CONSULTING GROUP'S 2021 SAMPLE PLAN.
2. LOCATIONS OF FEATURES ARE APPROXIMATE.
3. BLACK AND WHITE REPRODUCTION OF THIS COLOR ORIGINAL MAY REDUCE ITS EFFECTIVENESS AND LEAD TO INCORRECT INTERPRETATION.

LEGEND

- PROPOSED VERTICAL INJECTION POINT WITH 8' RADIUS OF INFLUENCE
- MW-17 — 2024 SHALLOW GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- MW-11 — MAY THROUGH JULY 2023 SHALLOW GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- SB-1 — APRIL 2022 SOIL BORING LOCATION AND DESIGNATION
- SB-7 — MAY 2023 SOIL BORING LOCATION AND DESIGNATION
- DMW-1 — 2023 DEEP GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- MW-6 — EXISTING SHALLOW GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- GP-1 — 2019 SOIL BORING AND TEMPORARY WELL LOCATION AND DESIGNATION
- B-6 — 2021 SOIL BORING AND TEMPORARY WELL LOCATION AND DESIGNATION
- SW-1 — 2023 SURFACE WATER SAMPLE LOCATION AND DESIGNATION
- ESTIMATED AREA OF VINYL CHLORIDE-IMPACTED GROUNDWATER
- ESTIMATED AREA OF HVOC-IMPACTED SOIL
- UNDERGROUND OIL/WATER SEPARATOR
- STORM DRAIN MANHOLE
- SD — STORM DRAIN LINE
- STORMWATER CATCH BASIN
- SANITARY SEWER MANHOLE
- SS — SANITARY SEWER LINE
- PROPERTY LINE
- GROUNDWATER FLOW DIRECTION

0 40 80

Scale in Feet

Coit Services Site
16750 Woodinville Redmond Rd. NE
Woodinville, Washington

Revised Alternative 1 - Enhanced Reductive Dechlorination

Figure 9

LANDAU ASSOCIATES

Landau Associates | G:\Projects\1789\002\020\Additional Assessment 2024-06\F EnhRedDechlorination.dwg | 7/22/2024 10:58 PM | ezick

Table 1
Soil Sample Analytical Results
Coit Services Site
Woodinville, Washington

Soil Boring Number	Sample ID	Approximate Sample Depth (feet)	Sample Date	Volatiles (mg/kg; SW-846 8260D/8260D SIM)											
				cis-1,2-Dichloroethene	Toluene	2-Chlorotoluene	Acetone	Benzene	2-Butanone (MEK)	Trans-1,2-Dichloroethene	Naphthalene	Tetrachloroethene (PCE)	Trichloroethene (TCE)	Vinyl Chloride	Total Xylenes
MTCA Method A Cleanup Levels[a]				0.079[c]/ 0.0052[d]	7.0	1,600[b]	72,000[b]	0.03	48,000[b]	0.52[c]/ 0.032[d]	5.0	0.05	0.03	0.0017[c]/ 0.00009[d]	9.0
2023 Landau Investigation															
DMW-1	DMW-1-10	10	06/02/23	0.0233 J	<0.0631	<0.0631	<1.26	<0.0126	<0.631	<0.0315	<0.126	<0.0315	<0.0315[e]	<0.0126[e]	<0.0631[f]
	DMW-1-20	20	06/02/23	0.0578	<0.0722	<0.0722	<1.44	<0.0144	<0.722	<0.0361[e]	<0.144	<0.0361	<0.0361[e]	<0.0361[e]	<0.0722[f]
	DMW-1-47.5	47.5	06/02/23	R	R	R	R	R	R	R	R	R	R	R	R
DMW-2	DMW-2-20	20	05/23/23	<0.0297[e]	<0.0594	<0.0594	<1.19	<0.0119	<0.594	<0.0297	<0.119	<0.0297	<0.0297	<0.0119[e]	<0.0594[f]
MW-10	MW-10-12	12	05/23/23	<0.0384[e]	<0.0767	<0.0767	<1.53	<0.0153	<0.767	<0.0384[e]	<0.153	<0.0384	<0.0384[e]	<0.0153[e]	<0.0767[f]
	MW-10-7	7	05/23/23	<0.0340	<0.0679	<0.0679	<1.36	<0.0136	<0.679	<0.0340	<0.136	<0.0340	<0.0340[e]	<0.0136[e]	<0.0679[f]
MW-11	MW-11-5	5	06/01/23	0.0224 J	<0.0621	<0.0621	<1.24	<0.0124	<0.621	<0.0311	<0.124	<0.0311	<0.0311	<0.0124[e]	<0.0621[f]
SB-6	SB-6-13	13	05/23/23	<0.0447[e]	<0.0893	<0.0893	<1.79	<0.0179	<0.893	<0.0447[e]	<0.179	<0.0447	<0.0447[e]	<0.0165[e]	<0.0893[f]
SB-7	SB-7-12	12	05/23/23	<0.0456[e]	<0.0912	<0.0912	<1.82	<0.0182	<0.912	<0.0456[e]	<0.182	<0.0456	<0.0456[e]	<0.0182[e]	<0.0912[f]
SB-8	SB-8-13	13	05/23/23	<0.0315[e]	<0.0630	<0.0630	<1.26	<0.0126	<0.630	<0.0315	<0.126	<0.0315	<0.0315e	<0.0126[e]	<0.0630[f]
2022 SLR Investigation															
SB-1	SB-1-4.5'-5.0'	4.5-5.0	04/08/22	<0.027	<0.058	<0.055	<1.10	<0.011	<0.55	<0.027	<0.11	<0.027	<0.027	<0.027[e]	--
SB-2	SB-2-4.0'-4.5'	4.0-4.5	04/08/22	<0.032	<0.063	<0.063	<1.26	<0.013	<0.63	<0.032	<0.13	<0.032	<0.032[e]	<0.032[e]	--
SB-3	SB-3-6.0'-6.5'	6.0-6.5	04/08/22	<0.032	<0.063	<0.063	<1.27	<0.013	<0.63	<0.032	<0.13	<0.032	<0.032[e]	<0.032[e]	--
SB-4	SB-4-4.0'-4.5'	4.0-4.5	04/07/22	0.26	<0.053	<0.053	<1.06	<0.011	<0.53	<0.027	<0.11	<0.027	<0.027	<0.027[e]	--
	SB-4-16.0'-16.5'	16.0-16.5	04/07/22	<0.033[e]	<0.067	<0.067	<1.33	<0.013	<0.67	<0.033[e]	<0.13	<0.033	<0.033[e]	<0.033[e]	--
SB-5	SB-5-4.5'-5.0'	4.5-5.0	04/07/22	<0.026	<0.052	<0.052	<1.03	<0.010	<0.52	<0.026	<0.10	<0.026	<0.026	<0.026[e]	--
MW-1	MW-1-13.0'-13.5'	13.0-13.5	04/07/22	0.11	<0.069	<0.069	<1.37	<0.014	<0.69	<0.034[e]	<0.14	<0.034	<0.034[e]	<0.034[e]	--
	MW-1-22.5'-23.0'	22.5-23.0	04/07/22	<0.032[e]	<0.063	<0.063	<1.26	<0.013	<0.63	<0.032	<0.13	<0.032	<0.032[e]	<0.032[e]	--
MW-2	MW-2-6.0'-6.5'	6.0-6.5	04/06/22	<0.039	<0.077	<0.077	<1.54	<0.015	<0.77	<0.039	<0.15	<0.039	<0.039[e]	<0.039[e]	--
MW-3	MW-3-8.5'-9.0'	8.5-9.0	04/06/22	<0.048[e]	<0.096	<0.096	<1.93	<0.019	<0.96	<0.048[e]	<0.19	<0.048	<0.048[e]	<0.048[e]	--
2021 CODA Assessment															
B-1	B1	10-15	12/09/21	<0.009[e]	<0.017	<0.009	0.17	<0.003	0.37	<0.017	<0.043	<0.009	<0.003	<0.009[e]	<0.022
B-2	B2	10-15	12/09/21	<0.017[e]	<0.033	<0.017	<0.33	<0.007	0.56	<0.033[e]	<0.084	<0.017	<0.007	<0.017[e]	<0.044
B-3	B3	10-15	12/09/21	<0.006[e]	<0.011	<0.006	<0.11	<0.002	<0.22	<0.011	<0.028	<0.006	<0.002	<0.006[e]	<0.015
B-4	B4	10-15	12/09/21	<0.005	<0.011	<0.005	<0.11	<0.002	<0.21	<0.011	<0.026	<0.005	<0.002	<0.005[e]	<0.014
B-5	B5	10-15	12/09/21	<0.005	<0.010	<0.005	<0.10	<0.002	0.17	<0.010	<0.025	<0.005	<0.002	<0.005[e]	<0.013
B-6	B6	10-15	12/09/21	<0.009[e]	<0.018	<0.009	<0.18	<0.004	0.36	<0.018	<0.044	<0.009	<0.004	<0.009[e]	<0.023
B-7	B7	10-15	12/09/21	0.33	0.017	<0.025	0.77	0.011	1.30	<0.050[e]	<0.12	<0.025	<0.010	<0.025[e]	<0.064
B-8	B8	10-15	12/09/21	<0.018[e]	<0.035	<0.018	0.36	<0.007	<0.71	<0.035[e]	<0.089	<0.018	<0.007	<0.018[e]	<0.046
B-9	B9	10-15	12/09/21	<0.010[e]	<0.021	<0.010	0.18	<0.004	0.48	<0.021	<0.052	<0.010	<0.004	<0.010[e]	<0.027
B-10	B10-1	0-5	11/30/21	0.067	0.015	<0.005	<0.10	<0.002	<0.21	0.004	0.013	<0.005	<0.002	<0.005[e]	0.002
	B10-2	10-15	11/30/21	<0.008[e]	<0.016	<0.008	0.15	<0.003	0.35	<0.016	<0.040	<0.008	<0.003	<0.008[e]	<0.021
B-11	B11-1	0-5	12/10/21	0.004	<0.008	<0.004	<0.080	<0.002	<0.16	<0.008	<0.020	0.14	0.005	<0.004[e]	<0.010
	B11-2	10-15	12/10/21	0.13	0.003	<0.005	<0.091	<0.002	<0.18	0.003	<0.023	0.003	<0.002	0.007	<0.012
B-12	B12-1	0-5	12/10/21	0.27	0.009	<0.005	<0.092	<0.002	<0.18	0.014	0.01	<0.005	<0.002	<0.005[e]	0.003
	B12-2	10-15	12/10/21	0.15	0.014	<0.010	0.17	<0.004	0.42	0.009	<0.049	<0.010	<0.004	<0.010[e]	<0.025

Table 1
Soil Sample Analytical Results
Coit Services Site
Woodinville, Washington

Soil Boring Number	Sample ID	Approximate Sample Depth (feet)	Sample Date	Volatiles (mg/kg; SW-846 8260D/8260D SIM)											
				cis-1,2-Dichloroethene	Toluene	2-Chlorotoluene	Acetone	Benzene	2-Butanone (MEK)	Trans-1,2-Dichloroethene	Naphthalene	Tetrachloroethene (PCE)	Trichloroethene (TCE)	Vinyl Chloride	Total Xylenes
MTCA Method A Cleanup Levels[a]				0.079[c]/ 0.0052[d]	7.0	1,600[b]	72,000[b]	0.03	48,000[b]	0.52[c]/ 0.032[d]	5.0	0.05	0.03	0.0017[c]/ 0.00009[d]	9.0
2019 AECOM Assessment															
GP-1	GP-1-3	3	11/16/19	<0.017	--	<0.021	--	--	--	<0.017	--	<0.021	<0.017	<0.021[e]	--
	GP-1-8	8	11/16/19	<0.025	--	<0.031	--	--	--	<0.025	--	<0.031	<0.025	<0.031[e]	--
GP-2	GP-2-4	4	11/16/19	<0.024	--	<0.030	--	--	--	<0.024	--	<0.030	<0.024	<0.030h	--
	GP-2-9.5	9.5	11/16/19	<0.044[e]	--	0.12	--	--	--	<0.044[e]	--	<0.055[e]	<0.044[e]	<0.055[e]	--
GP-3	GP-3-3.5	3.5	11/16/19	<0.021	--	<0.026	--	--	--	<0.021	--	<0.026	<0.021	<0.026[e]	--
	GP-3-10.5	10.5	11/16/19	<0.022[e]	--	<0.028	--	--	--	<0.022	--	<0.028	<0.022	<0.028[e]	--
GP-4	GP-4-7	7	11/16/19	0.038	--	<0.028	--	--	--	<0.023	--	0.092	<0.023	<0.028[e]	--
	GP-4-12	12	11/16/19	0.23	--	<0.032	--	--	--	<0.026	--	<0.032	<0.026	<0.032[e]	--
GP-5	GP-5-6	6	11/16/19	0.13	--	<0.032	--	--	--	<0.025	--	0.13	<0.025	<0.032[e]	--
	GP-5-13	13	11/16/19	0.13	--	<0.031	--	--	--	<0.025	--	<0.031	<0.025	<0.031[e]	--

Notes:

This table only includes the analytes that were detected in at least one soil sample and have MTCA Method A or Method B soil cleanup levels.

Green shading indicates detected analyte exceeds one or more applicable cleanup level.

Based on the 2022 and 2023 groundwater monitoring data, the vadose zone beneath the subject property area extends to a depth of approximately 8.7 feet below ground surface (bgs).

J = Estimated result. The laboratory stated that the result was detected below the lowest point of the calibration curve, but above the specified method detection limit (MDL).

R = The data are unusable. The sample results are rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.

[a] Chapter 173-340 WAC, Model Toxics Control Act Statute and Regulation, Table 740-1, Method A Soil Cleanup Levels for Unrestricted Land Uses. Revised November 2007.

[b] Method B cleanup level used because a Method A level is not established. Standard formula values, direct contact Method B soil cleanup levels as published in Ecology's Cleanup Level and Risk Calculation (CLARC) online database (January 2023).

[c] Method B cleanup level used because a Method A level is not established. Standard formula values, protection of groundwater in the vadose zone Method B soil cleanup level as published in Ecology's CLARC online database (January 2023). The protection of groundwater in the vadose zone values were only applied to soil samples collected at depths of less than 8.7 feet bgs.

[d] Method B cleanup level used because a Method A level is not established. Standard formula values, protection of groundwater in the saturated zone Method B soil cleanup level as published in Ecology's CLARC online database (January 2023). The protection of groundwater in the saturated zone values were only applied to the soil samples collected at depths greater than 8.7 feet bgs.

[e] The analyte was not detected at a concentration greater than the method reporting limit (MRL); however, the MRL exceeded the MTCA Method A or Method B cleanup level.

[f] m,p-Xylene and o-xylene were reported for this sample; the sum of detected concentrations are displayed, or in cases where both results were non-detect, the MRL for m,p-xylene is displayed (the higher of the two MRLs).

Abbreviations and Acronyms:

-- = not analyzed

ID = Identification

mg/kg = milligrams per kilogram

MTCA = Model Toxics Control Act

SIM = selected ion monitoring

Table 2
Groundwater Sample Analytical Results
Coit Services Site
Woodinville, Washington

Well Number	Sample ID	Sample Date	Volatiles (µg/L; SW-846 8260C/D/8260C SIM/8260D SIM)						
			Tetrachloroethene (PCE)	Trichloroethene (TCE)	cis-1,2-Dichloroethene	Vinyl Chloride	Chloroform	Benzene	Ethylbenzene
	MTCA Method B Cleanup Levels[a]		2.40	0.60	8.90	0.020	60	0.44	29
Shallow Groundwater Monitoring Wells									
MW-1	MW-1-0422	04/12/22	<0.40	<0.40	<0.40	0.27	<1.00	<0.20	<0.50
	MW-1-0722	07/12/22	0.20	<0.40	<0.40	0.052	<1.00	<0.20	<0.50
	MW-1-1022	10/12/22	<0.40	<0.40	<0.40	0.036	<1.00	<0.20	<0.50
	MW-1-0123	01/09/23	<0.40	<0.40	<0.40	0.38	<1.00	<0.20	<0.50
	MW-1-0623	06/07/23	<0.400	<0.400	<0.400	<0.400[d]	<1.00	<0.200	<0.500
	MW-1-240402	04/02/24	--	--	--	0.0343	--	--	--
MW-2	MW-2-0422	04/12/22	<0.40	<0.40	0.65	0.085	<1.00	0.44	0.74
	MW-2-0722	07/12/22	<0.40	<0.40	0.51	0.21	<1.00	0.26	0.58
	MW-2-1022	10/12/22	<0.40	<0.40	<0.40	0.93	<1.00	<0.20	<0.50
	MW-2-0123	01/09/23	<0.40	<0.40	0.46	0.10	<1.00	0.15[c]	<0.50
	MW-2-0623	06/07/23	<0.400	<0.400	<0.400	1.19	<1.00	<0.200	<0.500
	MW-2-240402	04/02/24	--	--	--	0.0358	--	--	--
MW-3	MW-3-0422	04/12/22	<0.40	<0.40	<0.40	<0.020	<1.00	<0.20	<0.50
	MW-3-0722	07/12/22	<0.40	<0.40	<0.40	0.028	<1.00	<0.20	<0.50
	MW-3-1022	10/12/22	<0.40	<0.40	<0.40	0.054	<1.00	<0.20	<0.50
	MW-3-0123	01/09/23	<0.40	<0.40	<0.40	<0.010	<1.00	<0.20	<0.50
	MW-3-0623	06/08/23	<0.400	<0.400	<0.400	<0.400[d]	<1.00	<0.200	<0.500
	MW-3-240402	04/02/24	--	--	--	<0.020	--	--	--
MW-4	MW-4-0123	01/09/23	<0.40	<0.40	0.95	9.83	<1.00	<0.20	<0.50
	MW-4-0623	06/08/23	<0.400	<0.400	0.440	1.85	<1.00	<0.200	<0.500
	MW-4-240402	04/02/24	--	--	--	5.06	--	--	--
MW-5	MW-5-0123	01/10/23	<0.40	<0.40	<0.40	<0.010	<1.00	<0.20	<0.50
	MW-5-0623	06/07/23	<0.400	<0.400	<0.400	<0.400[d]	<1.00	<0.200	<0.500
MW-6	MW-6-0123	01/10/23	<0.40	<0.40	<0.40	<0.010	<1.00	<0.20	<0.50
	MW-6-0623	06/07/23	<0.400	<0.400	<0.400	<0.400[d]	<1.00	<0.200	<0.500
	MW-6-240402	04/02/24	--	--	--	<0.030[d]	--	--	--
MW-7	MW-7-0123	01/10/23	<0.40	<0.40	1.19	0.045	<1.00	<0.20	<0.50
	MW-7-0623	06/07/23	<0.400	<0.400	1.50	<0.400[d]	<1.00	<0.200	<0.500
	MW-7-240402	04/02/24	--	--	--	<0.030[d]	--	--	--
MW-8	MW-8-0123	01/09/23	<0.40	<0.40	<0.40	1.01	<1.00	<0.20	<0.50
	MW-8-0623	06/08/23	<0.400	<0.400	0.220 J	0.860	<1.00	<0.200	<0.500
MW-9	MW-9-0123	01/09/23	<0.40	<0.40	0.24	1.61	<1.00	<0.20	<0.50
	MW-9-0623	06/07/23	<0.400	<0.400	<0.400	0.360 J	<1.00	<0.200	<0.500
MW-10	MW-10-0623	06/07/23	<0.400	<0.400	<0.400	<0.400[d]	<1.00	<0.200	<0.500
MW-11	MW-11-0623	06/08/23	<0.400	<0.400	<0.400	<0.400[d]	<1.00	<0.200	<0.500
MW-12	MW-12-0623	06/07/23	<0.400	<0.400	<0.400	<0.400[d]	<1.00	<0.200	<0.500
MW-13	MW-13-0623	06/07/23	<0.400	<0.400	<0.400	1.34	<1.00	<0.200	<0.500
MW-14	MW-14-0623	06/07/23	<0.400	<0.400	<0.400	1.52	<1.00	<0.200	<0.500
	MW-14-240402	04/02/24	--	--	--	1.45	--	--	--
MW-15	MW-15-0823	08/01/23	<0.400	<0.400	<0.400	0.220	<1.00	<0.200	<0.500
	MW-15-240403	04/03/24	--	--	--	0.100 J	--	--	--
MW-16	MW-16-240403	04/03/24	--	--	--	0.170 J	--	--	--
MW-17	MW-17-240508	05/08/24	--	--	--	<0.020	--	--	--

Table 2
Groundwater Sample Analytical Results
Coit Services Site
Woodinville, Washington

Well Number	Sample ID	Sample Date	Volatiles (µg/L; SW-846 8260C/D/8260C SIM/8260D SIM)						
			Tetrachloroethene (PCE)	Trichloroethene (TCE)	cis-1,2-Dichloroethene	Vinyl Chloride	Chloroform	Benzene	Ethylbenzene
	MTCA Method B Cleanup Levels[a]		2.40	0.60	8.90	0.020	60	0.44	29
Deep Groundwater Monitoring Wells									
DMW-1	DMW-1-0623	06/08/23	<0.400	<0.400	<0.400	<0.400[d]	0.730 J	<0.200	<0.500
DMW-2	DMW-2-0623	06/08/23	<0.400	<0.400	<0.400	<0.400[d]	0.600 J	<0.200	<0.500
2021 Temporary Wells									
B-1	B1-W*	12/09/21	<1.00	<1.00[d]	<1.00	<1.00[d]	<5.00[e]	<1.00	<1.00
B-2	B2-W*	12/09/21	<1.00	<1.00[d]	<1.00	<1.00[d]	<5.00[e]	<1.00	<1.00
B-3	B3-W*	12/09/21	<1.00	<1.00[d]	<1.00	<1.00[d]	<5.00[e]	<1.00	<1.00
B-4	B4-W*	12/09/21	<1.00	<1.00[d]	0.31	0.44[b]	<5.00[e]	<1.00	<1.00
B-5	B5-W*	12/09/21	<1.00	<1.00[d]	<1.00	<1.00[d]	<5.00[e]	<1.00	<1.00
B-6	B6-W*	12/09/21	<1.00	<1.00[d]	0.16	<1.00[d]	<5.00[e]	<1.00	<1.00
B-7	B7-W*	12/09/21	<1.00	<1.00[d]	2.44	1.55[b]	<5.00	<1.00	<1.00
B-8	B8-W*	12/09/21	<1.00	<1.00[d]	<1.00	<1.00[d]	<5.00	<1.00	<1.00
B-9	B9-W*	12/09/21	<1.00	<1.00[d]	<1.00	<1.00[d]	<5.00	<1.00	<1.00
B-11	B11-W*	12/09/21	0.40	<1.00[d]	0.37	2.99[b]	<5.00	<1.00	<1.00
2019 Temporary Wells									
GP-1	GP-1-W*	11/16/19	<1.00	<0.50	2.05	<0.20[d]	<1.00	--	--
GP-2	GP-2-W*	11/16/19	<1.00	<0.50	<1.00	<0.20[d]	<1.00	--	--
GP-3	GP-3-W*	11/16/19	<1.00	<0.50	<1.00	0.35[b]	<1.00	--	--
GP-4	GP-4-W*	11/16/19	1.04	<0.50	7.62	5.45[b]	2.95	--	--
GP-5	GP-5-W*	11/16/19	<1.00	<0.50	<1.00	<0.20[d]	<1.00	--	--

Notes:

This table only includes the volatile organic compound (VOC) analytes that were detected in at least one sample and that have MTCA cleanup levels based on protection of surface water.

Green shading indicates detected analyte exceeds the applicable cleanup level.

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

* Groundwater sample was collected from a temporary well.

[a] Ecology's Model Toxics Control Act (MTCA) Method B cleanup levels based on protection of surface water (freshwater) as published on Ecology's Cleanup Level and Risk Calculation (CLARC) online database (February 2024).

[b] Sample collected from temporary well and may be biased high.

[c] Sample result is estimated. The result was detected below the lowest point of the calibration curve, but above the method detection limit (MDL).

[d] The analyte was not detected at a concentration greater than the method detection limit (MDL); however, the MDL exceeded the MTCA Method B cleanup level.

[f] m,p-Xylene and o-xylene were reported for this sample; the sum of detected concentrations are displayed, or in cases where both results were non-detect, the method reporting limit (MRL) for m,p-xylene is displayed (the higher of the two MRLs).

