Site Investigation Summary Report
Oregon Lithoprint aka News Register Site
609 NE Third Street
McMinnville, Oregon

Prepared for:
Oregon Lithoprint, Inc.

June 17, 2022
2442-00

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1.0 Introduction

This Supplemental Site Investigation Summary Report presents a summary of site investigation activities that were conducted between November 2021 and May 2022 at the Oregon Lithoprint Site (Site; Figures 1 and 2) and an assessment of the potential for unacceptable exposure risks and whether any future remediation activities may be appropriate at the Site. The report concludes that the current site conditions do not present unacceptable exposure risks and that potential future exposures can be managed effectively with institutional controls, consistent with DEQ regulations and guidance. Based on this risk-based assessment, Oregon Lithoprint, Inc. requests that DEQ issue a No Further Action (NFA) determination for the Site pending implementation of the institutional controls discussed herein and as approved by DEQ.

The Site includes the downtown area of the City of McMinnville (City) that has been impacted by historical releases of gasoline from former underground storage tanks (USTs) associated with the O'Dell Building at 609 NE Third Street (Former O'Dell Building Gasoline USTs). The Site also includes properties that have been investigated to characterize the extent and magnitude of the gasoline contamination, but which ultimately were determined not to have been impacted by the historical releases from the Former O'Dell Building Gasoline USTs. DEQ's leaking underground storage tank (LUST) file for this Site is record number 36-85-4001.

1.1 Purpose

The purpose of the sampling described in this report is to augment prior data collection activities to address the following data gaps:

- DEQ had requested additional groundwater monitoring data to further assess concentration trends at the Site and to further evaluate the October 2019 groundwater concentration anomaly that was observed in monitoring well MW-5 to determine whether it was the result of a seasonal influence or whether it was not representative of Site conditions. Additional groundwater samples were collected in November 2021.
- Based on the results of soil and groundwater samples previously collected beneath the Site buildings, and sub-slab vapor samples collected within the Odd Fellows Building, DEQ has requested further evaluation of potential vapor intrusion risk to the Odd Fellows Building and the restaurant located immediately to its west. This included sampling of soil, soil vapor, sub-slab vapor, and ambient air within and around the Odd Fellows Building in May 2022.

1.2 Scope of Work

This report documents the activities, methods, and results of sampling and assessment completed at the Site between November 2021 and May 2022. The investigation activities were conducted as outlined in the DEQ-approved Additional Investigation Work Plan (Apex, 2021) and associated adjustments that were

identified in DEQ comments received on March 7, 2022 and the April 26, 2022 meeting with DEQ. The investigation included the following tasks:

- Conducting one focused round of groundwater monitoring and sampling in November 2021 (gauging wells MW-1 through MW-6 and sampling wells MW-4 through MW-6);
- Installing two new sub-slab vapor pins within the basement of the Odd Fellows Building and conducting one round of sub-slab vapor sampling from all five vapor points within the Odd Fellows Building;
- Collecting additional grab soil and grab soil vapor samples at up to 10 borings installed via direct push drilling methods east and south of the Odd Fellows Building and to the south of the restaurant located to the west of the Odd Fellows Building;
- Collecting ambient air samples outside the Odd Fellows Building, within the Odd Fellows Building basement, and within the basement of the restaurant to the west of the Odd Fellows Building; and
- Analysis of the collected samples for petroleum hydrocarbons and volatile organic compounds (VOCs).

In addition to documenting the results of the additional sampling, this report includes:

- An update to the Conceptual Site Model;
- Comparison of the collected data to applicable Oregon DEQ Risk-Based Concentrations (RBCs);
- Assessment of whether additional remedial action may be necessary; and
- Our conclusion regarding the request for a No Further Action determination from DEQ based on the completed risk-based site assessment.

2.0 Background

This section includes a description of the Site and a summary of prior environmental activities conducted at the Site.

2.1 Site Location and Description

The primary Site building (the O'Dell Building) is located on a 0.14-acre property at 609 NE Third Street. The building is 1.5 stories, approximately 6,000 square feet (SF), and contains no basement. The building was leased by Oregon Lithoprint, Inc. (Oregon Lithoprint), doing business as News-Register Publishing Co., between 1981 and 2019. The O'Dell Building has housed offices and staff for the News Register; no printing has been conducted on-site. First Federal leased the O'Dell Building between 2019 and 2021. The current property owner is Oregon Lithoprint, Inc., and the building is currently leased to Alt Coworking as of September 2021.

The parcels adjacent to and across the street from the O'Dell Building are used for primarily commercial purposes with some limited residential as described below:

- North (604 NE Fourth Street): a parking lot for the O'Dell Building's tenants;
- East (611 NE Third Street): a two-story commercial building (the News Register building);
- South and Southeast (608 and 618 NE Third Street): a commercial building with apartments on the second floor;
- Southwest (546 NE Third Street): a commercial building;
- West (305 NE Ford Street): the Odd Fellows Building (also known as the Sidway Building and Third Street Flats Building) which contains a basement; and
- Northwest (375 NE Ford Street): a recently constructed four-story hotel (the Atticus Hotel).

All properties within the Site are zoned as commercial (C-3). Residential use is allowed by the zoning code but is considered unlikely beyond the limited second-floor apartments based on the use and layout of the existing buildings.

Several below-grade utilities are present at the Site and include sanitary and storm sewer lines, historical wooden steam heat lines, electric, street-light, telecommunications, and natural gas lines. The stormwater lines are 3 to 4 feet below the ground surface (bgs), and the sanitary sewer lines are between 6.34 feet and 9.74 feet bgs. The wooden steam lines are associated with a former steam power plant located two blocks west of the Site and are at unknown locations and depths. Based on City staff observations at other locations, they are not likely deep below ground surface.

2.2 Physical Setting

This section summarizes Site topography, geology, and hydrogeology based on observations made during investigation activities.

2.2.1 Topography and Geology

The Site is located between 148 feet and 149.5 feet above mean sea level (MSL) and is relatively flat. The nearest surface water body is Cozine Creek, located approximately 1,400 feet south of the Site.

According to the Geologic Map of Oregon (United States Geological Survey [USGS], 1991), the Site is underlain by Quaternary Surficial Deposits that are comprised of unconsolidated alluvium and lacustrine sediments (including clay, silt, sand, and gravel). Subsurface materials encountered in previous investigations included silts and clayey silts to depths of at least 25 feet below ground surface (the extent of explorations that have been completed at the Site). Localized gravel fill was historically observed within the Former O'Dell Building Gasoline USTs excavation area and utility trenches installed in the O'Dell Building.

2.2.2 Hydrogeology

Six groundwater monitoring wells (MW-1 through MW-6) are located in the Right of Way (ROW) near the intersection of NE Ford Street and NE Third Street. Based on previously advanced soil borings and data from the monitoring wells, depth to groundwater at the Site generally ranges between 3.4 feet and 13.4 feet bgs. The groundwater flow direction is primarily to the south/southwest, towards Cozine Creek, which is approximately 1,400 feet south of the Site (see Figure 3). The hydraulic gradient at the Site is typically to the southwest-south at a range of between 0.011 feet/feet and 0.036 feet/feet, with an average gradient of 0.018 feet/feet. The most recent measured groundwater elevations from the November 2021 monitoring event are presented in Table 1 and shown on Figure 3. The groundwater gradient in November 2021 was 0.036 ft/ft to the southwest.

2.3 Site History

An in-depth site development history was provided in the *Site Investigation Summary Report* submitted to DEQ on June 28, 2019 (Apex, 2019b). A brief summary is provided in the sections below.

2.3.1 Historical Sampling Activities – 2001 through 2016

The Site has been impacted by historical releases of gasoline from former USTs associated with the O'Dell Building, as well as other sources. The Former O'Dell Building Gasoline USTs were located within the NE Ford Street ROW west of the O'Dell Building. One of the USTs is believed to have been decommissioned in-place in 1971 following reports of a gasoline release. The other UST was used until 1985 when both Former O'Dell Building Gasoline USTs were removed following detection of another release. When the USTs were removed in 1985, free product was observed within the UST excavation. The impacted soil and free product were removed, and the DEQ indicated that no further actions were required in November 1985. However, the DEQ LUST file for the Site remained open.

In 2001, the Oregon DEQ contacted Oregon Lithoprint, the then-tenant of the O'Dell Building, to investigate the status of the open LUST file. The DEQ required Oregon Lithoprint to undertake additional investigation activities to determine whether the historical impacts from the former USTs posed a risk to human health or the environment. Multiple site assessments were performed between 2001 and 2016.

Gasoline-related contamination in soil, soil vapor, air, and groundwater has been identified at the O'Dell Building, at the Odd Fellows Building, and in the ROW. Visibly-impacted soils were observed during previous investigations at depths of between 9 and 25 feet bgs. Solvent hydrocarbons were also detected in Site groundwater; however, these constituents were determined to be originating from upgradient, off-site sources. As a result of the numerous investigations conducted to date, the primary source of petroleum impacts has been determined to be the Former O'Dell Building Gasoline USTs. No preferential pathways for contamination

have been identified at the Site to date, including the sanitary sewer lines south of the Site in Third Street. It has been concluded (based on the analytical data previously collected) that the contaminant plume is stable.

Soil samples were collected in multiple investigations between 2002 and 2016 across the Site. The primary contaminants of concern (COCs) in soil were determined to be gasoline-range total petroleum hydrocarbons (TPHg) and benzene. Detected TPHg concentrations have historically ranged from 11.1 milligrams per kilogram (mg/kg) to 3,350 mg/kg. Detected benzene concentrations have ranged from 0.0342 mg/kg to 9.01 mg/kg.

Groundwater grab and groundwater well samples were collected in multiple investigations between 2002 and 2016 across the Site. The primary COCs in groundwater were determined to be TPHg, benzene, and dissolved lead. Detected TPHg concentrations have ranged from 108 micrograms per liter (µg/L) to 52,500 µg/L, and detected benzene concentrations have ranged from 0.5 µg/L to 14,600 µg/L.

Soil gas samples were collected at the Site in 2012 and 2013. Concentrations of TPHg in soil gas have ranged from non-detect to 800 micrograms per cubic meter (µg/m^3). Concentrations of benzene have ranged from non-detect to 2.7 µg/m^3.

Air samples were collected within exterior areas of the Site and within several Site buildings between 2003 and 2014. Detected concentrations of TPHg in ambient air have ranged between 74 µg/m^3 and 1,200 µg/m^3. Detected benzene concentrations have ranged between 0.56 µg/m^3 and 1.2 µg/m^3. The detected benzene concentrations in ambient air have been determined to be related to background urban air conditions in the vicinity of the Site.

A chemical oxidation treatment pilot study was conducted at the Site from September through November 2015. Post-remediation project injection results showed significant decreases in the TPHg and benzene concentrations.

2.3.2 Recent Sampling Activities – 2019 and 2020

Additional sampling activities were conducted in 2019 and 2020 to quantify potential petroleum impacts in soil and groundwater underlying the O'Dell Building and to assess the current conditions of impacts in groundwater across the Site (since the full set of groundwater monitoring wells had not been sampled since 2014). A detailed account of the 2019/2020 sampling activities and results were provided in the following reports previously submitted to DEQ:

- *Summary Report – Soil and Groundwater Sampling*, April 5, 2019 (Apex, 2019a)
- *Site Investigation Summary Report,* June 28, 2019 (Apex, 2019b)
- *Additional Investigation Work Plan,* October 3, 2019 (Apex, 2019c)

- *October 2019 Site Investigation Summary Report,* December 4, 2019 (Apex, 2019d)
- *Summary Report – First Quarter 2020 Sampling Event,* March 11, 2020 (Apex, 2020a)
- *Summary Report – Second Quarter 2020 Sampling Event,* May 13, 2020 (Apex, 2020b)
- *Third Quarter 2020 Data Summary and Site Closure Assessment,* November 16, 2020 (Apex, 2020c)

The sampling results from February 2019 through July 2020 indicated significant permanent reductions in petroleum contamination in the soil and groundwater across the Site compared to the investigations completed prior to 2016. The collected sub-slab vapor and ambient air data also reflected limited potential for unacceptable risk exposures based on current Site uses. The extent of impacts above risk-based concentrations (RBCs) was observed to be limited to the NE Ford Street ROW between the O'Dell Building and the Odd Fellows Building, beneath the southwest corner of the Odd Fellows Building, and on the north side of Third Street near the intersection with NE Ford Street (between wells MW-2 and MW-4). Separate-phase hydrocarbons (free product) have not been observed at the Site since the decommissioning of the Former O'Dell Building Gasoline USTs in 1985.

Based on the current Site use, the primary potential risk exposure that was identified as being of potential concern is limited to construction worker exposure beneath the southwest corner of the O'Dell Building and in the vicinity of MW-4. This exposure would only present a potential risk if construction or excavation activities were undertaken without appropriate precautions. The potential for unacceptable risk to construction workers beneath the O'Dell Building is further limited by the fact that the building would need to be razed or excavation activities would need to be conducted within the existing building footprint for potential exposures to occur.

A secondary potential risk exposure of concern was identified as the limited potential for vapor intrusion impacts, with the October 2019 sub-slab vapor sample collected beneath the Odd Fellows Building (at SV-6) exceeding the occupational vapor intrusion RBC for benzene. However the historical soil gas and ambient air sampling has shown that the indoor air concentrations are consistent with background conditions and not noticeably impacted by vapor intrusion (consistent with the fine-grained soil and depth below the ground surface).

As part of the Third Quarter 2020 Data Summary and Site Closure Assessment (Apex, 2020c), Apex prepared a Contaminated Media Management Plan (CMMP) to manage potential exposure risks at the Site. The CMMP defines procedures for appropriate management of soil and groundwater at the Site that may contain chemicals above certain screening levels, and it has been provided to the City of McMinnville for their review and approval (a copy of the CMMP is included in Appendix C). In addition, institutional controls for the O'Dell Building and Odd Fellows Building have been proposed and would include deed restrictions on groundwater use and attachment of the CMMP to each of the properties. Residential land use would also be restricted in the basement of the Odd Fellows Building until contaminant concentrations are below the Urban Residential RBC or until appropriate engineering controls are installed (a copy of the proposed institutional controls is

included in Appendix D). The CMMP would also apply to management of any related contamination in the ROW.

Apex requested an NFA determination for the Site subject to compliance with the prepared CMMP and land use restrictions that will be established. However, in subsequent communications with DEQ, including a call with DEQ on October 20, 2021, DEQ identified two remaining data gaps (listed above in Section 1.1) and requested additional evaluation of soil vapor, soil, and groundwater near the Odd Fellows Building. The requested additional sampling activities were conducted and the results are presented within this report.

3.0 Site Investigation Activities

The scope of work included soil boring advancement for the collection of soil and soil vapor samples, groundwater monitoring and sampling, sub-slab vapor point installation and sampling, and ambient air sampling. The field and sampling procedures included preparation, collection of groundwater samples, soil boring installation via direct push drilling methods, soil sampling, installation of vapor pins, soil vapor sampling, ambient air sampling, groundwater sampling, sample management (i.e., containers, storage, and shipment), decontamination procedures, and handling of investigation-derived wastes (IDW). Detailed field and sampling procedures are described within the Additional Investigation Work Plan (Apex, 2021).

3.1 Preparatory Activities

Property Access. Apex provided notification to the property owners prior to conducting field activities. Apex also coordinated with the owner of the restaurant west of the Odd Fellows Building to access their basement for ambient air sampling.

Permitting. Apex coordinated with the City of McMinnville to establish an ROW permit to complete the soil borings within the sidewalk or street ROW adjacent to the Odd Fellows Building. As part of the permitting process, Apex prepared a traffic control plan to address impacts to sidewalk and adjacent street use. Apex also coordinated with the City to determine any requirements regarding the completion of the soil borings and restoration activities (e.g., replacing sidewalk panels) following the work.

Underground Utility Location. Prior to execution of the work, Apex mobilized to the Site to mark out the proposed sampling locations with marking paint to enable identification of nearby underground utilities by Dig-Alert/Underground Service Alert (USA). Because Dig-Alert does not mark out underground utilities on private property and to provide additional precaution due to the high number of utilities located within the boundaries of the Site, a private underground utility locate event was conducted on April 14, 2022 to mark out underground utilities located near each proposed sampling location prior to performing the subsurface work. The upper 5 feet in each boring were also soft-cleared using a hand auger to minimize the potential of impacting any unidentified utilities.

If any underground utilities were identified within 5 feet of a proposed sampling location, Apex adjusted the proposed sampling location before drilling commenced. Apex also adjusted the proposed drilling locations to provide a safety buffer for buildings, heavy traffic areas, overhead utilities, and similar Site features so that sampling could be performed safely and with minimal disruption to existing businesses. The final exploration locations are shown on Figures 3 through 6 (for groundwater, soil, soil vapor, and soil gas/ambient air samples, respectively).

Site Health and Safety Plan. A Site-specific health and safety plan (HASP) was prepared for the proposed activities and included within the Additional Investigation Work Plan (Apex, 2021). The HASP was prepared in general accordance with the Occupational Safety and Health Administration (OSHA) and the Oregon Administrative Rules (OAR). A copy of the HASP was maintained on-Site during the field activities.

Prior to performing any on-Site work, Apex prepared a Job Safety Analysis (JSA) and HASP guiding Site- and project-specific activities, risks, and safety protocols. All field staff and subcontractor personnel supporting the project were required to review and agree to abide by the HASP. Safety topics were refreshed daily with the field crew using a daily tailgate safety meeting, conducted by Apex's Site Supervisor or Site Safety Officer.

Due to the COVID-19 pandemic, additional safety measures were implemented during the field activities to reduce or eliminate the spread of COVID-19, including the following:

- Personnel committed to staying home and away from the job site if they were exhibiting symptoms of COVID-19 as described by the Centers for Disease Control and Prevention (CDC);
- If personnel on the job site began to have symptoms, they were asked to leave immediately;
- Personnel followed social distancing protocols, with spacing greater than 6 feet;
- Common areas and areas of high "hand traffic" were cleaned and disinfected regularly;
- Tools, pens, and paperwork were not shared;
- Personnel washed their hands regularly and thoroughly, and used hand sanitizer if soap and water were not available;
- Nitrile gloves were used and changed once they contacted a potentially contaminated surface; and,
- Personnel wore cloth face coverings if a distance of 6 feet could not be maintained or if they were unvaccinated.

3.2 Field Activities

3.2.1 Groundwater Monitoring Activities

Groundwater levels were measured in each of the six monitoring wells (wells MW-1 through MW-6) on November 22, 2021. The well caps were removed and water levels were allowed to equilibrate before

collecting measurements. The depth to groundwater, free product (if present), and/or sheen were measured in each well to the nearest 0.01 foot using an electronic oil-water interface probe (no product or sheens were observed during this sampling event). Table 1 includes measured depths to groundwater and the corresponding groundwater elevations. Figure 3 presents groundwater elevations.

Groundwater samples were subsequently collected via low-flow procedures from each well. Field parameters, including pH, temperature, and electrical conductivity were recorded. The turbidity of the water was monitored visually with the color and clarity of the water recorded on the sampling data sheet. Purging was considered complete when the water was visually clear and the field parameters stabilized to within 10 percent of the previous measurement for three consecutive three-minute intervals. Table 2 includes the measured field parameters.

Samples were transferred into laboratory-supplied containers, stored below 6 degrees Celsius, and submitted to Pace Analytical of Mount Juliet, Tennessee, a state-certified laboratory, under chain-of-custody protocol. Additional groundwater sampling procedures, sample handling, and quality assurance/quality control (QA/QC) procedures are detailed in the Work Plan (Apex, 2021). QA/QC procedures were used throughout this project, including collecting one duplicate groundwater sample and preparing one equipment blank sample.

3.2.2 Soil Boring Installation and Grab Soil and Soil Vapor Sample Collection

The soil boring activities were completed between May 9 and 10, 2022, during which 10 subsurface borings were advanced at the Site, as shown on Figure 5. Pacific Soil and Water, Inc. of Tigard, Oregon, under subcontract to Apex, completed the installations using a direct-push drilling rig. The explorations were completed to depths of about 12 feet bgs. An Apex representative observed and documented the drilling activities and subsurface conditions encountered. Field exploration logs are included in Appendix A.

Lithologic Logging. The uppermost 5 feet of each boring were observed from the cuttings generated from the hand-auger during the utility clearing. At depths of below 5 feet, continuous soil samples were collected while advancing each of the explorations. Each soil core was logged and described according to the lithologic characteristics using the Unified Soil Classification System (USCS) in general accordance with ASTM 2487/2488.

Field Screening. Soil samples were field-screened for the presence of VOCs using a photoionization detector (PID) and for petroleum hydrocarbons by performing sheen tests (a visual inspection for assessing if an oily sheen is present). The results of the field screening are shown on each of the exploration logs included in Appendix A. The predominant soil types encountered in the explorations were consistent with the Site Geology description in Section 2.2 (predominantly silts and clayey silts). In general, evidence of impacts to soil from the field screening results (PID measurements and sheens) were encountered at depths of 10 feet below ground surface or greater (except for boring SB-1 which did not have field evidence of impacts, and

boring SB-9 which had an elevated PID measurement at a depth of 7.5 feet bgs). This zone of impacted soil also corresponded to a visible change in soil color (transitioning from brown to gray).

Soil Sampling. Soil samples from each exploration core were selected for chemical analysis based on field screening results (i.e., relatively higher PID readings). In the absence of positive screening results, the sample was selected from the bottom of the boring (above the water table at the time of drilling). The samples were contained in laboratory-provided sample jars and stored below 6 degrees Celsius before being transferred to the laboratory for chemical analysis. Section 3.4 discusses the analytical program and results. Detailed soil sampling procedures were discussed in the Work Plan. The soil sample IDs and corresponding depth at which the samples were collected are detailed in the exploration logs included in Appendix A.

Soil Vapor Sampling. After the soil samples were collected from each of the push-probe explorations, the explorations were abandoned in two stages to allow for the collection of a soil vapor sample from each one. The explorations were backfilled to a depth of 5 feet bgs, and a temporary soil-gas monitoring point was installed in each exploration in accordance with DEQ vapor intrusion guidance. A 6-inch vapor screen attached to 0.25-inch Teflon tubing was placed at 5 feet bgs, sand was placed in the annulus to approximately 2 inches above the top of the screen, and hydrated bentonite was used to seal around the tubing to prevent ambient air intrusion during sampling. The vapor samples were collected in accordance with the Work Plan in laboratory-provided sample containers (6 liter Summa canisters) over a sampling interval of 30 minutes.

Borehole Abandonment. Following the collection of the soil and soil vapor samples, the borings were fully abandoned by backfilling the borehole with hydrated bentonite. Completion of each borehole abandonment included the finishing of improved surfaces to match the surrounding area (asphalt concrete or Portland cement concrete). The sidewalk panels that were impacted by the drilling are slated to be replaced in accordance with the requirements of the City of McMinnville.

3.2.3 Soil Vapor Pin Installation and Sub-Slab Soil Vapor Sampling Activities

Prior to the sampling event, two additional sub-slab soil vapor monitoring points were installed beneath the floor slab of the Odd Fellows Building (three points had been installed previously). Sub-slab vapor monitoring points were installed using Vapor Pins® and the water dam method to ensure an adequate seal between the Vapor Pins® and the concrete. Sub-slab soil vapor samples were collected on May 10, 2022 from sample points SV-5 through SV-8 (no sample was collected from sample point SV-4 as the sample point was submerged by the shallow groundwater table). Sample points SV-1 through SV-3 are located in the O'Dell Building and were not included in this sampling event.

Samples were collected in laboratory-provided and certified clean Summa canisters over a 30-minute period using a laboratory-provided flow controller. Field observations and measurements made during the sampling events were recorded in field notes and on the chain-of-custody. Samples were submitted to Pace Analytical under chain-of-custody protocol and were analyzed for VOCs by EPA TO-15.

3.2.4 Ambient Air Sampling Activities

On May 10, 2022, five ambient air samples were collected in laboratory-provided and certified clean Summa canisters over an 8-hour period using a laboratory-provided flow controller. Field observations and measurements made during the sampling events were recorded in field notes and on the chain-of-custody.

3.3 Deviations from Work Scope

During the May 2022 vapor monitoring tasks, seven Summa canisters (provided by the analytical laboratory) were found to be not properly pressurized and therefore could not be used for the sampling, including two that were included as equipment backup reserves, resulting in five air/vapor samples that were not able to be collected. Samplers prioritized providing a distribution of sample points in the push-probe vapor points, and deemphasized sub-slab and ambient air sample locations that were farthest from the area of most interest. Also, sub-slab vapor point SV-4 was submerged at the time of the sampling and therefore no sample was collected from this point. Therefore, vapor samples were not collected from borings SB-3, SB-8, and SB-9, sub-slab vapor point SV-4, and ambient air sample AA-2.

3.4 Chemical Analyses and Results

3.4.1 Analysis Performed

Chemical analysis of the collected samples was performed to evaluate potential risks to human health or the environment due to contamination at the Site. The samples were analyzed on a standard turnaround time (10 business days) by Pace Analytical. The analytical laboratory reports and a data quality review are provided in Appendix B.

Groundwater Sample Analysis. The groundwater samples were analyzed for TPHg by Northwest Method NWTPH-Gx and VOCs by US Environmental Protection Agency (EPA) Method 8260D.

Soil Sample Analysis. The soil samples were analyzed for TPHg by Northwest Method NWTPH-Gx and VOCs by EPA Method 8260D.

Soil Vapor and Ambient Air Sample Analysis. The soil vapor (push-probe and sub-slab) and ambient air samples were analyzed for VOCs by EPA Method TO-15.

3.4.2 Chemical Results and Screening

The groundwater analytical results from November 2021 are summarized in Table 3 and presented on Figure 4; the soil sample analytical results are summarized in Table 4 and presented on Figure 5; and soil vapor and ambient air results are summarized in Tables 5 and 6, respectively and presented on Figure 6. The below section discusses the analytical results.

Groundwater. Petroleum-related analytes were detected in groundwater collected from the three monitoring wells that were sampled in November 2021 (MW-4 through MW-6). Detected concentrations of petroleum hydrocarbons and VOCs include concentrations of benzene that range from non-detect in MW-5 to 2,250 µg/L in MW-4, and TPHg concentrations that range from 115 µg/L in MW-5 to 3,990 µg/L in MW-4. These concentrations are generally lower than have been observed in prior monitoring events.

Groundwater exceedances of the applicable RBCs include benzene in MW-4, which exceeds the construction/excavation worker RBC and the urban residential vapor intrusion RBC (by factors of 1.3 and 4.4, respectively). The exceedances of analyte concentrations above the Urban Residential RBCs, however, are not currently applicable as there are no residential uses within the Locality of the Facility.

Soil. Petroleum-related analytes were detected in soil collected from 9 of the 10 push-probe explorations that were completed in May 2022 (excepting exploration SB-1). Detected concentrations of petroleum hydrocarbons and VOCs include:

- Benzene concentrations that range from non-detect in SB-4 to 1.18 mg/kg in SB-10 (with an average concentration of 0.30 mg/kg);
- Ethylbenzene concentrations that range from 0.13 mg/kg in SB-4 to 19.6 mg/kg in SB-9 (with an average of 4.8 mg/kg);
- 1,3,5-Trimethylbenzene concentrations that range from non-detect in four borings to 4.31 mg/kg in SB-9 (with an average of 0.80 mg/kg); and
- TPHg concentrations that range from 157 mg/kg in SB-3 to 4,180 mg/kg in SB-2 (an average of 750 mg/kg).

Soil exceedances of the applicable RBCs include:

- Benzene concentrations in SB-6, SB-9, and SB-10, which exceed the urban residential vapor intrusion RBC (by factors of between 1.6 and 3.1);
- Ethylbenzene concentrations in borings SB-6 through SB-10 exceeding the urban residential vapor intrusion RBC (by factors of between 1.6 and 6.5), and the concentration in SB-9 exceeding the occupational vapor intrusion RBC (by a factor of 1.2).
- 1,3,5-Trimethylbenzene concentrations in borings SB-3, SB-6, SB-7, SB-9, and SB-10 exceeding the urban residential vapor intrusion RBC, and the concentrations in borings SB-9 and SB-10 exceeding the occupational vapor intrusion RBC (by factors of 2.0 and 1.3, respectively).
- TPHg concentrations in borings SB-2 through SB-4 and SB-6 through SB-10, exceeding the urban residential RBC (by factors of between 1.7 and 44).

The exceedances of analyte concentrations above the urban residential RBCs, however, are not currently applicable as there are no residential uses within the Locality of the Facility. Other VOCs also had exceedances, but are not petroleum contaminants (such as acrylonitrile, chloroform, and 1,1,2-trichloroethane).

Soil Vapor (Push-Probe Explorations). Petroleum-related analytes were detected in each of the soil vapor samples collected from the push-probe explorations that were completed in May 2022 (SB-1 through SB-10). Detected concentrations of petroleum VOCs include:

- Benzene concentrations that range from non-detect in SB-2 through SB-10 to 2.8 µg/m^3 in SB-1 (though the detection limits were elevated in three of the borings);
- Ethylbenzene concentrations that range from non-detect in SB-2 to 1,470 µg/m^3 in SB-10 (with an average of 286 µg/m^3);
- Toluene concentrations that range from non-detect in borings SB-2, SB-6, SB-7, and SB-10 to 19.6 µg/m^3 in SB-5; and
- Total xylene concentrations that range from non-detect in SB-2 and SB-7 to 954 µg/m^3 in SB-2 (an average of 750 µg/m^3).

Other petroleum VOCs (such as cyclohexane, heptane, hexane, and 2,2,4-trimethylpentane) were detected in each of the soil vapor samples. Ethanol was also detected in six of the seven samples (excepting SB-10). The relatively highest concentrations of these VOCs were encountered in SB-7. 1,3,5-Trimethylbenzene was detected in only one of the push-probe vapor samples (at a concentration that is three orders of magnitude below the urban residential vapor intrusion RBC).

Soil vapor exceedances of the applicable RBCs include ethylbenzene in SB-10, which exceeds the urban residential vapor intrusion RBC (by a factor of 2.8). The exceedances of analyte concentrations above the urban residential RBCs, however, are not currently applicable as there are no residential uses within the Locality of the Facility.

Sub-Slab Soil Vapor. Petroleum-related analytes were detected in three of the four sub-slab vapor samples that were collected in May 2022 (excepting SV-8). Detected concentrations of petroleum VOCs include:

- Ethylbenzene concentrations that range from 1.41 µg/m^3 in SV-6 to 1.51 µg/m^3 in SV-7;
- A detection of toluene of 8.70 µg/m^3 in SV-7; and
- Total xylene concentrations that range from non-detect in SV-8 to 7.8 µg/m^3 in SV-7.

Other petroleum VOCs (such as cyclohexane, heptane, hexane, and 2,2,4-trimethylpentane) were detected in several of the soil vapor samples. Ethanol was also detected in each of the four samples. 1,3,5-Trimethylbenzene was not detected in any of the sub-slab vapor samples collected in May 2022.

There were no exceedances of the applicable RBCs in the sub-slab vapor samples (the nearest detected petroleum VOC concentration to its RBC is ethylbenzene at 0.3 percent of the RBC).

Ambient Air. Petroleum-related analytes were detected in two of the five ambient air samples that were collected in May 2022 (AA-1 and AA-3). Detected concentrations of petroleum VOCs include:

- An ethylbenzene detection of 0.94 µg/m^3 in AA-3;
- Toluene concentrations that range from 3.30 µg/m^3 in sample AA-3 to 4.11 µg/m^3 in AA-1; and
- A total xylene concentration of 4.5 µg/m^3 in AA-3.

There were no exceedances of the applicable RBCs in the ambient air samples (the nearest detected petroleum VOC concentration to its RBC is ethylbenzene at 35 percent of the RBC). 1,3,5-Trimethylbenzene was not detected in any of the ambient air samples.

4.0 Summary of Sampling Activities and Results

A summary of historical and recent site investigation sampling activities is provided below (additional details are presented in the individual reports listed in Section 8). Historical sample locations and results are shown on the figures included within Appendix E.

Soil Sampling Activities. Soil samples have been collected from 67 discrete points across the Site. The table below summarizes the date of each sampling effort and the range of the primary petroleum-related contaminants (benzene, ethylbenzene, and TPHg) that were encountered:

Date Sampled	Location ID(s)	Concentration Range (mg/kg)
April 2002	SP-1 through SP-4	Benzene: Non-Detect to 9.01 Ethylbenzene: Non-Detect to 81.2 TPHg: Non-Detect to 3,350
June 2003	SP-5 through SP-8	Benzene: Non-Detect Ethylbenzene: 7.0 to 11.3 TPHg: Non-Detect to 497
June 2005	SP-9 through SP-12	TPHg: Non-Detect to 54
October 2011	MW-1 through MW-6 borings	Benzene: Non-Detect to 6.68 Ethylbenzene: Non-Detect to 2.23 TPHg: Non-Detect to 740
	SG-1 boring	Benzene: 0.4 to 1.38 Ethylbenzene: 0.97 to 23.7 TPHg: 11.1 to 1,440

Date Sampled	Location ID(s)	Concentration Range (mg/kg)
October 2011	PP-1 through PP-4	Benzene: Non-Detect to 0.779 Ethylbenzene: Non-Detect to 3.9 TPHg: Non-Detect to 1,250
January 2014	Sidway under UST 70"	Non-Detect
March 2014	BH-1 through BH-3	Benzene: Non-Detect Ethylbenzene: Non-Detect to 0.12 TPHg: Non-Detect to 247
October 2014	B-1 through B-8	Benzene: Non-Detect to 1.99 Ethylbenzene: Non-Detect to 4.95 TPHg: Non-Detect to 1,030
February 2016	DGB-1 through DGB-7	Benzene: Non-Detect to 0.118 Ethylbenzene: Non-Detect to 21.1 TPHg: Non-Detect to 1,870
February 2019	ODB-1 through ODB-7	Benzene: 0.00452 to 1.42 Ethylbenzene: 0.024 to 22.3 TPHg: 68.7 to 1,220
October 2019	ODB-8 through ODB-13	Benzene: Non-Detect to 0.339 Ethylbenzene: Non-Detect to 0.094 TPHg: 38.1 to 254
May 2022	SB-1 through SB-10	Benzene: Non-Detect to 1.18 Ethylbenzene: 0.13 to 19.6 TPHg: 157 to 4,180

Groundwater Sampling Activities. Groundwater samples have been collected from 54 discrete points across the Site, with multiple samples collected from the groundwater monitoring wells between 2012 and 2022. The table below summarizes the date of each sampling effort and the range of the primary petroleum-related contaminants (benzene, ethylbenzene, and gasoline-range TPH) that were encountered:

Date Sampled	Location ID(s)	Detected Concentration Range (µg/L)
April 2002	SP-1 through SP-4	Benzene: Non-Detect to 11,800 Ethylbenzene: 2 to 2,290
June 2003	SP-5 through SP-8	Benzene: Non-Detect to 5,564 Ethylbenzene: Non-Detect to 935
June 2005	SP-9 through SP-12	Benzene: Non-Detect to 4.0 Ethylbenzene: Non-Detect to 20
October 2011	SG-1 boring	Benzene: 10,500 Ethylbenzene: 1,550 TPHg: 52,500

Date Sampled	Location ID(s)	Detected Concentration Range (µg/L)
October 2011	PP-1 through PP-4	Benzene: non-detect to 7,570 Ethylbenzene: 2.9 to 2.460 TPHg: 1,720 to 46,500
February 2012	MW-1 through MW-6	Benzene: 1.98 to 13,000 Ethylbenzene: 0.52 to 1,980 TPHg: 108 to 36,000
June 2012	MW-1 through MW-6	Benzene: 11.2 to 14,600 Ethylbenzene: 10.6 to 2,110 TPHg: 142 to 36,900
August 2012	MW-1 through MW-6	Benzene: 38.2 to 11,500 Ethylbenzene: Non-Detect to 508 TPHg: 413 to 24,000
December 2012	MW-1 through MW-6	Benzene: 0.5 to 11,300 Ethylbenzene: Non-Detect to 725 TPHg: Non-Detect to 26,800
February 2013	MW-1 through MW-6	Benzene: 1.98 to 13,000 Ethylbenzene: Non-Detect to 1,900 TPHg: Non-Detect to 43,100
March 2014	MW-4, MW-6; borings BH-1 through BH-3	Benzene: Non-Detect to 11,400 Ethylbenzene: Non-Detect to 189 TPHg: Non-Detect to 25,700
October 2014	MW-4, MW-6; borings B-1 through B-8	Benzene: Non-Detect to 11,800 Ethylbenzene: Non-Detect to 1,080 TPHg: Non-Detect to 33,200
February 2016	DGB-1 through DGB-7	Benzene: Non-Detect to 214 Ethylbenzene: Non-Detect to 2,070 TPHg: Non-Detect to 17,600
February 2019	ODB-1 through ODB-7; MW-1 through MW-6	Benzene: Non-Detect to 1,640 Ethylbenzene: Non-Detect to 924 TPHg: 64.4 to 19,900
October 2019	ODB-8 through ODB-13; MW-1 through MW-6	Benzene: 1.34 to 5,870 Ethylbenzene: Non-Detect to 232 TPHg: 914 to 70,200
January 2020	MW-1 through MW-6	Benzene: Non-Detect to 4,010 Ethylbenzene: Non-Detect to 1,120 TPHg: Non-Detect to 8,630

Date Sampled	Location ID(s)	Detected Concentration Range (µg/L)
April 2020	MW-1 through MW-6	Benzene: Non-Detect to 2,890 Ethylbenzene: Non-Detect to 1,790 TPHg: 56.2 to 9,960
July 2020	MW-1 through MW-6	Benzene: 2.15 to 2,770 Ethylbenzene: Non-Detect to 1,450 TPHg: 186 to 14,500
November 2021	MW-4 through MW-6	Benzene: Non-Detect to 2,250 Ethylbenzene: Non-Detect TPHg: 115 to 3,990

The recent groundwater analytical results from the six Site monitoring wells (MW-1 through MW-6; from February 2019 through November 2021) are summarized here:

Monitoring Well	Most Recent Concentration (µg/L)	Maximum Historical Concentration (µg/L)	Percent Reduction from Historical Maximum Concentration	Average Groundwater Concentration (µg/L) 2019 – 2021
MW-1				
TPH	186	959	81%	279
Benzene	2.15	96.2	98%	10.0
MW-2				
TPH	14,500	24,700	41%	9,120
Benzene	924	4,020	77%	706
MW-3				10.2
TPH	3,450	3,450	0%	2,776
Benzene	2.53	38.2	93%	10.2
MW-4				2,773
TPH	3,990	9,690	59%	7,184
Benzene	2,250	4,120	45%	2,773
MW-5				997
TPH	115	7,130	98%	1,295
Benzene	< 1.0	5,870	99.9%+	997
MW-6				151
TPH	721	43,100	98%	2,356
Benzene	0.49	14,600	99.99%	151

Concentration trend graphs for each of these monitoring wells are included in Appendix F.

Air/Vapor Sampling Activities. Samples collected from ambient air, soil gas, and sub-slab vapor have been collected from 44 discrete points across the Site. The table below summarizes the date of each sampling effort and the range of the primary petroleum-related contaminants (benzene and ethylbenzene) that were encountered.

Date Sampled	Location ID(s)	Media	Detected Concentration Range (µg/m^3)
February 2003	SIC-1 and SIC-2	Air	Benzene: 0.97 to 1.0 Ethylbenzene: Non-Detect
August 2006	4-basement, 5-basement, 3-outside, 1-1st floor, 2-2nd floor	Air	Benzene: Non-Detect to 1.2 Ethylbenzene: Non-Detect to 2.9
August 2012	SG-1	Soil Gas	Benzene: Non-Detect Ethylbenzene: Non-Detect
December 2012	SG-1	Soil Gas	Benzene: 2.7 Ethylbenzene: 2.2
February 2013	SG-1	Soil Gas	Benzene: Non-Detect Ethylbenzene: Non-Detect
June 2013	SG-1	Soil Gas	Benzene: Non-Detect Ethylbenzene: Non-Detect
July 2013	AS-1 through AS-10	Air	Benzene: Non-Detect to 0.75 Ethylbenzene: Non-Detect to 1.5
March 2014	AS-1 through AS-11	Air	Benzene: Non-Detect to 1.2 Ethylbenzene: Non-Detect to 2.2
October 2019	SV-1 through SV-6	Sub-Slab Vapor	Benzene: Non-Detect to 49,900 Ethylbenzene: Non-Detect to 22.2
January 2020	SV-4 through SV-6	Sub-Slab Vapor	Benzene: Non-Detect to 0.91 Ethylbenzene: 1.72 to 2.42
July 2020	SV-1 through SV-3	Sub-Slab Vapor	Benzene: Non-Detect to 1.25 Ethylbenzene: 1.74 to 1.92
May 2022	SB-1, SB-2, SB-4-SB-7, SB-10	Soil Gas	Benzene: Non-Detect to 2.85 Ethylbenzene: Non-Detect to 1,470
May 2022	SV-5 through SV-8	Sub-Slab Vapor	Benzene: Non-Detect Ethylbenzene: Non-Detect to 1.51
May 2022	AA-1 through AA-5	Air	Benzene: Non-Detect Ethylbenzene: Non-Detect to 0.94

5.0 Conceptual Site Model Update

A Conceptual Site Model (CSM) considers physical properties, the nature and extent of contamination, and potential exposure pathways under current and potential future uses. This Section presents an updated CSM for the Site based on the information gathered during the recent SI activities.

5.1 Physical Model

Site topography, geology, and hydrogeology are summarized in Section 2.2. In general, explorations at the Site and the immediate vicinity encountered silts and clayey silts. Groundwater is typically encountered at depths ranging seasonally from 3.4 feet to 13.4 feet bgs, with an average flow gradient of about 0.016 feet/feet to the southwest-south.

5.2 Contaminants of Potential Concern

Contaminants of potential concern (COPCs) have been identified as petroleum constituents. Specific analytes that have been detected above laboratory method reporting limits include: TPHg, benzene, butylbenzene (n-, sec-, and tert-), ethylbenzene, isopropylbenzene, p-isopropyltoluene, naphthalene, n-propylbenzene, toluene, trimethylbenzene (1,2,3-, 1,2,4-, and 1,3,5-), and total xylenes. Historical sampling also reported detections of diesel-range TPH (likely associated with elevated concentrations of degraded gasoline constituents being captured in the diesel-range analysis method) and trichloroethene; however, these analytes were not detected in the 2019 sampling event and are not associated with the Former O'Dell Building Gasoline USTs, so are not considered to be COPCs.

5.3 Nature and Extent of Contamination

Concentrations of COPCs associated with the Site have been encountered in soil and groundwater in the immediate vicinity of the Former O'Dell Building Gasoline USTs, the adjacent ROW for NE Ford Street, beneath the Odd Fellows Building to the west, and in the ROW for Third Street to the south (extending into the Third Street ROW to the vicinity of MW-5). Lower levels of related contamination (below risk thresholds) have historically been observed farther to the west (between explorations BH-3 and BH-2) and to the south (ending between MW-5 and SP-11). The relatively highest concentrations are typically encountered at depths between 9 and 19 feet (i.e., across the range of seasonal groundwater fluctuations). Recent sampling of groundwater monitoring wells has shown that the extent of petroleum impacts has been decreasing on the downgradient edge, with only minor detections in MW-5 since January 2020. Push-probe sample results also show that the groundwater plume does not extend significantly beyond MW-4 and boring SB-2.

5.4 Locality of the Facility

The locality of the facility (LOF) is defined as locations where a human or ecological receptor contacts or is reasonably likely to come into contact with facility-related hazardous substances (OAR 340-122-0115[40]).

The term "Facility" is defined (in both ORS 465.200 and OAR 340-122-0115) to include the equipment or property where the release occurred and where the release has come to be located. At this Site, the LOF describes the location of contamination related to releases from the Former O'Dell Building Gasoline USTs. The LOF also includes impacted areas that do not exceed soil and groundwater RBCs and thus do not present potentially unacceptable risks. Although previous investigations have identified up-gradient, down-gradient, and cross-gradient contamination from other sources that have contributed to low concentrations of petroleum hydrocarbon contamination at the Site, the groundwater plume from the Former O'Dell Building Gasoline USTs is stable or decreasing, well-characterized, and is associated with the relatively higher concentrations of the petroleum hydrocarbon contamination at the Site.

Based on a conservative evaluation of the chemical data discussed above, the LOF associated with releases from the Former O'Dell Building Gasoline USTs generally covers an area of about 31,000 square feet that includes the western side of the O'Dell Building, the adjacent ROW for NE Ford Street, the southeast corner of the block to the west (beneath the Odd Fellows Building and adjacent restaurant), a portion of the ROW of Third Street, and a small section of the block south of Third Street. The extent of the LOF is shown on Figure 7.

5.5 Beneficial Land and Water Use and Exposure Pathways

Current and future land uses were assessed to develop a model describing potentially complete exposure pathways for human and ecologic receptors at the Site. The potentially complete pathways established in this section will be used in conjunction with contaminant concentrations to evaluate risk at the Site.

5.5.1 Summary of Land Use

The following section describes current and potential reasonably likely future land uses.

Current Use. The properties within the LOF are zoned commercial (C-3) and are currently used for commercial purposes. Zoning allows for residential uses (urban residential, such as second-floor apartments), but no properties within the LOF currently have residential uses.

Much of the land use within the LOF is associated with the ROW of NE Ford Street and NE Third Street, and no long-term exposure is feasible for these areas. Short-term exposures to construction or excavation workers (such as during utility construction or maintenance) are reasonable to expect in the ROW.

Future Use. The properties within the LOF are likely to continue use as commercial properties, and information provided by the City of McMinnville in June 2019 indicates that there are no known or planned changes to land use zoning in the vicinity of the Site. The City of McMinnville online geographic information system (GIS) zoning map was reviewed in September 2020 and June 2022 and no changes have been observed to the zoning of properties within or adjacent to the LOF.

Residential uses within the LOF are allowed by the current zoning (such as second-floor apartments) but are considered to be unlikely based on the use and layout of the buildings in the LOF (the O'Dell Building and the Odd Fellows Building). While no plans for residential development are currently known, it is understood that when zoning allows for residential uses, DEQ presumes that such future uses are reasonably likely and must be accounted for in the CSM and risk assessment. No residential use is feasible within the ROW.

5.5.2 Summary of Water Use

Each of the properties in the LOF are supplied with water from the City municipal supply (which is sourced from Coast Range reservoirs that could not be impacted by Site contamination). After performing a well search with the Oregon Water Resource Department well record database, no residential water wells have been identified in the vicinity of the Site, and due to the fine-grained nature of the shallow groundwater aquifer, any future use of groundwater within the LOF is considered to be impractical.

The nearest surface water body is Cozine Creek, which is approximately 1,400 feet south of the Site. Based on a search of the Oregon Water Resource Department water right database, there is one permitted diversion point from Cozine Creek (used for irrigation). Contamination migrating through groundwater from the Site would not be able to impact the surface water due to the significant distance between the creek and the Site where the plume has stabilized. This water use is therefore not at risk from Site contaminants.

5.5.3 Exposure Pathway Analysis

Potential Receptors. Potential human receptors in the LOF include those that may be exposed to the COPCs under the current or reasonably likely future land and water use scenarios. The following potential receptors were identified:

1. Urban residential (potential future exposure);
2. Occupational workers;
3. Construction workers (potential future); and
4. Excavation workers (potential future).

Because the Site is fully developed (including buildings and pavements) and has no surface water exposure, there is no viable ecological habitat of significance.

Exposure Pathways for Soil in the LOF. Exposure pathways describe the physical connection or potential connection between a receptor and a potential contaminant source. Identifying a pathway as complete or potentially complete does not, by itself, indicate that there is an unacceptable risk, only that a receptor could

be exposed to a contaminant source if such a source exists. Potentially complete exposure pathways for soil are listed below:

- *Direct Contact (Soil Ingestion, Dermal Contact, and Inhalation) (Potential Future).* This pathway is potentially complete for shallow soil in the LOF (though, currently, the Site is completely covered in pavement or buildings and shallow soil is not readily accessible to normal Site users). Construction worker and excavation worker exposures are potentially complete for both surface soil and subsurface soil (such as for utility maintenance or future redevelopment of the property).
- *Vapor Intrusion into Buildings*. This pathway may be considered potentially complete under current and future land use, as COPCs have been detected beneath the Site buildings. However, while COPCs have been detected in soil gas, sampling results beneath the Odd Fellows Building and the O'Dell Building have reported that the COPC concentrations in soil are generally below the occupational RBCs (with the exception of ethylbenzene in two samples, one beneath the southwest corner of the O'Dell Building and one in the right-of-way west of the Odd Fellows Building -- considered very unlikely to result in an unacceptable exposure as discussed above). An elevated benzene concentration was detected in one sub-slab vapor sample beneath the Odd Fellows Building in October 2019; however, when this location was re-sampled in January 2020 and May 2022, benzene was near to or below the reporting limit (a decrease of nearly five orders of magnitude). As the other vapor sampling points beneath the Odd Fellows Building have also consistently exhibited low benzene concentrations, the high concentration detected in October 2019 is considered anomalous. Sampling of indoor air in buildings at the Site (including the Odd Fellows Building and the adjacent restaurant basement, and historically at four other businesses to the west) has also consistently indicated that the indoor air quality is similar to observed outdoor air quality (outdoor ambient air samples) and published conditions for normal urban environments. Therefore, significant vapor intrusion is not occurring.
- *Volatilization to Outdoor Air.* This pathway may be considered currently potentially complete for current and future land use, as COPCs have been detected in soil and groundwater outside of the building footprints. Outdoor air volatilization is limited to the ROW, as the remainder of the Site is predominantly covered by buildings (which are addressed by the vapor intrusion pathway discussed above). The sampling of outdoor air, however, has indicated that air quality is consistent with normal urban environments and significant volatilization to outdoor air is not occurring.
- *Leaching to Groundwater*. This pathway is considered incomplete under current and reasonably likely future land use, as groundwater in the vicinity of the Site is not being used and would not be suitable for groundwater production.

Exposure Pathways for Groundwater in the LOF. Potentially complete exposure pathways for groundwater are listed below:

- *Groundwater Ingestion and Inhalation*. This pathway is incomplete, as groundwater in the vicinity of the Site is not used and would not be suitable for groundwater production.

- *Vapor Intrusion into Buildings*. This pathway may be considered potentially complete under current and future land use, as COPCs have been detected beneath Site buildings. However, groundwater concentrations beneath both buildings were generally below the occupational RBCs (with the exception of TPHg beneath the southwest corner of the O'Dell Building – considered very unlikely to adversely affect indoor air at the Site, as discussed above). Sampling of indoor air in buildings at the Site (including the Odd Fellows Building, the adjacent restaurant basement, and historically at four other businesses to the west) has also consistently indicated that the indoor air quality is similar to observed outdoor air quality (outdoor ambient air samples) and published conditions for normal urban environments. Therefore, significant vapor intrusion is not occurring.
- *Volatilization to Outdoor Air*: This pathway may be considered potentially complete under current and future land use, as COPCs have been identified in soil and groundwater outside of the building footprints. Outdoor air volatilization is limited to the ROW because the remainder of the Site is predominantly covered by buildings (which are addressed by the vapor intrusion pathway discussed above). Sampling of outdoor air, however, has indicated that air quality is consistent with normal urban environments and significant volatilization to outdoor air is not occurring.
- *Groundwater in Excavations (Potential Future)*. This pathway is considered complete for construction and excavation worker exposures, as groundwater at the Site is typically encountered at reasonable excavation depths.
- *Groundwater Discharge to Surface Water*. This pathway is incomplete.

Exposure Pathways for Air in the LOF. Potentially complete exposure pathways for air are listed below:

- *Air Inhalation*. This pathway is not considered to be complete, as there are no primary releases of COPCs to air (volatilization from impacted soil and groundwater are considered in the other pathways). No petroleum hydrocarbons have been detected in ambient air samples at concentrations above the RBCs.
- *Soil Gas Vapor Intrusion into Buildings*. This pathway is considered potentially complete under current and future land use, as COPCs have been detected in soil gas. Sampling of sub-slab vapor/soil-gas, however, has generally shown low concentrations and therefore would not have a significant potential for impacting the overlying indoor air spaces, corroborated by the consistently acceptable concentrations encountered in ambient air samples.

6.0 Risk-Based Screening

6.1 Screening of Site Data

To assess the potential risks associated with current Site conditions, the recent data collected at the Site for soil, groundwater, soil vapor, sub-slab vapor, and ambient air have been screened against the May 2018

RBCs that correspond to the potentially complete exposure pathways identified above. As groundwater conditions have changed significantly in recent years, the groundwater data collected from February 2019 to November 2021 were evaluated. To provide coverage across the Site for soil, soil vapor, and ambient air data (and reflecting an observation that soil conditions are slower to change than groundwater conditions), the evaluation included soil data from sampling from investigations between 2002 and 2022. A summary of the historical data (groundwater and air data collected prior to 2019, and all soil data) is included in Appendix E, and the recently collected data is summarized in Tables 3 through 6 (for groundwater, soil, soil vapor/sub-slab vapor, and ambient air, respectively).

Data collected from within the footprints of buildings are screened against the Occupational and Urban Residential RBCs (and the less conservative Construction and Excavation Worker RBCs). Data collected from within vicinity parking lots and the ROWs for NE Ford Street and NE Third Street are primarily screened against the Occupational RBC and the Construction and Excavation Worker RBCs. To be conservative, these data were also compared to Urban Residential RBCs to reflect the proximity of these samples to occupied spaces; however, sampling data within occupied spaces is considered more representative of exposure risks. The applicable RBCs used for the screening are shown as follows:

Soil Pathways	Applicable RBC (mg/kg)		
	TPHg	Benzene	Ethylbenzene
Direct Contact (RBCss)			
Urban Residential	2,500	24	110
Occupational	20,000	37	150
Construction Worker	9,700	380	1,700
Excavation Worker	NA (>Max)	11,000	49,000
Volatilization to Outdoor Air (RBCso)			
Urban Residential	5,900	27	85
Occupational	69,000	50	160
Vapor Intrusion into Buildings (RBCsi)			
Urban Residential	94	0.38	3.0
Occupational	NA (>Max)	2.1	17

Groundwater Pathways	Applicable RBC (µg/L)		
	TPHg	Benzene	Ethylbenzene
Volatilization to Outdoor Air (RBCwo)			
Urban Residential	NA (>S)	7,400	23,000
Occupational	NA (>S)	14,000	43,000

Groundwater Pathways	Applicable RBC (µg/L)		
	TPHg	Benzene	Ethylbenzene
Vapor Intrusion into Buildings (RBCwi)			
Urban Residential	22,000	510	1,500
Occupational	NA (>S)	2,800	8,200
GW in Excavation (RBCwe)	14,000	1,800	4,500

Air Pathways	Applicable RBC (µg/m^3)		
	TPHg	Benzene	Ethylbenzene
Soil Gas – Vapor Intrusion into Buildings (RBCsv)			
Urban Residential	79,000	170	530
Occupational	1,700,000	1,600	4,900
Air Inhalation			
Urban Residential	390	0.85	2.7
Occupational	1,700	1.6	4.9

Notes: RBCs from Oregon DEQ Risk-Based Decision Making Guidance, updated May 2018.
>Max = Calculated soil RBC exceeds maximum possible concentration and therefore poses no risk.
>S = Calculated groundwater RBC exceeds solubility limit and therefore poses no risk.
mg/kg = milligram per kilogram
µg/L = microgram per liter
µg/m^3 = microgram per cubic meter

6.2 Analytical Data and Risk-Based Screening: Soil Gas and Ambient Air

Volatile Organic Compounds. Historical sampling events (prior to 2019) included the collection of soil gas samples from beneath the Odd Fellows Building. These samples were collected in the vicinity of relatively higher soil and groundwater impacts (location SG-1, near SP-3, MW-6, MW-4, and B-3). The detected concentrations of TPHg and VOCs in these historical samples were several orders of magnitude below the urban residential RBCs.

Recent sub-slab vapor samples were collected from beneath the Odd Fellows Building in October 2019, January 2020, and May 2022, and beneath the O'Dell Building in October 2019 and January 2020. Multiple petroleum-related analytes were detected in each sample; however, all detected concentrations were below the applicable RBCs except for benzene detected at SV-6 (beneath the southeast corner of the Odd Fellows Building) in October 2019 at a concentration of 49,900 µg/m^3, which exceeds the RBCs for Soil Gas Vapor Intrusion into Buildings for both Urban Residential (170 µg/m^3) and Occupational (1,600 µg/m^3) exposures. However, in follow-up samples collected from sample point SV-6 during the January 2020 and May 2022 sampling events, the benzene concentration has been several orders of magnitude below the urban residential RBC (consistently below 1 µg/m^3). Each of these two sampling events also included the collection

of an ambient air sample within the Odd Fellows Building basement; both samples were non-detect for benzene.

Benzene was detected in seven historical ambient air samples at concentrations that exceed the urban residential vapor intrusion RBC of 0.85 µg/m^3 (at concentrations ranging from non-detect to 1.2 µg/m^3). However, these concentrations are less than the range of typical urban air quality measurements measured by DEQ in urban areas (ranging from 2.9 µg/m^3 to 4.8 µg/m^3; DEQ, 2020), corroborated by the consistency of the data and the similarity between indoor air and outdoor air results collected across the Site. The exceedances were also above the urban residential RBC by factors of less than 1.5. Based on the similarities between these indoor air samples and the outdoor ambient air samples, these exceedances are considered to be associated with regional background air quality and not indicative of unacceptable exposures resulting from contamination released from the Former O'Dell Building Gasoline USTs. This is consistent with the relatively low soil gas results, the clayey soil encountered at the Site, and the significant age of the petroleum associated with the UST release (where much of the volatile fraction of the gasoline would have already dissipated).

Soil gas samples collected in May 2022 from the push-probe explorations adjacent to the Odd Fellows Building had detected concentrations of VOCs that were below the urban residential vapor intrusion RBC, with the exception of the ethylbenzene concentration in boring SB-10 (which exceeded the urban residential RBC by a factor of 2.8). However, ethylbenzene was not detected above the RBCs in the sub-slab vapor samples or the ambient air samples within the basement of the Odd Fellows Building.

Conclusion. With the exception of one sub-slab vapor sample (SV-6; October 2019) with an exceedance of benzene and one push-probe soil gas sample (SB-10; May 2022) with an exceedance of ethylbenzene, the envelope of vapor concentrations around the Odd Fellows Building and the O'Dell Building shows VOC concentrations that are consistently below the urban residential RBCs. As these two exceedances have not translated to exceedances in indoor air (and for ethylbenzene, no exceedances in the sub-slab vapor samples), and there are no current urban residential property uses in the vicinity of the Site, it is concluded that there are no unacceptable soil vapor/soil gas exposures.

6.3 Analytical Data and Risk-Based Screening: Soil

Total Petroleum Hydrocarbons. Eleven of thirteen historical soil samples collected beneath the O'Dell Building from February 2019 and October 2019 (ODB-1 and ODB-3 through ODB-12) and six of eight historical soil samples beneath the Odd Fellows Building (B-1 through B-5 and B-8) have TPHg concentrations that exceed the urban residential vapor intrusion RBC of 94 mg/kg (with concentrations ranging from 200 mg/kg to 1,220 mg/kg). Eight of the ten soil samples collected during the May 2022 push-probe explorations also exceeded the urban residential vapor intrusion RBC (with concentrations of between 157 mg/kg and 4,180 mg/kg). No soil samples have been encountered with TPHg concentrations that exceed the remaining applicable RBCs. However, these RBC exceedances for TPHg concentrations have been demonstrated not

to be an exposure concern from vapor intrusion due to the low concentrations of petroleum constituents detected in collected soil vapor and ambient air samples (being orders of magnitude below the RBCs, as described in Section 6.2 above). These results are consistent with the aged condition of the gasoline fraction, where the relative concentration of the volatile fraction is lower than it would be for the fresh gasoline standard that is the basis for the RBC.

Volatile Organic Compounds. Two historical soil samples (ODB-3 and ODB-7) from February and October 2019 beneath the O'Dell Building and one soil sample beneath the Odd Fellows Building (B-3; collected in October 2014) were reported with benzene concentrations that exceed the urban residential vapor intrusion RBC. From the May 2022 push-probe sampling event, 3 of the 10 soil samples also had benzene concentrations above the urban residential RBC.

Two historical samples collected beneath the Odd Fellows Building (B-1 and B-2) and five of the ten push-probe samples collected in May 2022 (SB-6 through SB-10) had detected concentrations of ethylbenzene that exceeded the urban residential vapor intrusion RBCs, with one boring (SB-9) that also exceeded the occupational vapor intrusion RBC. Similarly, five of the May 2022 push-probe samples (SB-3, SB-6, SB-7, SB-9, and SB-10) had detected concentrations of 1,3,5-trimethylbenzene that were above the urban residential vapor intrusion RBC (with two samples, SB-9 and SB-10, that also exceeded the occupational vapor intrusion RBC).

However, these relatively elevated VOC concentrations have not translated to a concern for vapor intrusion into the Odd Fellows Building because the concentrations of petroleum constituents detected in collected soil vapor and ambient air samples are either non-detect or several orders of magnitude below the respective RBCs (as described in Section 6.2 above).

Conclusion. Exceedances of the applicable RBCs for soil samples were limited to:

- Urban residential vapor intrusion for TPHg, benzene, ethylbenzene, and 1,3,5-trimethylbenzene in several samples beneath the O'Dell Building samples collected in 8 of the 10 push-probe explorations around the Odd Fellows Building;
- Occupational vapor intrusion for ethylbenzene in one sample beneath the O'Dell Building; and
- Occupational vapor intrusion for ethylbenzene in one sample and 1,3,5-trimethylbenzene in two samples collected from the push-probe explorations.

As there are no urban residential uses at the Site, the only current potentially unacceptable risk from soil would be associated with ethylbenzene and 1,3,5-trimethylbenzene in boring ODB-3 beneath the O'Dell Building and borings SB-9 and SB-10 adjacent to the Odd Fellows Building, which exceed the Occupational RBC. Benzene and TPHg were only detected above the urban residential RBC and are not considered an unacceptable risk due to the lack of urban residential uses at the Site and the low concentrations of petroleum

constituents detected in collected soil gas and ambient air samples at the O'Dell Building and the Odd Fellows Building.

The three soil samples with exceedances of ethylbenzene or 1,3,5-trimethylbenzene are not considered to represent an actual risk to occupants of the Odd Fellows Building (even if the building were to be used for urban residential purposes) due to the following lines of evidence:

- The samples were collected at a depth of between 9.5 feet and 12 feet bgs, which is significantly deeper than the default assumption used for the development of the RBC;
- The occupational vapor intrusion RBC is only exceeded in 2 of the 10 samples by a factor of between 1.2 and 2.0;
- 1,3,5-Trimethylbenzene was not detected in the May 2022 sub-slab vapor samples or ambient air samples, and historical detections in samples at both the O'Dell Building and the Odd Fellows Building are several orders of magnitude below the RBCs;
- The recent and historical detected concentrations of ethylbenzene in the sub-slab vapor samples beneath both buildings were two orders of magnitude below the urban residential RBC; and
- Ambient air samples collected in both buildings have no detected concentrations of 1,3,5-trimethylbenzene, and detected concentrations of ethylbenzene are below the RBCs and are consistent with the outdoor ambient air samples.

6.4 Groundwater Concentration Trends

The recently-collected November 2021 groundwater data was compared to historical data to evaluate concentration trends. Monitoring well trend graphs are provided in Appendix F. Benzene and TPHg concentrations in wells MW-1 and MW-3 and TPHg concentrations in wells MW-4 and MW-5 have been consistently below their respective RBCs since 2012. Concentration trends for the remaining wells and parameters are discussed below.

Monitoring Well MW-2. Benzene concentrations in well MW-2 have been generally decreasing since 2012, but with variability in recent years. As of the most recent sampling (in July 2020), benzene concentrations have decreased by 77 percent from the high concentration of 4,020 µg/L detected in June 2012 to 924 µg/L.

TPHg concentrations in well MW-2 are also lower than were observed historically. TPHg concentrations have decreased by 41 percent from the high concentration of 24,700 µg/L detected in February 2012 to the most recent concentration of 14,500 µg/L detected in July 2020.

Monitoring Well MW-4. Benzene concentrations in well MW-4 have been stable to decreasing since 2012. Benzene concentrations have decreased by 45 percent from the high concentration of 4,120 µg/L detected in March 2014 to the most recent concentration of 2,250 µg/L detected in July 2020. Similarly, TPH

concentrations have decreased relative to historical highs (from a high of 9,690 µg/L in February 2013 to 3,990 µg/L in November 2021; a 59 percent reduction).

Monitoring Well MW-5. Benzene concentrations in well MW-5 have fluctuated between non-detect and 5,870 µg/L from 2012 through 2021. The average recent benzene concentration (calculated from 2019 through 2021 data) in well MW-5 is 997 µg/L. However, the detected concentration from the October 2019 sampling event (5,870 µg/L) is considered to be anomalous and is contributing to a high average that is not representative of actual Site conditions; the other five samples that have been collected from MW-5 between 2019 and 2021 have benzene concentrations that range from non-detect to 96.3 µg/L (averaging 22.8 µg/L). Excluding the October 2019 concentration as an outlier, benzene concentrations have reduced by at least 99 percent from the previous high concentration of 1,880 µg/L detected in August 2012 to the most recent non-detect result in November 2021.

Monitoring Well MW-6. Benzene concentrations have decreased since 2012 and have been consistently below the RBC during the sampling events between 2019 and 2021. Benzene concentrations have decreased by five orders of magnitude from the high concentration of 14,600 µg/L detected in June 2012 to the most recent concentration of 0.49 µg/L detected in November 2021.

TPHg concentrations have also decreased since 2012 and have been consistently below the RBC since 2019. TPHg concentrations have decreased by 98 percent from the high concentration of 42,400 µg/L detected in February 2013 to the most recent concentration of 721 µg/L detected in July 2020.

6.5 Analytical Data and Risk-Based Screening: Groundwater

Total Petroleum Hydrocarbons. For groundwater monitoring well sampling completed between February 2019 and November 2021, one groundwater sample from July 2020 (from monitoring well MW-2) had a reported TPHg concentration that exceeded the RBC for direct contact with groundwater in an excavation (at a concentration of 14,500 µg/L, relative to the RBC of 14,000 µg/L).

The average TPHg concentration in groundwater samples collected between February 2019 and November 2021 for each monitoring well was below the RBC of 14,000 µg/L, with the highest average concentration detected in well MW-2 (an average of 8,908 µg/L over the five monitoring events that included this well).

In November 2021, the detected TPH concentrations in MW-4 and MW-6 were the lowest that have historically been recorded in these wells (at 3,990 µg/L and 721 µg/L, respectively).

Volatile Organic Compounds. Two of the most recent groundwater samples (July 2020 for MW-2 and November 2021 for MW-4) had reported benzene concentrations that exceeded the urban residential groundwater vapor intrusion RBC of 510 µg/L (at concentrations of 924 µg/L and 2,250 µg/L, respectively). The comparison of the groundwater data from these two wells to the urban residential RBC is a conservative

representation of potential risk to the adjacent buildings since there is currently no residential use of these buildings. The concentration detected at well MW-4 further exceeded the construction/excavation worker direct contact RBC (1,800 µg/L). These wells are located within the ROW of NE Third Street, and there are no urban residential site uses. Since February 2019, benzene concentrations in monitoring well MW-2 have ranged from 317 µg/L to 1,120 µg/L, and concentrations in MW-4 have ranged from 1,640 µg/L to 4,010 µg/L.

The average benzene concentration in groundwater samples collected between February 2019 and November 2021 was screened against the RBC. The average concentrations in well MW-2 (average of 725 µg/L), well MW-4 (average of 2,770 µg/L), and well MW-5 (average of 997 µg/L) exceed the urban residential groundwater vapor intrusion RBC of 510 µg/L. MW-4 is the only monitoring well with an average benzene concentration that exceeds the construction/excavation worker direct contact RBC of 1,800 µg/L and no average concentration exceeds the occupational vapor intrusion RBC of 2,800 µg/L.

Forecasting of the observed decreasing trends in benzene concentration suggest that MW-4 will reach the urban residential RBC in about two years (assuming that the trend observed between January 2020 and November 2021 continues at the same rate).

Conclusion. Exceedances of the groundwater RBCs were limited to:

- Urban residential vapor intrusion for benzene in two samples collected in the Third Street ROW in July 2020 or November 2021 (depending on the well sampled, and not including the anomalous detection in MW-5 in October 2019); and
- The construction/excavation worker direct contact RBC for benzene in MW-4 (both in November 2021 and the average concentration detected between 2019 and 2021).

From previous sampling (between 2019 and 2020), it was identified that the TPHg concentration in well MW-2 only exceeds the Construction and Excavation Worker RBC by a factor of 1.04. Other samples collected in the vicinity of MW-2 did not contain analyte concentrations above applicable RBCs (the benzene concentration in the nearest sub-slab vapor point SV-2 was 0.04 percent of the occupational soil gas RBC). Based on the low exceedance ratio and sub-slab vapor results from within the O'Dell Building, it was concluded that the TPHg concentration in well MW-2 was not adversely affecting indoor air quality in the O'Dell Building.

As there are no urban residential uses in the LOF and the two samples with benzene concentrations above the urban residential RBC are located in the ROW (not beneath the Site buildings), the only current potentially unacceptable risks from groundwater would be associated with benzene in MW-4, which exceeds the excavation worker RBC. As discussed above, the indoor air and ambient air concentrations at the Site are not adversely affected and the exceedance of the urban residential vapor intrusion RBC for benzene at well MW-4 is therefore not indicative of an unacceptable risk condition. It is unlikely that construction work beneath the O'Dell Building would extend to the depth of groundwater (and if such work were planned, the potential

exposure risks during the work could be readily managed with a Contaminated Media Management Plan [CMMP] prepared for the Site). Therefore, the only remaining exceedance of a relevant RBC is associated with excavation worker direct contact near MW-4.

6.6 Summary of Risk Screening

The table below summarizes risk screening pathways and exceedances for the Site. Exposure pathways were evaluated for the following potential receptors:

- Urban residential (potential future exposure);
- Occupational workers;
- Construction workers (potential future); and
- Excavation workers (potential future).

Because the Site is fully developed (including buildings and pavements) and has no surface water exposure, there is no viable ecological habitat of significance.

Exposure Pathway	Media	Exceedances of Potentially Applicable RBCs		
		Right-of-Way	Odd Fellows Building	O'Dell Building
Direct Contact/ Ingestion/ Inhalation	Soil	None	None	None
	Groundwater	None	None	None
Vapor Intrusion into Buildings	Soil	N/A – See Note A	Benzene in SB-6, SB-9, and SB-10 Ethylbenzene in SB-6 through SB-10 1,3,5-Trimethylbenzene in SB-3, SB-6, SB-7, SB-9, and SB-10 TPHg in SB-2 through SB-4 and SB-6 through SB-10	Benzene at ODB-3 and ODB-7 Ethylbenzene at ODB-3 TPHg at ODB-1, ODB-3 through ODB-12
			Note: Exceedances of Soil RBCs are not indicative of an unacceptable exposure risk, as direct vapor exposures are acceptable based on ambient air and soil gas samples.	

Exposure Pathway	Media	Exceedances of Potentially Applicable RBCs		
		Right-of-Way	Odd Fellows Building	O'Dell Building
Vapor Intrusion into Buildings	Groundwater	N/A – See Note A	Inferred potential from proximity to MW-4 (contradicted by acceptable soil gas and ambient air data)	Inferred potential from proximity to MW-2 (contradicted by acceptable soil gas and ambient air data)
	Soil Gas	N/A – See Note A	Benzene at SV-6 in October 2019, but conclusion is that this result is not indicative of typical site conditions	None
Volatilization to Outdoor Air	Soil	None	None	None
	Groundwater	None	None	None
Leaching to Groundwater	Soil	N/A – see Note B	N/A – see Note B	N/A – see Note B
Groundwater in Excavations	Groundwater	Benzene in wells MW-2 and MW-4 during several sampling events (and MW-5 in October 2019); TPHg in well MW-2 during July 2020 event. However, MW-5 result considered anomalous.	Inferred potential from proximity to MW-4	Inferred potential from proximity to MW-2
Groundwater Discharge to Surface Water	Groundwater	N/A – see Note C	N/A – see Note C	N/A – see Note C
Soil Gas Vapor Intrusion	Soil Gas	N/A	Benzene at SV-6 in October 2019, but conclusion is that this result is not indicative of typical site conditions	None
Inhalation	Ambient Air	None	None	None

Note A – No building present

Note B – Pathway is incomplete (no beneficial groundwater use)

Note C – Pathway is incomplete (no surface water discharge)

7.0 Conclusions and Recommendations

Impacts from TPHg and related VOCs have been detected across the extent of the LOF shown on Figure 7. These impacts, however, have diminished significantly between 2014 and 2021, resulting in Site conditions where the extent of concentrations exceeding currently applicable RBCs is limited to the NE Ford Street ROW between the O'Dell Building and the Odd Fellows Building, beneath the southwest corner of the Odd Fellows Building, and the north side of Third Street near the intersection with NE Ford Street (between MW-2 and MW-4). Separate-phase hydrocarbons (free product) have not been observed at the Site since the decommissioning of the Former O'Dell Building Gasoline USTs in 1985.

Based on the current Site use, the primary potential risk exposure of potential concern is limited to construction/excavation worker exposure beneath the southwest corner of the O'Dell Building and in the vicinity of MW-4. However, this exposure would only present a potential risk if construction or excavation activities were undertaken without appropriate precautions (such as implementation of a CMMP). The potential for unacceptable risk to construction workers beneath the O'Dell Building is further limited by the fact that the building would need to be razed or excavation activities would need to be conducted within the existing building footprint for potential exposures to occur.

A secondary potential risk exposure of concern is the limited potential for vapor intrusion impacts, with one recent sub-slab vapor sample collected beneath the Odd Fellows Building that exceeded the occupational vapor intrusion RBC for benzene. However, the potential vapor intrusion exceedances are limited by the site conditions and the historical soil gas and ambient air sampling that has shown that the indoor air concentrations are consistent with background conditions and not noticeably or likely impacted by vapor intrusion (consistent with the fine-grained soil and depth below the ground surface). Multiple samples collected from the same sampling point (SV-6) have not shown any recurrences of the elevated benzene concentration, so that one event does not appear to be associated with the typical site conditions.

Based on the consistently acceptable results observed in the indoor ambient air samples (being either non-detect for VOCs or consistent with outdoor ambient air sample results), there would be no advantage to the installation of an engineering control to manage the theoretical exposure risks indicated by the RBC exceedances encountered in MW-4 and several of the push-probe explorations (specifically, there is no vapor mass in the indoor air to be removed).

Based on the summary of Site data and associated risk screening, institutional controls can manage the potential exposure risks. Therefore, a CMMP has been prepared and is included as Appendix C. The CMMP defines procedures for appropriate management of soil and groundwater at the Site that may contain chemicals above certain screening levels. A final copy of the CMMP will be provided to the City of McMinnville following approval of this report (a draft copy has been provided previously, with acceptance by the City in principle).

In addition, the institutional controls for the O'Dell Building and Odd Fellows Building will include deed restrictions on groundwater use and attachment of the CMMP to each of the properties. Residential land use would also be restricted in the basement of the Odd Fellows Building until contaminant concentrations are consistently below the urban residential RBC. The proposed deed restrictions are included within Appendix D. These proposed deed restrictions are the same substantively as the deed restrictions provided to DEQ in November 2020; however, the restrictions for the O'Dell Building property have been updated to reflect a change in ownership during the intervening period.

Based on the above risk-based site assessment, the current and reasonably likely potential exposures to Site contaminants can be managed through institutional controls; no active remediation is needed to be protective; and concentration trends in the site groundwater monitoring wells demonstrate that petroleum hydrocarbon concentrations are naturally attenuating. Therefore, Oregon Lithoprint requests that DEQ issue an NFA determination for the Site subject to compliance with the prepared CMMP in Appendix C, and compliance with land use restrictions included in Appendix D for the O'Dell Building and the Odd Fellows Building.

8.0 References

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Apex, 2020a. *Summary Report – First Quarter 2020 Sampling Event. Oregon Lithoprint aka News Register Site. 609-611 NE Third Street, McMinnville, OR.* March 11, 2020.

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Apex 2020c. *Summary Report – 1. Third Quarter 2020 Data Summary and Site Closure Assessment. Oregon Lithoprint aka News Register Site. 609-611 NE Third Street, McMinnville, OR.* November 16, 2020.

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Table 1
Groundwater Elevations
Oregon Lithoprint
McMinnville, Oregon

Monitoring Well (Elevation in Feet MSL)[1]	Sampling Date	Depth to Water	Depth to Product (feet)	Product Thickness (feet)	Groundwater Elevations (feet)
MW-1	02/14/19	4.70	--	--	152.54
(157.24)	10/17/19	8.69	--	--	148.55
	01/30/20	3.40	--	--	153.84
	04/16/20	6.18	--	--	151.06
	07/17/20	8.81	--	--	148.43
	11/22/21	4.92	--	--	152.32
MW-2	02/14/19	7.21	--	--	150.45
(157.66)	10/17/19	9.63	--	--	148.03
	01/30/20	6.39	--	--	151.27
	04/16/20	8.58	--	--	149.08
	07/17/20	10.43	--	--	147.23
	11/22/21	7.38	--	--	150.28
MW-3	02/14/19	6.25	--	--	150.48
(156.73)	10/17/19	7.44	--	--	149.29
	01/30/20	6.00	--	--	150.73
	04/16/20	7.49	--	--	149.24
	07/17/20	8.54	--	--	148.19
	11/22/21	6.90	--	--	149.83
MW-4	02/14/19	7.75	--	--	148.83
(156.58)	10/17/19	9.45	--	--	147.13
	01/30/20	7.61	--	--	148.97
	04/16/20	8.84	--	--	147.74
	07/17/20	10.10	--	--	146.48
	11/22/21	8.24	--	--	148.34
MW-5	02/14/19	6.97	--	--	150.07
(157.04)	10/17/19	9.99	--	--	147.05
	01/30/20	6.54	--	--	150.50
	04/16/20	8.83	--	--	148.21
	07/17/20	10.80	--	--	146.24
	11/22/21	7.68	--	--	149.36
MW-6	02/14/19	7.09	--	--	149.94
(157.03)	10/17/19	9.01	--	--	148.02
	01/30/20	6.87	--	--	150.16
	04/16/20	8.23	--	--	148.80
	07/17/20	9.74	--	--	147.29
	11/22/21	7.37	--	--	149.66

Notes:

1. feet MSL = Feet above mean sea level.
2. Casing elevations provided by Coles and Betts, Draft CAP table.
3. -- = No product.

Table 2
Groundwater Field Parameters
Oregon Lithoprint
McMinnville, Oregon

Well/Boring ID	Sampling Date	pH	Temp (ºC)	Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)
MW-1	10/17/19	6.36	17.1	437.8	0.60	-1.7
	01/30/20	6.73	12.9	276	1.55	-1
	04/16/20	6.44	14.5	361.2	1.24	-105
	07/17/20	5.86	16.5	443.1	1.03	-3.4
MW-2	10/17/19	6.68	15.8	641	0.25	-21.4
	01/30/20	6.67	15.4	843	1.12	-109
	04/16/20	6.76	15.2	871	0.48	-186.3
	07/17/20	6.29	15.7	746	0.63	-21.2
MW-3	10/17/19	6.85	16.2	517	1.62	-29
	01/30/20	6.74	14.6	575	0.70	-84
	04/16/20	6.89	14.2	543	0.74	-192.7
	07/17/20	6.60	15.9	458.2	0.48	79.6
MW-4	10/17/19	7.11	17.0	684	0.25	8.9
	01/30/20	7.01	15.8	900	0.95	-117
	04/16/20	7.16	16.1	818	0.38	-227.6
	07/17/20	6.68	17.1	667	0.74	114.3
	11/22/21	7.82	14.8	641	0.47	-160.1
MW-5	10/17/19	6.79	14.6	642	0.32	-14.5
	01/30/20	6.29	13.9	445	1.90	71
	04/16/20	6.54	13.4	422	0.84	-85.6
	07/17/20	6.20	14.3	291.4	1.08	42.3
	11/22/21	7.27	14.1	250.6	6.86	-33.3
MW-6	10/17/19	6.63	16.6	1654	0.26	-11
	01/30/20	6.32	15.6	2840	0.43	-53
	04/16/20	6.47	15.5	2538	0.57	-186.4
	07/17/20	6.29	16.2	1921	0.74	148.6
	11/22/21	7.36	15.4	1198	0.70	-110.6

Notes:

1. °C = Degrees Celsius.
2. µS/cm = Microsiemens per centimeter.
3. ORP = Oxidation-reduction potential.
4. mg/L (ppm) = Milligrams per liter (parts per million).
5. mV = Millivolts.
6. -- = Parameter not recorded.

Table 3
Groundwater Analytical Results
Oregon Lithoprint
McMinnville, Oregon

Sample Location ID	MW-1					MW-2							MW-3					MW-4							
Date	2/14/2019	10/17/2019	1/30/2020	4/16/2020	7/17/2020	2/14/2019	10/17/2019	10/17/2019 DUP	1/30/2020	4/16/2020	7/17/2020	7/17/2020 DUP	2/14/2019	10/17/2019	1/30/2020	4/16/2020	7/17/2020	2/14/2019	10/17/2019	1/30/2020	1/30/2020 DUP	4/16/2020	4/16/2020 DUP	7/17/2020	11/22/2021
Volatile Organic Compounds (µg/L)																									
Acetone	<50.0 UJ	<50.0	<50.0	<50.0	<50.0 UJ	<50.0 UJ	<50.0	<50.0 UJ	<1000	<1000	253 J+	<50.0 UJ	<50.0 UJ	<50.0	<50.0	<50.0	161 J+	<50.0 UJ	<50.0	<5000	<500	<5000	<5000	<1000	<5000 UJ
Acrolein	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0 R	<1000	<1000	<1000	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<5000	<500	<5000	<5000	<1000	<5000 UJ
Acrylonitrile	<10.0 UJ	20.0	<10.0	<10.0	<10.0	<10.0 UJ	<10.0	<10.0	<200	<200	<200	<10.0	<10.0 UJ	<10.0	<10.0	<10.0	<10.0	<10.0 UJ	<10.0	<1000	<100	<1000	<1000	<200	<1000
Benzene	<1.00	46.4	<1.00	0.240 J	2.15	602	410	317	568	1,120	924	999	3.13	37.4	3.39	4.74	2.53	1,640	3,040	4,010	3,350	2,890	2,230	2,770	2,250
Bromobenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00 UJ	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
Bromodichloromethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
Bromoform	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
Bromomethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<100	<100	<100	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<500	<50.0	<500	<500	<100	<500
n-Butylbenzene	<1.00	<1.00	<1.00	<1.00	<1.00	3.54	4.01	2.38 J	<20.0	7.61 J	7.43 J	9.04	2.08	3.05	1.07	1.58	2.84	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
sec-Butylbenzene	<1.00	0.387 J	<1.00	<1.00	0.434 J	4.34	6.00	4.94 J	<20.0	7.36 J	9.18 J	9.83	6.45	7.52	2.69	4.49	7.90	<1.00	0.686 J	<100	<10.0	<100	<100	<20.0	<100
tert-Butylbenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	0.602 J	0.472 J	<20.0	<20.0	<20.0	0.491 J	0.434 J	0.467 J	<1.00	0.374 J	0.478 J	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
Carbon Tetrachloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	0.436 J+	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
Chlorobenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
Chlorodibromomethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
Chloroethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<100	<100	<100	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<500	<50.0	<500	<500	<100	<500
Chloroform	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<100	<100	<100	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<500	<50.0	<500	<500	<100	<500
Chloromethane	<2.50	<2.50 UJ	<2.50	<2.50	<2.50	<2.50	<2.50 UJ	<2.50	<50.0	<50.0	<50.0	<2.50	<2.50	<2.50 UJ	<2.50	<2.50	<2.50	<2.50	<2.50 UJ	<250	<25.0	<250	<250	<50.0	<250
2-Chlorotoluene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00 UJ	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
4-Chlorotoluene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00 UJ	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
1,2-Dibromo-3-Chloropropane	<5.00 UJ	<5.00	<5.00	<5.00	<5.00	<5.00 UJ	<5.00	<5.00	<100	<100	<100	<5.00	<5.00 UJ	<5.00	<5.00 UJ	<5.00	<5.00	<5.00 UJ	<5.00	<500 UJ	<50.0 UJ	<500	<500	<100	<500
1,2-Dibromoethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
Dibromomethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
1,2-Dichlorobenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
1,3-Dichlorobenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
1,4-Dichlorobenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
Dichlorodifluoromethane	<5.00	<5.00 UJ	<5.00	<5.00	<5.00	<5.00	<5.00 UJ	<5.00	<100	<100	<100	<5.00	<5.00	<5.00 UJ	<5.00	<5.00	<5.00	<5.00	<5.00 UJ	<500	<50.0	<500	<500	<100	<500
1,1-Dichloroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
1,2-Dichloroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
1,1-Dichloroethene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	1.46	1.17	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
cis-1,2-Dichloroethene	<1.00	0.445 J	<1.00	<1.00	<1.00	<1.00	29.9	28.2	<20.0	<20.0	11.1 J	11.1	<1.00	0.676 J	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
trans-1,2-Dichloroethene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	12.2	10.2	<20.0	<20.0	3.09 J	3.21	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
1,2-Dichloropropane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
1,1-Dichloropropene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
1,3-Dichloropropane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
cis-1,3-Dichloropropene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
trans-1,3-Dichloropropene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
2,2-Dichloropropane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0 UJ	<100
di-Isopropyl Ether	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
Ethylbenzene	<1.00	9.95	<1.00	1.42	4.45	882	165	185	853	1,790	1,290	1,450	10.4	12.5	3.00	4.23	7.40	2.39	6.84	<100	7.01 J	29.1 J	<100	5.11 J	<100
Hexachloro-1,3-Butadiene	<1.00	<1.00	<1.00	<1.00	<1.00 UJ	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0 UJ	<1.00 UJ	<1.00	<1.00	<1.00	<1.00	<1.00 UJ	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
Isopropylbenzene	<1.00	1.53	<1.00	0.200 J	1.31	36.9	25.8	25.8	39.5	79.0	84.4	93.6	12.5	14.6	4.37	8.09	14.3	2.40	8.81	<100	7.71 J	<100	<100	5.67 J	<100
p-Isopropyltoluene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	0.730 J	0.610 J	<20.0	<20.0	<20.0	1.22	1.62	1.79	1.34	1.16	1.49	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
2-Butanone (MEK)	<10.0 UJ	<10.0	<10.0	<10.0	<10.0	<10.0 UJ	<10.0	<10.0	<200	<200	<200	<10.0	<10.0 UJ	<10.0	<10.0	<10.0	<10.0	<10.0 UJ	<10.0	<1000	<100	<1000	<1000	<200	<1000
Methylene Chloride	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<100	<100	<100	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<500	<50.0	<500	<500	<100	<500
4-Methyl-2-Pentanone (MIBK)	<10.0 UJ	<10.0	<10.0	<10.0	<10.0	<10.0 UJ	<10.0	<10.0	<200	<200	<200	<10.0	<10.0 UJ	<10.0	<10.0	<10.0	<10.0	<10.0 UJ	<10.0	<1000	<100	<1000	<1000	<200	<1000
Methyl Tert-Butyl Ether	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
Naphthalene	<5.00	1.49 J	<5.00	<5.00 UJ	1.47 J	67.2 J	8.91	10.5	108	181 J	99.6 J	190	8.30 J	2.19 J	<5.00 UJ	<5.00 UJ	<5.00 UJ	<5.00 UJ	<5.00	<500 UJ	<50.0 UJ	<500 UJ	<500 UJ	<100	<500
n-Propylbenzene	<1.00	1.43	<1.00	0.364 J	2.76	72.0	41.8	36.4 J	79.2	173	170	171 J	18.2	22.9	5.81	11.3	20.3	0.693 J	1.18	<100	<10.0	<100	<100	<20.0 UJ	<100
Styrene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
1,1,1,2-Tetrachloroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
1,1,2,2-Tetrachloroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00 UJ	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
1,1,2-Trichlorotrifluoroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
Tetrachloroethene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
Toluene	<1.00	1.08	<1.00	<1.00	<1.00	0.420 J	4.38	3.25	<20.0	<20.0	<20.0	2.31	<1.00	<1.00	<1.00	0.295 J	<1.00	5.18	12.7	<100	9.01 J	<100	<100	9.81 J	<100
1,2,3-Trichlorobenzene	<1.00 UJ	<1.00	<1.00	<1.00	<1.00 UJ	<1.00 UJ	<1.00	<1.00	<20.0	<20.0	<20.0 UJ	<25.0	<1.00 UJ	<1.00	<1.00 UJ	<1.00	<1.00 UJ	<1.00 UJ	<1.00	<100 UJ	<10.0 UJ	<100	<100	<20.0	<100
1,2,4-Trichlorobenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<25.0	<1.00	<1.00	<1.00 UJ	<1.00	<1.00	<1.00	<1.00	<100 UJ	<10.0 UJ	<100	<100	<20.0	<100
1,1,1-Trichloroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
1,1,2-Trichloroethane	<1.00	0.436 J	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
Trichloroethene	<1.00	0.979 J	<1.00	<1.00	<1.00	<1.00	4.74	4.36	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100
Trichlorofluoromethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<100	<100	<100	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<500	<50.0	<500	<500	<100	<500
1,2,3-Trichloropropane	<2.50 UJ	<2.50	<2.50	<2.50	<2.50	<2.50 UJ	<2.50	<2.50 UJ	<50.0	<50.0	<50.0	<2.50	<2.50 UJ	<2.50	<2.50	<2.50	<2.50	<2.50 UJ	<2.50	<250	<25.0	<250	<250	<50.0	<250
1,2,4-Trimethylbenzene	<1.00	0.76 J	<1.00	0.716 J	1.05	6.98	0.493 J	0.495 J	<20.0	<20.0	<20.0	1.61	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	39.4 J	<100	<20.0	<100
1,2,3-Trimethylbenzene	<1.00	0.645 J	0.335 J	0.179 J	0.427 J	116	18.7 D	13.5 D	31.3	182	140	131	8.83	13.1	5.04	2.59	7.88	1.52	0.523 J	<100	<10.0	22.5 J	<100	<20.0	<100
1,3,5-Trimethylbenzene	<1.00	<1.00	<1.00	<1.00	<1.00	1.23	0.868 J	0.645 J	<20.0	<20.0	<20.0	1.36	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	17.1 J	<100	<20.0	<100
Vinyl Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0	<100 UJ
Xylenes, Total	<3.00	1.55 J	<3.00	<3.00	<3.00	1.81 J	6.55	5.95	<60.0	5.50 J	6.12 J	8.18	<3.00	<3.00	<3.00	0.453 J	0.430 J	1.80 J	2.78 J	<300	<30.0	51.4 J	<300	<60.0	<300
Gasoline Range Organics	188 J+	914	<100	56.2 J+	186 J+	7,280	7,160	6,100	5,640	9,960	14,500	13,200	2,900	3,440	1,850	2,240	3,450	5,180	8,680	7,600	8,630	7,980 J-	7,890 J-	7,520	3,990

Notes:

1. µg/L = Micrograms per liter.
2. Bold values indicate the compounds was detected above method detection limits.
3. < = Analyte was not detected above the reporting limit.
4. DEQ Risk-Based Concentrations from Oregon Department of Environmental Quality's *Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sites* , revised May 2018.
5. Shaded values indicate concentrations detected above the Urban Residential RBC for Vapor Intrusion.
6. Shaded values indicate concentrations detected above the Occupational RBC for Vapor Intrusion and/or the Construction and Excavation Worker RBC for Groundwater in Excavations.
7. -- = Value not available.
8. J = Result is estimated.
9. UJ = Reporting limit is estimated due to analyte quality control.
10. J+ = Result is estimated and may be biased high.
11. R = The data are unusable and the presence of the analyte in the sample is unknown.
12. D = For results greater than five times the reporting limit, the RPD between primary sample and field duplicate exceeds 30 percent.
13. J- = Result is estimated and may be biased low.
14. B = The same analyte is found in the associated blank.

Table 3
Groundwater Analytical Results
Oregon Lithoprint
McMinnville, Oregon

Sample Location ID	MW-5						MW-6						DEQ Risk-Based Concentrations		
Date	2/14/2019	10/17/2019	1/30/2020	4/16/2020	7/17/2020	11/22/2021	2/14/2019	10/17/2019	1/30/2020	4/16/2020	7/17/2020	11/22/2021	GW in Excavation | Construction and Excavation Worker	Groundwater Vapor Intrusion into Buildings | Urban Residential	Vapor Intrusion into Buildings | Occupational
Volatile Organic Compounds (µg/L)															
Acetone	<50.0 UJ	<50.0	<50.0	<50.0	<50.0 UJ	<50.0 UJ	<50.0 UJ	<50.0	<2500	74.1 J	<50.0	<50.0 UJ	--	--	--
Acrolein	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0 UJ	<50.0	<50.0	<2500	<250	<50.0	<50.0	--	--	--
Acrylonitrile	<10.0 UJ	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0 UJ	<10.0	<500	<50.0	<10.0	<10.0	250	1,700	9,200
Benzene	<1.00	5,870	16.3	<1.00	96.3	<1.00	89.2	200	406	51.3	9.86	0.490 J	1,800	510	2,800
Bromobenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	--	--	--
Bromodichloromethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	450	420	2,300
Bromoform	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	14,000	85,000	470,000
Bromomethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<250	<25.0	<5.00	<5.00	1,200	2,100	27,000
n-Butylbenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	2.14	<1.00	<50.0	<5.00	<1.00	<1.00	--	--	--
sec-Butylbenzene	<1.00	1.03	<1.00	<1.00	0.162 J	<1.00	9.53	1.89	<50.0	4.40 J	3.90	1.39	--	--	--
tert-Butylbenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	0.417 J	<50.0	<5.00	0.391 J	0.432 J	--	--	--
Carbon Tetrachloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	1,800	220	1,200
Chlorobenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	10,000	67,000	--
Chlorodibromomethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	610	2300	13,000
Chloroethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<250	<25.0	<5.00	<5.00	2,400,000	2,800,000	--
Chloroform	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<250	<25.0	<5.00	<5.00	720	290	1,600
Chloromethane	<2.50	<2.50 UJ	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50 UJ	<125	<12.5	<2.50	<2.50 UJ	22,000	26,000	330,000
2-Chlorotoluene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	--	--	--
4-Chlorotoluene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	--	--	--
1,2-Dibromo-3-Chloropropane	<5.00 UJ	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 UJ	<5.00	<250 UJ	<25.0	<5.00	<5.00 UJ	--	--	--
1,2-Dibromoethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	27	110	590
Dibromomethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	--	--	--
1,2-Dichlorobenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	37,000	--	--
1,3-Dichlorobenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	--	--	--
1,4-Dichlorobenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	1,500	1,300	7,100
Dichlorodifluoromethane	<5.00	<5.00 UJ	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00 UJ	<250	<25.0	<5.00	<5.00	--	--	--
1,1-Dichloroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	10,000	2,600	14,000
1,2-Dichloroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	1.14	0.571 J	630	700	3,900
1,1-Dichloroethene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	44,000	29,000	360,000
cis-1,2-Dichloroethene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	18,000	--	--
trans-1,2-Dichloroethene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	180	--	--
1,2-Dichloropropane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	--	--	--
1,1-Dichloropropene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	--	--	--
1,3-Dichloropropane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	--	--	--
cis-1,3-Dichloropropene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	--	--	--
trans-1,3-Dichloropropene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	--	--	--
2,2-Dichloropropane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00 UJ	<1.00	--	--	--
di-Isopropyl Ether	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	--	--	--
Ethylbenzene	<1.00	24.8	<1.00	<1.00	<1.00	<1.00	661	4.76	1,120	172	0.761 J	<1.00	4,500	1,500	8,200
Hexachloro-1,3-Butadiene	<1.00	<1.00	<1.00	<1.00	<1.00 UJ	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	--	--	--
Isopropylbenzene	<1.00	16.1	<1.00	<1.00	0.249 J	<1.00	59.3	4.90	102	34.5	11.6	4.09	51,000	'--	--
p-Isopropyltoluene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	0.898 J	0.585 J	<50.0	<5.00	0.545 J	<1.00	--	--	--
2-Butanone (MEK)	<10.0 UJ	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0 UJ	<10.0	<500	<50.0	<10.0	<10.0 UJ	--	--	--
Methylene Chloride	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<250	<25.0	<5.00	<5.00	79,000	160,000	3,300,000
4-Methyl-2-Pentanone (MIBK)	<10.0 UJ	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0 UJ	<10.0	<500	<50.0	<10.0	<10.0	--	--	--
Methyl Tert-Butyl Ether	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	63,000	160,000	870,000
Naphthalene	<5.00 UJ	<5.00	<5.00	<5.00 UJ	<5.00 UJ	<5.00	28.0 J	<5.00	<250 UJ	<25.0	<5.00	<5.00	500	2,000	11,000
n-Propylbenzene	<1.00	4.3	<1.00	<1.00	<1.00	<1.00	186	4.89	237	79.1	19.1 J	0.614 J	--	--	--
Styrene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	170,000	--	--
1,1,1,2-Tetrachloroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	--	--	--
1,1,2,2-Tetrachloroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	--	--	--
1,1,2-Trichlorotrifluoroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	--	--	--
Tetrachloroethene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	5,600	8,700	48,000
Toluene	<1.00	5.51	<1.00	<1.00	<1.00	<1.00	0.499 J	0.935 J	<50.0	<5.00	0.298 J	<1.00	220,000	--	--
1,2,3-Trichlorobenzene	<1.00 UJ	<1.00	<1.00	<1.00	<1.00 UJ	<1.00	<1.00 UJ	<1.00	<50.0 UJ	<5.00	<1.00	<1.00	--	--	--
1,2,4-Trichlorobenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0 UJ	<5.00	<1.00	<1.00	--	--	--
1,1,1-Trichloroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	1,100,000	--	--
1,1,2-Trichloroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	49	1,000	11,000
Trichloroethene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	430	430	3,700
Trichlorofluoromethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<250	<25.0	<5.00	<5.00	160,000	36,000	460,000
1,2,3-Trichloropropane	<2.50 UJ	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50 UJ	<2.50	<125	<12.5	<2.50	<2.50	--	--	--
1,2,4-Trimethylbenzene	<1.00	0.538 J	<1.00	<1.00	<1.00	<1.00	17.7	0.452 J	26.0 J	2.34 J	<1.00	<1.00	6,300	50,000	--
1,2,3-Trimethylbenzene	<1.00	1.54	<1.00	<1.00	<1.00	<1.00	2.31	<1.00	<50.0	<5.00	<1.00	<1.00	--	--	--
1,3,5-Trimethylbenzene	<1.00	0.421 J	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	7,500	36,000	--
Vinyl Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00 UJ	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	960	21	880
Xylenes, Total	<3.00	7.63	<3.00	<3.00	<3.00	<3.00	14.1	<3.00	<150	1.86 J	0.229 J	<3.00	23,000	86,000	--
Gasoline Range Organics	64.4 J+	7,130	<100	177 J+	236 J+	115 J+	4,260	1,430	2,770	2,170	1,150	721 J+	14,000	22,000	--

Notes:

1. µg/L = Micrograms per liter.
2. Bold values indicate the compounds was detected above method detection limits.
3. < = Analyte was not detected above the reporting limit.
4. DEQ Risk-Based Concentrations from Oregon Department of Environmental Quality's *Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sites* , revised May 2018.
5. Shaded values indicate concentrations detected above the Urban Residential RBC for Vapor Intrusion.
6. Shaded values indicate concentrations detected above the Occupational RBC for Vapor Intrusion and/or the Construction and Excavation Worker RBC for Groundwater in Excavations.
7. -- = Value not available.
8. J = Result is estimated.
9. UJ = Reporting limit is estimated due to analyte quality control.
10. J+ = Result is estimated and may be biased high.
11. R = The data are unusable and the presence of the analyte in the sample is unknown.
12. D = For results greater than five times the reporting limit, the RPD between primary sample and field duplicate exceeds 30 percent.
13. J- = Result is estimated and may be biased low.
14. B = The same analyte is found in the associated blank.

Table 4
Soil Analytical Results - May 2022
Oregon Lithoprint
McMinnville, Oregon

Sample Location	SB-1	SB-2	SB-3	SB-4	SB-5	DEQ Risk-Based Concentrations		
Depth (feet)	12	12	10	10	12	Soil Ingestion, Dermal Contact, and Inhalation | Occupational	Soil Vapor Intrusion into Buildings | Urban Residential	Soil Vapor Intrusion into Buildings | Occupational
Date	5/9/2022	5/9/2022	5/9/2022	5/9/2022	5/9/2022			
Volatile Organic Compounds (mg/kg)								
Acetone	0.0888 J+	<0.760	1.91 J+	2.25 J+	<0.0868	--	--	--
Acrylonitrile	<0.0219	<0.190	0.287	0.714	<0.0217	4	0.19	1
Benzene	<0.00175	0.0228	0.0236	<0.00176	0.00222	37	0.38	2.1
Bromobenzene	<0.0219	<0.190	<0.0225	<0.0220	<0.0217	--	--	--
Bromodichloromethane	<0.00438	<0.0380	<0.00451	<0.00440	<0.00434	15	0.096	0.53
Bromoform	<0.0438	<0.380	<0.0451	<0.0440	<0.0434	260	19	110
Bromomethane	<0.0219	<0.190	<0.0225	<0.0220	<0.0217	750	1.3	17
n-Butylbenzene	<0.0219	8.46	0.350	2.20	<0.0217	--	--	--
sec-Butylbenzene	<0.0219	4.68	0.167	1.08	<0.0217	--	--	--
tert-Butylbenzene	<0.00875	0.0840	<0.00902	0.0181	<0.00868	--	--	--
Carbon Tetrachloride	<0.00875	<0.0760	<0.00902	<0.00880	<0.00868	34	0.28	1.6
Chlorobenzene	<0.00438	<0.0380	<0.00451	<0.00440	<0.00434	8,700	77	--
Chlorodibromomethane	<0.00438	<0.0380	<0.00451	<0.00440	<0.00434	17	0.53	2.9
Chloroethane	<0.00875	<0.0760	<0.00902	<0.00880	<0.00868	--	--	--
Chloroform	<0.00438	<0.0380	<0.00451	<0.00440	<0.00434	26	0.074	0.41
Chloromethane	<0.0219	<0.190	<0.0225	<0.0220	<0.0217	25,000	24	300
2-Chlorotoluene	<0.00438	<0.0380	<0.00451	<0.00440	<0.00434	--	--	--
4-Chlorotoluene	<0.00875	<0.0760	<0.00902	<0.00880	<0.00868	--	--	--
1,2-Dibromo-3-Chloropropane	<0.0438	<0.380	<0.0451	<0.0440	<0.0434	--	--	--
1,2-Dibromoethane	<0.00438	<0.0380	<0.00451	<0.00440	<0.00434	0.73	0.028	0.16
Dibromomethane	<0.00875	<0.0760	<0.00902	<0.00880	<0.00868	--	--	--
1,2-Dichlorobenzene	<0.00875	<0.0760	<0.00902	<0.00880	<0.00868	36,000	--	--
1,3-Dichlorobenzene	<0.00875	<0.0760	<0.00902	<0.00880	<0.00868	--	--	--
1,4-Dichlorobenzene	<0.00875	<0.0760	<0.00902	<0.00880	<0.00868	64	2.3	13
Dichlorodifluoromethane	<0.00438	<0.0380	<0.00451	<0.00440	<0.00434	--	--	--
1,1-Dichloroethane	<0.00438	<0.0380	<0.00451	<0.00440	0.00106 J	260	1.1	5.9
1,2-Dichloroethane	<0.00438	<0.0380	<0.00451	<0.00440	<0.00434	16	0.18	1
1,1-Dichloroethene	<0.00438	<0.0380	<0.00451	<0.00440	<0.00434	29,000	54	680
cis-1,2-Dichloroethene	<0.00438	<0.0380	<0.00451	<0.00440	<0.00434	2,300	--	--
trans-1,2-Dichloroethene	<0.00875	<0.0760	<0.00902	<0.00880	<0.00868	23,000	--	--
1,2-Dichloropropane	<0.00875	<0.0760	<0.00902	<0.00880	<0.00868	--	--	--
1,1-Dichloropropene	<0.00438	<0.0380	<0.00451	<0.00440	<0.00434	--	--	--
1,3-Dichloropropane	<0.00875	<0.0760	<0.00902	<0.00880	<0.00868	--	--	--
cis-1,3-Dichloropropene	<0.00438	<0.0380	<0.00451	<0.00440	<0.00434	--	--	--
trans-1,3-Dichloropropene	<0.00875	<0.0760	<0.00902	<0.00880	<0.00868	--	--	--
2,2-Dichloropropane	<0.00438	<0.0380	<0.00451	<0.00440	<0.00434	--	--	--
Di-Isopropyl Ether	<0.00175	<0.0152	<0.00180	<0.00176	<0.00174	--	--	--
Ethylbenzene	<0.00438	0.138	0.482	0.134	0.00279 J	150	3.0	17
Hexachloro-1,3-Butadiene	<0.0438	<0.380	<0.0451	<0.0440	<0.0434	--	--	--
Isopropylbenzene	<0.00438	2.01	0.388	1.31	0.000982 J	57,000	--	--
P-Isopropyltoluene	<0.00875	0.264	0.0299	0.121	<0.00868	--	--	--
2-Butanone (MEK)	<0.175	<1.52	0.177 J	0.646	<0.174	--	--	--
Methylene Chloride	<0.0438	<0.380	<0.0451	<0.0440	<0.0434	1,600	48	950
4-Methyl-2-Pentanone (MIBK)	<0.0438	<0.380	0.563	5.49	<0.0434	--	--	--
Methyl Tert-Butyl Ether	<0.00175	<0.0152	<0.00180	<0.00176	0.00159 J	1,100	20	110
Naphthalene	<0.0219	<0.190	0.491	0.225	<0.0217	23	15	83
n-Propylbenzene	<0.00875	10.7	1.33	4.45	<0.00868	--	--	--
Styrene	<0.0219	<0.190	<0.0225	0.000512 J	<0.0217	130,000	--	--
1,1,1,2-Tetrachloroethane	<0.00438	<0.0380	<0.00451	<0.00440	<0.00434	--	--	--
1,1,2,2-Tetrachloroethane	<0.00438	<0.0380	<0.00451	0.862	<0.00434	--	--	--
1,1,2-Trichlorotrifluoroethane	<0.00438	<0.0380	<0.00451	<0.00440	<0.00434	--	--	--
Tetrachloroethene	<0.00438	<0.0380	<0.00451	<0.00440	<0.00434	1,000	6.6	36
Toluene	<0.00875	<0.0760	<0.00902	0.0105	0.00510 J	88,000	--	--
1,2,3-Trichlorobenzene	<0.0219 UJ	<0.190 UJ	<0.0225	<0.0220	<0.0217	--	--	--
1,2,4-Trichlorobenzene	<0.0219	<0.190	<0.0225	<0.0220	<0.0217	--	--	--
1,1,1-Trichloroethane	<0.00438	<0.0380	<0.00451	<0.00440	<0.00434	870,000	--	--
1,1,2-Trichloroethane	<0.00438	<0.0380	0.101	0.716	<0.00434	26	0.38	4.2
Trichloroethene	<0.00175	<0.0152	<0.00180	<0.00176	<0.00174	51	0.26	2.3
Trichlorofluoromethane	<0.00438	<0.0380	<0.00451	<0.00440	<0.00434	130,000	190	--
1,2,3-Trichloropropane	<0.0219	<0.190	0.0227	0.260	<0.0217	--	--	--
1,2,4-Trimethylbenzene	<0.00875	<0.0760	0.649	<0.00880	0.00321 J	6,900	140	--
1,2,3-Trimethylbenzene	<0.00875	0.0568 J	0.299	<0.00880	<0.00868	--	--	--
1,3,5-Trimethylbenzene	<0.00875	<0.0760	0.216	0.00611 J	<0.00868	4.4	0.053	2.2
Vinyl Chloride	<0.00438	<0.0380	<0.00451	<0.00440	<0.00434	6,900	98	--
Xylenes, Total	<0.0114	0.0171 J	0.0124	0.00964 J	0.00642 J	25,000	160	--
Gasoline Range Organics	<4.38	4,180	157	516	7.53 J+	20,000	94	--

Notes:

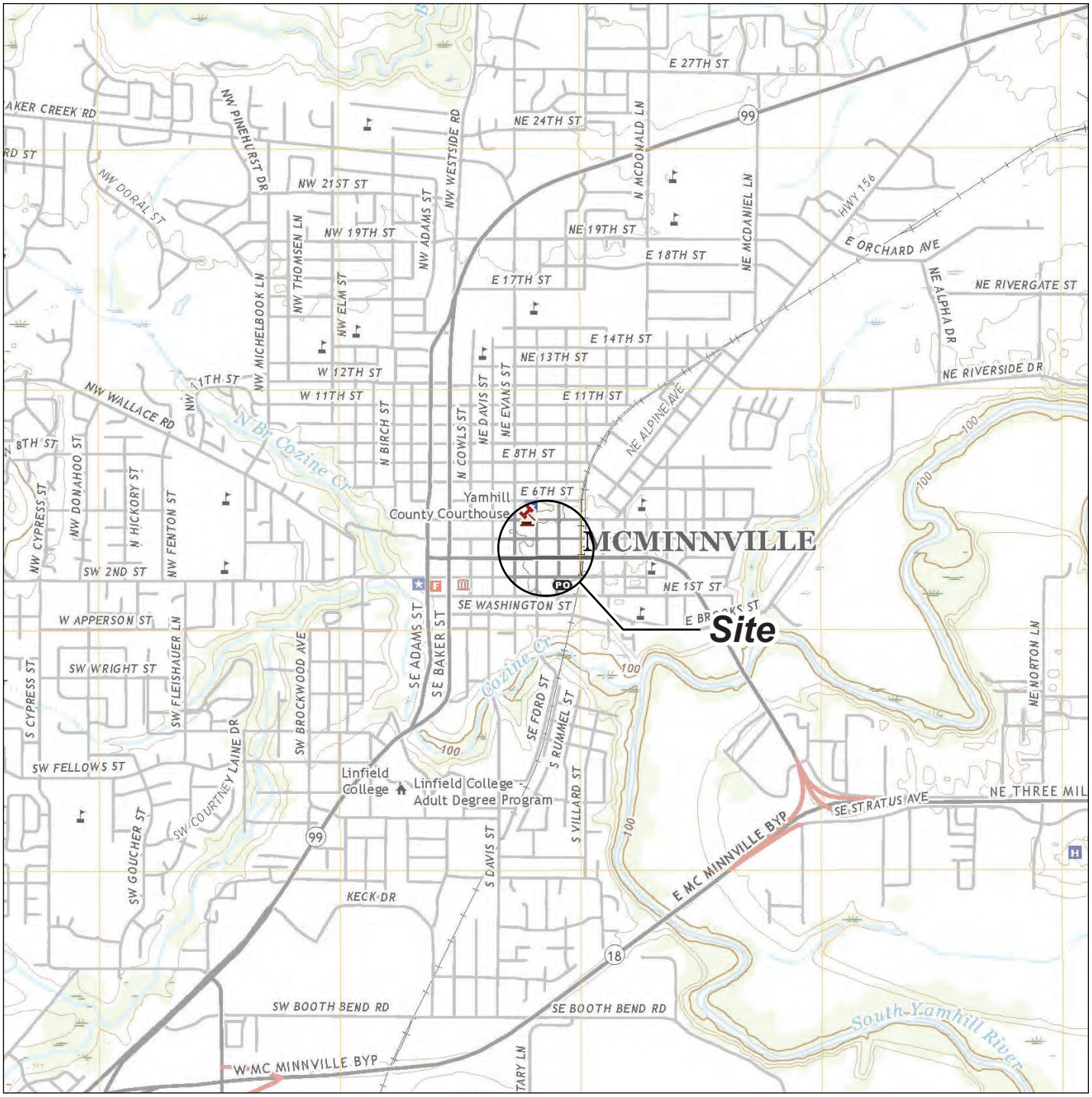
1. mg/kg = Milligrams per kilogram.
2. Bold values indicate the compounds was detected above method detection limits.
3. < = Analyte was not detected above the reporting limit.
4. DEQ Risk-Based Concentrations from Oregon Department of Environmental Quality's *Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sites* , revised May 2018.
5. Shaded values indicate concentrations detected above the Urban Residential RBC for Vapor Intrusion.
6. Shaded values indicate concentrations detected above the Occupational RBC for Vapor Intrusion and/or Direct Contact.
7. -- = Value not available.
8. J = Result is estimated.
9. UJ = Reporting limit is estimated due to analyte quality control.
10. J+ = Result is estimated and may be biased high.

Table 4
Soil Analytical Results - May 2022
Oregon Lithoprint
McMinnville, Oregon

Sample Location	SB-6	SB-7	SB-8	SB-9	SB-10	DEQ Risk-Based Concentrations: Soil Ingestion, Dermal Contact, and Inhalation | Occupational	DEQ Risk-Based Concentrations: Soil Vapor Intrusion into Buildings | Urban Residential	DEQ Risk-Based Concentrations: Soil Vapor Intrusion into Buildings | Occupational
Depth (feet)	12	10	12	10	10			
Date	5/9/2022	5/10/2022	5/10/2022	5/10/2022	5/10/2022			
Volatile Organic Compounds (mg/kg)								
Acetone	7.11 J+	2.57 J+	1.65 J+	2.89 J+	8.32 J+	--	--	--
Acrylonitrile	<0.0227	<0.0228	<0.0229	<0.0231	<0.0228	4	0.19	1
Benzene	0.801	0.251	0.108	0.637	1.18	37	0.38	2.1
Bromobenzene	<0.0227	<0.0228	<0.0229	<0.0231	<0.0228	--	--	--
Bromodichloromethane	<0.00454	<0.00455	<0.00458	<0.00463	<0.00455	15	0.096	0.53
Bromoform	<0.0454	<0.0455	<0.0458	<0.0463	<0.0455	260	19	110
Bromomethane	<0.0227	<0.0228	<0.0229	<0.0231	<0.0228	750	1.3	17
n-Butylbenzene	1.21	1.42	0.983	2.33	0.57	--	--	--
sec-Butylbenzene	0.632	0.677	0.472	1.09	0.277	--	--	--
tert-Butylbenzene	<0.00909	0.0115	<0.00915	<0.00925	<0.00911	--	--	--
Carbon Tetrachloride	<0.00909	<0.00910	<0.00915	<0.00925	<0.00911	34	0.28	1.6
Chlorobenzene	<0.00454	<0.00455	<0.00458	<0.00463	<0.00455	8,700	77	--
Chlorodibromomethane	<0.00454	<0.00455	<0.00458	<0.00463	<0.00455	17	0.53	2.9
Chloroethane	<0.00909	<0.00910	<0.00915	<0.00925	<0.00911	--	--	--
Chloroform	0.220	<0.00455	<0.00458	<0.00463	<0.00455	26	0.074	0.41
Chloromethane	<0.0227	<0.0228	<0.0229	<0.0231	<0.0228	25,000	24	300
2-Chlorotoluene	0.0425	0.0317	<0.00458	<0.00463	<0.00455	--	--	--
4-Chlorotoluene	<0.00909	<0.00910	<0.00915	<0.00925	<0.00911	--	--	--
1,2-Dibromo-3-Chloropropane	<0.0454	<0.0455	<0.0458	<0.0463	<0.0455	--	--	--
1,2-Dibromoethane	<0.00454	<0.00455	<0.00458	<0.00463	<0.00455	0.73	0.028	0.16
Dibromomethane	<0.00909	<0.00910	<0.00915	<0.00925	<0.00911	--	--	--
1,2-Dichlorobenzene	<0.00909	<0.00910	<0.00915	<0.00925	<0.00911	36,000	--	--
1,3-Dichlorobenzene	<0.00909	<0.00910	<0.00915	<0.00925	<0.00911	--	--	--
1,4-Dichlorobenzene	<0.00909	<0.00910	<0.00915	<0.00925	<0.00911	64	2.3	13
Dichlorodifluoromethane	<0.00454	<0.00455	<0.00458	<0.00463	<0.00455	--	--	--
1,1-Dichloroethane	<0.00454	<0.00455	<0.00458	<0.00463	<0.00455	260	1.1	5.9
1,2-Dichloroethane	<0.00454	<0.00455	<0.00458	<0.00463	<0.00455	16	0.18	1
1,1-Dichloroethene	<0.00454	<0.00455	<0.00458	<0.00463	<0.00455	29,000	54	680
cis-1,2-Dichloroethene	<0.00454	<0.00455	<0.00458	<0.00463	<0.00455	2,300	--	--
trans-1,2-Dichloroethene	<0.00909	<0.00910	<0.00915	<0.00925	<0.00911	23,000	--	--
1,2-Dichloropropane	<0.00909	<0.00910	<0.00915	<0.00925	<0.00911	--	--	--
1,1-Dichloropropene	<0.00454	<0.00455	<0.00458	<0.00463	<0.00455	--	--	--
1,3-Dichloropropane	<0.00909	<0.00910	<0.00915	<0.00925	<0.00911	--	--	--
cis-1,3-Dichloropropene	<0.00454	<0.00455	<0.00458	<0.00463	<0.00455	--	--	--
trans-1,3-Dichloropropene	<0.00909	<0.00910	<0.00915	<0.00925	<0.00911	--	--	--
2,2-Dichloropropane	<0.00454	<0.00455	<0.00458	<0.00463	<0.00455	--	--	--
Di-Isopropyl Ether	<0.00182	<0.00182	<0.00183	<0.00185	<0.00182	--	--	--
Ethylbenzene	9.67	8.37	4.76	19.6	5.23	150	3.0	17
Hexachloro-1,3-Butadiene	<0.0454	<0.0455	<0.0458	<0.0463	<0.0455	--	--	--
Isopropylbenzene	1.53	1.82	1.30	2.85	0.708	57,000	--	--
P-Isopropyltoluene	0.222	0.228	0.0231	0.57	0.199	--	--	--
2-Butanone (MEK)	0.747	<0.182	0.471	0.751	0.490	--	--	--
Methylene Chloride	<0.0454	<0.0455	<0.0458	<0.0463	<0.0455	1,600	48	950
4-Methyl-2-Pentanone (MIBK)	3.98	<0.0455	<0.0458	2.91	1.06	--	--	--
Methyl Tert-Butyl Ether	<0.00182	<0.00182	<0.00183	<0.00185	<0.00182	1,100	20	110
Naphthalene	1.31	1.93	1.10	4.53	0.954	23	15	83
n-Propylbenzene	4.49	5.08	4.89	9.38	2.04	--	--	--
Styrene	<0.0227	<0.0228	<0.0229	<0.0231	<0.0228	130,000	--	--
1,1,1,2-Tetrachloroethane	<0.00454	<0.00455	<0.00458	<0.00463	<0.00455	--	--	--
1,1,2,2-Tetrachloroethane	<0.00454	<0.00455	<0.00458	0.387	<0.00455	--	--	--
1,1,2-Trichlorotrifluoroethane	<0.00454	<0.00455	<0.00458	<0.00463	<0.00455	--	--	--
Tetrachloroethene	<0.00454	<0.00455	<0.00458	<0.00463	<0.00455	1,000	6.6	36
Toluene	0.0536	<0.00910	<0.00915	<0.00925	0.0526	88,000	--	--
1,2,3-Trichlorobenzene	<0.0227	<0.0228	<0.0229	<0.0231	<0.0228	--	--	--
1,2,4-Trichlorobenzene	<0.0227	<0.0228	<0.0229	<0.0231	<0.0228	--	--	--
1,1,1-Trichloroethane	<0.00454	<0.00455	<0.00458	<0.00463	<0.00455	870,000	--	--
1,1,2-Trichloroethane	0.727	0.544	0.258	0.429	<0.00455	26	0.38	4.2
Trichloroethene	<0.00182	<0.00182	<0.00183	<0.00185	<0.00182	51	0.26	2.3
Trichlorofluoromethane	<0.00454	<0.00455	<0.00458	<0.00463	<0.00455	130,000	190	--
1,2,3-Trichloropropane	0.181	<0.0228	<0.0229	<0.0231	<0.0228	--	--	--
1,2,4-Trimethylbenzene	4.94	8.77	0.196	36.8	7.94	6,900	140	--
1,2,3-Trimethylbenzene	3.33	4.22	3.81	9.07	2.06	--	--	--
1,3,5-Trimethylbenzene	0.155	0.282	<0.00915	4.31	2.95	4.4	0.053	2.2
Vinyl Chloride	<0.00454	<0.00455	<0.00458	<0.00463	<0.00455	6,900	98	--
Xylenes, Total	0.712	0.0127	<0.0119	17.2	13.2	25,000	160	--
Gasoline Range Organics	611	548	441 J+	805 J+	237	20,000	94	--

Notes:

1. mg/kg = Milligrams per kilogram.
2. Bold values indicate the compounds was detected above method detection limits.
3. < = Analyte was not detected above the reporting limit.
4. DEQ Risk-Based Concentrations from Oregon Department of Environmental Quality's *Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sites* , revised May 2018.
5. Shaded values indicate concentrations detected above the Urban Residential RBC for Vapor Intrusion.
6. Shaded values indicate concentrations detected above the Occupational RBC for Vapor Intrusion and/or Direct Contact.
7. -- = Value not available.
8. J = Result is estimated.
9. UJ = Reporting limit is estimated due to analyte quality control.
10. J+ = Result is estimated and may be biased high.



Note: Base map prepared from USGS 7.5-minute quadrangle of McMinnville, OR, dated 2020 as provided by USGS.gov.

N

0 2,000 4,000

Approximate Scale in Feet

Site Location Map

Supplemental Investigation Report
Oregon Lithoprint
McMinnville, Oregon

Apex Companies, LLC 3015 SW First Avenue Portland, Oregon 97201	Project Number: 320002442-00	Drawn: JP	Approved: MWS	Figure 1
	June 2022			

I:\Client\Oregon Lithoprint\Supplemental Inv. Report\320002442-00 01 (Site Location).des

Sources: Base map prepared from Google Earth Pro imagery (4/15/2021) and Key Features and Sample Location figure by Coles & Associates (4/30/18). All site features, locations, and dimensions are approximate.

Site Plan

Supplemental Investigation Report
Oregon Lithoprint
McMinnville, Oregon

Apex Companies, LLC 3015 SW First Avenue Portland, Oregon 97201	Project Number: 320002442-00	Drawn: JP	Approved: MWS	Figure 2
	June 2022			

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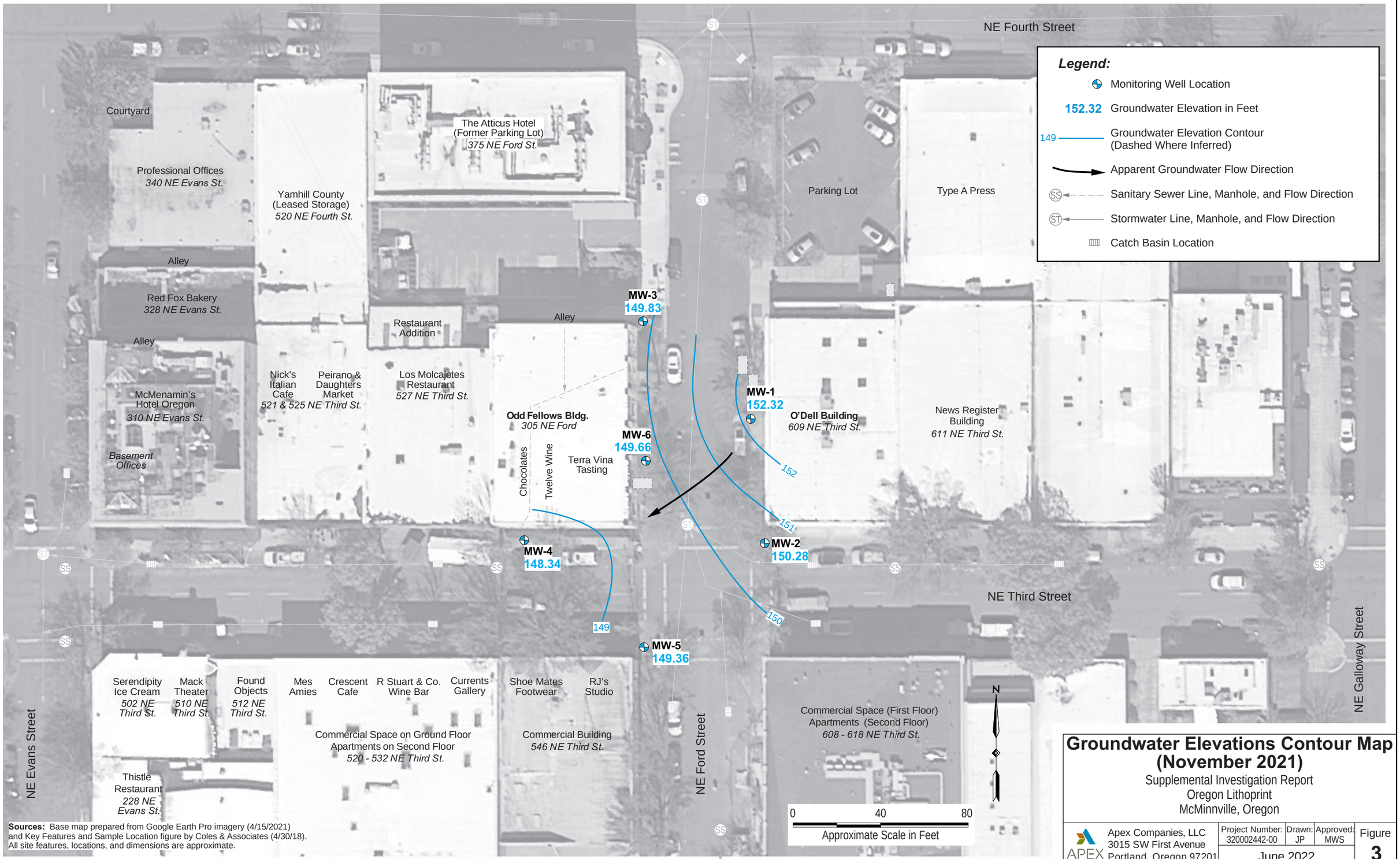

Sources: Base map prepared from Google Earth Pro imagery (4/15/2021) and Key Features and Sample Location figure by Coles & Associates (4/30/18). All site features, locations, and dimensions are approximate.

Groundwater Elevations Contour Map (November 2021)

Supplemental Investigation Report
Oregon Lithoprint
McMinnville, Oregon

Apex Companies, LLC 3015 SW First Avenue Portland, Oregon 97201	Project Number: 320002442-00	Drawn: JP	Approved: MWS	Figure 3
	June 2022			

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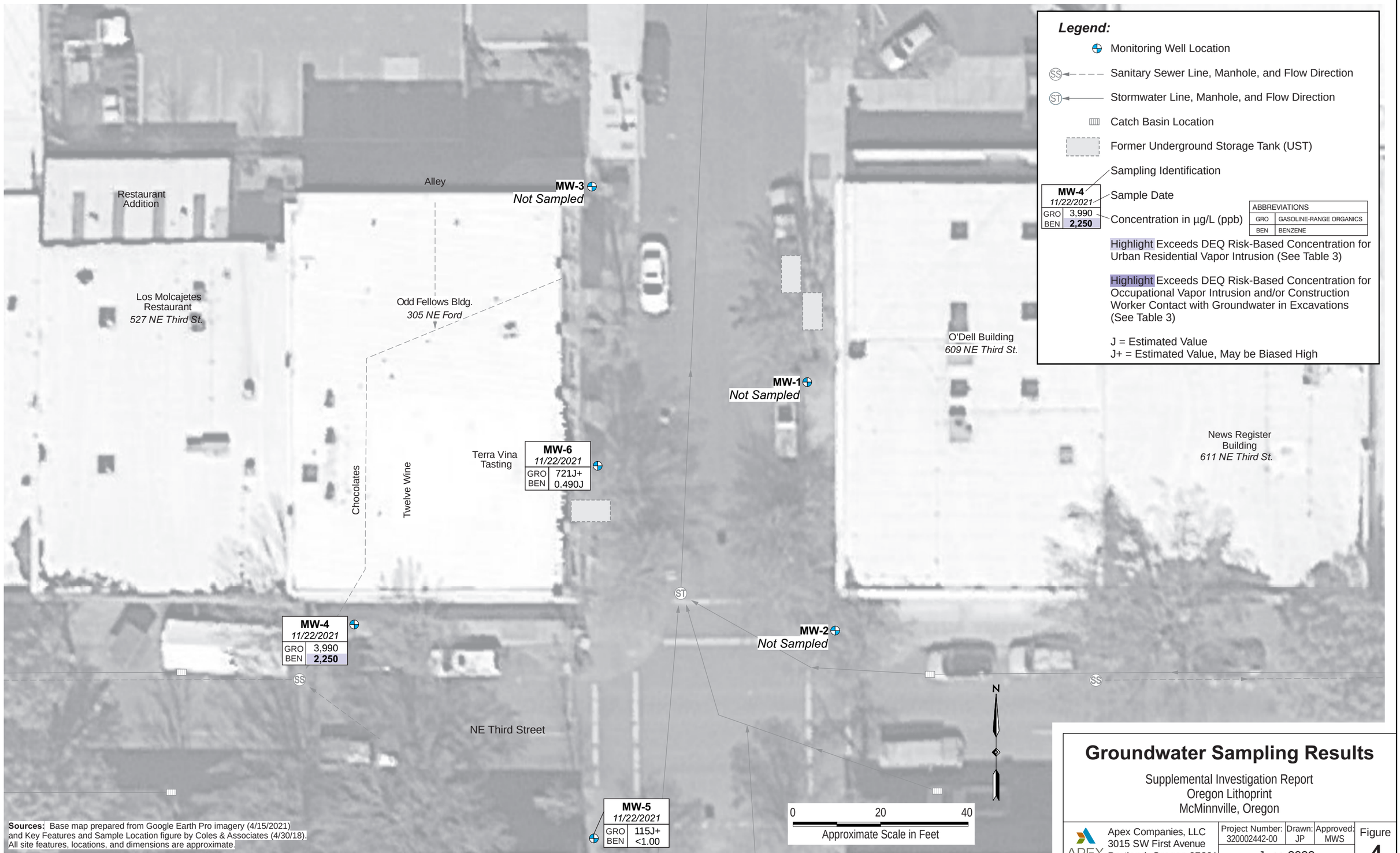

Sources: Base map prepared from Google Earth Pro imagery (4/15/2021) and Key Features and Sample Location figure by Coles & Associates (4/30/18). All site features, locations, and dimensions are approximate.

Groundwater Sampling Results

Supplemental Investigation Report
Oregon Lithoprint
McMinnville, Oregon

Apex Companies, LLC
3015 SW First Avenue
Portland, Oregon 97201

Project Number:	Drawn:	Approved:
320002442-00	JP	MWS

June 2022

Figure **4**

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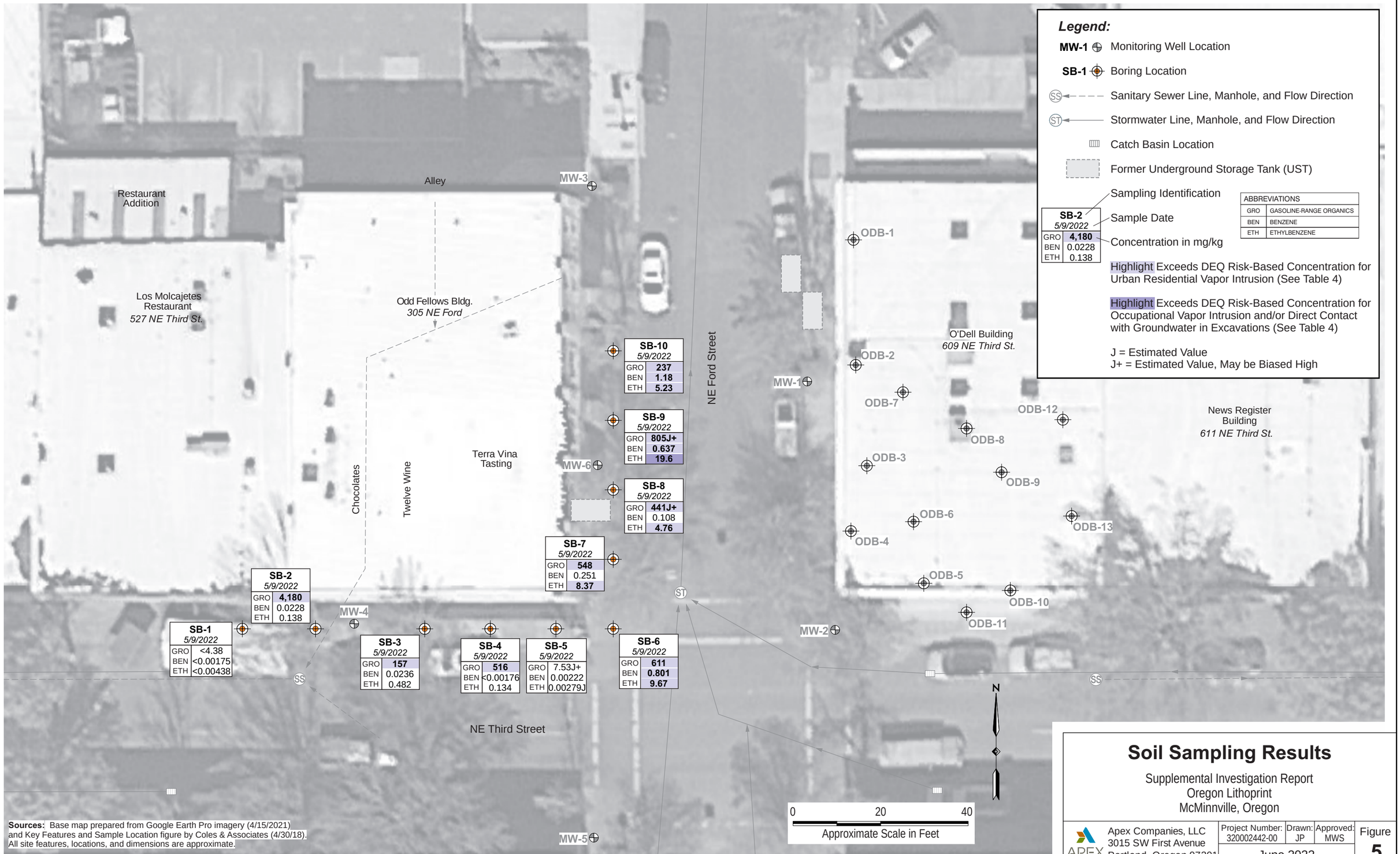

Legend:

- **MW-1** Monitoring Well Location
- **SB-1** Boring Location
- SS Sanitary Sewer Line, Manhole, and Flow Direction
- ST Stormwater Line, Manhole, and Flow Direction
- Catch Basin Location
- Former Underground Storage Tank (UST)
- Sampling Identification
- Sample Date
- Concentration in mg/kg

SB-2 5/9/2022	
GRO	**4,180**
BEN	0.0228
ETH	0.138

ABBREVIATIONS	
GRO	GASOLINE-RANGE ORGANICS
BEN	BENZENE
ETH	ETHYLBENZENE

Highlight Exceeds DEQ Risk-Based Concentration for Urban Residential Vapor Intrusion (See Table 4)

Highlight Exceeds DEQ Risk-Based Concentration for Occupational Vapor Intrusion and/or Direct Contact with Groundwater in Excavations (See Table 4)

J = Estimated Value
J+ = Estimated Value, May be Biased High

Sources: Base map prepared from Google Earth Pro imagery (4/15/2021) and Key Features and Sample Location figure by Coles & Associates (4/30/18). All site features, locations, and dimensions are approximate.

Soil Sampling Results

Supplemental Investigation Report
Oregon Lithoprint
McMinnville, Oregon

Apex Companies, LLC
3015 SW First Avenue
Portland, Oregon 97201

Project Number:	Drawn:	Approved:	Figure
320002442-00	JP	MWS	5

June 2022

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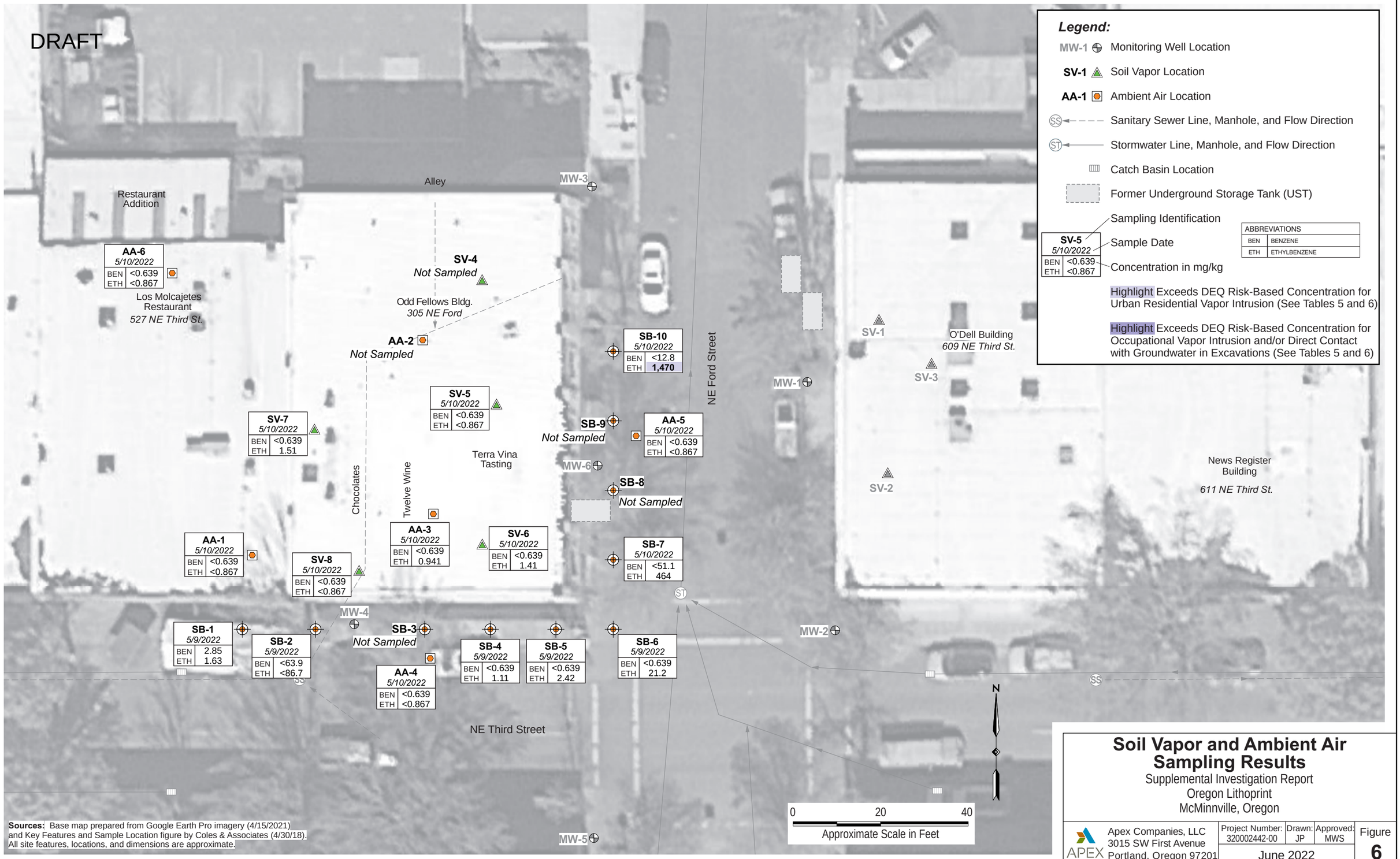

Legend:

- MW-1 — Monitoring Well Location
- SV-1 — Soil Vapor Location
- AA-1 — Ambient Air Location
- SS — Sanitary Sewer Line, Manhole, and Flow Direction
- ST — Stormwater Line, Manhole, and Flow Direction
- Catch Basin Location
- Former Underground Storage Tank (UST)

Sampling Identification
Sample Date
Concentration in mg/kg

SV-5
5/10/2022
BEN <0.639
ETH <0.867

ABBREVIATIONS	
BEN	BENZENE
ETH	ETHYLBENZENE

Highlight Exceeds DEQ Risk-Based Concentration for Urban Residential Vapor Intrusion (See Tables 5 and 6)

Highlight Exceeds DEQ Risk-Based Concentration for Occupational Vapor Intrusion and/or Direct Contact with Groundwater in Excavations (See Tables 5 and 6)

Sources: Base map prepared from Google Earth Pro imagery (4/15/2021) and Key Features and Sample Location figure by Coles & Associates (4/30/18). All site features, locations, and dimensions are approximate.

Soil Vapor and Ambient Air Sampling Results

Supplemental Investigation Report
Oregon Lithoprint
McMinnville, Oregon

Apex Companies, LLC
3015 SW First Avenue
Portland, Oregon 97201

Project Number:	Drawn:	Approved:	Figure
320002442-00	JP	MWS	6

June 2022

I:\Client\Oregon Lithoprint\Supplemental Inv. Report\320002442-00 06 (Ambient Air Results).des

NE Fourth Street

Courtyard

Professional Offices

Yamhill County
(Leased Storage)

The Atticus Hotel
(Former Parking Lot)

Parking Lot

Red Fox Bakery

McMenamin's
Hotel Oregon

Nick's
Italian
Cafe

Peirano &
Daughters
Market

Los Molcajetes
Restaurant

MW-3

O'Dell Building

Odd Fellows Bldg.

MW-1

News Register
Building

Chocolates

Twelve Wine

Terra Vina
Tasting

MW-6

MW-4

MW-2

NE Third Street

NE Galloway Street

MW-5

Serendipity
Ice Cream

Mack
Theater

Found
Objects

Mes
Amies

Crescent
Cafe

R Stuart & Co.
Wine Bar

Currents
Gallery

Shoe Mates
Footwear

RJ's
Studio

Commercial Space on Ground Floor
Apartments on Second Floor

Commercial Building

Thistle
Restaurant

NE Evans Street

NE Ford Street

Commercial Space (First Floor)
Apartments (Second Floor)

N

0 40 80

Approximate Scale in Feet

Legend:

- Monitoring Well Location (Coles)
- Sanitary Sewer Line, Manhole, and Flow Direction
- Stormwater Line, Manhole, and Flow Direction
- Catch Basin Location
- Locality of Facility
- Extent of Contamination from Other Sources

Sources: Base map prepared from Google Earth Pro imagery (4/15/2021) and Key Features and Sample Location figure by Coles & Associates (4/30/18). All site features, locations, and dimensions are approximate.

Locality of Facility

Supplemental Investigation Report
Oregon Lithoprint
McMinnville, Oregon

Apex Companies, LLC
3015 SW First Avenue
Portland, Oregon 97201

Project Number:	Drawn:	Approved:	Figure
320002442-00	JP	MWS	7

June 2022

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Appendix A

Boring Logs and Field Sampling Sheets

Sample Descriptions

Classification of soils in this report is based on visual field and laboratory observations which include density/consistency, moisture condition, and grain size, and should not be construed to imply field nor laboratory testing unless presented herein. Visual-manual classification methods of ASTM D 2488 were used as an identification guide.

Soil descriptions consist of the following:
MAJOR CONSTITUENT with additional remarks; color, moisture, minor constituents, density/consistency.

Density/Consistency

Soil density/consistency in borings is related primarily to the Standard Penetration Resistance. Soil density/consistency in test pits and push probe explorations is estimated based on visual observation and is presented parenthetically on test pit and push probe exploration logs.

SAND and GRAVEL Density	Standard Penetration Resistance in Blows/Foot
Very loose	0 - 4
Loose	4 - 10
Medium dense	10 - 30
Dense	30 - 50
Very dense	>50

SILT or CLAY Density	Standard Penetration Resistance in Blows/Foot	Approximate Shear Strength in TSF
Very soft	0 - 2	<0.125
Soft	2 - 4	0.125 - 0.25
Medium stiff	4 - 8	0.25 - 0.5
Stiff	8 - 15	0.5 - 1.0
Very Stiff	15 - 30	1.0 - 2.0
Hard	>30	>2.0

Moisture

Dry	Little perceptible moisture.
Sl. Moist	Some perceptible moisture, probably below optimum.
Moist	Probably near optimum moisture content.
Wet	Much perceptible moisture, probably above optimum.

Minor Constituents

	Estimated Percentage
Not identified in description	0 - 5
Slightly (clayey, silty, etc.)	5 - 12
Clayey, silty, sandy, gravelly	12 - 30
Very (clayey, silty, etc.)	30 - 50

Sampling Symbols

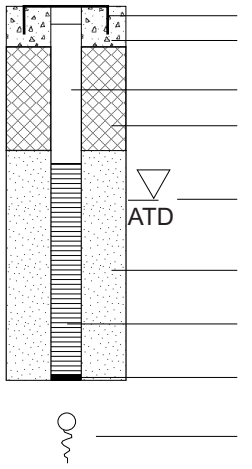
BORING AND PUSH-PROBE SYMBOLS

- Recovery
- No Recovery
- Temporarily Screened Interval
- PID — Photoionization Detector Reading
- W — Water Sample
- Sample Submitted for Chemical Analysis
- NS — No Sheen
- SS — Slight Sheen
- MS — Moderate Sheen
- HS — Heavy Sheen
- BF — Biogenic Film

TEST PIT SOIL SAMPLES

- Grab (Jar)
- Bag
- Shelby Tube

Groundwater Observations and Monitoring Well Construction



- Flush Mounted Monument
- Concrete Surface Seal
- Well Casing
- Bentonite Seal
- Groundwater Level on Date or (ATD) At Time of Drilling
- Sand Pack
- Well Screen
- End Cap
- Groundwater Seepage (Test Pits)

Key to Exploration Logs

Supplemental Investigation Report
Oregon Lithoprint
McMinnville, Oregon

APEX Apex Companies, LLC 3015 SW First Avenue Portland, Oregon 97201	Project Number: 320002442-00	Drawn: JP	Approved: MWS	Figure **Key**
	June 2022			

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Apex Companies, LLC
3015 SW First Avenue
APEX Portland, Oregon 97201

Supplemental Investigation Report
Oregon Lithoprint
McMinnville, Oregon

Boring Number: SB-1

Project Number: **320002442-00**
Logged By: F. Sullivan
Date: May 9, 2022
Site Conditions: Clear
Drilling Contractor: Pacific Soil & Water
Drilling Equipment: Hand Auger, Push Probe
Sampler Type: 5' Cores
Depth to Water (ATD): 12' ATD
Surface Elevation: Not Measured

Boring Details and Notes:

Depth, feet	Core Interval/Recovery	Laboratory Sample ID	PID	Sheen	Lithologic Description
0	Hand Auger		<5	NS	Clayey SILT; medium brown, slightly moist, high plasticity, very stiff.
5			<5	NS	Becomes light brown.
			<5	NS	Becomes medium brown.
10			<5	NS	
		SB-1-12'	<5	NS	Bottom of Boring at 12.0' BGS.
15					

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Boring Number: SB-2

Project Number: **320002442-00**
Logged By: F. Sullivan
Date: May 9, 2022
Site Conditions: Clear
Drilling Contractor: Pacific Soil & Water
Drilling Equipment: Hand Auger, Push Probe
Sampler Type: 5' Cores
Depth to Water (ATD): 12' ATD
Surface Elevation: Not Measured

Boring Details and Notes:

Depth, feet	Core Interval/Recovery	Laboratory Sample ID	PID	Sheen	Lithologic Description
	Hand Auger		<5	NS	Clayey SILT; dark brown, moist, high plasticity, soft.
5			<5	NS	
			<5	NS	Silty fine SAND; dark brown, slightly moist, trace clay, high plasticity, medium dense.
10			<5	NS	Becomes light brown with a reddish tint.
		SB-2-12'	176	MS	Becomes light gray. Petroleum-like odor.
					Bottom of Boring at 12.0' BGS.
15					

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Supplemental Investigation Report
Oregon Lithoprint
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Boring Number: SB-3

Project Number: **320002442-00**
Logged By: F. Sullivan
Date: May 9, 2022
Site Conditions: Clear
Drilling Contractor: Pacific Soil & Water
Drilling Equipment: Hand Auger, Push Probe
Sampler Type: 5' Cores
Depth to Water (ATD): 12' ATD
Surface Elevation: Not Measured

Boring Details and Notes:

Depth, feet	Core Interval/Recovery	Laboratory Sample ID	PID	Sheen	Lithologic Description
	Hand Auger		<5	NS	Silty fine SAND; light brown, slightly moist, medium plasticity, medium dense.
5			<5	NS	
			<5	NS	Trace clay.
					Becomes light gray.
10		SB-3-10'	1,200	MS	
			468	MS	Becomes light gray. Petroleum-like odor.
					Bottom of Boring at 12.0' BGS.
15					

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Supplemental Investigation Report
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Boring Number: SB-4

Project Number: **320002442-00**
Logged By: F. Sullivan
Date: May 9, 2022
Site Conditions: Clear
Drilling Contractor: Pacific Soil & Water
Drilling Equipment: Hand Auger, Push Probe
Sampler Type: 5' Cores
Depth to Water (ATD): 12' ATD
Surface Elevation: Not Measured

Boring Details and Notes:

Depth, feet	Core Interval/Recovery	Laboratory Sample ID	PID	Sheen	Lithologic Description
	Hand Auger		<5	NS	Silty fine SAND; medium brown, slightly moist, trace clay, high plasticity, medium dense.
5			<5	NS	Medium plasticity.
			<5	NS	
					Becomes light gray. With trace clay.
10		SB-4-10'	929	MS	
			4,761	MS	
					Bottom of Boring at 12.0' BGS.
15					

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Supplemental Investigation Report
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Boring Number: **SB-5**

Project Number: **320002442-00**
Logged By: F. Sullivan
Date: May 10, 2022
Site Conditions: Clear
Drilling Contractor: Pacific Soil & Water
Drilling Equipment: Hand Auger, Push Probe
Sampler Type: 5' Cores
Depth to Water (ATD): 12' ATD
Surface Elevation: Not Measured

Boring Details and Notes:

Depth, feet	Core Interval/Recovery	Laboratory Sample ID	PID	Sheen	Lithologic Description
	Hand Auger		<5	NS	Silty fine SAND; dark brown, slightly moist, medium plasticity, medium dense.
5			<5	NS	Becomes light brown.
			<5	NS	
					Becomes light brown/gray. With trace clay.
10			<5	NS	
		SB-5-12'	365	MS	Becomes light gray.
					Bottom of Boring at 12.0' BGS.
15					

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Supplemental Investigation Report
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McMinnville, Oregon

Boring Number: SB-6

Project Number: **320002442-00**
Logged By: F. Sullivan
Date: May 10, 2022
Site Conditions: Clear
Drilling Contractor: Pacific Soil & Water
Drilling Equipment: Hand Auger, Push Probe
Sampler Type: 5' Cores
Depth to Water (ATD): 12' ATD
Surface Elevation: Not Measured

Boring Details and Notes:

Depth, feet	Core Interval/Recovery	Laboratory Sample ID	PID	Sheen	Lithologic Description
	Hand Auger		<5	NS	Silty fine SAND; light brown, slightly moist, medium plasticity, medium dense.
5			<5	NS	With trace clay.
			<5	NS	Clayey SILT; medium brown, slightly moist, high plasticity, very stiff.
10			130	MS	Becomes light gray and moist.
		SB-6-12'	276	MS	Bottom of Boring at 12.0' BGS.
15					

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Supplemental Investigation Report
Oregon Lithoprint
McMinnville, Oregon

Boring Number: SB-7

Project Number: **320002442-00**
Logged By: F. Sullivan
Date: May 10, 2022
Site Conditions: Clear
Drilling Contractor: Pacific Soil & Water
Drilling Equipment: Hand Auger, Push Probe
Sampler Type: 5' Cores
Depth to Water (ATD): 12' ATD, 8' Backflow
Surface Elevation: Not Measured

Boring Details and Notes:

Depth, feet	Core Interval/Recovery	Laboratory Sample ID	PID	Sheen	Lithologic Description
	Hand Auger		<5	NS	Clayey SILT; dark brown, slightly moist, medium plasticity, very stiff.
5			<5	NS	Becomes light brown, high plasticity.
			<5	NS	
10		SB-7-10'	776	MS	Becomes light gray, moist.
			350	MS	
					Bottom of Boring at 12.0' BGS.
15					

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Supplemental Investigation Report
Oregon Lithoprint
McMinnville, Oregon

Boring Number: SB-8

Project Number: **320002442-00**
Logged By: F. Sullivan
Date: May 10, 2022
Site Conditions: Clear
Drilling Contractor: Pacific Soil & Water
Drilling Equipment: Hand Auger, Push Probe
Sampler Type: 5' Cores
Depth to Water (ATD): 12' ATD, 8' Backflow
Surface Elevation: Not Measured

Boring Details and Notes:

Depth, feet	Core Interval/Recovery	Laboratory Sample ID	PID	Sheen	Lithologic Description
	Hand Auger		<5	NS	Silty fine SAND; dark brown, slightly moist, trace clay, medium plasticity, medium dense.
5					Clayey SILT; light brown, slightly moist, high plasticity, very stiff.
			<5	NS	Becomes wet, hard.
10			356	NS	Becomes light gray.
		SB-8-12'	471	NS	
					Bottom of Boring at 12.0' BGS.
15					

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Supplemental Investigation Report
Oregon Lithoprint
McMinnville, Oregon

Boring Number: SB-9

Project Number: **320002442-00**
Logged By: F. Sullivan
Date: May 10, 2022
Site Conditions: Clear
Drilling Contractor: Pacific Soil & Water
Drilling Equipment: Hand Auger, Push Probe
Sampler Type: 5' Cores
Depth to Water (ATD): 12' ATD
Surface Elevation: Not Measured

Boring Details and Notes:

Depth, feet	Core Interval/Recovery	Laboratory Sample ID	PID	Sheen	Lithologic Description
0	Hand Auger		<5	NS	Soil and gravel mix over clayey SILT; gray, slightly moist, high plasticity, hard. Slight petroleum-like odor.
5			<5	NS	
			74	NS	
10		SB-9-10'	782	NS	Becomes wet.
			662	NS	Bottom of Boring at 12.0' BGS.
15					

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Supplemental Investigation Report
Oregon Lithoprint
McMinnville, Oregon

Boring Number: SB-10

Project Number: **320002442-00**
Logged By: F. Sullivan
Date: May 10, 2022
Site Conditions: Clear
Drilling Contractor: Pacific Soil & Water
Drilling Equipment: Hand Auger, Push Probe
Sampler Type: 5' Cores
Depth to Water (ATD): 12' ATD
Surface Elevation: Not Measured

Boring Details and Notes:

Depth, feet	Core Interval/Recovery	Laboratory Sample ID	PID	Sheen	Lithologic Description
	Hand Auger		<5	NS	Silty fine SAND; dark brown, slightly moist, trace clay, medium plasticity, medium dense.
5			<5	NS	Clayey SILT; medium brown, slightly moist, high plasticity, very stiff.
			<5	NS	
10		SB-10-12'	694	NS	Becomes light gray, wet.
			860	NS	Bottom of Boring at 12.0' BGS.
15					

WELL GAGING DATA SHEET

APEX

		Job Number:	2442-00
Client:		Date:	11-22-21
Project:	Oregon Lithoprint	Sampler:	Frankie Sullivan
Weather:		Time In/Out:	

WATER LEVEL DATA

Well I.D.	Time	Depth to Free Product (feet)	Depth to Water (feet)	Depth to Well Bottom (feet)	Product Thickness (feet)	Water Column Height (feet)	Notes/Other Remarks
MW-1	1107		4.92	21.61			
MW-3	1112		6.90	24.93			
MW-6	1117		7.37	24.73			
MW-4	1123		8.24	24.63			
MW-5	1127		7.68	24.72			
MW-2	1132		7.38	24.91			

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-4	Job Number:	2442-00
Client:		Date:	11/22/21
Project:	Oregon Lithoprint	Sampler:	Franklin Sullivan
Weather:	Overcast	Time In/Out:	

WELL DATA

Well Depth:	24.63	Well Diameter:	4 in	Water Height	
Depth to Water:	8.23	Screened Interval:	10 Ft	x Multiplier	
Water Column Length:		Depth to Free Product:		x Casing Volumes	
Purge Volume:		Free Product Thickness:		= Purge Volume	
Water Height Multipliers (gal)	1-inch = 0.041	2-inch = 0.162	4-inch = 0.653	1 gallon = 3.785 liters	

PURGING DATA

Purge Method:	Pump	Pump Intake Depth:	MS	Comments	
Sampling Method:	LF	Tubing Type:	LDPE		

Time	Volume Purged (liters)	Cumulative Volume Purged (liters)	DTW (btc)	Purge Rate (L/min)	pH	Temp (°C)	Cond (µS/cm)	DO (ppm)	ORP (mV)	Turbidity (NTUs)	Clarity/Color Other Remarks
					+/-0.1	+/-0.5° C	+/-5%	+/- 0.5 ppm	+/-20mV	+/-10%	<-- Stabilization Criteria
1344			8.68		7.64	14.5	634.0	0.94	-116.2		
1347			8.98		7.84	15.1	639	0.50	-151.1		
1350			9.25		7.83	14.8	641	0.51	-156.5		
1353			9.45		7.82	14.6	641	0.47	-160.1		

Clarity: VC = very cloudy, Cl = Cloudy, SC = slightly cloudy, AC = almost clear, C = clear

SAMPLING DATA

Sample ID:	MW-4	Sampling Flow Rate	0.15	Analytical Laboratory:	
Sample Time:	1357	Final Depth to Water:	9.78	Did Well Dewater?	