Abbreviations and Acronyms:

-- = not analyzed
µg/L = micrograms per liter
ID = Identification
MTCA = Model Toxics Control Act
SIM = selected ion monitoring

Table 3
Groundwater Sampling Field Parameter Measurements
Coit Services Site
Woodinville, Washington

Well Number	Date Measured	Approximate Total Purge Volume (gallons)	Temperature (°C)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	Redox Potential (mV)
Shallow Groundwater Monitoring Wells							
MW-1	04/12/22	1.25	15.5	0.33	0.65	7.14	232.2
	07/13/22	1.50	15.7	0.27	0.14	5.89	10.8
	10/12/22	1.75	15.6	0.29	0.08	6.47	26.2
	01/09/23	2.00	15.9	0.38	0.43	6.61	23.7
	06/07/23	1.50	15.8	0.29	4.82	6.66	77.1
	04/02/24	1.20	15.8	0.45	0.19	6.53	84.0
MW-2	04/12/22	1.50	9.80	0.30	0.74	6.74	229.9
	07/13/22	1.00	14.0	0.33	0.12	6.19	8.90
	10/12/22	1.75	14.3	0.26	0.05	6.51	24.9
	01/09/23	1.25	8.60	0.31	0.94	6.75	15.8
	06/07/23	1.25	13.30	0.27	0.59	6.85	-27.3
	04/02/24	1.40	11.1	0.32	0.20	6.52	-28.5
MW-3	04/12/22	1.50	14.2	0.40	0.79	6.67	243.4
	07/13/22	1.25	15.8	0.39	0.07	6.23	1.70
	10/12/22	1.75	15.4	0.33	0.06	6.42	30.2
	01/09/23	1.25	14.3	0.29	0.06	6.42	33.7
	06/08/23	1.25	15.2	0.41	1.20	6.65	18.7
	04/02/24	1.00	14.9	0.40	0.09	6.30	52.4
MW-4	01/09/23	1.25	15.7	0.63	0.10	6.35	37.6
	06/08/23	1.50	15.1	0.35	1.11	6.49	8.8
	04/02/24	1.20	15.5	0.54	0.11	6.30	-6.5
MW-5	01/10/23	1.75	15.4	0.33	0.06	6.50	29.3
	06/07/23	1.50	15.2	0.24	1.57	6.54	37.4
MW-6	01/10/23	1.50	15.8	0.38	0.12	6.68	20.2
	06/07/23	1.75	15.4	0.27	2.25	6.68	53.5
	04/02/24	1.20	15.6	0.48	0.15	6.53	79.4
MW-7	01/10/23	1.00	12.7	0.40	0.13	6.55	27.0
	06/07/23	1.75	13.0	0.25	1.26	6.86	-13.8
	04/02/24	1.40	12.5	0.40	0.09	6.51	-16.3
MW-8	01/09/23	1.50	12.3	1.67	0.26	6.22	44.3
	06/08/23	1.50	12.9	0.44	0.57	6.62	-11.4
MW-9	01/09/23	1.75	12.8	0.61	0.60	6.63	22.6
	06/07/23	1.50	13.9	0.32	1.86	7.02	-31.6
MW-10	06/07/23	1.50	13.8	0.30	0.58	6.70	-7.1
MW-11	06/08/23	1.00	15.1	0.29	0.48	6.71	-4.7
MW-12	06/07/23	1.50	14.2	0.35	1.56	6.67	-14.3
MW-13	06/07/23	1.75	15.1	0.35	2.12	6.78	-37.7
MW-14	06/07/23	1.50	13.5	0.26	0.41	7.11	-41.7
	04/02/24	1.20	13.7	0.43	0.09	6.55	-40.0
MW-15	08/01/23	1.75	13.6	0.30	0.48	6.63	118.8
	04/03/24	1.20	11.0	0.38	0.12	6.28	80.3
MW-16	04/03/24	1.20	12.5	0.46	0.21	6.65	59.6
MW-17	4/3/2024	1.6	11.9	0.354	0.16	6.16	77.1
	05/08/24	0.75	13.7	0.42	0.28	5.98	-23.4

Table 3
Groundwater Sampling Field Parameter Measurements
Coit Services Site
Woodinville, Washington

Well Number	Date Measured	Approximate Total Purge Volume (gallons)	Temperature (°C)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	Redox Potential (mV)
Deep Groundwater Monitoring Wells							
DMW-1	06/08/23	1.50	14.6	0.37	0.31	7.93	-56.0
DMW-2	06/08/23	2.00	13.4	0.45	0.83	7.96	-59.6

Notes:

Field parameter measurements in this table were the final measurements prior to collecting each groundwater sample.

Abbreviations and Acronyms:

^{o}C = degrees Celsius
mg/L = milligrams per liter
mS/cm = milliSiemens per centimeter
mV = millivolts

Table 4
Groundwater Geochemical Data
Coit Services Site
Woodinville, Washington

Well ID	Sample Date	Volatile Organic Compounds			Aquifer Redox Conditions				Donor Indicators	
		VC (µg/L)	Ethene (µg/L)	Ethane (µg/L)	DO (mg/L)	Nitrate (mg/L)	Sulfate (mg/L)	Methane (µg/L)	TOC (mg/L)	pH
MTCA Method B Cleanup Level		0.020	--	--	--	10	--	--	--	--
MW-1	4/2/2024	**0.0343**	<1.0	<1.0	**0.19**	<0.25	**2.53**	**640**	**4.80**	**6.53**
MW-2	4/2/2024	**0.0358**	<1.0	<1.0	**0.20**	<0.25	**13.3**	**50**	**3.00**	**6.52**
MW-3	4/2/2024	<0.020	<1.0	<1.0	**0.09**	**1.47**	**7.38**	**180**	**3.30**	**6.30**
MW-4	4/2/2024	**5.06**	<1.0	<1.0	**0.11**	<0.25	<1.00	**3,200**	**9.90**	**6.30**
MW-6	4/2/2024	<0.030	<1.0	<1.0	**0.15**	<0.25	<1.00	**1,800**	**7.60**	**6.53**
MW-7	4/2/2024	<0.030	<1.0	<1.0	**0.09**	<0.25	**6.01**	**1,600**	**6.00**	**6.51**
MW-14	4/2/2024	**1.45**	<1.0	<1.0	**0.09**	<0.25	**3.35**	**1,400**	**6.70**	**6.55**
MW-15	4/3/2024	**0.100 J**	<1.0	<1.0	**0.12**	<0.25	**5.50**	**380**	**7.10**	**6.28**
MW-16	4/3/2024	**0.170 J**	<1.0	<1.0	**0.21**	<0.25	<1.00	**1,200**	**5.60**	**6.65**
MW-17	4/3/2024	--	<1.0	<1.0	**0.16**	<0.25	**12.4**	**33**	**5.20**	**6.16**
	5/8/2024	<0.020	--	--	**0.28**	--	--	--	--	**5.98**

Notes:
Bold text indicates detected analyte.
Green shading indicates detected analyte exceeds applicable cleanup level.
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- = not analyzed

Abbreviations and Acronyms:
µg/L = micrograms per liter
DO = dissolved oxygen
ID = identification
mg/L = milligrams per liter
TOC = total organic carbon
VC = vinyl chloride

Table 5
Groundwater Monitoring Data
Coit Services Site
Woodinville, Washington

Well Number	Approximate Depth of Well Screen (feet)	Top of Casing Elevation (feet)[a]	Date Measured	Depth to Groundwater (feet)[b]	Groundwater Elevation (feet)
Shallow Groundwater Monitoring Wells					
MW-1	2.8 to 22.8	36.43	04/12/22	14.07	22.36
			07/12/22	15.28	21.15
			10/12/22	16.54	19.89
			01/09/23	13.67	22.76
			06/07/23	15.49	20.94
			08/01/23	16.20	20.23
			04/02/24	14.26	22.17
MW-2	2.7 to 22.7	32.09	04/12/22	9.61	22.48
			07/12/22	10.84	21.25
			10/12/22	12.12	19.97
			01/09/23	9.18	22.91
			06/07/23	11.16	20.93
			08/01/23	11.84	20.25
			04/02/24	9.80	22.29
MW-3	3 to 23	35.35	04/12/22	13.94	21.41
			07/12/22	15.08	20.27
			10/12/22	16.01	19.34
			01/09/23	13.50	21.85
			06/07/23	15.22	20.13
			08/01/23	15.84	19.51
			04/02/24	14.13	21.22
MW-4	2.5 to 22.5	35.96	01/09/23	13.52	22.44
			06/07/23	15.30	20.66
			08/01/23	16.02	19.94
			04/02/24	14.14	21.82
MW-5	2.4 to 22.4	36.30	01/09/23	13.56	22.74
			06/07/23	15.34	20.96
			08/01/23	16.11	20.19
			04/02/24	14.14	22.16
MW-6	2.4 to 22.4	36.40	01/09/23	13.47	22.93
			06/07/23	15.32	21.08
			08/01/23	16.07	20.33
			04/02/24	14.06	22.34
MW-7	3 to 23	33.23	01/09/23	10.22	23.01
			06/07/23	12.13	21.10
			08/01/23	12.95	20.28
			04/02/24	10.81	22.42

Table 5
Groundwater Monitoring Data
Coit Services Site
Woodinville, Washington

Well Number	Approximate Depth of Well Screen (feet)	Top of Casing Elevation (feet)[a]	Date Measured	Depth to Groundwater (feet)[b]	Groundwater Elevation (feet)
MW-8	3 to 23	31.46	01/09/23	8.70	22.76
			06/07/23	10.60	20.86
			08/01/23	10.34	21.12
			04/02/24	9.34	22.12
MW-9	2 to 22	31.99	01/09/23	9.30	22.69
			06/07/23	11.14	20.85
			08/01/23	11.85	20.14
			04/02/24	9.95	22.04
MW-10	4 to 19	32.12	06/07/23	11.36	20.76
			08/01/23	12.04	20.08
			04/02/24	10.15	21.97
MW-11	8 to 23	36.41	06/07/23	15.84	20.57
			08/01/24	16.49	19.92
			04/02/24	14.70	21.71
MW-12	4 to 19	33.11	06/07/23	12.34	20.77
			08/01/23	15.01	18.10
			04/02/24	11.08	22.03
MW-13	3 to 18	32.20	06/07/23	11.61	20.59
			08/01/23	12.25	19.95
			04/02/24	10.38	21.82
MW-14	4 to 19	33.15	06/07/23	12.59	20.56
			08/01/23	13.28	20.56
			04/02/24	11.43	21.72
MW-15	5 to 20	33.18	08/01/23	14.00	19.18
			04/02/24	12.50	20.68
MW-16	3 to 19	33.22	04/02/24	12.54	20.68
MW-17	4 to 20	33.36	04/02/24	12.48	20.88
			05/08/24	12.68	20.68
Deep Groundwater Monitoring Wells					
DMW-1	42.5 to 48.5	36.40	06/07/23	15.88	20.52
			08/01/23	16.54	19.86
			04/02/24	14.73	21.67
DMW-2	44 to 49	31.93	06/07/23	11.01	20.92
			08/01/23	11.73	20.20
			04/02/24	9.77	22.16

Notes:

[a] Elevations surveyed relative to the NAVD 88 vertical datum.

[b] Depth below top of well casing.

Table 6
Revised Cost Estimate for Alternative 1 - Enhanced Reductive Dechlorination
Coit Services Site
Woodinville, Washington

Remedy Components:

Bioremediation Injections - Injection of emulsified vegetable oil (EVO) solution to two (2) rows of injection wells with 15-foot spacing. Injection wells installed with 15-foot-long screens set at a bottom depth of 35 feet below ground surface. Row A, targeting the northern vinyl chloride (VC) plume, is 60 feet long and features four (4) injection wells. Row B, targeting the southern VC plume, is 45 feet long and features three (3) injection wells. The target volume is 31,500 gallons containing EVO at 10% by volume. Two (2) injection events over two years are recommended.

Groundwater Monitoring - Groundwater monitoring of 17 shallow and 2 deep monitoring wells for 4 years on a quarterly basis. Analytical testing for full-list VOCs by EPA Method 8260D (including vinyl chloride by 8260D SIM) and annual testing from eleven selected wells for ethene.

REMEDIAL ACTION COMPONENT	QTY	UNIT	UNIT COST	TOTAL COST
Pre-Remediation Activities				
Pre-Remedial Design Investigation	1	LS	$ 45,000	$ 45,000
Injection Points Installation	1	LS	$ 57,200	$ 57,200
Permitting	1	LS	$ 40,000	$ 40,000
EVO Injection Activities				
Injection Substrate	2	events	$ 45,000	$ 90,000
Equipment and Labor	2	events	$ 47,500	$ 95,000
Subtotal				*$ 327,200*
Contingency	20%	of subtotal		$ 65,440
Project Management	8%	of subtotal		$ 27,000
Design	10%	of subtotal		$ 33,000
Construction Oversight and Reporting	20%	of subtotal		$ 66,000
Remedial Action Subtotal (Rounded to Nearest $10,000)				**$ 520,000**
Groundwater Monitoring				
Year 1 of Quarterly Sampling/Reporting	1	LS	$ 43,600	$ 43,600
Year 2 of Quarterly Sampling/Reporting	1	LS	$ 43,600	$ 43,600
Year 3 of Quarterly Sampling/Reporting	1	LS	$ 43,600	$ 43,600
Year 4 of Quarterly Sampling/Reporting	1	LS	$ 43,600	$ 43,600
NPV[1] of Groundwater Monitoring Subtotal (Rounded to Nearest $10,000)				**$ 170,000**
REMEDIAL ACTION ESTIMATED TOTAL (Rounded to Nearest $10,000)				**$ 690,000**

Note:
[1]Net present value (NPV) is based on a 2.5 percent discount rate for a 20-year period, as per OMB Circular No. A-94 (Executive Office of the President, Office of Management and Budget, 2022 Discount Rates memo dated March 15, 2022).

APPENDIX A

Soil Boring Logs

Soil Classification System

MAJOR DIVISIONS			GRAPHIC SYMBOL	USCS LETTER SYMBOL[1]	TYPICAL DESCRIPTIONS [2][3]
COARSE-GRAINED SOIL (More than 50% of material is larger than No. 200 sieve size)	GRAVEL AND GRAVELLY SOIL (More than 50% of coarse fraction retained on No. 4 sieve)	CLEAN GRAVEL (Little or no fines)		GW	Well-graded gravel; gravel/sand mixture(s); little or no fines
				GP	Poorly graded gravel; gravel/sand mixture(s); little or no fines
		GRAVEL WITH FINES (Appreciable amount of fines)		GM	Silty gravel; gravel/sand/silt mixture(s)
				GC	Clayey gravel; gravel/sand/clay mixture(s)
	SAND AND SANDY SOIL (More than 50% of coarse fraction passed through No. 4 sieve)	CLEAN SAND (Little or no fines)		SW	Well-graded sand; gravelly sand; little or no fines
				SP	Poorly graded sand; gravelly sand; little or no fines
		SAND WITH FINES (Appreciable amount of fines)		SM	Silty sand; sand/silt mixture(s)
				SC	Clayey sand; sand/clay mixture(s)
FINE-GRAINED SOIL (More than 50% of material is smaller than No. 200 sieve size)	SILT AND CLAY (Liquid limit less than 50)			ML	Inorganic silt and very fine sand; rock flour; silty or clayey fine sand or clayey silt with low plasticity
				CL	Inorganic clay of low to medium plasticity; gravelly clay; sandy clay; silty clay; lean clay
				OL	Organic silt; organic, silty clay of low plasticity
	SILT AND CLAY (Liquid limit greater than 50)			MH	Inorganic silt; micaceous or diatomaceous fine sand; elastic silt
				CH	Inorganic clay of high plasticity; fat clay
				OH	Organic clay of medium to high plasticity; organic silt
	HIGHLY ORGANIC SOIL			PT	Peat; humus; swamp soil with high organic content

OTHER MATERIALS	GRAPHIC SYMBOL	LETTER SYMBOL	TYPICAL DESCRIPTIONS
PAVEMENT		AC or PC	Asphalt concrete pavement or Portland cement pavement
ROCK		RK	Rock (See Rock Classification)
WOOD		WD	Wood, lumber, wood chips
DEBRIS		DB	Construction debris, garbage

Notes:
1. USCS letter symbols correspond to symbols used by the Unified Soil Classification System and ASTM classification methods. Dual letter symbols (e.g., SP-SM for sand or gravel) indicate soil with an estimated 5-15% fines. Multiple letter symbols (e.g., ML/CL) indicate borderline or multiple soil classifications.
2. Soil descriptions are based on the general approach presented in the Standard Practice for Description and Identification of Soils (Visual-Manual Procedure), outlined in ASTM D 2488. Where laboratory index testing has been conducted, soil classifications are based on the Standard Test Method for Classification of Soils for Engineering Purposes, as outlined in ASTM D 2487.
3. Soil description terminology is based on visual estimates (in the absence of laboratory test data) of the percentages of each soil type and is defined as follows:

Primary Constituent:	> 50% - "GRAVEL," "SAND," "SILT," "CLAY," etc.
Secondary Constituents:	> 30% and ≤ 50% - "very gravelly," "very sandy," "very silty," etc.
	> 15% and ≤ 30% - "gravelly," "sandy," "silty," etc.
Additional Constituents:	> 5% and ≤ 15% - "with gravel," "with sand," "with silt," etc.
	≤ 5% - "with trace gravel," "with trace sand," "with trace silt," etc., or not noted.

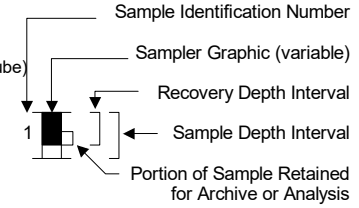
4. Soil density or consistency descriptions are based on judgement using a combination of sampler penetration blow counts, drilling or excavating conditions, field tests, and laboratory tests, as appropriate.

Drilling and Sampling Key

SAMPLER TYPE & METHOD

Graphic	Code	Description
☒	a	3.25-in OD, 2.42-in ID Split Spoon
⋈	b	2.00-in OD, 1.50-in ID Split Spoon
◧	c	Thin-Wall Sampler (aka Shelby Tube)
G	d	Grab Sample
▮	e	Single-Tube Core Barrel
▮	f	Double-Tube Core Barrel
☒	g	2.50-in OD, 2.00-in ID WSDOT
☒	h	3.00-in OD, 2.37-in ID Mod. Calif.
☒	i	Other - See text if applicable
	1	300-lb Hammer, 30-inch Drop
	2	140-lb Hammer, 30-inch Drop
	3	Direct Push
	4	Vibrocore
	5	Other - See text if applicable
	6	Piston Extraction

SAMPLE NUMBER & INTERVAL



Groundwater

- ▽ Approximate water level at time of drilling (ATD)
- ▼ Approximate water level at time after drilling/excavation/well

Field and Lab Test Data

Code	Description
WOR	Weight of Rod
WOH	Weight of Hammer
PP = 1.0	Pocket Penetrometer, tsf
TV = 0.5	Torvane, tsf
PID = 100	Photoionization Detector VOC screening, ppm
W = 10	Moisture Content, %
D = 120	Dry Density, pcf
-200 = 60	Material smaller than No. 200 sieve, %
GS	Grain Size - See separate figure for data
AL	Atterberg Limits - See separate figure for data
UU	Triaxial Unconsolidated Undrained (UU) Strength
CU	Triaxial Consolidated Undrained (CU) Strength
Consol	1-D Consolidation Test
Perm	Permeability Test
CA	Chemical Analysis

LANDAU ASSOCIATES

Coit Services Site
Woodinville, WA

Soil Classification System and Key

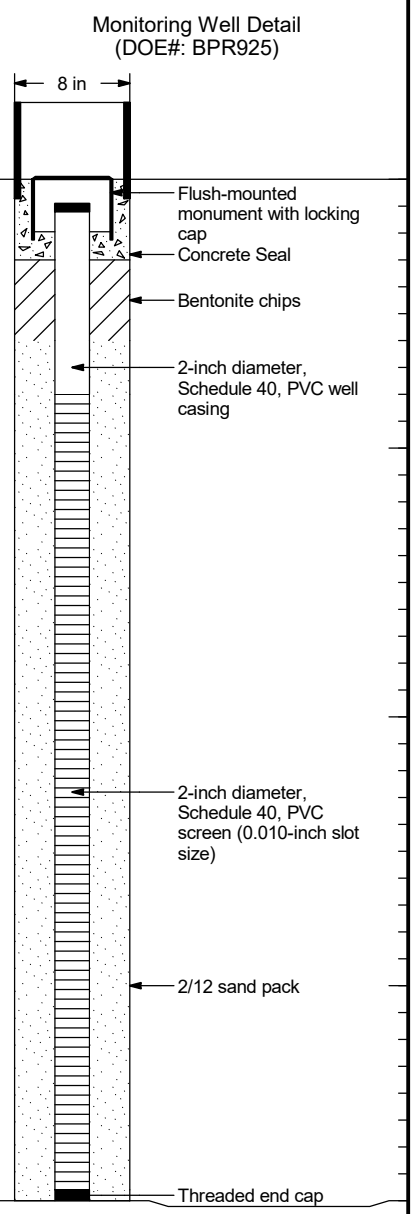
Figure A-1

MW-16

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	PID (ppm)	Graphic Symbol	USCS Symbol	Drilling Method: Hollow-Stem Auger Ground Elevation (ft): 28.64 Drilled By: Cascade Environmental	Water Level
0						SP	Brown, fine to medium **SAND**, trace fine gravel and trace silt, no odor (medium dense, moist)	
5		a2	25	0.0		SP-SM	Gray, fine to medium **SAND** with silt, no odor (loose, moist)	
		a2	16	0.0		OL	Brown, organic **SILT** with trace ogranic roots and wood debris, no odor (soft, moist)	
						ML	Gray **SILT** with fine sand, no odor (soft, moist)	
10		a2	20	0.0		SP-SM	Brown, fine to medium **SAND**, with silt, no odor (loose, moist)	
		a2	50/6	0.0		SP	@ 13.0 feet: Becomes wet Gray, fine to medium **SAND**, no odor (medium dense to very dense, wet)	ATD
15		a2	60	0.0				
		a2	35	0.0				
20								
25								

Boring Completed 03/25/24
Total Depth of Boring = 19.0 ft.

Monitoring Well Completed 03/25/24
Total Depth of Monitoring Well = 19.0 ft.



Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

1789002.020.022 6/28/24 N:\PROJECTS\1789002.GPJ WELL LOG

LANDAU ASSOCIATES

Coit Services Site Woodinville, WA	Log of Monitoring Well MW-16	Figure A-2

MW-17

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	PID (ppm)	Graphic Symbol	USCS Symbol	Water Level
0						SP	
5		a2	55	0.0			
		a2	8	0.0		SP-SM / ML	
10		a2	7	0.0		OL	
		a2	10	0.0			
15		a2	10	0.0			
		a2	45	0.0		SP	ATD
20		a2	40	0.0			
25							

Drilling Method: Hollow-Stem Auger

Ground Elevation (ft): 28.81

Drilled By: Cascade Environmental

Brown, fine to medium **SAND**, no odor (loose, moist)

@ 2 feet: Becomes light-brown

Gray, fine **SAND** with silt, brown mottling, no odor (loose, moist)

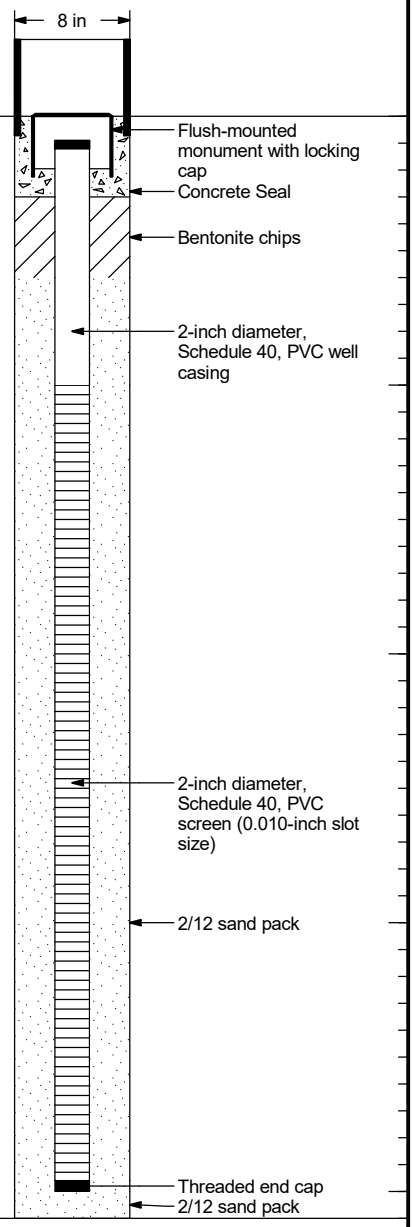
Gray **SILT** with fine sand, brown mottling, no odor (soft, moist)

Brown, organic **SILT** with trace ogranic roots and wood debris, no odor (soft, moist)

Gray, fine **SAND**, no odor (medium dense, wet)

@ 18.0 feet: Becomes wet

Monitoring Well Detail
(DOE#: BPR924)



Boring Completed 03/25/24
Total Depth of Boring = 20.5 ft.