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
4 40mL VOAs	HCl	VOCs & TPH 8x	yes (no)			
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-5	Job Number:	2442-00
Client:		Date:	11/22/21
Project:	Oregon Lithoprint	Sampler:	Frankie Sullivan
Weather:	Overcast	Time In/Out:	

WELL DATA

Well Depth:	24.72	Well Diameter:	4 in	Water Height	
Depth to Water:	7.20	Screened Interval:	10 ft	x Multiplier	
Water Column Length:		Depth to Free Product:		x Casing Volumes	
Purge Volume:		Free Product Thickness:		= Purge Volume	
Water Height Multipliers (gal)	1-inch = 0.041	2-inch = 0.162	4-inch = 0.653	1 gallon = 3.785 liters	

PURGING DATA

Purge Method:	Peristaltic	Pump Intake Depth:	MS	Comments	
Sampling Method:	LF	Tubing Type:	LDPE		

Time	Volume Purged (liters)	Cumulative Volume Purged (liters)	DTW (btc)	Purge Rate (L/min)	pH	Temp (°C)	Cond (µS/cm)	DO (ppm)	ORP (mV)	Turbidity (NTUs)	Clarity/Color Other Remarks
					+/-0.1	+/-0.5° C	+/-5%	+/- 0.5 ppm	+/-20mV	+/-10%	<-- Stabilization Criteria
1422			6.04		7.95	13.2	230.4	2.13	-57.0		
1425			8.45		8.04	13.8	241.0	0.90	-60.4		
1428			6.97		7.87	14.0	244.1	0.84	-49.6		
1431			9.51		7.71	14.2	244.4	0.85	-44.0		
1434			10.02		7.56	14.2	244.0	0.87	-45.6		
1437			10.51		7.40	14.2	242.4	0.89	-39.0		
1440			10.81		7.37	14.1	245.6	0.89	-37.8		
1443			11.01		7.27	14.1	250.6	0.86	-33.3		
			10.8								

Clarity: VC = very cloudy, Cl = Cloudy, SC = slightly cloudy, AC = almost clear, C = clear

SAMPLING DATA

Sample ID:	MW-5	Sampling Flow Rate	0.15	Analytical Laboratory:	
Sample Time:	1445	Final Depth to Water:	10.99	Did Well Dewater?	

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
4 4mL VOA's	HCl	VOCs + TPHGx	yes (no)			
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-6	Job Number:	2442-00
Client:		Date:	11/22/21
Project:	Oregon Lithoprint	Sampler:	FS
Weather:	Clear	Time In/Out:	

WELL DATA

Well Depth:	24.73	Well Diameter:	4 in	Water Height	
Depth to Water:	7.48	Screened Interval:	10 Ft	x Multiplier	
Water Column Length:		Depth to Free Product:		x Casing Volumes	
Purge Volume:		Free Product Thickness:		= Purge Volume	
Water Height Multipliers (gal)	1-inch = 0.041	2-inch = 0.162	4-inch = 0.653	1 gallon = 3.785 liters	

PURGING DATA

Purge Method:		Pump Intake Depth:	Comments
Sampling Method:		Tubing Type:	

Time	Volume Purged (liters)	Cumulative Volume Purged (liters)	DTW (btc)	Purge Rate (L/min)	pH	Temp (°C)	Cond (µS/cm)	DO (ppm)	ORP (mV)	Turbidity (NTUs)	Clarity/Color Other Remarks
					+/-0.1	+/-0.5° C	+/-5%	+/- 0.5 ppm	+/-20mV	+/-10%	<-- Stabilization Criteria
1230			7.94		6.96	14.5	1110	1.15	-98.7		
1233			8.32		7.42	15.1	1168	0.78	-109.0		
1236			8.72		7.37	15.3	1187	0.72	-109.2		
1239			9.09		7.36	15.4	1198	0.70	-110.6		

Clarity: VC = very cloudy, Cl = Cloudy, SC = slightly cloudy, AC = almost clear, C = clear

SAMPLING DATA

Sample ID:	MW-6	Sampling Flow Rate	0.15	Analytical Laboratory:	
Sample Time:	1245	Final Depth to Water:	9.56	Did Well Dewater?	

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
4 40mL VOAs	HCl	VOCs & TPH-Gx	yes (no)			
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

Appendix B

Laboratory Data Packages and QA/QC Review

Appendix B – Analytical Laboratory Report and Quality Assurance / Quality Control Review

1.0 Introduction

This appendix documents the results of a quality assurance/quality control (QA/QC) review of the analytical data for groundwater, soil, soil vapor, and ambient air samples collected during additional site investigation activities at the Oregon Lithoprint Site in McMinnville, Oregon. Samples from the Site were analyzed by Pace Analytical of Mount Juliet, Tennessee. Copies of the analytical laboratory reports are included in this attachment, referenced in Table 1 as follows.

Table 1: Analytical Laboratory Reports

Report	Report Date	Sampling Event
L1435508	December 2, 2021	Groundwater sampling
L1492886	May 19, 2022	Ambient air and soil vapor sampling
L1492986	May 20, 2022	Soil sampling

2.0 Data Validation

The QA review outlines the applicable quality control criteria utilized during the data review process, as well as any deviations from those criteria. Examination and validation of the laboratory summary reports include:

- Analytical preparation and quantitation methods;
- Analytical method holding times;
- Sample handling;
- Chain of custody handling;
- Detection and reporting limits;
- Analyte identification and quantitation;
- Method and equipment blank detections;
- Laboratory control samples, matrix spikes, and surrogates to assess laboratory accuracy; and
- Laboratory control sample duplicates and matrix spike duplicates to assess laboratory precision.

The QA/QC review did not include a review of raw data.

Appendix B – Analytical Laboratory Report and Quality Assurance / Quality Control Review

This QA/QC review documents the relationship between analytical findings and data quality objectives based on precision and accuracy. It also summarizes possible error or bias and the effect on data quality and usability.

The laboratory quality control (QC) samples provided in data packages were used to evaluate laboratory contamination or background interferences, sample preparation efficiency, instrumentation performance and sample matrix interferences. The QC samples provided by the analytical laboratories include method blanks, laboratory control samples (LCS/LCSD) and matrix spikes (MS/MSD). Surrogates were also analyzed to assess sample preparation efficiency and matrix interferences.

2.1 Data Qualifiers

Any data that is found to have possible bias or error was qualified and flagged. The following are flags used in this QA/QC review and data tables.

Table 2: Qualifier Flags

J	Result is estimated.
J+	Result is estimated and may be biased high.
UJ	Reporting limit is estimated due to analyte quality control.
E	The result exceeded the upper limit of the calibration range. The result is estimated.

3.0 Analytical Methods

Chemical analyses consisted of the following:

- Total petroleum hydrocarbons (TPHg) gasoline range organics in soil and groundwater by Method NWTPH-Gx;
- Volatile organic compounds (VOCs) in soil and groundwater by United States Environmental Protection Agency (EPA) Method 8260D; and
- VOCs in soil vapor and ambient air by EPA Method TO-15.

4.0 Data Quality Assurance Review

The general QA objectives for this project were to develop and implement procedures for obtaining, evaluating, and confirming the usability of data of a specified quality. To collect such information, analytical data must have an appropriate degree of accuracy and reproducibility, samples collected must be representative of actual field conditions, and samples must be collected and analyzed using unbroken chain-of-custody procedures.

Reporting limits and analytical results were compared to cleanup and screening levels for each parameter in the matrix of concern. Precision, accuracy, completeness, and comparability parameters used to indicate data quality are defined below.

4.1 Holding Times and Sample Receipt

The holding time is the minimum amount of time the sample can be stored before analytes start to degrade and are not representative of initial sampling concentrations. Holding times are defined by analytical methods. Samples were prepared and analyzed within method specified holding times.

Chain of custody documents were appropriately relinquished by Apex Companies personnel and received by Pace Analytical. They were filled out with the correct sample ID, sampling date, sampling time and analyses requested. No discrepancies were found between sampling container labels and the chain of custody document. Groundwater and soil samples were received by the laboratory on ice and below six degrees Celsius (6ºC). All containers were intact upon receipt by the laboratory and not broken.

4.2 Reporting Limits and Detection Limits

Reporting limits are the lowest concentration an instrument is capable of accurately quantifying an analyte. They are determined by the laboratory and are based on instrumentation capabilities, the matrix of field samples, sample preparation procedures and suggested reporting limits by the EPA. In some cases, reporting limits exceeded the risk-based screening levels. To account for this difference, the laboratory reported results to the lowest method detection limits, which were below the risk-based screening levels. Method detection limits (MDL) are the lowest concentrations that the instrument can positively identify an analyte; however, concentrations reported between the MDL and reporting limit are estimated and are J-flagged as such.

4.3 Method Blanks

A method – or laboratory – blank is a quality control sample prepared by the laboratory from an analyte-free matrix and analyzed in an analytical batch along with environmental and other QC samples. It is used to assess laboratory contamination or background interferences.

For groundwater results associated with laboratory report L1435508, TPHg was detected in the method blank of analytical batch WG1780528. TPHg was detected in groundwater samples collected from wells MW-5 and MW-6 at concentrations that are less than ten times the concentration of the method blank. These results may have had significant contributions from laboratory contamination and results are 'J+' flagged as estimated values that may be biased high.

For ambient air results and soil vapor associated with laboratory report L1492886, propene was detected in the method blank for analytical batches WG1863384, WG1863390, and WG1864598. Propene was detected at a concentration of less than ten times the method blank concentration for soil vapor sample SB-10. This result may have had a significant contribution from laboratory contamination and the result is 'J+' flagged as an estimated value that may be biased high.

For soil results associated with laboratory report L1492986, TPHg was detected in the method blank for analytical batches WG1864604 and WG1864703. The associated soil results collected from SB-5, SB-8, and SB-9 had concentrations of TPHg that were less than ten times the method blank concentration. These results may have had a significant contribution from laboratory contamination and the result is 'J+' flagged as an estimated value that may be biased high.

For soil results associated with laboratory report L1492986, acetone was detected in the method blank for analytical batch WG1864109. The associated soil results collected from SB-1 had concentration of acetone that was less than ten times the method blank concentration. This result may have had a significant contribution from laboratory contamination and the result is 'J+' flagged as an estimated value that may be biased high.

4.4 Instrument Calibration

Instruments were calibrated to method specifications; however, the concentrations of the following analytes were estimated due to continuing calibration verification failure:

- Acetone, acrolein, and vinyl chloride responded low for the continuing calibration check for groundwater samples collected from wells MW-4 and MW-5. These analytes were not detected for wells MW-4 and MW-5 and results are 'UJ' flagged as estimated non-detections at the detection limit.
- Acetone, chloromethane, 1,2-dibromo-3-chloropropane, and 2-butanone responded low for the continuing calibration check for groundwater samples collected from well MW-6. These analytes were not detected for well MW-6 and results are 'UJ' flagged as estimated non-detections at the detection limit.

- Acetone responded high for the continuing calibration check for soil samples SB-1, SB-3, SB-4, SB-6, SB-7, SB-8, SB-9, and SB-10. Detected results may be biased high for these samples and are 'J+' flagged as estimated values that may be biased high.
- 1,2,3-Trichlorobenzene responded low for the continuing calibration check for soil samples SB-1 and SB-2R. 1,2,3-Trichlorobenzene was not detected for soil samples SB-1 and SB-2R and results are 'UJ' flagged as estimated non-detections at the detection limit.

For ambient air sample AA-3, ethanol was detected above the upper limit of the calibration range. This result is 'E' flagged and should be considered an estimated value.

4.5 Accuracy

Accuracy compares the accepted reference concentration of an analyte to the concentration determined analytically. Accuracy is measured as a percent recovery. This recovery must be within a certain range – or control limit – for the data in an analytical batch to be considered acceptable. The analytical laboratory provides quality control samples and surrogates to help determine the accuracy and acceptability of the data reported. These quality control samples and surrogates are discussed below.

4.5.1 Laboratory Control Samples

Laboratory control samples (LCS) and laboratory control sample duplicates (LCSD) were analyzed by the laboratory to assess the accuracy of the analytical methods. One set of LCS and LCSDs were analyzed per analytical batch. The LCS and LCSDs are prepared from an analyte-free matrix that is spiked with known levels of compounds of concern. The concentrations are measured and compared to the known spiked levels, expressed as a percent recovery.

Hexachloro-1,3-butadiene and 1,2,3-trichlorobenzene were recovered above the upper control limit for analytical batch WG1782553 (associated with groundwater samples collected from wells MW-4 and MW-5). Groundwater samples were not detected for these analytes and results were not flagged.

Carbon tetrachloride, trans-1,2-dichloroethene, trichloroethene, and 1,2,3-trimethylbenzene were recovered above the upper control limit for analytical batch WG1783063. The associated groundwater sample collected from well MW-6 was not detected for these analytes and results were not flagged.

Acetone, bromomethane, chloroethane, and vinyl chloride were recovered above the upper control limit for analytical batch WG1864109. Acetone was the only analyte detected (soil sample SB-1) and the result is 'J+' flagged as an estimated value that may be biased high.

4.5.2 Matrix Samples

A matrix spike QC sample is used to assess the performance of the analytical method by determining potential matrix interferences. Matrix spike (MS) and matrix spike duplicate (MSD) analyses are performed on one environmental sample per analytical batch. A matrix spike sample uses an environmental sample that is spiked with known concentrations of analytes of interest. The matrix spike is then prepared and analyzed with the same analytical procedures as environmental samples in the analytical batch. The resulting concentration of the matrix spike is then compared to the known – or true – values added to the non-spiked environmental sample concentration. This comparison is expressed as a percent recovery.

MS and MSD recoveries were within control limits.

4.5.3 Surrogates

Surrogates are organic compounds that are similar in chemical composition to the analytes of interest but are not likely to be found in the environment. They are spiked at a known concentration into environmental and batch QC samples prior to sample preparation and analysis. Surrogate recoveries for environmental samples are used to evaluate matrix interference, sample preparation efficiency, and analysis performance on a sample-specific basis.

Surrogate recoveries were within the control limits for the analyzed samples with the following exceptions.

For VOC analysis of soil samples SB-2R, the recovery of toluene-d8 was below the lower control limit. This low recovery is likely due to the dilution performed on the sample and results are accepted based on the recovery of the remaining surrogates.

For VOC analysis of soil samples SB-4, SB-6, SB-9, and SB-10, the recovery of 4-bromofluorobenzene was above the upper control limit. Benzene derivative target compound results are accepted based on the acceptable recovery of toluene-d8.

4.6 Precision

Precision is measured by how close values of duplicate analyses are to each other. These duplicate analyses are prepared from separate aliquots of the same sample and are analyzed at the same (or similar) time. Precision in the field ensures that samples taken are representative of field concentrations; this is demonstrated by field duplicates. Analytical precision is the ability of the laboratory to reproduce results that are similar to each other; this is measured through duplicate analysis of environmental and batch QC samples. Precision is estimated by the relative percent difference (RPD) between the original analysis and the duplicate analysis.

4.6.1 Laboratory Control Sample Duplicates

The analytical batch LCS concentration of an analyte is compared to the LCSD concentration of the same analyte. The RPD is calculated from these two concentrations, which must be below a certain percentage to be considered acceptable.

The RPD for acrolein for analytical batch WG1782553 exceeded the control limit. Associated groundwater sample results were not detected and results were not flagged.

The RPD for hexachloro-1,3-butadiene, naphthalene, 1,2,3-trichlorobenzene, and 1,2,4-trichlorobenzene exceeded the control limit for analytical batch WG1864109. The associated soil results were not detected for these analytes and no results were flagged.

4.6.2 Matrix Spike Duplicate

Similar to the LCS/LCSD, the analytical batch MS/MSD analyte concentrations are also compared to each other and expressed as an RPD. RPD values for MS and MSD batch pairs were within laboratory control limits.

5.0 Conclusion

In conclusion, the QA objectives have been met and the data are of sufficient quality for use in this project.

ANALYTICAL REPORT

December 02, 2021

Apex Companies, LLC - Portland, OR

Sample Delivery Group:	L1435508
Samples Received:	11/24/2021
Project Number:	2442-00
Description:	Oregon Lithoprint

Report To: Mike Stevens
3015 SW First Avenue
Portland, OR 97201-4707

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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MW-4 L1435508-01 GW

Collected by: Franklin Sullivan
Collected date/time: 11/22/21 13:57
Received date/time: 11/24/21 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1780528	5	11/27/21 04:52	11/27/21 04:52	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1782553	100	12/02/21 07:40	12/02/21 07:40	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1783063	100	12/02/21 13:18	12/02/21 13:18	ADM	Mt. Juliet, TN

MW-5 L1435508-02 GW

Collected by: Franklin Sullivan
Collected date/time: 11/22/21 14:48
Received date/time: 11/24/21 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1780528	1	11/27/21 01:12	11/27/21 01:12	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1782553	1	12/02/21 05:23	12/02/21 05:23	JAH	Mt. Juliet, TN

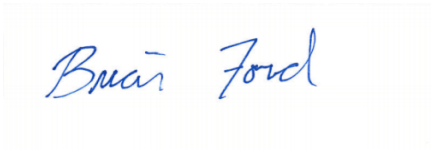
MW-6 L1435508-03 GW

Collected by: Franklin Sullivan
Collected date/time: 11/22/21 12:45
Received date/time: 11/24/21 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1780528	1	11/27/21 01:34	11/27/21 01:34	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1783063	1	12/02/21 12:58	12/02/21 12:58	ADM	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Brian Ford
Project Manager

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	3990		158	500	5	11/27/2021 04:52	WG1780528
(S) a,a,a-Trifluorotoluene(FID)	*91.3*			*78.0-120*		*11/27/2021 04:52*	WG1780528

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	C3	1130	5000	100	12/02/2021 07:40	WG1782553
Acrolein	U	C3 J3	254	5000	100	12/02/2021 07:40	WG1782553
Acrylonitrile	U		67.1	1000	100	12/02/2021 07:40	WG1782553
Benzene	2250		9.41	100	100	12/02/2021 07:40	WG1782553
Bromobenzene	U		11.8	100	100	12/02/2021 07:40	WG1782553
Bromodichloromethane	U		13.6	100	100	12/02/2021 07:40	WG1782553
Bromoform	U		12.9	100	100	12/02/2021 07:40	WG1782553
Bromomethane	U		60.5	500	100	12/02/2021 07:40	WG1782553
n-Butylbenzene	U		15.7	100	100	12/02/2021 07:40	WG1782553
sec-Butylbenzene	U		12.5	100	100	12/02/2021 07:40	WG1782553
tert-Butylbenzene	U		12.7	100	100	12/02/2021 07:40	WG1782553
Carbon tetrachloride	U		12.8	100	100	12/02/2021 07:40	WG1782553
Chlorobenzene	U		11.6	100	100	12/02/2021 07:40	WG1782553
Chlorodibromomethane	U		14.0	100	100	12/02/2021 07:40	WG1782553
Chloroethane	U		19.2	500	100	12/02/2021 07:40	WG1782553
Chloroform	U		11.1	500	100	12/02/2021 07:40	WG1782553
Chloromethane	U		96.0	250	100	12/02/2021 07:40	WG1782553
2-Chlorotoluene	U		10.6	100	100	12/02/2021 07:40	WG1782553
4-Chlorotoluene	U		11.4	100	100	12/02/2021 07:40	WG1782553
1,2-Dibromo-3-Chloropropane	U		27.6	500	100	12/02/2021 07:40	WG1782553
1,2-Dibromoethane	U		12.6	100	100	12/02/2021 07:40	WG1782553
Dibromomethane	U		12.2	100	100	12/02/2021 07:40	WG1782553
1,2-Dichlorobenzene	U		10.7	100	100	12/02/2021 07:40	WG1782553
1,3-Dichlorobenzene	U		11.0	100	100	12/02/2021 07:40	WG1782553
1,4-Dichlorobenzene	U		12.0	100	100	12/02/2021 07:40	WG1782553
Dichlorodifluoromethane	U		37.4	500	100	12/02/2021 07:40	WG1782553
1,1-Dichloroethane	U		10.0	100	100	12/02/2021 07:40	WG1782553
1,2-Dichloroethane	U		8.19	100	100	12/02/2021 07:40	WG1782553
1,1-Dichloroethene	U		18.8	100	100	12/02/2021 07:40	WG1782553
cis-1,2-Dichloroethene	U		12.6	100	100	12/02/2021 07:40	WG1782553
trans-1,2-Dichloroethene	U		14.9	100	100	12/02/2021 07:40	WG1782553
1,2-Dichloropropane	U		14.9	100	100	12/02/2021 07:40	WG1782553
1,1-Dichloropropene	U		14.2	100	100	12/02/2021 07:40	WG1782553
1,3-Dichloropropane	U		11.0	100	100	12/02/2021 07:40	WG1782553
cis-1,3-Dichloropropene	U		11.1	100	100	12/02/2021 07:40	WG1782553
trans-1,3-Dichloropropene	U		11.8	100	100	12/02/2021 07:40	WG1782553
2,2-Dichloropropane	U		16.1	100	100	12/02/2021 07:40	WG1782553
Di-isopropyl ether	U		10.5	100	100	12/02/2021 07:40	WG1782553
Ethylbenzene	U		13.7	100	100	12/02/2021 07:40	WG1782553
Hexachloro-1,3-butadiene	U	J4	33.7	100	100	12/02/2021 07:40	WG1782553
Isopropylbenzene	U		10.5	100	100	12/02/2021 07:40	WG1782553
p-Isopropyltoluene	U		12.0	100	100	12/02/2021 07:40	WG1782553
2-Butanone (MEK)	U		119	1000	100	12/02/2021 07:40	WG1782553
Methylene Chloride	U		43.0	500	100	12/02/2021 07:40	WG1782553
4-Methyl-2-pentanone (MIBK)	U		47.8	1000	100	12/02/2021 07:40	WG1782553
Methyl tert-butyl ether	U		10.1	100	100	12/02/2021 07:40	WG1782553
Naphthalene	U		100	500	100	12/02/2021 07:40	WG1782553
n-Propylbenzene	U		9.93	100	100	12/02/2021 07:40	WG1782553

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Styrene	U		11.8	100	100	12/02/2021 07:40	WG1782553
1,1,1,2-Tetrachloroethane	U		14.7	100	100	12/02/2021 07:40	WG1782553
1,1,2,2-Tetrachloroethane	U		13.3	100	100	12/02/2021 07:40	WG1782553
1,1,2-Trichlorotrifluoroethane	U		18.0	100	100	12/02/2021 07:40	WG1782553
Tetrachloroethene	U		30.0	100	100	12/02/2021 13:18	WG1783063
Toluene	U		27.8	100	100	12/02/2021 07:40	WG1782553
1,2,3-Trichlorobenzene	U	J4	23.0	100	100	12/02/2021 07:40	WG1782553
1,2,4-Trichlorobenzene	U		48.1	100	100	12/02/2021 07:40	WG1782553
1,1,1-Trichloroethane	U		14.9	100	100	12/02/2021 07:40	WG1782553
1,1,2-Trichloroethane	U		15.8	100	100	12/02/2021 07:40	WG1782553
Trichloroethene	U		19.0	100	100	12/02/2021 07:40	WG1782553
Trichlorofluoromethane	U		16.0	500	100	12/02/2021 07:40	WG1782553
1,2,3-Trichloropropane	U		23.7	250	100	12/02/2021 07:40	WG1782553
1,2,4-Trimethylbenzene	U		32.2	100	100	12/02/2021 07:40	WG1782553
1,2,3-Trimethylbenzene	U		10.4	100	100	12/02/2021 07:40	WG1782553
1,3,5-Trimethylbenzene	U		10.4	100	100	12/02/2021 07:40	WG1782553
Vinyl chloride	U	C3	23.4	100	100	12/02/2021 07:40	WG1782553
Xylenes, Total	U		17.4	300	100	12/02/2021 07:40	WG1782553
(S) Toluene-d8	*111*			*80.0-120*		*12/02/2021 07:40*	WG1782553
(S) Toluene-d8	*104*			*80.0-120*		*12/02/2021 13:18*	WG1783063
(S) 4-Bromofluorobenzene	*96.4*			*77.0-126*		*12/02/2021 07:40*	WG1782553
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*12/02/2021 13:18*	WG1783063
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*12/02/2021 07:40*	WG1782553
(S) 1,2-Dichloroethane-d4	*84.6*			*70.0-130*		*12/02/2021 13:18*	WG1783063

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	115	B	31.6	100	1	11/27/2021 01:12	WG1780528
(S) a,a,a-Trifluorotoluene(FID)	*93.6*			*78.0-120*		*11/27/2021 01:12*	WG1780528

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	C3	11.3	50.0	1	12/02/2021 05:23	WG1782553
Acrolein	U	C3 J3	2.54	50.0	1	12/02/2021 05:23	WG1782553
Acrylonitrile	U		0.671	10.0	1	12/02/2021 05:23	WG1782553
Benzene	U		0.0941	1.00	1	12/02/2021 05:23	WG1782553
Bromobenzene	U		0.118	1.00	1	12/02/2021 05:23	WG1782553
Bromodichloromethane	U		0.136	1.00	1	12/02/2021 05:23	WG1782553
Bromoform	U		0.129	1.00	1	12/02/2021 05:23	WG1782553
Bromomethane	U		0.605	5.00	1	12/02/2021 05:23	WG1782553
n-Butylbenzene	U		0.157	1.00	1	12/02/2021 05:23	WG1782553
sec-Butylbenzene	U		0.125	1.00	1	12/02/2021 05:23	WG1782553
tert-Butylbenzene	U		0.127	1.00	1	12/02/2021 05:23	WG1782553
Carbon tetrachloride	U		0.128	1.00	1	12/02/2021 05:23	WG1782553
Chlorobenzene	U		0.116	1.00	1	12/02/2021 05:23	WG1782553
Chlorodibromomethane	U		0.140	1.00	1	12/02/2021 05:23	WG1782553
Chloroethane	U		0.192	5.00	1	12/02/2021 05:23	WG1782553
Chloroform	U		0.111	5.00	1	12/02/2021 05:23	WG1782553
Chloromethane	U		0.960	2.50	1	12/02/2021 05:23	WG1782553
2-Chlorotoluene	U		0.106	1.00	1	12/02/2021 05:23	WG1782553
4-Chlorotoluene	U		0.114	1.00	1	12/02/2021 05:23	WG1782553
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	12/02/2021 05:23	WG1782553
1,2-Dibromoethane	U		0.126	1.00	1	12/02/2021 05:23	WG1782553
Dibromomethane	U		0.122	1.00	1	12/02/2021 05:23	WG1782553
1,2-Dichlorobenzene	U		0.107	1.00	1	12/02/2021 05:23	WG1782553
1,3-Dichlorobenzene	U		0.110	1.00	1	12/02/2021 05:23	WG1782553
1,4-Dichlorobenzene	U		0.120	1.00	1	12/02/2021 05:23	WG1782553
Dichlorodifluoromethane	U		0.374	5.00	1	12/02/2021 05:23	WG1782553
1,1-Dichloroethane	U		0.100	1.00	1	12/02/2021 05:23	WG1782553
1,2-Dichloroethane	U		0.0819	1.00	1	12/02/2021 05:23	WG1782553
1,1-Dichloroethene	U		0.188	1.00	1	12/02/2021 05:23	WG1782553
cis-1,2-Dichloroethene	U		0.126	1.00	1	12/02/2021 05:23	WG1782553
trans-1,2-Dichloroethene	U		0.149	1.00	1	12/02/2021 05:23	WG1782553
1,2-Dichloropropane	U		0.149	1.00	1	12/02/2021 05:23	WG1782553
1,1-Dichloropropene	U		0.142	1.00	1	12/02/2021 05:23	WG1782553
1,3-Dichloropropane	U		0.110	1.00	1	12/02/2021 05:23	WG1782553
cis-1,3-Dichloropropene	U		0.111	1.00	1	12/02/2021 05:23	WG1782553
trans-1,3-Dichloropropene	U		0.118	1.00	1	12/02/2021 05:23	WG1782553
2,2-Dichloropropane	U		0.161	1.00	1	12/02/2021 05:23	WG1782553
Di-isopropyl ether	U		0.105	1.00	1	12/02/2021 05:23	WG1782553
Ethylbenzene	U		0.137	1.00	1	12/02/2021 05:23	WG1782553
Hexachloro-1,3-butadiene	U	J4	0.337	1.00	1	12/02/2021 05:23	WG1782553
Isopropylbenzene	U		0.105	1.00	1	12/02/2021 05:23	WG1782553
p-Isopropyltoluene	U		0.120	1.00	1	12/02/2021 05:23	WG1782553
2-Butanone (MEK)	U		1.19	10.0	1	12/02/2021 05:23	WG1782553
Methylene Chloride	U		0.430	5.00	1	12/02/2021 05:23	WG1782553
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	12/02/2021 05:23	WG1782553
Methyl tert-butyl ether	U		0.101	1.00	1	12/02/2021 05:23	WG1782553
Naphthalene	U		1.00	5.00	1	12/02/2021 05:23	WG1782553
n-Propylbenzene	U		0.0993	1.00	1	12/02/2021 05:23	WG1782553

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Styrene	U		0.118	1.00	1	12/02/2021 05:23	WG1782553
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	12/02/2021 05:23	WG1782553
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	12/02/2021 05:23	WG1782553
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	12/02/2021 05:23	WG1782553
Tetrachloroethene	U		0.300	1.00	1	12/02/2021 05:23	WG1782553
Toluene	U		0.278	1.00	1	12/02/2021 05:23	WG1782553
1,2,3-Trichlorobenzene	U	J4	0.230	1.00	1	12/02/2021 05:23	WG1782553
1,2,4-Trichlorobenzene	U		0.481	1.00	1	12/02/2021 05:23	WG1782553
1,1,1-Trichloroethane	U		0.149	1.00	1	12/02/2021 05:23	WG1782553
1,1,2-Trichloroethane	U		0.158	1.00	1	12/02/2021 05:23	WG1782553
Trichloroethene	U		0.190	1.00	1	12/02/2021 05:23	WG1782553
Trichlorofluoromethane	U		0.160	5.00	1	12/02/2021 05:23	WG1782553
1,2,3-Trichloropropane	U		0.237	2.50	1	12/02/2021 05:23	WG1782553
1,2,4-Trimethylbenzene	U		0.322	1.00	1	12/02/2021 05:23	WG1782553
1,2,3-Trimethylbenzene	U		0.104	1.00	1	12/02/2021 05:23	WG1782553
1,3,5-Trimethylbenzene	U		0.104	1.00	1	12/02/2021 05:23	WG1782553
Vinyl chloride	U	C3	0.234	1.00	1	12/02/2021 05:23	WG1782553
Xylenes, Total	U		0.174	3.00	1	12/02/2021 05:23	WG1782553
(S) Toluene-d8	*106*			*80.0-120*		*12/02/2021 05:23*	WG1782553
(S) 4-Bromofluorobenzene	*94.8*			*77.0-126*		*12/02/2021 05:23*	WG1782553
(S) 1,2-Dichloroethane-d4	*98.1*			*70.0-130*		*12/02/2021 05:23*	WG1782553

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	721	B	31.6	100	1	11/27/2021 01:34	WG1780528
(S) a,a,a-Trifluorotoluene(FID)	*92.2*			*78.0-120*		*11/27/2021 01:34*	WG1780528

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	C3	11.3	50.0	1	12/02/2021 12:58	WG1783063
Acrolein	U		2.54	50.0	1	12/02/2021 12:58	WG1783063
Acrylonitrile	U		0.671	10.0	1	12/02/2021 12:58	WG1783063
Benzene	0.490	J	0.0941	1.00	1	12/02/2021 12:58	WG1783063
Bromobenzene	U		0.118	1.00	1	12/02/2021 12:58	WG1783063
Bromodichloromethane	U		0.136	1.00	1	12/02/2021 12:58	WG1783063
Bromoform	U		0.129	1.00	1	12/02/2021 12:58	WG1783063
Bromomethane	U		0.605	5.00	1	12/02/2021 12:58	WG1783063
n-Butylbenzene	U		0.157	1.00	1	12/02/2021 12:58	WG1783063
sec-Butylbenzene	1.39		0.125	1.00	1	12/02/2021 12:58	WG1783063
tert-Butylbenzene	0.432	J	0.127	1.00	1	12/02/2021 12:58	WG1783063
Carbon tetrachloride	U	J4	0.128	1.00	1	12/02/2021 12:58	WG1783063
Chlorobenzene	U		0.116	1.00	1	12/02/2021 12:58	WG1783063
Chlorodibromomethane	U		0.140	1.00	1	12/02/2021 12:58	WG1783063
Chloroethane	U		0.192	5.00	1	12/02/2021 12:58	WG1783063
Chloroform	U		0.111	5.00	1	12/02/2021 12:58	WG1783063
Chloromethane	U	C3	0.960	2.50	1	12/02/2021 12:58	WG1783063
2-Chlorotoluene	U		0.106	1.00	1	12/02/2021 12:58	WG1783063
4-Chlorotoluene	U		0.114	1.00	1	12/02/2021 12:58	WG1783063
1,2-Dibromo-3-Chloropropane	U	C3	0.276	5.00	1	12/02/2021 12:58	WG1783063
1,2-Dibromoethane	U		0.126	1.00	1	12/02/2021 12:58	WG1783063
Dibromomethane	U		0.122	1.00	1	12/02/2021 12:58	WG1783063
1,2-Dichlorobenzene	U		0.107	1.00	1	12/02/2021 12:58	WG1783063
1,3-Dichlorobenzene	U		0.110	1.00	1	12/02/2021 12:58	WG1783063
1,4-Dichlorobenzene	U		0.120	1.00	1	12/02/2021 12:58	WG1783063
Dichlorodifluoromethane	U		0.374	5.00	1	12/02/2021 12:58	WG1783063
1,1-Dichloroethane	U		0.100	1.00	1	12/02/2021 12:58	WG1783063
1,2-Dichloroethane	0.571	J	0.0819	1.00	1	12/02/2021 12:58	WG1783063
1,1-Dichloroethene	U		0.188	1.00	1	12/02/2021 12:58	WG1783063
cis-1,2-Dichloroethene	U		0.126	1.00	1	12/02/2021 12:58	WG1783063
trans-1,2-Dichloroethene	U	J4	0.149	1.00	1	12/02/2021 12:58	WG1783063
1,2-Dichloropropane	U		0.149	1.00	1	12/02/2021 12:58	WG1783063
1,1-Dichloropropene	U		0.142	1.00	1	12/02/2021 12:58	WG1783063
1,3-Dichloropropane	U		0.110	1.00	1	12/02/2021 12:58	WG1783063
cis-1,3-Dichloropropene	U		0.111	1.00	1	12/02/2021 12:58	WG1783063
trans-1,3-Dichloropropene	U		0.118	1.00	1	12/02/2021 12:58	WG1783063
2,2-Dichloropropane	U		0.161	1.00	1	12/02/2021 12:58	WG1783063
Di-isopropyl ether	U		0.105	1.00	1	12/02/2021 12:58	WG1783063
Ethylbenzene	U		0.137	1.00	1	12/02/2021 12:58	WG1783063
Hexachloro-1,3-butadiene	U		0.337	1.00	1	12/02/2021 12:58	WG1783063
Isopropylbenzene	4.09		0.105	1.00	1	12/02/2021 12:58	WG1783063
p-Isopropyltoluene	U		0.120	1.00	1	12/02/2021 12:58	WG1783063
2-Butanone (MEK)	U	C3	1.19	10.0	1	12/02/2021 12:58	WG1783063
Methylene Chloride	U		0.430	5.00	1	12/02/2021 12:58	WG1783063
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	12/02/2021 12:58	WG1783063
Methyl tert-butyl ether	U		0.101	1.00	1	12/02/2021 12:58	WG1783063
Naphthalene	U		1.00	5.00	1	12/02/2021 12:58	WG1783063
n-Propylbenzene	0.614	J	0.0993	1.00	1	12/02/2021 12:58	WG1783063

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Styrene	U		0.118	1.00	1	12/02/2021 12:58	WG1783063
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	12/02/2021 12:58	WG1783063
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	12/02/2021 12:58	WG1783063
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	12/02/2021 12:58	WG1783063
Tetrachloroethene	U		0.300	1.00	1	12/02/2021 12:58	WG1783063
Toluene	U		0.278	1.00	1	12/02/2021 12:58	WG1783063
1,2,3-Trichlorobenzene	U		0.230	1.00	1	12/02/2021 12:58	WG1783063
1,2,4-Trichlorobenzene	U		0.481	1.00	1	12/02/2021 12:58	WG1783063
1,1,1-Trichloroethane	U		0.149	1.00	1	12/02/2021 12:58	WG1783063
1,1,2-Trichloroethane	U		0.158	1.00	1	12/02/2021 12:58	WG1783063
Trichloroethene	U	J4	0.190	1.00	1	12/02/2021 12:58	WG1783063
Trichlorofluoromethane	U		0.160	5.00	1	12/02/2021 12:58	WG1783063
1,2,3-Trichloropropane	U		0.237	2.50	1	12/02/2021 12:58	WG1783063
1,2,4-Trimethylbenzene	U		0.322	1.00	1	12/02/2021 12:58	WG1783063
1,2,3-Trimethylbenzene	U	J4	0.104	1.00	1	12/02/2021 12:58	WG1783063
1,3,5-Trimethylbenzene	U		0.104	1.00	1	12/02/2021 12:58	WG1783063
Vinyl chloride	U		0.234	1.00	1	12/02/2021 12:58	WG1783063
Xylenes, Total	U		0.174	3.00	1	12/02/2021 12:58	WG1783063
(S) Toluene-d8	*88.0*			*80.0-120*		*12/02/2021 12:58*	WG1783063
(S) 4-Bromofluorobenzene	*92.9*			*77.0-126*		*12/02/2021 12:58*	WG1783063
(S) 1,2-Dichloroethane-d4	*82.4*			*70.0-130*		*12/02/2021 12:58*	WG1783063

Method Blank (MB)

(MB) R3736390-2 11/26/21 21:03

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	77.0	J	31.6	100
(S) a,a,a-Trifluorotoluene(FID)	*94.7*			*78.0-120*

Laboratory Control Sample (LCS)

(LCS) R3736390-1 11/26/21 20:19

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	4990	90.7	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*83.8*	*78.0-120*	

Method Blank (MB)

(MB) R3736205-3 12/02/21 04:08

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		11.3	50.0
Acrolein	U		2.54	50.0
Acrylonitrile	U		0.671	10.0
Benzene	U		0.0941	1.00
Bromobenzene	U		0.118	1.00
Bromodichloromethane	U		0.136	1.00
Bromoform	U		0.129	1.00
Bromomethane	U		0.605	5.00
n-Butylbenzene	U		0.157	1.00
sec-Butylbenzene	U		0.125	1.00
tert-Butylbenzene	U		0.127	1.00
Carbon tetrachloride	U		0.128	1.00
Chlorobenzene	U		0.116	1.00
Chlorodibromomethane	U		0.140	1.00
Chloroethane	U		0.192	5.00
Chloroform	U		0.111	5.00
Chloromethane	U		0.960	2.50
2-Chlorotoluene	U		0.106	1.00
4-Chlorotoluene	U		0.114	1.00
1,2-Dibromo-3-Chloropropane	U		0.276	5.00
1,2-Dibromoethane	U		0.126	1.00
Dibromomethane	U		0.122	1.00
1,2-Dichlorobenzene	U		0.107	1.00
1,3-Dichlorobenzene	U		0.110	1.00
1,4-Dichlorobenzene	U		0.120	1.00
Dichlorodifluoromethane	U		0.374	5.00
1,1-Dichloroethane	U		0.100	1.00
1,2-Dichloroethane	U		0.0819	1.00
1,1-Dichloroethene	U		0.188	1.00
cis-1,2-Dichloroethene	U		0.126	1.00
trans-1,2-Dichloroethene	U		0.149	1.00
1,2-Dichloropropane	U		0.149	1.00
1,1-Dichloropropene	U		0.142	1.00
1,3-Dichloropropane	U		0.110	1.00
cis-1,3-Dichloropropene	U		0.111	1.00
trans-1,3-Dichloropropene	U		0.118	1.00
2,2-Dichloropropane	U		0.161	1.00
Di-isopropyl ether	U		0.105	1.00
Ethylbenzene	U		0.137	1.00
Hexachloro-1,3-butadiene	U		0.337	1.00

Method Blank (MB)

(MB) R3736205-3 12/02/21 04:08

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Isopropylbenzene	U		0.105	1.00
p-Isopropyltoluene	U		0.120	1.00
2-Butanone (MEK)	U		1.19	10.0
Methylene Chloride	U		0.430	5.00
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0
Methyl tert-butyl ether	U		0.101	1.00
Naphthalene	U		1.00	5.00
n-Propylbenzene	U		0.0993	1.00
Styrene	U		0.118	1.00
1,1,1,2-Tetrachloroethane	U		0.147	1.00
1,1,2,2-Tetrachloroethane	U		0.133	1.00
Tetrachloroethene	U		0.300	1.00
Toluene	U		0.278	1.00
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.481	1.00
1,1,1-Trichloroethane	U		0.149	1.00
1,1,2-Trichloroethane	U		0.158	1.00
Trichloroethene	U		0.190	1.00
Trichlorofluoromethane	U		0.160	5.00
1,2,3-Trichloropropane	U		0.237	2.50
1,2,3-Trimethylbenzene	U		0.104	1.00
1,2,4-Trimethylbenzene	U		0.322	1.00
1,3,5-Trimethylbenzene	U		0.104	1.00
Vinyl chloride	U		0.234	1.00
Xylenes, Total	U		0.174	3.00
(S) Toluene-d8	*103*			*80.0-120*
(S) 4-Bromofluorobenzene	*98.2*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3736205-1 12/02/21 03:11 • (LCSD) R3736205-2 12/02/21 03:30

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	19.5	16.3	78.0	65.2	19.0-160			17.9	27
Acrolein	25.0	5.12	3.78	20.5	15.1	10.0-160		J3	30.1	26
Acrylonitrile	25.0	24.3	21.9	97.2	87.6	55.0-149			10.4	20
Benzene	5.00	4.93	4.92	98.6	98.4	70.0-123			0.203	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3736205-1 12/02/21 03:11 • (LCSD) R3736205-2 12/02/21 03:30

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromobenzene	5.00	4.95	4.89	99.0	97.8	73.0-121			1.22	20
Bromodichloromethane	5.00	4.84	4.67	96.8	93.4	75.0-120			3.58	20
Bromoform	5.00	4.38	4.20	87.6	84.0	68.0-132			4.20	20
Bromomethane	5.00	4.79	4.87	95.8	97.4	10.0-160			1.66	25
n-Butylbenzene	5.00	5.10	5.11	102	102	73.0-125			0.196	20
sec-Butylbenzene	5.00	5.03	5.19	101	104	75.0-125			3.13	20
tert-Butylbenzene	5.00	4.86	5.30	97.2	106	76.0-124			8.66	20
Carbon tetrachloride	5.00	5.34	5.41	107	108	68.0-126			1.30	20
Chlorobenzene	5.00	4.63	4.52	92.6	90.4	80.0-121			2.40	20
Chlorodibromomethane	5.00	4.37	4.34	87.4	86.8	77.0-125			0.689	20
Chloroethane	5.00	4.09	4.14	81.8	82.8	47.0-150			1.22	20
Chloroform	5.00	5.17	5.05	103	101	73.0-120			2.35	20
Chloromethane	5.00	4.04	3.97	80.8	79.4	41.0-142			1.75	20
2-Chlorotoluene	5.00	4.57	4.74	91.4	94.8	76.0-123			3.65	20
4-Chlorotoluene	5.00	4.71	4.94	94.2	98.8	75.0-122			4.77	20
1,2-Dibromo-3-Chloropropane	5.00	4.72	4.42	94.4	88.4	58.0-134			6.56	20
1,2-Dibromoethane	5.00	4.36	4.31	87.2	86.2	80.0-122			1.15	20
Dibromomethane	5.00	4.74	4.39	94.8	87.8	80.0-120			7.67	20
1,2-Dichlorobenzene	5.00	5.03	4.90	101	98.0	79.0-121			2.62	20
1,3-Dichlorobenzene	5.00	4.77	4.79	95.4	95.8	79.0-120			0.418	20
1,4-Dichlorobenzene	5.00	4.49	4.70	89.8	94.0	79.0-120			4.57	20
Dichlorodifluoromethane	5.00	5.35	5.73	107	115	51.0-149			6.86	20
1,1-Dichloroethane	5.00	4.70	4.58	94.0	91.6	70.0-126			2.59	20
1,2-Dichloroethane	5.00	4.79	4.57	95.8	91.4	70.0-128			4.70	20
1,1-Dichloroethene	5.00	4.59	4.76	91.8	95.2	71.0-124			3.64	20
cis-1,2-Dichloroethene	5.00	4.94	5.26	98.8	105	73.0-120			6.27	20
trans-1,2-Dichloroethene	5.00	5.03	5.18	101	104	73.0-120			2.94	20
1,2-Dichloropropane	5.00	4.57	4.56	91.4	91.2	77.0-125			0.219	20
1,1-Dichloropropene	5.00	5.19	5.22	104	104	74.0-126			0.576	20
1,3-Dichloropropane	5.00	4.89	5.04	97.8	101	80.0-120			3.02	20
cis-1,3-Dichloropropene	5.00	4.54	4.48	90.8	89.6	80.0-123			1.33	20
trans-1,3-Dichloropropene	5.00	4.25	4.41	85.0	88.2	78.0-124			3.70	20
2,2-Dichloropropane	5.00	4.55	4.46	91.0	89.2	58.0-130			2.00	20
Di-isopropyl ether	5.00	4.91	4.86	98.2	97.2	58.0-138			1.02	20
Ethylbenzene	5.00	4.34	4.64	86.8	92.8	79.0-123			6.68	20
Hexachloro-1,3-butadiene	5.00	7.52	7.06	150	141	54.0-138	J4	J4	6.31	20
Isopropylbenzene	5.00	4.76	4.88	95.2	97.6	76.0-127			2.49	20
p-Isopropyltoluene	5.00	4.77	4.99	95.4	99.8	76.0-125			4.51	20
2-Butanone (MEK)	25.0	21.1	22.1	84.4	88.4	44.0-160			4.63	20
Methylene Chloride	5.00	4.83	4.66	96.6	93.2	67.0-120			3.58	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3736205-1 12/02/21 03:11 • (LCSD) R3736205-2 12/02/21 03:30

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
4-Methyl-2-pentanone (MIBK)	25.0	23.8	23.1	95.2	92.4	68.0-142			2.99	20
Methyl tert-butyl ether	5.00	4.89	4.38	97.8	87.6	68.0-125			11.0	20
Naphthalene	5.00	4.83	4.79	96.6	95.8	54.0-135			0.832	20
n-Propylbenzene	5.00	4.79	5.16	95.8	103	77.0-124			7.44	20
Styrene	5.00	4.17	4.10	83.4	82.0	73.0-130			1.69	20
1,1,1,2-Tetrachloroethane	5.00	4.95	4.87	99.0	97.4	75.0-125			1.63	20
1,1,2,2-Tetrachloroethane	5.00	4.68	4.47	93.6	89.4	65.0-130			4.59	20
Tetrachloroethene	5.00	5.24	5.35	105	107	72.0-132			2.08	20
Toluene	5.00	4.69	4.88	93.8	97.6	79.0-120			3.97	20
1,1,2-Trichlorotrifluoroethane	5.00	4.84	5.07	96.8	101	69.0-132			4.64	20
1,2,3-Trichlorobenzene	5.00	7.05	6.73	141	135	50.0-138	J4		4.64	20
1,2,4-Trichlorobenzene	5.00	5.81	5.52	116	110	57.0-137			5.12	20
1,1,1-Trichloroethane	5.00	5.53	5.68	111	114	73.0-124			2.68	20
1,1,2-Trichloroethane	5.00	5.03	4.99	101	99.8	80.0-120			0.798	20
Trichloroethene	5.00	4.89	5.10	97.8	102	78.0-124			4.20	20
Trichlorofluoromethane	5.00	5.47	5.48	109	110	59.0-147			0.183	20
1,2,3-Trichloropropane	5.00	4.98	4.57	99.6	91.4	73.0-130			8.59	20
1,2,3-Trimethylbenzene	5.00	4.78	4.85	95.6	97.0	77.0-120			1.45	20
1,2,4-Trimethylbenzene	5.00	4.73	4.89	94.6	97.8	76.0-121			3.33	20
1,3,5-Trimethylbenzene	5.00	4.80	5.14	96.0	103	76.0-122			6.84	20
Vinyl chloride	5.00	3.94	4.04	78.8	80.8	67.0-131			2.51	20
Xylenes, Total	15.0	13.7	13.4	91.3	89.3	79.0-123			2.21	20
(S) Toluene-d8				*104*	*104*	*80.0-120*				
(S) 4-Bromofluorobenzene				*98.6*	*93.1*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*99.4*	*100*	*70.0-130*				

Method Blank (MB)

(MB) R3736332-2 12/02/21 09:40

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		11.3	50.0
Acrolein	U		2.54	50.0
Acrylonitrile	U		0.671	10.0
Benzene	U		0.0941	1.00
Bromobenzene	U		0.118	1.00
Bromodichloromethane	U		0.136	1.00
Bromoform	U		0.129	1.00
Bromomethane	U		0.605	5.00
n-Butylbenzene	U		0.157	1.00
sec-Butylbenzene	U		0.125	1.00
tert-Butylbenzene	U		0.127	1.00
Carbon tetrachloride	U		0.128	1.00
Chlorobenzene	U		0.116	1.00
Chlorodibromomethane	U		0.140	1.00
Chloroethane	U		0.192	5.00
Chloroform	U		0.111	5.00
Chloromethane	U		0.960	2.50
2-Chlorotoluene	U		0.106	1.00
4-Chlorotoluene	U		0.114	1.00
1,2-Dibromo-3-Chloropropane	U		0.276	5.00
1,2-Dibromoethane	U		0.126	1.00
Dibromomethane	U		0.122	1.00
1,2-Dichlorobenzene	U		0.107	1.00
1,3-Dichlorobenzene	U		0.110	1.00
1,4-Dichlorobenzene	U		0.120	1.00
Dichlorodifluoromethane	U		0.374	5.00
1,1-Dichloroethane	U		0.100	1.00
1,2-Dichloroethane	U		0.0819	1.00
1,1-Dichloroethene	U		0.188	1.00
cis-1,2-Dichloroethene	U		0.126	1.00
trans-1,2-Dichloroethene	U		0.149	1.00
1,2-Dichloropropane	U		0.149	1.00
1,1-Dichloropropene	U		0.142	1.00
1,3-Dichloropropane	U		0.110	1.00
cis-1,3-Dichloropropene	U		0.111	1.00
trans-1,3-Dichloropropene	U		0.118	1.00
2,2-Dichloropropane	U		0.161	1.00
Di-isopropyl ether	U		0.105	1.00
Ethylbenzene	U		0.137	1.00
Hexachloro-1,3-butadiene	U		0.337	1.00

Method Blank (MB)

(MB) R3736332-2 12/02/21 09:40

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Isopropylbenzene	U		0.105	1.00
p-Isopropyltoluene	U		0.120	1.00
2-Butanone (MEK)	U		1.19	10.0
Methylene Chloride	U		0.430	5.00
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0
Methyl tert-butyl ether	U		0.101	1.00
Naphthalene	U		1.00	5.00
n-Propylbenzene	U		0.0993	1.00
Styrene	U		0.118	1.00
1,1,1,2-Tetrachloroethane	U		0.147	1.00
1,1,2,2-Tetrachloroethane	U		0.133	1.00
Tetrachloroethene	U		0.300	1.00
Toluene	U		0.278	1.00
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.481	1.00
1,1,1-Trichloroethane	U		0.149	1.00
1,1,2-Trichloroethane	U		0.158	1.00
Trichloroethene	U		0.190	1.00
Trichlorofluoromethane	U		0.160	5.00
1,2,3-Trichloropropane	U		0.237	2.50
1,2,3-Trimethylbenzene	U		0.104	1.00
1,2,4-Trimethylbenzene	U		0.322	1.00
1,3,5-Trimethylbenzene	U		0.104	1.00
Vinyl chloride	U		0.234	1.00
Xylenes, Total	U		0.174	3.00
(S) Toluene-d8	*104*			*80.0-120*
(S) 4-Bromofluorobenzene	*110*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*84.9*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3736332-1 12/02/21 09:00

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	25.0	15.5	62.0	19.0-160	
Acrolein	25.0	32.5	130	10.0-160	
Acrylonitrile	25.0	22.1	88.4	55.0-149	
Benzene	5.00	5.45	109	70.0-123	

Laboratory Control Sample (LCS)

(LCS) R3736332-1 12/02/21 09:00

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromobenzene	5.00	4.60	92.0	73.0-121	
Bromodichloromethane	5.00	5.13	103	75.0-120	
Bromoform	5.00	4.74	94.8	68.0-132	
Bromomethane	5.00	4.94	98.8	10.0-160	
n-Butylbenzene	5.00	4.73	94.6	73.0-125	
sec-Butylbenzene	5.00	5.77	115	75.0-125	
tert-Butylbenzene	5.00	5.93	119	76.0-124	
Carbon tetrachloride	5.00	6.35	127	68.0-126	J4
Chlorobenzene	5.00	5.79	116	80.0-121	
Chlorodibromomethane	5.00	4.94	98.8	77.0-125	
Chloroethane	5.00	4.66	93.2	47.0-150	
Chloroform	5.00	5.70	114	73.0-120	
Chloromethane	5.00	4.21	84.2	41.0-142	
2-Chlorotoluene	5.00	5.08	102	76.0-123	
4-Chlorotoluene	5.00	4.98	99.6	75.0-122	
1,2-Dibromo-3-Chloropropane	5.00	3.98	79.6	58.0-134	
1,2-Dibromoethane	5.00	5.30	106	80.0-122	
Dibromomethane	5.00	4.96	99.2	80.0-120	
1,2-Dichlorobenzene	5.00	5.81	116	79.0-121	
1,3-Dichlorobenzene	5.00	5.11	102	79.0-120	
1,4-Dichlorobenzene	5.00	6.00	120	79.0-120	
Dichlorodifluoromethane	5.00	5.68	114	51.0-149	
1,1-Dichloroethane	5.00	5.86	117	70.0-126	
1,2-Dichloroethane	5.00	5.40	108	70.0-128	
1,1-Dichloroethene	5.00	6.14	123	71.0-124	
cis-1,2-Dichloroethene	5.00	5.80	116	73.0-120	
trans-1,2-Dichloroethene	5.00	6.10	122	73.0-120	J4
1,2-Dichloropropane	5.00	5.78	116	77.0-125	
1,1-Dichloropropene	5.00	6.06	121	74.0-126	
1,3-Dichloropropane	5.00	4.83	96.6	80.0-120	
cis-1,3-Dichloropropene	5.00	4.74	94.8	80.0-123	
trans-1,3-Dichloropropene	5.00	4.36	87.2	78.0-124	
2,2-Dichloropropane	5.00	5.29	106	58.0-130	
Di-isopropyl ether	5.00	5.50	110	58.0-138	
Ethylbenzene	5.00	5.93	119	79.0-123	
Hexachloro-1,3-butadiene	5.00	6.27	125	54.0-138	
Isopropylbenzene	5.00	5.94	119	76.0-127	
p-Isopropyltoluene	5.00	5.64	113	76.0-125	
2-Butanone (MEK)	25.0	16.3	65.2	44.0-160	
Methylene Chloride	5.00	5.24	105	67.0-120	

Laboratory Control Sample (LCS)

(LCS) R3736332-1 12/02/21 09:00

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
4-Methyl-2-pentanone (MIBK)	25.0	24.1	96.4	68.0-142	
Methyl tert-butyl ether	5.00	5.28	106	68.0-125	
Naphthalene	5.00	5.66	113	54.0-135	
n-Propylbenzene	5.00	5.22	104	77.0-124	
Styrene	5.00	5.18	104	73.0-130	
1,1,1,2-Tetrachloroethane	5.00	5.77	115	75.0-125	
1,1,2,2-Tetrachloroethane	5.00	4.30	86.0	65.0-130	
Tetrachloroethene	5.00	6.35	127	72.0-132	
Toluene	5.00	5.60	112	79.0-120	
1,1,2-Trichlorotrifluoroethane	5.00	6.07	121	69.0-132	
1,2,3-Trichlorobenzene	5.00	6.36	127	50.0-138	
1,2,4-Trichlorobenzene	5.00	5.74	115	57.0-137	
1,1,1-Trichloroethane	5.00	5.87	117	73.0-124	
1,1,2-Trichloroethane	5.00	5.21	104	80.0-120	
Trichloroethene	5.00	6.30	126	78.0-124	J4
Trichlorofluoromethane	5.00	6.58	132	59.0-147	
1,2,3-Trichloropropane	5.00	5.29	106	73.0-130	
1,2,3-Trimethylbenzene	5.00	6.66	133	77.0-120	J4
1,2,4-Trimethylbenzene	5.00	5.61	112	76.0-121	
1,3,5-Trimethylbenzene	5.00	5.67	113	76.0-122	
Vinyl chloride	5.00	6.36	127	67.0-131	
Xylenes, Total	15.0	17.8	119	79.0-123	
(S) Toluene-d8			*96.8*	*80.0-120*	
(S) 4-Bromofluorobenzene			*99.3*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*84.3*	*70.0-130*	

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

APEX

CHAIN OF CUSTODY RECORD

L1435508

Client Name: Apex
Address: 3015 SW First Ave
City/State/Zip: Portland, OR 97201

Telephone Number: 503.924.4704
Fax No.: 503.943.6357

Project Manager: Mike Stevens
Project Name: Oregon Lithoprint
Project Number: 2442-00
Sampler Name: Franklin Sullivan

Analytical Lab: Pace/ESC
Report To: mstevens@apexcos.com, kelsi.evans@apexcos.com
Page: 1 of 1

J045

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Ice	HNO_3 (Red Label)	HCl (Blue Label)	NaOH (Orange Label)	H_2SO_4 Plastic (Yellow Label)	H_2SO_4 Glass(Yellow Label)	None (Black Label)	Other (Specify)	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify):	Analyze For: NWTPH-Gx	VOCs	RUSH TAT (Pre-Schedule)	Standard TAT	Fax Results	Send QC with report
MW-4	11/22/21	1357	4	x			x		x						x						x	x				-01
MW-5	11/22/21	1448	4	x			x		x						x						x	x				-02
MW-6	11/22/21	1245	4	x			x		x						x						x	x				-03

Special Instructions:

Method of Shipment:

Laboratory Comments:
Temperature Upon Receipt: 4.0
VOCs Free of Headspace? Y N

Relinquished by: Name/Company	Date	Time	Received by: Name/Company	Date	Time
Franklin Sullivan/Apex	11-23-21	1321		11/24/21	0915
Relinquished by: Name/Company	Date	Time	Received by: Name/Company	Date	Time
Relinquished by: Name/Company	Date	Time	Received by: Name/Company	Date	Time
Relinquished by: Name/Company	Date	Time	Received by: Name/Company	Date	Time

Sample Receipt Checklist

COC Seal Present/Intact:	Y N	If Applicable	
COC Signed/Accurate:	✓ Y N	VOA Zero Headspace:	✓ Y N
Bottles arrive intact:	✓ Y N	Pres.Correct/Check:	Y N
Correct bottles used:	✓ Y N		
Sufficient volume sent:	✓ Y N		
RAD Screen <0.5 mR/hr:	✓ Y N		

ANALYTICAL REPORT

May 19, 2022

Apex Companies, LLC - Portland, OR

Sample Delivery Group:	L1492886
Samples Received:	05/12/2022
Project Number:	
Description:	Oregon Lithoprint

Report To: Mike Stevens
3015 SW First Avenue
Portland, OR 97201-4707

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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AA-1 L1492886-01 Air

Collected by: Robert S | Collected date/time: 05/10/22 09:19 | Received date/time: 05/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1863384	1	05/13/22 22:05	05/13/22 22:05	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1863863	1	05/14/22 12:47	05/14/22 12:47	FKG	Mt. Juliet, TN

AA-3 L1492886-03 Air

Collected by: Robert S | Collected date/time: 05/10/22 10:03 | Received date/time: 05/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1863384	1	05/13/22 22:46	05/13/22 22:46	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1863863	1	05/14/22 13:30	05/14/22 13:30	FKG	Mt. Juliet, TN

AA-4 L1492886-04 Air

Collected by: Robert S | Collected date/time: 05/10/22 09:01 | Received date/time: 05/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1863384	1	05/13/22 23:26	05/13/22 23:26	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1863863	1	05/14/22 14:14	05/14/22 14:14	FKG	Mt. Juliet, TN

AA-5 L1492886-05 Air

Collected by: Robert S | Collected date/time: 05/10/22 08:59 | Received date/time: 05/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1863390	1	05/13/22 16:47	05/13/22 16:47	CEP	Mt. Juliet, TN

AA-6 L1492886-06 Air

Collected by: Robert S | Collected date/time: 05/10/22 09:17 | Received date/time: 05/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1863390	1	05/13/22 17:29	05/13/22 17:29	CEP	Mt. Juliet, TN

SB-1 L1492886-07 Air

Collected by: Robert S | Collected date/time: 05/09/22 10:15 | Received date/time: 05/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1863390	1	05/13/22 18:13	05/13/22 18:13	CEP	Mt. Juliet, TN

SB-2 L1492886-08 Air

Collected by: Robert S | Collected date/time: 05/09/22 10:56 | Received date/time: 05/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1864598	100	05/17/22 00:08	05/17/22 00:08	DAH	Mt. Juliet, TN

SB-4R L1492886-09 Air

Collected by: Robert S | Collected date/time: 05/09/22 13:46 | Received date/time: 05/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1864598	1	05/16/22 17:18	05/16/22 17:18	DAH	Mt. Juliet, TN

SB-5 L1492886-10 Air

Collected by: Robert S | Collected date/time: 05/09/22 13:44 | Received date/time: 05/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1864598	1	05/16/22 17:57	05/16/22 17:57	DAH	Mt. Juliet, TN

SB-6 L1492886-11 Air

Collected by: Robert S | Collected date/time: 05/09/22 14:33 | Received date/time: 05/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1863390	1	05/13/22 21:05	05/13/22 21:05	CEP	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1864598	50	05/17/22 00:45	05/17/22 00:45	DAH	Mt. Juliet, TN

SB-7 L1492886-12 Air

Collected by: Robert S | Collected date/time: 05/10/22 11:33 | Received date/time: 05/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1863390	80	05/13/22 21:46	05/13/22 21:46	CEP	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1864598	800	05/17/22 01:22	05/17/22 01:22	DAH	Mt. Juliet, TN

SB-10 L1492886-13 Air

Collected by: Robert S | Collected date/time: 05/10/22 11:33 | Received date/time: 05/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1863390	20	05/13/22 22:27	05/13/22 22:27	CEP	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1865699	200	05/18/22 13:34	05/18/22 13:34	DAH	Mt. Juliet, TN

SV-5 L1492886-14 Air

Collected by: Robert S | Collected date/time: 05/10/22 13:13 | Received date/time: 05/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1863390	1	05/13/22 23:10	05/13/22 23:10	CEP	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1864495	1	05/16/22 19:03	05/16/22 19:03	FKG	Mt. Juliet, TN

SV-6 L1492886-15 Air

Collected by: Robert S | Collected date/time: 05/10/22 13:23 | Received date/time: 05/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1863390	1	05/13/22 23:52	05/13/22 23:52	CEP	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1864495	1	05/16/22 19:44	05/16/22 19:44	FKG	Mt. Juliet, TN

SV-7 L1492886-16 Air

Collected by: Robert S | Collected date/time: 05/10/22 15:24 | Received date/time: 05/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1863390	1	05/14/22 00:36	05/14/22 00:36	CEP	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

SAMPLE SUMMARY

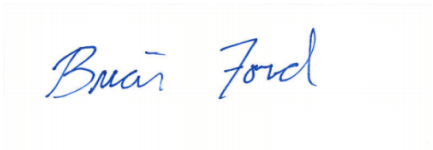
SV-8 L1492886-17 Air

Collected by: Robert S
Collected date/time: 05/10/22 13:36
Received date/time: 05/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1863390	1	05/14/22 01:22	05/14/22 01:22	CEP	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Brian Ford
Project Manager

Project Narrative

L1492886-02, AA-2: could not be analyzed due to insuficient sample volume. received at -19"Hg.

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	3.42	8.13		1	WG1863384
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1863384
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1863384
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1863384
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1863384
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1863384
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1863384
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1863384
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1863384
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1863384
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1863384
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1863384
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1863384
Chloromethane	74-87-3	50.50	0.200	0.413	0.611	1.26		1	WG1863384
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1863384
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1863384
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1863384
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1863384
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1863384
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1863384
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1863384
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1863384
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1863384
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1863384
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1863384
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1863384
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1863384
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1863384
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1863384
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1863384
Ethanol	64-17-5	46.10	1.25	2.36	20.5	38.7		1	WG1863384
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1863384
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1863384
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.248	1.39		1	WG1863384
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.367	1.82		1	WG1863863
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1863384
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1863384
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1863384
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1863384
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1863384
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1863384
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.353	1.23		1	WG1863384
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1863384
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1863384
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1863384
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1863384
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1863384
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1863384
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1863384
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1863384
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1863384
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1863384
Tetrachloroethylene	127-18-4	166	0.200	1.36	0.938	6.37		1	WG1863384
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1863384
Toluene	108-88-3	92.10	0.500	1.88	1.09	4.11		1	WG1863384
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1863384

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1863384
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1863384
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1863384
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1863384
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1863384
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1863384
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1863384
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1863384
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1863384
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1863384
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1863384
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*97.1*				WG1863384
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*96.5*				WG1863863

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	8.33	19.8		1	WG1863384
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1863384
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1863384
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1863384
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1863384
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1863384
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1863384
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1863384
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1863384
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1863384
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1863384
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1863384
Chloroform	67-66-3	119	0.200	0.973	0.263	1.28		1	WG1863384
Chloromethane	74-87-3	50.50	0.200	0.413	0.577	1.19		1	WG1863384
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1863384
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1863384
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1863384
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1863384
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1863384
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1863384
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1863384
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1863384
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1863384
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1863384
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1863384
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1863384
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1863384
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1863384
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1863384
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1863384
Ethanol	64-17-5	46.10	1.25	2.36	176	332	E	1	WG1863863
Ethylbenzene	100-41-4	106	0.200	0.867	0.217	0.941		1	WG1863384
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1863384
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.263	1.48		1	WG1863384
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.488	2.41		1	WG1863863
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1863384
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1863384
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1863384
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1863384
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1863384
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1863384
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1863384
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1863384
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1863384
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1863384
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1863384
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1863384
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1863384
2-Propanol	67-63-0	60.10	1.25	3.07	5.95	14.6		1	WG1863384
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1863384
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1863384
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1863384
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1863384
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1863384
Toluene	108-88-3	92.10	0.500	1.88	0.877	3.30		1	WG1863384
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1863384

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1863384
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1863384
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1863384
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1863384
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1863384
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1863384
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1863384
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1863384
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1863384
m&p-Xylene	1330-20-7	106	0.400	1.73	0.767	3.33		1	WG1863384
o-Xylene	95-47-6	106	0.200	0.867	0.259	1.12		1	WG1863384
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*97.7*				WG1863384
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*96.0*				WG1863863

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	1.38	3.28		1	WG1863384
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1863384
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1863384
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1863384
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1863384
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1863384
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1863384
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1863384
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1863384
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1863384
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1863384
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1863384
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1863384
Chloromethane	74-87-3	50.50	0.200	0.413	0.665	1.37		1	WG1863384
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1863384
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1863384
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1863384
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1863384
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1863384
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1863384
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1863384
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1863384
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1863384
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1863384
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1863384
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1863384
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1863384
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1863384
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1863384
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1863384
Ethanol	64-17-5	46.10	1.25	2.36	2.55	4.81		1	WG1863863
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1863384
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1863384
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.249	1.40		1	WG1863384
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.383	1.89		1	WG1863863
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1863384
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1863384
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1863384
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1863384
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1863384
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1863384
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1863384
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1863384
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1863384
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1863384
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1863384
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1863384
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1863384
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1863384
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1863384
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1863384
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1863384
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1863384
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1863384
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1863384
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1863384

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1863384
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1863384
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1863384
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1863384
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1863384
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1863384
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1863384
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1863384
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1863384
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1863384
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1863384
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*97.6*				WG1863384
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*97.8*				WG1863863

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	1.49	3.54		1	WG1863390
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1863390
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1863390
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1863390
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1863390
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1863390
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1863390
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1863390
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1863390
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1863390
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1863390
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1863390
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1863390
Chloromethane	74-87-3	50.50	0.200	0.413	0.724	1.50		1	WG1863390
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1863390
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1863390
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1863390
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1863390
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1863390
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1863390
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1863390
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1863390
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1863390
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1863390
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1863390
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1863390
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1863390
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1863390
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1863390
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1863390
Ethanol	64-17-5	46.10	1.25	2.36	ND	ND		1	WG1863390
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1863390
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1863390
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.248	1.39		1	WG1863390
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.361	1.79		1	WG1863390
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1863390
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1863390
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1863390
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1863390
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1863390
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1863390
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1863390
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1863390
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1863390
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1863390
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1863390
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1863390
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1863390
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1863390
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1863390
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1863390
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1863390
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1863390
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1863390
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1863390
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1863390

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1863390
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1863390
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1863390
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1863390
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1863390
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1863390
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1863390
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1863390
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1863390
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1863390
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1863390
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*95.9*				WG1863390

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	1.44	3.42		1	WG1863390
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1863390
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1863390
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1863390
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1863390
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1863390
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1863390
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1863390
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1863390
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1863390
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1863390
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1863390
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1863390
Chloromethane	74-87-3	50.50	0.200	0.413	0.602	1.24		1	WG1863390
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1863390
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1863390
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1863390
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1863390
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1863390
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1863390
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1863390
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1863390
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1863390
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1863390
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1863390
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1863390
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1863390
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1863390
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1863390
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1863390
Ethanol	64-17-5	46.10	1.25	2.36	19.1	36.0		1	WG1863390
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1863390
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1863390
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.239	1.34		1	WG1863390
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.378	1.87		1	WG1863390
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1863390
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1863390
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1863390
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1863390
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1863390
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1863390
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1863390
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1863390
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1863390
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1863390
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1863390
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1863390
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1863390
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1863390
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1863390
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1863390
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1863390
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1863390
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1863390
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1863390
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1863390

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1863390
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1863390
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1863390
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1863390
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1863390
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1863390
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1863390
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1863390
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1863390
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1863390
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1863390
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*95.5*				WG1863390

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	7.79	18.5		1	WG1863390
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1863390
Benzene	71-43-2	78.10	0.200	0.639	0.893	2.85		1	WG1863390
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1863390
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1863390
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1863390
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1863390
1,3-Butadiene	106-99-0	54.10	2.00	4.43	5.48	12.1		1	WG1863390
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.886	2.76		1	WG1863390
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1863390
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1863390
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1863390
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1863390
Chloromethane	74-87-3	50.50	0.200	0.413	0.458	0.946		1	WG1863390
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1863390
Cyclohexane	110-82-7	84.20	0.200	0.689	0.686	2.36		1	WG1863390
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1863390
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1863390
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1863390
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1863390
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1863390
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1863390
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1863390
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1863390
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1863390
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1863390
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1863390
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1863390
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1863390
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1863390
Ethanol	64-17-5	46.10	1.25	2.36	19.8	37.3		1	WG1863390
Ethylbenzene	100-41-4	106	0.200	0.867	0.376	1.63		1	WG1863390
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.237	1.16		1	WG1863390
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.252	1.42		1	WG1863390
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.361	1.79		1	WG1863390
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1863390
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1863390
Heptane	142-82-5	100	0.200	0.818	0.960	3.93		1	WG1863390
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1863390
n-Hexane	110-54-3	86.20	0.630	2.22	2.16	7.62		1	WG1863390
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1863390
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.514	1.78		1	WG1863390
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1863390
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	1.85	5.46		1	WG1863390
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1863390
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1863390
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1863390
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1863390
2-Propanol	67-63-0	60.10	1.25	3.07	4.33	10.6		1	WG1863390
Propene	115-07-1	42.10	1.25	2.15	72.7	125		1	WG1863390
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1863390
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1863390
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1863390
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1863390
Toluene	108-88-3	92.10	0.500	1.88	4.16	15.7		1	WG1863390
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1863390

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1863390
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1863390
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1863390
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1863390
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1863390
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	5.03	23.5		1	WG1863390
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1863390
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1863390
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1863390
m&p-Xylene	1330-20-7	106	0.400	1.73	1.07	4.64		1	WG1863390
o-Xylene	95-47-6	106	0.200	0.867	0.378	1.64		1	WG1863390
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*100*				WG1863390

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	125	297	628	1490		100	WG1864598
Allyl chloride	107-05-1	76.53	20.0	62.6	ND	ND		100	WG1864598
Benzene	71-43-2	78.10	20.0	63.9	ND	ND		100	WG1864598
Benzyl Chloride	100-44-7	127	20.0	104	ND	ND		100	WG1864598
Bromodichloromethane	75-27-4	164	20.0	134	ND	ND		100	WG1864598
Bromoform	75-25-2	253	60.0	621	ND	ND		100	WG1864598
Bromomethane	74-83-9	94.90	20.0	77.6	ND	ND		100	WG1864598
1,3-Butadiene	106-99-0	54.10	200	443	ND	ND		100	WG1864598
Carbon disulfide	75-15-0	76.10	20.0	62.2	ND	ND		100	WG1864598
Carbon tetrachloride	56-23-5	154	20.0	126	ND	ND		100	WG1864598
Chlorobenzene	108-90-7	113	20.0	92.4	ND	ND		100	WG1864598
Chloroethane	75-00-3	64.50	20.0	52.8	ND	ND		100	WG1864598
Chloroform	67-66-3	119	20.0	97.3	ND	ND		100	WG1864598
Chloromethane	74-87-3	50.50	20.0	41.3	ND	ND		100	WG1864598
2-Chlorotoluene	95-49-8	126	20.0	103	ND	ND		100	WG1864598
Cyclohexane	110-82-7	84.20	20.0	68.9	1020	3510		100	WG1864598
Dibromochloromethane	124-48-1	208	20.0	170	ND	ND		100	WG1864598
1,2-Dibromoethane	106-93-4	188	20.0	154	ND	ND		100	WG1864598
1,2-Dichlorobenzene	95-50-1	147	20.0	120	ND	ND		100	WG1864598
1,3-Dichlorobenzene	541-73-1	147	20.0	120	ND	ND		100	WG1864598
1,4-Dichlorobenzene	106-46-7	147	20.0	120	ND	ND		100	WG1864598
1,2-Dichloroethane	107-06-2	99	20.0	81.0	ND	ND		100	WG1864598
1,1-Dichloroethane	75-34-3	98	20.0	80.2	ND	ND		100	WG1864598
1,1-Dichloroethene	75-35-4	96.90	20.0	79.3	ND	ND		100	WG1864598
cis-1,2-Dichloroethene	156-59-2	96.90	20.0	79.3	ND	ND		100	WG1864598
trans-1,2-Dichloroethene	156-60-5	96.90	20.0	79.3	ND	ND		100	WG1864598
1,2-Dichloropropane	78-87-5	113	20.0	92.4	ND	ND		100	WG1864598
cis-1,3-Dichloropropene	10061-01-5	111	20.0	90.8	ND	ND		100	WG1864598
trans-1,3-Dichloropropene	10061-02-6	111	20.0	90.8	ND	ND		100	WG1864598
1,4-Dioxane	123-91-1	88.10	20.0	72.1	ND	ND		100	WG1864598
Ethanol	64-17-5	46.10	125	236	322	607		100	WG1864598
Ethylbenzene	100-41-4	106	20.0	86.7	ND	ND		100	WG1864598
4-Ethyltoluene	622-96-8	120	20.0	98.2	ND	ND		100	WG1864598
Trichlorofluoromethane	75-69-4	137.40	20.0	112	ND	ND		100	WG1864598
Dichlorodifluoromethane	75-71-8	120.92	20.0	98.9	ND	ND		100	WG1864598
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	20.0	153	ND	ND		100	WG1864598
1,2-Dichlorotetrafluoroethane	76-14-2	171	20.0	140	ND	ND		100	WG1864598
Heptane	142-82-5	100	20.0	81.8	2430	9940		100	WG1864598
Hexachloro-1,3-butadiene	87-68-3	261	63.0	673	ND	ND		100	WG1864598
n-Hexane	110-54-3	86.20	63.0	222	2890	10200		100	WG1864598
Isopropylbenzene	98-82-8	120.20	20.0	98.3	20.3	99.8		100	WG1864598
Methylene Chloride	75-09-2	84.90	20.0	69.4	ND	ND		100	WG1864598
Methyl Butyl Ketone	591-78-6	100	125	511	ND	ND		100	WG1864598
2-Butanone (MEK)	78-93-3	72.10	125	369	ND	ND		100	WG1864598
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	125	512	ND	ND		100	WG1864598
Methyl methacrylate	80-62-6	100.12	20.0	81.9	ND	ND		100	WG1864598
MTBE	1634-04-4	88.10	20.0	72.1	ND	ND		100	WG1864598
Naphthalene	91-20-3	128	63.0	330	ND	ND		100	WG1864598
2-Propanol	67-63-0	60.10	125	307	2640	6490		100	WG1864598
Propene	115-07-1	42.10	125	215	ND	ND		100	WG1864598
Styrene	100-42-5	104	20.0	85.1	ND	ND		100	WG1864598
1,1,2,2-Tetrachloroethane	79-34-5	168	20.0	137	ND	ND		100	WG1864598
Tetrachloroethylene	127-18-4	166	20.0	136	ND	ND		100	WG1864598
Tetrahydrofuran	109-99-9	72.10	20.0	59.0	ND	ND		100	WG1864598
Toluene	108-88-3	92.10	50.0	188	ND	ND		100	WG1864598
1,2,4-Trichlorobenzene	120-82-1	181	63.0	466	ND	ND		100	WG1864598

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	20.0	109	ND	ND		100	WG1864598
1,1,2-Trichloroethane	79-00-5	133	20.0	109	ND	ND		100	WG1864598
Trichloroethylene	79-01-6	131	20.0	107	ND	ND		100	WG1864598
1,2,4-Trimethylbenzene	95-63-6	120	20.0	98.2	ND	ND		100	WG1864598
1,3,5-Trimethylbenzene	108-67-8	120	20.0	98.2	ND	ND		100	WG1864598
2,2,4-Trimethylpentane	540-84-1	114.22	20.0	93.4	1160	5420		100	WG1864598
Vinyl chloride	75-01-4	62.50	20.0	51.1	ND	ND		100	WG1864598
Vinyl Bromide	593-60-2	106.95	20.0	87.5	ND	ND		100	WG1864598
Vinyl acetate	108-05-4	86.10	20.0	70.4	ND	ND		100	WG1864598
m&p-Xylene	1330-20-7	106	40.0	173	ND	ND		100	WG1864598
o-Xylene	95-47-6	106	20.0	86.7	ND	ND		100	WG1864598
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*103*				WG1864598

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	10.3	24.5		1	WG1864598
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1864598
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1864598
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1864598
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1864598
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1864598
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1864598
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1864598
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1864598
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1864598
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1864598
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1864598
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1864598
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1864598
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1864598
Cyclohexane	110-82-7	84.20	0.200	0.689	9.21	31.7		1	WG1864598
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1864598
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1864598
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1864598
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	0.200	1.20		1	WG1864598
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1864598
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1864598
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1864598
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1864598
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1864598
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1864598
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1864598
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1864598
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1864598
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1864598
Ethanol	64-17-5	46.10	1.25	2.36	5.61	10.6		1	WG1864598
Ethylbenzene	100-41-4	106	0.200	0.867	0.256	1.11		1	WG1864598
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.215	1.06		1	WG1864598
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.435	2.44		1	WG1864598
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.552	2.73		1	WG1864598
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1864598
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1864598
Heptane	142-82-5	100	0.200	0.818	11.1	45.4		1	WG1864598
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1864598
n-Hexane	110-54-3	86.20	0.630	2.22	25.0	88.1		1	WG1864598
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1864598
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.704	2.44		1	WG1864598
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1864598
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1864598
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1864598
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1864598
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1864598
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1864598
2-Propanol	67-63-0	60.10	1.25	3.07	4.01	9.86		1	WG1864598
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1864598
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1864598
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1864598
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1864598
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1864598
Toluene	108-88-3	92.10	0.500	1.88	1.46	5.50		1	WG1864598
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1864598

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1864598
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1864598
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1864598
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.352	1.73		1	WG1864598
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1864598
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	4.12	19.2		1	WG1864598
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1864598
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1864598
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1864598
m&p-Xylene	1330-20-7	106	0.400	1.73	0.835	3.62		1	WG1864598
o-Xylene	95-47-6	106	0.200	0.867	0.325	1.41		1	WG1864598
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*99.6*				WG1864598

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	8.06	19.2		1	WG1864598
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1864598
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1864598
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1864598
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1864598
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1864598
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1864598
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1864598
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1864598
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1864598
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1864598
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1864598
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1864598
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1864598
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1864598
Cyclohexane	110-82-7	84.20	0.200	0.689	2.75	9.47		1	WG1864598
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1864598
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1864598
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1864598
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	0.211	1.27		1	WG1864598
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1864598
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1864598
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1864598
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1864598
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1864598
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1864598
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1864598
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1864598
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1864598
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1864598
Ethanol	64-17-5	46.10	1.25	2.36	12.0	22.6		1	WG1864598
Ethylbenzene	100-41-4	106	0.200	0.867	0.559	2.42		1	WG1864598
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1864598
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.359	2.02		1	WG1864598
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.559	2.76		1	WG1864598
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1864598
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1864598
Heptane	142-82-5	100	0.200	0.818	9.32	38.1		1	WG1864598
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1864598
n-Hexane	110-54-3	86.20	0.630	2.22	6.97	24.6		1	WG1864598
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1864598
Methylene Chloride	75-09-2	84.90	0.200	0.694	2.19	7.60		1	WG1864598
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1864598
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1864598
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1864598
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1864598
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1864598
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1864598
2-Propanol	67-63-0	60.10	1.25	3.07	3.90	9.59		1	WG1864598
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1864598
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1864598
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1864598
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1864598
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1864598
Toluene	108-88-3	92.10	0.500	1.88	5.20	19.6		1	WG1864598
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1864598

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1864598
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1864598
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1864598
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.321	1.58		1	WG1864598
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1864598
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	10.3	48.1		1	WG1864598
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1864598
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1864598
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1864598
m&p-Xylene	1330-20-7	106	0.400	1.73	1.63	7.07		1	WG1864598
o-Xylene	95-47-6	106	0.200	0.867	0.553	2.40		1	WG1864598
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*101*				WG1864598

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	15.0	35.6		1	WG1863390
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1863390
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1863390
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1863390
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1863390
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1863390
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1863390
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1863390
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1863390
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1863390
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1863390
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1863390
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1863390
Chloromethane	74-87-3	50.50	0.200	0.413	0.607	1.25		1	WG1863390
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1863390
Cyclohexane	110-82-7	84.20	10.0	34.4	441	1520		50	WG1864598
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1863390
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1863390
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1863390
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1863390
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1863390
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1863390
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1863390
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1863390
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1863390
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1863390
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1863390
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1863390
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1863390
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1863390
Ethanol	64-17-5	46.10	1.25	2.36	12.6	23.8		1	WG1863390
Ethylbenzene	100-41-4	106	0.200	0.867	4.90	21.2		1	WG1863390
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.220	1.08		1	WG1863390
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.296	1.66		1	WG1863390
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.320	1.58		1	WG1863390
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1863390
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1863390
Heptane	142-82-5	100	10.0	40.9	361	1480		50	WG1864598
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1863390
n-Hexane	110-54-3	86.20	31.5	111	3000	10600		50	WG1864598
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1863390
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1863390
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1863390
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	1.60	4.72		1	WG1863390
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1863390
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1863390
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1863390
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1863390
2-Propanol	67-63-0	60.10	1.25	3.07	3.19	7.84		1	WG1863390
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1863390
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1863390
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1863390
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1863390
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1863390
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1863390
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1863390

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1863390
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1863390
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1863390
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.515	2.53		1	WG1863390
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1863390
2,2,4-Trimethylpentane	540-84-1	114.22	10.0	46.7	97.1	454		50	WG1864598
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1863390
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1863390
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1863390
m&p-Xylene	1330-20-7	106	0.400	1.73	1.01	4.38		1	WG1863390
o-Xylene	95-47-6	106	0.200	0.867	0.354	1.53		1	WG1863390
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*104*				WG1863390
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*101*				WG1864598

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	100	238	ND	ND		80	WG1863390
Allyl chloride	107-05-1	76.53	16.0	50.1	ND	ND		80	WG1863390
Benzene	71-43-2	78.10	16.0	51.1	ND	ND		80	WG1863390
Benzyl Chloride	100-44-7	127	16.0	83.1	ND	ND		80	WG1863390
Bromodichloromethane	75-27-4	164	16.0	107	ND	ND		80	WG1863390
Bromoform	75-25-2	253	48.0	497	ND	ND		80	WG1863390
Bromomethane	74-83-9	94.90	16.0	62.1	ND	ND		80	WG1863390
1,3-Butadiene	106-99-0	54.10	160	354	ND	ND		80	WG1863390
Carbon disulfide	75-15-0	76.10	16.0	49.8	ND	ND		80	WG1863390
Carbon tetrachloride	56-23-5	154	16.0	101	ND	ND		80	WG1863390
Chlorobenzene	108-90-7	113	16.0	73.9	ND	ND		80	WG1863390
Chloroethane	75-00-3	64.50	16.0	42.2	ND	ND		80	WG1863390
Chloroform	67-66-3	119	16.0	77.9	ND	ND		80	WG1863390
Chloromethane	74-87-3	50.50	16.0	33.0	ND	ND		80	WG1863390
2-Chlorotoluene	95-49-8	126	16.0	82.5	ND	ND		80	WG1863390
Cyclohexane	110-82-7	84.20	16.0	55.1	4830	16600		80	WG1863390
Dibromochloromethane	124-48-1	208	16.0	136	ND	ND		80	WG1863390
1,2-Dibromoethane	106-93-4	188	16.0	123	ND	ND		80	WG1863390
1,2-Dichlorobenzene	95-50-1	147	16.0	96.2	ND	ND		80	WG1863390
1,3-Dichlorobenzene	541-73-1	147	16.0	96.2	ND	ND		80	WG1863390
1,4-Dichlorobenzene	106-46-7	147	16.0	96.2	ND	ND		80	WG1863390
1,2-Dichloroethane	107-06-2	99	16.0	64.8	ND	ND		80	WG1863390
1,1-Dichloroethane	75-34-3	98	16.0	64.1	ND	ND		80	WG1863390
1,1-Dichloroethene	75-35-4	96.90	16.0	63.4	ND	ND		80	WG1863390
cis-1,2-Dichloroethene	156-59-2	96.90	16.0	63.4	ND	ND		80	WG1863390
trans-1,2-Dichloroethene	156-60-5	96.90	16.0	63.4	ND	ND		80	WG1863390
1,2-Dichloropropane	78-87-5	113	16.0	73.9	ND	ND		80	WG1863390
cis-1,3-Dichloropropene	10061-01-5	111	16.0	72.6	ND	ND		80	WG1863390
trans-1,3-Dichloropropene	10061-02-6	111	16.0	72.6	ND	ND		80	WG1863390
1,4-Dioxane	123-91-1	88.10	16.0	57.7	ND	ND		80	WG1863390
Ethanol	64-17-5	46.10	100	189	805	1520		80	WG1863390
Ethylbenzene	100-41-4	106	16.0	69.4	107	464		80	WG1863390
4-Ethyltoluene	622-96-8	120	16.0	78.5	ND	ND		80	WG1863390
Trichlorofluoromethane	75-69-4	137.40	16.0	89.9	ND	ND		80	WG1863390
Dichlorodifluoromethane	75-71-8	120.92	16.0	79.1	ND	ND		80	WG1863390
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	16.0	123	ND	ND		80	WG1863390
1,2-Dichlorotetrafluoroethane	76-14-2	171	16.0	112	ND	ND		80	WG1863390
Heptane	142-82-5	100	160	654	11100	45400		800	WG1864598
Hexachloro-1,3-butadiene	87-68-3	261	50.4	538	ND	ND		80	WG1863390
n-Hexane	110-54-3	86.20	504	1780	44800	158000		800	WG1864598
Isopropylbenzene	98-82-8	120.20	16.0	78.7	24.7	121		80	WG1863390
Methylene Chloride	75-09-2	84.90	16.0	55.6	ND	ND		80	WG1863390
Methyl Butyl Ketone	591-78-6	100	100	409	ND	ND		80	WG1863390
2-Butanone (MEK)	78-93-3	72.10	100	295	ND	ND		80	WG1863390
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	100	409	ND	ND		80	WG1863390
Methyl methacrylate	80-62-6	100.12	16.0	65.5	ND	ND		80	WG1863390
MTBE	1634-04-4	88.10	16.0	57.7	ND	ND		80	WG1863390
Naphthalene	91-20-3	128	50.4	264	ND	ND		80	WG1863390
2-Propanol	67-63-0	60.10	100	246	8150	20000	E	80	WG1863390
Propene	115-07-1	42.10	100	172	ND	ND		80	WG1863390
Styrene	100-42-5	104	16.0	68.1	ND	ND		80	WG1863390
1,1,2,2-Tetrachloroethane	79-34-5	168	16.0	110	ND	ND		80	WG1863390
Tetrachloroethylene	127-18-4	166	16.0	109	ND	ND		80	WG1863390
Tetrahydrofuran	109-99-9	72.10	16.0	47.2	ND	ND		80	WG1863390
Toluene	108-88-3	92.10	40.0	151	ND	ND		80	WG1863390
1,2,4-Trichlorobenzene	120-82-1	181	50.4	373	ND	ND		80	WG1863390

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	16.0	87.0	ND	ND		80	WG1863390
1,1,2-Trichloroethane	79-00-5	133	16.0	87.0	ND	ND		80	WG1863390
Trichloroethylene	79-01-6	131	16.0	85.7	ND	ND		80	WG1863390
1,2,4-Trimethylbenzene	95-63-6	120	16.0	78.5	ND	ND		80	WG1863390
1,3,5-Trimethylbenzene	108-67-8	120	16.0	78.5	ND	ND		80	WG1863390
2,2,4-Trimethylpentane	540-84-1	114.22	16.0	74.7	6530	30500		80	WG1863390
Vinyl chloride	75-01-4	62.50	16.0	40.9	ND	ND		80	WG1863390
Vinyl Bromide	593-60-2	106.95	16.0	70.0	ND	ND		80	WG1863390
Vinyl acetate	108-05-4	86.10	16.0	56.3	ND	ND		80	WG1863390
m&p-Xylene	1330-20-7	106	32.0	139	ND	ND		80	WG1863390
o-Xylene	95-47-6	106	16.0	69.4	ND	ND		80	WG1863390
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*100*				WG1863390
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*101*				WG1864598

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	25.0	59.4	ND	ND		20	WG1863390
Allyl chloride	107-05-1	76.53	4.00	12.5	ND	ND		20	WG1863390
Benzene	71-43-2	78.10	4.00	12.8	ND	ND		20	WG1863390
Benzyl Chloride	100-44-7	127	4.00	20.8	ND	ND		20	WG1863390
Bromodichloromethane	75-27-4	164	4.00	26.8	ND	ND		20	WG1863390
Bromoform	75-25-2	253	12.0	124	ND	ND		20	WG1863390
Bromomethane	74-83-9	94.90	4.00	15.5	ND	ND		20	WG1863390
1,3-Butadiene	106-99-0	54.10	40.0	88.5	ND	ND		20	WG1863390
Carbon disulfide	75-15-0	76.10	4.00	12.4	ND	ND		20	WG1863390
Carbon tetrachloride	56-23-5	154	4.00	25.2	ND	ND		20	WG1863390
Chlorobenzene	108-90-7	113	4.00	18.5	ND	ND		20	WG1863390
Chloroethane	75-00-3	64.50	4.00	10.6	ND	ND		20	WG1863390
Chloroform	67-66-3	119	4.00	19.5	ND	ND		20	WG1863390
Chloromethane	74-87-3	50.50	4.00	8.26	ND	ND		20	WG1863390
2-Chlorotoluene	95-49-8	126	4.00	20.6	ND	ND		20	WG1863390
Cyclohexane	110-82-7	84.20	40.0	138	1490	5130		200	WG1865699
Dibromochloromethane	124-48-1	208	4.00	34.0	ND	ND		20	WG1863390
1,2-Dibromoethane	106-93-4	188	4.00	30.8	ND	ND		20	WG1863390
1,2-Dichlorobenzene	95-50-1	147	4.00	24.0	ND	ND		20	WG1863390
1,3-Dichlorobenzene	541-73-1	147	4.00	24.0	ND	ND		20	WG1863390
1,4-Dichlorobenzene	106-46-7	147	4.00	24.0	ND	ND		20	WG1863390
1,2-Dichloroethane	107-06-2	99	4.00	16.2	ND	ND		20	WG1863390
1,1-Dichloroethane	75-34-3	98	4.00	16.0	ND	ND		20	WG1863390
1,1-Dichloroethene	75-35-4	96.90	4.00	15.9	ND	ND		20	WG1863390
cis-1,2-Dichloroethene	156-59-2	96.90	4.00	15.9	ND	ND		20	WG1863390
trans-1,2-Dichloroethene	156-60-5	96.90	4.00	15.9	ND	ND		20	WG1863390
1,2-Dichloropropane	78-87-5	113	4.00	18.5	ND	ND		20	WG1863390
cis-1,3-Dichloropropene	10061-01-5	111	4.00	18.2	ND	ND		20	WG1863390
trans-1,3-Dichloropropene	10061-02-6	111	4.00	18.2	ND	ND		20	WG1863390
1,4-Dioxane	123-91-1	88.10	4.00	14.4	ND	ND		20	WG1863390
Ethanol	64-17-5	46.10	25.0	47.1	ND	ND		20	WG1863390
Ethylbenzene	100-41-4	106	4.00	17.3	338	1470		20	WG1863390
4-Ethyltoluene	622-96-8	120	4.00	19.6	28.3	139		20	WG1863390
Trichlorofluoromethane	75-69-4	137.40	4.00	22.5	ND	ND		20	WG1863390
Dichlorodifluoromethane	75-71-8	120.92	4.00	19.8	ND	ND		20	WG1863390
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	4.00	30.7	ND	ND		20	WG1863390
1,2-Dichlorotetrafluoroethane	76-14-2	171	4.00	28.0	ND	ND		20	WG1863390
Heptane	142-82-5	100	40.0	164	2580	10600		200	WG1865699
Hexachloro-1,3-butadiene	87-68-3	261	12.6	135	ND	ND		20	WG1863390
n-Hexane	110-54-3	86.20	126	444	4460	15700		200	WG1865699
Isopropylbenzene	98-82-8	120.20	4.00	19.7	22.6	111		20	WG1863390
Methylene Chloride	75-09-2	84.90	4.00	13.9	ND	ND		20	WG1863390
Methyl Butyl Ketone	591-78-6	100	25.0	102	ND	ND		20	WG1863390
2-Butanone (MEK)	78-93-3	72.10	25.0	73.7	ND	ND		20	WG1863390
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	25.0	102	ND	ND		20	WG1863390
Methyl methacrylate	80-62-6	100.12	4.00	16.4	ND	ND		20	WG1863390
MTBE	1634-04-4	88.10	4.00	14.4	ND	ND		20	WG1863390
Naphthalene	91-20-3	128	12.6	66.0	ND	ND		20	WG1863390
2-Propanol	67-63-0	60.10	25.0	61.5	ND	ND		20	WG1863390
Propene	115-07-1	42.10	25.0	43.0	42.5	73.2	B	20	WG1863390
Styrene	100-42-5	104	4.00	17.0	ND	ND		20	WG1863390
1,1,2,2-Tetrachloroethane	79-34-5	168	4.00	27.5	ND	ND		20	WG1863390
Tetrachloroethylene	127-18-4	166	4.00	27.2	ND	ND		20	WG1863390
Tetrahydrofuran	109-99-9	72.10	4.00	11.8	ND	ND		20	WG1863390
Toluene	108-88-3	92.10	10.0	37.7	ND	ND		20	WG1863390
1,2,4-Trichlorobenzene	120-82-1	181	12.6	93.3	ND	ND		20	WG1863390

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	4.00	21.8	ND	ND		20	WG1863390
1,1,2-Trichloroethane	79-00-5	133	4.00	21.8	ND	ND		20	WG1863390
Trichloroethylene	79-01-6	131	4.00	21.4	ND	ND		20	WG1863390
1,2,4-Trimethylbenzene	95-63-6	120	4.00	19.6	50.8	249		20	WG1863390
1,3,5-Trimethylbenzene	108-67-8	120	4.00	19.6	19.3	94.7		20	WG1863390
2,2,4-Trimethylpentane	540-84-1	114.22	40.0	187	1720	8040		200	WG1865699
Vinyl chloride	75-01-4	62.50	4.00	10.2	ND	ND		20	WG1863390
Vinyl Bromide	593-60-2	106.95	4.00	17.5	ND	ND		20	WG1863390
Vinyl acetate	108-05-4	86.10	4.00	14.1	ND	ND		20	WG1863390
m&p-Xylene	1330-20-7	106	8.00	34.7	220	954		20	WG1863390
o-Xylene	95-47-6	106	4.00	17.3	ND	ND		20	WG1863390
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*103*				WG1863390
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*95.5*				WG1865699

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	2.03	4.82		1	WG1863390
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1863390
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1863390
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1863390
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1863390
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1863390
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1863390
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1863390
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1863390
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1863390
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1863390
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1863390
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1863390
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1863390
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1863390
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1864495
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1863390
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1863390
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1863390
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1863390
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1863390
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1863390
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1863390
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1863390
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	0.271	1.07		1	WG1863390
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1863390
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1863390
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1863390
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1863390
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1863390
Ethanol	64-17-5	46.10	1.25	2.36	6.45	12.2		1	WG1863390
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1863390
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1863390
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.233	1.31		1	WG1863390
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.343	1.70		1	WG1863390
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1863390
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1863390
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1864495
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1863390
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1864495
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1863390
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1863390
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1863390
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1863390
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1863390
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1863390
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1863390
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1863390
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1863390
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1863390
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1863390
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1863390
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1863390
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1863390
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1863390
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1863390

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1863390
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1863390
Trichloroethylene	79-01-6	131	0.200	1.07	3.68	19.7		1	WG1863390
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.262	1.29		1	WG1863390
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1863390
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1863390
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1863390
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1863390
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1863390
m&p-Xylene	1330-20-7	106	0.400	1.73	0.422	1.83		1	WG1863390
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1863390
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*101*				WG1863390
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*97.1*				WG1864495

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	3.48	8.27		1	WG1863390
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1863390
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1863390
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1863390
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1863390
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1863390
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1863390
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1863390
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1863390
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1863390
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1863390
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1863390
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1863390
Chloromethane	74-87-3	50.50	0.200	0.413	0.464	0.958		1	WG1863390
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1863390
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1864495
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1863390
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1863390
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1863390
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	0.302	1.82		1	WG1863390
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1863390
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1863390
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1863390
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1863390
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1863390
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1863390
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1863390
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1863390
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1863390
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1863390
Ethanol	64-17-5	46.10	1.25	2.36	6.51	12.3		1	WG1863390
Ethylbenzene	100-41-4	106	0.200	0.867	0.326	1.41		1	WG1863390
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.221	1.08		1	WG1863390
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.250	1.40		1	WG1863390
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.426	2.11		1	WG1863390
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1863390
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1863390
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1864495
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1863390
n-Hexane	110-54-3	86.20	0.630	2.22	0.703	2.48		1	WG1864495
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1863390
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1863390
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1863390
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	2.72	8.02		1	WG1863390
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1863390
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1863390
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1863390
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1863390
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1863390
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1863390
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1863390
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1863390
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1863390
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1863390
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1863390
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1863390

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1863390
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1863390
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1863390
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.316	1.55		1	WG1863390
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1863390
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1863390
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1863390
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1863390
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1863390
m&p-Xylene	1330-20-7	106	0.400	1.73	1.17	5.07		1	WG1863390
o-Xylene	95-47-6	106	0.200	0.867	0.493	2.14		1	WG1863390
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*103*				WG1863390
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*97.1*				WG1864495

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	8.86	21.1		1	WG1863390
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1863390
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1863390
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1863390
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1863390
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1863390
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1863390
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1863390
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1863390
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1863390
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1863390
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1863390
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1863390
Chloromethane	74-87-3	50.50	0.200	0.413	0.619	1.28		1	WG1863390
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1863390
Cyclohexane	110-82-7	84.20	0.200	0.689	0.303	1.04		1	WG1863390
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1863390
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1863390
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1863390
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1863390
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1863390
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1863390
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1863390
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1863390
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1863390
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1863390
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1863390
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1863390
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1863390
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1863390
Ethanol	64-17-5	46.10	1.25	2.36	50.9	96.0		1	WG1863390
Ethylbenzene	100-41-4	106	0.200	0.867	0.349	1.51		1	WG1863390
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.282	1.38		1	WG1863390
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.228	1.28		1	WG1863390
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.421	2.08		1	WG1863390
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1863390
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1863390
Heptane	142-82-5	100	0.200	0.818	0.218	0.892		1	WG1863390
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1863390
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1863390
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1863390
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.303	1.05		1	WG1863390
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1863390
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	3.30	9.73		1	WG1863390
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1863390
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1863390
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1863390
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1863390
2-Propanol	67-63-0	60.10	1.25	3.07	1.33	3.27		1	WG1863390
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1863390
Styrene	100-42-5	104	0.200	0.851	0.229	0.974		1	WG1863390
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1863390
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1863390
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1863390
Toluene	108-88-3	92.10	0.500	1.88	2.31	8.70		1	WG1863390
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1863390

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1863390
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1863390
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1863390
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.389	1.91		1	WG1863390
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1863390
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	0.273	1.28		1	WG1863390
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1863390
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1863390
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1863390
m&p-Xylene	1330-20-7	106	0.400	1.73	1.30	5.64		1	WG1863390
o-Xylene	95-47-6	106	0.200	0.867	0.493	2.14		1	WG1863390
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*100*				WG1863390

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	1.74	4.13		1	WG1863390
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1863390
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1863390
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1863390
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1863390
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1863390
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1863390
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1863390
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1863390
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1863390
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1863390
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1863390
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1863390
Chloromethane	74-87-3	50.50	0.200	0.413	0.256	0.529		1	WG1863390
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1863390
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1863390
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1863390
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1863390
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1863390
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1863390
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1863390
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1863390
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1863390
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1863390
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1863390
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1863390
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1863390
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1863390
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1863390
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1863390
Ethanol	64-17-5	46.10	1.25	2.36	7.50	14.1		1	WG1863390
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1863390
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1863390
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.243	1.37		1	WG1863390
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.426	2.11		1	WG1863390
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1863390
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1863390
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1863390
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1863390
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1863390
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1863390
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1863390
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1863390
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1863390
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1863390
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1863390
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1863390
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1863390
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1863390
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1863390
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1863390
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1863390
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1863390
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	2.47	7.28		1	WG1863390
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1863390
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1863390

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1863390
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1863390
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1863390
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1863390
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1863390
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1863390
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1863390
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1863390
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1863390
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1863390
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1863390
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.6*				WG1863390

Method Blank (MB)

(MB) R3791664-3 05/13/22 10:12

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethanol	U		0.265	1.25
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Heptane	U		0.104	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
n-Hexane	U		0.206	0.630
Isopropylbenzene	U		0.0777	0.200

Method Blank (MB)

(MB) R3791664-3 05/13/22 10:12

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.271	J	0.0932	1.25
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
(S) 1,4-Bromofluorobenzene	*93.5*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3791664-1 05/13/22 08:50 • (LCSD) R3791664-2 05/13/22 09:33

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	3.75	3.74	3.75	99.7	100	70.0-130			0.267	25
Allyl Chloride	3.75	3.89	3.87	104	103	70.0-130			0.515	25
Benzene	3.75	3.96	3.93	106	105	70.0-130			0.760	25
Benzyl Chloride	3.75	4.11	4.01	110	107	70.0-152			2.46	25
Bromodichloromethane	3.75	3.85	3.80	103	101	70.0-130			1.31	25
Bromoform	3.75	3.87	3.85	103	103	70.0-130			0.518	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3791664-1 05/13/22 08:50 • (LCSD) R3791664-2 05/13/22 09:33

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromomethane	3.75	3.43	3.28	91.5	87.5	70.0-130			4.47	25
1,3-Butadiene	3.75	3.52	3.42	93.9	91.2	70.0-130			2.88	25
Carbon disulfide	3.75	3.83	3.77	102	101	70.0-130			1.58	25
Carbon tetrachloride	3.75	3.84	3.83	102	102	70.0-130			0.261	25
Chlorobenzene	3.75	3.84	3.81	102	102	70.0-130			0.784	25
Chloroethane	3.75	3.85	3.84	103	102	70.0-130			0.260	25
Chloroform	3.75	3.86	3.84	103	102	70.0-130			0.519	25
Chloromethane	3.75	3.74	3.72	99.7	99.2	70.0-130			0.536	25
2-Chlorotoluene	3.75	3.98	3.95	106	105	70.0-130			0.757	25
Cyclohexane	3.75	4.03	4.01	107	107	70.0-130			0.498	25
Dibromochloromethane	3.75	3.85	3.84	103	102	70.0-130			0.260	25
1,2-Dibromoethane	3.75	3.84	3.81	102	102	70.0-130			0.784	25
1,2-Dichlorobenzene	3.75	4.03	4.00	107	107	70.0-130			0.747	25
1,3-Dichlorobenzene	3.75	4.16	4.16	111	111	70.0-130			0.000	25
1,4-Dichlorobenzene	3.75	4.36	4.34	116	116	70.0-130			0.460	25
1,2-Dichloroethane	3.75	3.76	3.74	100	99.7	70.0-130			0.533	25
1,1-Dichloroethane	3.75	3.89	3.86	104	103	70.0-130			0.774	25
1,1-Dichloroethene	3.75	3.86	3.84	103	102	70.0-130			0.519	25
cis-1,2-Dichloroethene	3.75	3.87	3.82	103	102	70.0-130			1.30	25
trans-1,2-Dichloroethene	3.75	3.78	3.76	101	100	70.0-130			0.531	25
1,2-Dichloropropane	3.75	3.91	3.89	104	104	70.0-130			0.513	25
cis-1,3-Dichloropropene	3.75	3.85	3.81	103	102	70.0-130			1.04	25
trans-1,3-Dichloropropene	3.75	3.92	3.85	105	103	70.0-130			1.80	25
1,4-Dioxane	3.75	3.73	3.68	99.5	98.1	70.0-140			1.35	25
Ethanol	3.75	3.79	3.72	101	99.2	55.0-148			1.86	25
Ethylbenzene	3.75	3.97	3.99	106	106	70.0-130			0.503	25
4-Ethyltoluene	3.75	4.07	4.04	109	108	70.0-130			0.740	25
Trichlorofluoromethane	3.75	3.90	3.86	104	103	70.0-130			1.03	25
1,1,2-Trichlorotrifluoroethane	3.75	3.93	3.89	105	104	70.0-130			1.02	25
1,2-Dichlorotetrafluoroethane	3.75	3.90	3.85	104	103	70.0-130			1.29	25
Heptane	3.75	3.93	3.91	105	104	70.0-130			0.510	25
Hexachloro-1,3-butadiene	3.75	3.93	3.93	105	105	70.0-151			0.000	25
n-Hexane	3.75	3.97	3.94	106	105	70.0-130			0.759	25
Isopropylbenzene	3.75	4.02	4.00	107	107	70.0-130			0.499	25
Methylene Chloride	3.75	3.55	3.55	94.7	94.7	70.0-130			0.000	25
Methyl Butyl Ketone	3.75	3.71	3.59	98.9	95.7	70.0-149			3.29	25
Methyl Ethyl Ketone	3.75	3.96	3.96	106	106	70.0-130			0.000	25
4-Methyl-2-pentanone (MIBK)	3.75	3.94	3.88	105	103	70.0-139			1.53	25
Methyl Methacrylate	3.75	3.98	3.91	106	104	70.0-130			1.77	25
MTBE	3.75	3.97	3.93	106	105	70.0-130			1.01	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3791664-1 05/13/22 08:50 • (LCSD) R3791664-2 05/13/22 09:33

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Naphthalene	3.75	3.98	3.81	106	102	70.0-159			4.36	25
2-Propanol	3.75	3.88	3.81	103	102	70.0-139			1.82	25
Propene	3.75	3.60	3.56	96.0	94.9	64.0-144			1.12	25
Styrene	3.75	4.04	4.02	108	107	70.0-130			0.496	25
1,1,2,2-Tetrachloroethane	3.75	3.77	3.76	101	100	70.0-130			0.266	25
Tetrachloroethylene	3.75	3.92	3.90	105	104	70.0-130			0.512	25
Tetrahydrofuran	3.75	3.83	3.80	102	101	70.0-137			0.786	25
Toluene	3.75	3.91	3.88	104	103	70.0-130			0.770	25
1,2,4-Trichlorobenzene	3.75	4.19	4.04	112	108	70.0-160			3.65	25
1,1,1-Trichloroethane	3.75	3.87	3.86	103	103	70.0-130			0.259	25
1,1,2-Trichloroethane	3.75	3.85	3.80	103	101	70.0-130			1.31	25
Trichloroethylene	3.75	3.80	3.75	101	100	70.0-130			1.32	25
1,2,4-Trimethylbenzene	3.75	4.04	4.03	108	107	70.0-130			0.248	25
1,3,5-Trimethylbenzene	3.75	3.98	3.97	106	106	70.0-130			0.252	25
2,2,4-Trimethylpentane	3.75	4.06	4.03	108	107	70.0-130			0.742	25
Vinyl chloride	3.75	3.80	3.70	101	98.7	70.0-130			2.67	25
Vinyl Bromide	3.75	3.93	3.92	105	105	70.0-130			0.255	25
Vinyl acetate	3.75	3.82	3.73	102	99.5	70.0-130			2.38	25
m&p-Xylene	7.50	8.10	8.07	108	108	70.0-130			0.371	25
o-Xylene	3.75	3.94	3.91	105	104	70.0-130			0.764	25
(S) 1,4-Bromofluorobenzene				*98.5*	*98.8*	*60.0-140*				

Method Blank (MB)

(MB) R3791711-3 05/13/22 10:46

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethanol	U		0.265	1.25
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Heptane	U		0.104	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
n-Hexane	U		0.206	0.630

Method Blank (MB)

(MB) R3791711-3 05/13/22 10:46

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.252	J	0.0932	1.25
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
(S) 1,4-Bromofluorobenzene	*97.1*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3791711-1 05/13/22 09:20 • (LCSD) R3791711-2 05/13/22 10:04

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	3.75	4.12	4.19	110	112	70.0-130			1.68	25
Allyl Chloride	3.75	3.82	4.34	102	116	70.0-130			12.7	25
Benzene	3.75	3.96	3.89	106	104	70.0-130			1.78	25
Benzyl Chloride	3.75	4.07	4.04	109	108	70.0-152			0.740	25
Bromodichloromethane	3.75	3.93	3.91	105	104	70.0-130			0.510	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3791711-1 05/13/22 09:20 • (LCSD) R3791711-2 05/13/22 10:04

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromoform	3.75	4.06	4.12	108	110	70.0-130			1.47	25
Bromomethane	3.75	4.24	4.20	113	112	70.0-130			0.948	25
1,3-Butadiene	3.75	4.26	4.18	114	111	70.0-130			1.90	25
Carbon disulfide	3.75	4.06	4.45	108	119	70.0-130			9.17	25
Carbon tetrachloride	3.75	4.06	3.97	108	106	70.0-130			2.24	25
Chlorobenzene	3.75	3.94	3.89	105	104	70.0-130			1.28	25
Chloroethane	3.75	4.60	4.29	123	114	70.0-130			6.97	25
Chloroform	3.75	4.03	4.01	107	107	70.0-130			0.498	25
Chloromethane	3.75	4.18	4.02	111	107	70.0-130			3.90	25
2-Chlorotoluene	3.75	4.00	3.94	107	105	70.0-130			1.51	25
Cyclohexane	3.75	4.04	4.05	108	108	70.0-130			0.247	25
Dibromochloromethane	3.75	3.96	4.01	106	107	70.0-130			1.25	25
1,2-Dibromoethane	3.75	3.87	3.89	103	104	70.0-130			0.515	25
1,2-Dichlorobenzene	3.75	4.04	4.00	108	107	70.0-130			0.995	25
1,3-Dichlorobenzene	3.75	3.97	3.94	106	105	70.0-130			0.759	25
1,4-Dichlorobenzene	3.75	3.97	3.97	106	106	70.0-130			0.000	25
1,2-Dichloroethane	3.75	3.98	3.90	106	104	70.0-130			2.03	25
1,1-Dichloroethane	3.75	3.95	3.96	105	106	70.0-130			0.253	25
1,1-Dichloroethene	3.75	3.92	3.98	105	106	70.0-130			1.52	25
cis-1,2-Dichloroethene	3.75	4.14	4.05	110	108	70.0-130			2.20	25
trans-1,2-Dichloroethene	3.75	3.97	4.04	106	108	70.0-130			1.75	25
1,2-Dichloropropane	3.75	3.91	3.95	104	105	70.0-130			1.02	25
cis-1,3-Dichloropropene	3.75	3.99	4.01	106	107	70.0-130			0.500	25
trans-1,3-Dichloropropene	3.75	4.03	3.97	107	106	70.0-130			1.50	25
1,4-Dioxane	3.75	4.19	4.04	112	108	70.0-140			3.65	25
Ethanol	3.75	3.98	3.85	106	103	55.0-148			3.32	25
Ethylbenzene	3.75	3.94	3.99	105	106	70.0-130			1.26	25
4-Ethyltoluene	3.75	4.00	4.08	107	109	70.0-130			1.98	25
Trichlorofluoromethane	3.75	4.14	4.01	110	107	70.0-130			3.19	25
Dichlorodifluoromethane	3.75	3.93	3.76	105	100	64.0-139			4.42	25
1,1,2-Trichlorotrifluoroethane	3.75	4.11	3.96	110	106	70.0-130			3.72	25
1,2-Dichlorotetrafluoroethane	3.75	4.18	4.08	111	109	70.0-130			2.42	25
Heptane	3.75	3.70	3.73	98.7	99.5	70.0-130			0.808	25
Hexachloro-1,3-butadiene	3.75	4.06	4.05	108	108	70.0-151			0.247	25
n-Hexane	3.75	3.99	3.90	106	104	70.0-130			2.28	25
Isopropylbenzene	3.75	3.94	3.89	105	104	70.0-130			1.28	25
Methylene Chloride	3.75	3.76	3.73	100	99.5	70.0-130			0.801	25
Methyl Butyl Ketone	3.75	4.08	4.10	109	109	70.0-149			0.489	25
Methyl Ethyl Ketone	3.75	4.10	4.19	109	112	70.0-130			2.17	25
4-Methyl-2-pentanone (MIBK)	3.75	4.13	4.11	110	110	70.0-139			0.485	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3791711-1 05/13/22 09:20 • (LCSD) R3791711-2 05/13/22 10:04

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methyl Methacrylate	3.75	3.94	4.03	105	107	70.0-130			2.26	25
MTBE	3.75	3.97	3.89	106	104	70.0-130			2.04	25
Naphthalene	3.75	3.76	3.82	100	102	70.0-159			1.58	25
2-Propanol	3.75	4.05	3.98	108	106	70.0-139			1.74	25
Propene	3.75	4.14	4.24	110	113	64.0-144			2.39	25
Styrene	3.75	4.02	4.02	107	107	70.0-130			0.000	25
1,1,2,2-Tetrachloroethane	3.75	3.98	3.86	106	103	70.0-130			3.06	25
Tetrachloroethylene	3.75	3.92	3.97	105	106	70.0-130			1.27	25
Tetrahydrofuran	3.75	4.01	3.94	107	105	70.0-137			1.76	25
Toluene	3.75	4.02	3.94	107	105	70.0-130			2.01	25
1,2,4-Trichlorobenzene	3.75	3.90	3.92	104	105	70.0-160			0.512	25
1,1,1-Trichloroethane	3.75	3.99	3.99	106	106	70.0-130			0.000	25
1,1,2-Trichloroethane	3.75	3.93	4.00	105	107	70.0-130			1.77	25
Trichloroethylene	3.75	4.01	4.07	107	109	70.0-130			1.49	25
1,2,4-Trimethylbenzene	3.75	4.14	4.14	110	110	70.0-130			0.000	25
1,3,5-Trimethylbenzene	3.75	4.20	3.99	112	106	70.0-130			5.13	25
2,2,4-Trimethylpentane	3.75	4.06	4.04	108	108	70.0-130			0.494	25
Vinyl chloride	3.75	4.24	4.11	113	110	70.0-130			3.11	25
Vinyl Bromide	3.75	4.14	4.02	110	107	70.0-130			2.94	25
Vinyl acetate	3.75	4.05	3.90	108	104	70.0-130			3.77	25
m&p-Xylene	7.50	8.05	8.03	107	107	70.0-130			0.249	25
o-Xylene	3.75	3.99	3.95	106	105	70.0-130			1.01	25
(S) 1,4-Bromofluorobenzene				*100*	*100*	*60.0-140*				

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Method Blank (MB)

(MB) R3792186-3 05/14/22 09:04

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Ethanol	U		0.265	1.25
Dichlorodifluoromethane	U		0.137	0.200
(S) 1,4-Bromofluorobenzene	*97.3*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3792186-1 05/14/22 06:15 • (LCSD) R3792186-2 05/14/22 06:58

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethanol	3.75	4.15	4.05	111	108	55.0-148			2.44	25
Dichlorodifluoromethane	3.75	3.78	4.03	101	107	64.0-139			6.40	25
(S) 1,4-Bromofluorobenzene				*98.8*	*99.3*	*60.0-140*				

Method Blank (MB)

(MB) R3792321-3 05/16/22 11:52

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Cyclohexane	U		0.0753	0.200
Heptane	U		0.104	0.200
n-Hexane	U		0.206	0.630
(S) 1,4-Bromofluorobenzene	*94.1*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3792321-1 05/16/22 10:30 • (LCSD) R3792321-2 05/16/22 11:12

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Cyclohexane	3.75	4.54	4.54	121	121	70.0-130			0.000	25
Heptane	3.75	4.49	4.64	120	124	70.0-130			3.29	25
n-Hexane	3.75	4.51	4.50	120	120	70.0-130			0.222	25
(S) 1,4-Bromofluorobenzene				*98.2*	*98.7*	*60.0-140*				

Method Blank (MB)

(MB) R3792565-3 05/16/22 11:19

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethanol	U		0.265	1.25
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Heptane	U		0.104	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
n-Hexane	U		0.206	0.630

Method Blank (MB)

(MB) R3792565-3 05/16/22 11:19

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.122	J	0.0932	1.25
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
(S) 1,4-Bromofluorobenzene	*98.8*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3792565-1 05/16/22 10:01 • (LCSD) R3792565-2 05/16/22 10:40

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	3.75	3.69	4.20	98.4	112	70.0-130			12.9	25
Allyl Chloride	3.75	3.70	3.87	98.7	103	70.0-130			4.49	25
Benzene	3.75	4.03	4.01	107	107	70.0-130			0.498	25
Benzyl Chloride	3.75	4.01	4.12	107	110	70.0-152			2.71	25
Bromodichloromethane	3.75	3.92	3.92	105	105	70.0-130			0.000	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3792565-1 05/16/22 10:01 • (LCSD) R3792565-2 05/16/22 10:40

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromoform	3.75	3.84	3.89	102	104	70.0-130			1.29	25
Bromomethane	3.75	4.04	4.11	108	110	70.0-130			1.72	25
1,3-Butadiene	3.75	4.24	4.34	113	116	70.0-130			2.33	25
Carbon disulfide	3.75	3.91	3.91	104	104	70.0-130			0.000	25
Carbon tetrachloride	3.75	3.88	3.88	103	103	70.0-130			0.000	25
Chlorobenzene	3.75	4.00	3.99	107	106	70.0-130			0.250	25
Chloroethane	3.75	4.08	4.16	109	111	70.0-130			1.94	25
Chloroform	3.75	3.96	3.99	106	106	70.0-130			0.755	25
Chloromethane	3.75	4.24	4.14	113	110	70.0-130			2.39	25
2-Chlorotoluene	3.75	3.97	3.99	106	106	70.0-130			0.503	25
Cyclohexane	3.75	4.02	4.09	107	109	70.0-130			1.73	25
Dibromochloromethane	3.75	3.94	3.95	105	105	70.0-130			0.253	25
1,2-Dibromoethane	3.75	4.02	4.02	107	107	70.0-130			0.000	25
1,2-Dichlorobenzene	3.75	3.94	3.99	105	106	70.0-130			1.26	25
1,3-Dichlorobenzene	3.75	3.97	4.02	106	107	70.0-130			1.25	25
1,4-Dichlorobenzene	3.75	3.92	3.98	105	106	70.0-130			1.52	25
1,2-Dichloroethane	3.75	3.91	3.91	104	104	70.0-130			0.000	25
1,1-Dichloroethane	3.75	3.96	3.99	106	106	70.0-130			0.755	25
1,1-Dichloroethene	3.75	3.85	4.39	103	117	70.0-130			13.1	25
cis-1,2-Dichloroethene	3.75	4.07	4.08	109	109	70.0-130			0.245	25
trans-1,2-Dichloroethene	3.75	3.91	3.92	104	105	70.0-130			0.255	25
1,2-Dichloropropane	3.75	4.04	4.06	108	108	70.0-130			0.494	25
cis-1,3-Dichloropropene	3.75	3.94	4.00	105	107	70.0-130			1.51	25
trans-1,3-Dichloropropene	3.75	3.98	3.99	106	106	70.0-130			0.251	25
1,4-Dioxane	3.75	4.05	4.06	108	108	70.0-140			0.247	25
Ethanol	3.75	3.58	3.95	95.5	105	55.0-148			9.83	25
Ethylbenzene	3.75	4.02	4.02	107	107	70.0-130			0.000	25
4-Ethyltoluene	3.75	4.07	4.16	109	111	70.0-130			2.19	25
Trichlorofluoromethane	3.75	3.90	4.03	104	107	70.0-130			3.28	25
Dichlorodifluoromethane	3.75	3.94	3.98	105	106	64.0-139			1.01	25
1,1,2-Trichlorotrifluoroethane	3.75	3.76	4.27	100	114	70.0-130			12.7	25
1,2-Dichlorotetrafluoroethane	3.75	4.04	4.09	108	109	70.0-130			1.23	25
Heptane	3.75	4.14	4.30	110	115	70.0-130			3.79	25
Hexachloro-1,3-butadiene	3.75	3.73	3.82	99.5	102	70.0-151			2.38	25
n-Hexane	3.75	3.96	4.00	106	107	70.0-130			1.01	25
Isopropylbenzene	3.75	4.06	4.10	108	109	70.0-130			0.980	25
Methylene Chloride	3.75	3.65	3.68	97.3	98.1	70.0-130			0.819	25
Methyl Butyl Ketone	3.75	4.13	4.14	110	110	70.0-149			0.242	25
Methyl Ethyl Ketone	3.75	4.04	4.08	108	109	70.0-130			0.985	25
4-Methyl-2-pentanone (MIBK)	3.75	4.12	4.15	110	111	70.0-139			0.726	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3792565-1 05/16/22 10:01 • (LCSD) R3792565-2 05/16/22 10:40

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methyl Methacrylate	3.75	4.04	4.17	108	111	70.0-130			3.17	25
MTBE	3.75	3.89	3.92	104	105	70.0-130			0.768	25
Naphthalene	3.75	4.00	4.08	107	109	70.0-159			1.98	25
2-Propanol	3.75	3.84	4.39	102	117	70.0-139			13.4	25
Propene	3.75	3.85	3.95	103	105	64.0-144			2.56	25
Styrene	3.75	4.07	4.11	109	110	70.0-130			0.978	25
1,1,2,2-Tetrachloroethane	3.75	3.98	4.04	106	108	70.0-130			1.50	25
Tetrachloroethylene	3.75	3.91	3.93	104	105	70.0-130			0.510	25
Tetrahydrofuran	3.75	4.13	4.21	110	112	70.0-137			1.92	25
Toluene	3.75	4.02	4.00	107	107	70.0-130			0.499	25
1,2,4-Trichlorobenzene	3.75	3.84	3.90	102	104	70.0-160			1.55	25
1,1,1-Trichloroethane	3.75	3.90	3.95	104	105	70.0-130			1.27	25
1,1,2-Trichloroethane	3.75	3.95	3.98	105	106	70.0-130			0.757	25
Trichloroethylene	3.75	3.95	3.97	105	106	70.0-130			0.505	25
1,2,4-Trimethylbenzene	3.75	4.07	4.14	109	110	70.0-130			1.71	25
1,3,5-Trimethylbenzene	3.75	3.93	3.96	105	106	70.0-130			0.760	25
2,2,4-Trimethylpentane	3.75	4.19	4.16	112	111	70.0-130			0.719	25
Vinyl chloride	3.75	4.35	4.40	116	117	70.0-130			1.14	25
Vinyl Bromide	3.75	3.94	4.10	105	109	70.0-130			3.98	25
Vinyl acetate	3.75	3.88	3.86	103	103	70.0-130			0.517	25
m&p-Xylene	7.50	8.01	8.15	107	109	70.0-130			1.73	25
o-Xylene	3.75	4.02	4.04	107	108	70.0-130			0.496	25
(S) 1,4-Bromofluorobenzene				*99.4*	*99.6*	*60.0-140*				

Method Blank (MB)

(MB) R3793121-3 05/18/22 10:08

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Cyclohexane	U		0.0753	0.200
Heptane	U		0.104	0.200
n-Hexane	U		0.206	0.630
2,2,4-Trimethylpentane	U		0.133	0.200
(S) 1,4-Bromofluorobenzene	*93.8*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3793121-1 05/18/22 09:04 • (LCSD) R3793121-2 05/18/22 09:38

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Cyclohexane	3.75	4.59	4.66	122	124	70.0-130			1.51	25
Heptane	3.75	4.69	4.67	125	125	70.0-130			0.427	25
n-Hexane	3.75	4.61	4.62	123	123	70.0-130			0.217	25
2,2,4-Trimethylpentane	3.75	4.70	4.58	125	122	70.0-130			2.59	25
(S) 1,4-Bromofluorobenzene				*103*	*104*	*60.0-140*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
Apex Companies, LLC - Portland, OR

3015 SW First Avenue
Portland, OR 97201-4707

Billing Information:
Accounts Payable
3015 SW First Ave.
Portland, OR 97201-4707

Analysis

Chain of Custody Page 1 of 3

Pace
PEOPLE ADVANCING SCIENCE
MT JULIET, TN
12065 Lebanon Road Mt Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Report To: **Mike Stevens**

Email To: kelsi.evans@apexcos.com;mstevens@apexcos.com;Heather.Gosack@apexcos.com

Project Description: Soil borings / vapor samples

City/State Collected: ~~Mc Minnville~~ Mc Minnville OR

Please Circle: (PT) MT CT ET

Phone: **503-924-4704**

Client Project #

Lab Project # **ASHCREPOR-LITHOPRINT**

SDG # L1492886

L-185

Collected by (print): Robert Schettler

Site/Facility ID #

P.O. #

Acctnum: ASHCREPOR
Template: T205841
Prelogin: P912843
PM: 110 - Brian Ford
PB: CSC 03/21/22

Collected by (signature):

Rush? (Lab MUST Be Notified)
___ Same Day ___ Three Day
___ Next Day X Five Day
___ Two Day

Date Results Needed

Shipped Via: FedEX Saver

Sample ID	Can #	Flow Cont. #	Collection Date	Collection Time	Canister Pressure/Vacuum Initial	Canister Pressure/Vacuum Final	VOCs TO-15 Summa				Rem./Contaminant	Sample # (lab only)
AA-1			5/10/22	0919	-23	-3	X					01
AA-2				1000	-30	-20	X					02
AA-3				1003	-30	0	X					03
AA-4				0901	-28	-5	X					04
AA-5				0859	-30	-4	X					05
AA-6				0917	-30	-5	X					06
SB-1			5/9/22	1015	-22	-5	X					07
SB-2				1056	-25	-1	X					08
~~SB-3~~				~~1125~~	~~-28~~	~~-4~~	~~X~~					
~~SB-4~~				1219	~~-28~~	~~-28~~	X					

Remarks: Do not analyze SB-3 or SB-4, they may have taken in water

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: __ UPS __ FedEx __ Courier __ _____ / Tracking #	Hold #
Robert Schettler	5/11/22	1600		Date: Time:	Condition: (lab use only)
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Date: Time:	COC Seal Intact: ___ Y ___ N ___ NA
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) D. Ramsey	Date: 5-12-22 Time: 900	NCF:

Company Name/Address:
Apex Companies, LLC - Portland, OR

3015 SW First Avenue
Portland, OR 97201-4707

Billing Information:
Accounts Payable
3015 SW First Ave.
Portland, OR 97201-4707

Report To:
Mike Stevens

Email To:
kelsi.evans@apexcos.com;mstevens@apexcos.com;Heather.Gosack@apexcos.com

Project Description: Soil borings / vapor samples

City/State Collected: McMinnville, OR

Please Circle: (PT) MT CT ET

Phone: 503-924-4704

Client Project #

Lab Project #
ASHCREPOR-LITHOPRINT

Collected by (print): Robert Schettler

Site/Facility ID #

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)
___ Same Day ___ Three Day
___ Next Day ___ Five Day
___ Two Day

Date Results Needed

Analysis: VOCs TO-15 Summa

Chain of Custody Page 3 of 3

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SDG # L1492836

Table #

Acctnum: ASHCREPOR
Template: T205841
Prelogin: P912843
PM: 110 - Brian Ford
PB: CSL 03/21/22

Shipped Via: FedEX Saver

Sample ID	Can #	Flow Cont. #	Collection Date	Collection Time	Canister Pressure/Vacuum Initial	Canister Pressure/Vacuum Final	VOCs TO-15 Summa	Rem./Contaminant	Sample # (lab only)
SB-4R			5/9/22	1346	-28	-4	X		09
SB-5				1344	-28	-5	X		10
SB-6				1433	-28	-5	X		11
SB-7			5/10/22	1133	-29	-4	X		12
~~SB-8~~				1141	-9	-3	X		
~~SB-9~~				1140	-17	-4	X		
SB-10				1133	-30	-4	X		13
~~SV-4~~				1242	-30	-22	X		
SV-5				1313	-30	-5	X		14
SV-6				1323	-28.5	-3	X		15

Remarks: Do not analyze SV-4, it may have taken in water

Do not analyze SB-8 or SB-9, they started with low pressures

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ___ UPS ___ FedEx ___ Courier ___	Tracking #	Hold #
Robert Schettler	5/11/22	1600			Date: Time:	Condition: (lab use only)
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)		Date: Time:	COC Seal Intact: ___ Y ___ N ___ NA
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) D. Ramsey		Date: 5-12-22 Time: 900	NCF:

Company Name/Address:
Apex Companies, LLC - Portland, OR

3015 SW First Avenue
Portland, OR 97201-4707

Billing Information:
Accounts Payable
3015 SW First Ave.
Portland, OR 97201-4707

Report To:
Mike Stevens

Email To:
kelsi.evans@apexcos.com;mstevens@apexcos.com;Heather.Gosack@apexcos.com

Project Description: Soil borings / vapor samples

City/State Collected: McMinnville, OR

Please Circle: PT MT CT ET

Phone: **503-924-4704**

Client Project #

Lab Project #
ASHCREPOR-LITHOPRINT

Collected by (print): Robert Schaffer

Site/Facility ID #

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)
___ Same Day ___ Three Day
___ Next Day ___ Five Day
___ Two Day

Date Results Needed

Analysis: VOCs TO-15 Summa

Chain of Custody Page 3 of 3

Pace
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12065 Lebanon Road Mt Juliet, TN 37122
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SDG # L1492286

Table #

Acctnum: ASHCREPOR
Template: T205841
Prelogin: P912843
PM: 110 - Brian Ford
PB: CSL 05/12/22

Shipped Via: FedEX Saver

Sample ID	Can #	Flow Cont. #	Collection Date	Collection Time	Canister Pressure/Vacuum Initial	Canister Pressure/Vacuum Final	VOCs TO-15 Summa				Rem./Contaminant	Sample # (lab only)
SV-7			5/10/22	1524	-26	-5	X					16
SV-8			↓	1336	-30	-2	X					17

Remarks: One can was returned unused / unlabeled

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: __ UPS __ FedEx __ Courier __ _____	Tracking #	Hold #
Robert Schaffer	5/11/22 5/10/22	1600			Date: Time:	Condition: (lab use only)
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)		Date: Time:	COC Seal Intact: ___Y ___N ___NA
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) P. Reamsey		Date: 5-12-22 Time: 900	NCF:

ANALYTICAL REPORT

May 20, 2022

Apex Companies, LLC - Portland, OR

Sample Delivery Group:	L1492986
Samples Received:	05/12/2022
Project Number:	
Description:	Oregon Lithoprint

Report To: Mike Stevens
3015 SW First Avenue
Portland, OR 97201-4707

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

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SAMPLE SUMMARY

SB-1 L1492986-01 Solid

Collected by: Franklin Sullivan | Collected date/time: 05/09/22 09:45 | Received date/time: 05/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1865459	1	05/18/22 07:44	05/18/22 07:54	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1863876	25	05/09/22 09:45	05/16/22 12:57	CAM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1864109	1	05/09/22 09:45	05/15/22 18:38	JHH	Mt. Juliet, TN

SB-2R L1492986-02 Solid

Collected by: Franklin Sullivan | Collected date/time: 05/09/22 10:49 | Received date/time: 05/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1865459	1	05/18/22 07:44	05/18/22 07:54	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1864703	2500	05/09/22 10:49	05/17/22 09:45	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1864109	8	05/09/22 10:49	05/15/22 19:56	JHH	Mt. Juliet, TN

SB-3 L1492986-03 Solid

Collected by: Franklin Sullivan | Collected date/time: 05/09/22 11:15 | Received date/time: 05/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1865459	1	05/18/22 07:44	05/18/22 07:54	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1863886	25	05/09/22 11:15	05/15/22 05:26	CAM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1864371	1	05/09/22 11:15	05/16/22 13:58	AV	Mt. Juliet, TN

SB-4 L1492986-04 Solid

Collected by: Franklin Sullivan | Collected date/time: 05/09/22 11:47 | Received date/time: 05/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1865459	1	05/18/22 07:44	05/18/22 07:54	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1864604	500	05/09/22 11:47	05/17/22 07:50	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1864371	1	05/09/22 11:47	05/16/22 14:17	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1866384	4	05/09/22 11:47	05/20/22 00:56	ACG	Mt. Juliet, TN

SB-5 L1492986-05 Solid

Collected by: Franklin Sullivan | Collected date/time: 05/09/22 12:30 | Received date/time: 05/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1865459	1	05/18/22 07:44	05/18/22 07:54	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1864604	25	05/09/22 12:30	05/17/22 07:04	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1866380	1	05/09/22 12:30	05/19/22 14:56	ACG	Mt. Juliet, TN

SB-6 L1492986-06 Solid

Collected by: Franklin Sullivan | Collected date/time: 05/09/22 14:05 | Received date/time: 05/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1865459	1	05/18/22 07:44	05/18/22 07:54	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1864604	500	05/09/22 14:05	05/17/22 08:13	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1864371	1	05/09/22 14:05	05/16/22 14:56	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1866384	8	05/09/22 14:05	05/20/22 01:15	ACG	Mt. Juliet, TN

SB-7 L1492986-07 Solid

Collected by: Franklin Sullivan | Collected date/time: 05/10/22 08:58 | Received date/time: 05/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1865459	1	05/18/22 07:44	05/18/22 07:54	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1864604	500	05/10/22 08:58	05/17/22 08:36	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1864371	1	05/10/22 08:58	05/16/22 15:15	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1866384	8	05/10/22 08:58	05/20/22 01:34	ACG	Mt. Juliet, TN

SB-8 L1492986-08 Solid

Collected by: Franklin Sullivan | Collected date/time: 05/10/22 10:12 | Received date/time: 05/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1865459	1	05/18/22 07:44	05/18/22 07:54	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1864604	500	05/10/22 10:12	05/17/22 08:59	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1864371	1	05/10/22 10:12	05/16/22 15:34	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1866384	8	05/10/22 10:12	05/20/22 01:53	ACG	Mt. Juliet, TN

SB-9 L1492986-09 Solid

Collected by: Franklin Sullivan | Collected date/time: 05/10/22 10:34 | Received date/time: 05/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1865459	1	05/18/22 07:44	05/18/22 07:54	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1864604	1000	05/10/22 10:34	05/17/22 09:22	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1864371	1	05/10/22 10:34	05/16/22 15:53	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1866384	20	05/10/22 10:34	05/20/22 02:12	ACG	Mt. Juliet, TN

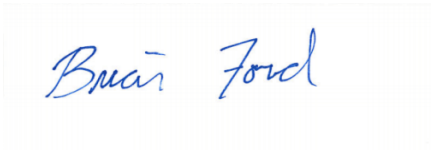
SB-10 L1492986-10 Solid

Collected by: Franklin Sullivan | Collected date/time: 05/10/22 10:46 | Received date/time: 05/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1865459	1	05/18/22 07:44	05/18/22 07:54	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1864604	25	05/10/22 10:46	05/17/22 07:27	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1864371	1	05/10/22 10:46	05/16/22 16:12	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1866384	8	05/10/22 10:46	05/20/22 02:32	ACG	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Brian Ford
Project Manager

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	74.4		1	05/18/2022 07:54	WG1865459

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	U		1.48	4.38	25	05/16/2022 12:57	WG1863876
(S) a,a,a-Trifluorotoluene(FID)	*99.7*			*77.0-120*		*05/16/2022 12:57*	WG1863876

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0888	B C5 J4	0.0639	0.0875	1	05/15/2022 18:38	WG1864109
Acrylonitrile	U		0.00632	0.0219	1	05/15/2022 18:38	WG1864109
Benzene	U		0.000818	0.00175	1	05/15/2022 18:38	WG1864109
Bromobenzene	U		0.00158	0.0219	1	05/15/2022 18:38	WG1864109
Bromodichloromethane	U		0.00127	0.00438	1	05/15/2022 18:38	WG1864109
Bromoform	U		0.00205	0.0438	1	05/15/2022 18:38	WG1864109
Bromomethane	U	J4	0.00345	0.0219	1	05/15/2022 18:38	WG1864109
n-Butylbenzene	U		0.00919	0.0219	1	05/15/2022 18:38	WG1864109
sec-Butylbenzene	U		0.00504	0.0219	1	05/15/2022 18:38	WG1864109
tert-Butylbenzene	U		0.00341	0.00875	1	05/15/2022 18:38	WG1864109
Carbon tetrachloride	U		0.00157	0.00875	1	05/15/2022 18:38	WG1864109
Chlorobenzene	U		0.000368	0.00438	1	05/15/2022 18:38	WG1864109
Chlorodibromomethane	U		0.00107	0.00438	1	05/15/2022 18:38	WG1864109
Chloroethane	U	J4	0.00298	0.00875	1	05/15/2022 18:38	WG1864109
Chloroform	U		0.00180	0.00438	1	05/15/2022 18:38	WG1864109
Chloromethane	U		0.00762	0.0219	1	05/15/2022 18:38	WG1864109
2-Chlorotoluene	U		0.00151	0.00438	1	05/15/2022 18:38	WG1864109
4-Chlorotoluene	U		0.000788	0.00875	1	05/15/2022 18:38	WG1864109
1,2-Dibromo-3-Chloropropane	U		0.00683	0.0438	1	05/15/2022 18:38	WG1864109
1,2-Dibromoethane	U		0.00113	0.00438	1	05/15/2022 18:38	WG1864109
Dibromomethane	U		0.00131	0.00875	1	05/15/2022 18:38	WG1864109
1,2-Dichlorobenzene	U		0.000744	0.00875	1	05/15/2022 18:38	WG1864109
1,3-Dichlorobenzene	U		0.00105	0.00875	1	05/15/2022 18:38	WG1864109
1,4-Dichlorobenzene	U		0.00123	0.00875	1	05/15/2022 18:38	WG1864109
Dichlorodifluoromethane	U		0.00282	0.00438	1	05/15/2022 18:38	WG1864109
1,1-Dichloroethane	U		0.000860	0.00438	1	05/15/2022 18:38	WG1864109
1,2-Dichloroethane	U		0.00114	0.00438	1	05/15/2022 18:38	WG1864109
1,1-Dichloroethene	U		0.00106	0.00438	1	05/15/2022 18:38	WG1864109
cis-1,2-Dichloroethene	U		0.00129	0.00438	1	05/15/2022 18:38	WG1864109
trans-1,2-Dichloroethene	U		0.00182	0.00875	1	05/15/2022 18:38	WG1864109
1,2-Dichloropropane	U		0.00249	0.00875	1	05/15/2022 18:38	WG1864109
1,1-Dichloropropene	U		0.00142	0.00438	1	05/15/2022 18:38	WG1864109
1,3-Dichloropropane	U		0.000877	0.00875	1	05/15/2022 18:38	WG1864109
cis-1,3-Dichloropropene	U		0.00133	0.00438	1	05/15/2022 18:38	WG1864109
trans-1,3-Dichloropropene	U		0.00200	0.00875	1	05/15/2022 18:38	WG1864109
2,2-Dichloropropane	U		0.00242	0.00438	1	05/15/2022 18:38	WG1864109
Di-isopropyl ether	U		0.000718	0.00175	1	05/15/2022 18:38	WG1864109
Ethylbenzene	U		0.00129	0.00438	1	05/15/2022 18:38	WG1864109
Hexachloro-1,3-butadiene	U	J3	0.0105	0.0438	1	05/15/2022 18:38	WG1864109
Isopropylbenzene	U		0.000744	0.00438	1	05/15/2022 18:38	WG1864109
p-Isopropyltoluene	U		0.00446	0.00875	1	05/15/2022 18:38	WG1864109
2-Butanone (MEK)	U		0.111	0.175	1	05/15/2022 18:38	WG1864109
Methylene Chloride	U		0.0116	0.0438	1	05/15/2022 18:38	WG1864109
4-Methyl-2-pentanone (MIBK)	U		0.00399	0.0438	1	05/15/2022 18:38	WG1864109

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000613	0.00175	1	05/15/2022 18:38	WG1864109
Naphthalene	U	J3	0.00854	0.0219	1	05/15/2022 18:38	WG1864109
n-Propylbenzene	U		0.00166	0.00875	1	05/15/2022 18:38	WG1864109
Styrene	U		0.000401	0.0219	1	05/15/2022 18:38	WG1864109
1,1,1,2-Tetrachloroethane	U		0.00166	0.00438	1	05/15/2022 18:38	WG1864109
1,1,2,2-Tetrachloroethane	U		0.00122	0.00438	1	05/15/2022 18:38	WG1864109
1,1,2-Trichlorotrifluoroethane	U		0.00132	0.00438	1	05/15/2022 18:38	WG1864109
Tetrachloroethene	U		0.00157	0.00438	1	05/15/2022 18:38	WG1864109
Toluene	U		0.00228	0.00875	1	05/15/2022 18:38	WG1864109
1,2,3-Trichlorobenzene	U	C3 J3	0.0128	0.0219	1	05/15/2022 18:38	WG1864109
1,2,4-Trichlorobenzene	U	J3	0.00770	0.0219	1	05/15/2022 18:38	WG1864109
1,1,1-Trichloroethane	U		0.00162	0.00438	1	05/15/2022 18:38	WG1864109
1,1,2-Trichloroethane	U		0.00105	0.00438	1	05/15/2022 18:38	WG1864109
Trichloroethene	U		0.00102	0.00175	1	05/15/2022 18:38	WG1864109
Trichlorofluoromethane	U		0.00145	0.00438	1	05/15/2022 18:38	WG1864109
1,2,3-Trichloropropane	U		0.00284	0.0219	1	05/15/2022 18:38	WG1864109
1,2,4-Trimethylbenzene	U		0.00277	0.00875	1	05/15/2022 18:38	WG1864109
1,2,3-Trimethylbenzene	U		0.00277	0.00875	1	05/15/2022 18:38	WG1864109
1,3,5-Trimethylbenzene	U		0.00350	0.00875	1	05/15/2022 18:38	WG1864109
Vinyl chloride	U	J4	0.00203	0.00438	1	05/15/2022 18:38	WG1864109
Xylenes, Total	U		0.00154	0.0114	1	05/15/2022 18:38	WG1864109
(S) Toluene-d8	*102*			*75.0-131*		*05/15/2022 18:38*	WG1864109
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*05/15/2022 18:38*	WG1864109
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*05/15/2022 18:38*	WG1864109

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	71.5		1	05/18/2022 07:54	WG1865459

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	4180		161	475	2500	05/17/2022 09:45	WG1864703
(S) a,a,a-Trifluorotoluene(FID)	*97.8*			*77.0-120*		*05/17/2022 09:45*	WG1864703