Monitoring Well Completed 03/25/24
Total Depth of Monitoring Well = 20.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

1789002.020.022 6/28/24 N:\PROJECTS\1789002.GPJ WELL LOG

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Coit Services Site
Woodinville, WA

Log of Monitoring Well MW-17

Figure
A-3

APPENDIX B

Groundwater Sample Collection Forms

LANDAU ASSOCIATES

// GROUNDWATER LOW-FLOW SAMPLE COLLECTION FORM

Project Name: Coit Services | Project Number: 1789002.020.022
Event: Groundwater Sampling | Well ID: MW-1
Weather: 50s; overcast | Sample ID: MW-1- 240402
Landau Rep.: Spencer Lo | Date: 04/02/24 | Time: 10:44

WELL INFORMATION

Screened Interval: Top (ft): 2.80 | Bottom (ft): 22.80 | Well Secure? ☐ No ☑ Yes | Damaged? ☑ No ☐ Yes
DTW After Cap Opened (ft): | Time: | Describe:
Static DTW (ft): 12.26 | Time: 9:51 | Flow-Thru Cell Vol.: 200 mL | WQM No.: YSI #2
Begin Purge (Date/Time): 4/2/2024 10:25 | End Purge (Date/Time): 4/2/2024 10:43 | Gallons Purged: 1.2
Water Disposal: ☑ 55-gal drum ☐ Storage tank ☐ Ground ☐ Other:

PURGE DATA

Cell shading indicating purge stabilization is for informational purposes only.

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Purge Vol ≥1 flow-thru cell vol.	Comments/ Observations
Stabilization →	± 3%	± 10%	± 3%	± 0.1 units	± 10 mV	± 10%	± 0.00 ft	(Yes/No)	
10:28	16.2	1.40	461.3	6.68	90.9	-	14.29	yes	clear; no odor
10:31	15.9	1.02	463.6	6.55	91.2	-	14.29	yes	clear; no odor
10:34	15.8	0.30	459.9	6.53	91.5	-	14.29	yes	clear; no odor
10:37	15.8	0.20	452.7	6.53	90.6	-	14.29	yes	clear; no odor
10:40	15.8	0.19	449.8	6.53	87.7	-	14.29	yes	clear; no odor
10:43	15.8	0.19	445.6	6.53	84.0	-	14.29	yes	clear; no odor
10:46									
10:49									
10:52									
10:55									

Sample Description (turbidity, color, odor, sheen): colorless; clear; no odor, no sheen | $Fe\ 2^{+}$ (mg/L): 2.4

PUMP AND MATERIAL INFORMATION

Collection Method: ☐ Bailer ☑ Pump | Type: peristaltic
Material: ☑ Stainless Steel ☑ PVC ☐ Teflon ☑ Polyethylene ☐ Other ☑ Dedicated
Decon Procedure: ☑ Alconox Wash ☐ Tap Rinse ☑ DI Water ☐ Dedicated
☐ Other (describe sequence):

CONFIRMATION PARAMETERS (if applicable per Landau Field Manual)

☐ Applicable

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Comments/Observations
10:50	**15.9**	**0.21**	**442**	**6.53**	**75.2**	**-**	**14.29**	**clear; no odor**

Scheduled Analysis (Circle/Bold Applicable)							Bottle Information	
							Number	Type
Volatiles:	**8260**	**8260 SIM**	8021	524	624		3	40 mL HCl pres. VOA
Semivolatiles:	8270	8270 SIM	8011	625				
Petroleum Hydrocarbons:	NWTPH-HCID	NWTPH-Gx	NWTPH-Dx	NWTPH-Dx SGC				
Total/Dissolved Metals:	6010	6020	200.7	200.8	7471	☐ Field Filtered		
PCBs & Nitroaromatics:	8082	1668	608	8330				
Dioxin-Furans:	1613	8290						
PFAS:	1633	537.1	533	SOP				
Conventionals:	**300.0**	SM2450C	SM2450D	**SM5310C**	**RSK175**		1	250 mL clear poly
Other:							1	250 mL clear NaOH pres. poly

Duplicate or Parent Sample ID: ☐ MS/MSD
Comments: sample intake placed at 14.5 feet below top of casing
Signature: Spencer Lo | Date: 04/02/24

// GROUNDWATER LOW-FLOW SAMPLE COLLECTION FORM

Project Name: Coit Services | Project Number: 1789002.020.022
Event: Groundwater Sampling | Well ID: MW-2
Weather: 50s; overcast | Sample ID: MW-2- 240402
Landau Rep.: Spencer Lo | Date: 04/02/24 | Time: 12:35

WELL INFORMATION

Screened Interval: Top (ft): 2.70 | Bottom (ft): 22.70 | Well Secure? ☐ No ☑ Yes | Damaged? ☑ No ☐ Yes
DTW After Cap Opened (ft): | Time: | Describe:
Static DTW (ft): 9.80 | Time: 9:07 | Flow-Thru Cell Vol.: 200 mL | WQM No.: YSI #2
Begin Purge (Date/Time): 4/2/2024 12:13 | End Purge (Date/Time): 4/2/2024 12:34 | Gallons Purged: 1.4
Water Disposal: ☑ 55-gal drum ☐ Storage tank ☐ Ground ☐ Other:

PURGE DATA

Cell shading indicating purge stabilization is for informational purposes only.

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Purge Vol ≥1 flow-thru cell vol.	Comments/ Observations
Stabilization →	± 3%	± 10%	± 3%	± 0.1 units	± 10 mV	± 10%	± 0.00 ft	(Yes/No)	
12:16	11.3	0.43	345.8	6.58	1.7	-	9.79	yes	clear; no odor
12:19	11.0	0.14	339.2	6.42	-10.2	-	9.79	yes	clear; no odor
12:22	11.0	0.15	331.2	6.41	-15.6	-	9.79	yes	clear; no odor
12:25	11.4	0.16	327.1	6.54	-26.7	-	9.79	yes	clear; no odor
12:28	11.3	0.19	325.6	6.53	-27.3	-	9.79	yes	clear; no odor
12:31	11.4	0.19	326.8	6.52	-28.5	-	9.79	yes	clear; no odor
12:34	11.1	0.20	323.1	6.52	-28.5	-	9.79	yes	clear; no odor
12:37									
12:40									
12:43									

Sample Description (turbidity, color, odor, sheen): colorless; clear; no odor, no sheen | Fe 2^{+} (mg/L): 2.0

PUMP AND MATERIAL INFORMATION

Collection Method: ☐ Bailer ☑ Pump | Type: peristaltic
Material: ☑ Stainless Steel ☑ PVC ☐ Teflon ☑ Polyethylene ☐ Other ☑ Dedicated
Decon Procedure: ☑ Alconox Wash ☐ Tap Rinse ☑ DI Water ☐ Dedicated
☐ Other (describe sequence):

CONFIRMATION PARAMETERS (if applicable per Landau Field Manual)

☐ Applicable

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Comments/Observations
12:41	**11.4**	**0.18**	**320.9**	**6.51**	**-31.1**	**-**	**9.79**	**clear; no odor**

Scheduled Analysis (Circle/Bold Applicable)							Bottle Information	
							Number	Type
Volatiles:	**8260**	**8260 SIM**	8021	524	624		3	40 mL HCl pres. VOA
Semivolatiles:	8270	8270 SIM	8011	625				
Petroleum Hydrocarbons:	NWTPH-HCID	NWTPH-Gx	NWTPH-Dx	NWTPH-Dx SGC				
Total/Dissolved Metals:	6010	6020	200.7	200.8	7471	☐ Field Filtered		
PCBs & Nitroaromatics:	8082	1668	608	8330				
Dioxin-Furans:	1613	8290						
PFAS:	1633	537.1	533	SOP				
Conventionals:	**300.0**	SM2450C	SM2450D	**SM5310C**	**RSK175**		1	250 mL clear poly
Other:							1	250 mL clear NaOH pres. poly

Duplicate or Parent Sample ID: ☐ MS/MSD
Comments: sample intake placed at 12 feet below top of casing
Signature: Spencer Lo | Date: 04/02/24

LANDAU ASSOCIATES

// GROUNDWATER LOW-FLOW SAMPLE COLLECTION FORM

Project Name: Coit Services | Project Number: 1789002.020.022
Event: Groundwater Sampling | Well ID: MW-3
Weather: 50s; overcast | Sample ID: MW-3- 240402
Landau Rep.: Spencer Lo | Date: 04/02/24 | Time: 14:34

WELL INFORMATION

Screened Interval: Top (ft): 3.00 | Bottom (ft): 23.00 | Well Secure? ☐ No ☑ Yes | Damaged? ☑ No ☐ Yes
DTW After Cap Opened (ft): | Time: | Describe:
Static DTW (ft): 14.13 | Time: 9:22 | Flow-Thru Cell Vol.: 200 mL | WQM No.: YSI #2
Begin Purge (Date/Time): 4/2/2024 14:17 | End Purge (Date/Time): 4/2/2024 14:32 | Gallons Purged: 1.0
Water Disposal: ☑ 55-gal drum ☐ Storage tank ☐ Ground ☐ Other:

PURGE DATA

Cell shading indicating purge stabilization is for informational purposes only.

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Purge Vol ≥1 flow-thru cell vol.	Comments/ Observations
Stabilization →	± 3%	± 10%	± 3%	± 0.1 units	± 10 mV	± 10%	± 0.00 ft	(Yes/No)	
14:20	14.8	0.41	438.2	6.34	75.7	-	14.39	yes	clear; no odor
14:23	14.8	0.09	410.7	6.30	65.3	-	14.44	yes	clear; no odor
14:26	14.8	0.09	400.6	6.30	59.0	-	14.46	yes	clear; no odor
14:29	14.8	0.11	397.7	6.30	55.5	-	14.46	yes	clear; no odor
14:32	14.9	0.09	395.3	6.30	52.4	-	14.46	yes	clear; no odor
14:35									
14:38									
14:41									
14:44									
14:47									

Sample Description (turbidity, color, odor, sheen): colorless; clear; no odor, no sheen | $Fe\ 2^{+}$ (mg/L): 0.2

PUMP AND MATERIAL INFORMATION

Collection Method: ☐ Bailer ☑ Pump | Type: peristaltic
Material: ☑ Stainless Steel ☑ PVC ☐ Teflon ☑ Polyethylene ☐ Other ☑ Dedicated
Decon Procedure: ☑ Alconox Wash ☐ Tap Rinse ☑ DI Water ☐ Dedicated
☐ Other (describe sequence):

CONFIRMATION PARAMETERS (if applicable per Landau Field Manual)

☐ Applicable

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Comments/Observations
14:40	**15**	**0.16**	**395.9**	**6.3**	**48**	**-**	**14.46**	**clear; no odor**

Scheduled Analysis (Circle/Bold Applicable)							Bottle Information	
							Number	Type
Volatiles:	**8260**	**8260 SIM**	8021	524	624		3	40 mL HCl pres. VOA
Semivolatiles:	8270	8270 SIM	8011	625				
Petroleum Hydrocarbons:	NWTPH-HCID	NWTPH-Gx	NWTPH-Dx	NWTPH-Dx SGC				
Total/Dissolved Metals:	6010	6020	200.7	200.8	7471	☐ Field Filtered		
PCBs & Nitroaromatics:	8082	1668	608	8330				
Dioxin-Furans:	1613	8290						
PFAS:	1633	537.1	533	SOP				
Conventionals:	**300.0**	SM2450C	SM2450D	**SM5310C**	**RSK175**		1	250 mL clear poly
Other:							1	250 mL clear NaOH pres. poly

Duplicate or Parent Sample ID: ☐ MS/MSD
Comments: sample intake placed at 16.5 feet below top of casing
Signature: Spencer Lo | Date: 04/02/24

LANDAU ASSOCIATES

// GROUNDWATER LOW-FLOW SAMPLE COLLECTION FORM

Project Name: Coit Services | Project Number: 1789002.020.022
Event: Groundwater Sampling | Well ID: MW-4
Weather: 50s; overcast | Sample ID: MW-4- 240402
Landau Rep.: Spencer Lo | Date: 04/02/24 | Time: 13:58

WELL INFORMATION

Screened Interval: Top (ft): 2.50 | Bottom (ft): 22.50 | Well Secure? ☐ No ☑ Yes | Damaged? ☑ No ☐ Yes
DTW After Cap Opened (ft): | Time: | Describe:
Static DTW (ft): 14.14 | Time: 9:33 | Flow-Thru Cell Vol.: 200 mL | WQM No.: YSI #2
Begin Purge (Date/Time): 4/2/2024 13:39 | End Purge (Date/Time): 4/2/2024 13:57 | Gallons Purged: 1.2
Water Disposal: ☑ 55-gal drum ☐ Storage tank ☐ Ground ☐ Other:

PURGE DATA

Cell shading indicating purge stabilization is for informational purposes only.

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Purge Vol ≥1 flow-thru cell vol.	Comments/ Observations
Stabilization →	± 3%	± 10%	± 3%	± 0.1 units	± 10 mV	± 10%	± 0.00 ft	(Yes/No)	
13:42	15.8	0.45	575	6.27	72.5	-	14.15	yes	clear; no odor
13:45	15.6	0.16	566	6.28	36.8	-	14.16	yes	clear; no odor
13:48	15.6	0.10	559	6.28	21.7	-	14.16	yes	clear; no odor
13:51	15.6	0.12	549	6.29	7.2	-	14.16	yes	clear; no odor
13:54	15.5	0.11	541	6.30	-0.7	-	14.16	yes	clear; no odor
13:57	15.5	0.11	540	6.30	-6.5	-	14.16	yes	clear; no odor
14:00									
14:03									
14:06									
14:09									

Sample Description (turbidity, color, odor, sheen): colorless; clear; no odor, no sheen | Fe^{2+} (mg/L): 3.6

PUMP AND MATERIAL INFORMATION

Collection Method: ☐ Bailer ☑ Pump | Type: peristaltic
Material: ☑ Stainless Steel ☑ PVC ☐ Teflon ☑ Polyethylene ☐ Other ☑ Dedicated
Decon Procedure: ☑ Alconox Wash ☐ Tap Rinse ☑ DI Water ☐ Dedicated
☐ Other (describe sequence):

CONFIRMATION PARAMETERS (if applicable per Landau Field Manual)

☐ Applicable

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Comments/Observations
14:05	**15.8**	**0.17**	**536**	**6.32**	**-16.4**	**-**	**14.16**	**clear; no odor**

Scheduled Analysis (Circle/Bold Applicable)							Bottle Information	
							Number	Type
Volatiles:	**8260**	**8260 SIM**	8021	524	624		3	40 mL HCl pres. VOA
Semivolatiles:	8270	8270 SIM	8011	625				
Petroleum Hydrocarbons:	NWTPH-HCID	NWTPH-Gx	NWTPH-Dx	NWTPH-Dx SGC				
Total/Dissolved Metals:	6010	6020	200.7	200.8	7471	☐ Field Filtered		
PCBs & Nitroaromatics:	8082	1668	608	8330				
Dioxin-Furans:	1613	8290						
PFAS:	1633	537.1	533	SOP				
Conventionals:	**300.0**	SM2450C	SM2450D	**SM5310C**	**RSK175**		1	250 mL clear poly
Other:							1	250 mL clear NaOH pres. poly

Duplicate or Parent Sample ID: ☐ MS/MSD
Comments: sample intake placed at 16.5 feet below top of casing
Signature: Spencer Lo | Date: 04/02/24

LANDAU ASSOCIATES

// GROUNDWATER LOW-FLOW SAMPLE COLLECTION FORM

Project Name: Coit Services | Project Number: 1789002.020.022
Event: Groundwater Sampling | Well ID: MW-6
Weather: 50s; overcast | Sample ID: MW-6- 240402
Landau Rep.: Spencer Lo | Date: 04/02/24 | Time: 11:16

WELL INFORMATION

Screened Interval: Top (ft): 2.40 | Bottom (ft): 22.40 | Well Secure? ☐ No ☑ Yes | Damaged? ☑ No ☐ Yes
DTW After Cap Opened (ft): | Time: | Describe:
Static DTW (ft): 14.06 | Time: 9:44 | Flow-Thru Cell Vol.: 200 mL | WQM No.: YSI #2
Begin Purge (Date/Time): 4/2/2024 10:57 | End Purge (Date/Time): 4/2/2024 11:15 | Gallons Purged: 1.2
Water Disposal: ☑ 55-gal drum ☐ Storage tank ☐ Ground ☐ Other:

PURGE DATA

Cell shading indicating purge stabilization is for informational purposes only.

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Purge Vol ≥1 flow-thru cell vol.	Comments/ Observations
Stabilization →	± 3%	± 10%	± 3%	± 0.1 units	± 10 mV	± 10%	± 0.00 ft	(Yes/No)	
11:00	15.8	0.43	507	6.51	99.1	-	14.08	yes	clear; no odor
11:03	15.7	0.24	511	6.51	95.8	-	14.07	yes	clear; no odor
11:06	15.6	0.19	509	6.52	91.9	-	14.08	yes	clear; no odor
11:09	15.6	0.16	492	6.53	86.8	-	14.08	yes	clear; no odor
11:12	15.6	0.15	492	6.53	83.6	-	14.08	yes	clear; no odor
11:15	15.6	0.15	479	6.53	79.4	-	14.08	yes	clear; no odor
11:18									
11:21									
11:24									
11:27									

Sample Description (turbidity, color, odor, sheen): colorless; clear; no odor, no sheen | Fe 2^{+} (mg/L): 3.2

PUMP AND MATERIAL INFORMATION

Collection Method: ☐ Bailer ☑ Pump | Type: peristaltic
Material: ☑ Stainless Steel ☑ PVC ☐ Teflon ☑ Polyethylene ☐ Other ☑ Dedicated
Decon Procedure: ☑ Alconox Wash ☐ Tap Rinse ☑ DI Water ☐ Dedicated
☐ Other (describe sequence):

CONFIRMATION PARAMETERS (if applicable per Landau Field Manual)

☐ Applicable

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Comments/Observations
11:22	**15.7**	**0.17**	**471**	**6.54**	**70.1**	**-**	**14.08**	**clear; no odor**

Scheduled Analysis (Circle/Bold Applicable)							Bottle Information	
							Number	Type
Volatiles:	**8260**	**8260 SIM**	8021	524	624		3	40 mL HCl pres. VOA
Semivolatiles:	8270	8270 SIM	8011	625				
Petroleum Hydrocarbons:	NWTPH-HCID	NWTPH-Gx	NWTPH-Dx	NWTPH-Dx SGC				
Total/Dissolved Metals:	6010	6020	200.7	200.8	7471	☐ Field Filtered		
PCBs & Nitroaromatics:	8082	1668	608	8330				
Dioxin-Furans:	1613	8290						
PFAS:	1633	537.1	533	SOP				
Conventionals:	**300.0**	SM2450C	SM2450D	**SM5310C**	**RSK175**		1	250 mL clear poly
Other:							1	250 mL clear NaOH pres. poly

Duplicate or Parent Sample ID: ☐ MS/MSD
Comments: sample intake placed at 16.5 feet below top of casing
Signature: Spencer Lo | Date: 04/02/24

LANDAU ASSOCIATES

// GROUNDWATER LOW-FLOW SAMPLE COLLECTION FORM

Project Name: Coit Services | Project Number: 1789002.020.022
Event: Groundwater Sampling | Well ID: MW-7
Weather: 50s; overcast | Sample ID: MW-7- 240402
Landau Rep.: Spencer Lo | Date: 04/02/24 | Time: 11:58

WELL INFORMATION

Screened Interval: Top (ft): 3.00 | Bottom (ft): 23.00 | Well Secure? ☐ No ☑ Yes | Damaged? ☑ No ☐ Yes
DTW After Cap Opened (ft): | Time: | Describe:
Static DTW (ft): 10.81 | Time: 9:47 | Flow-Thru Cell Vol.: 200 mL | WQM No.: YSI #2
Begin Purge (Date/Time): 4/2/2024 11:36 | End Purge (Date/Time): 4/2/2024 11:57 | Gallons Purged: 1.4
Water Disposal: ☑ 55-gal drum ☐ Storage tank ☐ Ground ☐ Other:

PURGE DATA

Cell shading indicating purge stabilization is for informational purposes only.

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Purge Vol ≥1 flow-thru cell vol.	Comments/ Observations
Stabilization →	± 3%	± 10%	± 3%	± 0.1 units	± 10 mV	± 10%	± 0.00 ft	(Yes/No)	
11:39	12.4	0.44	383.9	6.52	73.4	-	10.81	yes	clear; no odor
11:42	12.2	0.12	413	6.39	45.1	-	10.81	yes	clear; no odor
11:45	12.3	0.09	413.6	6.39	20.1	-	10.81	yes	clear; no odor
11:48	12.2	0.08	401.3	6.45	4.2	-	10.81	yes	clear; no odor
11:51	12.4	0.09	395.1	6.52	-7.2	-	10.81	yes	clear; no odor
11:54	12.5	0.10	396.7	6.52	-11.0	-	10.81	yes	clear; no odor
11:57	12.5	0.09	398.8	6.51	-16.3	-	10.81	yes	clear; no odor
12:00									
12:03									
12:06									

Sample Description (turbidity, color, odor, sheen): colorless; clear; no odor, no sheen | Fe 2^{+} (mg/L): 2.0

PUMP AND MATERIAL INFORMATION

Collection Method: ☐ Bailer ☑ Pump | Type: peristaltic
Material: ☑ Stainless Steel ☑ PVC ☐ Teflon ☑ Polyethylene ☐ Other ☑ Dedicated
Decon Procedure: ☑ Alconox Wash ☐ Tap Rinse ☑ DI Water ☐ Dedicated
☐ Other (describe sequence):

CONFIRMATION PARAMETERS (if applicable per Landau Field Manual)

☐ Applicable

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Comments/Observations
12:05	**12.7**	**0.12**	**374.5**	**6.52**	**-23.1**	**-**	**10.81**	**clear; no odor**

Scheduled Analysis (Circle/Bold Applicable)							Bottle Information	
							Number	Type
Volatiles:	**8260**	**8260 SIM**	8021	524	624		3	40 mL HCl pres. VOA
Semivolatiles:	8270	8270 SIM	8011	625				
Petroleum Hydrocarbons:	NWTPH-HCID	NWTPH-Gx	NWTPH-Dx	NWTPH-Dx SGC				
Total/Dissolved Metals:	6010	6020	200.7	200.8	7471	☐ Field Filtered		
PCBs & Nitroaromatics:	8082	1668	608	8330				
Dioxin-Furans:	1613	8290						
PFAS:	1633	537.1	533	SOP				
Conventionals:	**300.0**	SM2450C	SM2450D	**SM5310C**	**RSK175**		1	250 mL clear poly
Other:							1	250 mL clear NaOH pres. poly

Duplicate or Parent Sample ID: ☐ MS/MSD
Comments: sample intake placed at 13.0 feet below top of casing
Signature: Spencer Lo | Date: 04/02/24

// GROUNDWATER LOW-FLOW SAMPLE COLLECTION FORM

Project Name: Coit Services | Project Number: 1789002.020.022
Event: Groundwater Sampling | Well ID: MW-14
Weather: 50s; overcast | Sample ID: MW-14- 240402
Landau Rep.: Spencer Lo | Date: 04/02/24 | Time: 13:09

WELL INFORMATION

Screened Interval: Top (ft): 4.00 | Bottom (ft): 19.00 | Well Secure? ☐ No ☑ Yes | Damaged? ☑ No ☐ Yes
DTW After Cap Opened (ft): | Time: | Describe:
Static DTW (ft): 11.43 | Time: 9:20 | Flow-Thru Cell Vol.: 200 mL | WQM No.: YSI #2
Begin Purge (Date/Time): 4/2/2024 12:50 | End Purge (Date/Time): 4/2/2024 13:08 | Gallons Purged: 1.2
Water Disposal: ☑ 55-gal drum ☐ Storage tank ☐ Ground ☐ Other:

PURGE DATA

Cell shading indicating purge stabilization is for informational purposes only.