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	J4	0.555	0.760	8	05/15/2022 19:56	WG1864109
Acrylonitrile	U		0.0549	0.190	8	05/15/2022 19:56	WG1864109
Benzene	0.0228		0.00711	0.0152	8	05/15/2022 19:56	WG1864109
Bromobenzene	U		0.0137	0.190	8	05/15/2022 19:56	WG1864109
Bromodichloromethane	U		0.0110	0.0380	8	05/15/2022 19:56	WG1864109
Bromoform	U		0.0178	0.380	8	05/15/2022 19:56	WG1864109
Bromomethane	U	J4	0.0300	0.190	8	05/15/2022 19:56	WG1864109
n-Butylbenzene	8.46		0.0798	0.190	8	05/15/2022 19:56	WG1864109
sec-Butylbenzene	4.68		0.0437	0.190	8	05/15/2022 19:56	WG1864109
tert-Butylbenzene	0.0840		0.0297	0.0760	8	05/15/2022 19:56	WG1864109
Carbon tetrachloride	U		0.0136	0.0760	8	05/15/2022 19:56	WG1864109
Chlorobenzene	U		0.00319	0.0380	8	05/15/2022 19:56	WG1864109
Chlorodibromomethane	U		0.00931	0.0380	8	05/15/2022 19:56	WG1864109
Chloroethane	U	J4	0.0258	0.0760	8	05/15/2022 19:56	WG1864109
Chloroform	U		0.0157	0.0380	8	05/15/2022 19:56	WG1864109
Chloromethane	U		0.0661	0.190	8	05/15/2022 19:56	WG1864109
2-Chlorotoluene	U		0.0132	0.0380	8	05/15/2022 19:56	WG1864109
4-Chlorotoluene	U		0.00684	0.0760	8	05/15/2022 19:56	WG1864109
1,2-Dibromo-3-Chloropropane	U		0.0593	0.380	8	05/15/2022 19:56	WG1864109
1,2-Dibromoethane	U		0.00985	0.0380	8	05/15/2022 19:56	WG1864109
Dibromomethane	U		0.0114	0.0760	8	05/15/2022 19:56	WG1864109
1,2-Dichlorobenzene	U		0.00646	0.0760	8	05/15/2022 19:56	WG1864109
1,3-Dichlorobenzene	U		0.00912	0.0760	8	05/15/2022 19:56	WG1864109
1,4-Dichlorobenzene	U		0.0106	0.0760	8	05/15/2022 19:56	WG1864109
Dichlorodifluoromethane	U		0.0245	0.0380	8	05/15/2022 19:56	WG1864109
1,1-Dichloroethane	U		0.00747	0.0380	8	05/15/2022 19:56	WG1864109
1,2-Dichloroethane	U		0.00986	0.0380	8	05/15/2022 19:56	WG1864109
1,1-Dichloroethene	U		0.00922	0.0380	8	05/15/2022 19:56	WG1864109
cis-1,2-Dichloroethene	U		0.0112	0.0380	8	05/15/2022 19:56	WG1864109
trans-1,2-Dichloroethene	U		0.0158	0.0760	8	05/15/2022 19:56	WG1864109
1,2-Dichloropropane	U		0.0217	0.0760	8	05/15/2022 19:56	WG1864109
1,1-Dichloropropene	U		0.0123	0.0380	8	05/15/2022 19:56	WG1864109
1,3-Dichloropropane	U		0.00762	0.0760	8	05/15/2022 19:56	WG1864109
cis-1,3-Dichloropropene	U		0.0115	0.0380	8	05/15/2022 19:56	WG1864109
trans-1,3-Dichloropropene	U		0.0173	0.0760	8	05/15/2022 19:56	WG1864109
2,2-Dichloropropane	U		0.0209	0.0380	8	05/15/2022 19:56	WG1864109
Di-isopropyl ether	U		0.00623	0.0152	8	05/15/2022 19:56	WG1864109
Ethylbenzene	0.138		0.0112	0.0380	8	05/15/2022 19:56	WG1864109
Hexachloro-1,3-butadiene	U	J3	0.0912	0.380	8	05/15/2022 19:56	WG1864109
Isopropylbenzene	2.01		0.00646	0.0380	8	05/15/2022 19:56	WG1864109
p-Isopropyltoluene	0.264		0.0388	0.0760	8	05/15/2022 19:56	WG1864109
2-Butanone (MEK)	U		0.966	1.52	8	05/15/2022 19:56	WG1864109
Methylene Chloride	U		0.101	0.380	8	05/15/2022 19:56	WG1864109
4-Methyl-2-pentanone (MIBK)	U		0.0346	0.380	8	05/15/2022 19:56	WG1864109

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.00532	0.0152	8	05/15/2022 19:56	WG1864109
Naphthalene	U	J3	0.0741	0.190	8	05/15/2022 19:56	WG1864109
n-Propylbenzene	10.7		0.0144	0.0760	8	05/15/2022 19:56	WG1864109
Styrene	U		0.00348	0.190	8	05/15/2022 19:56	WG1864109
1,1,1,2-Tetrachloroethane	U		0.0144	0.0380	8	05/15/2022 19:56	WG1864109
1,1,2,2-Tetrachloroethane	U		0.0106	0.0380	8	05/15/2022 19:56	WG1864109
1,1,2-Trichlorotrifluoroethane	U		0.0115	0.0380	8	05/15/2022 19:56	WG1864109
Tetrachloroethene	U		0.0136	0.0380	8	05/15/2022 19:56	WG1864109
Toluene	U		0.0198	0.0760	8	05/15/2022 19:56	WG1864109
1,2,3-Trichlorobenzene	U	C3 J3	0.111	0.190	8	05/15/2022 19:56	WG1864109
1,2,4-Trichlorobenzene	U	J3	0.0669	0.190	8	05/15/2022 19:56	WG1864109
1,1,1-Trichloroethane	U		0.0140	0.0380	8	05/15/2022 19:56	WG1864109
1,1,2-Trichloroethane	U		0.00909	0.0380	8	05/15/2022 19:56	WG1864109
Trichloroethene	U		0.00888	0.0152	8	05/15/2022 19:56	WG1864109
Trichlorofluoromethane	U		0.0126	0.0380	8	05/15/2022 19:56	WG1864109
1,2,3-Trichloropropane	U		0.0247	0.190	8	05/15/2022 19:56	WG1864109
1,2,4-Trimethylbenzene	U		0.0239	0.0760	8	05/15/2022 19:56	WG1864109
1,2,3-Trimethylbenzene	0.0568	J	0.0239	0.0760	8	05/15/2022 19:56	WG1864109
1,3,5-Trimethylbenzene	U		0.0304	0.0760	8	05/15/2022 19:56	WG1864109
Vinyl chloride	U	J4	0.0176	0.0380	8	05/15/2022 19:56	WG1864109
Xylenes, Total	0.0171	J	0.0134	0.0988	8	05/15/2022 19:56	WG1864109
(S) Toluene-d8	*62.9*	J2		*75.0-131*		*05/15/2022 19:56*	WG1864109
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*05/15/2022 19:56*	WG1864109
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*05/15/2022 19:56*	WG1864109

Sample Narrative:

L1492986-02 WG1864109: Non-target compounds too high to run at a lower dilution.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	73.7		1	05/18/2022 07:54	WG1865459

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	157		1.53	4.51	25	05/15/2022 05:26	WG1863886
(S) a,a,a-Trifluorotoluene(FID)	*97.0*			*77.0-120*		*05/15/2022 05:26*	WG1863886

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	1.91	C5	0.0658	0.0902	1	05/16/2022 13:58	WG1864371
Acrylonitrile	0.287		0.00651	0.0225	1	05/16/2022 13:58	WG1864371
Benzene	0.0236		0.000842	0.00180	1	05/16/2022 13:58	WG1864371
Bromobenzene	U		0.00162	0.0225	1	05/16/2022 13:58	WG1864371
Bromodichloromethane	U		0.00131	0.00451	1	05/16/2022 13:58	WG1864371
Bromoform	U		0.00211	0.0451	1	05/16/2022 13:58	WG1864371
Bromomethane	U		0.00355	0.0225	1	05/16/2022 13:58	WG1864371
n-Butylbenzene	0.350		0.00947	0.0225	1	05/16/2022 13:58	WG1864371
sec-Butylbenzene	0.167		0.00520	0.0225	1	05/16/2022 13:58	WG1864371
tert-Butylbenzene	U		0.00352	0.00902	1	05/16/2022 13:58	WG1864371
Carbon tetrachloride	U		0.00162	0.00902	1	05/16/2022 13:58	WG1864371
Chlorobenzene	U		0.000379	0.00451	1	05/16/2022 13:58	WG1864371
Chlorodibromomethane	U		0.00110	0.00451	1	05/16/2022 13:58	WG1864371
Chloroethane	U		0.00307	0.00902	1	05/16/2022 13:58	WG1864371
Chloroform	U		0.00186	0.00451	1	05/16/2022 13:58	WG1864371
Chloromethane	U		0.00785	0.0225	1	05/16/2022 13:58	WG1864371
2-Chlorotoluene	U		0.00156	0.00451	1	05/16/2022 13:58	WG1864371
4-Chlorotoluene	U		0.000812	0.00902	1	05/16/2022 13:58	WG1864371
1,2-Dibromo-3-Chloropropane	U		0.00703	0.0451	1	05/16/2022 13:58	WG1864371
1,2-Dibromoethane	U		0.00117	0.00451	1	05/16/2022 13:58	WG1864371
Dibromomethane	U		0.00135	0.00902	1	05/16/2022 13:58	WG1864371
1,2-Dichlorobenzene	U		0.000767	0.00902	1	05/16/2022 13:58	WG1864371
1,3-Dichlorobenzene	U		0.00108	0.00902	1	05/16/2022 13:58	WG1864371
1,4-Dichlorobenzene	U		0.00126	0.00902	1	05/16/2022 13:58	WG1864371
Dichlorodifluoromethane	U		0.00290	0.00451	1	05/16/2022 13:58	WG1864371
1,1-Dichloroethane	U		0.000886	0.00451	1	05/16/2022 13:58	WG1864371
1,2-Dichloroethane	U		0.00117	0.00451	1	05/16/2022 13:58	WG1864371
1,1-Dichloroethene	U		0.00109	0.00451	1	05/16/2022 13:58	WG1864371
cis-1,2-Dichloroethene	U		0.00132	0.00451	1	05/16/2022 13:58	WG1864371
trans-1,2-Dichloroethene	U		0.00188	0.00902	1	05/16/2022 13:58	WG1864371
1,2-Dichloropropane	U		0.00256	0.00902	1	05/16/2022 13:58	WG1864371
1,1-Dichloropropene	U		0.00146	0.00451	1	05/16/2022 13:58	WG1864371
1,3-Dichloropropane	U		0.000904	0.00902	1	05/16/2022 13:58	WG1864371
cis-1,3-Dichloropropene	U		0.00137	0.00451	1	05/16/2022 13:58	WG1864371
trans-1,3-Dichloropropene	U		0.00206	0.00902	1	05/16/2022 13:58	WG1864371
2,2-Dichloropropane	U		0.00249	0.00451	1	05/16/2022 13:58	WG1864371
Di-isopropyl ether	U		0.000740	0.00180	1	05/16/2022 13:58	WG1864371
Ethylbenzene	0.482		0.00133	0.00451	1	05/16/2022 13:58	WG1864371
Hexachloro-1,3-butadiene	U		0.0108	0.0451	1	05/16/2022 13:58	WG1864371
Isopropylbenzene	0.388		0.000767	0.00451	1	05/16/2022 13:58	WG1864371
p-Isopropyltoluene	0.0299		0.00460	0.00902	1	05/16/2022 13:58	WG1864371
2-Butanone (MEK)	0.177	J	0.115	0.180	1	05/16/2022 13:58	WG1864371
Methylene Chloride	U		0.0120	0.0451	1	05/16/2022 13:58	WG1864371
4-Methyl-2-pentanone (MIBK)	0.563		0.00411	0.0451	1	05/16/2022 13:58	WG1864371

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000631	0.00180	1	05/16/2022 13:58	WG1864371
Naphthalene	0.491		0.00880	0.0225	1	05/16/2022 13:58	WG1864371
n-Propylbenzene	1.33		0.00171	0.00902	1	05/16/2022 13:58	WG1864371
Styrene	U		0.000413	0.0225	1	05/16/2022 13:58	WG1864371
1,1,1,2-Tetrachloroethane	U		0.00171	0.00451	1	05/16/2022 13:58	WG1864371
1,1,2,2-Tetrachloroethane	U		0.00125	0.00451	1	05/16/2022 13:58	WG1864371
1,1,2-Trichlorotrifluoroethane	U		0.00136	0.00451	1	05/16/2022 13:58	WG1864371
Tetrachloroethene	U		0.00162	0.00451	1	05/16/2022 13:58	WG1864371
Toluene	U		0.00234	0.00902	1	05/16/2022 13:58	WG1864371
1,2,3-Trichlorobenzene	U		0.0132	0.0225	1	05/16/2022 13:58	WG1864371
1,2,4-Trichlorobenzene	U		0.00794	0.0225	1	05/16/2022 13:58	WG1864371
1,1,1-Trichloroethane	U		0.00166	0.00451	1	05/16/2022 13:58	WG1864371
1,1,2-Trichloroethane	0.101		0.00108	0.00451	1	05/16/2022 13:58	WG1864371
Trichloroethene	U		0.00105	0.00180	1	05/16/2022 13:58	WG1864371
Trichlorofluoromethane	U		0.00149	0.00451	1	05/16/2022 13:58	WG1864371
1,2,3-Trichloropropane	0.0227		0.00292	0.0225	1	05/16/2022 13:58	WG1864371
1,2,4-Trimethylbenzene	0.649		0.00285	0.00902	1	05/16/2022 13:58	WG1864371
1,2,3-Trimethylbenzene	0.299		0.00285	0.00902	1	05/16/2022 13:58	WG1864371
1,3,5-Trimethylbenzene	0.216		0.00361	0.00902	1	05/16/2022 13:58	WG1864371
Vinyl chloride	U		0.00209	0.00451	1	05/16/2022 13:58	WG1864371
Xylenes, Total	0.0124		0.00159	0.0117	1	05/16/2022 13:58	WG1864371
(S) Toluene-d8	*105*			*75.0-131*		*05/16/2022 13:58*	WG1864371
(S) 4-Bromofluorobenzene	*125*			*67.0-138*		*05/16/2022 13:58*	WG1864371
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*05/16/2022 13:58*	WG1864371

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	72.7		1	05/18/2022 07:54	WG1865459

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	516		29.7	88.0	500	05/17/2022 07:50	WG1864604
(S) a,a,a-Trifluorotoluene(FID)	*93.3*			*77.0-120*		*05/17/2022 07:50*	WG1864604

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	2.25	C5	0.0642	0.0880	1	05/16/2022 14:17	WG1864371
Acrylonitrile	0.714		0.00635	0.0220	1	05/16/2022 14:17	WG1864371
Benzene	U		0.000822	0.00176	1	05/16/2022 14:17	WG1864371
Bromobenzene	U		0.00158	0.0220	1	05/16/2022 14:17	WG1864371
Bromodichloromethane	U		0.00128	0.00440	1	05/16/2022 14:17	WG1864371
Bromoform	U		0.00206	0.0440	1	05/16/2022 14:17	WG1864371
Bromomethane	U		0.00347	0.0220	1	05/16/2022 14:17	WG1864371
n-Butylbenzene	2.20		0.00924	0.0220	1	05/16/2022 14:17	WG1864371
sec-Butylbenzene	1.08		0.00507	0.0220	1	05/16/2022 14:17	WG1864371
tert-Butylbenzene	0.0181		0.00343	0.00880	1	05/16/2022 14:17	WG1864371
Carbon tetrachloride	U		0.00158	0.00880	1	05/16/2022 14:17	WG1864371
Chlorobenzene	U		0.000370	0.00440	1	05/16/2022 14:17	WG1864371
Chlorodibromomethane	U		0.00108	0.00440	1	05/16/2022 14:17	WG1864371
Chloroethane	U		0.00299	0.00880	1	05/16/2022 14:17	WG1864371
Chloroform	U		0.00181	0.00440	1	05/16/2022 14:17	WG1864371
Chloromethane	U		0.00766	0.0220	1	05/16/2022 14:17	WG1864371
2-Chlorotoluene	U		0.00152	0.00440	1	05/16/2022 14:17	WG1864371
4-Chlorotoluene	U		0.000792	0.00880	1	05/16/2022 14:17	WG1864371
1,2-Dibromo-3-Chloropropane	U		0.00686	0.0440	1	05/16/2022 14:17	WG1864371
1,2-Dibromoethane	U		0.00114	0.00440	1	05/16/2022 14:17	WG1864371
Dibromomethane	U		0.00132	0.00880	1	05/16/2022 14:17	WG1864371
1,2-Dichlorobenzene	U		0.000748	0.00880	1	05/16/2022 14:17	WG1864371
1,3-Dichlorobenzene	U		0.00106	0.00880	1	05/16/2022 14:17	WG1864371
1,4-Dichlorobenzene	U		0.00123	0.00880	1	05/16/2022 14:17	WG1864371
Dichlorodifluoromethane	U		0.00283	0.00440	1	05/16/2022 14:17	WG1864371
1,1-Dichloroethane	U		0.000864	0.00440	1	05/16/2022 14:17	WG1864371
1,2-Dichloroethane	U		0.00114	0.00440	1	05/16/2022 14:17	WG1864371
1,1-Dichloroethene	U		0.00107	0.00440	1	05/16/2022 14:17	WG1864371
cis-1,2-Dichloroethene	U		0.00129	0.00440	1	05/16/2022 14:17	WG1864371
trans-1,2-Dichloroethene	U		0.00183	0.00880	1	05/16/2022 14:17	WG1864371
1,2-Dichloropropane	U		0.00250	0.00880	1	05/16/2022 14:17	WG1864371
1,1-Dichloropropene	U		0.00142	0.00440	1	05/16/2022 14:17	WG1864371
1,3-Dichloropropane	U		0.000882	0.00880	1	05/16/2022 14:17	WG1864371
cis-1,3-Dichloropropene	U		0.00133	0.00440	1	05/16/2022 14:17	WG1864371
trans-1,3-Dichloropropene	U		0.00201	0.00880	1	05/16/2022 14:17	WG1864371
2,2-Dichloropropane	U		0.00243	0.00440	1	05/16/2022 14:17	WG1864371
Di-isopropyl ether	U		0.000722	0.00176	1	05/16/2022 14:17	WG1864371
Ethylbenzene	0.134		0.00130	0.00440	1	05/16/2022 14:17	WG1864371
Hexachloro-1,3-butadiene	U		0.0106	0.0440	1	05/16/2022 14:17	WG1864371
Isopropylbenzene	1.31		0.000748	0.00440	1	05/16/2022 14:17	WG1864371
p-Isopropyltoluene	0.121		0.00449	0.00880	1	05/16/2022 14:17	WG1864371
2-Butanone (MEK)	0.646		0.112	0.176	1	05/16/2022 14:17	WG1864371
Methylene Chloride	U		0.0117	0.0440	1	05/16/2022 14:17	WG1864371
4-Methyl-2-pentanone (MIBK)	5.49		0.00401	0.0440	1	05/16/2022 14:17	WG1864371

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000616	0.00176	1	05/16/2022 14:17	WG1864371
Naphthalene	0.225		0.00859	0.0220	1	05/16/2022 14:17	WG1864371
n-Propylbenzene	4.45		0.00669	0.0352	4	05/20/2022 00:56	WG1866384
Styrene	0.000512	J	0.000403	0.0220	1	05/16/2022 14:17	WG1864371
1,1,1,2-Tetrachloroethane	U		0.00167	0.00440	1	05/16/2022 14:17	WG1864371
1,1,2,2-Tetrachloroethane	0.862		0.00122	0.00440	1	05/16/2022 14:17	WG1864371
1,1,2-Trichlorotrifluoroethane	U		0.00133	0.00440	1	05/16/2022 14:17	WG1864371
Tetrachloroethene	U		0.00158	0.00440	1	05/16/2022 14:17	WG1864371
Toluene	0.0105		0.00229	0.00880	1	05/16/2022 14:17	WG1864371
1,2,3-Trichlorobenzene	U		0.0129	0.0220	1	05/16/2022 14:17	WG1864371
1,2,4-Trichlorobenzene	U		0.00774	0.0220	1	05/16/2022 14:17	WG1864371
1,1,1-Trichloroethane	U		0.00162	0.00440	1	05/16/2022 14:17	WG1864371
1,1,2-Trichloroethane	0.716		0.00105	0.00440	1	05/16/2022 14:17	WG1864371
Trichloroethene	U		0.00103	0.00176	1	05/16/2022 14:17	WG1864371
Trichlorofluoromethane	U		0.00146	0.00440	1	05/16/2022 14:17	WG1864371
1,2,3-Trichloropropane	0.260		0.00285	0.0220	1	05/16/2022 14:17	WG1864371
1,2,4-Trimethylbenzene	U		0.00278	0.00880	1	05/16/2022 14:17	WG1864371
1,2,3-Trimethylbenzene	U		0.00278	0.00880	1	05/16/2022 14:17	WG1864371
1,3,5-Trimethylbenzene	0.00611	J	0.00352	0.00880	1	05/16/2022 14:17	WG1864371
Vinyl chloride	U		0.00204	0.00440	1	05/16/2022 14:17	WG1864371
Xylenes, Total	0.00964	J	0.00155	0.0114	1	05/16/2022 14:17	WG1864371
(S) Toluene-d8	*102*			*75.0-131*		*05/16/2022 14:17*	WG1864371
(S) Toluene-d8	*110*			*75.0-131*		*05/20/2022 00:56*	WG1866384
(S) 4-Bromofluorobenzene	*171*	J1		*67.0-138*		*05/16/2022 14:17*	WG1864371
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*05/20/2022 00:56*	WG1866384
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*05/16/2022 14:17*	WG1864371
(S) 1,2-Dichloroethane-d4	*98.8*			*70.0-130*		*05/20/2022 00:56*	WG1866384

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	74.5		1	05/18/2022 07:54	WG1865459

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	7.53	B	1.47	4.34	25	05/17/2022 07:04	WG1864604
(S) a,a,a-Trifluorotoluene(FID)	*98.6*			*77.0-120*		*05/17/2022 07:04*	WG1864604

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0634	0.0868	1	05/19/2022 14:56	WG1866380
Acrylonitrile	U		0.00627	0.0217	1	05/19/2022 14:56	WG1866380
Benzene	0.00222		0.000811	0.00174	1	05/19/2022 14:56	WG1866380
Bromobenzene	U		0.00156	0.0217	1	05/19/2022 14:56	WG1866380
Bromodichloromethane	U		0.00126	0.00434	1	05/19/2022 14:56	WG1866380
Bromoform	U		0.00203	0.0434	1	05/19/2022 14:56	WG1866380
Bromomethane	U		0.00342	0.0217	1	05/19/2022 14:56	WG1866380
n-Butylbenzene	U		0.00911	0.0217	1	05/19/2022 14:56	WG1866380
sec-Butylbenzene	U		0.00500	0.0217	1	05/19/2022 14:56	WG1866380
tert-Butylbenzene	U		0.00338	0.00868	1	05/19/2022 14:56	WG1866380
Carbon tetrachloride	U		0.00156	0.00868	1	05/19/2022 14:56	WG1866380
Chlorobenzene	U		0.000365	0.00434	1	05/19/2022 14:56	WG1866380
Chlorodibromomethane	U		0.00106	0.00434	1	05/19/2022 14:56	WG1866380
Chloroethane	U		0.00295	0.00868	1	05/19/2022 14:56	WG1866380
Chloroform	U		0.00179	0.00434	1	05/19/2022 14:56	WG1866380
Chloromethane	U		0.00755	0.0217	1	05/19/2022 14:56	WG1866380
2-Chlorotoluene	U		0.00150	0.00434	1	05/19/2022 14:56	WG1866380
4-Chlorotoluene	U		0.000781	0.00868	1	05/19/2022 14:56	WG1866380
1,2-Dibromo-3-Chloropropane	U		0.00677	0.0434	1	05/19/2022 14:56	WG1866380
1,2-Dibromoethane	U		0.00112	0.00434	1	05/19/2022 14:56	WG1866380
Dibromomethane	U		0.00130	0.00868	1	05/19/2022 14:56	WG1866380
1,2-Dichlorobenzene	U		0.000738	0.00868	1	05/19/2022 14:56	WG1866380
1,3-Dichlorobenzene	U		0.00104	0.00868	1	05/19/2022 14:56	WG1866380
1,4-Dichlorobenzene	U		0.00122	0.00868	1	05/19/2022 14:56	WG1866380
Dichlorodifluoromethane	U		0.00279	0.00434	1	05/19/2022 14:56	WG1866380
1,1-Dichloroethane	0.00106	J	0.000852	0.00434	1	05/19/2022 14:56	WG1866380
1,2-Dichloroethane	U		0.00113	0.00434	1	05/19/2022 14:56	WG1866380
1,1-Dichloroethene	U		0.00105	0.00434	1	05/19/2022 14:56	WG1866380
cis-1,2-Dichloroethene	U		0.00127	0.00434	1	05/19/2022 14:56	WG1866380
trans-1,2-Dichloroethene	U		0.00181	0.00868	1	05/19/2022 14:56	WG1866380
1,2-Dichloropropane	U		0.00246	0.00868	1	05/19/2022 14:56	WG1866380
1,1-Dichloropropene	U		0.00140	0.00434	1	05/19/2022 14:56	WG1866380
1,3-Dichloropropane	U		0.000870	0.00868	1	05/19/2022 14:56	WG1866380
cis-1,3-Dichloropropene	U		0.00131	0.00434	1	05/19/2022 14:56	WG1866380
trans-1,3-Dichloropropene	U		0.00198	0.00868	1	05/19/2022 14:56	WG1866380
2,2-Dichloropropane	U		0.00240	0.00434	1	05/19/2022 14:56	WG1866380
Di-isopropyl ether	U		0.000712	0.00174	1	05/19/2022 14:56	WG1866380
Ethylbenzene	0.00279	J	0.00128	0.00434	1	05/19/2022 14:56	WG1866380
Hexachloro-1,3-butadiene	U		0.0104	0.0434	1	05/19/2022 14:56	WG1866380
Isopropylbenzene	0.000982	J	0.000738	0.00434	1	05/19/2022 14:56	WG1866380
p-Isopropyltoluene	U		0.00443	0.00868	1	05/19/2022 14:56	WG1866380
2-Butanone (MEK)	U		0.110	0.174	1	05/19/2022 14:56	WG1866380
Methylene Chloride	U		0.0115	0.0434	1	05/19/2022 14:56	WG1866380
4-Methyl-2-pentanone (MIBK)	U		0.00396	0.0434	1	05/19/2022 14:56	WG1866380

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	0.00159	J	0.000608	0.00174	1	05/19/2022 14:56	WG1866380
Naphthalene	U		0.00847	0.0217	1	05/19/2022 14:56	WG1866380
n-Propylbenzene	U		0.00165	0.00868	1	05/19/2022 14:56	WG1866380
Styrene	U		0.000398	0.0217	1	05/19/2022 14:56	WG1866380
1,1,1,2-Tetrachloroethane	U		0.00165	0.00434	1	05/19/2022 14:56	WG1866380
1,1,2,2-Tetrachloroethane	U		0.00121	0.00434	1	05/19/2022 14:56	WG1866380
1,1,2-Trichlorotrifluoroethane	U		0.00131	0.00434	1	05/19/2022 14:56	WG1866380
Tetrachloroethene	U		0.00156	0.00434	1	05/19/2022 14:56	WG1866380
Toluene	0.00510	J	0.00226	0.00868	1	05/19/2022 14:56	WG1866380
1,2,3-Trichlorobenzene	U		0.0127	0.0217	1	05/19/2022 14:56	WG1866380
1,2,4-Trichlorobenzene	U		0.00764	0.0217	1	05/19/2022 14:56	WG1866380
1,1,1-Trichloroethane	U		0.00160	0.00434	1	05/19/2022 14:56	WG1866380
1,1,2-Trichloroethane	U		0.00104	0.00434	1	05/19/2022 14:56	WG1866380
Trichloroethene	U		0.00101	0.00174	1	05/19/2022 14:56	WG1866380
Trichlorofluoromethane	U		0.00144	0.00434	1	05/19/2022 14:56	WG1866380
1,2,3-Trichloropropane	U		0.00281	0.0217	1	05/19/2022 14:56	WG1866380
1,2,4-Trimethylbenzene	0.00321	J	0.00274	0.00868	1	05/19/2022 14:56	WG1866380
1,2,3-Trimethylbenzene	U		0.00274	0.00868	1	05/19/2022 14:56	WG1866380
1,3,5-Trimethylbenzene	U		0.00347	0.00868	1	05/19/2022 14:56	WG1866380
Vinyl chloride	U		0.00201	0.00434	1	05/19/2022 14:56	WG1866380
Xylenes, Total	0.00642	J	0.00153	0.0113	1	05/19/2022 14:56	WG1866380
(S) Toluene-d8	*105*			*75.0-131*		*05/19/2022 14:56*	WG1866380
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*05/19/2022 14:56*	WG1866380
(S) 1,2-Dichloroethane-d4	*95.9*			*70.0-130*		*05/19/2022 14:56*	WG1866380

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	72.8		1	05/18/2022 07:54	WG1865459

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	611		30.7	90.9	500	05/17/2022 08:13	WG1864604
(S) a,a,a-Trifluorotoluene(FID)	*98.3*			*77.0-120*		*05/17/2022 08:13*	WG1864604

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	7.11	C5	0.0663	0.0909	1	05/16/2022 14:56	WG1864371
Acrylonitrile	U		0.00656	0.0227	1	05/16/2022 14:56	WG1864371
Benzene	0.801		0.000849	0.00182	1	05/16/2022 14:56	WG1864371
Bromobenzene	U		0.00164	0.0227	1	05/16/2022 14:56	WG1864371
Bromodichloromethane	U		0.00132	0.00454	1	05/16/2022 14:56	WG1864371
Bromoform	U		0.00213	0.0454	1	05/16/2022 14:56	WG1864371
Bromomethane	U		0.00358	0.0227	1	05/16/2022 14:56	WG1864371
n-Butylbenzene	1.21		0.00954	0.0227	1	05/16/2022 14:56	WG1864371
sec-Butylbenzene	0.632		0.00523	0.0227	1	05/16/2022 14:56	WG1864371
tert-Butylbenzene	U		0.00354	0.00909	1	05/16/2022 14:56	WG1864371
Carbon tetrachloride	U		0.00163	0.00909	1	05/16/2022 14:56	WG1864371
Chlorobenzene	U		0.000382	0.00454	1	05/16/2022 14:56	WG1864371
Chlorodibromomethane	U		0.00111	0.00454	1	05/16/2022 14:56	WG1864371
Chloroethane	U		0.00309	0.00909	1	05/16/2022 14:56	WG1864371
Chloroform	0.220		0.00187	0.00454	1	05/16/2022 14:56	WG1864371
Chloromethane	U		0.00790	0.0227	1	05/16/2022 14:56	WG1864371
2-Chlorotoluene	0.0425		0.00157	0.00454	1	05/16/2022 14:56	WG1864371
4-Chlorotoluene	U		0.000818	0.00909	1	05/16/2022 14:56	WG1864371
1,2-Dibromo-3-Chloropropane	U		0.00709	0.0454	1	05/16/2022 14:56	WG1864371
1,2-Dibromoethane	U		0.00118	0.00454	1	05/16/2022 14:56	WG1864371
Dibromomethane	U		0.00136	0.00909	1	05/16/2022 14:56	WG1864371
1,2-Dichlorobenzene	U		0.000772	0.00909	1	05/16/2022 14:56	WG1864371
1,3-Dichlorobenzene	U		0.00109	0.00909	1	05/16/2022 14:56	WG1864371
1,4-Dichlorobenzene	U		0.00127	0.00909	1	05/16/2022 14:56	WG1864371
Dichlorodifluoromethane	U		0.00293	0.00454	1	05/16/2022 14:56	WG1864371
1,1-Dichloroethane	U		0.000892	0.00454	1	05/16/2022 14:56	WG1864371
1,2-Dichloroethane	U		0.00118	0.00454	1	05/16/2022 14:56	WG1864371
1,1-Dichloroethene	U		0.00110	0.00454	1	05/16/2022 14:56	WG1864371
cis-1,2-Dichloroethene	U		0.00133	0.00454	1	05/16/2022 14:56	WG1864371
trans-1,2-Dichloroethene	U		0.00189	0.00909	1	05/16/2022 14:56	WG1864371
1,2-Dichloropropane	U		0.00258	0.00909	1	05/16/2022 14:56	WG1864371
1,1-Dichloropropene	U		0.00147	0.00454	1	05/16/2022 14:56	WG1864371
1,3-Dichloropropane	U		0.000910	0.00909	1	05/16/2022 14:56	WG1864371
cis-1,3-Dichloropropene	U		0.00138	0.00454	1	05/16/2022 14:56	WG1864371
trans-1,3-Dichloropropene	U		0.00207	0.00909	1	05/16/2022 14:56	WG1864371
2,2-Dichloropropane	U		0.00251	0.00454	1	05/16/2022 14:56	WG1864371
Di-isopropyl ether	U		0.000745	0.00182	1	05/16/2022 14:56	WG1864371
Ethylbenzene	9.67		0.0107	0.0363	8	05/20/2022 01:15	WG1866384
Hexachloro-1,3-butadiene	U		0.0109	0.0454	1	05/16/2022 14:56	WG1864371
Isopropylbenzene	1.53		0.000772	0.00454	1	05/16/2022 14:56	WG1864371
p-Isopropyltoluene	0.222		0.00463	0.00909	1	05/16/2022 14:56	WG1864371
2-Butanone (MEK)	0.747		0.115	0.182	1	05/16/2022 14:56	WG1864371
Methylene Chloride	U		0.0121	0.0454	1	05/16/2022 14:56	WG1864371
4-Methyl-2-pentanone (MIBK)	3.98		0.00414	0.0454	1	05/16/2022 14:56	WG1864371

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000636	0.00182	1	05/16/2022 14:56	WG1864371
Naphthalene	1.31		0.00887	0.0227	1	05/16/2022 14:56	WG1864371
n-Propylbenzene	4.49		0.0138	0.0727	8	05/20/2022 01:15	WG1866384
Styrene	U		0.000416	0.0227	1	05/16/2022 14:56	WG1864371
1,1,1,2-Tetrachloroethane	U		0.00172	0.00454	1	05/16/2022 14:56	WG1864371
1,1,2,2-Tetrachloroethane	U		0.00126	0.00454	1	05/16/2022 14:56	WG1864371
1,1,2-Trichlorotrifluoroethane	U		0.00137	0.00454	1	05/16/2022 14:56	WG1864371
Tetrachloroethene	U		0.00163	0.00454	1	05/16/2022 14:56	WG1864371
Toluene	0.0536		0.00236	0.00909	1	05/16/2022 14:56	WG1864371
1,2,3-Trichlorobenzene	U		0.0133	0.0227	1	05/16/2022 14:56	WG1864371
1,2,4-Trichlorobenzene	U		0.00800	0.0227	1	05/16/2022 14:56	WG1864371
1,1,1-Trichloroethane	U		0.00168	0.00454	1	05/16/2022 14:56	WG1864371
1,1,2-Trichloroethane	0.727		0.00108	0.00454	1	05/16/2022 14:56	WG1864371
Trichloroethene	U		0.00106	0.00182	1	05/16/2022 14:56	WG1864371
Trichlorofluoromethane	U		0.00150	0.00454	1	05/16/2022 14:56	WG1864371
1,2,3-Trichloropropane	0.181		0.00294	0.0227	1	05/16/2022 14:56	WG1864371
1,2,4-Trimethylbenzene	4.94		0.0229	0.0727	8	05/20/2022 01:15	WG1866384
1,2,3-Trimethylbenzene	3.33		0.00287	0.00909	1	05/16/2022 14:56	WG1864371
1,3,5-Trimethylbenzene	0.155		0.00363	0.00909	1	05/16/2022 14:56	WG1864371
Vinyl chloride	U		0.00211	0.00454	1	05/16/2022 14:56	WG1864371
Xylenes, Total	0.712		0.00160	0.0118	1	05/16/2022 14:56	WG1864371
(S) Toluene-d8	*110*			*75.0-131*		*05/16/2022 14:56*	WG1864371
(S) Toluene-d8	*101*			*75.0-131*		*05/20/2022 01:15*	WG1866384
(S) 4-Bromofluorobenzene	*142*	J1		*67.0-138*		*05/16/2022 14:56*	WG1864371
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*05/20/2022 01:15*	WG1866384
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*05/16/2022 14:56*	WG1864371
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*05/20/2022 01:15*	WG1866384

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	73.3		1	05/18/2022 07:54	WG1865459

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	548		30.8	91.0	500	05/17/2022 08:36	WG1864604
(S) a,a,a-Trifluorotoluene(FID)	*97.6*			*77.0-120*		*05/17/2022 08:36*	WG1864604

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	2.57	C5	0.0664	0.0910	1	05/16/2022 15:15	WG1864371
Acrylonitrile	U		0.00657	0.0228	1	05/16/2022 15:15	WG1864371
Benzene	0.251		0.000850	0.00182	1	05/16/2022 15:15	WG1864371
Bromobenzene	U		0.00164	0.0228	1	05/16/2022 15:15	WG1864371
Bromodichloromethane	U		0.00132	0.00455	1	05/16/2022 15:15	WG1864371
Bromoform	U		0.00213	0.0455	1	05/16/2022 15:15	WG1864371
Bromomethane	U		0.00359	0.0228	1	05/16/2022 15:15	WG1864371
n-Butylbenzene	1.42		0.00956	0.0228	1	05/16/2022 15:15	WG1864371
sec-Butylbenzene	0.677		0.00524	0.0228	1	05/16/2022 15:15	WG1864371
tert-Butylbenzene	0.0115		0.00355	0.00910	1	05/16/2022 15:15	WG1864371
Carbon tetrachloride	U		0.00163	0.00910	1	05/16/2022 15:15	WG1864371
Chlorobenzene	U		0.000382	0.00455	1	05/16/2022 15:15	WG1864371
Chlorodibromomethane	U		0.00111	0.00455	1	05/16/2022 15:15	WG1864371
Chloroethane	U		0.00309	0.00910	1	05/16/2022 15:15	WG1864371
Chloroform	U		0.00188	0.00455	1	05/16/2022 15:15	WG1864371
Chloromethane	U		0.00792	0.0228	1	05/16/2022 15:15	WG1864371
2-Chlorotoluene	0.0317		0.00157	0.00455	1	05/16/2022 15:15	WG1864371
4-Chlorotoluene	U		0.000819	0.00910	1	05/16/2022 15:15	WG1864371
1,2-Dibromo-3-Chloropropane	U		0.00710	0.0455	1	05/16/2022 15:15	WG1864371
1,2-Dibromoethane	U		0.00118	0.00455	1	05/16/2022 15:15	WG1864371
Dibromomethane	U		0.00137	0.00910	1	05/16/2022 15:15	WG1864371
1,2-Dichlorobenzene	U		0.000774	0.00910	1	05/16/2022 15:15	WG1864371
1,3-Dichlorobenzene	U		0.00109	0.00910	1	05/16/2022 15:15	WG1864371
1,4-Dichlorobenzene	U		0.00127	0.00910	1	05/16/2022 15:15	WG1864371
Dichlorodifluoromethane	U		0.00293	0.00455	1	05/16/2022 15:15	WG1864371
1,1-Dichloroethane	U		0.000894	0.00455	1	05/16/2022 15:15	WG1864371
1,2-Dichloroethane	U		0.00118	0.00455	1	05/16/2022 15:15	WG1864371
1,1-Dichloroethene	U		0.00110	0.00455	1	05/16/2022 15:15	WG1864371
cis-1,2-Dichloroethene	U		0.00134	0.00455	1	05/16/2022 15:15	WG1864371
trans-1,2-Dichloroethene	U		0.00189	0.00910	1	05/16/2022 15:15	WG1864371
1,2-Dichloropropane	U		0.00259	0.00910	1	05/16/2022 15:15	WG1864371
1,1-Dichloropropene	U		0.00147	0.00455	1	05/16/2022 15:15	WG1864371
1,3-Dichloropropane	U		0.000912	0.00910	1	05/16/2022 15:15	WG1864371
cis-1,3-Dichloropropene	U		0.00138	0.00455	1	05/16/2022 15:15	WG1864371
trans-1,3-Dichloropropene	U		0.00208	0.00910	1	05/16/2022 15:15	WG1864371
2,2-Dichloropropane	U		0.00251	0.00455	1	05/16/2022 15:15	WG1864371
Di-isopropyl ether	U		0.000746	0.00182	1	05/16/2022 15:15	WG1864371
Ethylbenzene	8.37		0.0107	0.0364	8	05/20/2022 01:34	WG1866384
Hexachloro-1,3-butadiene	U		0.0109	0.0455	1	05/16/2022 15:15	WG1864371
Isopropylbenzene	1.82		0.000774	0.00455	1	05/16/2022 15:15	WG1864371
p-Isopropyltoluene	0.228		0.00464	0.00910	1	05/16/2022 15:15	WG1864371
2-Butanone (MEK)	U		0.116	0.182	1	05/16/2022 15:15	WG1864371
Methylene Chloride	U		0.0121	0.0455	1	05/16/2022 15:15	WG1864371
4-Methyl-2-pentanone (MIBK)	U		0.00415	0.0455	1	05/16/2022 15:15	WG1864371

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000637	0.00182	1	05/16/2022 15:15	WG1864371
Naphthalene	1.93		0.00888	0.0228	1	05/16/2022 15:15	WG1864371
n-Propylbenzene	5.08		0.0138	0.0728	8	05/20/2022 01:34	WG1866384
Styrene	U		0.000417	0.0228	1	05/16/2022 15:15	WG1864371
1,1,1,2-Tetrachloroethane	U		0.00173	0.00455	1	05/16/2022 15:15	WG1864371
1,1,2,2-Tetrachloroethane	U		0.00127	0.00455	1	05/16/2022 15:15	WG1864371
1,1,2-Trichlorotrifluoroethane	U		0.00137	0.00455	1	05/16/2022 15:15	WG1864371
Tetrachloroethene	U		0.00163	0.00455	1	05/16/2022 15:15	WG1864371
Toluene	U		0.00237	0.00910	1	05/16/2022 15:15	WG1864371
1,2,3-Trichlorobenzene	U		0.0133	0.0228	1	05/16/2022 15:15	WG1864371
1,2,4-Trichlorobenzene	U		0.00801	0.0228	1	05/16/2022 15:15	WG1864371
1,1,1-Trichloroethane	U		0.00168	0.00455	1	05/16/2022 15:15	WG1864371
1,1,2-Trichloroethane	0.544		0.00109	0.00455	1	05/16/2022 15:15	WG1864371
Trichloroethene	U		0.00106	0.00182	1	05/16/2022 15:15	WG1864371
Trichlorofluoromethane	U		0.00151	0.00455	1	05/16/2022 15:15	WG1864371
1,2,3-Trichloropropane	U		0.00295	0.0228	1	05/16/2022 15:15	WG1864371
1,2,4-Trimethylbenzene	8.77		0.0229	0.0728	8	05/20/2022 01:34	WG1866384
1,2,3-Trimethylbenzene	4.22		0.0229	0.0728	8	05/20/2022 01:34	WG1866384
1,3,5-Trimethylbenzene	0.282		0.00364	0.00910	1	05/16/2022 15:15	WG1864371
Vinyl chloride	U		0.00211	0.00455	1	05/16/2022 15:15	WG1864371
Xylenes, Total	0.0127		0.00160	0.0118	1	05/16/2022 15:15	WG1864371
(S) Toluene-d8	*119*			*75.0-131*		*05/16/2022 15:15*	WG1864371
(S) Toluene-d8	*106*			*75.0-131*		*05/20/2022 01:34*	WG1866384
(S) 4-Bromofluorobenzene	*138*			*67.0-138*		*05/16/2022 15:15*	WG1864371
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*05/20/2022 01:34*	WG1866384
(S) 1,2-Dichloroethane-d4	*98.7*			*70.0-130*		*05/16/2022 15:15*	WG1864371
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*05/20/2022 01:34*	WG1866384

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	73.1		1	05/18/2022 07:54	WG1865459

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	441	B	30.9	91.5	500	05/17/2022 08:59	WG1864604
(S) a,a,a-Trifluorotoluene(FID)	*97.3*			*77.0-120*		*05/17/2022 08:59*	WG1864604

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	1.65	C5	0.0668	0.0915	1	05/16/2022 15:34	WG1864371
Acrylonitrile	U		0.00661	0.0229	1	05/16/2022 15:34	WG1864371
Benzene	0.108		0.000855	0.00183	1	05/16/2022 15:34	WG1864371
Bromobenzene	U		0.00165	0.0229	1	05/16/2022 15:34	WG1864371
Bromodichloromethane	U		0.00133	0.00458	1	05/16/2022 15:34	WG1864371
Bromoform	U		0.00214	0.0458	1	05/16/2022 15:34	WG1864371
Bromomethane	U		0.00361	0.0229	1	05/16/2022 15:34	WG1864371
n-Butylbenzene	0.983		0.00961	0.0229	1	05/16/2022 15:34	WG1864371
sec-Butylbenzene	0.472		0.00527	0.0229	1	05/16/2022 15:34	WG1864371
tert-Butylbenzene	U		0.00357	0.00915	1	05/16/2022 15:34	WG1864371
Carbon tetrachloride	U		0.00164	0.00915	1	05/16/2022 15:34	WG1864371
Chlorobenzene	U		0.000384	0.00458	1	05/16/2022 15:34	WG1864371
Chlorodibromomethane	U		0.00112	0.00458	1	05/16/2022 15:34	WG1864371
Chloroethane	U		0.00311	0.00915	1	05/16/2022 15:34	WG1864371
Chloroform	U		0.00189	0.00458	1	05/16/2022 15:34	WG1864371
Chloromethane	U		0.00796	0.0229	1	05/16/2022 15:34	WG1864371
2-Chlorotoluene	U		0.00158	0.00458	1	05/16/2022 15:34	WG1864371
4-Chlorotoluene	U		0.000824	0.00915	1	05/16/2022 15:34	WG1864371
1,2-Dibromo-3-Chloropropane	U		0.00714	0.0458	1	05/16/2022 15:34	WG1864371
1,2-Dibromoethane	U		0.00119	0.00458	1	05/16/2022 15:34	WG1864371
Dibromomethane	U		0.00137	0.00915	1	05/16/2022 15:34	WG1864371
1,2-Dichlorobenzene	U		0.000778	0.00915	1	05/16/2022 15:34	WG1864371
1,3-Dichlorobenzene	U		0.00110	0.00915	1	05/16/2022 15:34	WG1864371
1,4-Dichlorobenzene	U		0.00128	0.00915	1	05/16/2022 15:34	WG1864371
Dichlorodifluoromethane	U		0.00295	0.00458	1	05/16/2022 15:34	WG1864371
1,1-Dichloroethane	U		0.000899	0.00458	1	05/16/2022 15:34	WG1864371
1,2-Dichloroethane	U		0.00119	0.00458	1	05/16/2022 15:34	WG1864371
1,1-Dichloroethene	U		0.00111	0.00458	1	05/16/2022 15:34	WG1864371
cis-1,2-Dichloroethene	U		0.00134	0.00458	1	05/16/2022 15:34	WG1864371
trans-1,2-Dichloroethene	U		0.00190	0.00915	1	05/16/2022 15:34	WG1864371
1,2-Dichloropropane	U		0.00260	0.00915	1	05/16/2022 15:34	WG1864371
1,1-Dichloropropene	U		0.00148	0.00458	1	05/16/2022 15:34	WG1864371
1,3-Dichloropropane	U		0.000917	0.00915	1	05/16/2022 15:34	WG1864371
cis-1,3-Dichloropropene	U		0.00139	0.00458	1	05/16/2022 15:34	WG1864371
trans-1,3-Dichloropropene	U		0.00209	0.00915	1	05/16/2022 15:34	WG1864371
2,2-Dichloropropane	U		0.00253	0.00458	1	05/16/2022 15:34	WG1864371
Di-isopropyl ether	U		0.000751	0.00183	1	05/16/2022 15:34	WG1864371
Ethylbenzene	4.76		0.0108	0.0366	8	05/20/2022 01:53	WG1866384
Hexachloro-1,3-butadiene	U		0.0110	0.0458	1	05/16/2022 15:34	WG1864371
Isopropylbenzene	1.30		0.000778	0.00458	1	05/16/2022 15:34	WG1864371
p-Isopropyltoluene	0.0231		0.00467	0.00915	1	05/16/2022 15:34	WG1864371
2-Butanone (MEK)	0.471		0.116	0.183	1	05/16/2022 15:34	WG1864371
Methylene Chloride	U		0.0122	0.0458	1	05/16/2022 15:34	WG1864371
4-Methyl-2-pentanone (MIBK)	U		0.00417	0.0458	1	05/16/2022 15:34	WG1864371

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000641	0.00183	1	05/16/2022 15:34	WG1864371
Naphthalene	1.10		0.00893	0.0229	1	05/16/2022 15:34	WG1864371
n-Propylbenzene	4.89		0.0139	0.0732	8	05/20/2022 01:53	WG1866384
Styrene	U		0.000419	0.0229	1	05/16/2022 15:34	WG1864371
1,1,1,2-Tetrachloroethane	U		0.00174	0.00458	1	05/16/2022 15:34	WG1864371
1,1,2,2-Tetrachloroethane	U		0.00127	0.00458	1	05/16/2022 15:34	WG1864371
1,1,2-Trichlorotrifluoroethane	U		0.00138	0.00458	1	05/16/2022 15:34	WG1864371
Tetrachloroethene	U		0.00164	0.00458	1	05/16/2022 15:34	WG1864371
Toluene	U		0.00238	0.00915	1	05/16/2022 15:34	WG1864371
1,2,3-Trichlorobenzene	U		0.0134	0.0229	1	05/16/2022 15:34	WG1864371
1,2,4-Trichlorobenzene	U		0.00806	0.0229	1	05/16/2022 15:34	WG1864371
1,1,1-Trichloroethane	U		0.00169	0.00458	1	05/16/2022 15:34	WG1864371
1,1,2-Trichloroethane	0.258		0.00109	0.00458	1	05/16/2022 15:34	WG1864371
Trichloroethene	U		0.00107	0.00183	1	05/16/2022 15:34	WG1864371
Trichlorofluoromethane	U		0.00151	0.00458	1	05/16/2022 15:34	WG1864371
1,2,3-Trichloropropane	U		0.00297	0.0229	1	05/16/2022 15:34	WG1864371
1,2,4-Trimethylbenzene	0.196		0.00289	0.00915	1	05/16/2022 15:34	WG1864371
1,2,3-Trimethylbenzene	3.81		0.0231	0.0732	8	05/20/2022 01:53	WG1866384
1,3,5-Trimethylbenzene	U		0.00366	0.00915	1	05/16/2022 15:34	WG1864371
Vinyl chloride	U		0.00212	0.00458	1	05/16/2022 15:34	WG1864371
Xylenes, Total	U		0.00161	0.0119	1	05/16/2022 15:34	WG1864371
(S) Toluene-d8	*111*			*75.0-131*		*05/16/2022 15:34*	WG1864371
(S) Toluene-d8	*103*			*75.0-131*		*05/20/2022 01:53*	WG1866384
(S) 4-Bromofluorobenzene	*132*			*67.0-138*		*05/16/2022 15:34*	WG1864371
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*05/20/2022 01:53*	WG1866384
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*05/16/2022 15:34*	WG1864371
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*05/20/2022 01:53*	WG1866384

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	72.8		1	05/18/2022 07:54	WG1865459

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	805	B	62.7	185	1000	05/17/2022 09:22	WG1864604
(S) a,a,a-Trifluorotoluene(FID)	*98.6*			*77.0-120*		*05/17/2022 09:22*	WG1864604

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	2.89	C5	0.0676	0.0925	1	05/16/2022 15:53	WG1864371
Acrylonitrile	U		0.00668	0.0231	1	05/16/2022 15:53	WG1864371
Benzene	0.637		0.000864	0.00185	1	05/16/2022 15:53	WG1864371
Bromobenzene	U		0.00167	0.0231	1	05/16/2022 15:53	WG1864371
Bromodichloromethane	U		0.00134	0.00463	1	05/16/2022 15:53	WG1864371
Bromoform	U		0.00217	0.0463	1	05/16/2022 15:53	WG1864371
Bromomethane	U		0.00365	0.0231	1	05/16/2022 15:53	WG1864371
n-Butylbenzene	2.33		0.00972	0.0231	1	05/16/2022 15:53	WG1864371
sec-Butylbenzene	1.09		0.00533	0.0231	1	05/16/2022 15:53	WG1864371
tert-Butylbenzene	U		0.00361	0.00925	1	05/16/2022 15:53	WG1864371
Carbon tetrachloride	U		0.00166	0.00925	1	05/16/2022 15:53	WG1864371
Chlorobenzene	U		0.000389	0.00463	1	05/16/2022 15:53	WG1864371
Chlorodibromomethane	U		0.00113	0.00463	1	05/16/2022 15:53	WG1864371
Chloroethane	U		0.00315	0.00925	1	05/16/2022 15:53	WG1864371
Chloroform	U		0.00191	0.00463	1	05/16/2022 15:53	WG1864371
Chloromethane	U		0.00805	0.0231	1	05/16/2022 15:53	WG1864371
2-Chlorotoluene	U		0.00160	0.00463	1	05/16/2022 15:53	WG1864371
4-Chlorotoluene	U		0.000833	0.00925	1	05/16/2022 15:53	WG1864371
1,2-Dibromo-3-Chloropropane	U		0.00722	0.0463	1	05/16/2022 15:53	WG1864371
1,2-Dibromoethane	U		0.00120	0.00463	1	05/16/2022 15:53	WG1864371
Dibromomethane	U		0.00139	0.00925	1	05/16/2022 15:53	WG1864371
1,2-Dichlorobenzene	U		0.000787	0.00925	1	05/16/2022 15:53	WG1864371
1,3-Dichlorobenzene	U		0.00111	0.00925	1	05/16/2022 15:53	WG1864371
1,4-Dichlorobenzene	U		0.00130	0.00925	1	05/16/2022 15:53	WG1864371
Dichlorodifluoromethane	U		0.00298	0.00463	1	05/16/2022 15:53	WG1864371
1,1-Dichloroethane	U		0.000909	0.00463	1	05/16/2022 15:53	WG1864371
1,2-Dichloroethane	U		0.00120	0.00463	1	05/16/2022 15:53	WG1864371
1,1-Dichloroethene	U		0.00112	0.00463	1	05/16/2022 15:53	WG1864371
cis-1,2-Dichloroethene	U		0.00136	0.00463	1	05/16/2022 15:53	WG1864371
trans-1,2-Dichloroethene	U		0.00192	0.00925	1	05/16/2022 15:53	WG1864371
1,2-Dichloropropane	U		0.00263	0.00925	1	05/16/2022 15:53	WG1864371
1,1-Dichloropropene	U		0.00150	0.00463	1	05/16/2022 15:53	WG1864371
1,3-Dichloropropane	U		0.000927	0.00925	1	05/16/2022 15:53	WG1864371
cis-1,3-Dichloropropene	U		0.00140	0.00463	1	05/16/2022 15:53	WG1864371
trans-1,3-Dichloropropene	U		0.00211	0.00925	1	05/16/2022 15:53	WG1864371
2,2-Dichloropropane	U		0.00255	0.00463	1	05/16/2022 15:53	WG1864371
Di-isopropyl ether	U		0.000759	0.00185	1	05/16/2022 15:53	WG1864371
Ethylbenzene	19.6		0.0272	0.0925	20	05/20/2022 02:12	WG1866384
Hexachloro-1,3-butadiene	U		0.0111	0.0463	1	05/16/2022 15:53	WG1864371
Isopropylbenzene	2.85		0.000787	0.00463	1	05/16/2022 15:53	WG1864371
p-Isopropyltoluene	0.570		0.00472	0.00925	1	05/16/2022 15:53	WG1864371
2-Butanone (MEK)	0.751		0.118	0.185	1	05/16/2022 15:53	WG1864371
Methylene Chloride	U		0.0123	0.0463	1	05/16/2022 15:53	WG1864371
4-Methyl-2-pentanone (MIBK)	2.91		0.00422	0.0463	1	05/16/2022 15:53	WG1864371

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000648	0.00185	1	05/16/2022 15:53	WG1864371
Naphthalene	4.53		0.181	0.463	20	05/20/2022 02:12	WG1866384
n-Propylbenzene	9.38		0.0352	0.185	20	05/20/2022 02:12	WG1866384
Styrene	U		0.000424	0.0231	1	05/16/2022 15:53	WG1864371
1,1,1,2-Tetrachloroethane	U		0.00175	0.00463	1	05/16/2022 15:53	WG1864371
1,1,2,2-Tetrachloroethane	0.387		0.00129	0.00463	1	05/16/2022 15:53	WG1864371
1,1,2-Trichlorotrifluoroethane	U		0.00140	0.00463	1	05/16/2022 15:53	WG1864371
Tetrachloroethene	U		0.00166	0.00463	1	05/16/2022 15:53	WG1864371
Toluene	U		0.00241	0.00925	1	05/16/2022 15:53	WG1864371
1,2,3-Trichlorobenzene	U		0.0136	0.0231	1	05/16/2022 15:53	WG1864371
1,2,4-Trichlorobenzene	U		0.00814	0.0231	1	05/16/2022 15:53	WG1864371
1,1,1-Trichloroethane	U		0.00171	0.00463	1	05/16/2022 15:53	WG1864371
1,1,2-Trichloroethane	0.429		0.00110	0.00463	1	05/16/2022 15:53	WG1864371
Trichloroethene	U		0.00108	0.00185	1	05/16/2022 15:53	WG1864371
Trichlorofluoromethane	U		0.00153	0.00463	1	05/16/2022 15:53	WG1864371
1,2,3-Trichloropropane	U		0.00300	0.0231	1	05/16/2022 15:53	WG1864371
1,2,4-Trimethylbenzene	36.8		0.0585	0.185	20	05/20/2022 02:12	WG1866384
1,2,3-Trimethylbenzene	9.07		0.0585	0.185	20	05/20/2022 02:12	WG1866384
1,3,5-Trimethylbenzene	4.31		0.0740	0.185	20	05/20/2022 02:12	WG1866384
Vinyl chloride	U		0.00215	0.00463	1	05/16/2022 15:53	WG1864371
Xylenes, Total	17.2		0.00163	0.0120	1	05/16/2022 15:53	WG1864371
(S) Toluene-d8	*104*			*75.0-131*		*05/16/2022 15:53*	WG1864371
(S) Toluene-d8	*104*			*75.0-131*		*05/20/2022 02:12*	WG1866384
(S) 4-Bromofluorobenzene	*139*	J1		*67.0-138*		*05/16/2022 15:53*	WG1864371
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*05/20/2022 02:12*	WG1866384
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*05/16/2022 15:53*	WG1864371
(S) 1,2-Dichloroethane-d4	*99.4*			*70.0-130*		*05/20/2022 02:12*	WG1866384

Sample Narrative:

L1492986-09 WG1864371: Surrogate failure due to matrix interference.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	73.4		1	05/18/2022 07:54	WG1865459

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	237		1.54	4.55	25	05/17/2022 07:27	WG1864604
(S) a,a,a-Trifluorotoluene(FID)	*104*			*77.0-120*		*05/17/2022 07:27*	WG1864604

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	8.32	C5	0.0665	0.0911	1	05/16/2022 16:12	WG1864371
Acrylonitrile	U		0.00657	0.0228	1	05/16/2022 16:12	WG1864371
Benzene	1.18		0.000851	0.00182	1	05/16/2022 16:12	WG1864371
Bromobenzene	U		0.00164	0.0228	1	05/16/2022 16:12	WG1864371
Bromodichloromethane	U		0.00132	0.00455	1	05/16/2022 16:12	WG1864371
Bromoform	U		0.00213	0.0455	1	05/16/2022 16:12	WG1864371
Bromomethane	U		0.00359	0.0228	1	05/16/2022 16:12	WG1864371
n-Butylbenzene	0.570		0.00956	0.0228	1	05/16/2022 16:12	WG1864371
sec-Butylbenzene	0.277		0.00525	0.0228	1	05/16/2022 16:12	WG1864371
tert-Butylbenzene	U		0.00355	0.00911	1	05/16/2022 16:12	WG1864371
Carbon tetrachloride	U		0.00164	0.00911	1	05/16/2022 16:12	WG1864371
Chlorobenzene	U		0.000382	0.00455	1	05/16/2022 16:12	WG1864371
Chlorodibromomethane	U		0.00111	0.00455	1	05/16/2022 16:12	WG1864371
Chloroethane	U		0.00310	0.00911	1	05/16/2022 16:12	WG1864371
Chloroform	U		0.00188	0.00455	1	05/16/2022 16:12	WG1864371
Chloromethane	U		0.00792	0.0228	1	05/16/2022 16:12	WG1864371
2-Chlorotoluene	U		0.00158	0.00455	1	05/16/2022 16:12	WG1864371
4-Chlorotoluene	U		0.000820	0.00911	1	05/16/2022 16:12	WG1864371
1,2-Dibromo-3-Chloropropane	U		0.00710	0.0455	1	05/16/2022 16:12	WG1864371
1,2-Dibromoethane	U		0.00118	0.00455	1	05/16/2022 16:12	WG1864371
Dibromomethane	U		0.00137	0.00911	1	05/16/2022 16:12	WG1864371
1,2-Dichlorobenzene	U		0.000774	0.00911	1	05/16/2022 16:12	WG1864371
1,3-Dichlorobenzene	U		0.00109	0.00911	1	05/16/2022 16:12	WG1864371
1,4-Dichlorobenzene	U		0.00127	0.00911	1	05/16/2022 16:12	WG1864371
Dichlorodifluoromethane	U		0.00293	0.00455	1	05/16/2022 16:12	WG1864371
1,1-Dichloroethane	U		0.000894	0.00455	1	05/16/2022 16:12	WG1864371
1,2-Dichloroethane	U		0.00118	0.00455	1	05/16/2022 16:12	WG1864371
1,1-Dichloroethene	U		0.00110	0.00455	1	05/16/2022 16:12	WG1864371
cis-1,2-Dichloroethene	U		0.00134	0.00455	1	05/16/2022 16:12	WG1864371
trans-1,2-Dichloroethene	U		0.00189	0.00911	1	05/16/2022 16:12	WG1864371
1,2-Dichloropropane	U		0.00259	0.00911	1	05/16/2022 16:12	WG1864371
1,1-Dichloropropene	U		0.00147	0.00455	1	05/16/2022 16:12	WG1864371
1,3-Dichloropropane	U		0.000912	0.00911	1	05/16/2022 16:12	WG1864371
cis-1,3-Dichloropropene	U		0.00138	0.00455	1	05/16/2022 16:12	WG1864371
trans-1,3-Dichloropropene	U		0.00208	0.00911	1	05/16/2022 16:12	WG1864371
2,2-Dichloropropane	U		0.00251	0.00455	1	05/16/2022 16:12	WG1864371
Di-isopropyl ether	U		0.000747	0.00182	1	05/16/2022 16:12	WG1864371
Ethylbenzene	5.23		0.0107	0.0364	8	05/20/2022 02:32	WG1866384
Hexachloro-1,3-butadiene	U		0.0109	0.0455	1	05/16/2022 16:12	WG1864371
Isopropylbenzene	0.708		0.000774	0.00455	1	05/16/2022 16:12	WG1864371
p-Isopropyltoluene	0.199		0.00464	0.00911	1	05/16/2022 16:12	WG1864371
2-Butanone (MEK)	0.490		0.116	0.182	1	05/16/2022 16:12	WG1864371
Methylene Chloride	U		0.0121	0.0455	1	05/16/2022 16:12	WG1864371
4-Methyl-2-pentanone (MIBK)	1.06		0.00415	0.0455	1	05/16/2022 16:12	WG1864371

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000637	0.00182	1	05/16/2022 16:12	WG1864371
Naphthalene	0.954		0.00889	0.0228	1	05/16/2022 16:12	WG1864371
n-Propylbenzene	2.04		0.00173	0.00911	1	05/16/2022 16:12	WG1864371
Styrene	U		0.000417	0.0228	1	05/16/2022 16:12	WG1864371
1,1,1,2-Tetrachloroethane	U		0.00173	0.00455	1	05/16/2022 16:12	WG1864371
1,1,2,2-Tetrachloroethane	U		0.00127	0.00455	1	05/16/2022 16:12	WG1864371
1,1,2-Trichlorotrifluoroethane	U		0.00137	0.00455	1	05/16/2022 16:12	WG1864371
Tetrachloroethene	U		0.00163	0.00455	1	05/16/2022 16:12	WG1864371
Toluene	0.0526		0.00237	0.00911	1	05/16/2022 16:12	WG1864371
1,2,3-Trichlorobenzene	U		0.0133	0.0228	1	05/16/2022 16:12	WG1864371
1,2,4-Trichlorobenzene	U		0.00801	0.0228	1	05/16/2022 16:12	WG1864371
1,1,1-Trichloroethane	U		0.00168	0.00455	1	05/16/2022 16:12	WG1864371
1,1,2-Trichloroethane	U		0.00109	0.00455	1	05/16/2022 16:12	WG1864371
Trichloroethene	U		0.00106	0.00182	1	05/16/2022 16:12	WG1864371
Trichlorofluoromethane	U		0.00151	0.00455	1	05/16/2022 16:12	WG1864371
1,2,3-Trichloropropane	U		0.00295	0.0228	1	05/16/2022 16:12	WG1864371
1,2,4-Trimethylbenzene	7.94		0.0229	0.0728	8	05/20/2022 02:32	WG1866384
1,2,3-Trimethylbenzene	2.06		0.00288	0.00911	1	05/16/2022 16:12	WG1864371
1,3,5-Trimethylbenzene	2.95		0.00364	0.00911	1	05/16/2022 16:12	WG1864371
Vinyl chloride	U		0.00211	0.00455	1	05/16/2022 16:12	WG1864371
Xylenes, Total	13.2		0.00160	0.0118	1	05/16/2022 16:12	WG1864371
(S) Toluene-d8	*115*			*75.0-131*		*05/16/2022 16:12*	WG1864371
(S) Toluene-d8	*109*			*75.0-131*		*05/20/2022 02:32*	WG1866384
(S) 4-Bromofluorobenzene	*139*	J1		*67.0-138*		*05/16/2022 16:12*	WG1864371
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*05/20/2022 02:32*	WG1866384
(S) 1,2-Dichloroethane-d4	*91.9*			*70.0-130*		*05/16/2022 16:12*	WG1864371
(S) 1,2-Dichloroethane-d4	*96.7*			*70.0-130*		*05/20/2022 02:32*	WG1866384

Sample Narrative:

L1492986-10 WG1864371: Surrogate failure due to matrix interference.

Method Blank (MB)

(MB) R3793563-1 05/18/22 07:54

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1492986-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1492986-01 05/18/22 07:54 • (DUP) R3793563-3 05/18/22 07:54

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	74.4	72.8	1	2.11		10

Laboratory Control Sample (LCS)

(LCS) R3793563-2 05/18/22 07:54

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3792379-2 05/16/22 03:23

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Gasoline Range Organics-NWTPH	U		0.848	2.50
(S) a,a,a-Trifluorotoluene(FID)	*99.5*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3792379-1 05/16/22 02:00

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5.50	5.42	98.5	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*101*	*77.0-120*	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Method Blank (MB)

(MB) R3792283-2 05/14/22 23:26

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPHG C6 - C12	U		0.848	2.50
(S) a,a,a-Trifluorotoluene(FID)	*98.3*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3792283-1 05/14/22 22:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPHG C6 - C12	5.50	5.83	106	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*105*	*77.0-120*	

L1492486-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1492486-02 05/15/22 05:02 • (MS) R3792283-3 05/15/22 10:13 • (MSD) R3792283-4 05/15/22 10:53

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Gasoline Range Organics-NWTPH	129	14.1	140	139	97.6	96.8	25	50.0-150			0.717	27
(S) a,a,a-Trifluorotoluene(FID)					*105*	*105*		*77.0-120*				

Method Blank (MB)

(MB) R3792797-3 05/17/22 06:26

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Gasoline Range Organics-NWTPH	1.25	J	0.848	2.50
(S) a,a,a-Trifluorotoluene(FID)	*98.4*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3792797-2 05/17/22 05:40

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5.50	5.47	99.5	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*107*	*77.0-120*	

Method Blank (MB)

(MB) R3792798-3 05/17/22 06:26

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Gasoline Range Organics-NWTPH	1.25	J	0.848	2.50
(S) a,a,a-Trifluorotoluene(FID)	*98.4*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3792798-2 05/17/22 05:40

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5.50	5.47	99.5	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			*107*	*77.0-120*	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Method Blank (MB)

(MB) R3792850-3 05/15/22 12:43

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	0.0417	J	0.0365	0.0500
Acrylonitrile	U		0.00361	0.0125
Benzene	U		0.000467	0.00100
Bromobenzene	U		0.000900	0.0125
Bromodichloromethane	U		0.000725	0.00250
Bromoform	U		0.00117	0.0250
Bromomethane	U		0.00197	0.0125
n-Butylbenzene	U		0.00525	0.0125
sec-Butylbenzene	U		0.00288	0.0125
tert-Butylbenzene	U		0.00195	0.00500
Carbon tetrachloride	U		0.000898	0.00500
Chlorobenzene	U		0.000210	0.00250
Chlorodibromomethane	U		0.000612	0.00250
Chloroethane	U		0.00170	0.00500
Chloroform	U		0.00103	0.00250
Chloromethane	U		0.00435	0.0125
2-Chlorotoluene	U		0.000865	0.00250
4-Chlorotoluene	U		0.000450	0.00500
1,2-Dibromo-3-Chloropropane	U		0.00390	0.0250
1,2-Dibromoethane	U		0.000648	0.00250
Dibromomethane	U		0.000750	0.00500
1,2-Dichlorobenzene	U		0.000425	0.00500
1,3-Dichlorobenzene	U		0.000600	0.00500
1,4-Dichlorobenzene	U		0.000700	0.00500
Dichlorodifluoromethane	U		0.00161	0.00250
1,1-Dichloroethane	U		0.000491	0.00250
1,2-Dichloroethane	U		0.000649	0.00250
1,1-Dichloroethene	U		0.000606	0.00250
cis-1,2-Dichloroethene	U		0.000734	0.00250
trans-1,2-Dichloroethene	U		0.00104	0.00500
1,2-Dichloropropane	U		0.00142	0.00500
1,1-Dichloropropene	U		0.000809	0.00250
1,3-Dichloropropane	U		0.000501	0.00500
cis-1,3-Dichloropropene	U		0.000757	0.00250
trans-1,3-Dichloropropene	U		0.00114	0.00500
2,2-Dichloropropane	U		0.00138	0.00250
Di-isopropyl ether	U		0.000410	0.00100
Ethylbenzene	U		0.000737	0.00250
Hexachloro-1,3-butadiene	U		0.00600	0.0250
Isopropylbenzene	U		0.000425	0.00250

Method Blank (MB)

(MB) R3792850-3 05/15/22 12:43

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00255	0.00500
2-Butanone (MEK)	U		0.0635	0.100
Methylene Chloride	U		0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.00228	0.0250
Methyl tert-butyl ether	U		0.000350	0.00100
Naphthalene	U		0.00488	0.0125
n-Propylbenzene	U		0.000950	0.00500
Styrene	U		0.000229	0.0125
1,1,1,2-Tetrachloroethane	U		0.000948	0.00250
1,1,2,2-Tetrachloroethane	U		0.000695	0.00250
1,1,2-Trichlorotrifluoroethane	U		0.000754	0.00250
Tetrachloroethene	U		0.000896	0.00250
Toluene	U		0.00130	0.00500
1,2,3-Trichlorobenzene	U		0.00733	0.0125
1,2,4-Trichlorobenzene	U		0.00440	0.0125
1,1,1-Trichloroethane	U		0.000923	0.00250
1,1,2-Trichloroethane	U		0.000597	0.00250
Trichloroethene	U		0.000584	0.00100
Trichlorofluoromethane	U		0.000827	0.00250
1,2,3-Trichloropropane	U		0.00162	0.0125
1,2,4-Trimethylbenzene	U		0.00158	0.00500
1,2,3-Trimethylbenzene	U		0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
Vinyl chloride	U		0.00116	0.00250
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	*103*			*75.0-131*
(S) 4-Bromofluorobenzene	*103*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3792850-1 05/15/22 11:25 • (LCSD) R3792850-2 05/15/22 11:45

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.625	0.952	1.09	152	174	10.0-160		J4	13.5	31
Acrylonitrile	0.625	0.768	0.829	123	133	45.0-153			7.64	22
Benzene	0.125	0.132	0.132	106	106	70.0-123			0.000	20
Bromobenzene	0.125	0.127	0.121	102	96.8	73.0-121			4.84	20
Bromodichloromethane	0.125	0.128	0.128	102	102	73.0-121			0.000	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3792850-1 05/15/22 11:25 • (LCSD) R3792850-2 05/15/22 11:45

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromoform	0.125	0.123	0.126	98.4	101	64.0-132			2.41	20
Bromomethane	0.125	0.203	0.209	162	167	56.0-147	J4	J4	2.91	20
n-Butylbenzene	0.125	0.128	0.139	102	111	68.0-135			8.24	20
sec-Butylbenzene	0.125	0.136	0.135	109	108	74.0-130			0.738	20
tert-Butylbenzene	0.125	0.131	0.127	105	102	75.0-127			3.10	20
Carbon tetrachloride	0.125	0.150	0.150	120	120	66.0-128			0.000	20
Chlorobenzene	0.125	0.139	0.134	111	107	76.0-128			3.66	20
Chlorodibromomethane	0.125	0.134	0.134	107	107	74.0-127			0.000	20
Chloroethane	0.125	0.182	0.182	146	146	61.0-134	J4	J4	0.000	20
Chloroform	0.125	0.137	0.139	110	111	72.0-123			1.45	20
Chloromethane	0.125	0.164	0.163	131	130	51.0-138			0.612	20
2-Chlorotoluene	0.125	0.137	0.134	110	107	75.0-124			2.21	20
4-Chlorotoluene	0.125	0.132	0.126	106	101	75.0-124			4.65	20
1,2-Dibromo-3-Chloropropane	0.125	0.118	0.133	94.4	106	59.0-130			12.0	20
1,2-Dibromoethane	0.125	0.125	0.125	100	100	74.0-128			0.000	20
Dibromomethane	0.125	0.128	0.133	102	106	75.0-122			3.83	20
1,2-Dichlorobenzene	0.125	0.127	0.138	102	110	76.0-124			8.30	20
1,3-Dichlorobenzene	0.125	0.132	0.137	106	110	76.0-125			3.72	20
1,4-Dichlorobenzene	0.125	0.137	0.135	110	108	77.0-121			1.47	20
Dichlorodifluoromethane	0.125	0.154	0.155	123	124	43.0-156			0.647	20
1,1-Dichloroethane	0.125	0.140	0.142	112	114	70.0-127			1.42	20
1,2-Dichloroethane	0.125	0.133	0.131	106	105	65.0-131			1.52	20
1,1-Dichloroethene	0.125	0.143	0.141	114	113	65.0-131			1.41	20
cis-1,2-Dichloroethene	0.125	0.136	0.134	109	107	73.0-125			1.48	20
trans-1,2-Dichloroethene	0.125	0.140	0.150	112	120	71.0-125			6.90	20
1,2-Dichloropropane	0.125	0.128	0.128	102	102	74.0-125			0.000	20
1,1-Dichloropropene	0.125	0.135	0.135	108	108	73.0-125			0.000	20
1,3-Dichloropropane	0.125	0.127	0.124	102	99.2	80.0-125			2.39	20
cis-1,3-Dichloropropene	0.125	0.125	0.121	100	96.8	76.0-127			3.25	20
trans-1,3-Dichloropropene	0.125	0.125	0.118	100	94.4	73.0-127			5.76	20
2,2-Dichloropropane	0.125	0.137	0.137	110	110	59.0-135			0.000	20
Di-isopropyl ether	0.125	0.141	0.142	113	114	60.0-136			0.707	20
Ethylbenzene	0.125	0.134	0.134	107	107	74.0-126			0.000	20
Hexachloro-1,3-butadiene	0.125	0.117	0.151	93.6	121	57.0-150		J3	25.4	20
Isopropylbenzene	0.125	0.136	0.139	109	111	72.0-127			2.18	20
p-Isopropyltoluene	0.125	0.131	0.135	105	108	72.0-133			3.01	20
2-Butanone (MEK)	0.625	0.704	0.703	113	112	30.0-160			0.142	24
Methylene Chloride	0.125	0.144	0.153	115	122	68.0-123			6.06	20
4-Methyl-2-pentanone (MIBK)	0.625	0.708	0.739	113	118	56.0-143			4.28	20
Methyl tert-butyl ether	0.125	0.145	0.156	116	125	66.0-132			7.31	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3792850-1 05/15/22 11:25 • (LCSD) R3792850-2 05/15/22 11:45

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Naphthalene	0.125	0.106	0.139	84.8	111	59.0-130		J3	26.9	20
n-Propylbenzene	0.125	0.133	0.131	106	105	74.0-126			1.52	20
Styrene	0.125	0.135	0.134	108	107	72.0-127			0.743	20
1,1,1,2-Tetrachloroethane	0.125	0.140	0.143	112	114	74.0-129			2.12	20
1,1,2,2-Tetrachloroethane	0.125	0.130	0.131	104	105	68.0-128			0.766	20
1,1,2-Trichlorotrifluoroethane	0.125	0.153	0.159	122	127	61.0-139			3.85	20
Tetrachloroethene	0.125	0.143	0.134	114	107	70.0-136			6.50	20
Toluene	0.125	0.131	0.131	105	105	75.0-121			0.000	20
1,2,3-Trichlorobenzene	0.125	0.0992	0.138	79.4	110	59.0-139		J3	32.7	20
1,2,4-Trichlorobenzene	0.125	0.115	0.142	92.0	114	62.0-137		J3	21.0	20
1,1,1-Trichloroethane	0.125	0.147	0.152	118	122	69.0-126			3.34	20
1,1,2-Trichloroethane	0.125	0.124	0.121	99.2	96.8	78.0-123			2.45	20
Trichloroethene	0.125	0.135	0.132	108	106	76.0-126			2.25	20
Trichlorofluoromethane	0.125	0.161	0.155	129	124	61.0-142			3.80	20
1,2,3-Trichloropropane	0.125	0.143	0.142	114	114	67.0-129			0.702	20
1,2,4-Trimethylbenzene	0.125	0.128	0.133	102	106	70.0-126			3.83	20
1,2,3-Trimethylbenzene	0.125	0.130	0.137	104	110	74.0-124			5.24	20
1,3,5-Trimethylbenzene	0.125	0.129	0.129	103	103	73.0-127			0.000	20
Vinyl chloride	0.125	0.189	0.194	151	155	63.0-134	J4	J4	2.61	20
Xylenes, Total	0.375	0.412	0.355	110	94.7	72.0-127			14.9	20
(S) Toluene-d8				*100*	*102*	*75.0-131*				
(S) 4-Bromofluorobenzene				*100*	*99.6*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*105*	*106*	*70.0-130*				

Method Blank (MB)

(MB) R3792207-3 05/16/22 10:12

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0365	0.0500
Acrylonitrile	U		0.00361	0.0125
Benzene	U		0.000467	0.00100
Bromobenzene	U		0.000900	0.0125
Bromodichloromethane	U		0.000725	0.00250
Bromoform	U		0.00117	0.0250
Bromomethane	U		0.00197	0.0125
n-Butylbenzene	U		0.00525	0.0125
sec-Butylbenzene	U		0.00288	0.0125
tert-Butylbenzene	U		0.00195	0.00500
Carbon tetrachloride	U		0.000898	0.00500
Chlorobenzene	U		0.000210	0.00250
Chlorodibromomethane	U		0.000612	0.00250
Chloroethane	U		0.00170	0.00500
Chloroform	U		0.00103	0.00250
Chloromethane	U		0.00435	0.0125
2-Chlorotoluene	U		0.000865	0.00250
4-Chlorotoluene	U		0.000450	0.00500
1,2-Dibromo-3-Chloropropane	U		0.00390	0.0250
1,2-Dibromoethane	U		0.000648	0.00250
Dibromomethane	U		0.000750	0.00500
1,2-Dichlorobenzene	U		0.000425	0.00500
1,3-Dichlorobenzene	U		0.000600	0.00500
1,4-Dichlorobenzene	U		0.000700	0.00500
Dichlorodifluoromethane	U		0.00161	0.00250
1,1-Dichloroethane	U		0.000491	0.00250
1,2-Dichloroethane	U		0.000649	0.00250
1,1-Dichloroethene	U		0.000606	0.00250
cis-1,2-Dichloroethene	U		0.000734	0.00250
trans-1,2-Dichloroethene	U		0.00104	0.00500
1,2-Dichloropropane	U		0.00142	0.00500
1,1-Dichloropropene	U		0.000809	0.00250
1,3-Dichloropropane	U		0.000501	0.00500
cis-1,3-Dichloropropene	U		0.000757	0.00250
trans-1,3-Dichloropropene	U		0.00114	0.00500
2,2-Dichloropropane	U		0.00138	0.00250
Di-isopropyl ether	U		0.000410	0.00100
Ethylbenzene	U		0.000737	0.00250
Hexachloro-1,3-butadiene	U		0.00600	0.0250
Isopropylbenzene	U		0.000425	0.00250

Method Blank (MB)

(MB) R3792207-3 05/16/22 10:12

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00255	0.00500
2-Butanone (MEK)	U		0.0635	0.100
Methylene Chloride	U		0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.00228	0.0250
Methyl tert-butyl ether	U		0.000350	0.00100
Naphthalene	U		0.00488	0.0125
n-Propylbenzene	U		0.000950	0.00500
Styrene	U		0.000229	0.0125
1,1,1,2-Tetrachloroethane	U		0.000948	0.00250
1,1,2,2-Tetrachloroethane	U		0.000695	0.00250
1,1,2-Trichlorotrifluoroethane	U		0.000754	0.00250
Tetrachloroethene	U		0.000896	0.00250
Toluene	U		0.00130	0.00500
1,2,3-Trichlorobenzene	U		0.00733	0.0125
1,2,4-Trichlorobenzene	U		0.00440	0.0125
1,1,1-Trichloroethane	U		0.000923	0.00250
1,1,2-Trichloroethane	U		0.000597	0.00250
Trichloroethene	U		0.000584	0.00100
Trichlorofluoromethane	U		0.000827	0.00250
1,2,3-Trichloropropane	U		0.00162	0.0125
1,2,4-Trimethylbenzene	U		0.00158	0.00500
1,2,3-Trimethylbenzene	U		0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
Vinyl chloride	U		0.00116	0.00250
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	*105*			*75.0-131*
(S) 4-Bromofluorobenzene	*102*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*95.2*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3792207-1 05/16/22 08:57 • (LCSD) R3792207-2 05/16/22 09:16

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.625	0.964	0.857	154	137	10.0-160			11.8	31
Acrylonitrile	0.625	0.632	0.624	101	99.8	45.0-153			1.27	22
Benzene	0.125	0.120	0.123	96.0	98.4	70.0-123			2.47	20
Bromobenzene	0.125	0.126	0.128	101	102	73.0-121			1.57	20
Bromodichloromethane	0.125	0.119	0.120	95.2	96.0	73.0-121			0.837	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3792207-1 05/16/22 08:57 • (LCSD) R3792207-2 05/16/22 09:16

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromoform	0.125	0.123	0.123	98.4	98.4	64.0-132			0.000	20
Bromomethane	0.125	0.117	0.125	93.6	100	56.0-147			6.61	20
n-Butylbenzene	0.125	0.113	0.117	90.4	93.6	68.0-135			3.48	20
sec-Butylbenzene	0.125	0.111	0.115	88.8	92.0	74.0-130			3.54	20
tert-Butylbenzene	0.125	0.112	0.118	89.6	94.4	75.0-127			5.22	20
Carbon tetrachloride	0.125	0.125	0.126	100	101	66.0-128			0.797	20
Chlorobenzene	0.125	0.121	0.126	96.8	101	76.0-128			4.05	20
Chlorodibromomethane	0.125	0.127	0.127	102	102	74.0-127			0.000	20
Chloroethane	0.125	0.110	0.112	88.0	89.6	61.0-134			1.80	20
Chloroform	0.125	0.120	0.121	96.0	96.8	72.0-123			0.830	20
Chloromethane	0.125	0.104	0.104	83.2	83.2	51.0-138			0.000	20
2-Chlorotoluene	0.125	0.124	0.125	99.2	100	75.0-124			0.803	20
4-Chlorotoluene	0.125	0.112	0.115	89.6	92.0	75.0-124			2.64	20
1,2-Dibromo-3-Chloropropane	0.125	0.124	0.119	99.2	95.2	59.0-130			4.12	20
1,2-Dibromoethane	0.125	0.127	0.129	102	103	74.0-128			1.56	20
Dibromomethane	0.125	0.132	0.132	106	106	75.0-122			0.000	20
1,2-Dichlorobenzene	0.125	0.121	0.122	96.8	97.6	76.0-124			0.823	20
1,3-Dichlorobenzene	0.125	0.119	0.122	95.2	97.6	76.0-125			2.49	20
1,4-Dichlorobenzene	0.125	0.120	0.120	96.0	96.0	77.0-121			0.000	20
Dichlorodifluoromethane	0.125	0.131	0.139	105	111	43.0-156			5.93	20
1,1-Dichloroethane	0.125	0.124	0.129	99.2	103	70.0-127			3.95	20
1,2-Dichloroethane	0.125	0.128	0.129	102	103	65.0-131			0.778	20
1,1-Dichloroethene	0.125	0.123	0.128	98.4	102	65.0-131			3.98	20
cis-1,2-Dichloroethene	0.125	0.128	0.129	102	103	73.0-125			0.778	20
trans-1,2-Dichloroethene	0.125	0.127	0.132	102	106	71.0-125			3.86	20
1,2-Dichloropropane	0.125	0.124	0.129	99.2	103	74.0-125			3.95	20
1,1-Dichloropropene	0.125	0.121	0.123	96.8	98.4	73.0-125			1.64	20
1,3-Dichloropropane	0.125	0.122	0.125	97.6	100	80.0-125			2.43	20
cis-1,3-Dichloropropene	0.125	0.127	0.130	102	104	76.0-127			2.33	20
trans-1,3-Dichloropropene	0.125	0.122	0.121	97.6	96.8	73.0-127			0.823	20
2,2-Dichloropropane	0.125	0.128	0.133	102	106	59.0-135			3.83	20
Di-isopropyl ether	0.125	0.122	0.119	97.6	95.2	60.0-136			2.49	20
Ethylbenzene	0.125	0.123	0.125	98.4	100	74.0-126			1.61	20
Hexachloro-1,3-butadiene	0.125	0.121	0.123	96.8	98.4	57.0-150			1.64	20
Isopropylbenzene	0.125	0.119	0.124	95.2	99.2	72.0-127			4.12	20
p-Isopropyltoluene	0.125	0.113	0.118	90.4	94.4	72.0-133			4.33	20
2-Butanone (MEK)	0.625	0.696	0.632	111	101	30.0-160			9.64	24
Methylene Chloride	0.125	0.121	0.122	96.8	97.6	68.0-123			0.823	20
4-Methyl-2-pentanone (MIBK)	0.625	0.614	0.599	98.2	95.8	56.0-143			2.47	20
Methyl tert-butyl ether	0.125	0.133	0.126	106	101	66.0-132			5.41	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3792207-1 05/16/22 08:57 • (LCSD) R3792207-2 05/16/22 09:16

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Naphthalene	0.125	0.105	0.105	84.0	84.0	59.0-130			0.000	20
n-Propylbenzene	0.125	0.108	0.112	86.4	89.6	74.0-126			3.64	20
Styrene	0.125	0.124	0.124	99.2	99.2	72.0-127			0.000	20
1,1,1,2-Tetrachloroethane	0.125	0.123	0.128	98.4	102	74.0-129			3.98	20
1,1,2,2-Tetrachloroethane	0.125	0.111	0.110	88.8	88.0	68.0-128			0.905	20
1,1,2-Trichlorotrifluoroethane	0.125	0.114	0.117	91.2	93.6	61.0-139			2.60	20
Tetrachloroethene	0.125	0.117	0.124	93.6	99.2	70.0-136			5.81	20
Toluene	0.125	0.117	0.118	93.6	94.4	75.0-121			0.851	20
1,2,3-Trichlorobenzene	0.125	0.105	0.107	84.0	85.6	59.0-139			1.89	20
1,2,4-Trichlorobenzene	0.125	0.114	0.116	91.2	92.8	62.0-137			1.74	20
1,1,1-Trichloroethane	0.125	0.130	0.129	104	103	69.0-126			0.772	20
1,1,2-Trichloroethane	0.125	0.119	0.119	95.2	95.2	78.0-123			0.000	20
Trichloroethene	0.125	0.125	0.126	100	101	76.0-126			0.797	20
Trichlorofluoromethane	0.125	0.113	0.118	90.4	94.4	61.0-142			4.33	20
1,2,3-Trichloropropane	0.125	0.123	0.126	98.4	101	67.0-129			2.41	20
1,2,4-Trimethylbenzene	0.125	0.108	0.114	86.4	91.2	70.0-126			5.41	20
1,2,3-Trimethylbenzene	0.125	0.113	0.116	90.4	92.8	74.0-124			2.62	20
1,3,5-Trimethylbenzene	0.125	0.114	0.118	91.2	94.4	73.0-127			3.45	20
Vinyl chloride	0.125	0.119	0.125	95.2	100	63.0-134			4.92	20
Xylenes, Total	0.375	0.367	0.374	97.9	99.7	72.0-127			1.89	20
(S) Toluene-d8				*102*	*103*	*75.0-131*				
(S) 4-Bromofluorobenzene				*103*	*104*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*103*	*104*	*70.0-130*				

Method Blank (MB)

(MB) R3793860-3 05/19/22 13:57

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0365	0.0500
Acrylonitrile	U		0.00361	0.0125
Benzene	U		0.000467	0.00100
Bromobenzene	U		0.000900	0.0125
Bromodichloromethane	U		0.000725	0.00250
Bromoform	U		0.00117	0.0250
Bromomethane	U		0.00197	0.0125
n-Butylbenzene	U		0.00525	0.0125
sec-Butylbenzene	U		0.00288	0.0125
tert-Butylbenzene	U		0.00195	0.00500
Carbon tetrachloride	U		0.000898	0.00500
Chlorobenzene	U		0.000210	0.00250
Chlorodibromomethane	U		0.000612	0.00250
Chloroethane	U		0.00170	0.00500
Chloroform	U		0.00103	0.00250
Chloromethane	U		0.00435	0.0125
2-Chlorotoluene	U		0.000865	0.00250
4-Chlorotoluene	U		0.000450	0.00500
1,2-Dibromo-3-Chloropropane	U		0.00390	0.0250
1,2-Dibromoethane	U		0.000648	0.00250
Dibromomethane	U		0.000750	0.00500
1,2-Dichlorobenzene	U		0.000425	0.00500
1,3-Dichlorobenzene	U		0.000600	0.00500
1,4-Dichlorobenzene	U		0.000700	0.00500
Dichlorodifluoromethane	U		0.00161	0.00250
1,1-Dichloroethane	U		0.000491	0.00250
1,2-Dichloroethane	U		0.000649	0.00250
1,1-Dichloroethene	U		0.000606	0.00250
cis-1,2-Dichloroethene	U		0.000734	0.00250
trans-1,2-Dichloroethene	U		0.00104	0.00500
1,2-Dichloropropane	U		0.00142	0.00500
1,1-Dichloropropene	U		0.000809	0.00250
1,3-Dichloropropane	U		0.000501	0.00500
cis-1,3-Dichloropropene	U		0.000757	0.00250
trans-1,3-Dichloropropene	U		0.00114	0.00500
2,2-Dichloropropane	U		0.00138	0.00250
Di-isopropyl ether	U		0.000410	0.00100
Ethylbenzene	U		0.000737	0.00250
Hexachloro-1,3-butadiene	U		0.00600	0.0250
Isopropylbenzene	U		0.000425	0.00250

Method Blank (MB)

(MB) R3793860-3 05/19/22 13:57

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00255	0.00500
2-Butanone (MEK)	U		0.0635	0.100
Methylene Chloride	U		0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.00228	0.0250
Methyl tert-butyl ether	U		0.000350	0.00100
Naphthalene	U		0.00488	0.0125
n-Propylbenzene	U		0.000950	0.00500
Styrene	U		0.000229	0.0125
1,1,1,2-Tetrachloroethane	U		0.000948	0.00250
1,1,2,2-Tetrachloroethane	U		0.000695	0.00250
1,1,2-Trichlorotrifluoroethane	U		0.000754	0.00250
Tetrachloroethene	U		0.000896	0.00250
Toluene	U		0.00130	0.00500
1,2,3-Trichlorobenzene	U		0.00733	0.0125
1,2,4-Trichlorobenzene	U		0.00440	0.0125
1,1,1-Trichloroethane	U		0.000923	0.00250
1,1,2-Trichloroethane	U		0.000597	0.00250
Trichloroethene	U		0.000584	0.00100
Trichlorofluoromethane	U		0.000827	0.00250
1,2,3-Trichloropropane	U		0.00162	0.0125
1,2,4-Trimethylbenzene	U		0.00158	0.00500
1,2,3-Trimethylbenzene	U		0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
Vinyl chloride	U		0.00116	0.00250
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	*111*			*75.0-131*
(S) 4-Bromofluorobenzene	*101*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*98.4*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3793860-1 05/19/22 12:25 • (LCSD) R3793860-2 05/19/22 12:45

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.625	0.897	0.824	144	132	10.0-160			8.48	31
Acrylonitrile	0.625	0.720	0.727	115	116	45.0-153			0.968	22
Benzene	0.125	0.126	0.124	101	99.2	70.0-123			1.60	20
Bromobenzene	0.125	0.137	0.137	110	110	73.0-121			0.000	20
Bromodichloromethane	0.125	0.132	0.133	106	106	73.0-121			0.755	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3793860-1 05/19/22 12:25 • (LCSD) R3793860-2 05/19/22 12:45

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromoform	0.125	0.148	0.145	118	116	64.0-132			2.05	20
Bromomethane	0.125	0.130	0.128	104	102	56.0-147			1.55	20
n-Butylbenzene	0.125	0.139	0.134	111	107	68.0-135			3.66	20
sec-Butylbenzene	0.125	0.131	0.129	105	103	74.0-130			1.54	20
tert-Butylbenzene	0.125	0.134	0.127	107	102	75.0-127			5.36	20
Carbon tetrachloride	0.125	0.145	0.139	116	111	66.0-128			4.23	20
Chlorobenzene	0.125	0.137	0.131	110	105	76.0-128			4.48	20
Chlorodibromomethane	0.125	0.143	0.144	114	115	74.0-127			0.697	20
Chloroethane	0.125	0.136	0.126	109	101	61.0-134			7.63	20
Chloroform	0.125	0.126	0.128	101	102	72.0-123			1.57	20
Chloromethane	0.125	0.119	0.113	95.2	90.4	51.0-138			5.17	20
2-Chlorotoluene	0.125	0.142	0.137	114	110	75.0-124			3.58	20
4-Chlorotoluene	0.125	0.133	0.127	106	102	75.0-124			4.62	20
1,2-Dibromo-3-Chloropropane	0.125	0.146	0.144	117	115	59.0-130			1.38	20
1,2-Dibromoethane	0.125	0.145	0.143	116	114	74.0-128			1.39	20
Dibromomethane	0.125	0.135	0.131	108	105	75.0-122			3.01	20
1,2-Dichlorobenzene	0.125	0.137	0.135	110	108	76.0-124			1.47	20
1,3-Dichlorobenzene	0.125	0.141	0.140	113	112	76.0-125			0.712	20
1,4-Dichlorobenzene	0.125	0.128	0.130	102	104	77.0-121			1.55	20
Dichlorodifluoromethane	0.125	0.113	0.113	90.4	90.4	43.0-156			0.000	20
1,1-Dichloroethane	0.125	0.138	0.136	110	109	70.0-127			1.46	20
1,2-Dichloroethane	0.125	0.121	0.124	96.8	99.2	65.0-131			2.45	20
1,1-Dichloroethene	0.125	0.139	0.136	111	109	65.0-131			2.18	20
cis-1,2-Dichloroethene	0.125	0.138	0.132	110	106	73.0-125			4.44	20
trans-1,2-Dichloroethene	0.125	0.136	0.133	109	106	71.0-125			2.23	20
1,2-Dichloropropane	0.125	0.124	0.121	99.2	96.8	74.0-125			2.45	20
1,1-Dichloropropene	0.125	0.124	0.123	99.2	98.4	73.0-125			0.810	20
1,3-Dichloropropane	0.125	0.135	0.132	108	106	80.0-125			2.25	20
cis-1,3-Dichloropropene	0.125	0.114	0.116	91.2	92.8	76.0-127			1.74	20
trans-1,3-Dichloropropene	0.125	0.122	0.120	97.6	96.0	73.0-127			1.65	20
2,2-Dichloropropane	0.125	0.140	0.130	112	104	59.0-135			7.41	20
Di-isopropyl ether	0.125	0.123	0.122	98.4	97.6	60.0-136			0.816	20
Ethylbenzene	0.125	0.144	0.139	115	111	74.0-126			3.53	20
Hexachloro-1,3-butadiene	0.125	0.145	0.140	116	112	57.0-150			3.51	20
Isopropylbenzene	0.125	0.139	0.132	111	106	72.0-127			5.17	20
p-Isopropyltoluene	0.125	0.140	0.137	112	110	72.0-133			2.17	20
2-Butanone (MEK)	0.625	0.664	0.599	106	95.8	30.0-160			10.3	24
Methylene Chloride	0.125	0.131	0.130	105	104	68.0-123			0.766	20
4-Methyl-2-pentanone (MIBK)	0.625	0.757	0.762	121	122	56.0-143			0.658	20
Methyl tert-butyl ether	0.125	0.126	0.124	101	99.2	66.0-132			1.60	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3793860-1 05/19/22 12:25 • (LCSD) R3793860-2 05/19/22 12:45

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Naphthalene	0.125	0.132	0.133	106	106	59.0-130			0.755	20
n-Propylbenzene	0.125	0.137	0.135	110	108	74.0-126			1.47	20
Styrene	0.125	0.141	0.135	113	108	72.0-127			4.35	20
1,1,1,2-Tetrachloroethane	0.125	0.137	0.136	110	109	74.0-129			0.733	20
1,1,2,2-Tetrachloroethane	0.125	0.132	0.133	106	106	68.0-128			0.755	20
1,1,2-Trichlorotrifluoroethane	0.125	0.125	0.125	100	100	61.0-139			0.000	20
Tetrachloroethene	0.125	0.142	0.138	114	110	70.0-136			2.86	20
Toluene	0.125	0.129	0.122	103	97.6	75.0-121			5.58	20
1,2,3-Trichlorobenzene	0.125	0.136	0.137	109	110	59.0-139			0.733	20
1,2,4-Trichlorobenzene	0.125	0.140	0.140	112	112	62.0-137			0.000	20
1,1,1-Trichloroethane	0.125	0.151	0.140	121	112	69.0-126			7.56	20
1,1,2-Trichloroethane	0.125	0.138	0.133	110	106	78.0-123			3.69	20
Trichloroethene	0.125	0.139	0.136	111	109	76.0-126			2.18	20
Trichlorofluoromethane	0.125	0.110	0.112	88.0	89.6	61.0-142			1.80	20
1,2,3-Trichloropropane	0.125	0.140	0.140	112	112	67.0-129			0.000	20
1,2,4-Trimethylbenzene	0.125	0.134	0.128	107	102	70.0-126			4.58	20
1,2,3-Trimethylbenzene	0.125	0.132	0.132	106	106	74.0-124			0.000	20
1,3,5-Trimethylbenzene	0.125	0.127	0.128	102	102	73.0-127			0.784	20
Vinyl chloride	0.125	0.117	0.108	93.6	86.4	63.0-134			8.00	20
Xylenes, Total	0.375	0.404	0.407	108	109	72.0-127			0.740	20
(S) Toluene-d8				*103*	*103*	*75.0-131*				
(S) 4-Bromofluorobenzene				*102*	*99.7*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*104*	*103*	*70.0-130*				

Method Blank (MB)

(MB) R3794074-3 05/19/22 23:02

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Ethylbenzene	U		0.000737	0.00250
Naphthalene	U		0.00488	0.0125
n-Propylbenzene	U		0.000950	0.00500
1,2,4-Trimethylbenzene	U		0.00158	0.00500
1,2,3-Trimethylbenzene	U		0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
(S) Toluene-d8	*117*			*75.0-131*
(S) 4-Bromofluorobenzene	*96.3*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*94.4*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3794074-1 05/19/22 21:46 • (LCSD) R3794074-2 05/19/22 22:05

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.125	0.103	0.109	82.4	87.2	74.0-126			5.66	20
Naphthalene	0.125	0.106	0.112	84.8	89.6	59.0-130			5.50	20
n-Propylbenzene	0.125	0.114	0.109	91.2	87.2	74.0-126			4.48	20
1,2,4-Trimethylbenzene	0.125	0.103	0.100	82.4	80.0	70.0-126			2.96	20
1,2,3-Trimethylbenzene	0.125	0.103	0.0993	82.4	79.4	74.0-124			3.66	20
1,3,5-Trimethylbenzene	0.125	0.104	0.100	83.2	80.0	73.0-127			3.92	20
(S) Toluene-d8				*103*	*102*	*75.0-131*				
(S) 4-Bromofluorobenzene				*96.6*	*103*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*102*	*105*	*70.0-130*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
C5	The reported concentration is an estimate. The continuing calibration standard associated with this data responded high. Data is likely to show a high bias concerning the result.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Company Name/Address:
Apex Companies, LLC - Portland, OR

3015 SW First Avenue
Portland, OR 97201-4707

Billing Information:
Accounts Payable
3015 SW First Ave.
Portland, OR 97201-4707

Pres Chk

Report to:
Mike Stevens

Email To:
kelsi.evans@apexcos.com;mstevens@apexcos.c

Project Description:

City/State Collected:

Please Circle: PT MT CT ET

Phone: **503-924-4704**

Client Project #

Lab Project #
ASHCREPOR-LITHOPRINT

Collected by (print):
Franklin Sullivan

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N____ Y____

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed
Standard TAT

No. of Cntrs

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	NWTPHGX 40mlAmb/MeOH10ml/Syr	VOCs 8260D 2ozClr-NoPres	VOCs 8260D 40mlAmb/MeOH10ml/Syr	Remarks	Sample # (lab only)
SB-1	Grab	SS	12Ft	5-9-22	0945	2	X	X	X		-01
SB-2R		SS	12Ft	5-9-22	1049	2	X	X	X		-02
SB-3		SS	10Ft	5-9-22	1115	2	X	X	X		-03
SB-4		SS	10Ft	5-9-22	1147	2	X	X	X		-04
SB-5		SS	12Ft	5-9-22	1230	2	X	X	X		-05
SB-6		SS	12Ft	5-9-22	1405	2	X	X	X		-06
SB-7		SS	10Ft	5-10-22	0858	2	X	X	X		-07
SB-8		SS	12Ft	5-10-22	1012	2	X	X	X		-08
SB-9		SS	10Ft	5-10-22	1034	2	X	X	X		-09
SB-10		SS	12Ft	5-10-22	1046	2	X	X	X		-10

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1492986
B107

Acctnum: **ASHCREPOR**
Template: **T205842**
Prelogin: **P912844**
PM: **110 - Brian Ford**
PB:
Shipped Via:

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
Franklin Sullivan	5-11-22	1454			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.8°C Corr: 3.8°C Bottles Received: 20	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 5-12-22 Time: 0900	Hold: / Condition: NCF / OK

Appendix C

Contaminated Media Management Plan

Contaminated Media Management Plan
Oregon Lithoprint aka News Register Site
609 NE Third Street
McMinnville, Oregon

Prepared for:
Oregon Lithoprint, Inc.

November 16, 2020
2442-00

Contaminated Media Management Plan
Oregon Lithoprint aka News Register Site
609 NE Third Street
McMinnville, Oregon

Prepared for:
Oregon Lithoprint, Inc.

November 16, 2020
2442-00

Heather Gosack, R.G.
Senior Project Manager

REGISTERED PROFESSIONAL ENGINEER
17,296
OREGON
JULY 19, 1994
MICHAEL W. STEVENS
EXPIRES JUNE 30 2022

Michael Stevens, P.E.
Principal Engineer

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1.0 Introduction

This contaminated media management plan (CMMP) was prepared to address residual petroleum contamination that may be encountered in soil and groundwater in the vicinity of the Oregon Lithoprint site located at 609 NE Third Street, McMinnville, Yamhill County, Oregon (the Site; Figure C-1). The Oregon Department of Environmental Quality (DEQ) has created a Leaking Underground Storage Tank (LUST) file for the Site (LUST File No. 36-85-4001) in connection with historical releases from two 1,000-gallon gasoline underground storage tanks (USTs) located in the Ford Street right-of-way to the west of the O'Dell Building (the DEQ refers to the Site as the News Register Site in the LUST record).

1.1 Purpose and Use

The purpose of this CMMP is to provide guidance on the procedures for appropriate management of soil and groundwater at the Site that may contain chemicals above certain screening levels. This CMMP provides:

- Identification of soil management areas requiring appropriate handling of soil;
- Information needed to properly handle the soil within the identified soil management area during future Site activities (if any);
- Information needed to properly handle on-site groundwater; and
- Information needed to make informed decisions regarding the health and safety of Site workers.

This CMMP is intended to provide instruction regarding restrictions on Site activities and/or handling requirements for impacted media that would be encountered in identified areas at the Site.

1.2 Applicability

This CMMP provides guidance on the requirements for handling soil and groundwater within defined management areas. This CMMP is specific to the benzene and total petroleum hydrocarbons (TPH) as gasoline (TPHg) impacts that are associated with historical releases of gasoline from former underground storage tanks (USTs) associated with the O'Dell Building (the Former O'Dell Building Gasoline USTs). This plan is not applicable to other contamination that may be encountered at the Site, which may be subject to requirements that are not identified in this plan. The management areas correspond to the estimated extent of soil and groundwater containing petroleum constituents above applicable or relevant screening criteria. Soil and groundwater encountered in these areas shall be assumed to contain benzene and TPHg unless the requirements described in Section 3.1 and 4.1 demonstrate that the media is clean.

1.3 Limitations

The scope of this CMMP is intended to provide guidance on the identification and proper handling of soil or groundwater that does or may contain petroleum constituents that are associated with historical releases of gasoline from site USTs (i.e. the benzene and TPHg contamination) above regulatory screening levels. This CMMP is not intended to characterize potential human health or environmental risks associated with impacts from covered releases from the site USTs and shall not be relied upon as evidence of such risks. This CMMP also describes limited non-petroleum contamination (e.g., tetrachloroethene, trichloroethene, and other chlorinated hydrocarbons) that was encountered during the investigation of the covered releases from the site USTs that is not associated with the covered releases. However, this CMMP is not intended to be used in managing known and potential contamination that is not associated with the historical releases of gasoline from site USTs. Persons conducting activities in the defined management areas should take care to review existing sampling results (see Section 7.0 for references to Site environmental reports) as well as results from any future sampling to determine whether other soil or groundwater sampling or handling requirements may be applicable to their activities. Finally, this CMMP also is not intended to provide health and safety recommendations for the protection of Site workers or construction personnel. Persons involved in construction activities or Site operations that could result in exposure to Site soil or groundwater should be familiar with the content of this CMMP but should also have a Health and Safety Plan (HASP) prepared specific to the scope of their work. Minimum requirements for a HASP are contained in Section 6.0 below. Any unintended use of, or reliance on, this CMMP by any third party is at that party's sole risk

2.0 Background

The following sections describe the site location, history, and geology/hydrogeology.

2.1 Site Location and Physical Setting

The Site is located at the intersection of NE Third Street and NE Ford Street in McMinnville, Oregon (Figure 1). The properties included in the Site are used for commercial purposes as described below:

- 609 NE Third Street: The O'Dell Building;
- 305 NE Ford Street: The Odd Fellows Building (also known as the Sidway Building and Third Street Flats Building);
- The City Right-of-Way for NE Ford Street between the two site buildings; and
- The City Right-of-Way for NE Third Street on either side of the intersection with NE Ford Street.

All properties within the Site are zoned as commercial (C-3). Residential use is allowed by the zoning code but is considered unlikely based on the use and layout of the existing buildings.

Several below-grade utilities are present at the Site and include sanitary and storm sewer lines, historical wooden steam heat lines, electric, street-light, telecommunications, and natural gas lines. The stormwater lines are three to four feet below the ground surface (bgs), and the sanitary sewer lines are between 6.34 feet and 9.74 feet bgs. The wooden steam lines are associated with a former steam power plant located two blocks west of the Site and are at unknown locations and depths. Based on City staff observations at other locations, they are not likely deep below ground surface.

2.2 Site Geology and Hydrogeology

This section summarizes Site topography, geology, and hydrogeology based on observations made during investigation activities.

2.2.1 Topography and Geology

The Site is located between 148 feet and 149.5 feet above mean sea level (MSL) and is relatively flat. The nearest surface water body is Cozine Creek, located approximately 1,400 feet south of the Site.

According to the Geologic Map of Oregon (USGS, 1991), the Site is underlain by Quaternary Surficial Deposits that are comprised of unconsolidated alluvium and lacustrine sediments (including clay, silt, sand, and gravel). Subsurface materials encountered in previous investigations included silts and clayey silts. Localized gravel fill was historically observed within the Former O'Dell Building Gasoline USTs excavation area and utility trenches installed in the O'Dell Building.

2.2.2 Hydrogeology

Six groundwater monitoring wells (MW-1 through MW-6) are located in the Right of Way (ROW) near the intersection of NE Ford Street and NE Third Street. Based on previously advanced soil borings and data from the monitoring wells, depth to groundwater at the Site generally ranges between 3.4 feet and 13.4 feet bgs. The groundwater flow direction is primarily to the south/southwest, towards Cozine Creek, which is approximately 1,400 feet south of the Site (see Figure C-3). The hydraulic gradient at the Site is typically to the southwest at a range of between 0.011 feet/feet and 0.025 feet/feet, with an average gradient of 0.016 feet/feet.

2.3 Environmental Conditions and Contaminants of Potential Concern

This section discusses the environmental conditions and contaminants of potential concern (COPCs) on the Site.

2.3.1 Environmental Conditions

Former Underground Storage Tanks. The Site has been impacted by historical releases of gasoline from the Former O'Dell Building Gasoline USTs at 609 NE Third Street, as well as other sources. The following four former decommissioned USTs were located at the O'Dell Building and surrounding properties:

- Former O'Dell Building Gasoline USTs. Two former 1,000-gallon gasoline USTs were located in the Ford Street ROW to the west of the O'Dell Building. One of the tanks was decommissioned in-place in 1971 following reports of gasoline odors in businesses in the Odd Fellows Building and in two businesses one block to the west. Both gasoline USTs were removed in 1985. Businesses one block west of the O'Dell Building reported gasoline odors in 1985, prompting the UST removal. Soil and groundwater contamination were identified during the 1985 tank decommissioning activities and reported to DEQ (LUST File No. 36-85-4001). News Register records estimated that approximately 2,000 gallons of gasoline were released to the subsurface before the tanks were decommissioned. A product recovery well was installed within the UST pit in 1985. Records indicate that between 114 gallons and 400 gallons of product were removed from the recovery well between October 1985 and May 1986. Since the Former O'Dell Building Gasoline USTs were removed in 1985, there have been no reports of gasoline odors at the Site.
- O'Dell Building Alley UST. One former 540-gallon heating oil UST was located adjacent to the north side of the O'Dell Building. The UST may have also been formerly used to store diesel for generator fuel. It was decommissioned in-place in February 1998. This UST is upgradient from the Former O'Dell Building Gasoline USTs. Soil sampling indicated that a release from the UST had not occurred. No field evidence of contamination (i.e. odor, staining, or sheen) was observed during the decommissioning activities. Groundwater was not encountered during the decommissioning activities.
- Odd Fellows Building UST. A former decommissioned heating oil UST associated with the Odd Fellows Building was located west of the O'Dell Building across NE Ford Street in the ROW, below the sidewalk, near the southeast corner of the Odd Fellows Building. The UST was decommissioned in-place in January 2014.

2.3.2 Historical Site Investigations

Numerous site investigation activities have occurred at the Site since 1985. Historical investigations have been conducted in connection with the decommissioning of the former O'Dell Building Gasoline USTs, and in connection with efforts to determine the extent of potential impacts from historical releases from the USTs. During these investigations, the extent and magnitude of petroleum hydrocarbons originating from the USTs has been defined. The chronology and scope of these early investigations, which focused primarily on delineating the extent and magnitude of gasoline-related contamination at the Site, are discussed in the reports referenced in Section 7.

Concentrations of petroleum-related contaminants detected during recent investigations between February 2019 and July 2020 have included:

Analyte	Maximum Soil Concentration (mg/kg)	Construction Worker/Excavation Worker RBC	Maximum Groundwater Concentration (µg/L)	GW in Excavation RBC
Benzene	1.42 (ODB-3)	380	5,870 (MW-5)	1,800
n-Butylbenzene	8.34 (ODB-7)	NA	9.04 (MW-2)	NA
sec-Butylbenzene	3.45 (ODB-7)	NA	9.83 (MW-2)	NA
tert-Butylbenzene	0.034 (ODB-7)	NA	0.491 (MW-2)	NA
Ethylbenzene	22.3 (ODB-3)	1,700	1,790 (MW-2)	4,500
Isopropylbenzene	4.54 (ODB-7)	27,000	102 (MW-6)	51,000
p-isopropyltoluene	0.849 (ODB-3)	NA	1.79 (MW-3)	NA
Naphthalene	6.21 (ODB-3)	580	190 (MW-2)	500
n-Propylbenzene	23.3 (ODB-7)	NA	186 (MW-6)	NA
Toluene	0.0091 (ODB-10)	28,000	12.7 (MW-6)	220,000
1,2,3-Trimethylbenzene	18.3 (ODB-3)	NA	182 (MW-2)	NA
1,2,4-Trimethylbenzene	65.3 (ODB-3)	2,900	39.4 (MW-6)	6,300
1,3,5-Trimethylbenzene	17.7 (ODB-3)	2,900	17.1 (MW-6)	7,500
Total Xylenes	32.9 (ODB-3)	20,000	51.4 (MW-6)	23,000
TPHg	1,220 (ODB-3)	9,700	14,500 (MW-2)	14,000

Note: **Bold** values highlight exceedance of associated RBC.

Several non-petroleum contaminants that are not associated with the former USTs at the Site have also been detected in groundwater samples collected at the Site between February 2019 and July 2020:

Analyte	Detections (Well and Date)	GW in Excavation RBC (µg/L)
Trichloroethene	MW-1 (0.979 µg/L, 10/17/19); MW-2 (4.74 µg/L, 10/17/19)	430 µg/L
1,1-Dichloroethene	MW-1 (1.46 µg/L 10/17/19)	44,000 µg/L
cis-1,2-Dichloroethene	MW-1 (0.445 µg/L, 10/17/19); MW-2 (29.9 µg/L, 10/17/19); MW-3 (0.676 µg/L, 10/17/19)	18,000 µg/L
trans-1,2-Dichloroethene	MW-2 (12.2 µg/L, 10/17/2019)	180,000 µg/L
Carbon tetrachloride	MW-2 (0.436 µg/L, 10/17/19)	1,800 µg/L
1,1,2-Trichloroethane	MW-1 (0.436 µg/L, 10/17/19)	49 µg/L

In summary, impacts to soil in recent sampling events have been limited to petroleum hydrocarbons at concentrations that are consistently below the excavation/construction worker RBCs. Impacts to groundwater are predominantly petroleum-related, though several wells have had detections of other analytes originating from other sources. With the limited exceptions of benzene and TPHg, detected analyte concentrations in groundwater were generally below the excavation worker RBCs.

The most recent monitoring (completed in July 2020) shows that the magnitude of the petroleum impacts observed in the site groundwater monitoring wells is on a decreasing concentration trend, but residual contamination exists beneath the O'Dell Building, the Odd Fellows Building, and the adjacent rights-of-way for NE Ford Street and NE Third Street. In the July 2020 groundwater monitoring event, exceedances of the Oregon DEQ Risk-Based Concentrations (RBCs) were limited to benzene and TPHg in MW-4 (located south of the Odd Fellows Building) and benzene in MW-2 (located south of the O'Dell Building).

2.3.3 Contaminants of Potential Concern

The analytes that have been detected in recent sampling events at concentrations that are above laboratory method reporting limits are those that are listed in the tables above. Of these detected analytes, only TPHg and benzene in Site groundwater have been detected at concentrations above the DEQ's risk-based screening levels for exposure to groundwater in an excavation. Therefore, the COPCs for the Site include benzene and TPHg.

As referenced in the *Third Quarter 2020 Data Summary and Site Closure Assessment Report* (Apex, 2020c), residual contamination in soil and groundwater does not currently pose a risk to human health or the environment through the existing risk exposure pathways, which do not include direct contact exposures. However, in the event that activities at the Site may have the potential for direct exposures, such as during

property development or construction, underground utility work, or other subsurface disturbance, the contaminated media will need to be managed properly to effectively eliminate potential risks. This plan provides the scope for managing the contaminated media.

2.4 Applicability and Scope

This section discusses soil and groundwater management requirements for COPCs (benzene and TPHg) in Site soil and groundwater. Information related to health and safety considerations is discussed in Section 6. The health and safety standards are in addition to requirements that may be imposed on construction projects under federal, state, or local regulations.

Applicability. The requirements of this plan shall apply to soil and groundwater within the management areas shown on Figure C-7, and only for the COPCs (benzene and TPHg). The management areas for soil and groundwater at the Site are defined by the areas shown on Figure C-7. The defined management areas correspond to soil or groundwater containing chemicals above applicable or relevant screening criteria. Soil and groundwater within these areas shall be assumed to contain the COPCs and are to be handled in accordance with Sections 3 and 4 for soil and groundwater, respectively. If evidence of contamination is observed elsewhere at the Site (such as observations of an odor or stained soil), the material must also be tested and handled as described in this CMMP. If the soil or groundwater being managed is impacted by other contaminants (i.e., has analyte concentrations above the laboratory reporting limits), then other restrictions may apply to the management and disposal of those wastes as appropriate based on the regulatory action levels for that analyte (but these conditions are not governed by this CMMP and will need to be addressed by a qualified professional).

Scope. Soil management shall consist of the following steps:

1) Characterize the soil to be disturbed in accordance with Section 3.2.

   a) If benzene and TPHg concentrations are below detection limits or the Clean Fill screening levels published by DEQ (DEQ, 2019), the soil is not visibility stained, and the soil does not have a chemical odor, then no special handling is required[1] ("unrestricted use") and skip to Step 4.

   b) If chemicals are present above the unrestricted use criteria, the soil is visibly stained, or the soil has a chemical odor, then proceed to Step 2.

[1] Note that the Clean Fill determination process applies only to terrestrial (upland) reuse or disposal. The Clean Water Act and associated state water quality rules, rather than the solid waste rules, govern the filling of wetlands or waters of the state.

2) Handle soil in accordance with the requirements in Section 3.3.

3) For final disposition of excavated soil, follow the requirements of Section 3.4.

4) Prepare and file a report in accordance with Section 5.0.

Groundwater management shall consist of the following steps:

1) Characterize the groundwater to be disturbed in accordance with Section 4.1.

   a) If benzene and TPHg concentrations are below detection limits, then handling of any removed groundwater is unrestricted, unless other regulations apply (such as a permitted sewer discharge).

   b) If chemicals are detected, proceed to Step 2.

2) Handle groundwater in accordance with the requirements in Section 4.2.

3) For final disposition of removed groundwater, follow the requirements of Section 4.3.

4) Prepare and file a report in accordance with Section 5.0.

3.0 Contaminated Soil Management

This CMMP was prepared to support managing soil in the soil management area. The soil management area (Figure C-7) has been established based on the currently understood extent of chemical concentrations at and near the Site, and the current land use. The soil management area may be revised in the future if remedial actions or additional investigation activities are completed.

3.1 Characterization of Soil

The soil concentrations in soil are shown on Figures C-3 and C-4. Soil to be disturbed by activities within the soil management area shown on Figure C-7 shall be characterized for proper handling and disposition. Characterization may be conducted either prior to or after the soil-disturbing activity. The disposal of soil removed from the Site may include additional waste characterization criteria imposed by the disposal facility.

Characterization Prior to Soil Disturbance. Soil samples shall be collected in accordance with generally accepted environmental practices at the time of soil disturbance and under the direction of a qualified professional. At a minimum, soil samples shall be analyzed for the following:

- Petroleum VOCs (BTEX) by EPA Method 8021 or 8260; and,
- TPHg by Northwest Method NWTPH-Gx.

If disturbed soil may be removed from the Site and disposed of at a regulated facility, the potential disposal facility shall be contacted for any other testing that may be required for acceptance for disposal. Soil removed after characterization must be entirely from the envelope of the characterization samples (i.e. the characterization samples must surround the excavated area on all sides), otherwise the soil is to be handled as described below for characterization after excavation.

Characterization after Excavation. If soil is characterized after excavation, the soil shall be presumed to contain benzene and TPHg until testing demonstrates otherwise. The soil shall be handled in accordance with Section 3.3. Stockpiles shall be sampled at a frequency and using procedures in accordance with generally accepted environmental practices at the time of the work. At a minimum, soil samples shall be sampled and analyzed at a frequency no less than one sample per 100 cubic yards of excavated material and as defined above. The potential disposal facility shall be contacted for any other testing that may be required for acceptance for disposal.

3.2 Soil Handling

Until demonstrated otherwise (such as by the characterization described in Section 3.1), soil from the soil management area shown on Figure C-7 shall be presumed to contain benzene and TPHg, and shall be handled in accordance with the procedures in this section. The procedures in this section are in addition to the normal requirements for handling soil without chemicals and any City of McMinnville requirements for erosion and sedimentation control.

Soil Excavation. Excavated soil that contains benzene or TPHg above Clean Fill screening levels shall be maintained within the limits of the excavation, stockpiled in accordance with this plan, or placed immediately into a waiting truck.

Stockpiling. Excavated soil that is not immediately removed from the Site shall be placed in a covered roll-off box or in a covered stockpile. Stockpiles shall be maintained in a manner that prevents runon, runoff, and erosion of the stockpiles. Stockpiles shall be placed on plastic sheeting with a berm around the perimeter of the stockpile. The berm may be constructed by laying the bottom plastic over straw bales, Jersey Barriers, ecology blocks, or by other equivalent methods. When not active, stockpiles shall be covered with plastic and secured with sand bags or equivalent to prevent displacement of the plastic cover. The soil shall remain in well-maintained stockpiles until testing is completed and final disposition is determined. Once sampled, no soil shall be added to a stockpile. Following the removal of the stockpile, any exposed soil from beneath the stockpile shall be tested for benzene and TPHg and if detected the impacted soil shall be removed and handled in accordance with this CMMP.

Loading and Hauling. Excavated soil may be loaded into trucks for hauling to a disposal facility directly from the excavation or from a temporary stockpile as discussed above. During loading, care shall be taken to minimize spillage of soil on the exterior of the trucks or clean ground surface. Any soil on the truck exterior shall be removed prior to leaving the loading area. The trucks shall be covered with a tarp prior to departing the Site. Trucks shall not be allowed to leave the Site if liquids are draining from the load. Excavated soil shall be transported in accordance with appropriate Department of Transportation (DOT) regulations.

3.3 Final Disposition of Soil

The results of the characterization testing (Section 3.1) shall be used to determine the final disposition of excavated soil, as follows.

- If the COPCs are not detected in the soil samples, or if the concentrations of all COPCs are below the respective Clean Fill criteria, then this plan places no additional restrictions on the soil handling or disposition than would ordinarily apply from applicable state and federal regulations. The detection of other analytes is not addressed by this CMMP and would need to be addressed separately by a qualified professional.
- If benzene or TPHg is detected above the Clean Fill criteria, then the soil shall be properly characterized and disposed of at an offsite licensed facility permitted to accept solid wastes impacted by petroleum hydrocarbons (such as, but not limited to, a Subtitle D landfill or soil treatment facility). It is the responsibility of the party handling the soil to properly characterize and dispose of the soil, including addressing any additional waste characterization criteria that may be imposed by the disposal facility. The DEQ maintains a list of active permitted waste facilities (https://www.deq.state.or.us/lq/sw/disposal/ permittedfacilities.htm).

4.0 Contaminated Groundwater Management

This CMMP was also prepared to support managing groundwater in the groundwater management area. The groundwater management area (Figure C-7) has been established based on the currently understood extent of chemical concentrations at and near the Site. The groundwater management area may be revised in the future as remedial actions or additional investigation activities are completed.

4.1 Characterization of Groundwater

Groundwater concentrations from the current and historical monitoring events (2002 through July 2020) are shown on Figures C-5 and C-6 and on Table C-1, and the groundwater management area is shown on Figure C-7. The extent of the groundwater management area is based on the extrapolation of groundwater concentrations encountered in the immediate vicinity of the Site and may vary from actual conditions. The

groundwater management area includes both the Site and off-Site properties. The management area includes only the shallow groundwater that is typically encountered at depths of between 9 and 19 feet bgs.

Groundwater to be disturbed by activities within the groundwater management area shown on Figure C-7 shall be characterized for proper handling and disposition. Characterization may be conducted when groundwater is encountered in excavations or during dewatering during construction activities. Representative groundwater samples must be collected in accordance with generally accepted environmental practices at the time of the work. At a minimum, groundwater samples shall be analyzed for the following:

- Petroleum VOCs (BTEX) by EPA Method 8021 or 8260; and,
- TPHg by Northwest Method NWTPH-Gx.

For the purposes of the CMMP, contaminated groundwater is defined by DEQ rules (OAR Chapter 340, Division 122) as groundwater with concentrations of hazardous substances (i.e., petroleum constituents) greater than the laboratory detection limit. Thus, any groundwater that has detectable concentrations of petroleum hazardous substances (i.e., the benzene and TPHg contamination) is considered contaminated media.

4.2 Groundwater Handling

Until demonstrated otherwise (such as by the characterization described in Section 4.1), groundwater from the groundwater management area shown on Figure C-7 shall be presumed to be contaminated groundwater and shall be handled in accordance with the procedures in this section. The procedures in this section are in addition to requirements for handling groundwater without hazardous substances detections.

Any groundwater removed from the vicinity of the groundwater management area shall be containerized on-site or loaded directly into trucks or tanks/vessels for hauling to a disposal facility. During loading, care shall be taken to prevent spillage of groundwater from the tank or truck. Any groundwater spills shall be immediately stopped and the water shall be cleaned up; soil impacted by spilled water should be tested and removed in accordance with Section 3 if contaminated or assumed to be contaminated. After containerization, the water may be tested as described above and handled appropriately and disposed of in accordance with section 4.3.

It is recommended that groundwater be removed from the Site only to the extent that it is necessary to allow construction and redevelopment activities to occur. Alternative approaches that do not require groundwater removal would be preferred. Groundwater removal and handling shall be completed in a manner that prevents exacerbation of existing conditions and does not interfere with potential future investigation or cleanup activities at the Site. Pumping (such as for excavation dewatering) in the near vicinity of the groundwater management area may cause contaminated groundwater to migrate from its current location to the pumped

area and should therefore be avoided. If such near-vicinity pumping is unavoidable, then measures must be included that prevent such uncontrolled migration (such as, but not limited to, more aggressive pumping from within the groundwater management area so that the net change in the groundwater gradient is toward the Site and the migration is controlled). If testing results of water pumped from outside of the groundwater management area show detected concentrations of benzene or TPHg then the water is to be managed in accordance with this plan.

4.3 Final Disposition of Groundwater

The results of the characterization testing (Section 4.1) shall be used to determine the final disposition of any removed groundwater, as follows:

- If groundwater encountered in excavations during construction activities has been evaluated and shows no evidence of contamination, disposal of removed groundwater is not restricted by this plan and may be managed under any permitted means (for example, City's NPDES-permitted stormwater sewer system or sanitary sewer).
- If the removed groundwater is found to be contaminated by detected concentrations of benzene or TPHg, the groundwater will be characterized and disposed of at an offsite licensed facility permitted to accept petroleum-impacted water. It is the responsibility of the party handling the water to properly characterize and dispose of the water, including addressing any additional waste characterization criteria that may be imposed by the disposal facility. The DEQ maintains a list of active permitted waste facilities (https://www.deq.state.or.us/lq/sw/disposal/ permittedfacilities.htm).

5.0 Reporting

A brief letter report shall be prepared presenting the results of all sampling and chemical analysis and documenting the final disposal of any soil/groundwater that was disturbed and/or removed. At a minimum, the letter report shall include:

- A Site plan showing sample locations and the location of the work;
- Summary tables of analytical results;
- Discussion of field observations and results;
- Documentation of quantities and final disposition of soil/groundwater, including a Site plan if soil/groundwater is left at the Site;
- Completed DEQ Waste Generation and Management form(s) for the disposal;
- Copies of soil/groundwater disposal receipts, if applicable; and

- Analytical laboratory reports.

The report shall be submitted to the DEQ to include in the project file.

6.0 Health and Safety Training and Planning

This section addresses health and safety and training in addition to that which is normally conducted for construction activities. Any party completing any activity that may disturb soil or groundwater within the management areas at the Site as defined on Figure C-7 must comply with the following standards.

Training. Employees engaged in activities that may include exposure to media containing or assumed to contain chemicals are to be trained in accordance with 29 CFR 1910.120. Training will not be required for work areas that have been characterized (prior to the work activities) and shown not to contain chemicals at concentrations above the unrestricted use criteria (such as the DEQ clean fill standards for soil or being below the most restrictive of the DEQ RBCs [typically the residential RBCs]), or where a risk analysis completed by a qualified professional demonstrates that the chemicals will not pose an unacceptable risk to the Site workers. If it is uncertain whether training is necessary, the services of an Industrial Hygienist may be warranted to review the data prior to implementation.

Health and Safety Plan. The party in charge of the Site activities shall prepare and implement a HASP in accordance with Occupational Safety and Health Act (OSHA) requirements (i.e. 29 CFR 1910.120) and OARs. The HASP shall be prepared by a Certified Industrial Hygienist or qualified safety professional with a minimum of 40 hours of OSHA HAZWOPER training. The HASP shall identify and address, but not be limited to, the physical and chemical hazards of the Site and the proposed activities. The HASP content shall, at a minimum, describe the following:

- Required personal protective equipment (PPE);
- Site safety supervisor;
- Action levels at which protection would be upgraded;
- Controls to be used to minimize worker exposure to hazardous substances;
- Exclusion, contamination reduction, and clean zones;
- Personnel decontamination procedures;
- Route to hospital; and
- Monitoring equipment to be employed.

Data tables from soil and groundwater investigations within and near the management areas are included in the *Third Quarter 2020 Data Summary and Site Closure Assessment Report* (Apex, 2020c). The tables provide a guideline for the magnitudes of chemicals encountered in the management areas. If future remedial actions are completed within the LOF, these data will be obsolete and subsequent sampling would need to be conducted to inform future health and safety assessments.

7.0 References

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Table C-1
Groundwater Analytical Results
Oregon Lithoprint
McMinnville, Oregon

Sample Location ID	MW-1					MW-2							MW-3					MW-4						
Date	2/14/2019	10/17/2019	1/30/2020	4/16/2020	7/17/2020	2/14/2019	10/17/2019	10/17/2019 DUP	1/30/2020	4/16/2020	7/17/2020	7/17/2020 DUP	2/14/2019	10/17/2019	1/30/2020	4/16/2020	7/17/2020	2/14/2019	10/17/2019	1/30/2020	1/30/2020 DUP	4/16/2020	4/16/2020 DUP	7/17/2020
Volatile Organic Compounds (µg/L)																								
Acetone	<50.0 UJ	<50.0	<50.0	<50.0	<50.0 UJ	<50.0 UJ	<50.0	<50.0 UJ	<1000	<1000	253 J+	<50.0 UJ	<50.0 UJ	<50.0	<50.0	<50.0	161 J+	<50.0 UJ	<50.0	<5000	<500	<5000	<5000	<1000
Acrolein	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0 R	<1000	<1000	<1000	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<5000	<500	<5000	<5000	<1000
Acrylonitrile	<10.0 UJ	20.0	<10.0	<10.0	<10.0	<10.0 UJ	<10.0	<10.0	<200	<200	<200	<10.0	<10.0 UJ	<10.0	<10.0	<10.0	<10.0	<10.0 UJ	<10.0	<1000	<100	<1000	<1000	<200
Benzene	<1.00	46.4	<1.00	0.240 J	2.15	602	410	317	568	1,120	924	999	3.13	37.4	3.39	4.74	2.53	1,640	3,040	4,010	3,350	2,890	2,230	2,770
Bromobenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00 UJ	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
Bromodichloromethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
Bromoform	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
Bromomethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<100	<100	<100	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<500	<50.0	<500	<500	<100
n-Butylbenzene	<1.00	<1.00	<1.00	<1.00	<1.00	3.54	4.01	2.38 J	<20.0	7.61 J	7.43 J	9.04	2.08	3.05	1.07	1.58	2.84	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
sec-Butylbenzene	<1.00	0.387 J	<1.00	<1.00	0.434 J	4.34	6.00	4.94 J	<20.0	7.36 J	9.18 J	9.83	6.45	7.52	2.69	4.49	7.90	<1.00	0.686 J	<100	<10.0	<100	<100	<20.0
tert-Butylbenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	0.602 J	0.472 J	<20.0	<20.0	<20.0	0.491 J	0.434 J	0.467 J	<1.00	0.374 J	0.478 J	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
Carbon Tetrachloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	0.436 J+	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
Chlorobenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
Chlorodibromomethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
Chloroethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<100	<100	<100	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<500	<50.0	<500	<500	<100
Chloroform	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<100	<100	<100	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<500	<50.0	<500	<500	<100
Chloromethane	<2.50	<2.50 UJ	<2.50	<2.50	<2.50	<2.50	<2.50 UJ	<2.50	<50.0	<50.0	<50.0	<2.50	<2.50	<2.50 UJ	<2.50	<2.50	<2.50	<2.50	<2.50 UJ	<250	<25.0	<250	<250	<50.0
2-Chlorotoluene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00 UJ	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
4-Chlorotoluene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00 UJ	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
1,2-Dibromo-3-Chloropropane	<5.00 UJ	<5.00	<5.00	<5.00	<5.00	<5.00 UJ	<5.00	<5.00	<100	<100	<100	<5.00	<5.00 UJ	<5.00	<5.00 UJ	<5.00	<5.00	<5.00 UJ	<5.00	<500 UJ	<50.0 UJ	<500	<500	<100
1,2-Dibromoethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
Dibromomethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
1,2-Dichlorobenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
1,3-Dichlorobenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
1,4-Dichlorobenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
Dichlorodifluoromethane	<5.00	<5.00 UJ	<5.00	<5.00	<5.00	<5.00	<5.00 UJ	<5.00	<100	<100	<100	<5.00	<5.00	<5.00 UJ	<5.00	<5.00	<5.00	<5.00	<5.00 UJ	<500	<50.0	<500	<500	<100
1,1-Dichloroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
1,2-Dichloroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
1,1-Dichloroethene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	1.46	1.17	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
cis-1,2-Dichloroethene	<1.00	0.445 J	<1.00	<1.00	<1.00	<1.00	29.9	28.2	<20.0	<20.0	11.1 J	11.1	<1.00	0.676 J	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
trans-1,2-Dichloroethene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	12.2	10.2	<20.0	<20.0	3.09 J	3.21	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
1,2-Dichloropropane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
1,1-Dichloropropene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
1,3-Dichloropropane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
cis-1,3-Dichloropropene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
trans-1,3-Dichloropropene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
2,2-Dichloropropane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0 UJ
di-Isopropyl Ether	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
Ethylbenzene	<1.00	9.95	<1.00	1.42	4.45	882	165	185	853	1,790	1,290	1,450	10.4	12.5	3.00	4.23	7.40	2.39	6.84	<100	7.01 J	29.1 J	<100	5.11 J
Hexachloro-1,3-Butadiene	<1.00	<1.00	<1.00	<1.00	<1.00 UJ	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0 UJ	<1.00 UJ	<1.00	<1.00	<1.00	<1.00	<1.00 UJ	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
Isopropylbenzene	<1.00	1.53	<1.00	0.200 J	1.31	36.9	25.8	25.8	39.5	79.0	84.4	93.6	12.5	14.6	4.37	8.09	14.3	2.40	8.81	<100	7.71 J	<100	<100	5.67 J
p-Isopropyltoluene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	0.730 J	0.610 J	<20.0	<20.0	<20.0	1.22	1.62	1.79	1.34	1.16	1.49	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
2-Butanone (MEK)	<10.0 UJ	<10.0	<10.0	<10.0	<10.0	<10.0 UJ	<10.0	<10.0	<200	<200	<200	<10.0	<10.0 UJ	<10.0	<10.0	<10.0	<10.0	<10.0 UJ	<10.0	<1000	<100	<1000	<1000	<200
Methylene Chloride	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<100	<100	<100	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<500	<50.0	<500	<500	<100
4-Methyl-2-Pentanone (MIBK)	<10.0 UJ	<10.0	<10.0	<10.0	<10.0	<10.0 UJ	<10.0	<10.0	<200	<200	<200	<10.0	<10.0 UJ	<10.0	<10.0	<10.0	<10.0	<10.0 UJ	<10.0	<1000	<100	<1000	<1000	<200
Methyl Tert-Butyl Ether	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
Naphthalene	<5.00	1.49 J	<5.00	<5.00 UJ	1.47 J	67.2 J	8.91	10.5	108	181 J	99.6 J	190	8.30 J	2.19 J	<5.00 UJ	<5.00 UJ	<5.00 UJ	<5.00 UJ	<5.00	<500 UJ	<50.0 UJ	<500 UJ	<500 UJ	<100
n-Propylbenzene	<1.00	1.43	<1.00	0.364 J	2.76	72.0	41.8	36.4 J	79.2	173	170	171 J	18.2	22.9	5.81	11.3	20.3	0.693 J	1.18	<100	<10.0	<100	<100	<20.0 UJ
Styrene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
1,1,1,2-Tetrachloroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
1,1,2,2-Tetrachloroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00 UJ	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
1,1,2-Trichlorotrifluoroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
Tetrachloroethene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
Toluene	<1.00	1.08	<1.00	<1.00	<1.00	0.420 J	4.38	3.25	<20.0	<20.0	<20.0	2.31	<1.00	<1.00	<1.00	0.295 J	<1.00	5.18	12.7	<100	9.01 J	<100	<100	9.81 J
1,2,3-Trichlorobenzene	<1.00 UJ	<1.00	<1.00	<1.00	<1.00 UJ	<1.00 UJ	<1.00	<1.00	<20.0	<20.0	<20.0 UJ	<25.0	<1.00 UJ	<1.00	<1.00 UJ	<1.00	<1.00 UJ	<1.00 UJ	<1.00	<100 UJ	<10.0 UJ	<100	<100	<20.0
1,2,4-Trichlorobenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<25.0	<1.00	<1.00	<1.00 UJ	<1.00	<1.00	<1.00	<1.00	<100 UJ	<10.0 UJ	<100	<100	<20.0
1,1,1-Trichloroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
1,1,2-Trichloroethane	<1.00	0.436 J	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
Trichloroethene	<1.00	0.979 J	<1.00	<1.00	<1.00	<1.00	4.74	4.36	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
Trichlorofluoromethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<100	<100	<100	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<500	<50.0	<500	<500	<100
1,2,3-Trichloropropane	<2.50 UJ	<2.50	<2.50	<2.50	<2.50	<2.50 UJ	<2.50	<2.50 UJ	<50.0	<50.0	<50.0	<2.50	<2.50 UJ	<2.50	<2.50	<2.50	<2.50	<2.50 UJ	<2.50	<250	<25.0	<250	<250	<50.0
1,2,4-Trimethylbenzene	<1.00	0.76 J	<1.00	0.716 J	1.05	6.98	0.493 J	0.495 J	<20.0	<20.0	<20.0	1.61	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	39.4 J	<100	<20.0
1,2,3-Trimethylbenzene	<1.00	0.645 J	0.335 J	0.179 J	0.427 J	116	18.7 D	13.5 D	31.3	182	140	131	8.83	13.1	5.04	2.59	7.88	1.52	0.523 J	<100	<10.0	22.5 J	<100	<20.0
1,3,5-Trimethylbenzene	<1.00	<1.00	<1.00	<1.00	<1.00	1.23	0.868 J	0.645 J	<20.0	<20.0	<20.0	1.36	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	17.1 J	<100	<20.0
Vinyl Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<20.0	<20.0	<20.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	<10.0	<100	<100	<20.0
Xylenes, Total	<3.00	1.55 J	<3.00	<3.00	<3.00	1.81 J	6.55	5.95	<60.0	5.50 J	6.12 J	8.18	<3.00	<3.00	<3.00	0.453 J	0.430 J	1.80 J	2.78 J	<300	<30.0	51.4 J	<300	<60.0
Gasoline Range Organics	188 J+	914	<100	56.2 J+	186 J+	7,280	7,160	6,100	5,640	9,960	14,500	13,200	2,900	3,440	1,850	2,240	3,450	5,180	8,680	7,600	8,630	7,980 J-	7,890 J-	7,520

Notes:

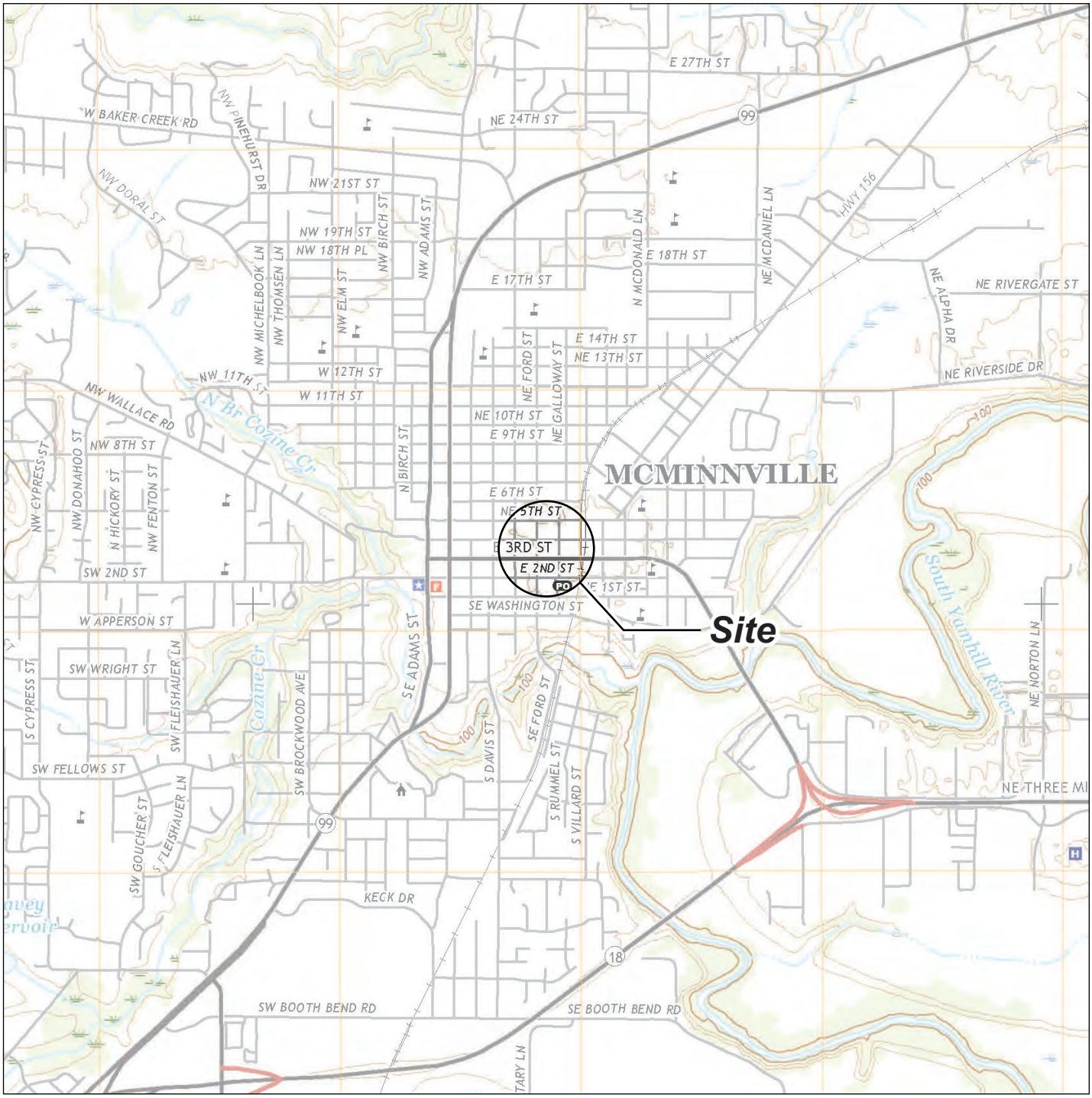
1. µg/L = Micrograms per liter.
2. Bold values indicate the compounds was detected above method detection limits.
3. < = Analyte was not detected above the reporting limit.
4. DEQ Risk-Based Concentrations from Oregon Department of Environmental Quality's *Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sites* , revised May 2018.
5. Shaded values indicate concentrations detected above the Occupational RBC for Vapor Intrusion and/or the Construction and Excavation Worker RBC for Groundwater in Excavations.
6. -- = Value not available.
7. J = Result is estimated.
8. UJ = Reporting limit is estimated due to analyte quality control.
9. J+ = Result is estimated and may be biased high.
10. R = The data are unusable and the presence of the analyte in the sample is unknown.
11. D = For results greater than five times the reporting limit, the RPD between primary sample and field duplicate exceeds 30 percent.
12. J- = Result is estimated and may be biased low.
13. B = The same analyte is found in the associated blank.

Table C-1
Groundwater Analytical Results
Oregon Lithoprint
McMinnville, Oregon

Sample Location ID	MW-5					MW-6					ODB-1	ODB-2	ODB-3	ODB-4	ODB-5	ODB-6	ODB-7	DEQ Risk-Based Concentrations
Date	2/14/2019	10/17/2019	1/30/2020	4/16/2020	7/17/2020	2/14/2019	10/17/2019	1/30/2020	4/16/2020	7/17/2020	02/13/2019	02/13/2019	02/14/2019	02/14/2019	02/14/2019	02/14/2019	02/14/2019	GW in Excavation | Construction and Excavation Worker
Volatile Organic Compounds (µg/L)																		
Acetone	<50.0 UJ	<50.0	<50.0	<50.0	<50.0 UJ	<50.0 UJ	<50.0	<2500	74.1 J	<50.0	<50.0 UJ	<50.0 UJ	<50.0 UJ	<50.0 UJ	<50.0 UJ	<50.0 UJ	<50.0 UJ	--
Acrolein	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<2500	<250	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	--
Acrylonitrile	<10.0 UJ	<10.0	<10.0	<10.0	<10.0	<10.0 UJ	<10.0	<500	<50.0	<10.0	<10.0 UJ	<10.0 UJ	<10.0 UJ	<10.0 UJ	<10.0 UJ	<10.0 UJ	<10.0 UJ	250
Benzene	<1.00	5,870	16.3	<1.00	96.3	89.2	200	406	51.3	9.86	1.81	56.6	509	309	10.8	307	96.7	1,800
Bromobenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--
Bromodichloromethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	450
Bromoform	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	14,000
Bromomethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<250	<25.0	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	1,200
n-Butylbenzene	<1.00	<1.00	<1.00	<1.00	<1.00	2.14	<1.00	<50.0	<5.00	<1.00	20.1	44.8	33.8	35.5	26.3	30.4	18.5	--
sec-Butylbenzene	<1.00	1.03	<1.00	<1.00	0.162 J	9.53	1.89	<50.0	4.40 J	3.90	12.7	32.3	26.6	27.1	24.4	27.9	16.2	--
tert-Butylbenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	0.417 J	<50.0	<5.00	0.391 J	<1.00	0.431 J	0.450 J	0.443 J	0.774 J	0.619 J	<1.00	--
Carbon Tetrachloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	1,800
Chlorobenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	10,000
Chlorodibromomethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	610
Chloroethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<250	<25.0	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	2,400,000
Chloroform	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<250	<25.0	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	720
Chloromethane	<2.50	<2.50 UJ	<2.50	<2.50	<2.50	<2.50	<2.50 UJ	<125	<12.5	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	22,000
2-Chlorotoluene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--
4-Chlorotoluene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--
1,2-Dibromo-3-Chloropropane	<5.00 UJ	<5.00	<5.00	<5.00	<5.00	<5.00 UJ	<5.00	<250 UJ	<25.0	<5.00	<5.00 UJ	<5.00 UJ	<5.00 UJ	<5.00 UJ	<5.00 UJ	<5.00 UJ	<5.00 UJ	--
1,2-Dibromoethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	27
Dibromomethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--
1,2-Dichlorobenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	37,000
1,3-Dichlorobenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--
1,4-Dichlorobenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	1,500
Dichlorodifluoromethane	<5.00	<5.00 UJ	<5.00	<5.00	<5.00	<5.00	<5.00 UJ	<250	<25.0	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	--
1,1-Dichloroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	10,000
1,2-Dichloroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	1.14	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	630
1,1-Dichloroethene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	44,000
cis-1,2-Dichloroethene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	18,000
trans-1,2-Dichloroethene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	180
1,2-Dichloropropane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--
1,1-Dichloropropene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--
1,3-Dichloropropane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--
cis-1,3-Dichloropropene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--
trans-1,3-Dichloropropene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--
2,2-Dichloropropane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00 UJ	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--
di-Isopropyl Ether	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--
Ethylbenzene	<1.00	24.8	<1.00	<1.00	<1.00	661	4.76	1,120	172	0.761 J	182	273	594	924	25.7	44.8	27.9	4,500
Hexachloro-1,3-Butadiene	<1.00	<1.00	<1.00	<1.00	<1.00 UJ	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--
Isopropylbenzene	<1.00	16.1	<1.00	<1.00	0.249 J	59.3	4.90	102	34.5	11.6	37.6	101	106	118	117	139	65.9	51,000
p-Isopropyltoluene	<1.00	<1.00	<1.00	<1.00	<1.00	0.898 J	0.585 J	<50.0	<5.00	0.545 J	1.08	4.23	7.51	7.48	0.650 J	0.743 J	<1.00	--
2-Butanone (MEK)	<10.0 UJ	<10.0	<10.0	<10.0	<10.0	<10.0 UJ	<10.0	<500	<50.0	<10.0	<10.0 UJ	<10.0 UJ	<10.0 UJ	<10.0 UJ	<10.0 UJ	<10.0 UJ	<10.0 UJ	--
Methylene Chloride	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<250	<25.0	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	79,000
4-Methyl-2-Pentanone (MIBK)	<10.0 UJ	<10.0	<10.0	<10.0	<10.0	<10.0 UJ	<10.0	<500	<50.0	<10.0	<10.0 UJ	<10.0 UJ	<10.0 UJ	<10.0 UJ	<10.0 UJ	<10.0 UJ	<10.0 UJ	--
Methyl Tert-Butyl Ether	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	63,000
Naphthalene	<5.00 UJ	<5.00	<5.00	<5.00 UJ	<5.00 UJ	28.0 J	<5.00	<250 UJ	<25.0	<5.00	35.6 J	86.3 J	110 J	90.6 J	8.38 J	3.93 J	20.3 J	500
n-Propylbenzene	<1.00	4.3	<1.00	<1.00	<1.00	186	4.89	237	79.1	19.1 J	156	312	378	389	388	509	216	--
Styrene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	170,000
1,1,1,2-Tetrachloroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--
1,1,2,2-Tetrachloroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--
1,1,2-Trichlorotrifluoroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--
Tetrachloroethene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	5,600
Toluene	<1.00	5.51	<1.00	<1.00	<1.00	0.499 J	0.935 J	<50.0	<5.00	0.298 J	<1.00	0.572 J	0.540 J	14.4	0.741 J	0.930 J	0.526 J	220,000
1,2,3-Trichlorobenzene	<1.00 UJ	<1.00	<1.00	<1.00	<1.00 UJ	<1.00 UJ	<1.00	<50.0 UJ	<5.00	<1.00	<1.00 UJ	<1.00 UJ	<1.00 UJ	<1.00 UJ	<1.00 UJ	<1.00 UJ	<1.00 UJ	--
1,2,4-Trichlorobenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0 UJ	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--
1,1,1-Trichloroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	1,100,000
1,1,2-Trichloroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	49
Trichloroethene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	430
Trichlorofluoromethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<250	<25.0	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	160,000
1,2,3-Trichloropropane	<2.50 UJ	<2.50	<2.50	<2.50	<2.50	<2.50 UJ	<2.50	<125	<12.5	<2.50	<2.50 UJ	<2.50 UJ	<2.50 UJ	<2.50 UJ	<2.50 UJ	<2.50 UJ	<2.50 UJ	--
1,2,4-Trimethylbenzene	<1.00	0.538 J	<1.00	<1.00	<1.00	17.7	0.452 J	26.0 J	2.34 J	<1.00	79.6	277	1,070	855	2.30 J	11.3	1.23	6,300
1,2,3-Trimethylbenzene	<1.00	1.54	<1.00	<1.00	<1.00	2.31	<1.00	<50.0	<5.00	<1.00	151	160	345	344	2.64 J	6.63	1.55	--
1,3,5-Trimethylbenzene	<1.00	0.421 J	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	7,500
Vinyl Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<50.0	<5.00	<1.00	4.92	85.6	228	183	<5.00	3.07	<1.00	960
Xylenes, Total	<3.00	7.63	<3.00	<3.00	<3.00	14.1	<3.00	<150	1.86 J	0.229 J	1.59 J	124	1,040	1,350	<15.0	40.6	<3.00	23,000
Gasoline Range Organics	64.4 J+	7,130	<100	177 J+	236 J+	4,260	1,430	2,770	2,170	1,150	5,170	8,490	15,100	19,900	7,100	8,180	3,410	14,000

Notes:

1. µg/L = Micrograms per liter.
2. Bold values indicate the compounds was detected above method detection limits.
3. < = Analyte was not detected above the reporting limit.
4. DEQ Risk-Based Concentrations from Oregon Department of Environmental Quality's *Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sites* , revised May 2018.
5. Shaded values indicate concentrations detected above the Urban Residential RBC for Vapor Intrusion.
6. Shaded values indicate concentrations detected above the Occupational RBC for Vapor Intrusion and/or the Construction and Excavation Worker RBC for Groundwater in Excavations.
7. -- = Value not available.
8. J = Result is estimated.
9. UJ = Reporting limit is estimated due to analyte quality control.
10. J+ = Result is estimated and may be biased high.
11. R = The data are unusable and the presence of the analyte in the sample is unknown.
12. D = For results greater than five times the reporting limit, the RPD between primary sample and field duplicate exceeds 30 percent.
13. J- = Result is estimated and may be biased low.
14. B = The same analyte is found in the associated blank.