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Purge Vol ≥1 flow-thru cell vol.	Comments/ Observations
Stabilization →	± 3%	± 10%	± 3%	± 0.1 units	± 10 mV	± 10%	± 0.00 ft	(Yes/No)	
12:53	14.0	0.33	462.3	6.52	-9.5	-	11.43	yes	clear; no odor
12:56	13.9	0.15	459.1	6.54	-19.6	-	11.44	yes	clear; no odor
12:59	13.7	0.13	450.8	6.54	-27.3	-	11.44	yes	clear; no odor
13:02	13.8	0.10	443.2	6.55	-30.9	-	11.45	yes	clear; no odor
13:05	13.9	0.10	440.4	6.55	-37.7	-	11.44	yes	clear; no odor
13:08	13.7	0.09	433.2	6.55	-40.0	-	11.44	yes	clear; no odor
13:11									
13:14									
13:17									
13:20									

Sample Description (turbidity, color, odor, sheen): colorless; clear; no odor, no sheen | Fe 2^{+} (mg/L): 4.4

PUMP AND MATERIAL INFORMATION

Collection Method: ☐ Bailer ☑ Pump | Type: peristaltic
Material: ☑ Stainless Steel ☑ PVC ☐ Teflon ☑ Polyethylene ☐ Other ☑ Dedicated
Decon Procedure: ☑ Alconox Wash ☐ Tap Rinse ☑ DI Water ☐ Dedicated
☐ Other (describe sequence):

CONFIRMATION PARAMETERS (if applicable per Landau Field Manual)

☐ Applicable

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Comments/Observations
13:16	**13.9**	**0.11**	**430**	**6.54**	**-43.2**	**-**	**11.44**	**clear; no odor**

Scheduled Analysis (Circle/Bold Applicable)							Bottle Information	
							Number	Type
Volatiles:	**8260**	**8260 SIM**	8021	524	624		3	40 mL HCl pres. VOA
Semivolatiles:	8270	8270 SIM	8011	625				
Petroleum Hydrocarbons:	NWTPH-HCID	NWTPH-Gx	NWTPH-Dx	NWTPH-Dx SGC				
Total/Dissolved Metals:	6010	6020	200.7	200.8	7471	☐ Field Filtered		
PCBs & Nitroaromatics:	8082	1668	608	8330				
Dioxin-Furans:	1613	8290						
PFAS:	1633	537.1	533	SOP				
Conventionals:	**300.0**	SM2450C	SM2450D	**SM5310C**	**RSK175**		1	250 mL clear poly
Other:							1	250 mL clear NaOH pres. poly

Duplicate or Parent Sample ID: ☐ MS/MSD
Comments: sample intake placed at 13.5 feet below top of casing
Signature: Picture | Date: 04/02/24

LANDAU ASSOCIATES

// GROUNDWATER LOW-FLOW SAMPLE COLLECTION FORM

Project Name: Coit Services | Project Number: 1789002.020.022
Event: Groundwater Sampling | Well ID: MW-15
Weather: 50s; light rain | Sample ID: MW-15- 240403
Landau Rep.: Spencer Lo | Date: 04/03/24 | Time: 10:31

WELL INFORMATION

Screened Interval: Top (ft): 5.00 | Bottom (ft): 20.00 | Well Secure? ☐ No ☑ Yes | Damaged? ☑ No ☐ Yes
DTW After Cap Opened (ft): | Time: | Describe:
Static DTW (ft): 12.11 | Time: 10:10 | Flow-Thru Cell Vol.: 200 mL | WQM No.: YSI #2
Begin Purge (Date/Time): 4/3/2024 10:12 | End Purge (Date/Time): 4/3/2024 10:30 | Gallons Purged: 1.2
Water Disposal: ☑ 55-gal drum ☐ Storage tank ☐ Ground ☐ Other:

PURGE DATA

Cell shading indicating purge stabilization is for informational purposes only.

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Purge Vol ≥1 flow-thru cell vol.	Comments/ Observations
Stabilization →	± 3%	± 10%	± 3%	± 0.1 units	± 10 mV	± 10%	± 0.00 ft	(Yes/No)	
10:15	10.4	0.25	361.2	6.21	100.1	-	12.15	yes	clear; no odor
10:18	10.7	0.22	381.5	6.13	98.0	-	12.15	yes	clear; no odor
10:21	10.9	0.14	380.9	6.28	87.9	-	12.15	yes	clear; no odor
10:24	10.9	0.12	383.9	6.27	86.5	-	12.15	yes	clear; no odor
10:27	11.0	0.11	390.3	6.29	83.9	-	12.15	yes	clear; no odor
10:30	11.0	0.12	381.2	6.28	80.3	-	12.15	yes	clear; no odor
10:33									
10:36									
10:39									
10:42									

Sample Description (turbidity, color, odor, sheen): colorless; clear; no odor, no sheen | $Fe\ 2^{+}$ (mg/L): 4.0

PUMP AND MATERIAL INFORMATION

Collection Method: ☐ Bailer ☑ Pump | Type: peristaltic
Material: ☑ Stainless Steel ☑ PVC ☐ Teflon ☑ Polyethylene ☐ Other ☑ Dedicated
Decon Procedure: ☑ Alconox Wash ☐ Tap Rinse ☑ DI Water ☐ Dedicated
☐ Other (describe sequence):

CONFIRMATION PARAMETERS (if applicable per Landau Field Manual)

☐ Applicable

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Comments/Observations
10:39	**11.1**	**0.14**	**394.4**	**6.28**	**74.3**	**-**	**12.15**	**clear; no odor**

Scheduled Analysis (Circle/Bold Applicable)							Bottle Information	
							Number	Type
Volatiles:	**8260**	**8260 SIM**	8021	524	624		3	40 mL HCl pres. VOA
Semivolatiles:	8270	8270 SIM	8011	625				
Petroleum Hydrocarbons:	NWTPH-HCID	NWTPH-Gx	NWTPH-Dx	NWTPH-Dx SGC				
Total/Dissolved Metals:	6010	6020	200.7	200.8	7471	☐ Field Filtered		
PCBs & Nitroaromatics:	8082	1668	608	8330				
Dioxin-Furans:	1613	8290						
PFAS:	1633	537.1	533	SOP				
Conventionals:	**300.0**	SM2450C	SM2450D	**SM5310C**	**RSK175**		1	250 mL clear poly
Other:							1	250 mL clear NaOH pres. poly

Duplicate or Parent Sample ID: ☐ MS/MSD
Comments: sample intake placed at 14.5 feet below top of casing
Signature: Spencer Lo | Date: 04/03/24

LANDAU ASSOCIATES

// GROUNDWATER LOW-FLOW SAMPLE COLLECTION FORM

Project Name: Coit Services | Project Number: 1789002.020.022
Event: Groundwater Sampling | Well ID: MW-16
Weather: 50s; light rain | Sample ID: MW-16- 240403
Landau Rep.: Spencer Lo | Date: 04/03/24 | Time: 9:56

WELL INFORMATION

Screened Interval: Top (ft): 4.00 | Bottom (ft): 19.00 | Well Secure? ☐ No ☑ Yes | Damaged? ☑ No ☐ Yes
DTW After Cap Opened (ft): | Time: | Describe:
Static DTW (ft): 12.32 | Time: 9:34 | Flow-Thru Cell Vol.: 200 mL | WQM No.: YSI #2
Begin Purge (Date/Time): 4/3/2024 9:37 | End Purge (Date/Time): 4/3/2024 9:55 | Gallons Purged: 1.2
Water Disposal: ☑ 55-gal drum ☐ Storage tank ☐ Ground ☐ Other:

PURGE DATA

Cell shading indicating purge stabilization is for informational purposes only.

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Purge Vol ≥1 flow-thru cell vol.	Comments/ Observations
Stabilization →	± 3%	± 10%	± 3%	± 0.1 units	± 10 mV	± 10%	± 0.00 ft	(Yes/No)	
9:40	11.9	0.99	473.4	6.93	42.5	-	12.33	yes	clear; no odor
9:43	12.5	0.46	469.8	6.58	62.1	-	12.34	yes	clear; no odor
9:46	12.5	0.33	464	6.54	67.4	-	12.36	yes	clear; no odor
9:49	12.6	0.23	460.9	6.63	63.7	-	12.36	yes	clear; no odor
9:52	12.5	0.21	459.9	6.64	62.8	-	12.38	yes	clear; no odor
9:55	12.5	0.21	457.1	6.65	59.6	-	12.38	yes	clear; no odor
9:58									
10:01									
10:04									
10:07									

Sample Description (turbidity, color, odor, sheen): colorless; clear; no odor, no sheen | Fe 2^{+} (mg/L): 4.2

PUMP AND MATERIAL INFORMATION

Collection Method: ☐ Bailer ☑ Pump | Type: peristaltic
Material: ☑ Stainless Steel ☑ PVC ☐ Teflon ☑ Polyethylene ☐ Other ☑ Dedicated
Decon Procedure: ☑ Alconox Wash ☐ Tap Rinse ☑ DI Water ☐ Dedicated
☐ Other (describe sequence):

CONFIRMATION PARAMETERS (if applicable per Landau Field Manual)

☐ Applicable

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Comments/Observations
10:03	**12.5**	**0.23**	**463.4**	**6.62**	**54.6**	**-**	**12.36**	**clear; no odor**

Scheduled Analysis (Circle/Bold Applicable)							Bottle Information	
							Number	Type
Volatiles:	**8260**	**8260 SIM**	8021	524	624		3	40 mL HCl pres. VOA
Semivolatiles:	8270	8270 SIM	8011	625				
Petroleum Hydrocarbons:	NWTPH-HCID	NWTPH-Gx	NWTPH-Dx	NWTPH-Dx SGC				
Total/Dissolved Metals:	6010	6020	200.7	200.8	7471	☐ Field Filtered		
PCBs & Nitroaromatics:	8082	1668	608	8330				
Dioxin-Furans:	1613	8290						
PFAS:	1633	537.1	533	SOP				
Conventionals:	**300.0**	SM2450C	SM2450D	**SM5310C**	**RSK175**		1	250 mL clear poly
Other:							1	250 mL clear NaOH pres. poly

Duplicate or Parent Sample ID: ☐ MS/MSD
Comments: sample intake placed at 14.5 feet below top of casing
Signature: Spencer Lo | Date: 04/03/24

LANDAU ASSOCIATES

// GROUNDWATER LOW-FLOW SAMPLE COLLECTION FORM

Project Name: Coit Services | Project Number: 1789002.020.022
Event: Groundwater Sampling | Well ID: MW-17
Weather: 50s; light rain | Sample ID: MW-17- 240403
Landau Rep.: Spencer Lo | Date: 04/03/24 | Time: 11:17

WELL INFORMATION

Screened Interval: Top (ft): 5.00 | Bottom (ft): 20.00 | Well Secure? ☐ No ☑ Yes | Damaged? ☑ No ☐ Yes
DTW After Cap Opened (ft): | Time: | Describe:
Static DTW (ft): 12.27 | Time: 10:48 | Flow-Thru Cell Vol.: 200 mL | WQM No.: YSI #2
Begin Purge (Date/Time): 4/3/2024 10:52 | End Purge (Date/Time): 4/3/2024 11:16 | Gallons Purged: 1.6
Water Disposal: ☑ 55-gal drum ☐ Storage tank ☐ Ground ☐ Other:

PURGE DATA

Cell shading indicating purge stabilization is for informational purposes only.

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Purge Vol ≥1 flow-thru cell vol.	Comments/ Observations
Stabilization →	± 3%	± 10%	± 3%	± 0.1 units	± 10 mV	± 10%	± 0.00 ft	(Yes/No)	
10:55	11.5	0.45	360.6	6.27	105.1	-	12.33	yes	clear; no odor
10:58	11.8	0.33	356.2	6.22	103.3	-	12.42	yes	clear; no odor
11:01	11.9	0.35	353.8	6.20	100.4	-	12.49	yes	clear; no odor
11:04	12.0	0.31	352	6.18	94.4	-	12.53	yes	clear; no odor
11:07	12.0	0.18	348.9	6.17	90.8	-	12.54	yes	clear; no odor
11:10	12.0	0.16	352.7	6.18	86.9	-	12.56	yes	clear; no odor
11:13	12.0	0.15	357.4	6.18	81.2	-	12.58	yes	clear; no odor
11:16	11.9	0.16	354.1	6.16	77.1	-	12.58	yes	clear; no odor
11:19									
11:22									

Sample Description (turbidity, color, odor, sheen): colorless; clear; no odor, no sheen | Fe 2^{+} (mg/L): 3.6

PUMP AND MATERIAL INFORMATION

Collection Method: ☐ Bailer ☑ Pump | Type: peristaltic
Material: ☑ Stainless Steel ☑ PVC ☐ Teflon ☑ Polyethylene ☐ Other ☑ Dedicated
Decon Procedure: ☑ Alconox Wash ☐ Tap Rinse ☑ DI Water ☐ Dedicated
☐ Other (describe sequence):

CONFIRMATION PARAMETERS (if applicable per Landau Field Manual)

☐ Applicable

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Comments/Observations
11:28	**11.9**	**0.26**	**359.8**	**6.2**	**70.3**	**-**	**12.58**	**clear; no odor**

Scheduled Analysis (Circle/Bold Applicable)							Bottle Information	
							Number	Type
Volatiles:	**8260**	**8260 SIM**	8021	524	624		3	40 mL HCl pres. VOA
Semivolatiles:	8270	8270 SIM	8011	625				
Petroleum Hydrocarbons:	NWTPH-HCID	NWTPH-Gx	NWTPH-Dx	NWTPH-Dx SGC				
Total/Dissolved Metals:	6010	6020	200.7	200.8	7471	☐ Field Filtered		
PCBs & Nitroaromatics:	8082	1668	608	8330				
Dioxin-Furans:	1613	8290						
PFAS:	1633	537.1	533	SOP				
Conventionals:	**300.0**	SM2450C	SM2450D	**SM5310C**	**RSK175**		1	250 mL clear poly
Other:							1	250 mL clear NaOH pres. poly

Duplicate or Parent Sample ID: ☐ MS/MSD
Comments: sample intake placed at 14.5 feet below top of casing
Signature: Spencer Lo | Date: 04/03/24

// GROUNDWATER LOW-FLOW SAMPLE COLLECTION FORM

Project Name: Coit Services | Project Number: 1789002.020.023
Event: Groundwater Sampling | Well ID: MW-17
Weather: Sunny ~68 degrees | Sample ID: MW-17- 240508
Landau Rep.: BLH | Date: 05/08/24 | Time: 14:05

WELL INFORMATION

Screened Interval: Top (ft): 5.00 | Bottom (ft): 20.00 | Well Secure? ☐ No ☑ Yes | Damaged? ☑ No ☐ Yes
DTW After Cap Opened (ft): 12.68 | Time: 13:30 | Describe: Flush mount in grass
Static DTW (ft): 12.68 | Time: 13:36 | Flow-Thru Cell Vol.: 200mL | WQM No.: Hanna #1
Begin Purge (Date/Time): 5/8/2024 13:38 | End Purge (Date/Time): 5/8/2024 14:01 | Gallons Purged: 3/4 gallon
Water Disposal: ☑ 55-gal drum ☐ Storage tank ☐ Ground ☐ Other:

PURGE DATA

Cell shading indicating purge stabilization is for informational purposes only.

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Purge Vol ≥1 flow-thru cell vol.	Comments/ Observations
Stabilization →	± 3%	± 10%	± 3%	± 0.1 units	± 10 mV	± 10%	± 0.00 ft	(Yes/No)	
13:44	13.5	0.43	443	5.97	-22.4		12.94	Yes	
13:47	13.5	0.39	448	5.93	-20.2		12.96	Yes	
13:51	13.6	0.34	439	5.95	-21.6		13.01	Yes	
13:54	13.3	0.31	434	5.97	-22.1		13.03	Yes	slowed pump rate to reduce drawdown
13:57	13.7	0.29	425	5.98	-23.8		12.99	Yes	
14:00	13.7	0.28	424	5.98	-23.4		12.99	Yes	

Sample Description (turbidity, color, odor, sheen): colorless / clear / odorless / no sheen | Fe 2^{+} (mg/L):

PUMP AND MATERIAL INFORMATION

Collection Method: ☐ Bailer ☑ Pump | Type: Peristaltic
Material: ☐ Stainless Steel ☐ PVC ☐ Teflon ☐ Polyethylene ☐ Other ☑ Dedicated
Decon Procedure: ☐ Alconox Wash ☐ Tap Rinse ☐ DI Water ☑ Dedicated
☐ Other (describe sequence):

CONFIRMATION PARAMETERS (if applicable per Landau Field Manual)

☐ Applicable

Time	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (S.U)	ORP (mV)	Turbidity (NTU)	DTW (ft)	Comments/Observations

Scheduled Analysis (Circle/Bold Applicable)							Bottle Information	
							Number	Type
Volatiles:	8260	**8260 SIM**	8021	524	624		6	VOA
Semivolatiles:	8270	8270 SIM	8011	625				
Petroleum Hydrocarbons:	NWTPH-HCID	NWTPH-Gx	NWTPH-Dx	NWTPH-Dx SGC				
Total/Dissolved Metals:	6010	6020	200.7	200.8	7471	☐ Field Filtered		
PCBs & Nitroaromatics:	8082	1668	608	8330				
Dioxin-Furans:	1613	8290						
PFAS:	1633	537.1	533	SOP				
Conventionals:	300.0	SM2450C	SM2450D	SM5310C	RSK175			
Other:								

Duplicate or Parent Sample ID: ☐ MS/MSD
Comments: intake ~15 ft below TOC, about 2 ft below water
Signature: BLH | Date: 05/08/24

APPENDIX C

Laboratory Reports

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Friday, April 26, 2024

Mike Staton
Landau Associates (Northgate)
155 NE 100th St #302
Seattle, WA 98125

RE: A4D0874 - Coit Services - 1789002.020.022

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A4D0874, which was received by the laboratory on 4/3/2024 at 10:22:00AM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: pnerenberg@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information
Acceptable Receipt Temperature is less than, or equal to, 6 degC (not frozen), or received on ice the same day as sampling.
(See Cooler Receipt Form for details)
Default Cooler 0.4 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Landau Associates (Northgate)	Project: **Coit Services**	
155 NE 100th St #302	Project Number: **1789002.020.022**	**Report ID:**
Seattle, WA 98125	Project Manager: **Mike Staton**	**A4D0874 - 04 26 24 1848**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1-240402	A4D0874-01	Water	04/02/24 10:44	04/03/24 10:22
MW-2-240402	A4D0874-02	Water	04/02/24 12:35	04/03/24 10:22
MW-3-240402	A4D0874-03	Water	04/02/24 14:34	04/03/24 10:22
MW-4-240402	A4D0874-04	Water	04/02/24 13:58	04/03/24 10:22
MW-6-240402	A4D0874-05	Water	04/02/24 11:16	04/03/24 10:22
MW-7-240402	A4D0874-06	Water	04/02/24 11:58	04/03/24 10:22
MW-14-240402	A4D0874-07	Water	04/02/24 13:09	04/03/24 10:22

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

Landau Associates (Northgate)	Project: **Coit Services**	
155 NE 100th St #302	Project Number: **1789002.020.022**	**Report ID:**
Seattle, WA 98125	Project Manager: **Mike Staton**	**A4D0874 - 04 26 24 1848**

ANALYTICAL SAMPLE RESULTS

Halogenated Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-4-240402 (A4D0874-04)				**Matrix: Water**		**Batch: 24D0170**		
Vinyl chloride	**5.06**	0.100	0.200	ug/L	1	04/04/24 16:32	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery: 110 %*		*Limits: 80-120 %*	*1*	*04/04/24 16:32*	*EPA 8260D*	
Toluene-d8 (Surr)			*98 %*	*80-120 %*	*1*	*04/04/24 16:32*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*94 %*	*80-120 %*	*1*	*04/04/24 16:32*	*EPA 8260D*	

Apex Laboratories

Philip Nerenberg, Lab Director

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503-718-2323
ORELAP ID: **OR100062**

Landau Associates (Northgate)	Project: **Coit Services**	
155 NE 100th St #302	Project Number: **1789002.020.022**	**Report ID:**
Seattle, WA 98125	Project Manager: **Mike Staton**	**A4D0874 - 04 26 24 1848**

ANALYTICAL SAMPLE RESULTS

Vinyl Chloride by EPA 8260D SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-1-240402 (A4D0874-01)				**Matrix: Water**		**Batch: 24D0504**		
Vinyl chloride	**0.0343**	0.0100	0.0200	ug/L	1	04/14/24 18:06	EPA 8260D SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*100 %*	*Limits: 80-120 %*	*1*	*04/14/24 18:06*	*EPA 8260D SIM*	
Toluene-d8 (Surr)			*101 %*	*80-120 %*	*1*	*04/14/24 18:06*	*EPA 8260D SIM*	
4-Bromofluorobenzene (Surr)			*101 %*	*80-120 %*	*1*	*04/14/24 18:06*	*EPA 8260D SIM*	
MW-2-240402 (A4D0874-02)				**Matrix: Water**		**Batch: 24D0504**		
Vinyl chloride	**0.0358**	0.0100	0.0200	ug/L	1	04/14/24 18:33	EPA 8260D SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*100 %*	*Limits: 80-120 %*	*1*	*04/14/24 18:33*	*EPA 8260D SIM*	
Toluene-d8 (Surr)			*101 %*	*80-120 %*	*1*	*04/14/24 18:33*	*EPA 8260D SIM*	
4-Bromofluorobenzene (Surr)			*101 %*	*80-120 %*	*1*	*04/14/24 18:33*	*EPA 8260D SIM*	
MW-3-240402 (A4D0874-03)				**Matrix: Water**		**Batch: 24D0504**		
Vinyl chloride	ND	0.0100	0.0200	ug/L	1	04/14/24 19:00	EPA 8260D SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*101 %*	*Limits: 80-120 %*	*1*	*04/14/24 19:00*	*EPA 8260D SIM*	
Toluene-d8 (Surr)			*101 %*	*80-120 %*	*1*	*04/14/24 19:00*	*EPA 8260D SIM*	
4-Bromofluorobenzene (Surr)			*101 %*	*80-120 %*	*1*	*04/14/24 19:00*	*EPA 8260D SIM*	
MW-6-240402 (A4D0874-05)				**Matrix: Water**		**Batch: 24D0504**		
Vinyl chloride	ND	0.0300	0.0300	ug/L	1	04/14/24 19:54	EPA 8260D SIM	R-06
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*101 %*	*Limits: 80-120 %*	*1*	*04/14/24 19:54*	*EPA 8260D SIM*	
Toluene-d8 (Surr)			*101 %*	*80-120 %*	*1*	*04/14/24 19:54*	*EPA 8260D SIM*	
4-Bromofluorobenzene (Surr)			*101 %*	*80-120 %*	*1*	*04/14/24 19:54*	*EPA 8260D SIM*	
MW-7-240402 (A4D0874-06)				**Matrix: Water**		**Batch: 24D0504**		
Vinyl chloride	ND	0.0300	0.0300	ug/L	1	04/14/24 20:20	EPA 8260D SIM	R-06
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*100 %*	*Limits: 80-120 %*	*1*	*04/14/24 20:20*	*EPA 8260D SIM*	
Toluene-d8 (Surr)			*102 %*	*80-120 %*	*1*	*04/14/24 20:20*	*EPA 8260D SIM*	
4-Bromofluorobenzene (Surr)			*100 %*	*80-120 %*	*1*	*04/14/24 20:20*	*EPA 8260D SIM*	
MW-14-240402 (A4D0874-07)				**Matrix: Water**		**Batch: 24D0504**		
Vinyl chloride	**1.45**	0.0100	0.0200	ug/L	1	04/14/24 20:47	EPA 8260D SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*101 %*	*Limits: 80-120 %*	*1*	*04/14/24 20:47*	*EPA 8260D SIM*	
Toluene-d8 (Surr)			*101 %*	*80-120 %*	*1*	*04/14/24 20:47*	*EPA 8260D SIM*	
4-Bromofluorobenzene (Surr)			*101 %*	*80-120 %*	*1*	*04/14/24 20:47*	*EPA 8260D SIM*	

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

Landau Associates (Northgate)	Project: Coit Services	
155 NE 100th St #302	Project Number: 1789002.020.022	Report ID:
Seattle, WA 98125	Project Manager: Mike Staton	A4D0874 - 04 26 24 1848

ANALYTICAL SAMPLE RESULTS

Anions by Ion Chromatography

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-1-240402 (A4D0874-01)				**Matrix: Water**				
Batch: 24D0142								
Nitrate-Nitrogen	ND	---	0.250	mg/L	1	04/03/24 18:51	EPA 300.0	
Sulfate	**2.53**	---	1.00	mg/L	1	04/03/24 18:51	EPA 300.0	
MW-2-240402 (A4D0874-02)				**Matrix: Water**				
Batch: 24D0142								
Nitrate-Nitrogen	ND	---	0.250	mg/L	1	04/03/24 19:13	EPA 300.0	
Sulfate	**13.3**	---	1.00	mg/L	1	04/03/24 19:13	EPA 300.0	
MW-3-240402 (A4D0874-03)				**Matrix: Water**				
Batch: 24D0142								
Nitrate-Nitrogen	**1.47**	---	0.250	mg/L	1	04/03/24 19:35	EPA 300.0	
Sulfate	**7.38**	---	1.00	mg/L	1	04/03/24 19:35	EPA 300.0	
MW-4-240402 (A4D0874-04)				**Matrix: Water**				
Batch: 24D0142								
Nitrate-Nitrogen	ND	---	0.250	mg/L	1	04/03/24 19:56	EPA 300.0	
Sulfate	ND	---	1.00	mg/L	1	04/03/24 19:56	EPA 300.0	
MW-6-240402 (A4D0874-05)				**Matrix: Water**				
Batch: 24D0142								
Nitrate-Nitrogen	ND	---	0.250	mg/L	1	04/03/24 20:18	EPA 300.0	
Sulfate	ND	---	1.00	mg/L	1	04/03/24 20:18	EPA 300.0	
MW-7-240402 (A4D0874-06)				**Matrix: Water**				
Batch: 24D0142								
Nitrate-Nitrogen	ND	---	0.250	mg/L	1	04/03/24 20:39	EPA 300.0	
Sulfate	**6.01**	---	1.00	mg/L	1	04/03/24 20:39	EPA 300.0	
MW-14-240402 (A4D0874-07)				**Matrix: Water**				
Batch: 24D0142								
Nitrate-Nitrogen	ND	---	0.250	mg/L	1	04/03/24 21:01	EPA 300.0	
Sulfate	**3.35**	---	1.00	mg/L	1	04/03/24 21:01	EPA 300.0	

Apex Laboratories

Philip Nerenberg, Lab Director

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503-718-2323
ORELAP ID: **OR100062**

Landau Associates (Northgate)	Project: **Coit Services**	
155 NE 100th St #302	Project Number: **1789002.020.022**	**Report ID:**
Seattle, WA 98125	Project Manager: **Mike Staton**	**A4D0874 - 04 26 24 1848**

QUALITY CONTROL (QC) SAMPLE RESULTS

Halogenated Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24D0170 - EPA 5030C												**Water**
Blank (24D0170-BLK1)				Prepared: 04/04/24 07:03 Analyzed: 04/04/24 10:09								
EPA 8260D												
Vinyl chloride	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 112 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*99 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*100 %*	*80-120 %*			*"*					
LCS (24D0170-BS1)				Prepared: 04/04/24 07:03 Analyzed: 04/04/24 08:47								
EPA 8260D												
Vinyl chloride	19.1	0.100	0.200	ug/L	1	20.0	---	96	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 103 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*96 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*97 %*	*80-120 %*			*"*					
Duplicate (24D0170-DUP1)				Prepared: 04/04/24 07:03 Analyzed: 04/04/24 18:48								
QC Source Sample: Non-SDG (A4D0794-06RE1)												
Vinyl chloride	**30.0**	0.500	1.00	ug/L	5	---	29.2	---	---	2	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 117 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*98 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*101 %*	*80-120 %*			*"*					
Matrix Spike (24D0170-MS1)				Prepared: 04/04/24 07:03 Analyzed: 04/04/24 11:59								
QC Source Sample: Non-SDG (A4D0845-02)												
EPA 8260D												
Vinyl chloride	20.5	0.100	0.200	ug/L	1	20.0	ND	103	58-137%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 104 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*95 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*93 %*	*80-120 %*			*"*					
Batch 24D0232 - EPA 5030C												**Water**
Blank (24D0232-BLK1)				Prepared: 04/05/24 08:49 Analyzed: 04/05/24 11:48								
EPA 8260D												
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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APEX LABORATORIES

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

Landau Associates (Northgate)	Project: **Coit Services**	
155 NE 100th St #302	Project Number: **1789002.020.022**	**Report ID:**
Seattle, WA 98125	Project Manager: **Mike Staton**	**A4D0874 - 04 26 24 1848**

QUALITY CONTROL (QC) SAMPLE RESULTS

Halogenated Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24D0232 - EPA 5030C												**Water**
Blank (24D0232-BLK1)				Prepared: 04/05/24 08:49 Analyzed: 04/05/24 11:48								
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 110 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*100 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*101 %*		*80-120 %*			*"*				
LCS (24D0232-BS1)				Prepared: 04/05/24 08:49 Analyzed: 04/05/24 10:26								
EPA 8260D												
1,2-Dichloroethane (EDC)	20.6	0.200	0.400	ug/L	1	20.0	---	103	80-120%	---	---	
1,1-Dichloroethane	20.0	0.200	0.400	ug/L	1	20.0	---	100	80-120%	---	---	
1,1-Dichloroethene	20.4	0.200	0.400	ug/L	1	20.0	---	102	80-120%	---	---	
cis-1,2-Dichloroethene	19.1	0.200	0.400	ug/L	1	20.0	---	96	80-120%	---	---	
trans-1,2-Dichloroethene	19.0	0.200	0.400	ug/L	1	20.0	---	95	80-120%	---	---	
Tetrachloroethene (PCE)	21.6	0.200	0.400	ug/L	1	20.0	---	108	80-120%	---	---	
1,1,1-Trichloroethane	22.6	0.200	0.400	ug/L	1	20.0	---	113	80-120%	---	---	
Trichloroethene (TCE)	20.3	0.200	0.400	ug/L	1	20.0	---	101	80-120%	---	---	
Vinyl chloride	19.7	0.100	0.200	ug/L	1	20.0	---	99	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 103 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*96 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*95 %*		*80-120 %*			*"*				
Duplicate (24D0232-DUP1)				Prepared: 04/05/24 08:49 Analyzed: 04/05/24 22:17								
QC Source Sample: Non-SDG (A4C1838-17RE1)												
1,2-Dichloroethane (EDC)	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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503-718-2323
ORELAP ID: **OR100062**

Landau Associates (Northgate)	Project: **Coit Services**	
155 NE 100th St #302	Project Number: **1789002.020.022**	**Report ID:**
Seattle, WA 98125	Project Manager: **Mike Staton**	**A4D0874 - 04 26 24 1848**

QUALITY CONTROL (QC) SAMPLE RESULTS

Halogenated Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24D0232 - EPA 5030C							**Water**					
Duplicate (24D0232-DUP1)			Prepared: 04/05/24 08:49 Analyzed: 04/05/24 22:17									
QC Source Sample: Non-SDG (A4C1838-17RE1)												
trans-1,2-Dichloroethene	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	2.00	4.00	ug/L	10	---	ND	---	---	---	30%	
Vinyl chloride	ND	1.00	2.00	ug/L	10	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 99 %*		*Limits: 80-120 %*		*Dilution: 1x*					
Toluene-d8 (Surr)			*99 %*		*80-120 %*		*"*					
4-Bromofluorobenzene (Surr)			*102 %*		*80-120 %*		*"*					
Matrix Spike (24D0232-MS1)			Prepared: 04/05/24 08:49 Analyzed: 04/05/24 12:42									**COMP**
QC Source Sample: Non-SDG (A4D0929-05)												
EPA 8260D												
1,2-Dichloroethane (EDC)	22.7	0.200	0.400	ug/L	1	20.0	ND	113	73-128%	---	---	
1,1-Dichloroethane	22.0	0.200	0.400	ug/L	1	20.0	ND	110	77-125%	---	---	
1,1-Dichloroethene	22.7	0.200	0.400	ug/L	1	20.0	ND	114	71-131%	---	---	
cis-1,2-Dichloroethene	21.1	0.200	0.400	ug/L	1	20.0	ND	106	78-123%	---	---	
trans-1,2-Dichloroethene	22.5	0.200	0.400	ug/L	1	20.0	ND	112	75-124%	---	---	
Tetrachloroethene (PCE)	24.0	0.200	0.400	ug/L	1	20.0	ND	120	74-129%	---	---	
1,1,1-Trichloroethane	26.0	0.200	0.400	ug/L	1	20.0	ND	130	74-131%	---	---	
Trichloroethene (TCE)	24.8	0.200	0.400	ug/L	1	20.0	ND	**124**	**79-123%**	---	---	Q-01
Vinyl chloride	22.6	0.100	0.200	ug/L	1	20.0	ND	113	58-137%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 103 %*		*Limits: 80-120 %*		*Dilution: 1x*					
Toluene-d8 (Surr)			*97 %*		*80-120 %*		*"*					
4-Bromofluorobenzene (Surr)			*97 %*		*80-120 %*		*"*					

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Landau Associates (Northgate)	Project: **Coit Services**	
155 NE 100th St #302	Project Number: **1789002.020.022**	**Report ID:**
Seattle, WA 98125	Project Manager: **Mike Staton**	**A4D0874 - 04 26 24 1848**

QUALITY CONTROL (QC) SAMPLE RESULTS

Vinyl Chloride by EPA 8260D SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24D0504 - EPA 5030C												**Water**
Blank (24D0504-BLK1)				Prepared: 04/14/24 15:02 Analyzed: 04/14/24 17:39								
EPA 8260D SIM												
Vinyl chloride	ND	0.0100	0.0200	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 100 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*100 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*101 %*	*80-120 %*			*"*					
LCS (24D0504-BS1)				Prepared: 04/14/24 15:02 Analyzed: 04/14/24 16:43								
EPA 8260D SIM												
Vinyl chloride	0.226	0.0100	0.0200	ug/L	1	0.200	---	113	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 98 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*100 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*98 %*	*80-120 %*			*"*					
Duplicate (24D0504-DUP1)				Prepared: 04/14/24 15:02 Analyzed: 04/14/24 22:35								
QC Source Sample: Non-SDG (A4D1027-01)												
Vinyl chloride	**0.0237**	0.0100	0.0200	ug/L	1	---	0.0218	---	---	8	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 102 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*102 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*100 %*	*80-120 %*			*"*					
Matrix Spike (24D0504-MS1)				Prepared: 04/14/24 15:02 Analyzed: 04/15/24 04:25								
QC Source Sample: Non-SDG (A4D1027-03)												
EPA 8260D SIM												
Vinyl chloride	0.303	0.0100	0.0200	ug/L	1	0.200	0.0122	**145**	**58-137%**	---	---	Q-01
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 103 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*101 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*101 %*	*80-120 %*			*"*					

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ANALYTICAL REPORT

Landau Associates (Northgate)	Project: Coit Services	
155 NE 100th St #302	Project Number: 1789002.020.022	Report ID:
Seattle, WA 98125	Project Manager: Mike Staton	A4D0874 - 04 26 24 1848

QUALITY CONTROL (QC) SAMPLE RESULTS

Anions by Ion Chromatography

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24D0142 - Method Prep: Aq							Water					
Blank (24D0142-BLK1)			Prepared: 04/03/24 11:53		Analyzed: 04/03/24 13:28							
EPA 300.0												
Nitrate-Nitrogen	ND	---	0.250	mg/L	1	---	---	---	---	---	---	
Sulfate	ND	---	1.00	mg/L	1	---	---	---	---	---	---	
LCS (24D0142-BS1)			Prepared: 04/03/24 11:53		Analyzed: 04/03/24 13:50							
EPA 300.0												
Nitrate-Nitrogen	2.02	---	0.250	mg/L	1	2.00	---	101	90-110%	---	---	
Sulfate	8.48	---	1.00	mg/L	1	8.00	---	106	90-110%	---	---	
Duplicate (24D0142-DUP1)			Prepared: 04/03/24 11:53		Analyzed: 04/03/24 14:33							
QC Source Sample: Non-SDG (A4D0871-01)												
Nitrate-Nitrogen	**0.341**	---	0.250	mg/L	1	---	0.343	---	---	0.7	3%	
Sulfate	**10.6**	---	1.00	mg/L	1	---	10.8	---	---	2	4%	
Duplicate (24D0142-DUP2)			Prepared: 04/03/24 11:53		Analyzed: 04/03/24 15:59							
QC Source Sample: Non-SDG (A4D0872-01)												
Nitrate-Nitrogen	ND	---	0.250	mg/L	1	---	ND	---	---	---	3%	
Sulfate	**42.4**	---	1.00	mg/L	1	---	42.2	---	---	0.6	4%	E
Matrix Spike (24D0142-MS1)			Prepared: 04/03/24 11:53		Analyzed: 04/03/24 14:54							
QC Source Sample: Non-SDG (A4D0871-01)												
EPA 300.0												
Nitrate-Nitrogen	2.89	---	0.312	mg/L	1	2.50	0.343	102	87-112%	---	---	
Sulfate	21.2	---	1.25	mg/L	1	10.0	10.8	104	88-115%	---	---	
Matrix Spike (24D0142-MS2)			Prepared: 04/03/24 11:53		Analyzed: 04/03/24 16:21							
QC Source Sample: Non-SDG (A4D0872-01)												
EPA 300.0												
Nitrate-Nitrogen	2.65	---	0.312	mg/L	1	2.50	ND	106	87-112%	---	---	
Sulfate	53.0	---	1.25	mg/L	1	10.0	42.2	108	88-115%	---	---	E

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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APEX LABORATORIES

Apex Laboratories, LLC
6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Landau Associates (Northgate)	Project: **Coit Services**	
155 NE 100th St #302	Project Number: **1789002.020.022**	**Report ID:**
Seattle, WA 98125	Project Manager: **Mike Staton**	**A4D0874 - 04 26 24 1848**

SAMPLE PREPARATION INFORMATION

Halogenated Volatile Organic Compounds by EPA 8260D

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24D0170							
A4D0874-04	Water	EPA 8260D	04/02/24 13:58	04/04/24 10:24	5mL/5mL	5mL/5mL	1.00

Vinyl Chloride by EPA 8260D SIM

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24D0504							
A4D0874-01	Water	EPA 8260D SIM	04/02/24 10:44	04/14/24 16:25	5mL/5mL	5mL/5mL	1.00
A4D0874-02	Water	EPA 8260D SIM	04/02/24 12:35	04/14/24 16:25	5mL/5mL	5mL/5mL	1.00
A4D0874-03	Water	EPA 8260D SIM	04/02/24 14:34	04/14/24 16:25	5mL/5mL	5mL/5mL	1.00
A4D0874-05	Water	EPA 8260D SIM	04/02/24 11:16	04/14/24 16:25	5mL/5mL	5mL/5mL	1.00
A4D0874-06	Water	EPA 8260D SIM	04/02/24 11:58	04/14/24 16:25	5mL/5mL	5mL/5mL	1.00
A4D0874-07	Water	EPA 8260D SIM	04/02/24 13:09	04/14/24 16:25	5mL/5mL	5mL/5mL	1.00

Anions by Ion Chromatography

Prep: Method Prep: Aq

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24D0142							
A4D0874-01	Water	EPA 300.0	04/02/24 10:44	04/03/24 11:53	5mL/5mL	5mL/5mL	1.00
A4D0874-02	Water	EPA 300.0	04/02/24 12:35	04/03/24 11:53	5mL/5mL	5mL/5mL	1.00
A4D0874-03	Water	EPA 300.0	04/02/24 14:34	04/03/24 11:53	5mL/5mL	5mL/5mL	1.00
A4D0874-04	Water	EPA 300.0	04/02/24 13:58	04/03/24 11:53	5mL/5mL	5mL/5mL	1.00
A4D0874-05	Water	EPA 300.0	04/02/24 11:16	04/03/24 11:53	5mL/5mL	5mL/5mL	1.00
A4D0874-06	Water	EPA 300.0	04/02/24 11:58	04/03/24 11:53	5mL/5mL	5mL/5mL	1.00
A4D0874-07	Water	EPA 300.0	04/02/24 13:09	04/03/24 11:53	5mL/5mL	5mL/5mL	1.00

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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Landau Associates (Northgate)	Project: **Coit Services**	
155 NE 100th St #302	Project Number: **1789002.020.022**	**Report ID:**
Seattle, WA 98125	Project Manager: **Mike Staton**	**A4D0874 - 04 26 24 1848**

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

COMP	Analyzed sample is a composite of discrete samples that was performed in the laboratory.
E	Estimated Value. The result is above the calibration range of the instrument.
Q-01	Spike recovery and/or RPD is outside acceptance limits.
R-06	Reporting level raised due to possible carryover from a previous sample.

Apex Laboratories

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

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155 NE 100th St #302	Project Number: **1789002.020.022**	**Report ID:**
Seattle, WA 98125	Project Manager: **Mike Staton**	**A4D0874 - 04 26 24 1848**

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

Results for Volatiles analyses on soils and sediments that are reported on a “dry weight” basis include the water miscible solvent (WMS) correction referenced in the EPA 8000 Method guidance documents. Solid and Liquid samples reported on an “As Received” basis do not have the WMS correction applied, as dry weight was not performed.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Apex Laboratories

Philip Nerenberg, Lab Director

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Landau Associates (Northgate)	Project: **Coit Services**	
155 NE 100th St #302	Project Number: **1789002.020.022**	**Report ID:**
Seattle, WA 98125	Project Manager: **Mike Staton**	**A4D0874 - 04 26 24 1848**

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).

-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.

-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

-Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level, if results are not reported to the MDL.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

Landau Associates (Northgate)	Project: **Coit Services**	
155 NE 100th St #302	Project Number: **1789002.020.022**	**Report ID:**
Seattle, WA 98125	Project Manager: **Mike Staton**	**A4D0874 - 04 26 24 1848**

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) -
EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

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155 NE 100th St #302	Project Number: **1789002.020.022**	**Report ID:**
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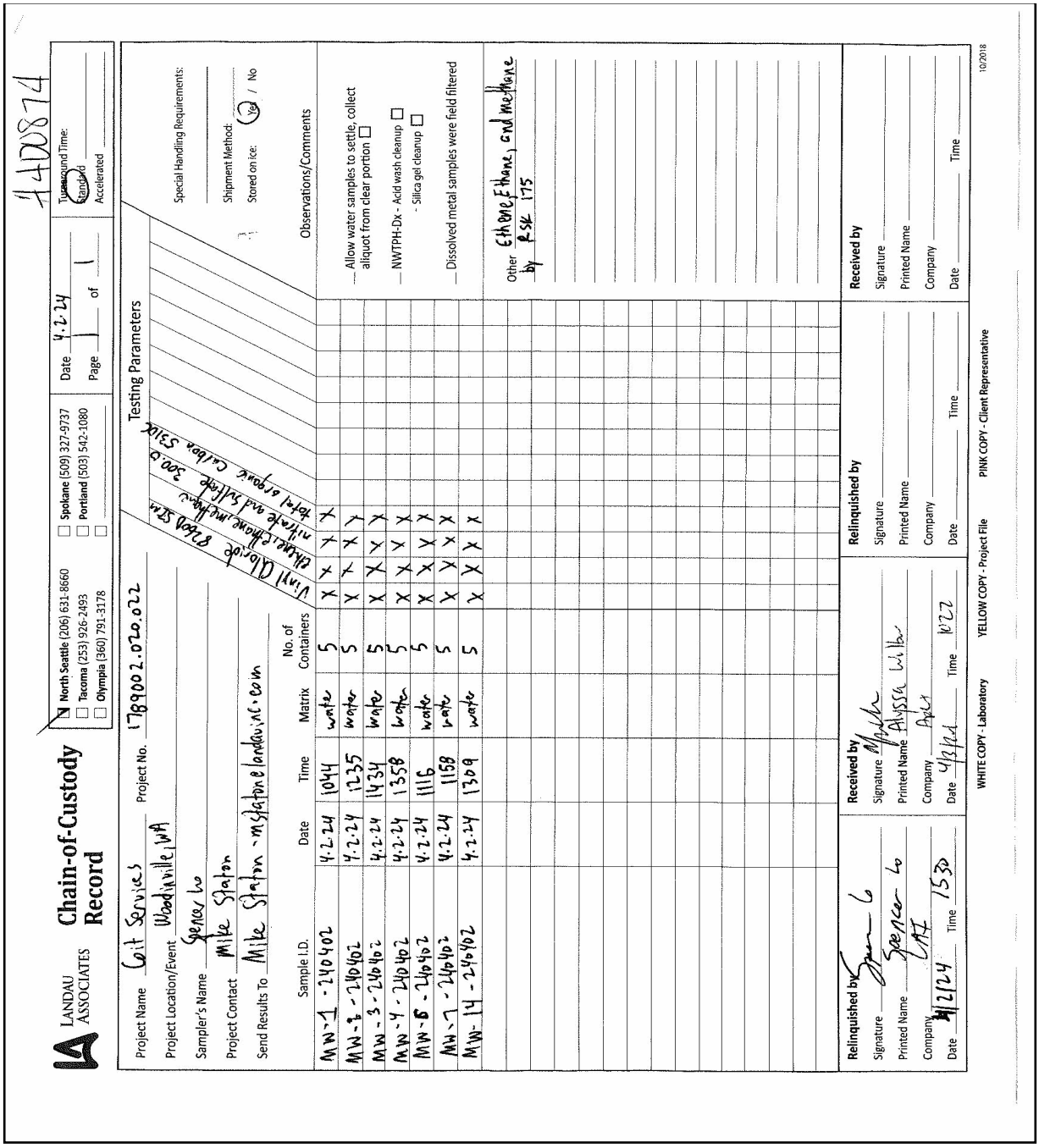

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APEX LABS COOLER RECEIPT FORM

Client: Landau Associates Element WO#: A4 D0874

Project/Project #: Coit Services 1789002.020.022 acc for aaw 4/4/24

Delivery Info:

Date/time received: 4/3/24 @ 1022 By: AAW

Delivered by: Apex__Client__ESS__FedEx X UPS__Radio__Morgan__SDS__Evergreen__Other__

From USDA Regulated Origin? Yes _____ No X

Cooler Inspection Date/time inspected: 4/3/24 @ 1023 By: AAW

Chain of Custody included? Yes X No _____

Signed/dated by client? Yes X No _____

Contains USDA Reg. Soils? Yes _____ No X Unsure (email RegSoils) _____

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	0.4						
Custody seals? (Y/N)	N						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	N						
Ice type: (Gel/Real/Other)	Real						
Condition (In/Out):	In						

Cooler out of temp? (Y/N) Possible reason why:

Green dots applied to out of temperature samples? Yes/No

Out of temperature samples form initiated? Yes/No

Sample Inspection: Date/time inspected: 4/3/24 @ 1120 By: JS

All samples intact? Yes X No ___ Comments:

JS 4/3

Bottle labels/COCs agree? ~~Yes~~ X No X Comments: Don 3/3 VOAs reads 2/4/24 on MW-2-240402 & Sulfuric poly for MW-14.

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments:

Do VOA vials have visible headspace? Yes ___ No X NA ___

Comments

Water samples: pH checked: Yes X No ___ NA ___ pH appropriate? Yes X No ___ NA ___ pH ID: A23172

Comments: 272933497746

~~272933497746~~ ACC FOR AAW 4/4/24

Labeled by: JS Witness: Cooler Inspected by:

Form Y-003 R-02 -

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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April 17, 2024 Service Request No:K2403596

Philip Nerenberg
Apex Laboratories
6700 SW Sandburg St.
Tigard, OR 97223

Laboratory Results for: A4D0874

Dear Philip,

Enclosed are the results of the sample(s) submitted to our laboratory April 04, 2024
For your reference, these analyses have been assigned our service request number **K2403596.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3364. You may also contact me via email at howard.holmes@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Howard Holmes
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Apex Laboratories
Project: A4D0874
Sample Matrix: Water

Service Request: K2403596
Date Received: 04/04/2024

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Seven water samples were received for analysis at ALS Environmental on 04/04/2024. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

General Chemistry:

No significant anomalies were noted with this analysis.