Note: Base map prepared from USGS 7.5-minute quadrangle of McMinnville, OR, dated 2017 as provided by USGS.gov.

N

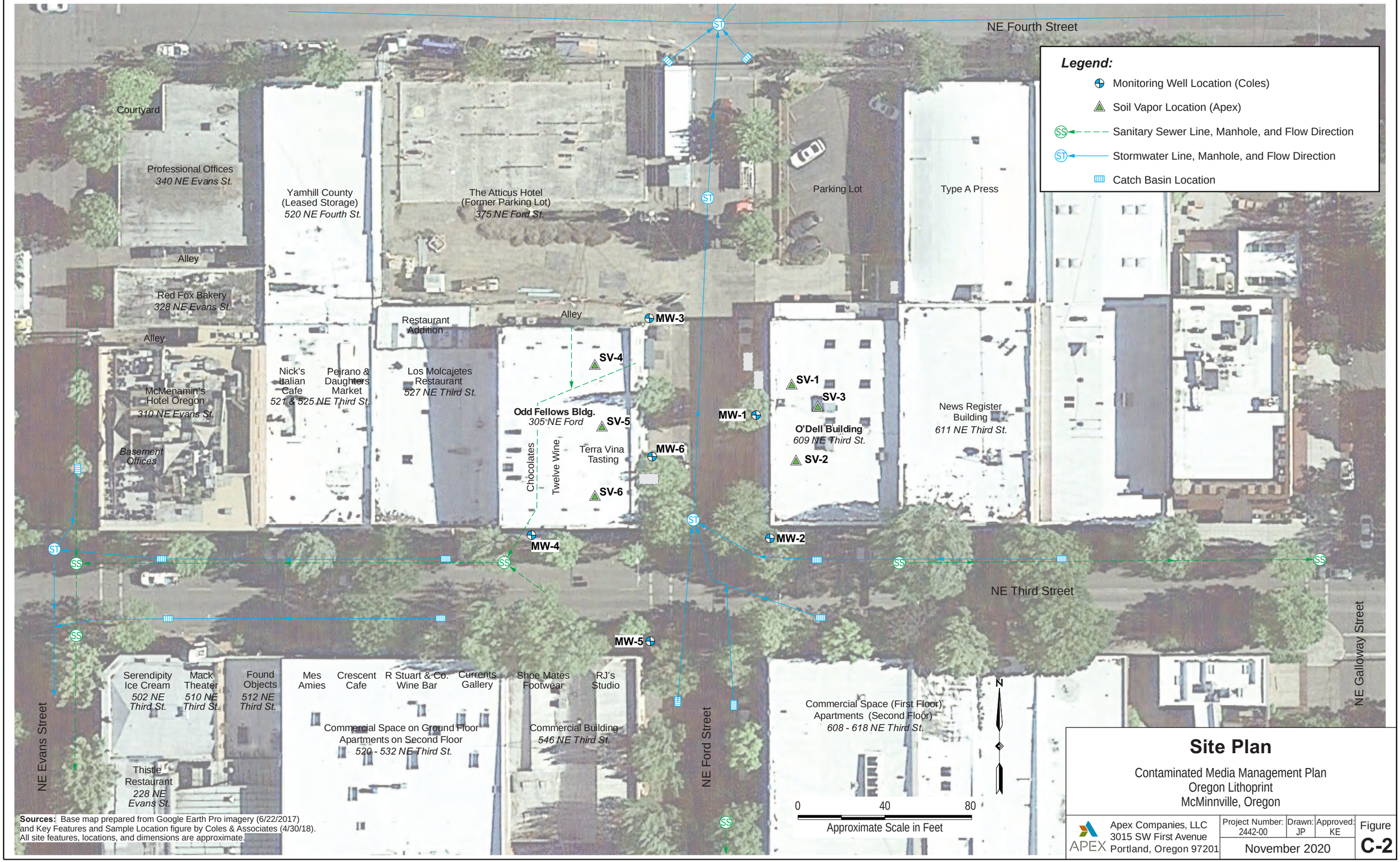
0 2,000 4,000

Approximate Scale in Feet

Site Location Map

Contaminated Media Management Plan
Oregon Lithoprint
McMinnville, Oregon

Apex Companies, LLC 3015 SW First Avenue Portland, Oregon 97201	Project Number: 2442-00	Drawn: JP	Approved: KE	Figure C-1
	November 2020			



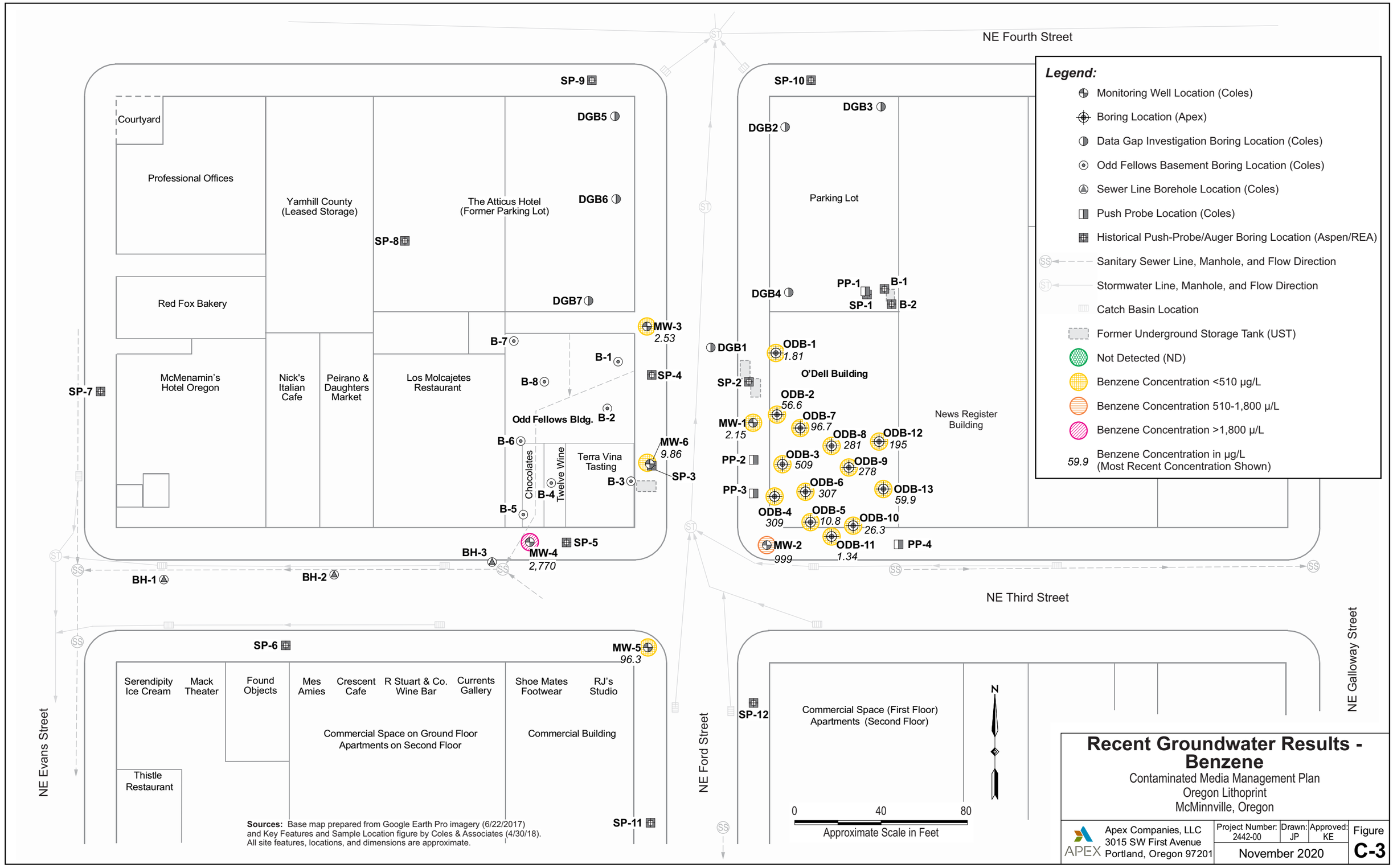
Sources: Base map prepared from Google Earth Pro imagery (6/22/2017) and Key Features and Sample Location figure by Coles & Associates (4/30/18). All site features, locations, and dimensions are approximate.

Site Plan

Contaminated Media Management Plan
Oregon Lithoprint
McMinnville, Oregon

APEX
Apex Companies, LLC
3015 SW First Avenue
Portland, Oregon 97201

Project Number:	Drawn:	Approved:	Figure
2442-00	JP	KE	C-2
November 2020			



Sources: Base map prepared from Google Earth Pro imagery (6/22/2017) and Key Features and Sample Location figure by Coles & Associates (4/30/18). All site features, locations, and dimensions are approximate.

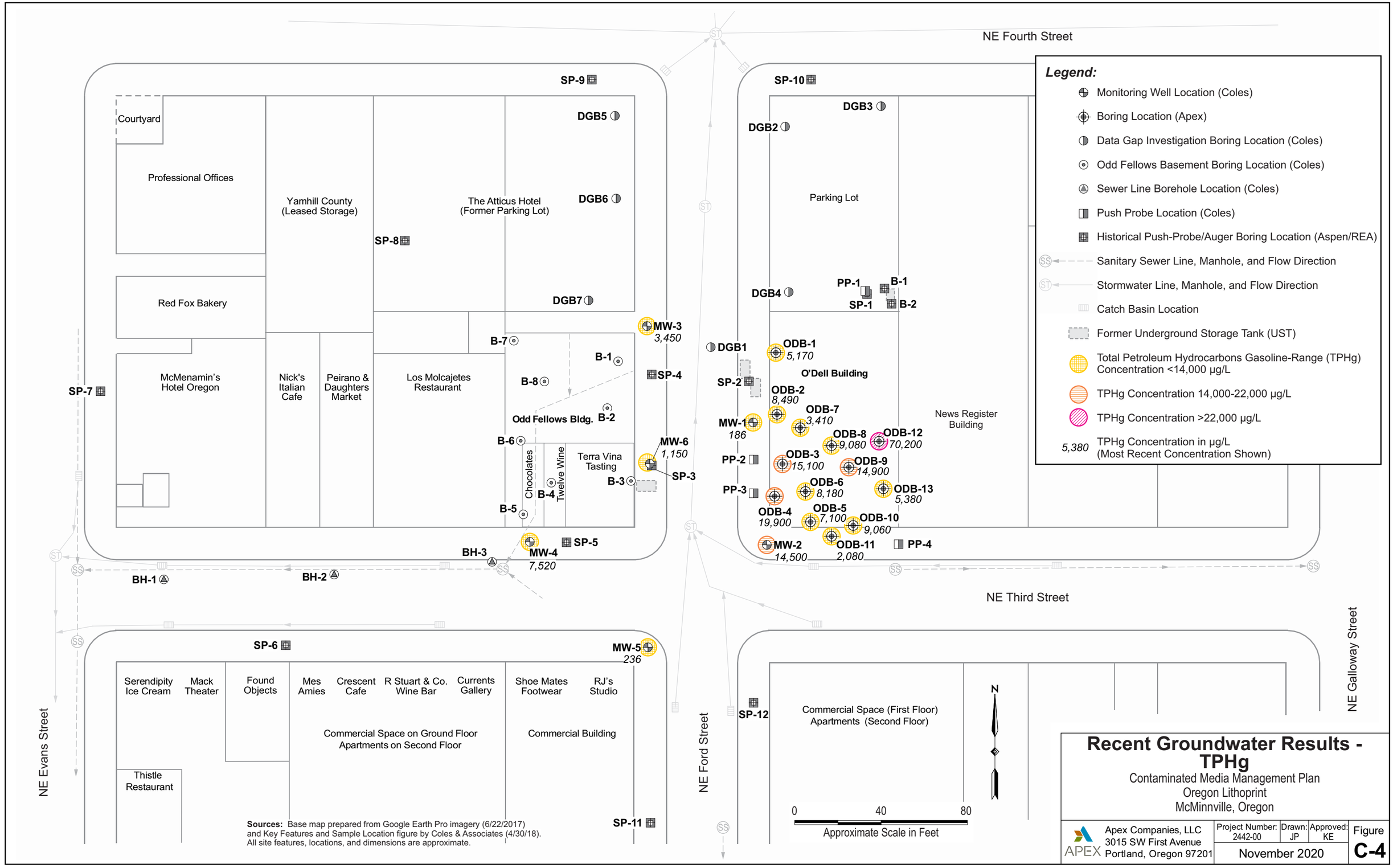
Recent Groundwater Results - Benzene

Contaminated Media Management Plan
Oregon Lithoprint
McMinnville, Oregon

Apex Companies, LLC
3015 SW First Avenue
Portland, Oregon 97201

Project Number:	Drawn:	Approved:	Figure
2442-00	JP	KE	C-3

November 2020



Sources: Base map prepared from Google Earth Pro imagery (6/22/2017) and Key Features and Sample Location figure by Coles & Associates (4/30/18). All site features, locations, and dimensions are approximate.

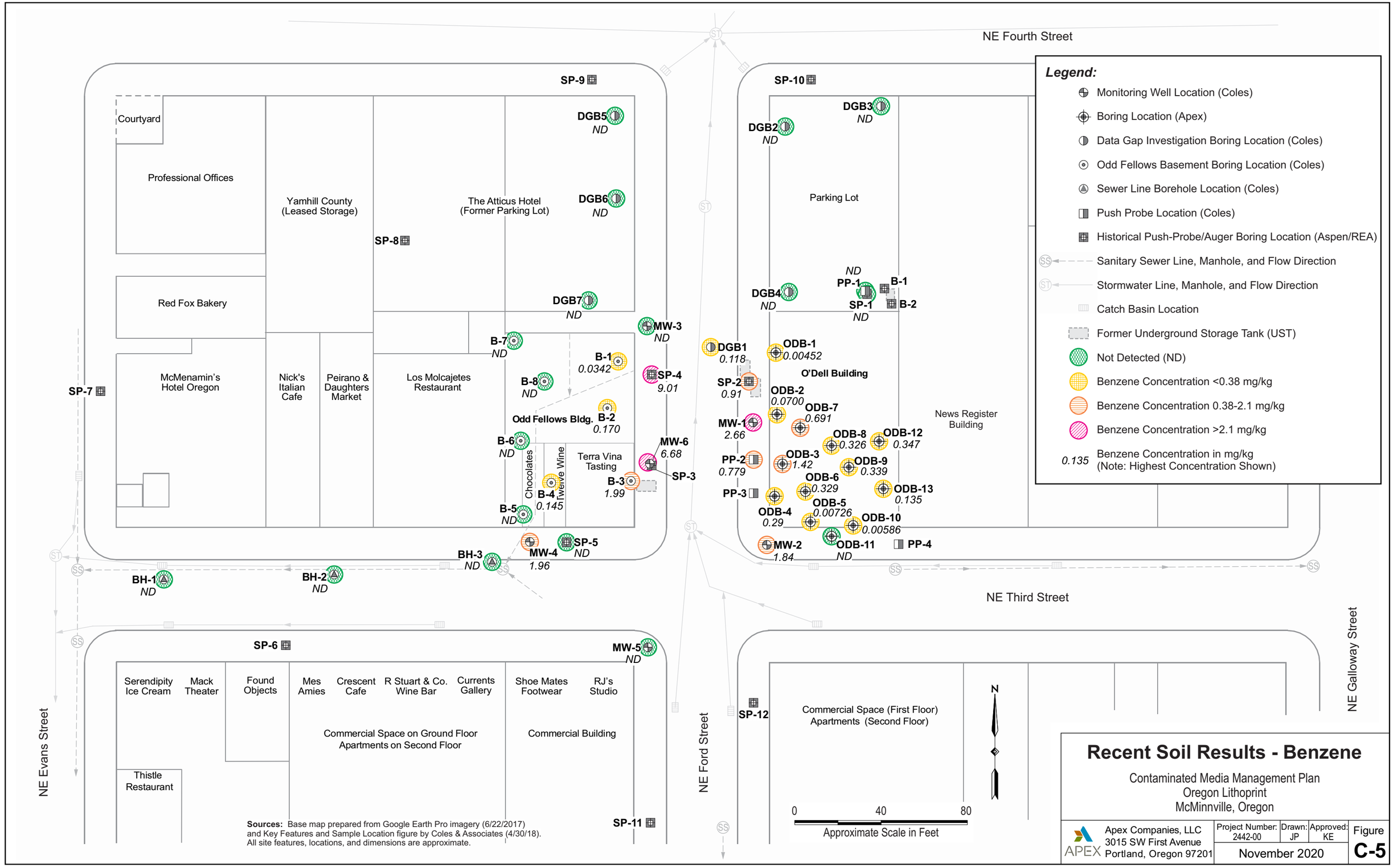
Recent Groundwater Results - TPHg

Contaminated Media Management Plan
Oregon Lithoprint
McMinnville, Oregon

Apex Companies, LLC
3015 SW First Avenue
Portland, Oregon 97201

Project Number:	Drawn:	Approved:	Figure
2442-00	JP	KE	C-4

November 2020



Legend:

- Monitoring Well Location (Coles)
- Boring Location (Apex)
- Data Gap Investigation Boring Location (Coles)
- Odd Fellows Basement Boring Location (Coles)
- Sewer Line Borehole Location (Coles)
- Push Probe Location (Coles)
- Historical Push-Probe/Auger Boring Location (Aspen/REA)
- Sanitary Sewer Line, Manhole, and Flow Direction
- Stormwater Line, Manhole, and Flow Direction
- Catch Basin Location
- Former Underground Storage Tank (UST)
- Not Detected (ND)
- Benzene Concentration <0.38 mg/kg
- Benzene Concentration 0.38-2.1 mg/kg
- Benzene Concentration >2.1 mg/kg
- 0.135 Benzene Concentration in mg/kg (Note: Highest Concentration Shown)

Sources: Base map prepared from Google Earth Pro imagery (6/22/2017) and Key Features and Sample Location figure by Coles & Associates (4/30/18). All site features, locations, and dimensions are approximate.

Recent Soil Results - Benzene

Contaminated Media Management Plan
Oregon Lithoprint
McMinnville, Oregon

APEX
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Portland, Oregon 97201

Project Number:	Drawn:	Approved:	Figure
2442-00	JP	KE	C-5

November 2020

NE Fourth Street

NE Third Street

NE Evans Street

NE Ford Street

NE Galloway Street

Courtyard

Professional Offices

Yamhill County (Leased Storage)

The Atticus Hotel (Former Parking Lot)

Red Fox Bakery

McMenamin's Hotel Oregon

Nick's Italian Cafe

Peirano & Daughters Market

Los Molcajetes Restaurant

Odd Fellows Bldg.

Chocolates

Twelve Vine

Terra Vina Tasting

Parking Lot

O'Dell Building

News Register Building

Serendipity Ice Cream

Mack Theater

Found Objects

Mes Amies

Crescent Cafe

R Stuart & Co. Wine Bar

Currents Gallery

Shoe Mates Footwear

RJ's Studio

Commercial Space on Ground Floor
Apartments on Second Floor

Commercial Building

Thistle Restaurant

Commercial Space (First Floor)
Apartments (Second Floor)

SP-9 ND

DGB5 ND

DGB6 498

SP-8 ND

DGB7 222

MW-3 132

B-7 ND

B-1 346

SP-4 3,120

B-8 1,030

B-2 230

B-6 ND

MW-6 16.2

SP-3 129

B-3 200

B-4 281

B-5 1,010

SP-5 497

MW-4 740

BH-3 247

BH-1 ND

BH-2 ND

SP-7 ND

SP-6 ND

MW-5 253

SP-11 54

SP-10

DGB3 ND

DGB2 647

1,250

PP-1

B-1

DGB4 1,740

SP-1 3,350

B-2

DGB1 1,870

ODB-1 245

SP-2 336

ODB-2 68.7

ODB-7 1,160

MW-1 154

ODB-8 144

ODB-12 254

PP-2 156

ODB-3 1,220

ODB-9 104

PP-3

ODB-6 929

ODB-13 38.1

ODB-4 278

ODB-5 866

ODB-10 150

MW-2 310

ODB-11 185

PP-4

SP-12 ND

Legend:

- Monitoring Well Location (Coles)
- Boring Location (Apex)
- Data Gap Investigation Boring Location (Coles)
- Odd Fellows Basement Boring Location (Coles)
- Sewer Line Borehole Location (Coles)
- Push Probe Location (Coles)
- Historical Push-Probe/Auger Boring Location (Aspen/REA)
- Sanitary Sewer Line, Manhole, and Flow Direction
- Stormwater Line, Manhole, and Flow Direction
- Catch Basin Location
- Former Underground Storage Tank (UST)
- Not Detected (ND)
- Total Petroleum Hydrocarbons Gasoline-Range (TPHg) Concentration <94 mg/kg
- TPHg Concentration 94-20,000 mg/kg
- TPHg Concentration >20,000 mg/kg
- 38.1 TPHg Concentration in mg/kg (Note: Highest Concentration Shown)

N

0 40 80

Approximate Scale in Feet

Sources: Base map prepared from Google Earth Pro imagery (6/22/2017) and Key Features and Sample Location figure by Coles & Associates (4/30/18). All site features, locations, and dimensions are approximate.

Soil Results - TPHg

Contaminated Media Management Plan
Oregon Lithoprint
McMinnville, Oregon

Apex Companies, LLC
3015 SW First Avenue
Portland, Oregon 97201

Project Number:	Drawn:	Approved:	Figure
2442-00	JP	KE	C-6

November 2020

NE Fourth Street

Legend:

- Monitoring Well Location (Coles)
- Sanitary Sewer Line, Manhole, and Flow Direction
- Stormwater Line, Manhole, and Flow Direction
- Catch Basin Location
- Soil Management Area
- Groundwater Management Area

Courtyard

Professional Offices

Yamhill County (Leased Storage)

The Atticus Hotel (Former Parking Lot)

Parking Lot

Red Fox Bakery

McMenamin's Hotel Oregon

Nick's Italian Cafe

Peirano & Daughters Market

Los Molcajetes Restaurant

MW-3

O'Dell Building

Odd Fellows Bldg.

MW-1

News Register Building

Chocolates

Twelve Vine

Terra Vina Tasting

MW-6

MW-4

MW-2

NE Third Street

NE Galloway Street

MW-5

Serendipity Ice Cream

Mack Theater

Found Objects

Mes Amies

Crescent Cafe

R Stuart & Co. Wine Bar

Currents Gallery

Shoe Mates Footwear

RJ's Studio

Commercial Space on Ground Floor
Apartments on Second Floor

Commercial Building

Thistle Restaurant

NE Evans Street

NE Ford Street

Commercial Space (First Floor)
Apartments (Second Floor)

N

0 40 80

Approximate Scale in Feet

Sources: Base map prepared from Google Earth Pro imagery (6/22/2017) and Key Features and Sample Location figure by Coles & Associates (4/30/18). All site features, locations, and dimensions are approximate.

Soil and Groundwater Management Areas

Contaminated Media Management Plan
Oregon Lithoprint
McMinnville, Oregon

APEX
Apex Companies, LLC
3015 SW First Avenue
Portland, Oregon 97201

Project Number:	Drawn:	Approved:	Figure
2442-00	JP	KE	C-7
November 2020			

Appendix D

Proposed Institutional Controls

Space above this line for Recorder's use.

After recording, return to:

Grantee
Oregon DEQ
165 E. 7th Ave., Ste. 100
Eugene, OR 97401
Attention: _____

Grantor
Odd Fellows Building, LLC
345 NE Ford Street /
PO Box 1277
McMinnville, OR 97128
c/o Brian Shea, Member, Odd Fellows Building, LLC

EASEMENT AND EQUITABLE SERVITUDES

This grant of Easement and acceptance of Equitable Servitudes ("EES") is made on [DATE] among Odd Fellows Building, LLC ("Grantor") and the State of Oregon, acting by and through the Oregon Department of Environmental Quality ("DEQ" or "Grantee").

RECITALS

A. Grantor is the owner of certain real property located at 305 NE Ford Street in McMinnville, Oregon in Yamhill County (the "Property") the location of which is more particularly described in **Exhibit A** and shown in **Exhibit B** to this EES. The Property is part of a site referenced under the name "News Register, DEQ USTC File No. 36-85-4001" in the files of DEQ's Environmental Cleanup Program at Western Region office located at 165 E. 7th Avenue, Suite 100, Eugene, Oregon, and telephone 541-686-7838. Interested parties may contact the Western Region office to review a detailed description of the residual risks from contamination remaining at the Property and described in the final site closure assessment report from the contractor, Apex Companies, LLC, and entitled *Third Quarter 2020 Data Summary and Site Closure Assessment Report*.

B. On [DATE], the Director of the Oregon Department of Environmental Quality or delegate selected the remedial action for the Property set forth in DEQ Staff Memorandum in support of a No Further Action determination. The remedial action selected requires, among other things, institutional controls at the Property including: no groundwater wells, no urban

residential/residential use in the basement, and adherence to a contaminated media management plan (**Exhibit C**).

C. The provisions of this EES are intended to further the implementation of the selected remedial action and thereby protect human health and the environment. Upon implementation of the selected remedial action, DEQ will issue a Conditional No Further Action Letter ("NFA") for this site.

D. Nothing in this EES constitutes an admission by Grantor of any liability for the contamination described in this EES.

1. DEFINITIONS

1.1. "Acceptable risk level" has the meaning set forth in Oregon Revised Statute (ORS) 465.315 and Oregon Administrative Rule (OAR) 340-122-0115.

1.2. "Beneficial use" has the meaning set forth in OAR 340-122-0115.

1.3. "DEQ" means the Oregon Department of Environmental Quality, and its employees, agents, and authorized representatives. "DEQ" also means any successor or assign of DEQ under the laws of Oregon, including but not limited to any entity or instrumentality of the State of Oregon authorized to perform any of the functions or to exercise any of the powers currently performed or exercised by DEQ.

1.4. "Ecological receptor" has the meaning set forth in OAR 340-122-0115.

1.5. "Engineering control" has the meaning set forth in OAR 340-122-0115.

1.6. "Hazardous substance" has the meaning set forth in ORS 465.200.

1.7. "Owner" means any person or entity, including Grantor, who at any time owns, occupies, or acquires any right, title, or interest in or to any portion of the Property or a vendee's interest of record to any portion of the Property, including any successor, heir, assign or holder of title or a vendee's interest of record to any portion of the Property, but excluding any entity or person who holds such interest solely for the security for the payment of an obligation and does not possess or control use of the Property.

1.8. "Remedial Action" has the meaning set forth in ORS 465.200 and OAR 340-122-0115.

2. GENERAL DECLARATION

2.1. Grantor, in consideration of Grantee's issuance of a No Further Action letter with conditions, grants to DEQ an Easement for access and accepts the Equitable Servitudes described

in this instrument and, in so doing, declares that the Property is now subject to and must in future be conveyed, transferred, leased, encumbered, occupied, built upon, or otherwise used or improved, in whole or in part, subject to this EES.

2.2. Each condition and restriction set forth in this EES touches and concerns the Property and the equitable servitudes granted in Section 3 and easement granted in Section 4 below, runs with the land for all purposes, is binding upon all current and future owners of the Property as set forth in this EES, and inures to the benefit of the State of Oregon. Grantor further conveys to DEQ the perpetual right to enforce the conditions and restrictions set forth in this EES.

3. EQUITABLE SERVITUDES (REQUIRED ACTIONS AND RESTRICTIONS ON USE)

3.1. **Groundwater Use Restrictions.** Owner may not extract through wells or by other means or use the shallow groundwater at the Property for consumption or other beneficial use. This prohibition does not apply to extraction of groundwater associated with groundwater treatment or monitoring activities approved by DEQ or to dewatering activities related to construction, development, the installation of sewer or utilities at the Property, or the operation of a permanent foundation dewatering system associated with the planned site development. Owner must conduct a waste determination on any groundwater that is extracted during such monitoring, treatment, or dewatering activities and handle, store and manage waste water according to applicable laws.

3.2. **Contaminated Media Management Plan.** The owner must comply with the approved *Contaminated Media Management Plan* dated [DATE], provided by Apex Companies, LLC and attached to this EES as **Exhibit C**. The contaminated media management plan defines the area in which certain requirements are to be followed to protect the health of construction and excavation workers. The contaminated medial management plan must be followed for all construction or excavation work that involves subsurface soil or groundwater at the Property. A copy of the approved contaminated media management plan is on file with DEQ and can be made available upon request.

3.3. **Land Use Restrictions.** The following operations and uses are prohibited on the Property: Urban residential/residential use of any type in the below-grade basement only.

3.4. **Use of the Property.** Owner may not occupy or allow other parties to occupy the Property unless the controls listed in this Section 3 are maintained.

4. EASEMENT (RIGHT OF ENTRY)

During reasonable hours and subject to reasonable security requirements, DEQ may enter upon and inspect any portion of the Property to determine whether the requirements of this EES

have been or are being complied with. Except when necessary to address an imminent threat to human health or the environment, DEQ will use its best efforts to notify the Owner 72 hours before DEQ entry to the Property. DEQ may enter upon the Property at any time to abate, mitigate, or cure at the expense of the Owner the violation of any condition or restriction contained in this EES, provided DEQ first gives written notice of the violation to Owner describing what is necessary to correct the violation and Owner fails to cure the violation within the time specified in such notice. Any such entry by DEQ to evaluate compliance or to abate, mitigate, or cure a violation may not be deemed a trespass.

5. RELEASE OF RESTRICTIONS

5.1. Owner may request release of any or all of the conditions or restrictions contained in this EES by submitting such request to the DEQ in writing with evidence that the conditions or restrictions are no longer necessary to protect human health and the environment. The decision to release any or all of the conditions or restrictions in this EES will be within the sole discretion of DEQ.

5.2. Upon a determination pursuant to Subsection 5.1, DEQ will, as appropriate, execute and deliver to Owner a release of specific conditions or restrictions, or a release of this EES in its entirety.

6. GENERAL PROVISIONS

6.1. **Notice of Transfer/Change of Use.** Owner must notify DEQ within 10 days after the effective date of any conveyance, grant, gift, or other transfer, in whole or in part, of Owner's interest in or occupancy of the Property. Such notice must include the full name and address of the Party to whom Owner has transferred an interest or right of occupancy. In addition, Owner must notify DEQ a minimum of 10 days before the effective date of any change in use of the Property that might expose human or ecological receptors to hazardous substances. Such notice must include complete details of any planned development activities or change in use. Notwithstanding the foregoing, Owner may not commence any development inconsistent with the conditions or restrictions in Section 3 without prior written approval from DEQ or removal of the condition or restriction as provided in Subsection 5.1. This subsection does not apply to the grant or conveyance of a security interest in the Property.

6.2. **Zoning Changes.** Owner must notify DEQ no less than 30 days before Owner's petitioning for or filing of any document initiating a rezoning of the Property that would change the base zone of the Property under the City of McMinnville zoning code or any successor code. As of the date of this EES, the base zone of the Property is commercial.

6.3. **Reference in Deed.** A reference to this EES, including its location in the public records, must be recited in any deed conveying the Property or any portion of the Property. Each condition and restriction contained in this EES runs with the land so burdened until such time as

the condition or restriction is removed by written certification from DEQ, recorded in the deed records of the County in which the Property is located, certifying that the condition or restriction is no longer required to protect human health or the environment.

6.4. **Effect of Recording.** Upon the recording of this EES, all future Owners are conclusively deemed to have consented and agreed to every condition and restriction contained in this EES, whether or not any reference to this EES is contained in an instrument by which such person or entity occupies or acquires an interest in the Property.

6.5. **Enforcement and Remedies.** Upon any violation of any condition or restriction contained in this EES, the State of Oregon, in addition to the remedies described in Section 4, may enforce this EES as provided in the Agreement or seek available legal or equitable remedies to enforce this EES, including civil penalties as set forth in ORS 465.900.

6.6. **IN WITNESS WHEREOF** Grantor and Grantee have executed this Easement and Equitable Servitude as of the date and year first set forth above.

BY SIGNATURE BELOW, THE STATE OF OREGON APPROVES AND ACCEPTS THIS CONVEYANCE PURSUANT TO ORS 93.808.

[Signature pages follow.]

GRANTOR: Odd Fellows Building, LLC

By: _____ Date: _____

Brian Shea, Member, Odd Fellows Building, LLC

STATE OF OREGON)
) ss.
County of Yamhill)

The foregoing instrument is acknowledged before me this ___ day of _____, 2020, by _____, Member of Odd Fellows Building LLC, on its behalf.

_____
NOTARY PUBLIC FOR OREGON
My commission expires:_____

GRANTEE: State of Oregon, Department of Environmental Quality

By: _____ Date: _____

Michael E. Kucinski, Environmental Cleanup and Emergency Response Manager, Western Region

STATE OF OREGON)
) ss.
County of Lane)

The foregoing instrument is acknowledged before me this ___ day of _____, 2020, by Michael E. Kucinski of the Oregon Department of Environment Quality, on its behalf.

_____
NOTARY PUBLIC FOR OREGON
My commission expires:_____

EXHIBIT A

Property Description

Lot 8, Block 2, ROWLAND'S ADDITION to the City of McMinnville, County of Yamhill and State of Oregon.

ALSO a part of Lot 7 In Block 2 of ROWLAND'S ADDITION to the City of McMinnville, County of Yamhill and State of Oregon, which part is described as follows:

BEGINNING at the Southeast corner of said Lot 7; thence running West 6-1/2 inches to center of the East Wall of the Brick Building, now located upon said Lot 7; thence running North along the center line of said Brick Wall of said Brick Building, 90.0 feet; thence running East 6-1/2 inches to East line of said Lot 7; thence South along the East line of said Lot 7, 90.0 feet to the Place of Beginning.

EXHIBIT B

Property Tax Lot

EXHIBIT C

Contaminated Media Management Plan

[INSERT CMMP]

Space above this line for Recorder's use.

After recording, return to:

Grantee
Oregon DEQ
165 E. 7th Ave., Ste. 100
Eugene, OR 97401
Attention: _____

Grantor
Oregon Lithoprint, Inc.
P.O. Box 727
McMinnville, OR 97128
c/o Jon E. Bladine

EASEMENT AND EQUITABLE SERVITUDES

This grant of Easement and acceptance of Equitable Servitudes ("EES") is made on [DATE] between Oregon Lithoprint, Inc. ("Grantor") and the State of Oregon, acting by and through the Oregon Department of Environmental Quality ("DEQ" or "Grantee").

RECITALS

A. Grantor is the owner of certain real property located at 609 NE Third Street in McMinnville, Oregon in Yamhill County (the "Property") the location of which is more particularly described in **Exhibit A** and shown in **Exhibit B** to this EES. The Property is part of a site referenced under the name "News Register, DEQ USTC File No. 36-85-4001" in the files of DEQ's Environmental Cleanup Program at Western Region office located at 165 E. 7th Avenue, Suite 100, Eugene, Oregon, and telephone 541-686-7838. Interested parties may contact the Western Region office to review a detailed description of the residual risks from contamination remaining at the Property and described in the final site closure assessment report from the contractor, Apex Companies, LLC, and entitled *Third Quarter 2020 Data Summary and Site Closure Assessment Report*.

B. On [DATE], the Director of the Oregon Department of Environmental Quality or delegate selected the remedial action for the Property set forth in DEQ Staff Memorandum in support of a No Further Action determination. The remedial action selected requires, among other things, institutional controls at the Property including: no groundwater wells and adherence to a contaminated media management plan (**Exhibit C**).

C. The provisions of this EES are intended to further the implementation of the selected remedial action and thereby protect human health and the environment. Upon implementation of the selected remedial action, DEQ will issue a Conditional No Further Action Letter ("NFA") for this site.

D. Nothing in this EES constitutes an admission by Grantor of any liability for the contamination described in this EES.

1. DEFINITIONS

1.1. "Acceptable risk level" has the meaning set forth in Oregon Revised Statute (ORS) 465.315 and Oregon Administrative Rule (OAR) 340-122-0115.

1.2. "Beneficial use" has the meaning set forth in OAR 340-122-0115.

1.3. "DEQ" means the Oregon Department of Environmental Quality, and its employees, agents, and authorized representatives. "DEQ" also means any successor or assign of DEQ under the laws of Oregon, including but not limited to any entity or instrumentality of the State of Oregon authorized to perform any of the functions or to exercise any of the powers currently performed or exercised by DEQ.

1.4. "Ecological receptor" has the meaning set forth in OAR 340-122-0115.

1.5. "Engineering control" has the meaning set forth in OAR 340-122-0115.

1.6. "Hazardous substance" has the meaning set forth in ORS 465.200.

1.7. "Owner" means any person or entity, including Grantor, who at any time owns, occupies, or acquires any right, title, or interest in or to any portion of the Property or a vendee's interest of record to any portion of the Property, including any successor, heir, assign or holder of title or a vendee's interest of record to any portion of the Property, but excluding any entity or person who holds such interest solely for the security for the payment of an obligation and does not possess or control use of the Property.

1.8. "Remedial Action" has the meaning set forth in ORS 465.200 and OAR 340-122-0115.

2. GENERAL DECLARATION

2.1. Grantor, in consideration of Grantee's issuance of a No Further Action letter with conditions, grants to DEQ an Easement for access and accepts the Equitable Servitudes described in this instrument and, in so doing, declares that the Property is now subject to and must in future be conveyed, transferred, leased, encumbered, occupied, built upon, or otherwise used or improved, in whole or in part, subject to this EES.

2.2. Each condition and restriction set forth in this EES touches and concerns the Property and the equitable servitudes granted in Section 3 and easement granted in Section 4 below, runs with the land for all purposes, is binding upon all current and future owners of the Property as set forth in this EES, and inures to the benefit of the State of Oregon. Grantor further conveys to DEQ the perpetual right to enforce the conditions and restrictions set forth in this EES.

3. EQUITABLE SERVITUDES (REQUIRED ACTIONS AND RESTRICTIONS ON USE)

3.1. **Groundwater Use Restrictions.** Owner may not extract through wells or by other means or use the shallow groundwater at the Property for consumption or other beneficial use. This prohibition does not apply to extraction of groundwater associated with groundwater treatment or monitoring activities approved by DEQ or to dewatering activities related to construction, development, the installation of sewer or utilities at the Property, or the operation of a permanent foundation dewatering system associated with the planned site development. Owner must conduct a waste determination on any groundwater that is extracted during such monitoring, treatment, or dewatering activities and handle, store and manage waste water according to applicable laws.

3.2. **Contaminated Media Management Plan.** The owner must comply with the approved *Contaminated Media Management Plan* dated [DATE], provided by Apex Companies, LLC and attached to this EES as **Exhibit C**. The contaminated media management plan defines the area in which certain requirements are to be followed to protect the health of construction and excavation workers. The contaminated medial management plan must be followed for all construction or excavation work that involves subsurface soil or groundwater at the Property. A copy of the approved contaminated media management plan is on file with DEQ and can be made available upon request.

3.3. **Use of the Property.** Owner may not occupy or allow other parties to occupy the Property unless the controls listed in this Section 3 are maintained.

4. EASEMENT (RIGHT OF ENTRY)

During reasonable hours and subject to reasonable security requirements, DEQ may enter upon and inspect any portion of the Property to determine whether the requirements of this EES have been or are being complied with. Except when necessary to address an imminent threat to human health or the environment, DEQ will use its best efforts to notify the Owner 72 hours before DEQ entry to the Property. DEQ may enter upon the Property at any time to abate, mitigate, or cure at the expense of the Owner the violation of any condition or restriction contained in this EES, provided DEQ first gives written notice of the violation to Owner describing what is necessary to correct the violation and Owner fails to cure the violation within

the time specified in such notice. Any such entry by DEQ to evaluate compliance or to abate, mitigate, or cure a violation may not be deemed a trespass.

5. RELEASE OF RESTRICTIONS

5.1. Owner may request release of any or all of the conditions or restrictions contained in this EES by submitting such request to the DEQ in writing with evidence that the conditions or restrictions are no longer necessary to protect human health and the environment. The decision to release any or all of the conditions or restrictions in this EES will be within the sole discretion of DEQ.

5.2. Upon a determination pursuant to Subsection 5.1, DEQ will, as appropriate, execute and deliver to Owner a release of specific conditions or restrictions, or a release of this EES in its entirety.

6. GENERAL PROVISIONS

6.1. **Notice of Transfer/Change of Use.** Owner must notify DEQ within 10 days after the effective date of any conveyance, grant, gift, or other transfer, in whole or in part, of Owner's interest in or occupancy of the Property. Such notice must include the full name and address of the Party to whom Owner has transferred an interest or right of occupancy. In addition, Owner must notify DEQ a minimum of 10 days before the effective date of any change in use of the Property that might expose human or ecological receptors to hazardous substances. Such notice must include complete details of any planned development activities or change in use. Notwithstanding the foregoing, Owner may not commence any development inconsistent with the conditions or restrictions in Section 3 without prior written approval from DEQ or removal of the condition or restriction as provided in Subsection 5.1. This subsection does not apply to the grant or conveyance of a security interest in the Property.

6.2. **Zoning Changes.** Owner must notify DEQ no less than 30 days before Owner's petitioning for or filing of any document initiating a rezoning of the Property that would change the base zone of the Property under the City of McMinnville zoning code or any successor code. As of the date of this EES, the base zone of the Property is commercial.

6.3. **Reference in Deed.** A reference to this EES, including its location in the public records, must be recited in any deed conveying the Property or any portion of the Property. Each condition and restriction contained in this EES runs with the land so burdened until such time as the condition or restriction is removed by written certification from DEQ, recorded in the deed records of the County in which the Property is located, certifying that the condition or restriction is no longer required to protect human health or the environment.

6.4. **Effect of Recording.** Upon the recording of this EES, all future Owners are conclusively deemed to have consented and agreed to every condition and restriction contained

in this EES, whether or not any reference to this EES is contained in an instrument by which such person or entity occupies or acquires an interest in the Property.

6.5. **Enforcement and Remedies.** Upon any violation of any condition or restriction contained in this EES, the State of Oregon, in addition to the remedies described in Section 4, may enforce this EES as provided in the Agreement or seek available legal or equitable remedies to enforce this EES, including civil penalties as set forth in ORS 465.900.

6.6. **IN WITNESS WHEREOF** Grantor and Grantee have executed this Easement and Equitable Servitude as of the date and year first set forth above.

BY SIGNATURE BELOW, THE STATE OF OREGON APPROVES AND ACCEPTS THIS CONVEYANCE PURSUANT TO ORS 93.808.

[Signature pages follow.]

GRANTOR: Oregon Lithoprint, Inc.

By: _____ Date: _____

By: _____ Date: _____

Jon E. Bladine
President
Oregon Lithoprint, Inc.

STATE OF OREGON)
) ss.
County of Yamhill)

The foregoing instrument is acknowledged before me this ___ day of _____, 2020, by Jon E. Bladine, as President of Oregon Lithoprint, Inc..

_____
NOTARY PUBLIC FOR OREGON
My commission expires:_____

GRANTEE: State of Oregon, Department of Environmental Quality

By: _____ Date: _____

Michael E. Kucinski, Environmental Cleanup and Emergency Response Manager, Western Region

STATE OF OREGON)
) ss.
County of Lane)

The foregoing instrument is acknowledged before me this ___ day of _____, 2020, by Michael E. Kucinski of the Oregon Department of Environment Quality, on its behalf.

_____
NOTARY PUBLIC FOR OREGON
My commission expires:_____

EXHIBIT A

Property Description

Yamhill County tax lot #R4421BC 04500
Lot 5, Block 7, Rowland's Addition to the City of McMinnville, County of Yamhill, State of Oregon.

EXHIBIT B

Property Tax Lot

EXHIBIT C

Contaminated Media Management Plan

[INSERT CMMP]

Appendix E

Historical Data Tables and Figures

Table E-1
Soil Analytical Results - February
Oregon Lithoprint
McMinnville, Oregon

Sample Location	ODB-1(8.5)	ODB-2(9.0)	ODB-3(9.5)	ODB-4(9.0)	ODB-5(9.0)	ODB-6(9.0)	ODB-7(9.0)	DEQ Risk-Based Concentrations		
Depth (feet)	8.5	9	9.5	9	9	9	9	Soil Ingestion, Dermal Contact, and Inhalation | Occupational	Soil Vapor Intrusion into Buildings | Urban Residential	Soil Vapor Intrusion into Buildings | Occupational
Date	02/13/2019	02/13/2019	02/14/2019	02/14/2019	02/14/2019	02/14/2019	02/14/2019			
Volatile Organic Compounds (mg/kg)										
Acetone	<0.0347	<0.0338	<6.83	<0.692	<0.280	<0.268	<0.275	--	--	--
Acrylonitrile	<0.0174	<0.0169	<0.137	<0.0173	<0.140	<0.134	<0.138	4	0.19	1
Benzene	0.00452	0.0700	1.42	0.290	0.00726 J	0.329	0.691	37	0.38	2.1
Bromobenzene	<0.0174	<0.0169	<0.137	<0.0173	<0.140	<0.134	<0.138	--	--	--
Bromodichloromethane	<0.00347	<0.00338	<0.0273	<0.00346	<0.0280	<0.0268	<0.0275	15	0.096	0.53
Bromoform	<0.0347	<0.0338	<0.273	<0.0346	<0.280	<0.268	<0.275	260	19	110
Bromomethane	<0.0174	<0.0169	<0.137	<0.0173	<0.140	<0.134	<0.138	750	1.3	17
n-Butylbenzene	0.720	0.292	3.06	2.42	1.33	3.20	8.34	--	--	--
sec-Butylbenzene	0.235	0.132	1.54	0.898	0.727	1.53	3.45	--	--	--
tert-Butylbenzene	<0.00695	<0.00676	<0.0547	0.00847	<0.0560	0.0224 J	0.0340 J	--	--	--
Carbon Tetrachloride	<0.00695	<0.00676	<0.0547	<0.00692	<0.0560	<0.0536	<0.0550	34	0.28	1.6
Chlorobenzene	<0.00347	<0.00338	<0.0273	<0.00346	<0.0280	<0.0268	<0.0275	8,700	77	--
Chlorodibromomethane	<0.00347	<0.00338	<0.0273	<0.00346	<0.0280	<0.0268	<0.0275	17	0.53	2.9
Chloroethane	<0.00695	<0.00676	<0.0547	<0.00692	<0.0560	<0.0536	<0.0550	--	--	--
Chloroform	<0.00347	<0.00338	<0.0273	<0.00346	<0.0280	<0.0268	<0.0275	26	0.074	0.41
Chloromethane	<0.0174	<0.0169	<0.137	<0.0173	<0.140	<0.134	<0.138	25,000	24	300
2-Chlorotoluene	<0.00347	<0.00338	<0.0273	<0.00346	<0.0280	<0.0268	<0.0275	--	--	--
4-Chlorotoluene	<0.00695	<0.00676	<0.0547	<0.00692	<0.0560	<0.0536	<0.0550	--	--	--
1,2-Dibromo-3-Chloropropane	<0.0347	<0.0338	<0.273	<0.0346	<0.280	<0.268	<0.275	--	--	--
1,2-Dibromoethane	<0.00347	<0.00338	<0.0273	<0.00346	<0.0280	<0.0268	<0.0275	0.73	0.028	0.16
Dibromomethane	<0.00695	<0.00676	<0.0547	<0.00692	<0.0560	<0.0536	<0.0550	--	--	--
1,2-Dichlorobenzene	<0.00695	<0.00676	<0.0547	<0.00692	<0.0560	<0.0536	<0.0550	36,000	--	--
1,3-Dichlorobenzene	<0.00695	<0.00676	<0.0547	<0.00692	<0.0560	<0.0536	<0.0550	--	--	--
1,4-Dichlorobenzene	<0.00695	<0.00676	<0.0547	<0.00692	<0.0560	<0.0536	<0.0550	64	2.3	13
Dichlorodifluoromethane	<0.00347	<0.00338	<0.0273	<0.00346	<0.0280 UJ	<0.0268	<0.0275	--	--	--
1,1-Dichloroethane	<0.00347	<0.00338	<0.0273	<0.00346	<0.0280	<0.0268	<0.0275	260	1.1	5.9
1,2-Dichloroethane	<0.00347	<0.00338	<0.0273	<0.00346	<0.0280	<0.0268	<0.0275	16	0.18	1
1,1-Dichloroethene	<0.00347	<0.00338	<0.0273	<0.00346	<0.0280	<0.0268	<0.0275	29,000	54	680
cis-1,2-Dichloroethene	<0.00347	<0.00338	<0.0273	<0.00346	<0.0280	<0.0268	<0.0275	2,300	--	--
trans-1,2-Dichloroethene	<0.00695	<0.00676	<0.0547	<0.00692	<0.0560	<0.0536	<0.0550	23,000	--	--
1,2-Dichloropropane	<0.00695	<0.00676	<0.0547	<0.00692	<0.0560	<0.0536	<0.0550	--	--	--
1,1-Dichloropropene	<0.00347	<0.00338	<0.0273	<0.00346	<0.0280	<0.0268	<0.0275	--	--	--
1,3-Dichloropropane	<0.00695	<0.00676	<0.0547	<0.00692	<0.0560	<0.0536	<0.0550	--	--	--
cis-1,3-Dichloropropene	<0.00347	<0.00338	<0.0273	<0.00346	<0.0280	<0.0268	<0.0275	--	--	--
trans-1,3-Dichloropropene	<0.00695	<0.00676	<0.0547	<0.00692	<0.0560	<0.0536	<0.0550	--	--	--
2,2-Dichloropropane	<0.00347	<0.00338	<0.0273	<0.00346	<0.0280	<0.0268	<0.0275	--	--	--
Di-Isopropyl Ether	<0.00139	<0.00135	<0.0109	<0.00138	<0.0112	<0.0107	<0.0110	--	--	--
Ethylbenzene	0.0626	0.0240	22.3	0.151	0.0572 J	0.152	0.520	150	3.0	17
Hexachloro-1,3-Butadiene	<0.0347	<0.0338	<0.273	<0.0346	<0.280	<0.268	<0.275	--	--	--
Isopropylbenzene	0.231	0.169	3.67	0.731	0.644	1.98	4.54	57,000	--	--
P-Isopropyltoluene	<0.00695	<0.00676	0.849	0.00511 J	<0.0560	0.0475 J	0.0375 J	--	--	--
2-Butanone (MEK)	<0.0347	<0.0338	<0.273	<0.0346	<0.280	<0.268	<0.275	--	--	--
Methylene Chloride	<0.0347	<0.0338	<0.273	<0.0346	<0.280	<0.268	<0.275	1,600	48	950
4-Methyl-2-Pentanone (MIBK)	<0.0347	<0.0338	<0.273	<0.0346	<0.280	<0.268	<0.275	--	--	--
Methyl Tert-Butyl Ether	<0.00139	<0.00135	<0.0109	<0.00138	<0.0112	<0.0107	<0.0110	1,100	20	110
Naphthalene	0.171	0.220	6.21	<0.0173	0.122 J	<0.134	<0.138	23	15	83
n-Propylbenzene	1.05	0.796	14.9	2.42	2.81	9.39	23.3	--	--	--
Styrene	<0.0174	<0.0169	<0.137	<0.0173	<0.140	<0.134	<0.138	130,000	--	--
1,1,1,2-Tetrachloroethane	<0.00347	<0.00338	<0.0273	<0.00346	<0.0280	<0.0268	<0.0275	--	--	--
1,1,2,2-Tetrachloroethane	<0.00347	<0.00338	<0.0273	<0.00346	<0.0280	<0.0268	<0.0275	--	--	--
1,1,2-Trichlorotrifluoroethane	<0.00347	<0.00338	<0.0273	<0.00346	<0.0280	<0.0268	<0.0275	--	--	--
Tetrachloroethene	<0.00347	<0.00338	<0.0273	<0.00346	<0.0280	<0.0268	<0.0275	1,000	6.6	36
Toluene	0.00242 J	0.00206 J	<0.0547	0.00550 J	<0.0560	<0.0536	<0.0550	88,000	--	--
1,2,3-Trichlorobenzene	<0.00347	<0.00338	<0.0273	<0.00346	<0.0280	<0.0268	<0.0275	--	--	--
1,2,4-Trichlorobenzene	<0.0174	<0.0169	<0.137	<0.0173	<0.140	<0.134	<0.138	--	--	--
1,1,1-Trichloroethane	<0.00347	<0.00338	<0.0273	<0.00346	<0.0280	<0.0268	<0.0275	870,000	--	--
1,1,2-Trichloroethane	<0.00347	<0.00338	<0.0273	<0.00346	<0.0280	<0.0268	<0.0275	26	0.38	4.2
Trichloroethene	<0.00139	<0.00135	<0.0109	<0.00138	<0.0112	<0.0107	<0.0110	51	0.26	2.3
Trichlorofluoromethane	<0.00347	<0.00338	<0.0273	<0.00346	<0.0280 UJ	<0.0268	<0.0275	130,000	190	--
1,2,3-Trichloropropane	<0.0174	<0.0169	<0.137	<0.0173	<0.140	<0.134	<0.138	--	--	--
1,2,4-Trimethylbenzene	0.00357 J	0.00194 J	65.3	0.0149	0.217 J	0.0510 J	0.0619	6,900	140	--
1,2,3-Trimethylbenzene	0.00285 J	0.00595 J	18.3	0.0421	0.0614 J	0.0529 J	0.163	--	--	--
Vinyl Chloride	<0.00347	<0.00338	<0.0273	<0.00346	<0.0280 UJ	<0.0268	<0.0275	4.4	0.053	2.2
1,3,5-Trimethylbenzene	0.00252 J	<0.00676	17.7	0.00948	0.0526 J	0.0121 J	0.0312 J	6,900	98	--
Xylenes, Total	<0.00903	<0.00879	32.9	0.0343	0.0617 J	<0.0696	<0.0715	25,000	160	--
Gasoline Range Organics	245	68.7	1,220	278	866	929	1,160	20,000	94	--

Notes:

1. mg/kg = Milligrams per kilogram.
2. Bold values indicate the compounds was detected above method detection limits.
3. < = Analyte was not detected above the reporting limit.
4. DEQ Risk-Based Concentrations from Oregon Department of Environmental Quality's *Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sites* , revised May 2018.
5. Shaded values indicate concentrations detected above the Urban Residential RBC for Vapor Intrusion.
6. Shaded values indicate concentrations detected above the Occupational RBC for Vapor Intrusion and/or Direct Contact.
7. -- = Value not available.
8. J = Result is estimated.
8. UJ = Reporting limit is estimated due to analyte quality control.

Table E-2
Soil Analytical Results - October 2019
Oregon Lithoprint
McMinnville, Oregon

Sample Location	ODB-8 (11.0)	ODB-9 (11.0)	ODB-10 (9.0)	ODB-10 (9.0) DUP	ODB-11 (11.0)	ODB-12 (9.0)	ODB-12 (14.0)	ODB-13 (11.0)	DEQ Risk-Based Concentrations		
Depth (feet)	11	11	9	9	11	9	14	11	Soil Ingestion, Dermal Contact, and Inhalation | Occupational	Soil Vapor Intrusion into Buildings | Urban Residential	Soil Vapor Intrusion into Buildings | Occupational
Date	10/14/2019	10/14/2019	10/15/2019	10/15/2019	10/15/2019	10/14/2019	10/14/2019	10/14/2019			
Volatile Organic Compounds (mg/kg)											
Acetone	0.202	<0.0706	<0.0682	<0.0341 UJ	<0.0712	<0.0338	<0.681 UJ	<0.0668	--	--	--
Acrylonitrile	<0.0725	<0.0353	<0.0341	<0.0170	<0.0356	<0.0169	<0.340	<0.0334	4	0.19	1
Benzene	0.326	0.339	0.00586	0.00326	<0.00285	0.0347	0.159	0.135	37	0.38	2.1
Bromobenzene	<0.0725	<0.0353	<0.0341	<0.0170	<0.0356	<0.0169	<0.340	<0.0334	--	--	--
Bromodichloromethane	<0.0145	<0.00706	<0.00682	<0.00341	<0.00712	<0.00338	<0.0681	<0.00668	15	0.096	0.53
Bromoform	<0.145	<0.0706	<0.0682	<0.0341	<0.0712	<0.0338	<0.681	<0.0668	260	19	110
Bromomethane	<0.0725	<0.0353	<0.0341	<0.0170	<0.0356	<0.0169	<0.340	<0.0334	750	1.3	17
n-Butylbenzene	0.62	0.302	0.506 D	0.0983 D	0.187	0.133	0.553	0.496	--	--	--
sec-Butylbenzene	0.294	0.15	0.258 D	0.0593 D	0.133	0.0648	0.321 J	0.235	--	--	--
tert-Butylbenzene	<0.0290	<0.0141	0.00438 J	<0.00681	<0.0142	<0.00676	<0.136	<0.0134	--	--	--
Carbon Tetrachloride	<0.0290	<0.0141	<0.0136	<0.00681	<0.0142	<0.00676	<0.136	<0.0134	34	0.28	1.6
Chlorobenzene	<0.0145	<0.00706	<0.00682	<0.00341	<0.00712	<0.00338	<0.0681	<0.00668	8,700	77	--
Chlorodibromomethane	<0.0145	<0.00706	<0.00682	<0.00341	<0.00712	<0.00338	<0.0681	<0.00668	17	0.53	2.9
Chloroethane	<0.0290	<0.0141	<0.0136	<0.00681	<0.0142	<0.00676	<0.136	<0.0134	--	--	--
Chloroform	<0.0145	<0.00706	<0.00682	<0.00341	<0.00712	<0.00338	<0.0681	<0.00668	26	0.074	0.41
Chloromethane	<0.0725	<0.0353	<0.0341	<0.0170	<0.0356	<0.0169	<0.340	<0.0334	25,000	24	300
2-Chlorotoluene	<0.0145	<0.00706	<0.00682	<0.00341	<0.00712	<0.00338	<0.0681	<0.00668	--	--	--
4-Chlorotoluene	<0.0290	<0.0141	<0.0136	<0.00681	<0.0142	<0.00676	<0.136	<0.0134	--	--	--
1,2-Dibromo-3-Chloropropane	<0.145	<0.0706	<0.0682	<0.0341 UJ	<0.0712	<0.0338	<0.681 UJ	<0.0668	--	--	--
1,2-Dibromoethane	<0.0145	<0.00706	<0.00682	<0.00341	<0.00712	<0.00338	<0.0681	<0.00668	0.73	0.028	0.16
Dibromomethane	<0.0290	<0.0141	<0.0136	<0.00681	<0.0142	<0.00676	<0.136	<0.0134	--	--	--
1,2-Dichlorobenzene	<0.0290	<0.0141	<0.0136	<0.00681	<0.0142	<0.00676	<0.136	<0.0134	36,000	--	--
1,3-Dichlorobenzene	<0.0290	<0.0141	<0.0136	<0.00681	<0.0142	<0.00676	<0.136	<0.0134	--	--	--

See notes at end of table.

Table E-2
Soil Analytical Results - October 2019
Oregon Lithoprint
McMinnville, Oregon

Sample Location	ODB-8 (11.0)	ODB-9 (11.0)	ODB-10 (9.0)	ODB-10 (9.0) DUP	ODB-11 (11.0)	ODB-12 (9.0)	ODB-12 (14.0)	ODB-13 (11.0)	DEQ Risk-Based Concentrations		
Depth (feet)	11	11	9	9	11	9	14	11	Soil Ingestion, Dermal Contact, and Inhalation | Occupational	Soil Vapor Intrusion into Buildings | Urban Residential	Soil Vapor Intrusion into Buildings | Occupational
Date	10/14/2019	10/14/2019	10/15/2019	10/15/2019	10/15/2019	10/14/2019	10/14/2019	10/14/2019			
Volatile Organic Compounds (mg/kg)											
1,4-Dichlorobenzene	<0.0290	<0.0141	<0.0136	<0.00681	<0.0142	<0.00676	<0.136	<0.0134	64	2.3	13
Dichlorodifluoromethane	<0.0145	<0.00706	<0.00682	<0.00341	<0.00712	<0.00338	<0.0681	<0.00668	--	--	--
1,1-Dichloroethane	<0.0145	<0.00706	<0.00682	<0.00341	<0.00712	<0.00338	<0.0681	<0.00668	260	1.1	5.9
1,2-Dichloroethane	<0.0145	<0.00706	<0.00682	<0.00341	<0.00712	<0.00338	<0.0681	<0.00668	16	0.18	1
1,1-Dichloroethene	<0.0145	<0.00706	<0.00682	<0.00341	<0.00712	<0.00338	<0.0681	<0.00668	29,000	54	680
cis-1,2-Dichloroethene	<0.0145	<0.00706	<0.00682	<0.00341	<0.00712	<0.00338	<0.0681	<0.00668	2,300	--	--
trans-1,2-Dichloroethene	<0.0290	<0.0141	<0.0136	<0.00681	<0.0142	<0.00676	<0.136	<0.0134	23,000	--	--
1,2-Dichloropropane	<0.0290	<0.0141	<0.0136	<0.00681	<0.0142	<0.00676	<0.136	<0.0134	--	--	--
1,1-Dichloropropene	<0.0145	<0.00706	<0.00682	<0.00341	<0.00712	<0.00338	<0.0681	<0.00668	--	--	--
1,3-Dichloropropane	<0.0290	<0.0141	<0.0136	<0.00681	<0.0142	<0.00676	<0.136	<0.0134	--	--	--
cis-1,3-Dichloropropene	<0.0145	<0.00706	<0.00682	<0.00341	<0.00712	<0.00338	<0.0681	<0.00668	--	--	--
trans-1,3-Dichloropropene	<0.0290	<0.0141	<0.0136	<0.00681	<0.0142	<0.00676	<0.136	<0.0134	--	--	--
2,2-Dichloropropane	<0.0145	<0.00706	<0.00682	<0.00341	<0.00712	<0.00338	<0.0681	<0.00668	--	--	--
Di-Isopropyl Ether	<0.00580	<0.00282	<0.00273	<0.00136	<0.00285	<0.00135	<0.0272	<0.00267	--	--	--
Ethylbenzene	0.0732	0.0354	0.0126	<0.00341	0.00994	0.00347	0.0941	0.0279	150	3.0	17
Hexachloro-1,3-Butadiene	<0.145	<0.0706	<0.0682	<0.0341 UJ	<0.0712	<0.0338	<0.681 UJ	<0.0668	--	--	--
Isopropylbenzene	0.606	0.306	0.278 D	0.0686 D	0.150	0.0745	0.636	0.346	57,000	--	--
P-Isopropyltoluene	0.0242 J	<0.0141	<0.0136	<0.00681	<0.0142	0.00373 J	<0.136	0.00686 J	--	--	--
2-Butanone (MEK)	<0.145	<0.0706	<0.0682	<0.0341	<0.0712	<0.0338	<0.681	<0.0668	--	--	--
Methylene Chloride	<0.145	<0.0706	<0.0682	<0.0341	<0.0712	<0.0338	<0.681	<0.0668	1,600	48	950
4-Methyl-2-Pentanone (MIBK)	<0.145	<0.0706	<0.0682	<0.0341	<0.0712	<0.0338	<0.681	<0.0668	--	--	--
Methyl Tert-Butyl Ether	<0.00580	<0.00282	<0.00273	<0.00136	<0.00285	<0.00135	<0.0272	<0.00267	1,100	20	110
Naphthalene	<0.0725	<0.0353	<0.0341	<0.0170 UJ	<0.0356	<0.0169	0.181 J	<0.0334	23	15	83
n-Propylbenzene	2.04	1.20	1.28 D	0.300 D	0.592	0.264	2.06	1.42	--	--	--
Styrene	<0.0725	<0.0353	<0.0341	<0.0170	<0.0356	<0.0169	<0.340	<0.0334	130,000	--	--

See notes at end of table.

Table E-2
Soil Analytical Results - October 2019
Oregon Lithoprint
McMinnville, Oregon

Sample Location	ODB-8 (11.0)	ODB-9 (11.0)	ODB-10 (9.0)	ODB-10 (9.0) DUP	ODB-11 (11.0)	ODB-12 (9.0)	ODB-12 (14.0)	ODB-13 (11.0)	DEQ Risk-Based Concentrations		
Depth (feet)	11	11	9	9	11	9	14	11	Soil Ingestion, Dermal Contact, and Inhalation | Occupational	Soil Vapor Intrusion into Buildings | Urban Residential	Soil Vapor Intrusion into Buildings | Occupational
Date	10/14/2019	10/14/2019	10/15/2019	10/15/2019	10/15/2019	10/14/2019	10/14/2019	10/14/2019			
Volatile Organic Compounds (mg/kg)											
1,1,1,2-Tetrachloroethane	<0.0145	<0.00706	<0.00682	<0.00341	<0.00712	<0.00338	<0.0681	<0.00668	--	--	--
1,1,2,2-Tetrachloroethane	<0.0145	<0.00706	<0.00682	<0.00341	<0.00712	<0.00338	<0.0681	<0.00668	--	--	--
1,1,2-Trichlorotrifluoroethane	<0.0145	<0.00706	<0.00682	<0.00341	<0.00712	<0.00338	<0.0681	<0.00668	--	--	--
Tetrachloroethene	<0.0145	<0.00706	<0.00682	<0.00341	<0.00712	<0.00338	<0.0681	<0.00668	1,000	6.6	36
Toluene	0.00834 J	0.00617 J	0.00911 J	0.00252 J	0.00725 J	0.00739	<0.136	0.00728 J	88,000	--	--
1,2,3-Trichlorobenzene	<0.0145	<0.00706	<0.00682	<0.00341 UJ	<0.00712	<0.00338	<0.0681 UJ	<0.00668	--	--	--
1,2,4-Trichlorobenzene	<0.0725	<0.0353	<0.0341	<0.0170 UJ	<0.0356	<0.0169	<0.340 UJ	<0.0334	--	--	--
1,1,1-Trichloroethane	<0.0145	<0.00706	<0.00682	<0.00341	<0.00712	<0.00338	<0.0681	<0.00668	870,000	--	--
1,1,2-Trichloroethane	<0.0145	<0.00706	<0.00682	<0.00341	<0.00712	<0.00338	<0.0681	<0.00668	26	0.38	4.2
Trichloroethene	<0.00580	<0.00282	<0.00273	<0.00136	<0.00285	<0.00135	<0.0272	<0.00267	51	0.26	2.3
Trichlorofluoromethane	<0.0145	<0.00706	<0.00682	<0.00341	<0.00712	<0.00338	<0.0681	<0.00668	130,000	190	--
1,2,3-Trichloropropane	<0.0725	<0.0353	<0.0341	<0.0170	<0.0356	<0.0169	<0.340	<0.0334	--	--	--
1,2,4-Trimethylbenzene	<0.0290	<0.0141	0.00368 J	<0.00681	<0.0142	0.00187 J	<0.136	<0.0134	6,900	140	--
1,2,3-Trimethylbenzene	0.0177 J	0.00906 J	<0.0136	<0.00681	0.00517 J	<0.00676	<0.136	0.00549 J	--	--	--
1,3,5-Trimethylbenzene	<0.0290	<0.0141	<0.0136	<0.00681	<0.0142	<0.00676	<0.136	<0.0134	6,900	98	--
Vinyl Chloride	<0.0145	<0.00706	<0.00682	<0.00341	<0.00712	<0.00338	<0.0681	<0.00668	4.4	0.053	2.2
Xylenes, Total	<0.0377	<0.0183	<0.0177	<0.00886	<0.0185	<0.00879	<0.177	<0.0174	25,000	160	--
Gasoline Range Organics	144	104	150	140	185	254	248	38.1	20,000	94	--

Notes:

1. mg/kg = Milligrams per kilogram.
2. Bold values indicate the compounds was detected above method detection limits.
3. < = Analyte was not detected above the reporting limit.
4. DEQ Risk-Based Concentrations from Oregon Department of Environmental Quality's *Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sites* , revised May 2018.
5. Shaded values indicate concentrations detected above the Urban Residential RBC for Vapor Intrusion.
6. Shaded values indicate concentrations detected above the Occupational RBC for Vapor Intrusion and/or Direct Contact.
7. -- = Value not available.
8. J = Result is estimated.
9. UJ = Reporting limit is estimated due to analyte quality control.
10. D = For results greater than five times the reporting limit, the RPD between primary sample and field duplicate exceeds 30 percent.

Table E-3
Groundwater Analytical Results - February 2019
Oregon Lithoprint
McMinnville, Oregon

Sample Location	ODB-1	ODB-2	ODB-3	ODB-4	ODB-5	ODB-6	ODB-7	DEQ Risk-Based Concentrations		
Date	02/13/2019	02/13/2019	02/14/2019	02/14/2019	02/14/2019	02/14/2019	02/14/2019	GW in Excavation | Construction and Excavation Worker	Groundwater Vapor Intrusion into Buildings | Urban Residential	Vapor Intrusion into Buildings | Occupational
Volatile Organic Compounds (µg/L)										
Acetone	<50.0 UJ	<50.0 UJ	<50.0 UJ	<50.0 UJ	<50.0 UJ	<50.0 UJ	<50.0 UJ	--	--	--
Acrolein	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	--	--	--
Acrylonitrile	<10.0 UJ	<10.0 UJ	<10.0 UJ	<10.0 UJ	<10.0 UJ	<10.0 UJ	<10.0 UJ	250	1,700	9,200
Benzene	1.81	56.6	509	309	10.8	307	96.7	1,800	510	2,800
Bromobenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--	--
Bromodichloromethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	450	420	2,300
Bromoform	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	14,000	85,000	470,000
Bromomethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	1,200	2,100	27,000
n-Butylbenzene	20.1	44.8	33.8	35.5	26.3	30.4	18.5	--	--	--
sec-Butylbenzene	12.7	32.3	26.6	27.1	24.4	27.9	16.2	--	--	--
tert-Butylbenzene	<1.00	0.431 J	0.450 J	0.443 J	0.774 J	0.619 J	<1.00	--	--	--
Carbon Tetrachloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	1,800	220	1,200
Chlorobenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	10,000	67,000	--
Chlorodibromomethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	610	2300	13,000
Chloroethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	2,400,000	2,800,000	--
Chloroform	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	720	290	1,600
Chloromethane	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	22,000	26,000	330,000
2-Chlorotoluene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--	--
4-Chlorotoluene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--	--
1,2-Dibromo-3-Chloropropane	<5.00 UJ	<5.00 UJ	<5.00 UJ	<5.00 UJ	<5.00 UJ	<5.00 UJ	<5.00 UJ	--	--	--
1,2-Dibromoethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	27	110	590
Dibromomethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--	--
1,2-Dichlorobenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	37,000	'--	--
1,3-Dichlorobenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--	--
1,4-Dichlorobenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	1,500	1,300	7,100
Dichlorodifluoromethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	--
1,1-Dichloroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	10,000	2,600	14,000
1,2-Dichloroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	630	700	3,900
1,1-Dichloroethene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	44,000	29,000	360,000
cis-1,2-Dichloroethene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	18,000	'--	--
trans-1,2-Dichloroethene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	180	'--	--
1,2-Dichloropropane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--	--
1,1-Dichloropropene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--	--
1,3-Dichloropropane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--	--
cis-1,3-Dichloropropene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--	--
trans-1,3-Dichloropropene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--	--
2,2-Dichloropropane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--	--
di-Isopropyl Ether	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--	--
Ethylbenzene	182	273	594	924	25.7	44.8	27.9	4,500	1,500	8,200
Hexachloro-1,3-Butadiene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--	--
Isopropylbenzene	37.6	101	106	118	117	139	65.9	51,000	'--	--
P-Isopropyltoluene	1.08	4.23	7.51	7.48	0.650 J	0.743 J	<1.00	--	--	--
2-Butanone (MEK)	<10.0 UJ	<10.0 UJ	<10.0 UJ	<10.0 UJ	<10.0 UJ	<10.0 UJ	<10.0 UJ	--	--	--
Methylene Chloride	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	79,000	160,000	3,300,000
4-Methyl-2-Pentanone (MIBK)	<10.0 UJ	<10.0 UJ	<10.0 UJ	<10.0 UJ	<10.0 UJ	<10.0 UJ	<10.0 UJ	--	--	--
Methyl Tert-Butyl Ether	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	63,000	160,000	870,000
Naphthalene	35.6 J	86.3 J	110 J	90.6 J	8.38 J	3.93 J	20.3 J	500	2,000	11,000
n-Propylbenzene	156	312	378	389	388	509	216	--	--	--
Styrene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	170,000	'--	--
1,1,1,2-Tetrachloroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--	--
1,1,2,2-Tetrachloroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--	--
1,1,2-Trichlorotrifluoroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	'--	--
Tetrachloroethene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	5,600	8,700	48,000
Toluene	<1.00	0.572 J	0.540 J	14.4	0.741 J	0.930 J	0.526 J	220,000	'--	--
1,2,3-Trichlorobenzene	<1.00 UJ	<1.00 UJ	<1.00 UJ	<1.00 UJ	<1.00 UJ	<1.00 UJ	<1.00 UJ	--	--	--
1,2,4-Trichlorobenzene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--	--
1,1,1-Trichloroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	1,100,000	'--	--
1,1,2-Trichloroethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	49	1,000	11,000
Trichloroethene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	430	430	3,700
Trichlorofluoromethane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	160,000	36,000	460,000
1,2,3-Trichloropropane	<2.50 UJ	<2.50 UJ	<2.50 UJ	<2.50 UJ	<2.50 UJ	<2.50 UJ	<2.50 UJ	--	--	--
1,2,4-Trimethylbenzene	79.6	277	1,070	855	2.30 J	11.3	1.23	6,300	50,000	--
1,2,3-Trimethylbenzene	151	160	345	344	2.64 J	6.63	1.55	--	--	--
Vinyl Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	960	21	880
1,3,5-Trimethylbenzene	4.92	85.6	228	183	<5.00	3.07	<1.00	7,500	36,000	--
Xylenes, Total	1.59 J	124	1,040	1,350	<15.0	40.6	<3.00	23,000	86,000	--
Gasoline Range Organics	5,170	8,490	15,100	19,900	7,100	8,180	3,410	14,000	22,000	--

Notes:

1. µg/L = Micrograms per liter.
2. Bold values indicate the compounds was detected above method detection limits.
3. < = Analyte was not detected above the reporting limit.
4. DEQ Risk-Based Concentrations from Oregon Department of Environmental Quality's *Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sites* , revised May 2018.
5. Shaded values indicate concentrations detected above the Urban Residential RBC for Vapor Intrusion.
6. Shaded values indicate concentrations detected above the Occupational RBC for Vapor Intrusion and/or the Construction and Excavation Worker RBC for Groundwater in Excavations.
7. -- = Value not available.
8. J = Result is estimated.
9. UJ = Reporting limit is estimated due to analyte quality control.
10. J+ = Result is estimated and may be biased high.