Approved by  Date 04/17/2024

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: MW-1-240402			Lab ID: K2403596-001			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Carbon, Total Organic	4.80		0.08	0.50	mg/L	SM 5310 C

CLIENT ID: MW-2-240402			Lab ID: K2403596-002			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Carbon, Total Organic	3.00		0.08	0.50	mg/L	SM 5310 C

CLIENT ID: MW-3-240402			Lab ID: K2403596-003			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Carbon, Total Organic	3.30		0.08	0.50	mg/L	SM 5310 C

CLIENT ID: MW-4-240402			Lab ID: K2403596-004			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Carbon, Total Organic	9.90		0.08	0.50	mg/L	SM 5310 C

CLIENT ID: MW-6-240402			Lab ID: K2403596-005			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Carbon, Total Organic	7.60		0.08	0.50	mg/L	SM 5310 C

CLIENT ID: MW-7-240402			Lab ID: K2403596-006			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Carbon, Total Organic	6.00		0.08	0.50	mg/L	SM 5310 C

CLIENT ID: MW-14-240402			Lab ID: K2403596-007			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Carbon, Total Organic	6.70		0.08	0.50	mg/L	SM 5310 C

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Apex Laboratories **Service Request:**K2403596

Project: A4D0874

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2403596-001	MW-1-240402	4/2/2024	1044
K2403596-002	MW-2-240402	4/2/2024	1235
K2403596-003	MW-3-240402	4/2/2024	1434
K2403596-004	MW-4-240402	4/2/2024	1358
K2403596-005	MW-6-240402	4/2/2024	1116
K2403596-006	MW-7-240402	4/2/2024	1158
K2403596-007	MW-14-240402	4/2/2024	1309

VN24035596

SUBCONTRACT ORDER

Apex Laboratories

A4D0874

RECEIVED 4/2/24

SENDING LABORATORY:

Apex Laboratories
6700 S.W. Sandburg Street
Tigard, OR 97223
Phone: (503) 718-2323
Fax: (503) 336-0745
Project Manager: Philip Nerenberg

RECEIVING LABORATORY:

ALS Group USA - Kelso
1317 S 13th Avenue
Kelso, WA 98626
Phone :(360) 577-7222
Fax: (360) 636-1068

Sample Name: MW-1-240402 **Sampled: 04/02/24 10:44** (A4D0874-01)

Analysis	Due	Expires	Comments
Total Organic Carbon - H2O (5310C)	04/16/24 17:00	04/30/24 10:44	
Containers Supplied: (E)250 mL Poly - Sulfuric (H2SO4)			

Sample Name: MW-2-240402 **Sampled: 04/02/24 12:35** (A4D0874-02)

Analysis	Due	Expires	Comments
Total Organic Carbon - H2O (5310C)	04/16/24 17:00	04/30/24 12:35	
Containers Supplied: (E)250 mL Poly - Sulfuric (H2SO4)			

Sample Name: MW-3-240402 **Sampled: 04/02/24 14:34** (A4D0874-03)

Analysis	Due	Expires	Comments
Total Organic Carbon - H2O (5310C)	04/16/24 17:00	04/30/24 14:34	
Containers Supplied: (E)250 mL Poly - Sulfuric (H2SO4)			

Sample Name: MW-4-240402 **Sampled: 04/02/24 13:58** (A4D0874-04)

Analysis	Due	Expires	Comments
Total Organic Carbon - H2O (5310C)	04/16/24 17:00	04/30/24 13:58	
Containers Supplied: (E)250 mL Poly - Sulfuric (H2SO4)			

Standard TAT

Released By	Date	Received By	Date
	4/4/24 1026		4/4/24 1026
	4/4/24 1155	M Milligan	4/4/24 1155

SUBCONTRACT ORDER

Apex Laboratories

A4D0874

Sample Name: MW-6-240402 **Sampled: 04/02/24 11:16** (A4D0874-05)

Analysis	Due	Expires	Comments
Total Organic Carbon - H2O (5310C)	04/16/24 17:00	04/30/24 11:16	
Containers Supplied:			
(E)250 mL Poly - Sulfuric (H2SO4)			

Sample Name: MW-7-240402 **Sampled: 04/02/24 11:58** (A4D0874-06)

Analysis	Due	Expires	Comments
Total Organic Carbon - H2O (5310C)	04/16/24 17:00	04/30/24 11:58	
Containers Supplied:			
(E)250 mL Poly - Sulfuric (H2SO4)			

Sample Name: MW-14-240402 **Sampled: 04/02/24 13:09** (A4D0874-07)

Analysis	Due	Expires	Comments
Total Organic Carbon - H2O (5310C)	04/16/24 17:00	04/30/24 13:09	
Containers Supplied:			
(E)250 mL Poly - Sulfuric (H2SO4)			

Standard TAT

Released By	Date	Received By	Date
	4/4/24 1026		4/4/24 1026
	4/4/24 1155	M. Mulligan	4/4/24 1155

PM HH

Cooler Receipt and Preservation Form

Client APEX Service Request K24 035916

Received: 4/4/24 Opened: 4/4/24 By: mm Unloaded: 4/4/24 By: mm

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? _____
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
	2.5	1201					

4. Was a Temperature Blank present in cooler? NA Y N If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA Y N
   If no, were they received on ice and same day as collected? If not, notate the cooler # above and notify the PM. NA Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Dry Ice* *Sleeves* _____
7. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
8. Were samples received in good condition (unbroken) NA Y N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA Y N
10. Did all sample labels and tags agree with custody papers? NA Y N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* NA Y N
14. Was C12/Res negative? NA Y N
15. Were samples received within the method specified time limit? If not, notate the error below and notify the PM NA Y N
16. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? NA Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: _____

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client:	Apex Laboratories	**Service Request:**	K2403596
Project:	A4D0874/		

Sample Name:	MW-1-240402	**Date Collected:**	04/2/24
Lab Code:	K2403596-001	**Date Received:**	04/4/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
SM 5310 C		MSPECHT

Sample Name:	MW-2-240402	**Date Collected:**	04/2/24
Lab Code:	K2403596-002	**Date Received:**	04/4/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
SM 5310 C		MSPECHT

Sample Name:	MW-3-240402	**Date Collected:**	04/2/24
Lab Code:	K2403596-003	**Date Received:**	04/4/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
SM 5310 C		MSPECHT

Sample Name:	MW-4-240402	**Date Collected:**	04/2/24
Lab Code:	K2403596-004	**Date Received:**	04/4/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
SM 5310 C		MSPECHT

Sample Name:	MW-6-240402	**Date Collected:**	04/2/24
Lab Code:	K2403596-005	**Date Received:**	04/4/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
SM 5310 C		MSPECHT

Client:	Apex Laboratories	**Service Request:**	K2403596
Project:	A4D0874/		

Sample Name:	MW-7-240402	**Date Collected:**	04/2/24
Lab Code:	K2403596-006	**Date Received:**	04/4/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
SM 5310 C		MSPECHT

Sample Name:	MW-14-240402	**Date Collected:**	04/2/24
Lab Code:	K2403596-007	**Date Received:**	04/4/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
SM 5310 C		MSPECHT

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

General Chemistry

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Apex Laboratories	**Service Request:**	K2403596
Project:	A4D0874	**Date Collected:**	04/02/24 10:44
Sample Matrix:	Water	**Date Received:**	04/04/24 11:55
Sample Name:	MW-1-240402	**Basis:**	NA
Lab Code:	K2403596-001		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Carbon, Total Organic	SM 5310 C	**4.80**	mg/L	0.50	0.08	1	04/10/24 15:27	

Analytical Report

Client:	Apex Laboratories	**Service Request:**	K2403596
Project:	A4D0874	**Date Collected:**	04/02/24 12:35
Sample Matrix:	Water	**Date Received:**	04/04/24 11:55
Sample Name:	MW-2-240402	**Basis:**	NA
Lab Code:	K2403596-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Carbon, Total Organic	SM 5310 C	**3.00**	mg/L	0.50	0.08	1	04/10/24 15:27	

Analytical Report

Client:	Apex Laboratories	**Service Request:**	K2403596
Project:	A4D0874	**Date Collected:**	04/02/24 14:34
Sample Matrix:	Water	**Date Received:**	04/04/24 11:55
Sample Name:	MW-3-240402	**Basis:**	NA
Lab Code:	K2403596-003		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Carbon, Total Organic	SM 5310 C	**3.30**	mg/L	0.50	0.08	1	04/10/24 15:27	

Analytical Report

Client:	Apex Laboratories	**Service Request:**	K2403596
Project:	A4D0874	**Date Collected:**	04/02/24 13:58
Sample Matrix:	Water	**Date Received:**	04/04/24 11:55
Sample Name:	MW-4-240402	**Basis:**	NA
Lab Code:	K2403596-004		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Carbon, Total Organic	SM 5310 C	**9.90**	mg/L	0.50	0.08	1	04/10/24 15:27	

Analytical Report

Client:	Apex Laboratories	**Service Request:**	K2403596
Project:	A4D0874	**Date Collected:**	04/02/24 11:16
Sample Matrix:	Water	**Date Received:**	04/04/24 11:55
Sample Name:	MW-6-240402	**Basis:**	NA
Lab Code:	K2403596-005		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Carbon, Total Organic	SM 5310 C	**7.60**	mg/L	0.50	0.08	1	04/10/24 15:27	

Analytical Report

Client:	Apex Laboratories	**Service Request:**	K2403596
Project:	A4D0874	**Date Collected:**	04/02/24 11:58
Sample Matrix:	Water	**Date Received:**	04/04/24 11:55
Sample Name:	MW-7-240402	**Basis:**	NA
Lab Code:	K2403596-006		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Carbon, Total Organic	SM 5310 C	**6.00**	mg/L	0.50	0.08	1	04/10/24 15:27	

Analytical Report

Client:	Apex Laboratories	**Service Request:**	K2403596
Project:	A4D0874	**Date Collected:**	04/02/24 13:09
Sample Matrix:	Water	**Date Received:**	04/04/24 11:55
Sample Name:	MW-14-240402	**Basis:**	NA
Lab Code:	K2403596-007		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Carbon, Total Organic	SM 5310 C	**6.70**	mg/L	0.50	0.08	1	04/10/24 15:27	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

General Chemistry

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Apex Laboratories	**Service Request:**	K2403596
Project:	A4D0874	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2403596-MB		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Carbon, Total Organic	SM 5310 C	ND U	mg/L	0.50	0.08	1	04/10/24 15:27	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Apex Laboratories	**Service Request:**	K2403596
Project:	A4D0874	**Date Analyzed:**	04/10/24
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Carbon, Total Organic

Analysis Method:	SM 5310 C	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	837464

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2403596-LCS	23.3	25.0	93	83-117

Air TECHNOLOGY Laboratories, Inc.

April 22, 2024

LA Cert #04140
EPA Methods TO3, TO14A, TO15, 25C/3C, ASTM D1946, RSK-175
TX Cert T104704450-14-6
EPA Methods TO14A, TO15
UT Cert CA0133332015-3
EPA Methods TO3, TO14A, TO15, RSK-175

Apex Laboratories
ATTN: Philip Nerenberg
6700 S.W. Sandburg St.
Tigard, OR 97223

LABORATORY TEST RESULTS

Project Reference: A4D0874
Lab Number: R040401-01/07

Enclosed are results for sample(s) received 4/04/24 by Air Technology Laboratories. Samples were received intact and chilled to 5° C. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

- Unless otherwise noted in the report, sample analyses were performed within method performance criteria and meet all requirements of the TNI Standards.
- The enclosed results relate only to the sample(s).

ATL appreciates the opportunity to provide testing services to your company. If you have any questions regarding these results, please call me at (626) 964-4032.

Sincerely,

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Note: The cover letter is an integral part of this analytical report.

SUBCONTRACT ORDER

Apex Laboratories

A4D0874

ACC 4/3/24

R040401-01/07

SENDING LABORATORY:

Apex Laboratories
6700 S.W. Sandburg Street
Tigard, OR 97223
Phone: (503) 718-2323
Fax: (503) 336-0745
Project Manager: Philip Nerenberg

RECEIVING LABORATORY:

Air Technology Laboratories, Inc
18501 E. Gale Ave Suite 130
City of Industry, CA 91748
Phone :(626) 964-4032
Fax: (626) 964-5832

Sample Name: MW-1-240402 **Water** **Sampled: 04/02/24 10:44** (A4D0874-01)

Analysis	Due	Expires	Comments
RSK 175 Preserved (Meth, Eth, Eth) (Sub)	04/16/24 17:00	04/16/24 10:44	
Containers Supplied:			
(C)40 mL VOA - HCL			

D on 3/3 voas reads 2/4/24

Sample Name: MW-2-240402 **Water** **Sampled: 04/02/24 12:35** (A4D0874-02)

Analysis	Due	Expires	Comments
RSK 175 Preserved (Meth, Eth, Eth) (Sub)	04/16/24 17:00	04/16/24 12:35	
Containers Supplied:			
(C)40 mL VOA - HCL			

Sample Name: MW-3-240402 **Water** **Sampled: 04/02/24 14:34** (A4D0874-03)

Analysis	Due	Expires	Comments
RSK 175 Preserved (Meth, Eth, Eth) (Sub)	04/16/24 17:00	04/16/24 14:34	
Containers Supplied:			
(C)40 mL VOA - HCL			

Sample Name: MW-4-240402 **Water** **Sampled: 04/02/24 13:58** (A4D0874-04)

Analysis	Due	Expires	Comments
RSK 175 Preserved (Meth, Eth, Eth) (Sub)	04/16/24 17:00	04/16/24 13:58	
Containers Supplied:			
(C)40 mL VOA - HCL			

Standard TAT

5°C
HO 4/4/24

Released By	Date	Received By	Date
[signature]	4/3/24	UPS (Shipper)	
UPS (Shipper)	4/4/24 10:15	[signature]	4/4/24 10:15
Released By	Date	Received By	Date

SUBCONTRACT ORDER

Apex Laboratories

A4D0874

R040401-01/07

Sample Name: MW-6-240402 **Water** **Sampled: 04/02/24 11:16** (A4D0874-05)

Analysis	Due	Expires	Comments
RSK 175 Preserved (Meth, Eth, Eth) (Sub)	04/16/24 17:00	04/16/24 11:16	
Containers Supplied:			
(C)40 mL VOA - HCL			

Sample Name: MW-7-240402 **Water** **Sampled: 04/02/24 11:58** (A4D0874-06)

Analysis	Due	Expires	Comments
RSK 175 Preserved (Meth, Eth, Eth) (Sub)	04/16/24 17:00	04/16/24 11:58	
Containers Supplied:			
(C)40 mL VOA - HCL			

D on sulfuric poly reads 2/4/24

Sample Name: MW-14-240402 **Water** **Sampled: 04/02/24 13:09** (A4D0874-07)

Analysis	Due	Expires	Comments
RSK 175 Preserved (Meth, Eth, Eth) (Sub)	04/16/24 17:00	04/16/24 13:09	
Containers Supplied:			
(C)40 mL VOA - HCL			

Standard TAT

5°C
HO 4/4/24

Released By	Date	Received By	Date
[signature]	4/3/24	UPS (Shipper)	
UPS (Shipper)	4/4/24 10:15	[signature]	4/4/24 10:15
Released By	Date	Received By	Date

Client: Apex Laboratories
Attn: Philip Nerenberg
Project Name: NA
Project No.: A4D0874
Date Received: 04/04/24
Matrix: Water
Reporting Units: ug/L

RSK175

Lab No.:	R040401-01		R040401-02		R040401-03		R040401-04	
Client Sample I.D.:	MW-1-240402 (A4D0874-01)		MW-2-240402 (A4D0874-02)		MW-3-240402 (A4D0874-03)		MW-4-240402 (A4D0874-04)	
Date/Time Sampled:	4/2/24 10:44		4/2/24 12:35		4/2/24 14:34		4/2/24 13:58	
Date/Time Analyzed:	4/10/24 11:44		4/10/24 11:55		4/10/24 12:33		4/10/24 12:44	
QC Batch No.:	240410GC8A1		240410GC8A1		240410GC8A1		240410GC8A1	
Analyst Initials:	AS		AS		AS		AS	
Dilution Factor:	1.0		1.0		1.0		1.0	
ANALYTE	Result ug/L	RL ug/L	Result ug/L	RL ug/L	Result ug/L	RL ug/L	Result ug/L	RL ug/L
Ethene	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Ethane	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Methane	640	1.0	50	1.0	180	1.0	3,200	1.0

ND = Not Detected (below RL)
RL = Reporting Limit

Reviewed/Approved By: _____ Date 4/22/24
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

Client: Apex Laboratories
Attn: Philip Nerenberg
Project Name: NA
Project No.: A4D0874
Date Received: 04/04/24
Matrix: Water
Reporting Units: ug/L

RSK175

Lab No.:	R040401-05		R040401-06		R040401-07			
Client Sample I.D.:	MW-6-240402 (A4D0874-05)		MW-7-240402 (A4D0874-06)		MW-14-240402 (A4D0874-07)			
Date/Time Sampled:	4/2/24 11:16		4/2/24 11:58		4/2/24 13:09			
Date/Time Analyzed:	4/10/24 12:55		4/10/24 13:17		4/10/24 13:30			
QC Batch No.:	240410GC8A1		240410GC8A1		240410GC8A1			
Analyst Initials:	AS		AS		AS			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	**Result ug/L**	**RL ug/L**	**Result ug/L**	**RL ug/L**	**Result ug/L**	**RL ug/L**		
Ethene	ND	1.0	ND	1.0	ND	1.0		
Ethane	ND	1.0	ND	1.0	ND	1.0		
Methane	1,800	1.0	1,600	1.0	1,400	1.0		

ND = Not Detected (below RL)
RL = Reporting Limit

Reviewed/Approved By: _____ Date 4/22/24
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch No: 240410GC8A1
Matrix: Water
Reporting Units: ug/L

RSK 175
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date/Time Analyzed:	4/10/24 9:48			4/10/24 9:24		4/10/24 9:37					
Analyst Initials:	AS			AS		AS					
Dilution Factor:	1.0			1.0		1.0			Limits		
ANALYTE	Result ug/L	RL ug/L	SPIKE AMT. ug/L	Result ug/L	% Rec.	Result ug/L	% Rec.	RPD %	Low %Rec	High %Rec	Max. RPD
Ethene	ND	1.0	1,150	1,180	103	1,210	106	2.7	70	130	30
Ethane	ND	1.0	1,200	1,260	102	1,270	103	0.8	70	130	30
Methane	ND	1.0	650	656	100	657	100	0.0	70	130	30

ND = Not Detected (below RL)
RL = Reporting Limit

Reviewed/Approved By: _____ Date 4/22/24
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Friday, April 26, 2024

Mike Staton
Landau Associates (Northgate)
155 NE 100th St #302
Seattle, WA 98125

RE: A4D0920 - Coit Services - 1789002.020.022

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A4D0920, which was received by the laboratory on 4/4/2024 at 10:51:00AM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: pnerenberg@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information
Acceptable Receipt Temperature is less than, or equal to, 6 degC (not frozen), or received on ice the same day as sampling.
(See Cooler Receipt Form for details)
Default Cooler 1.1 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Apex Laboratories

Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

Landau Associates (Northgate)	Project: **Coit Services**	
155 NE 100th St #302	Project Number: **1789002.020.022**	**Report ID:**
Seattle, WA 98125	Project Manager: **Mike Staton**	**A4D0920 - 04 26 24 1854**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-15-240403	A4D0920-01	Water	04/03/24 10:31	04/04/24 10:51
MW-16-240403	A4D0920-02	Water	04/03/24 09:56	04/04/24 10:51
MW-17-240403	A4D0920-03	Water	04/03/24 11:17	04/04/24 10:51

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

Landau Associates (Northgate)	Project: **Coit Services**	
155 NE 100th St #302	Project Number: **1789002.020.022**	**Report ID:**
Seattle, WA 98125	Project Manager: **Mike Staton**	**A4D0920 - 04 26 24 1854**

ANALYTICAL SAMPLE RESULTS

Halogenated Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-15-240403 (A4D0920-01RE1)				**Matrix: Water**		**Batch: 24D0357**		
Vinyl chloride	**0.100**	0.100	0.200	ug/L	1	04/10/24 19:19	EPA 8260D	**J**
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*109 %*	*Limits: 80-120 %*	*1*	*04/10/24 19:19*	*EPA 8260D*	
Toluene-d8 (Surr)			*102 %*	*80-120 %*	*1*	*04/10/24 19:19*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*104 %*	*80-120 %*	*1*	*04/10/24 19:19*	*EPA 8260D*	
MW-16-240403 (A4D0920-02RE1)				**Matrix: Water**		**Batch: 24D0357**		
Vinyl chloride	**0.170**	0.100	0.200	ug/L	1	04/10/24 19:47	EPA 8260D	**J**
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*113 %*	*Limits: 80-120 %*	*1*	*04/10/24 19:47*	*EPA 8260D*	
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*1*	*04/10/24 19:47*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*103 %*	*80-120 %*	*1*	*04/10/24 19:47*	*EPA 8260D*	
MW-17-240403 (A4D0920-03RE1)				**Matrix: Water**		**Batch: 24D0357**		
Vinyl chloride	ND	0.100	0.200	ug/L	1	04/10/24 20:14	EPA 8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*112 %*	*Limits: 80-120 %*	*1*	*04/10/24 20:14*	*EPA 8260D*	
Toluene-d8 (Surr)			*99 %*	*80-120 %*	*1*	*04/10/24 20:14*	*EPA 8260D*	
4-Bromofluorobenzene (Surr)			*104 %*	*80-120 %*	*1*	*04/10/24 20:14*	*EPA 8260D*	

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

Landau Associates (Northgate)	Project: **Coit Services**	
155 NE 100th St #302	Project Number: **1789002.020.022**	**Report ID:**
Seattle, WA 98125	Project Manager: **Mike Staton**	**A4D0920 - 04 26 24 1854**

ANALYTICAL SAMPLE RESULTS

Anions by Ion Chromatography

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-15-240403 (A4D0920-01)				**Matrix: Water**				
Batch: 24D0216								
Nitrate-Nitrogen	ND	---	0.250	mg/L	1	04/04/24 19:26	EPA 300.0	
Sulfate	**5.50**	---	1.00	mg/L	1	04/04/24 19:26	EPA 300.0	
MW-16-240403 (A4D0920-02)				**Matrix: Water**				
Batch: 24D0216								
Nitrate-Nitrogen	ND	---	0.250	mg/L	1	04/04/24 20:30	EPA 300.0	
Sulfate	ND	---	1.00	mg/L	1	04/04/24 20:30	EPA 300.0	
MW-17-240403 (A4D0920-03)				**Matrix: Water**				
Batch: 24D0216								
Nitrate-Nitrogen	ND	---	0.250	mg/L	1	04/04/24 20:52	EPA 300.0	
Sulfate	**12.4**	---	1.00	mg/L	1	04/04/24 20:52	EPA 300.0	

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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Landau Associates (Northgate)	Project: **Coit Services**	
155 NE 100th St #302	Project Number: **1789002.020.022**	**Report ID:**
Seattle, WA 98125	Project Manager: **Mike Staton**	**A4D0920 - 04 26 24 1854**

QUALITY CONTROL (QC) SAMPLE RESULTS

Halogenated Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24D0332 - EPA 5030C												**Water**
Blank (24D0332-BLK1)				Prepared: 04/09/24 07:07 Analyzed: 04/09/24 10:27								
EPA 8260D												
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	0.200	0.200	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 101 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*103 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*98 %*		*80-120 %*			*"*				
LCS (24D0332-BS1)				Prepared: 04/09/24 07:07 Analyzed: 04/09/24 10:05								
EPA 8260D												
1,2-Dichloroethane (EDC)	19.3	0.200	0.400	ug/L	1	20.0	---	97	80-120%	---	---	
1,1-Dichloroethane	18.9	0.200	0.400	ug/L	1	20.0	---	94	80-120%	---	---	
1,1-Dichloroethene	18.3	0.200	0.400	ug/L	1	20.0	---	92	80-120%	---	---	
cis-1,2-Dichloroethene	19.2	0.200	0.400	ug/L	1	20.0	---	96	80-120%	---	---	
trans-1,2-Dichloroethene	19.1	0.200	0.400	ug/L	1	20.0	---	96	80-120%	---	---	
Tetrachloroethene (PCE)	18.4	0.200	0.400	ug/L	1	20.0	---	92	80-120%	---	---	
1,1,1-Trichloroethane	18.9	0.200	0.400	ug/L	1	20.0	---	95	80-120%	---	---	
Trichloroethene (TCE)	17.5	0.200	0.400	ug/L	1	20.0	---	88	80-120%	---	---	
Vinyl chloride	14.8	0.200	0.200	ug/L	1	20.0	---	**74**	**80-120%**	---	---	Q-55
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 100 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*100 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*93 %*		*80-120 %*			*"*				
Duplicate (24D0332-DUP1)				Prepared: 04/09/24 07:07 Analyzed: 04/09/24 17:49								
QC Source Sample: Non-SDG (A4D0794-07RE1)												
1,2-Dichloroethane (EDC)	ND	1.00	2.00	ug/L	5	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	1.00	2.00	ug/L	5	---	ND	---	---	---	30%	

Apex Laboratories

Philip Nerenberg, Lab Director

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Landau Associates (Northgate)	Project: **Coit Services**	
155 NE 100th St #302	Project Number: **1789002.020.022**	**Report ID:**
Seattle, WA 98125	Project Manager: **Mike Staton**	**A4D0920 - 04 26 24 1854**

QUALITY CONTROL (QC) SAMPLE RESULTS

Halogenated Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24D0332 - EPA 5030C							**Water**					
Duplicate (24D0332-DUP1)			Prepared: 04/09/24 07:07 Analyzed: 04/09/24 17:49									
QC Source Sample: Non-SDG (A4D0794-07RE1)												
1,1-Dichloroethene	**1.40**	1.00	2.00	ug/L	5	---	1.25	---	---	11	30%	J
cis-1,2-Dichloroethene	**538**	1.00	2.00	ug/L	5	---	571	---	---	6	30%	
trans-1,2-Dichloroethene	**2.70**	1.00	2.00	ug/L	5	---	2.65	---	---	2	30%	
Tetrachloroethene (PCE)	**437**	1.00	2.00	ug/L	5	---	458	---	---	5	30%	
1,1,1-Trichloroethane	ND	1.00	2.00	ug/L	5	---	ND	---	---	---	30%	
Trichloroethene (TCE)	**257**	1.00	2.00	ug/L	5	---	273	---	---	6	30%	
Vinyl chloride	**51.6**	1.00	1.00	ug/L	5	---	55.1	---	---	7	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 106 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*105 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*97 %*		*80-120 %*				*"*			
Matrix Spike (24D0332-MS1)			Prepared: 04/09/24 07:07 Analyzed: 04/09/24 13:26									
QC Source Sample: Non-SDG (A4D1020-01)												
EPA 8260D												
1,2-Dichloroethane (EDC)	23.3	0.200	0.400	ug/L	1	20.0	ND	117	73-128%	---	---	
1,1-Dichloroethane	23.6	0.200	0.400	ug/L	1	20.0	ND	118	77-125%	---	---	
1,1-Dichloroethene	26.0	0.200	0.400	ug/L	1	20.0	ND	130	71-131%	---	---	
cis-1,2-Dichloroethene	23.6	0.200	0.400	ug/L	1	20.0	ND	118	78-123%	---	---	
trans-1,2-Dichloroethene	24.7	0.200	0.400	ug/L	1	20.0	ND	123	75-124%	---	---	
Tetrachloroethene (PCE)	22.8	0.200	0.400	ug/L	1	20.0	ND	114	74-129%	---	---	
1,1,1-Trichloroethane	25.3	0.200	0.400	ug/L	1	20.0	ND	127	74-131%	---	---	
Trichloroethene (TCE)	22.2	0.200	0.400	ug/L	1	20.0	ND	111	79-123%	---	---	
Vinyl chloride	20.1	0.200	0.200	ug/L	1	20.0	ND	101	58-137%	---	---	Q-54
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 102 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*101 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*92 %*		*80-120 %*				*"*			

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

Landau Associates (Northgate)	Project: **Coit Services**	
155 NE 100th St #302	Project Number: **1789002.020.022**	**Report ID:**
Seattle, WA 98125	Project Manager: **Mike Staton**	**A4D0920 - 04 26 24 1854**

QUALITY CONTROL (QC) SAMPLE RESULTS

Halogenated Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24D0357 - EPA 5030C												**Water**
Blank (24D0357-BLK1)			Prepared: 04/10/24 14:00 Analyzed: 04/10/24 17:03									
EPA 8260D												
1,2-Dichloroethane (EDC)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.200	0.400	ug/L	1	---	---	---	---	---	---	
Vinyl chloride	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 111 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*100 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*104 %*		*80-120 %*			*"*				
LCS (24D0357-BS1)			Prepared: 04/10/24 14:00 Analyzed: 04/10/24 15:57									
EPA 8260D												
1,2-Dichloroethane (EDC)	21.4	0.200	0.400	ug/L	1	20.0	---	107	80-120%	---	---	
1,1-Dichloroethane	20.4	0.200	0.400	ug/L	1	20.0	---	102	80-120%	---	---	
1,1-Dichloroethene	21.8	0.200	0.400	ug/L	1	20.0	---	109	80-120%	---	---	
cis-1,2-Dichloroethene	19.1	0.200	0.400	ug/L	1	20.0	---	96	80-120%	---	---	
trans-1,2-Dichloroethene	18.7	0.200	0.400	ug/L	1	20.0	---	93	80-120%	---	---	
Tetrachloroethene (PCE)	21.4	0.200	0.400	ug/L	1	20.0	---	107	80-120%	---	---	
1,1,1-Trichloroethane	23.5	0.200	0.400	ug/L	1	20.0	---	118	80-120%	---	---	
Trichloroethene (TCE)	20.2	0.200	0.400	ug/L	1	20.0	---	101	80-120%	---	---	
Vinyl chloride	18.8	0.100	0.200	ug/L	1	20.0	---	94	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 104 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*97 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*99 %*		*80-120 %*			*"*				
Duplicate (24D0357-DUP1)			Prepared: 04/10/24 14:00 Analyzed: 04/10/24 18:52									
QC Source Sample: Non-SDG (A4D0960-05)												
1,2-Dichloroethane (EDC)	ND	4.00	8.00	ug/L	20	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	4.00	8.00	ug/L	20	---	ND	---	---	---	30%	

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

Landau Associates (Northgate)	Project: **Coit Services**	
155 NE 100th St #302	Project Number: **1789002.020.022**	**Report ID:**
Seattle, WA 98125	Project Manager: **Mike Staton**	**A4D0920 - 04 26 24 1854**

QUALITY CONTROL (QC) SAMPLE RESULTS

Halogenated Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24D0357 - EPA 5030C							**Water**					
Duplicate (24D0357-DUP1)			Prepared: 04/10/24 14:00 Analyzed: 04/10/24 18:52									
QC Source Sample: Non-SDG (A4D0960-05)												
1,1-Dichloroethene	ND	4.00	8.00	ug/L	20	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	4.00	8.00	ug/L	20	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	4.00	8.00	ug/L	20	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	4.00	8.00	ug/L	20	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	4.00	8.00	ug/L	20	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	4.00	8.00	ug/L	20	---	ND	---	---	---	30%	
Vinyl chloride	ND	2.00	4.00	ug/L	20	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 111 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*98 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*103 %*		*80-120 %*			*"*				
Matrix Spike (24D0357-MS1)			Prepared: 04/10/24 14:00 Analyzed: 04/11/24 03:04									
QC Source Sample: Non-SDG (A4D0985-03)												
EPA 8260D												
1,2-Dichloroethane (EDC)	21.4	0.200	0.400	ug/L	1	20.0	ND	107	73-128%	---	---	
1,1-Dichloroethane	21.1	0.200	0.400	ug/L	1	20.0	ND	106	77-125%	---	---	
1,1-Dichloroethene	22.4	0.200	0.400	ug/L	1	20.0	ND	112	71-131%	---	---	
cis-1,2-Dichloroethene	19.7	0.200	0.400	ug/L	1	20.0	ND	98	78-123%	---	---	
trans-1,2-Dichloroethene	20.1	0.200	0.400	ug/L	1	20.0	ND	101	75-124%	---	---	
Tetrachloroethene (PCE)	22.5	0.200	0.400	ug/L	1	20.0	ND	113	74-129%	---	---	
1,1,1-Trichloroethane	25.0	0.200	0.400	ug/L	1	20.0	ND	125	74-131%	---	---	
Trichloroethene (TCE)	21.2	0.200	0.400	ug/L	1	20.0	ND	106	79-123%	---	---	
Vinyl chloride	21.2	0.100	0.200	ug/L	1	20.0	ND	106	58-137%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 105 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*94 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*96 %*		*80-120 %*			*"*				

Apex Laboratories

Philip Nerenberg, Lab Director

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503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

Landau Associates (Northgate)	Project: **Coit Services**	
155 NE 100th St #302	Project Number: **1789002.020.022**	**Report ID:**
Seattle, WA 98125	Project Manager: **Mike Staton**	**A4D0920 - 04 26 24 1854**

QUALITY CONTROL (QC) SAMPLE RESULTS

Anions by Ion Chromatography

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24D0216 - Method Prep: Aq									Water			
Blank (24D0216-BLK1)			Prepared: 04/04/24 17:18		Analyzed: 04/04/24 18:43							
EPA 300.0												
Nitrate-Nitrogen	ND	---	0.250	mg/L	1	---	---	---	---	---	---	
Sulfate	ND	---	1.00	mg/L	1	---	---	---	---	---	---	
LCS (24D0216-BS1)			Prepared: 04/04/24 17:18		Analyzed: 04/04/24 19:04							
EPA 300.0												
Nitrate-Nitrogen	2.12	---	0.250	mg/L	1	2.00	---	106	90-110%	---	---	
Sulfate	8.79	---	1.00	mg/L	1	8.00	---	110	90-110%	---	---	
Duplicate (24D0216-DUP1)			Prepared: 04/04/24 17:18		Analyzed: 04/04/24 19:47							
QC Source Sample: MW-15-240403 (A4D0920-01)												
EPA 300.0												
Nitrate-Nitrogen	ND	---	0.250	mg/L	1	---	ND	---	---	---	3%	
Sulfate	**5.40**	---	1.00	mg/L	1	---	5.50	---	---	2	4%	
Matrix Spike (24D0216-MS1)			Prepared: 04/04/24 17:18		Analyzed: 04/04/24 20:09							
QC Source Sample: MW-15-240403 (A4D0920-01)												
EPA 300.0												
Nitrate-Nitrogen	2.76	---	0.312	mg/L	1	2.50	ND	110	87-112%	---	---	
Sulfate	16.6	---	1.25	mg/L	1	10.0	5.50	111	88-115%	---	---	

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ANALYTICAL REPORT

Landau Associates (Northgate)	Project: Coit Services	
155 NE 100th St #302	Project Number: 1789002.020.022	Report ID:
Seattle, WA 98125	Project Manager: Mike Staton	A4D0920 - 04 26 24 1854

SAMPLE PREPARATION INFORMATION

Halogenated Volatile Organic Compounds by EPA 8260D

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24D0357							
A4D0920-01RE1	Water	EPA 8260D	04/03/24 10:31	04/10/24 16:23	5mL/5mL	5mL/5mL	1.00
A4D0920-02RE1	Water	EPA 8260D	04/03/24 09:56	04/10/24 16:23	5mL/5mL	5mL/5mL	1.00
A4D0920-03RE1	Water	EPA 8260D	04/03/24 11:17	04/10/24 16:23	5mL/5mL	5mL/5mL	1.00

Anions by Ion Chromatography

Prep: Method Prep: Aq

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24D0216							
A4D0920-01	Water	EPA 300.0	04/03/24 10:31	04/04/24 17:18	5mL/5mL	5mL/5mL	1.00
A4D0920-02	Water	EPA 300.0	04/03/24 09:56	04/04/24 17:18	5mL/5mL	5mL/5mL	1.00
A4D0920-03	Water	EPA 300.0	04/03/24 11:17	04/04/24 17:18	5mL/5mL	5mL/5mL	1.00

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Philip Nerenberg, Lab Director

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Seattle, WA 98125	Project Manager: **Mike Staton**	**A4D0920 - 04 26 24 1854**

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

J	Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified DL.
Q-54	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -6%. The results are reported as Estimated Values.
Q-55	Daily CCV/LCS recovery for this analyte was below the +/-20% criteria listed in EPA 8260, however there is adequate sensitivity to ensure detection at the reporting level.

Apex Laboratories

Philip Nerenberg, Lab Director

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Seattle, WA 98125	Project Manager: **Mike Staton**	**A4D0920 - 04 26 24 1854**

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

Results for Volatiles analyses on soils and sediments that are reported on a “dry weight” basis include the water miscible solvent (WMS) correction referenced in the EPA 8000 Method guidance documents. Solid and Liquid samples reported on an “As Received” basis do not have the WMS correction applied, as dry weight was not performed.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Apex Laboratories

Philip Nerenberg, Lab Director

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Seattle, WA 98125	Project Manager: **Mike Staton**	**A4D0920 - 04 26 24 1854**

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).

-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.

-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

-Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level, if results are not reported to the MDL.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

Landau Associates (Northgate)	Project: **Coit Services**	
155 NE 100th St #302	Project Number: **1789002.020.022**	**Report ID:**
Seattle, WA 98125	Project Manager: **Mike Staton**	**A4D0920 - 04 26 24 1854**

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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APEX LABORATORIES

Apex Laboratories, LLC
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ANALYTICAL REPORT

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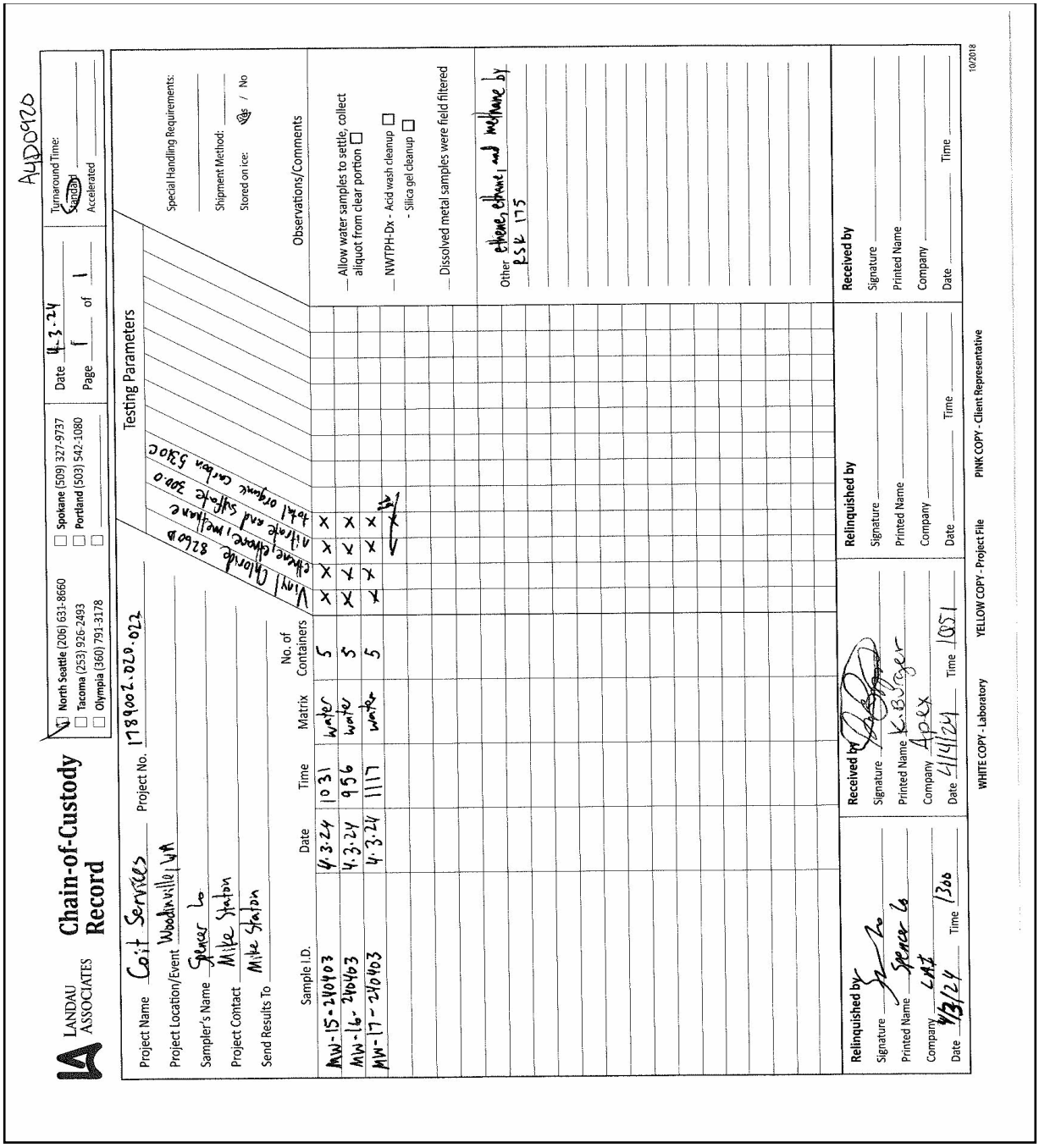

A4D0920

LANDAU ASSOCIATES

Chain-of-Custody Record

☑ North Seattle (206) 631-8660 ☐ Spokane (509) 327-9737
☐ Tacoma (253) 926-2493 ☐ Portland (503) 542-1080
☐ Olympia (360) 791-3178 ☐ _____

Date 4.3.24 Page 1 of 1

Turnaround Time: Standard _____ Accelerated _____

Project Name Coit Services Project No. 1789002.020.022
Project Location/Event Woodinville, WA
Sampler's Name Spencer Lo
Project Contact Mike Staton
Send Results To Mike Staton

Testing Parameters

Sample I.D.	Date	Time	Matrix	No. of Containers	VOCs (Chloride 8260B, chlorobenzene, methane, nitrate and sulfate 300.0, total organic carbon 5310C)	Dissolved metal samples were field filtered
MW-15-240403	4.3.24	1031	water	5	X	
MW-16-240403	4.3.24	956	water	5	X	
MW-17-240403	4.3.24	1117	water	5	X	X

Special Handling Requirements: _____
Shipment Method: _____
Stored on ice: Yes / No

Observations/Comments
- Allow water samples to settle, collect aliquot from clear portion ☐
- NWTPH-Dx - Acid wash cleanup ☐
  - Silica gel cleanup ☐
- Dissolved metal samples were field filtered

Other ethene, ethane, and methane by RSK 175

Relinquished by	Received by	Relinquished by	Received by
Signature Spencer Lo	Signature	Signature	Signature
Printed Name Spencer Lo	Printed Name K. Bisger	Printed Name	Printed Name
Company LAT	Company Apex	Company	Company
Date 4/3/24 Time 1300	Date 4/4/24 Time 1051	Date Time	Date Time

WHITE COPY - Laboratory YELLOW COPY - Project File PINK COPY - Client Representative

10/2018

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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Seattle, WA 98125	Project Manager: **Mike Staton**	**A4D0920 - 04 26 24 1854**

APEX LABS COOLER RECEIPT FORM

Client: Landau Associates Element WO#: A4D0920

Project/Project #: Coit Services 1789002.020.022 ACC for KAB 4/4/24

Delivery Info:

Date/time received: 4/4/24 @ 1051 By: KAB

Delivered by: Apex__Client__ESS__FedEx X UPS__Radio__Morgan__SDS__Evergreen__Other__

From USDA Regulated Origin? Yes ____ No X

Cooler Inspection Date/time inspected: 4/4/24 @ 1052 By: KAB

Chain of Custody included? Yes X No ____

Signed/dated by client? Yes Y No ____

Contains USDA Reg. Soils? Yes ____ No X Unsure (email RegSoils) ____

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	1.1						
Custody seals? (Y/N)	N						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	N						
Ice type: (Gel/Real/Other)	Real						
Condition (In/Out):	IN						

Cooler out of temp? (Y/(N)) Possible reason why: ____

Green dots applied to out of temperature samples? Yes (No)

Out of temperature samples form initiated? Yes (No)

Sample Inspection: Date/time inspected: 4/4/24 @ 1119 By: AAW

All samples intact? Yes X No ___ Comments: ____

Bottle labels/COCs agree? Yes ~~X~~ ACC for AAW 4/4/24 No (X) Comments: Trip Blank provided, not on COC.

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments: ____

Do VOA vials have visible headspace? Yes ___ No X NA ____

Comments MW-15 3/3 have sed

Water samples: pH checked: Yes X No ___ NA ___ pH appropriate? Yes X No ___ NA ____ pH ID: A23I172

Comments: ____

2729 7412 3998 TB #3511

Labeled by: AAW Witness: Cooler Inspected by: AAW

Form Y-003 R-02

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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April 18, 2024 Service Request No:K2403681

Philip Nerenberg
Apex Laboratories
6700 SW Sandburg St.
Tigard, OR 97223

Laboratory Results for: A4D0920

Dear Philip,

Enclosed are the results of the sample(s) submitted to our laboratory April 08, 2024
For your reference, these analyses have been assigned our service request number **K2403681.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3364. You may also contact me via email at howard.holmes@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Howard Holmes
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Apex Laboratories
Project: A4D0920
Sample Matrix: Water

Service Request: K2403681
Date Received: 04/08/2024

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Three water samples were received for analysis at ALS Environmental on 04/08/2024. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

General Chemistry:

No significant anomalies were noted with this analysis.

Approved by  Date 04/18/2024

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: MW-15-240403			Lab ID: K2403681-001			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Carbon, Total Organic	7.10		0.08	0.50	mg/L	SM 5310 C

CLIENT ID: MW-16-240403			Lab ID: K2403681-002			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Carbon, Total Organic	5.60		0.08	0.50	mg/L	SM 5310 C

CLIENT ID: MW-17-240403			Lab ID: K2403681-003			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Carbon, Total Organic	5.20		0.08	0.50	mg/L	SM 5310 C

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Apex Laboratories **Service Request:**K2403681
Project: A4D0920

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2403681-001	MW-15-240403	4/4/2024	1031
K2403681-002	MW-16-240403	4/4/2024	0956
K2403681-003	MW-17-240403	4/3/2024	1117

WO2403681

SUBCONTRACT ORDER

Apex Laboratories

ACC 4/4/24

A4D0920

SENDING LABORATORY:

Apex Laboratories
6700 S.W. Sandburg Street
Tigard, OR 97223
Phone: (503) 718-2323
Fax: (503) 336-0745
Project Manager: Philip Nerenberg

RECEIVING LABORATORY:

ALS Group USA - Kelso
1317 S 13th Avenue
Kelso, WA 98626
Phone :(360) 577-7222
Fax: (360) 636-1068

Sample Name: MW-15-240403 **Sampled: 04/04/24 10:31** (A4D0920-01)

Analysis	Due	Expires	Comments
Total Organic Carbon - H2O (5310C)	04/17/24 17:00	05/02/24 10:31	
Containers Supplied:			
(D)250 mL Poly - Sulfuric (H2SO4)			

Sample Name: MW-16-240403 **Sampled: 04/04/24 09:56** (A4D0920-02)

Analysis	Due	Expires	Comments
Total Organic Carbon - H2O (5310C)	04/17/24 17:00	05/02/24 09:56	
Containers Supplied:			
(D)250 mL Poly - Sulfuric (H2SO4)			

Sample Name: MW-17-240403 **Sampled: 04/03/24 11:17** (A4D0920-03)

Analysis	Due	Expires	Comments
Total Organic Carbon - H2O (5310C)	04/17/24 17:00	05/01/24 11:17	
Containers Supplied:			
(D)250 mL Poly - Sulfuric (H2SO4)			

Standard TAT

Released By	Date	Received By	Date
	4/8/24 1090		4/8/24 1050
	4/8/24 1215		4/8/24 1215

PM HH

Cooler Receipt and Preservation Form

Client Apex Service Request K24 03681

Received: 4/8/24 Opened: 4/8/24 By: HS Unloaded: 4/8/24 By: HS

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* (*Courier*) *Hand Delivered*
2. Samples were received in: (circle) (*Cooler*) *Box* *Envelope* *Other*_____ *NA*
3. Were custody seals on coolers? NA Y (N) If yes, how many and where? _____
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
4.0		IR01					

4. Was a Temperature Blank present in cooler? NA (Y) N If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA (Y) N
   If no, were they received on ice and same day as collected? If not, notate the cooler # above and notify the PM. (NA) Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* *Baggies* *Bubble Wrap* (*Gel Packs*) *Wet Ice* *Dry Ice* *Sleeves* _____
7. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
8. Were samples received in good condition (unbroken) NA (Y) N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA (Y) N
10. Did all sample labels and tags agree with custody papers? NA (Y) N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA (Y) N
13. Were VOA vials received without headspace? *Indicate in the table below.* (NA) Y N
14. Was C12/Res negative? (NA) Y N
15. Were samples received within the method specified time limit? If not, notate the error below and notify the PM (NA) Y N
16. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? (NA) Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: _____

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client:	Apex Laboratories	**Service Request:**	K2403681
Project:	A4D0920/		

Sample Name:	MW-15-240403	**Date Collected:**	04/4/24
Lab Code:	K2403681-001	**Date Received:**	04/8/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
SM 5310 C		MSPECHT

Sample Name:	MW-16-240403	**Date Collected:**	04/4/24
Lab Code:	K2403681-002	**Date Received:**	04/8/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
SM 5310 C		MSPECHT

Sample Name:	MW-17-240403	**Date Collected:**	04/3/24
Lab Code:	K2403681-003	**Date Received:**	04/8/24
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
SM 5310 C		MSPECHT

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

General Chemistry

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Apex Laboratories	**Service Request:**	K2403681
Project:	A4D0920	**Date Collected:**	04/04/24 10:31
Sample Matrix:	Water	**Date Received:**	04/08/24 12:15
Sample Name:	MW-15-240403	**Basis:**	NA
Lab Code:	K2403681-001		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Carbon, Total Organic	SM 5310 C	**7.10**	mg/L	0.50	0.08	1	04/12/24 14:49	

Analytical Report

Client:	Apex Laboratories	**Service Request:**	K2403681
Project:	A4D0920	**Date Collected:**	04/04/24 09:56
Sample Matrix:	Water	**Date Received:**	04/08/24 12:15
Sample Name:	MW-16-240403	**Basis:**	NA
Lab Code:	K2403681-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Carbon, Total Organic	SM 5310 C	**5.60**	mg/L	0.50	0.08	1	04/12/24 14:49	

Analytical Report

Client:	Apex Laboratories	**Service Request:**	K2403681
Project:	A4D0920	**Date Collected:**	04/03/24 11:17
Sample Matrix:	Water	**Date Received:**	04/08/24 12:15
Sample Name:	MW-17-240403	**Basis:**	NA
Lab Code:	K2403681-003		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Carbon, Total Organic	SM 5310 C	**5.20**	mg/L	0.50	0.08	1	04/12/24 14:49	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

General Chemistry

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Apex Laboratories	**Service Request:**	K2403681
Project:	A4D0920	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	K2403681-MB		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Carbon, Total Organic	SM 5310 C	ND U	mg/L	0.50	0.08	1	04/12/24 14:49	

Client:	Apex Laboratories	**Service Request:**	K2403681
Project:	A4D0920	**Date Collected:**	04/04/24
Sample Matrix:	Water	**Date Received:**	04/08/24
		Date Analyzed:	04/12/24
		Date Extracted:	NA

Matrix Spike Summary
Carbon, Total Organic

Sample Name:	MW-16-240403	**Units:**	mg/L
Lab Code:	K2403681-002	**Basis:**	NA
Analysis Method:	SM 5310 C		
Prep Method:	None		

Matrix Spike
K2403681-002MS

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Carbon, Total Organic	5.60	29.7	25.0	96	83-117

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

QA/QC Report

Client:	Apex Laboratories	**Service Request:**	K2403681
Project	A4D0920	**Date Collected:**	04/04/24
Sample Matrix:	Water	**Date Received:**	04/08/24
		Date Analyzed:	04/12/24

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	MW-16-240403	**Units:**	mg/L
Lab Code:	K2403681-002	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample K2403681-002DUP Result	Average	RPD	RPD Limit
Carbon, Total Organic	SM 5310 C	0.50	0.08	5.60	5.50	5.55	2	10

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Apex Laboratories	**Service Request:**	K2403681
Project:	A4D0920	**Date Analyzed:**	04/12/24
Sample Matrix:	Water	**Date Extracted:**	NA

Lab Control Sample Summary
Carbon, Total Organic

Analysis Method:	SM 5310 C	**Units:**	mg/L
Prep Method:	None	**Basis:**	NA
		Analysis Lot:	837780

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2403681-LCS	23.1	25.0	92	83-117

Air TECHNOLOGY
Laboratories, Inc.

April 24, 2024

LA Cert #04140
EPA Methods TO3, TO14A, TO15, 25C/3C, ASTM D1946, RSK-175

TX Cert T104704450-14-6
EPA Methods TO14A, TO15

UT Cert CA0133332015-3
EPA Methods TO3, TO14A, TO15, RSK-175

Apex Laboratories
ATTN: Philip Nerenberg
6700 S.W. Sandburg St.
Tigard, OR 97223

LABORATORY TEST RESULTS

Project Reference: A4D0920
Lab Number: R040905-01/03

Enclosed are results for sample(s) received 4/09/24 by Air Technology Laboratories. Samples were received intact and chilled to 3° C. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

- Unless otherwise noted in the report, sample analyses were performed within method performance criteria and meet all requirements of the TNI Standards.
- The enclosed results relate only to the sample(s).

ATL appreciates the opportunity to provide testing services to your company. If you have any questions regarding these results, please call me at (626) 964-4032.

Sincerely,

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Note: The cover letter is an integral part of this analytical report.

SUBCONTRACT ORDER

Apex Laboratories

A4D0920

ACC 4/4/24

R040905-01/03

SENDING LABORATORY:

Apex Laboratories
6700 S.W. Sandburg Street
Tigard, OR 97223
Phone: (503) 718-2323
Fax: (503) 336-0745
Project Manager: Philip Nerenberg

RECEIVING LABORATORY:

Air Technology Laboratories, Inc
18501 E. Gale Ave Suite 130
City of Industry, CA 91748
Phone :(626) 964-4032
Fax: (626) 964-5832

Sample Name: MW-15-240403 **Water** **Sampled: 04/04/24 10:31** (A4D0920-01)

Analysis	Due	Expires	Comments
RSK 175 Preserved (Meth, Eth, Eth) (Sub)	04/17/24 17:00	04/18/24 10:31	1/1 VOAs have sed
Containers Supplied:			
(C)40 mL VOA - HCL			

Sample Name: MW-16-240403 **Water** **Sampled: 04/04/24 09:56** (A4D0920-02)

Analysis	Due	Expires	Comments
RSK 175 Preserved (Meth, Eth, Eth) (Sub)	04/17/24 17:00	04/18/24 09:56	
Containers Supplied:			
(C)40 mL VOA - HCL			

Sample Name: MW-17-240403 **Water** **Sampled: 04/03/24 11:17** (A4D0920-03)

Analysis	Due	Expires	Comments
RSK 175 Preserved (Meth, Eth, Eth) (Sub)	04/17/24 17:00	04/17/24 11:17	
Containers Supplied:			
(C)40 mL VOA - HCL			

* COLL DT PER SAMPLE ID LABELS 4/9/24

Standard TAT

3°C HO 4/9/24

Released By	Date	Received By	Date
Masonmckeefry	4.8.24	UPS (Shipper)	
UPS (Shipper)	4/9/24 10:10		4/9/24 10:10
Released By	Date	Received By	Date

Client: Apex Laboratories
Attn: Philip Nerenberg
Project Name: NA
Project No.: A4D0920
Date Received: 04/09/24
Matrix: Water
Reporting Units: ug/L

RSK175

Lab No.:	R040905-01		R040905-02		R040905-03			
Client Sample I.D.:	MW-15-240403 (A4D0920-01)		MW-16-240403 (A4D0920-02)		MW-17-240403 (A4D0920-03)			
Date/Time Sampled:	4/3/24 10:31		4/3/24 9:56		4/3/24 11:17			
Date/Time Analyzed:	4/10/24 13:42		4/10/24 13:53		4/10/24 14:04			
QC Batch No.:	240410GC8A1		240410GC8A1		240410GC8A1			
Analyst Initials:	AS		AS		AS			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Result ug/L	RL ug/L	Result ug/L	RL ug/L	Result ug/L	RL ug/L		
Ethene	ND	1.0	ND	1.0	ND	1.0		
Ethane	ND	1.0	ND	1.0	ND	1.0		
Methane	380	1.0	1,200	1.0	33	1.0		

ND = Not Detected (below RL)
RL = Reporting Limit

Reviewed/Approved By: _____ **Date** 4/24/24
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch No: 240410GC8A1
Matrix: Water
Reporting Units: ug/L

RSK 175
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date/Time Analyzed:	4/10/24 9:48			4/10/24 9:24		4/10/24 9:37					
Analyst Initials:	AS			AS		AS					
Dilution Factor:	1.0			1.0		1.0			Limits		
ANALYTE	Result ug/L	RL ug/L	SPIKE AMT. ug/L	Result ug/L	% Rec.	Result ug/L	% Rec.	RPD %	Low %Rec	High %Rec	Max. RPD
Ethene	ND	1.0	1,150	1,180	103	1,210	106	2.7	70	130	30
Ethane	ND	1.0	1,200	1,260	102	1,270	103	0.8	70	130	30
Methane	ND	1.0	650	656	100	657	100	0.0	70	130	30

ND = Not Detected (below RL)
RL = Reporting Limit

Reviewed/Approved By: _____ Date 4/24/24
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Thursday, May 23, 2024

Mike Staton
Landau Associates (Northgate)
155 NE 100th St #302
Seattle, WA 98125

RE: A4E1091 - Coit Services - 1789002.020.023

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A4E1091, which was received by the laboratory on 5/9/2024 at 11:17:00AM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: pnerenberg@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information
Acceptable Receipt Temperature is less than, or equal to, 6 degC (not frozen), or received on ice the same day as sampling.
(See Cooler Receipt Form for details)
Default Cooler 2.7 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Landau Associates (Northgate)	Project: **Coit Services**	
155 NE 100th St #302	Project Number: **1789002.020.023**	**Report ID:**
Seattle, WA 98125	Project Manager: **Mike Staton**	**A4E1091 - 05 23 24 1106**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-17-240508	**A4E1091-01**	**Water**	**05/08/24 14:05**	**05/09/24 11:17**

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ANALYTICAL SAMPLE RESULTS

Vinyl Chloride by EPA 8260D SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-17-240508 (A4E1091-01)				**Matrix: Water**			**Batch: 24E0760**	**CONT**
Vinyl chloride	ND	---	0.0200	ug/L	1	05/21/24 18:12	EPA 8260D SIM	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*97 %*	*Limits:* *80-120 %*	*1*	*05/21/24 18:12*	*EPA 8260D SIM*	
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*1*	*05/21/24 18:12*	*EPA 8260D SIM*	
4-Bromofluorobenzene (Surr)			*103 %*	*80-120 %*	*1*	*05/21/24 18:12*	*EPA 8260D SIM*	

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QUALITY CONTROL (QC) SAMPLE RESULTS

Vinyl Chloride by EPA 8260D SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24E0760 - EPA 5030C												**Water**
Blank (24E0760-BLK1)			Prepared: 05/21/24 15:05 Analyzed: 05/21/24 17:45									
EPA 8260D SIM												
Vinyl chloride	ND	---	0.0200	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 96 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*101 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*102 %*		*80-120 %*				*"*			
LCS (24E0760-BS1)			Prepared: 05/21/24 15:05 Analyzed: 05/21/24 16:42									
EPA 8260D SIM												
Vinyl chloride	0.215	---	0.0200	ug/L	1	0.200	---	107	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 94 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*99 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*99 %*		*80-120 %*				*"*			
Duplicate (24E0760-DUP1)			Prepared: 05/21/24 15:05 Analyzed: 05/21/24 18:38									**CONT**
QC Source Sample: MW-17-240508 (A4E1091-01)												
EPA 8260D SIM												
Vinyl chloride	ND	---	0.0200	ug/L	1	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 97 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*101 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*102 %*		*80-120 %*				*"*			
Matrix Spike (24E0760-MS1)			Prepared: 05/21/24 15:05 Analyzed: 05/21/24 19:05									**CONT**
QC Source Sample: MW-17-240508 (A4E1091-01)												
EPA 8260D SIM												
Vinyl chloride	0.282	---	0.0200	ug/L	1	0.200	ND	**141**	**58-137%**	---	---	Q-01
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 96 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*100 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*101 %*		*80-120 %*				*"*			

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Seattle, WA 98125	Project Manager: **Mike Staton**	**A4E1091 - 05 23 24 1106**

SAMPLE PREPARATION INFORMATION

Vinyl Chloride by EPA 8260D SIM

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24E0760							
A4E1091-01	Water	EPA 8260D SIM	05/08/24 14:05	05/21/24 15:05	5mL/5mL	5mL/5mL	1.00

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QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

CONT	The Sample Container provided for this analysis was not provided by Apex Laboratories, and has not been verified as part of the Apex Quality System.
Q-01	Spike recovery and/or RPD is outside acceptance limits.

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REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

Results for Volatiles analyses on soils and sediments that are reported on a “dry weight” basis include the water miscible solvent (WMS) correction referenced in the EPA 8000 Method guidance documents. Solid and Liquid samples reported on an “As Received” basis do not have the WMS correction applied, as dry weight was not performed.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

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REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).

-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.

-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

-Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level, if results are not reported to the MDL.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

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LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) -
EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

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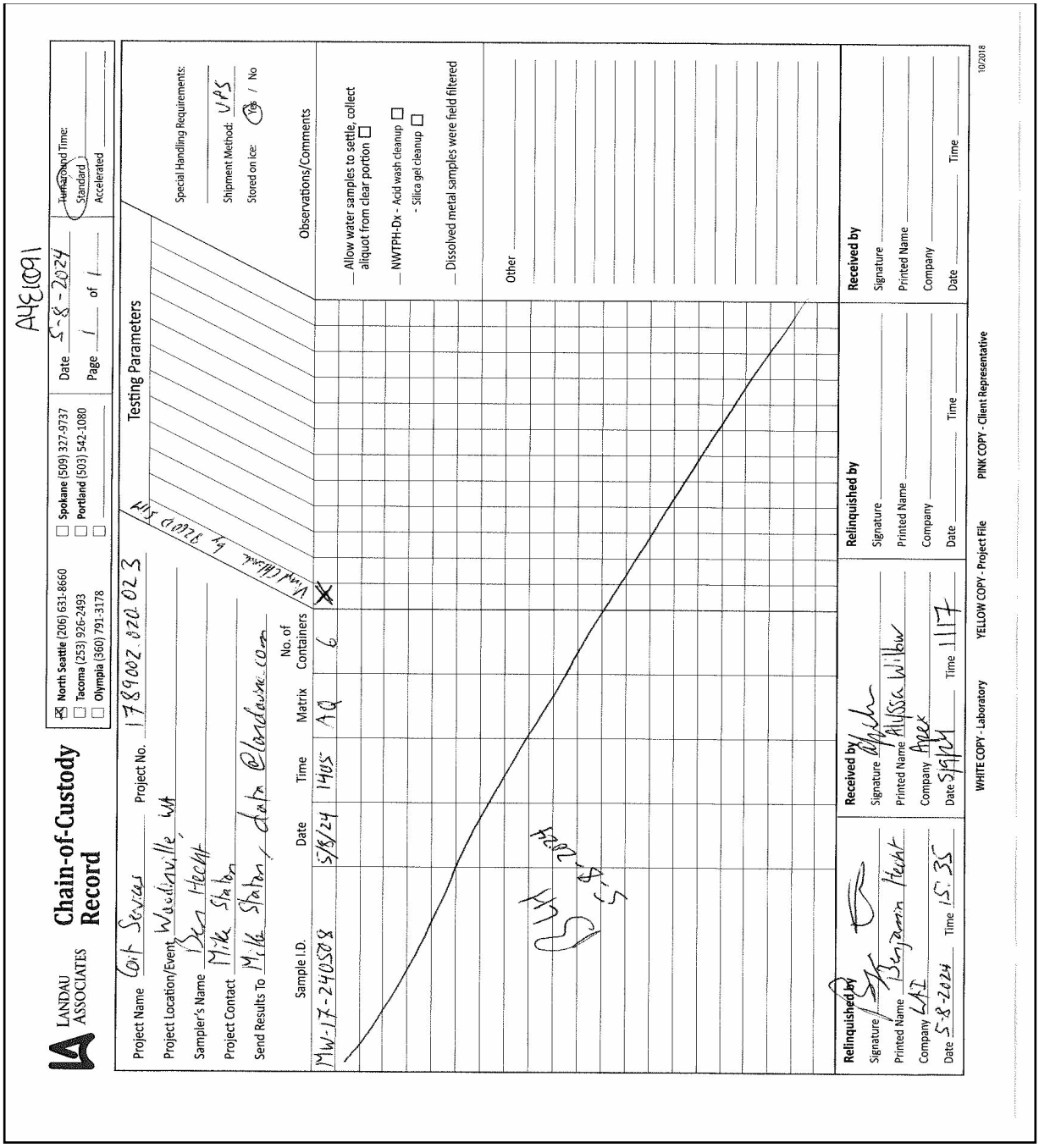

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APEX LABS COOLER RECEIPT FORM

Client: Landau Associates Element WO#: A4E1091

Project/Project #: Coit Services 1789002.020.023

Delivery Info:

Date/time received: 5/9/24 @ 1117 By: AAW

Delivered by: Apex__Client__ESS__FedEx__UPS_X_Radio__Morgan__SDS__Evergreen__Other__

From USDA Regulated Origin? Yes ____ No X

Cooler Inspection Date/time inspected: 5/9/24 @ 1117 By: AAW

Chain of Custody included? Yes X No ____

Signed/dated by client? Yes X No ____

Contains USDA Reg. Soils? Yes ____ No X Unsure (email RegSoils) ____

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	2.7						
Custody seals? (Y/N)	N						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	N						
Ice type: (Gel/Real/Other)	Real						
Condition (In/Out):	In						

Cooler out of temp? (Y/N) Possible reason why: ____

Green dots applied to out of temperature samples? Yes/No

Out of temperature samples form initiated? Yes/No

Sample Inspection: Date/time inspected: 5/9/24 @ 1405 By: KAB

All samples intact? Yes X No ___ Comments: ____

Bottle labels/COCs agree? Yes X No ___ Comments: ____

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments: ____

Do VOA vials have visible headspace? Yes ___ No X NA ____

Comments ____

Water samples: pH checked: Yes___No___NA X pH appropriate? Yes___No___NA X pH ID: ____

Comments: ____

12 CIB 06501 2073 6735

Labeled by: LeAB Witness: JM Cooler Inspected by: KAB

Form Y-003 R-02

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APPENDIX D

TEE Evaluation Form

Voluntary Cleanup Program

Washington State Department of Ecology
Toxics Cleanup Program

TERRESTRIAL ECOLOGICAL EVALUATION FORM

Under the Model Toxics Control Act (MTCA), a terrestrial ecological evaluation is necessary if hazardous substances are released into the soils at a Site. In the event of such a release, you must take one of the following three actions as part of your investigation and cleanup of the Site:

1. Document an exclusion from further evaluation using the criteria in WAC 173-340-7491.
2. Conduct a simplified evaluation as set forth in WAC 173-340-7492.
3. Conduct a site-specific evaluation as set forth in WAC 173-340-7493.

When requesting a written opinion under the Voluntary Cleanup Program (VCP), you must complete this form and submit it to the Department of Ecology (Ecology). The form documents the type and results of your evaluation.

Completion of this form is not sufficient to document your evaluation. You still need to document your analysis and the basis for your conclusion in your cleanup plan or report.

If you have questions about how to conduct a terrestrial ecological evaluation, please contact the Ecology site manager assigned to your Site. For additional guidance, please refer to https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Terrestrial-ecological-evaluation.

Step 1: IDENTIFY HAZARDOUS WASTE SITE	
Please identify below the hazardous waste site for which you are documenting an evaluation.	
Facility/Site Name: Coit Services	
Facility/Site Address: 16750 Woodinville-Redmond Road NE, Woodinville, WA	
Facility/Site No: 36189742	VCP Project No.: NW3377

Step 2: IDENTIFY EVALUATOR			
Please identify below the person who conducted the evaluation and their contact information.			
Name: Bill Haldeman			Title: Associate Hydrogeologist
Organization: Landau Associates, Inc.			
Mailing address: 155 NE 100th Street, Suite 302			
City: Seattle		State: WA	Zip code: 98125
Phone: 425-329-0257	Fax: --	E-mail: bhaldeman@landauinc.com	

Step 3: DOCUMENT EVALUATION TYPE AND RESULTS

A. Exclusion from further evaluation.

1. Does the Site qualify for an exclusion from further evaluation?

☐ Yes *If you answered **"YES,"** then answer **Question 2**.*

☒ No or Unknown *If you answered **"NO" or "UNKNOWN,"** then skip to **Step 3B** of this form.*

2. What is the basis for the exclusion? *Check all that apply. Then skip to **Step 4** of this form.*

Point of Compliance: WAC 173-340-7491(1)(a)

☐ All soil contamination is, or will be,* at least 15 feet below the surface.

☐ All soil contamination is, or will be,* at least 6 feet below the surface (or alternative depth if approved by Ecology), and institutional controls are used to manage remaining contamination.

Barriers to Exposure: WAC 173-340-7491(1)(b)

☐ All contaminated soil, is or will be,* covered by physical barriers (such as buildings or paved roads) that prevent exposure to plants and wildlife, and institutional controls are used to manage remaining contamination.

Undeveloped Land: WAC 173-340-7491(1)(c)

☐ There is less than 0.25 acres of contiguous[#] undeveloped[±] land on or within 500 feet of any area of the Site and any of the following chemicals is present: chlorinated dioxins or furans, PCB mixtures, DDT, DDE, DDD, aldrin, chlordane, dieldrin, endosulfan, endrin, heptachlor, heptachlor epoxide, benzene hexachloride, toxaphene, hexachlorobenzene, pentachlorophenol, or pentachlorobenzene.

☐ For sites not containing any of the chemicals mentioned above, there is less than 1.5 acres of contiguous[#] undeveloped[±] land on or within 500 feet of any area of the Site.

Background Concentrations: WAC 173-340-7491(1)(d)

☐ Concentrations of hazardous substances in soil do not exceed natural background levels as described in WAC 173-340-200 and 173-340-709.

* An exclusion based on future land use must have a completion date for future development that is acceptable to Ecology.

[±] "Undeveloped land" is land that is not covered by building, roads, paved areas, or other barriers that would prevent wildlife from feeding on plants, earthworms, insects, or other food in or on the soil.

[#] "Contiguous" undeveloped land is an area of undeveloped land that is not divided into smaller areas of highways, extensive paving, or similar structures that are likely to reduce the potential use of the overall area by wildlife.

B. Simplified evaluation.

1. Does the Site qualify for a simplified evaluation?

☒ Yes *If you answered **"YES,"** then answer **Question 2** below.*

☐ No or Unknown *If you answered **"NO"** or **"UNKNOWN,"** then skip to **Step 3C** of this form.*

2. Did you conduct a simplified evaluation?

☒ Yes *If you answered **"YES,"** then answer **Question 3** below.*

☐ No *If you answered **"NO,"** then skip to **Step 3C** of this form.*

3. Was further evaluation necessary?

☐ Yes *If you answered **"YES,"** then answer **Question 4** below.*

☒ No *If you answered **"NO,"** then answer **Question 5** below.*

4. If further evaluation was necessary, what did you do?

☐ Used the concentrations listed in Table 749-2 as cleanup levels. *If so, then skip to **Step 4** of this form.*

☐ Conducted a site-specific evaluation. *If so, then skip to **Step 3C** of this form.*

5. If no further evaluation was necessary, what was the reason? *Check all that apply. Then skip to **Step 4** of this form.*

Exposure Analysis: WAC 173-340-7492(2)(a)

☐ Area of soil contamination at the Site is not more than 350 square feet.

☐ Current or planned land use makes wildlife exposure unlikely. Used Table 749-1.

Pathway Analysis: WAC 173-340-7492(2)(b)

☐ No potential exposure pathways from soil contamination to ecological receptors.

Contaminant Analysis: WAC 173-340-7492(2)(c)

☒ No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations that exceed the values listed in Table 749-2.

☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations that exceed the values listed in Table 749-2, and institutional controls are used to manage remaining contamination.

☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays.

☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays, and institutional controls are used to manage remaining contamination.

C. Site-specific evaluation. A site-specific evaluation process consists of two parts: (1) formulating the problem, and (2) selecting the methods for addressing the identified problem. Both steps require consultation with and approval by Ecology. *See* WAC 173-340-7493(1)(c).

1. Was there a problem? *See* WAC 173-340-7493(2).

☐ Yes *If you answered **"YES,"** then answer **Question 2** below.*

☐ No *If you answered **"NO,"** then identify the reason here and then skip to **Question 5** below:*

- ☐ No issues were identified during the problem formulation step.
- ☐ While issues were identified, those issues were addressed by the cleanup actions for protecting human health.

2. What did you do to resolve the problem? *See* WAC 173-340-7493(3).

- ☐ Used the concentrations listed in Table 749-3 as cleanup levels. *If so, then skip to **Question 5** below.*
- ☐ Used one or more of the methods listed in WAC 173-340-7493(3) to evaluate and address the identified problem. *If so, then answer **Questions 3 and 4** below.*

3. If you conducted further site-specific evaluations, what methods did you use?
Check all that apply. See WAC 173-340-7493(3).

- ☐ Literature surveys.
- ☐ Soil bioassays.
- ☐ Wildlife exposure model.
- ☐ Biomarkers.
- ☐ Site-specific field studies.
- ☐ Weight of evidence.
- ☐ Other methods approved by Ecology. If so, please specify:

4. What was the result of those evaluations?

- ☐ Confirmed there was no problem.
- ☐ Confirmed there was a problem and established site-specific cleanup levels.

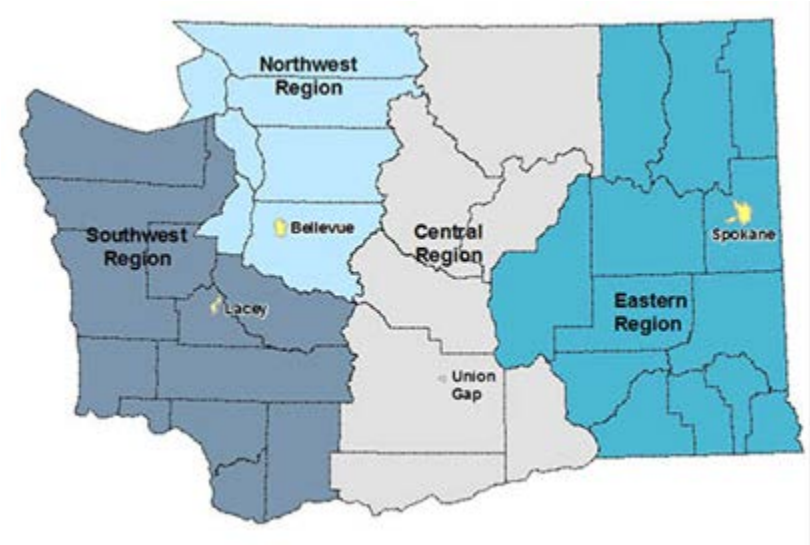
5. Have you already obtained Ecology's approval of both your problem formulation and problem resolution steps?

☐ Yes If so, please identify the Ecology staff who approved those steps:

☐ No

Step 4: SUBMITTAL

Please mail your completed form to the Ecology site manager 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.



Northwest Region: Attn: VCP Coordinator 3190 160th Ave. SE Bellevue, WA 98008-5452	**Central Region:** Attn: VCP Coordinator 1250 West Alder St. Union Gap, WA 98903-0009
Southwest Region: Attn: VCP Coordinator P.O. Box 47775 Olympia, WA 98504-7775	**Eastern Region:** Attn: VCP Coordinator N. 4601 Monroe Spokane WA 99205-1295

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

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Legend

- Area of Groundwater Contamination
- 500ft Buffer
- Building C Boundary

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

0 200 400

Scale in Feet

Source: Google Earth Imagery.

LANDAU ASSOCIATES

Coit Services Woodinville, Washington	**Aerial View of 500-foot Radius from Site**	Figure 1