Table E-4
Groundwater Analytical Results - October 2019
Oregon Lithoprint
McMinnville, Oregon

Sample Location	ODB-8	ODB-9	ODB-10	ODB-11	ODB-12	ODB-13	DEQ Risk-Based Concentrations		
Date	10/15/2019	10/15/2019	10/15/2019	10/15/2019	10/15/2019	10/15/2019	GW in Excavation | Construction and Excavation Worker	Groundwater Vapor Intrusion into Buildings | Urban Residential	Vapor Intrusion into Buildings | Occupational
Volatile Organic Compounds (µg/L)									
Acetone	<50.0	<500	<50.0	<100	<500	<50.0	--	--	--
Acrolein	<50.0 UJ	<500 UJ	<50.0 UJ	<100 UJ	<500 UJ	<50.0 UJ	--	--	--
Acrylonitrile	<10.0	<100	<10.0	<20.0	<100	<10.0	250	1,700	9,200
Benzene	281	278	26.3 J+	1.34 J	195	59.9	1,800	510	2,800
Bromobenzene	<1.00 UJ	<10.0 UJ	<1.00 UJ	<2.00 UJ	<10.0 UJ	<1.00 UJ	--	--	--
Bromodichloromethane	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	450	420	2,300
Bromoform	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	14,000	85,000	470,000
Bromomethane	<5.00	<50.0	<5.00	<10.0	<50.0	<5.00	1,200	2,100	27,000
n-Butylbenzene	28.1	29.1	24.5 J+	3.74	167	13.1	--	--	--
sec-Butylbenzene	28.3	25.0	25.0 J+	6.21	140	12.1	--	--	--
tert-Butylbenzene	0.824 J	<10.0	0.982 J, J+	<2.00	5.74 J	0.474 J	--	--	--
Carbon Tetrachloride	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	1,800	220	1,200
Chlorobenzene	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	10,000	67,000	--
Chlorodibromomethane	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	610	2300	13,000
Chloroethane	<5.00	<50.0	<5.00	<10.0	<50.0	<5.00	2,400,000	2,800,000	--
Chloroform	<5.00	<50.0	<5.00	<10.0	<50.0	<5.00	720	290	1,600
Chloromethane	<2.50	<25.0	<2.50	<5.00	<25.0	<2.50	22,000	26,000	330,000
2-Chlorotoluene	<1.00 UJ	<10.0 UJ	<1.00 UJ	<2.00 UJ	<10.0 UJ	<1.00 UJ	--	--	--
4-Chlorotoluene	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	--	--	--
1,2-Dibromo-3-Chloropropane	<5.00	<50.0	<5.00	<10.0	<50.0	<5.00	--	--	--
1,2-Dibromoethane	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	27	110	590
Dibromomethane	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	--	--	--
1,2-Dichlorobenzene	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	37,000	'--	--
1,3-Dichlorobenzene	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	--	--	--
1,4-Dichlorobenzene	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	1,500	1,300	7,100
Dichlorodifluoromethane	<5.00	<50.0	<5.00	<10.0	<50.0	<5.00	--	--	--
1,1-Dichloroethane	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	10,000	2,600	14,000
1,2-Dichloroethane	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	630	700	3,900
1,1-Dichloroethene	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	44,000	29,000	360,000
cis-1,2-Dichloroethene	<1.00	<10.0	<1.00	<2.00	<10.0	2.80	18,000	'--	--
trans-1,2-Dichloroethene	<1.00	<10.0	<1.00	<2.00	<10.0	4.28	180	'--	--
1,2-Dichloropropane	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	--	--	--
1,1-Dichloropropene	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	--	--	--
1,3-Dichloropropane	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	--	--	--
cis-1,3-Dichloropropene	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	--	--	--
trans-1,3-Dichloropropene	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	--	--	--
2,2-Dichloropropane	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	--	--	--
di-Isopropyl Ether	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	--	--	--
Ethylbenzene	56.3	33.2	30.6 J+	<2.00	232	35.6	4,500	1,500	8,200
Hexachloro-1,3-Butadiene	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	--	--	--
Isopropylbenzene	231	124	176 J+	4.28	699	64.9	51,000	'--	--
p-Isopropyltoluene	6.26	4.57 J	4.4 J+	1.16 J	33.7	3.64	--	--	--
2-Butanone (MEK)	<10.0	<100	<10.0	<20.0	<100	<10.0	--	--	--
Methylene Chloride	<5.00	<50.0	<5.00	<10.0	<50.0	<5.00	79,000	160,000	3,300,000
4-Methyl-2-Pentanone (MIBK)	<10.0	<100	<10.0	<20.0	<100	<10.0	--	--	--
Methyl Tert-Butyl Ether	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	63,000	160,000	870,000
Naphthalene	19.1	15.5 J	1.68 J, J+	3.36 J	72.2	2.43 J	500	2,000	11,000
n-Propylbenzene	835	286	396	11.5	1380	142	--	--	--
Styrene	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	170,000	'--	--
1,1,1,2-Tetrachloroethane	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	--	--	--
1,1,2,2-Tetrachloroethane	<1.00 UJ	<10.0 UJ	<1.00 UJ	<2.00 UJ	<10.0 UJ	<1.00 UJ	--	--	--
1,1,2-Trichlorotrifluoroethane	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	--	'--	--
Tetrachloroethene	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	5,600	8,700	48,000
Toluene	1.04	<10.0	1.31 J+	<2.00	<10.0	0.475 J	220,000	'--	--
1,2,3-Trichlorobenzene	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	--	--	--
1,2,4-Trichlorobenzene	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	--	--	--
1,1,1-Trichloroethane	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	1,100,000	'--	--
1,1,2-Trichloroethane	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	49	1,000	11,000
Trichloroethene	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	430	430	3,700
Trichlorofluoromethane	<5.00	<50.0	<5.00	<10.0	<50.0	<5.00	160,000	36,000	460,000
1,2,3-Trichloropropane	<2.50 UJ	<25.0 UJ	<2.50 UJ	<5.00 UJ	<25.0 UJ	<2.50 UJ	--	--	--
1,2,4-Trimethylbenzene	<1.00	<10.0	<1.00	10.8	<10.0	4.19	6,300	50,000	--
1,2,3-Trimethylbenzene	5.44	4.01 J	3.86 J+	4.99	34.3	1.34	--	--	--
1,3,5-Trimethylbenzene	0.414 J	<10.0	<1.00	2.56	<10.0	0.489 J	7,500	36,000	--
Vinyl Chloride	<1.00	<10.0	<1.00	<2.00	<10.0	<1.00	960	21	880
Xylenes, Total	<3.00	<30.0	1.73 J, J+	4.56 J	22.4 J	1.8 J	23,000	86,000	--
Gasoline Range Organics	9,080	14,900	9,060	2,080	70,200 J+	5,380	14,000	22,000	--

Notes:

1. µg/L = Micrograms per liter.
2. Bold values indicate the compounds was detected above method detection limits.
3. < = Analyte was not detected above the reporting limit.
4. DEQ Risk-Based Concentrations from Oregon Department of Environmental Quality's *Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sites* , revised May 2018.
5. Shaded values indicate concentrations detected above the Urban Residential RBC for Vapor Intrusion.
6. Shaded values indicate concentrations detected above the Occupational RBC for Vapor Intrusion and/or the Construction and Excavation Worker RBC for Groundwater in Excavations.
7. -- = Value not available.
8. J = Result is estimated.
9. UJ = Reporting limit is estimated due to analyte quality control.
10. J+ = Result is estimated and may be biased high.
11. R = The data are unusable and the presence of the analyte in the sample is unknown.
12. D = For results greater than five times the reporting limit, the RPD between primary sample and field duplicate exceeds 30 percent.

NE Fourth Street

NE Third Street

NE Evans Street

NE Ford Street

NE Galloway Street

Courtyard

Professional Offices

Yamhill County (Leased Storage)

The Atticus Hotel (Former Parking Lot)

Red Fox Bakery

McMenamin's Hotel Oregon

Nick's Italian Cafe

Peirano & Daughters Market

Los Molcajetes Restaurant

Odd Fellows Bldg.

Chocolates

Twelve Wine

Terra Vina Tasting

Parking Lot

O'Dell Building

News Register Building

Serendipity Ice Cream

Mack Theater

Found Objects

Mes Amies

Crescent Cafe

R Stuart & Co. Wine Bar

Currents Gallery

Shoe Mates Footwear

RJ's Studio

Commercial Space on Ground Floor
Apartments on Second Floor

Commercial Building

Thistle Restaurant

Commercial Space (First Floor)
Apartments (Second Floor)

SP-1 SP-2 SP-3 SP-4 SP-5 SP-6 SP-7 SP-8 SP-9 SP-10 SP-11 SP-12

MW-1 MW-2 MW-3 MW-4 MW-5 MW-6

B-1 B-2 B-3 B-4 B-5 B-6 B-7 B-8

BH-1 BH-2 BH-3

PP-1 PP-2 PP-3 PP-4

DGB2 DGB3 DGB4 DGB5 DGB6 DGB7 DGE

ODB-1 ODB-2 ODB-3 ODB-4 ODB-5 ODB-6 ODB-7 ODB-8 ODB-9 ODB-10 ODB-11 ODB-12 ODB-13

Legend:

- Monitoring Well Location (Coles)
- Boring Location (Apex)
- Data Gap Investigation Boring Location (Coles)
- Odd Fellows Basement Boring Location (Coles)
- Sewer Line Borehole Location (Coles)
- Push Probe Location (Coles)
- Historical Push-Probe/Auger Boring Location (Aspen/REA)
- Sanitary Sewer Line, Manhole, and Flow Direction
- Stormwater Line, Manhole, and Flow Direction
- Catch Basin Location
- Former Underground Storage Tank (UST)

N

0 40 80

Approximate Scale in Feet

Sources: Base map prepared from Google Earth Pro imagery (6/22/2017) and Key Features and Sample Location figure by Coles & Associates (4/30/18). All site features, locations, and dimensions are approximate.

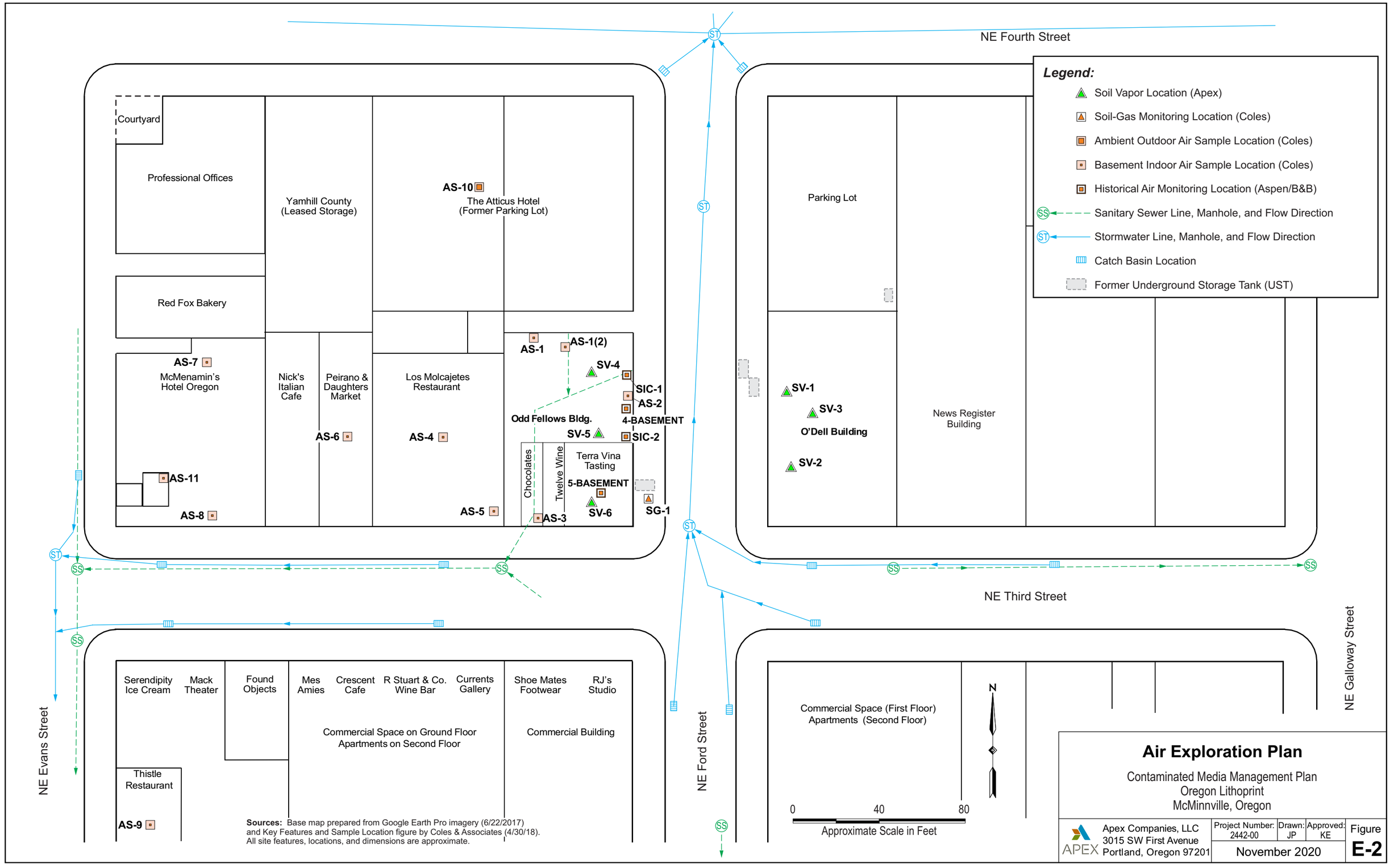
Soil and Groundwater Exploration Plan

Contaminated Media Management Plan
Oregon Lithoprint
McMinnville, Oregon

APEX
Apex Companies, LLC
3015 SW First Avenue
Portland, Oregon 97201

Project Number:	Drawn:	Approved:	Figure
2442-00	JP	KE	E-1

November 2020

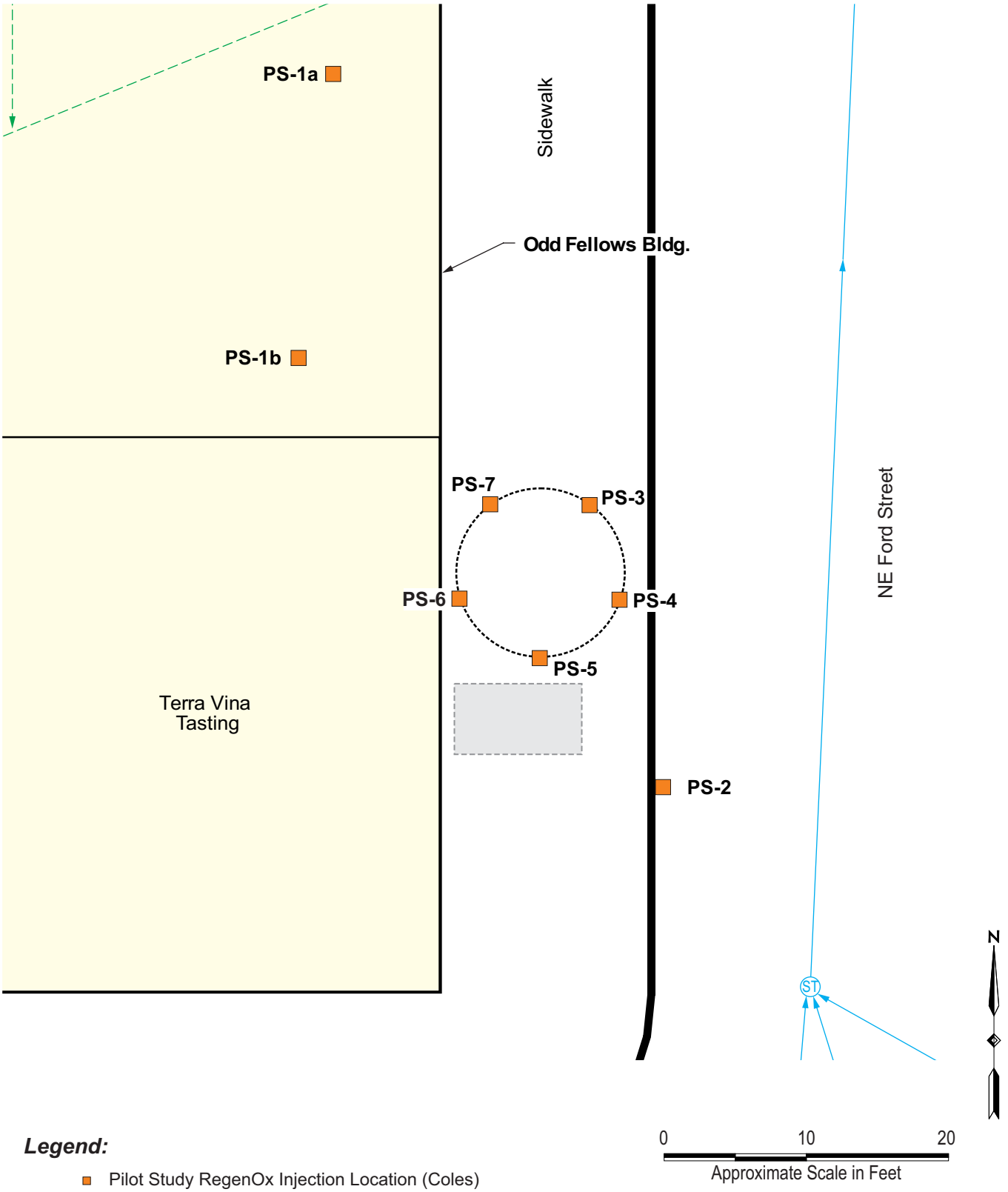


Sources: Base map prepared from Google Earth Pro imagery (6/22/2017) and Key Features and Sample Location figure by Coles & Associates (4/30/18). All site features, locations, and dimensions are approximate.

Air Exploration Plan

Contaminated Media Management Plan
Oregon Lithoprint
McMinnville, Oregon

Apex Companies, LLC 3015 SW First Avenue Portland, Oregon 97201	Project Number: 2442-00	Drawn: JP	Approved: KE	Figure **E-2**
	November 2020			



Legend:

- Pilot Study RegenOx Injection Location (Coles)
- Pilot Study PersulfOx Injection Location (Coles)
- Sanitary Sewer Line and Flow Direction
- Stormwater Line, Manhole, and Flow Direction
- Former Underground Storage Tank (UST)

Sources: Base map prepared from Google Earth Pro imagery (6/22/2017) and Key Features and Sample Location figure by Coles & Associates (4/30/18). All site features, locations, and dimensions are approximate.

Remediation Pilot Study Exploration Locations

Contaminated Media Management Plan
Oregon Lithoprint
McMinnville, Oregon

Apex Companies, LLC
3015 SW First Avenue
Portland, Oregon 97201

Project Number:	Drawn:	Approved:	Figure
2442-00	JP	KE	E-3

November 2020

NE Fourth Street

NE Third Street

NE Evans Street

NE Ford Street

NE Galloway Street

Courtyard

Professional Offices

Yamhill County
(Leased Storage)

The Atticus Hotel
(Former Parking Lot)

Red Fox Bakery

S-1

McMenamin's
Hotel Oregon

Nick's
Italian
Cafe

Peirano &
Daughters
Market

Los Molcajetes
Restaurant

SEEP

Odd Fellows Bldg.

Chocolates

Twelve Wine

Terra Vina
Tasting

Parking Lot

O'Dell Building

News Register
Building

Serendipity
Ice Cream

Mack
Theater

Found
Objects

Mes
Amies

Crescent
Cafe

R Stuart & Co.
Wine Bar

Currents
Gallery

Shoe Mates
Footwear

RJ's
Studio

Commercial Space on Ground Floor
Apartments on Second Floor

Commercial Building

Thistle
Restaurant

Commercial Space (First Floor)
Apartments (Second Floor)

Legend:

- Surface Water Grab Sample Location (Coles)
- Sanitary Sewer Line, Manhole, and Flow Direction
- Stormwater Line, Manhole, and Flow Direction
- Catch Basin Location
- Former Underground Storage Tank (UST)

N

0 40 80

Approximate Scale in Feet

Sources: Base map prepared from Google Earth Pro imagery (6/22/2017) and Key Features and Sample Location figure by Coles & Associates (4/30/18). All site features, locations, and dimensions are approximate.

Basement Sump Sample Locations

Contaminated Media Management Plan
Oregon Lithoprint
McMinnville, Oregon

Apex Companies, LLC
3015 SW First Avenue
Portland, Oregon 97201

Project Number:	Drawn:	Approved:	Figure
2442-00	JP	KE	E-4

November 2020

NE Fourth Street

NE Third Street

NE Evans Street

NE Ford Street

NE Galloway Street

Courtyard

Professional Offices

Yamhill County (Leased Storage)

The Atticus Hotel (Former Parking Lot)

Red Fox Bakery

McMenamin's Hotel Oregon

Nick's Italian Cafe

Peirano & Daughters Market

Los Molcajetes Restaurant

Odd Fellows Bldg.

Chocolates

Twelve Wine

Terra Vina Tasting

Parking Lot

O'Dell Building

News Register Building

Serendipity Ice Cream

Mack Theater

Found Objects

Mes Amies

Crescent Cafe

R Stuart & Co. Wine Bar

Currents Gallery

Shoe Mates Footwear

RJ's Studio

Commercial Space on Ground Floor
Apartments on Second Floor

Commercial Building

Thistle Restaurant

Commercial Space (First Floor)
Apartments (Second Floor)

SP-9 DGB5 DGB6 DGB7 SP-8 MW-3 2.53 B-7 B-1 SP-4 B-8 B-2 B-6 MW-6 9.86 SP-3 B-3 B-4 B-5 SP-5 MW-4 2,770 BH-3 BH-1 BH-2 SP-7

SP-10 DGB3 DGB2 DGB4 PP-1 B-1 SP-1 B-2 DGB1 ODB-1 1.81 SP-2 ODB-2 56.6 ODB-7 96.7 MW-1 2.15 ODB-8 281 ODB-12 195 PP-2 ODB-3 509 ODB-9 278 PP-3 ODB-6 307 ODB-13 59.9 ODB-4 309 ODB-5 10.8 ODB-10 26.3 MW-2 999 ODB-11 1.34 PP-4

SP-6 MW-5 96.3 SP-11

SP-12

Legend:

- Monitoring Well Location (Coles)
- Boring Location (Apex)
- Data Gap Investigation Boring Location (Coles)
- Odd Fellows Basement Boring Location (Coles)
- Sewer Line Borehole Location (Coles)
- Push Probe Location (Coles)
- Historical Push-Probe/Auger Boring Location (Aspen/REA)
- Sanitary Sewer Line, Manhole, and Flow Direction
- Stormwater Line, Manhole, and Flow Direction
- Catch Basin Location
- Former Underground Storage Tank (UST)
- Not Detected (ND)
- Benzene Concentration <510 µg/L
- Benzene Concentration 510-1,800 µ/L
- Benzene Concentration >1,800 µ/L
- 59.9 Benzene Concentration in µg/L (Most Recent Concentration Shown)

N

0 40 80

Approximate Scale in Feet

Sources: Base map prepared from Google Earth Pro imagery (6/22/2017) and Key Features and Sample Location figure by Coles & Associates (4/30/18). All site features, locations, and dimensions are approximate.

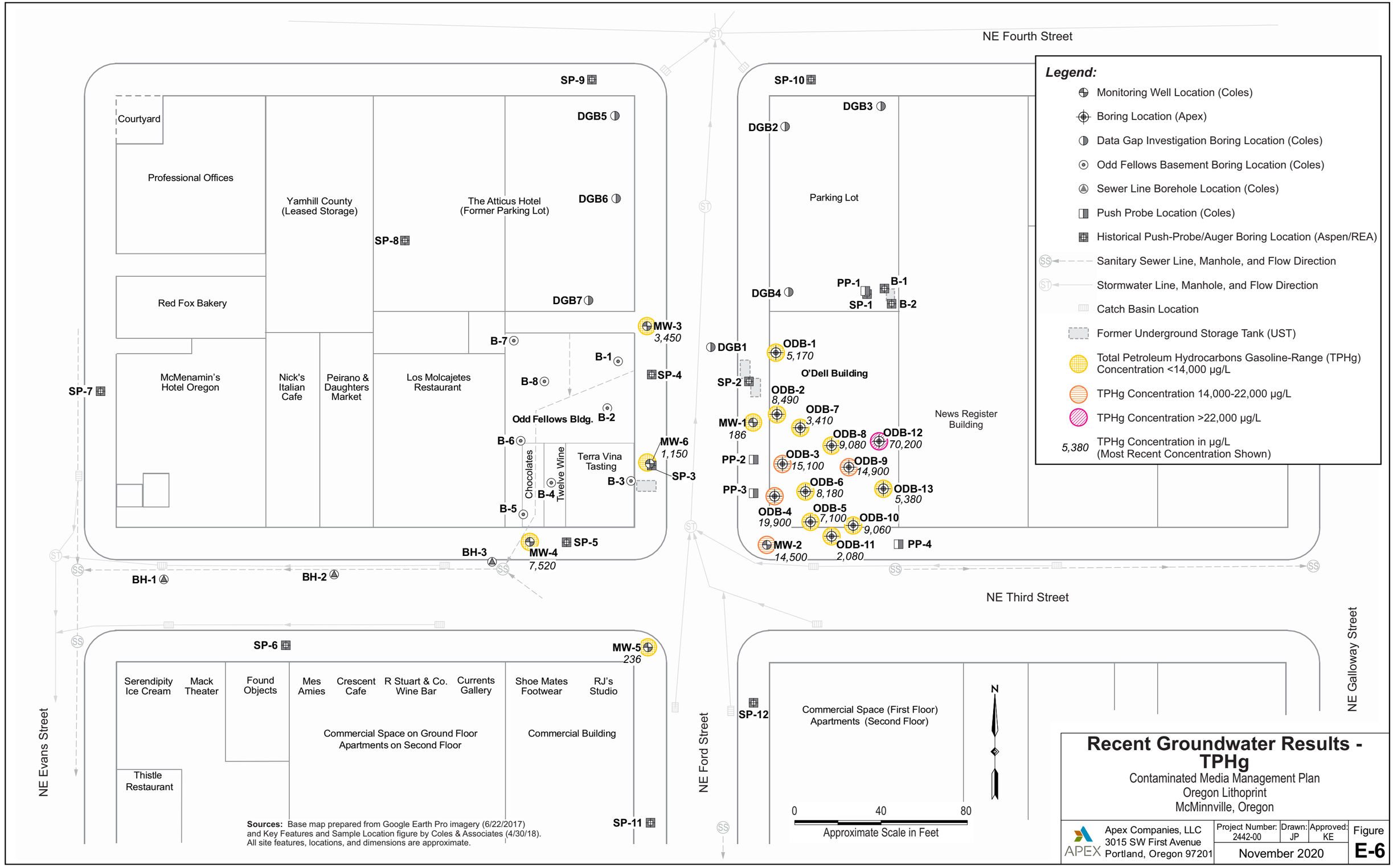
Recent Groundwater Results - Benzene

Contaminated Media Management Plan
Oregon Lithoprint
McMinnville, Oregon

APEX
Apex Companies, LLC
3015 SW First Avenue
Portland, Oregon 97201

Project Number:	Drawn:	Approved:	Figure
2442-00	JP	KE	E-5

November 2020



Legend:

- Monitoring Well Location (Coles)
- Boring Location (Apex)
- Data Gap Investigation Boring Location (Coles)
- Odd Fellows Basement Boring Location (Coles)
- Sewer Line Borehole Location (Coles)
- Push Probe Location (Coles)
- Historical Push-Probe/Auger Boring Location (Aspen/REA)
- Sanitary Sewer Line, Manhole, and Flow Direction
- Stormwater Line, Manhole, and Flow Direction
- Catch Basin Location
- Former Underground Storage Tank (UST)
- Total Petroleum Hydrocarbons Gasoline-Range (TPHg) Concentration <14,000 µg/L
- TPHg Concentration 14,000-22,000 µg/L
- TPHg Concentration >22,000 µg/L
- *5,380* TPHg Concentration in µg/L (Most Recent Concentration Shown)

Sources: Base map prepared from Google Earth Pro imagery (6/22/2017) and Key Features and Sample Location figure by Coles & Associates (4/30/18). All site features, locations, and dimensions are approximate.

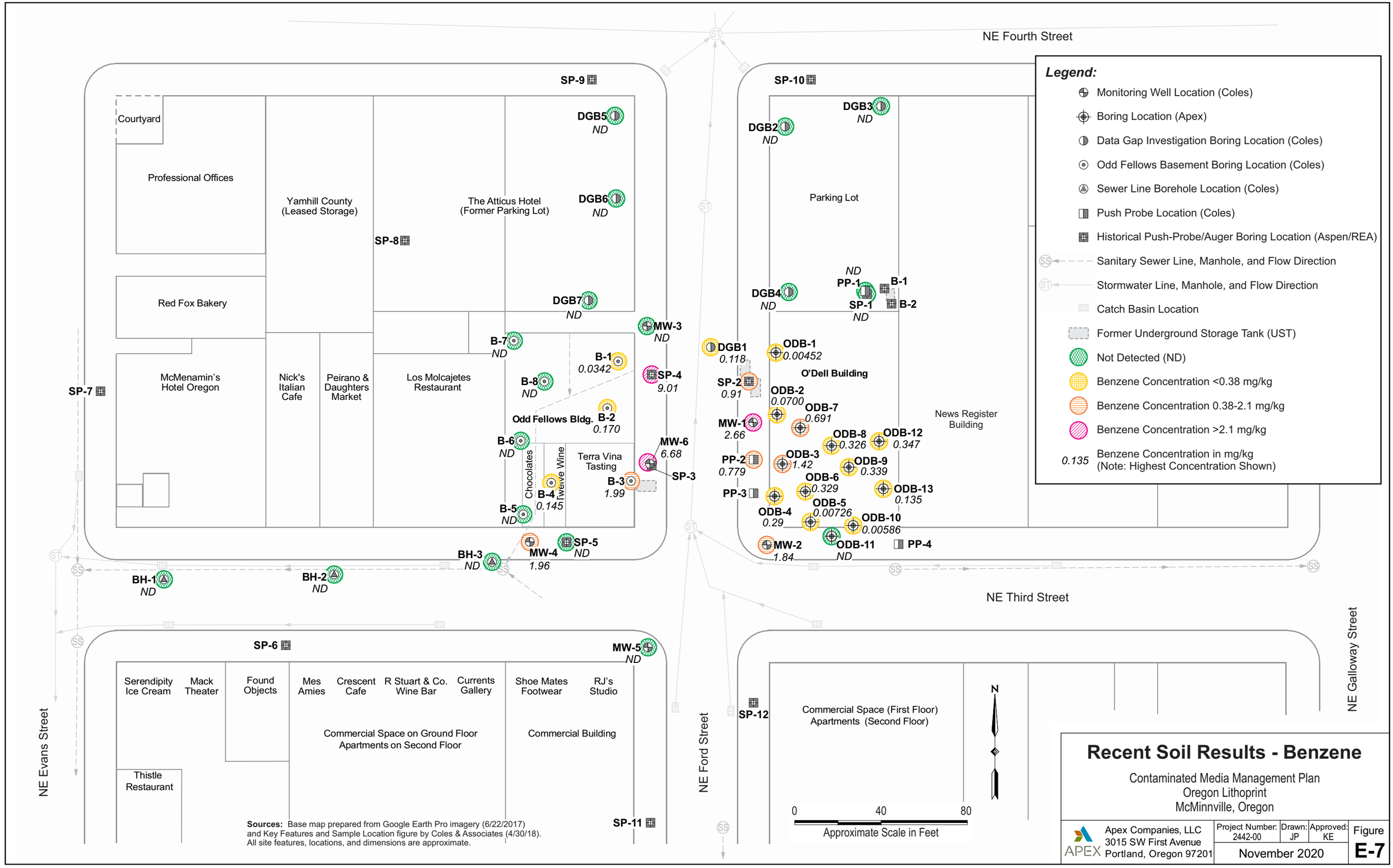
Recent Groundwater Results - TPHg

Contaminated Media Management Plan
Oregon Lithoprint
McMinnville, Oregon

Apex Companies, LLC
3015 SW First Avenue
Portland, Oregon 97201

Project Number:	Drawn:	Approved:	Figure
2442-00	JP	KE	E-6

November 2020



Legend:

- Monitoring Well Location (Coles)
- Boring Location (Apex)
- Data Gap Investigation Boring Location (Coles)
- Odd Fellows Basement Boring Location (Coles)
- Sewer Line Borehole Location (Coles)
- Push Probe Location (Coles)
- Historical Push-Probe/Auger Boring Location (Aspen/REA)
- Sanitary Sewer Line, Manhole, and Flow Direction
- Stormwater Line, Manhole, and Flow Direction
- Catch Basin Location
- Former Underground Storage Tank (UST)
- Not Detected (ND)
- Benzene Concentration <0.38 mg/kg
- Benzene Concentration 0.38-2.1 mg/kg
- Benzene Concentration >2.1 mg/kg
- 0.135 Benzene Concentration in mg/kg (Note: Highest Concentration Shown)

Sources: Base map prepared from Google Earth Pro imagery (6/22/2017) and Key Features and Sample Location figure by Coles & Associates (4/30/18). All site features, locations, and dimensions are approximate.

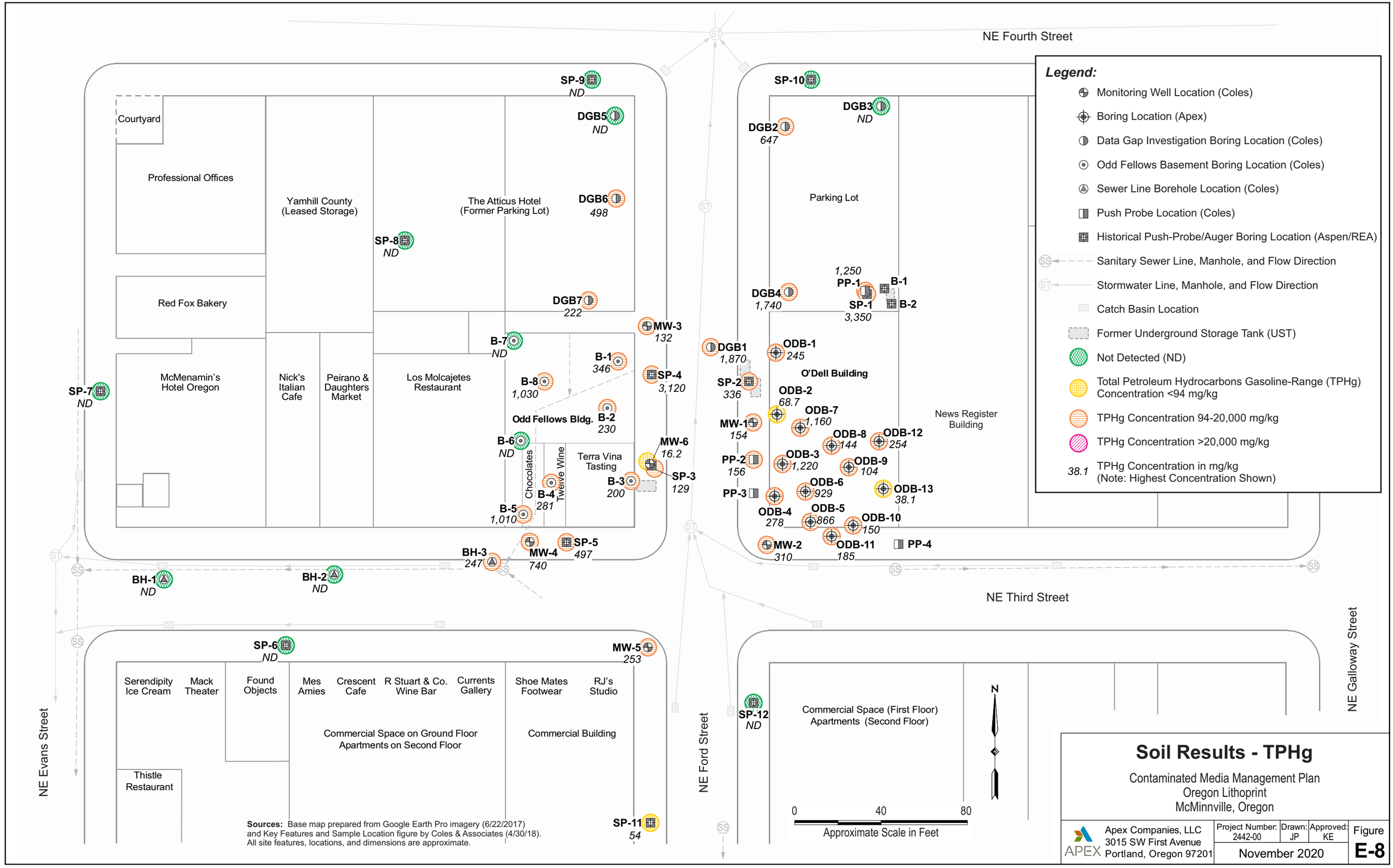
Recent Soil Results - Benzene

Contaminated Media Management Plan
Oregon Lithoprint
McMinnville, Oregon

APEX
Apex Companies, LLC
3015 SW First Avenue
Portland, Oregon 97201

Project Number:	Drawn:	Approved:	Figure
2442-00	JP	KE	E-7

November 2020



Legend:

- Monitoring Well Location (Coles)
- Boring Location (Apex)
- Data Gap Investigation Boring Location (Coles)
- Odd Fellows Basement Boring Location (Coles)
- Sewer Line Borehole Location (Coles)
- Push Probe Location (Coles)
- Historical Push-Probe/Auger Boring Location (Aspen/REA)
- Sanitary Sewer Line, Manhole, and Flow Direction
- Stormwater Line, Manhole, and Flow Direction
- Catch Basin Location
- Former Underground Storage Tank (UST)
- Not Detected (ND)
- Total Petroleum Hydrocarbons Gasoline-Range (TPHg) Concentration <94 mg/kg
- TPHg Concentration 94-20,000 mg/kg
- TPHg Concentration >20,000 mg/kg
- *38.1* TPHg Concentration in mg/kg (Note: Highest Concentration Shown)

Sources: Base map prepared from Google Earth Pro imagery (6/22/2017) and Key Features and Sample Location figure by Coles & Associates (4/30/18). All site features, locations, and dimensions are approximate.

Soil Results - TPHg

Contaminated Media Management Plan
Oregon Lithoprint
McMinnville, Oregon

Apex Companies, LLC
3015 SW First Avenue
Portland, Oregon 97201

Project Number:	Drawn:	Approved:	Figure
2442-00	JP	KE	E-8

November 2020

Table 1. Soil Analysis Results for Petroleum Hydrocarbons and VOCs (mg/kg) Before the 2016 Data Gap Investigation

Sample ID (depth interval)date	gasoline-range hydrocarbon	diesel-range hydrocarbon (see notes)	oil-range hydrocarbon	benzene	toluene	ethylbenzene	xylenes, total	naphthalene	methyl t-butyl ether (MTBE)	isopropylbenzene	n-propylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	1,2-dibromoethane(ED	1,2-dichloroethane (EDC)	n-butylbenzene	sec-butylbenzene	4-isopropyltoluene
B-1 (3) 02/20/98	na	<20	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
B-1 (6) 02/20/98	na	<20	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
B-1 (9) 02/20/98	na	<20	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
B-2 (3) 02/20/98	na	<20	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
B-2 (6) 02/20/98	na	<20	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
B-2 (9) 02/20/98	na	<20	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
SP-1 (12.0)04/17/02	198	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
SP-1 (19.0) 04/17/02	3,350	na	na	<0.04	<0.04	<0.04	0.09	na	na	na	na	na	na	na	na	na	na	na
SP-2 (11.5) 04/17/02	336	na	na	0.91	2.38	8.31	28.1	na	na	na	na	na	na	na	na	na	na	na
SP-3 (9.0) 04/17/02	129	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
SP-3 (15.0) 04/17/02	25	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
SP-4 (9.0) 04/17/02	3,120	na	na	9.01	26.1	81.2	339	na	na	na	na	na	na	na	na	na	na	na
SP-4 (15.0) 04/17/02	<20	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
SP-5 (14.5) 06/18/03	497	na	na	<0.04	<0.04	11.3	7.16	na	na	na	na	na	na	na	na	na	na	na
SP-5 (18.0) 06/18/03	303	na	na	<0.04	<0.04	7.04	7.46	na	na	na	na	na	na	na	na	na	na	na
SP-6 (9.0) 06/18/03	<20	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
SP-6 (13.0) 06/18/03	<20	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
SP-7 (9.0) 06/18/03	<20	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
SP-7 (13.0) 06/18/03	<20	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
SP-8 (9.0) 06/18/03	<20	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
SP-8 (13.0) 06/18/03	<20	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
SP-9 (11.0) 06/09/05	<20	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na

Notes: Sample IDs highlighted in blue if sample collected from saturated soil. The B-# samples in 1998 were collected and analyzed by REA Tech Management. The SP-# samples were collected by Aspen and analyzed by Wy'East Analytical Laboratory. All other samples collected by C&A and analyzed by Apex Labs. All diesel-range hydrocarbon detected values were qualified F-06 by the laboratory ("results in the diesel organics range are primarily due to overlap from a gasoline range product") and are not compared to the RBCs. In sample SG-1 (12-12.5), tert-butylbenzene was detected at 0.100 mg/kg. DEQ has not identified RBCs for n-propylbenzene, n-butylbenzene, sec-butylbenzene, and 4-isopropyltoluene. --- = no RBC available from the DEQ; >Max = The constituent RBC for this pathway is calculated as greater than 1 X E6 mg/kg. Therefore, this substance is deemed not to pose risks in this scenario. >Csat = This soil RBC exceeds the limit of three-phase equilibrium partitioning. < = less than the method reporting limit (MRL). na = not analyzed. X = see case narrative.

Table 1. Soil Analysis Results for Petroleum Hydrocarbons and VOCs (mg/kg) Before the 2016 Data Gap Investigation

Sample ID (depth interval)date	gasoline-range hydrocarbon	diesel-range hydrocarbon (see notes)	oil-range hydrocarbon	benzene	toluene	ethylbenzene	xylenes, total	naphthalene	methyl t-butyl ether (MTBE)	isopropylbenzene	n-propylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	1,2-dibromoethane(ED	1,2-dichloroethane (EDC)	n-butylbenzene	sec-butylbenzene	4-isopropyltoluene
SP-9 (15.5) 06/09/05	<20	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
SP-10 (11.0) 06/09/05	<20	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
SP-10 (14.0) 06/09/05	<20	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
SP-11 (10.0) 06/09/05	<20	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
SP-11 (14.0) 06/09/05	**54**	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
SP-12 (10.0) 06/09/05	<20	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
SP-12 (14.0) 06/09/05	<20	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-1 (11.5-12)10/11/11	154	33.0 (F-06)	<50.0	<0.0199	<0.0796	2.23	7.92	0.497	<0.0796	0.294	1.16	6.09	1.8	<0.0398	<0.0398	0.465	0.142	0.301
MW-1 (16.5-17) 10/11/11	29.3	<25.0	<50.0	2.66	0.301	1.41	3.04	0.187	<0.0823	<0.0823	0.213	0.714	0.301	<0.0412	<0.0412	<0.0823	<0.0823	<0.0823
MW-1 (24.5-25) 10/11/11	<8.05	<25.0	<50.0	0.356	<0.0805	0.0418	<0.121	<0.161	<0.0805	<0.0805	<0.0402	<0.0805	<0.0805	<0.0402	<0.0402	<0.0805	<0.0805	<0.0805
MW-2 (12-12.5) 10/11/11	58.2	80.5 (F-06)	<50.0	1.84	<0.0782	1.82	1.61	0.216	<0.0782	0.124	0.379	1.94	0.534	<0.0391	<0.0391	0.117	<0.0782	<0.0782
MW-2 (17-17.5) 10/11/11	310	49.8 (F-06)	<50.0	1.23	<0.286	0.424	0.877	<0.573	<0.286	0.47	0.664	<0.286	0.85	<0.143	<0.143	<0.286	<0.286	<0.286
MW-2 (24.5-25) 10/11/11	<8.07	<25.0	<50.0	1.76	<0.0807	<0.0404	<0.121	<0.161	<0.0807	<0.0807	<0.0404	<0.0807	<0.0807	<0.0404	<0.0404	<0.0807	<0.0807	<0.0807
MW-3 (11.5-12) 10/11/11	132	73.1 (F-06)	<50.0	<0.0774	<0.309	0.619	<0.464	<0.619	<0.309	<0.309	0.566	<0.309	<0.309	<0.155	<0.155	<0.309	<0.309	<0.309
MW-4 (12.5 -13.5) 10/11/11	<7.64	<25.0	<50.0	<0.0191	<0.0764	<0.0382	<0.115	<0.153	<0.0764	<0.0764	<0.0382	<0.0764	<0.0764	<0.0382	<0.0382	<0.0764	<0.0764	<0.0764
MW-4 (15-15.5) 10/10/11	740	57.6 (F-06)	<56.1	1.96	<0.354	0.283	0.792	<0.707	<0.354	0.93	1.53	4.02	2.95	<0.177	<0.177	1.69	0.548	0.919
MW-5 (12.5-13) 10/10/11	253	208 (F-06)	<50.0	<0.0193	<0.0771	<0.0385	<0.116	<0.154	<0.0771	<0.0771	<0.0385	<0.0771	<0.0771	<0.0385	<0.0385	<0.0771	<0.0771	<0.0771
MW-5 (18-18.5) 10/10/11	80.6	<25.0	<50.0	<0.0209	<0.0837	<0.0419	<0.126	<0.167	<0.0837	<0.0837	<0.0419	<0.0837	<0.0837	<0.0419	<0.0419	<0.0837	<0.0837	<0.0837
MW-6 (12.5-13) 10/10/11	16.2	<25.0	<50.0	4.63	<0.0780	1.46	<0.117	<0.156	<0.0780	<0.0780	0.136	<0.0780	<0.0780	<0.0390	<0.0390	<0.0780	<0.0780	<0.0780
MW-6 (17.5-18) 10/10/11	<8.52	<27.2	<54.4	6.68	<0.0852	0.222	0.0955	<0.170	<0.0852	<0.0852	0.0742	<0.0852	<0.0852	<0.0426	<0.0426	<0.0852	<0.0852	<0.0852
SG-1 (9.5-10) 10/10/11	1,440	2,370 (F-06)	<80.1	1.38	<0.312	23.7	83.7	4.28	<0.312	2.55	9.12	47.9	14.3	<0.156	<0.156	3.87	0.991	2.2

Notes: Sample IDs highlighted in blue if sample collected from saturated soil. The B-# samples in 1998 were collected and analyzed by REA Tech Management. The SP-# samples were collected by Aspen and analyzed by Wy'East Analytical Laboratory. All other samples collected by C&A and analyzed by Apex Labs. All diesel-range hydrocarbon detected values were qualified F-06 by the laboratory ("results in the diesel organics range are primarily due to overlap from a gasoline range product") and are not compared to the RBCs. In sample SG-1 (12-12.5), tert-butylbenzene was detected at 0.100 mg/kg. DEQ has not identified RBCs for n-propylbenzene, n-butylbenzene, sec-butylbenzene, and 4-isopropyltoluene. --- = no RBC available from the DEQ; >Max = The constituent RBC for this pathway is calculated as greater than 1 X E6 mg/kg. Therefore, this substance is deemed not to pose risks in this scenario. >Csat = This soil RBC exceeds the limit of three-phase equilibrium partitioning. < = less than the method reporting limit (MRL). na = not analyzed. X = see case narrative.

Table 1. Soil Analysis Results for Petroleum Hydrocarbons and VOCs (mg/kg) Before the 2016 Data Gap Investigation

Sample ID (depth interval)date	gasoline-range hydrocarbon	diesel-range hydrocarbon (see notes)	oil-range hydrocarbon	benzene	toluene	ethylbenzene	xylenes, total	naphthalene	methyl t-butyl ether (MTBE)	isopropylbenzene	n-propylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	1,2-dibromoethane(ED	1,2-dichloroethane (EDC)	n-butylbenzene	sec-butylbenzene	4-isopropyltoluene
SG-1 (12-12.5) 10/10/11	11.1	<25.0	<50.0	0.4	<0.0794	0.973	0.836	<0.159	<0.0794	<0.0794	0.154	0.553	0.172	<0.0397	<0.0397	<0.0794	<0.0794	<0.0794
PP-1 (12-12.5) 10/12/11	1,250	<25.0	<50.0	<0.204	<0.818	0.548	<1.23	<1.64	<0.818	<0.818	2.3	<0.818	<0.818	<0.409	<0.409	1.04	0.965	<0.818
PP-1 (13.5-14) 10/12/11	<8.85	<29.4	<58.7	<0.0221	<0.0885	<0.0443	<0.133	<0.177	<0.0885	<0.0885	<0.0443	<0.0885	<0.0885	<0.0443	<0.0443	<0.0885	<0.0885	<0.0885
PP-2 (12-12.5) 10/11/11	156	32.2 (F-06)	<50.0	0.779	<0.0789	3.94	12.7	0.632	<0.0798	0.293	1	5.47	1.55	<0.0395	<0.0395	0.362	0.106	0.23
Sidway under UST 70” 01/24/14	<8.01	<25.0	<50.0	<0.0200	<0.0801	<0.0401	<0.120	<0.160	<0.0801	<0.0801	<0.0401	<0.0801	<0.0801	<0.0801	<0.0401	na	na	na
BH-1@9 03/04/14	<8.53	na	na	<0.0213	<0.0853	<0.0427	<0.128	<0.171	<0.0853	<0.0853	<0.0427	<0.0853	<0.0853	<0.0853	<0.0427	na	na	na
BH-2@10 03/04/14	<8.20	na	na	<0.0205	<0.0820	<0.0410	<0.123	<0.164	<0.0820	<0.0820	<0.0410	<0.0820	<0.0820	<0.0820	<0.0410	na	na	na
BH-3@10 03/04/14	105	na	na	<0.0216	<0.0866	<0.0433	<0.130	<0.173	<0.0866	<0.0866	0.23	<0.0866	<0.0866	<0.0433	<0.0433	na	na	na
BH-3@10D 03/04/14	176	na	na	<0.0205	<0.0820	<0.0410	<0.123	<0.164	<0.0820	0.112	0.307	<0.0820	<0.0820	<0.0410	<0.0410	na	na	na
BH-3@12’8” 03/04/14	247	na	na	<0.0185	<0.0741	0.117	<0.111	<0.148	<0.0741	0.275	0.549	0.522	0.418	<0.0371	<0.0371	na	na	na
B-1@11 10/02/14	346	na	na	0.0342	<0.0813	3.2	<0.122	0.736	<0.0813	0.856	3.34	<0.0813	<0.0813	<0.0407	<0.0407	na	na	na
B-2@12 10/02/14	230	na	na	0.17	<0.0908	4.95	4.79	0.644	<0.0908	0.62	2.14	7.17	2.27	<0.0454	<0.0454	na	na	na
B-3@11 10/02/14	200	na	na	1.99	<0.0843	2.2	<0.126	<0.320	<0.0843	0.483	1.68	<0.0843	<0.0843	<0.0422	<0.0422	na	na	na
B-4@12 10/02/14	281	na	na	0.145	<0.0920	0.211	<0.138	0.272	<0.0920	0.357	1.21	<0.0920	<0.0920	<0.0460	<0.0460	na	na	na
B-5@13 10/02/14	1,010	na	na	<0.0200	<0.0801	<0.0401	<0.120	<0.160	<0.0801	0.309	0.696	<0.0801	<0.0801	<0.0401	<0.0401	na	na	na
B-6@12 10/02/14	<8.07	na	na	<0.0202	<0.0807	<0.0404	<0.121	<0.161	<0.0807	<0.0807	<0.0404	<0.0807	<0.0807	<0.0404	<0.0404	na	na	na
B-7@13 10/02/14	<9.60	na	na	<0.0240	<0.0960	<0.0480	<0.144	<0.192	<0.0960	<0.0960	<0.0480	<0.0960	<0.0960	<0.0480	<0.0480	na	na	na
B-7D@13 10/02/14	<8.23	na	na	<0.0206	<0.0823	<0.0412	<0.124	<0.165	<0.0823	<0.0823	<0.0412	<0.0823	<0.0823	<0.0412	<0.0412	na	na	na
B-8@12 10/02/14 (X)	91.8	na	na	<0.0215	<0.0859	0.294	<0.129	<0.172	<0.0859	0.122	0.354	<0.0859	<0.0859	<0.0429	<0.0429	na	na	na
B-8@12 10/02/14 (X)	1,030	na	na	<0.0204	<0.0817	1.76	<0.122	0.26	<0.0817	0.933	2.92	<0.0817	0.0955	<0.0408	<0.0408	na	na	na

Notes: Sample IDs highlighted in blue if sample collected from saturated soil. The B-# samples in 1998 were collected and analyzed by REA Tech Management. The SP-# samples were collected by Aspen and analyzed by Wy’East Analytical Laboratory. All other samples collected by C&A and analyzed by Apex Labs. All diesel-range hydrocarbon detected values were qualified F-06 by the laboratory (“results in the diesel organics range are primarily due to overlap from a gasoline range product”) and are not compared to the RBCs. In sample SG-1 (12-12.5), tert-butylbenzene was detected at 0.100 mg/kg. DEQ has not identified RBCs for n-propylbenzene, n-butylbenzene, sec-butylbenzene, and 4-isopropyltoluene. --- = no RBC available from the DEQ; >Max = The constituent RBC for this pathway is calculated as greater than 1 X E6 mg/kg. Therefore, this substance is deemed not to pose risks in this scenario. >Csat = This soil RBC exceeds the limit of three-phase equilibrium partitioning. < = less than the method reporting limit (MRL). na = not analyzed. X = see case narrative.

Table 1. Soil Analysis Results for Petroleum Hydrocarbons and VOCs (mg/kg) Before the 2016 Data Gap Investigation

	gasoline-range hydrocarbon	diesel-range hydrocarbon (see notes)	oil-range hydrocarbon	benzene	toluene	ethylbenzene	xylenes, total	naphthalene	methyl t-butyl ether (MTBE)	isopropylbenzene	n-propylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	1,2-dibromoethane (EDB)	1,2-dichloroethane (EDC)	n-butylbenzene	sec-butylbenzene	4-isopropyltoluene
Receptor Scenario/ Exposure Pathway	Risk-Based Concentrations (RBCs) are from DEQ's RBDM guidance document, as amended November 1, 2015)																	
Occupational/ Soil Ingestion, Dermal Contact, & Inhalation	20,000	14,000	36,000	37	88,000	150	25,000	23	1,100	57,000	---	2,000	12,000	0.73	16	---	---	---
Construction Worker/ Soil Ingestion, Dermal Contact, & Inhalation	9,700	4,600	11,000	380	28,000	1,700	20,000	580	12,000	27,000	---	2,000	3,500	9	200	---	---	---
Excavation Worker/ Soil Ingestion, Dermal Contact, & Inhalation	>Max	>Max	>Max	11,000	770,000	49,000	560,000	16,000	320,000	750,000	---	54,000	98,000	250	5600	---	---	---
Occupational/ Volatilization to Outdoor Air	69,000	>Max	>Max	50	>Csat	160	>Csat	83	1,500	>Csat	---	980	---	0.65	15	---	---	---
Occupational/ Vapor Intrusion into Buildings	>Max	>Max	>Max	2.1	>Csat	17	>Csat	83	110	>Csat	---	210	---	0.16	1	---	---	---
Occupational/ Leaching to Groundwater	130	>Max	>Max	0.1	490	0.90	100	0.34	0.54	>Csat	---	12	110	0.00056	0.13	---	---	---
Urban Residential/ Soil Ingestion, Dermal Contact, & Inhalation	2,500	2,200	5,700	24	12,000	110	2,900	25	730	7,000	---	220	1,600	0.53	12	---	---	---
Urban Residential/ Volatilization to Outdoor Air	5,900	>Max	>Max	27	>Csat	85	>Csat	15	810	>Csat	---	230	---	0.35	8.1	---	---	---
Urban Residential/ Vapor Intrusion into Buildings	94	>Max	>Max	0.38	>Csat	3	160	15	20	>Csat	---	16	---	0.028	0.18	---	---	---
Urban Residential/ Leaching to Groundwater	31	9,500	>Max	0.1	310	0.94	49	0.37	0.50	280	---	6	110	0.00056	0.013	---	---	---

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Table 2: Groundwater Grab Sampling Results for Petroleum Hydrocarbons (µg/l), VOCs (µg/l), and Dissolved Lead (µg/l) Before the 2016 Data Gap Investigation

Sample ID Date	gasoline-range hydrocarbon	diesel-range hydrocarbon (see notes)	benzene	toluene	ethylbenzene	xylenes, total	naphthalene	methyl t-butyl ether(MTBE)	isopropylbenzene	n-propylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	1,2-dibromoethane(EDB)	1,2-dichloroethane (EDC)	lead (dissolved)	trichloroethene (TCE)	cis-1,2-dichloroethene	trans-1,2-dichloroethene
SP-1 04/17/02	na	na	<2	<2	2*	<2	<2	<4	<2	<3	<2	<2	<2	<2	8	<2	<3	<2
SP-2 04/17/02	na	na	5*	<2	3*	11*	<2	<4	<2	<3	16	6	<2	<2	20	<2	<3	<2
SP-3 04/17/02	na	na	**11,800**	2,060	2,290	6,040	<100	<200	<100	234	725	436	<100	<100	<5	<100	<150	<100
SP-4 04/17/02	na	na	**5,984**	1,750	1,970	8,482	<100	<200	102	281	1,408	1,427	<100	<100	na	<100	<150	<100
SP-5 06/18/03	na	na	**5,564**	<100	935	1,893	219	<200	<100	200	860	305	<100	<100	na	<100	<150	<100
SP-6 06/18/03	na	na	<2	<2	<2	<2	<2	<4	<2	<3	<2	<2	<2	<2	na	<2	<3	<2
SP-7 06/18/03	na	na	<2	<2	<2	<2	<2	<4	<2	<3	<2	<2	<2	<2	na	65	25	<2
SP-8 06/18/03	na	na	<2	<2	<2	<2	<2	<4	<2	<3	<2	<2	<2	<2	na	<2	<3	<2
SP-9 06/09/05	na	na	<0.5	<1	<1	<2	<2	<4	<2	<3	<2	<2	<2	<2	na	<2	<3	<2
SP-10 06/09/05	na	na	4	<1	20	<2	<2	<4	15	16	3	<2	<2	<2	na	<2	<3	<2
SP-11 06/09/05	na	na	<0.5	<1	<1	<2	<2	<4	<2	<3	<2	<2	<2	<2	na	<2	<3	<2
SP-12 06/09/05	na	na	<0.5	<1	<1	<2	<2	<4	<2	<3	<2	<2	<2	<2	na	<2	<3	<2
SG-1 10/10/11	**52,500**	na	**10,500**	<200	1,550	3,510	<400	<200	<200	294	1,390	408	<100	<100	<1.00	<100	<200	<100
PP-1 10/12/11	5,990	1,380 (F-05)	<1.00	<2.00	21	<3.00	<4.00	<2.00	38	28.8	<2.00	<2.00	<1.00	<1.00	<1.00	15.4	7.06	25.4
PP-3 10/12/11	**46,500**	na	**7,570**	136	2,460	5,553	154	<50.0	96	246	1,310	326	<25.0	<25.0	<1.00	<25.0	<50.0	<25.0
PP-3 (Dup) 10/12/11	**23,200**	na	**5,420**	79.0	1,080	2,255	<100	<50.0	<50.0	58.5	342	84.0	<25.0	<25.0	<1.00	<25.0	<50.0	<25.0

Notes: Risk-Based Concentrations (RBCs) are from DEQ's RBDM guidance, as amended November 1, 2015. Detected concentrations gasoline are shaded in green and benzene are shaded in red if they exceed their Groundwater in Excavation RBC. The exceeded RBC is also bolded and shaded in red or green. The diesel-range hydrocarbon detected value was qualified F-05 by the laboratory ("the sample chromatographic pattern does not resemble the fuel standard used for quantification"). Oil-range hydrocarbons were only analyzed for in sample PP-1 and were < 842 µg/l. na = not analyzed; --- no RBC available from the DEQ; nv = not volatile; >S = exceeds the solubility limit; < = less than the method reporting limit (MRL). DEQ has not identified RBDM RBCs for n-propylbenzene. The SP-# samples shaded in yellow were collected by Aspen. Aspen samples analyzed by Wy'East Analytical Laboratory. * = results may be due to laboratory contamination. The PP-#, SG-1, BH-#, and B-# samples shaded in orange were collected by C&A and analyzed by Apex Labs. Also detected in sample PP-1 were n-butylbenzene at 9.82 µg/l, sec-butylbenzene at 12.2 µg/l, and 4-isopropyltoluene at 7.04 µg/l.

Table 2: Groundwater Grab Sampling Results for Petroleum Hydrocarbons (µg/l), VOCs (µg/l), and Dissolved Lead (µg/l) Before the 2016 Data Gap Investigation

Sample ID(Date)	gasoline-range hydrocarbon (see notes)	diesel-range hydrocarbon (see notes)	benzene	toluene	ethylbenzene	xylenes, total	naphthalene	methyl t-butyl ether(MTBE)	isopropylbenzene	n-propylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	1,2-dibromoethane(EDB)	1,2-dichloroethane (EDC)	lead (dissolved)	trichloroethene (TCE)	cis-1,2-dichloroethene	trans-1,2-dichloroethene
PP-4 10/12/11	1,720	na	22.8	<1.00	2.91	4.03	<2.00	<1.00	1.94	1.87	1.17	23.6	<1.00	<1.00	<1.00	<0.500	<1.00	<0.500
BH-1 03/04/14	<100	na	<0.250	<1.00	<0.500	<1.50	<2.00	<1.00	<1.00	<0.500	<1.00	<1.00	<0.500	<0.500	na	na	na	na
BH-2 03/04/14	<100	na	<0.250	<1.00	<0.500	<1.50	<2.00	<1.00	<1.00	<0.500	<1.00	<1.00	<0.500	<0.500	na	na	na	na
BH-3 03/04/14	11,700	na	14.8	<5.00	189	87.7	126	<5.00	132	298	337	280	<2.50	<2.50	na	na	na	na
BH-3D 03/04/14	9,490	na	17.8	<10.0	176	76.7	92.7	<10.0	108	249	270	225	<5.00	<5.00	na	na	na	na
B-1 10/02/14	5,140	na	6.8	<2.00	73.6	6.64	11.2	<2.00	27	58.9	24.1	8.12	<1.00	<1.00	na	na	na	na
B-2 10/02/14	13,400	na	42	<25.0	1,080	572	<50.0	<25.0	74.2	202	502	178	<12.5	<12.5	na	na	na	na
B-3 10/02/14	31,700	na	**11,800**	<25.0	89.8	72.8	<50.0	<25.0	50.2	120	139	120	<12.5	<12.5	na	na	na	na
B-3D 10/02/14	33,200	na	**11,800**	<10.0	82.7	69.5	30.8	<10.0	57.9	120	145	121	<5.00	<5.00	na	na	na	na
B-4 10/02/14	5,150	na	354	<5.00	160	54.4	52.3	<5.00	56.3	123	190	20	<2.50	<2.50	na	na	na	na
B-5 10/02/14	7,620	na	138	<50.0	337	403	<100	<50.0	58.5	152	370	172	<25.0	<25.0	na	na	na	na
B-6 10/02/14	4,490	na	0.72	<1.00	6.78	9.42	3.45	<1.00	48.8	18.2	68	55.7	<0.700	<0.500	na	na	na	na
B-7 10/02/14	790	na	<0.250	<1.00	<0.500	<1.50	<2.00	<1.00	1.14	1.07	<1.00	<1.00	<0.500	<0.500	na	na	na	na
B-8 10/02/14	2,440	na	1.4	<1.00	20.5	<1.50	<2.00	<1.00	28.6	49.3	<1.00	<1.00	<0.600	<0.500	na	na	na	na

Notes: Risk-Based Concentrations (RBCs) are from DEQ's RBDM guidance, as amended November 1, 2015. Detected concentrations gasoline are shaded in green and benzene are shaded in red if they exceed their Groundwater in Excavation RBC. The exceeded RBC is also bolded and shaded in red or green. The diesel-range hydrocarbon detected value was qualified F-05 by the laboratory ("the sample chromatographic pattern does not resemble the fuel standard used for quantification"). Oil-range hydrocarbons were only analyzed for in sample PP-1 and were < 842 µg/l. na = not analyzed; --- no RBC available from the DEQ; nv = not volatile; >S = exceeds the solubility limit; < = less than the method reporting limit (MRL). DEQ has not identified RBDM RBCs for n-propylbenzene. The SP-# samples shaded in yellow were collected by Aspen. Aspen samples analyzed by Wy'East Analytical Laboratory. * = results may be due to laboratory contamination. The PP-#, SG-1, BH-#, and B-# samples shaded in orange were collected by C&A and analyzed by Apex Labs. Also detected in sample PP-1 were n-butylbenzene at 9.82 µg/l, sec-butylbenzene at 12.2 µg/l, and 4-isopropyltoluene at 7.04 µg/l.

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	gasoline-range hydrocarbon (see notes)	diesel-range hydrocarbon (see notes)	benzene	toluene	ethylbenzene	xylenes, total	naphthalene	methyl t-butyl ether(MTBE)	isopropylbenzene	n-propylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	1,2-dibromoethane(EDB)	1,2-dichloroethane (EDC)	lead (dissolved)	trichloroethene (TCE)	cis-1,2-dichloroethene	trans-1,2-dichloroethene
Receptor Scenario/ Exposure Pathway	Risk-Based Concentrations (from DEQ's RBC table, dated November 1, 2015)																	
Occupational/ Ingestion & Inhalation from Tapwater	450	430	2.1	6,300	6.4	830	0.72	68	2,000	---	61	600	0.034	0.78	15	3.3	1,400	260
Occupational/ Volatilization to Outdoor Air	>S	>S	14,000	>S	43,000	>S	16,000	1,500,000	>S	---	>S	>S	790	9,000	nv	19,000	>S	1,800,000
Occupational/ Vapor Intrusion into Buildings	>S	>S	2,800	>S	8,200	>S	11,000	870,000	>S	---	>S	>S	590	3,900	nv	3,300	>S	350,000
Construction & Excavation Worker/ Groundwater in Excavation	**14,000**	>S	**1,800**	220,000	4,500	23,000	500	63,000	51,000	---	1,700	15,000	27	630	>S	430	24,000	14,000
Urban Residential/ Ingestion & Inhalation from Tapwater	110	100	2.0	4,400	6.7	710	0.78	64	1,800	---	54	500	0.034	0.78	15	3.3	260	2,600
Urban Residential/ Volatilization to Outdoor Air	>S	>S	7,400	>S	23,000	>S	8,500	830,000	>S	---	>S	>S	430	4,900	nv	6,900	>S	>S
Urban Residential/ Vapor Intrusion into Buildings	22,000	>S	510	>S	1,500	86,000	2,000	160,000	>S	---	5,800	>S	110	700	nv	430	>S	>S

Notes: Risk-Based Concentrations (RBCs) are from DEQ's RBDM guidance, as amended November 1, 2015. Detected concentrations gasoline are shaded in green and benzene are shaded in red if they exceed their Groundwater in Excavation RBC. The exceeded RBC is also bolded and shaded in red or green. The diesel-range hydrocarbon detected value was qualified F-05 by the laboratory ("the sample chromatographic pattern does not resemble the fuel standard used for quantification"). Oil-range hydrocarbons were only analyzed for in sample PP-1 and were < 842 µg/l. na = not analyzed; --- no RBC available from the DEQ; nv = not volatile; >S = exceeds the solubility limit; < = less than the method reporting limit (MRL). DEQ has not identified RBDM RBCs for n-propylbenzene. The SP-# samples shaded in yellow were collected by Aspen. Aspen samples analyzed by Wy'East Analytical Laboratory. * = results may be due to laboratory contamination. The PP-#, SG-1, BH-#, and B-# samples shaded in orange were collected by C&A and analyzed by Apex Labs. Also detected in sample PP-1 were n-butylbenzene at 9.82 µg/l, sec-butylbenzene at 12.2 µg/l, and 4-isopropyltoluene at 7.04 µg/l.

Table 3: Groundwater-Well Sampling Results for Petroleum Hydrocarbons (µg/l), VOCs (µg/l), and Dissolved Lead (µg/l) Before the 2016 Data Gap Investigation

Sample ID(Date)	gasoline-range hydrocarbon	diesel-range hydrocarbon (see notes)	oil-range hydrocarbon	benzene	toluene	ethylbenzene	xylenes, total	naphthalene	methyl t-butyl ether(MTBE)	isopropylbenzene	n-propylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	1,2-dibromoethane(EDB)	1,2-dichloroethane (EDC)	lead (dissolved)
MW-1 (021212)	108	<190	<381	12.5	<1.00	7.68	5.77	<2.00	<1.00	<1.00	0.770	2.99	<1.00	<0.500	<0.500	<1.00
MW-1 (060412)	142	na	na	11.2	<1.00	12.9	7.42	<2.00	<1.00	1.39	2.25	11.7	<1.00	<0.500	<0.500	<1.00
MW-1 (082712)	959	na	na	96.2	4.31	36.5	38.1	4.04	<1.00	3.64	5.75	14.2	1.84	<0.500	<0.500	na
MW-1 (120412)	<100	na	na	0.500	<1.00	<0.500	<1.50	<2.00	<1.00	<1.00	<0.500	<1.00	<1.00	<0.500	<0.500	na
MW-1 (022513)	<100	na	na	1.98	<1.00	6.24	2.88	<2.00	<1.00	<1.00	1.42	11.4	<1.00	<0.500	<0.500	na
MW-2 (021212)	**24,700**	2,800 (F-02)	<381	**3,720**	6.44	1,980	1,110	260	<1.00	103	234	894	168	<0.500	<0.750	1.08
MW-2 (060412)	**21,800**	na	na	**4,020**	<25.0	2,110	972	248	<25.0	88.2	220	833	138	<12.5	<12.5	<1.00
MW-2 (082712)	11,500	na	na	**2,370**	<20.0	508	241	73	<20.0	40.8	71.2	223	47.4	<10.0	<10.0	na
MW-2 (120412)	10,100	na	na	**2,140**	<25.0	725	174	65.2	<25.0	45.8	86	260	39.2	<12.5	<12.5	na
MW-2 (022513)	**20,200**	na	na	**3,170**	<20.0	1,900	411	219	<20.0	86.6	217	668	67	<10.0	<10.0	na
MW-3 (021212)	2,260	565 (F-02)	<377	34.8	2.06	26.3	7.22	5.76	<1.00	17.8	15.6	4.97	1.37	<0.500	<0.750	<1.00
MW-3 (060412)	2,240	na	na	36.6	1.66	34.6	7.26	5.59	<1.00	14.6	19.4	4.23	1.3	<0.500	<0.500	<1.00
MW-3 (082712)	1,850	na	na	38.2	2.06	19.7	5.65	3.71	<1.00	10.2	9.37	2.75	1.06	<0.500	<0.650	na
MW-3 (120412)	1,700	na	na	19.4	1.23	24.2	4.16	3.68	<1.00	18.1	15.9	2.71	6.83	<0.500	<0.500	na
MW-3 (022513)	2,350	na	na	20.2	1.27	22	4.18	3.59	<1.00	17.7	15.5	2.93	<1.00	<0.500	<0.500	na
MW-4 (021212)	3,240	378 (F-02)	<377	**3,110**	8.97	8.53	4.73	2.71	<1.00	12.2	4.04	4.14	5.11	<0.500	<0.500	<1.00
MW-4 (060412)	7,850	na	na	**3,370**	<20.0	10.6	<30.0	<40.0	<20.0	<20.0	<10.0	<20.0	<20.0	<10.0	<10.0	<1.00
MW-4 (082712)	6,750	na	na	**2,560**	<20.0	<10.0	<30.0	<40.0	<20.0	<20.0	<10.0	<20.0	<20.0	<10.0	<10.0	na
MW-4 (120412)	6,640	na	na	**2,930**	<25.0	<12.5	<37.5	<50.0	<25.0	<25.0	<12.5	<25.0	<25.0	<12.5	<12.5	na
MW-4 (022513)	9,690	na	na	**3,410**	<20.0	31.0	<30.0	<40.0	<20.0	<20.0	<10.0	<20.0	<20.0	<10.0	<10.0	na
MW-4 (030414)	5,100	na	na	**4,120**	9.54	7.48	3.17	<2.00	<1.00	11.3	2.34	<1.00	1.05	<0.500	<0.500	na
MW-4 (100214)	<5,000	na	na	**2,180**	<50.0	<25.0	<75.0	<100	<50.0	<50.0	<25.0	<50.0	<50.0	<25.0	<25.0	na
MW-5 (021212)	413	<190	<381	95.3	<1.00	0.52	<1.50	<2.00	<1.00	<1.00	0.72	<1.00	<1.00	<0.500	<0.500	<1.00

Notes: Risk-Based Concentrations (RBCs) are from DEQ's RBDM guidance, as amended November 1, 2015. Detected concentrations gasoline are shaded in green and benzene are shaded in red if they exceed their Groundwater in Excavation RBC. The exceeded RBC is also shaded in red or green. All diesel-range hydrocarbon detected values from February 2012 event were qualified F-02 by the laboratory ("results in the reported range are primarily due to a mid-range hydrocarbon"), are not compared to the RBCs, and were not analyzed for in subsequent groundwater monitoring events. DEQ has not identified RBDM RBCs for n-propylbenzene. na = not analyzed; --- no RBC available from the DEQ; nv = not volatile; >S = exceeds the solubility limit; D = duplicate sample; < = less than the method reporting limit (MRL).

Table 3: Groundwater-Well Sampling Results for Petroleum Hydrocarbons (µg/l), VOCs (µg/l), and Dissolved Lead (µg/l) Before the 2016 Data Gap Investigation

Sample ID(Date)	gasoline-range hydrocarbon	diesel-range hydrocarbon (see notes)	oil-range hydrocarbon	benzene	toluene	ethylbenzene	xylenes, total	naphthalene	methyl t-butyl ether(MTBE)	isopropylbenzene	n-propylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	1,2-dibromoethane(EDB)	1,2-dichloroethane (EDC)	lead (dissolved)
MW-5 (060412)	848	na	na	326	<1.00	3.15	2.11	<2.00	<1.00	1.38	0.96	1.71	<1.00	<0.500	<0.500	<1.00
MW-5 (082712)	5,110	na	na	**1,880**	<20.0	12.8	42.4	<40.0	<20.0	<20.0	<10.0	22.4	<20.0	<10.0	<10.0	na
MW-5 (120412)	1,540	na	na	634	<2.00	1.18	<3.00	<4.00	<2.00	<2.00	<1.00	<2.00	<2.00	<1.00	<1.00	na
MW-5D (082712)	na	na	na	659	<20.0	<10.0	<30.0	<40.0	<20.0	<20.0	<10.0	<20.0	<20.0	<10.0	<10.0	na
MW-5 (022513)	757	na	na	213	<2.00	<1.00	<3.00	<4.00	<2.00	<2.00	<1.00	<2.00	<2.00	<1.00	<1.00	na
MW-6 (021212)	**36,000**	2,270 F-02	<381	**13,000**	20	859	934	120	<1.00	58.3	103	400	113	<0.500	<2.00	1.03
MW-6D (021212)	na	na	na	**12,900**	20.9	847	912	131	<1.00	61.8	110	378	120	<0.500	<2.25	na
MW-6 (060412)	**36,900**	na	na	**14,600**	<100	1,140	450	<200	<100	<100	128	235	103	<50.0	<50.0	<1.00
MW-6 (082712)	**24,000**	na	na	**11,200**	21.2	358	133	<40.0	<20.0	40	48.6	69.4	30.2	<10.0	<10.0	na
MW-6D (082712)	na	na	na	**11,500**	20.4	360	135	<40.0	<20.0	37.4	46.8	69	30.2	<10.0	<10.0	na
MW-6 (120412)	**26,800**	na	na	**11,300**	<100	206	<150	<200	<100	<100	<50.0	<100	<100	<50.0	<50.0	na
MW-6 (022513)	**42,400**	na	na	**13,000**	<100	1,050	589	<200	<100	<100	103	247	<100	<50.0	<50.0	na
MW-6D (022513)	**43,100**	na	na	**13,000**	<100	1,070	612	<200	<100	<100	103	253	<100	<50.0	<50.0	na
MW-6 (030414)	**25,700**	na	na	**11,400**	20.2	802	335	57.5	<10.0	40.4	69.8	163	44.1	<5.00	<5.00	na
MW-6 (100214)	**21,700**	na	na	**10,000**	<100	224	<150	<200	<100	<100	<50.0	<100	<100	<50.0	<50.0	na
Receptor Scenario/ Exposure Pathway	Risk-Based Concentrations (from DEQ's RBC table, dated November 1, 2015)															
Occupational/ Ingestion & Inhalation from Tapwater	450	430	1,300	2.1	6,300	6.4	830	0.72	68	2,000	---	61	600	0.034	0.78	15
Occupational/ Volatilization to Outdoor Air	>S	>S	>S	14,000	>S	43,000	>S	16,000	1,500,000	>S	---	>S	>S	790	9,000	nv
Occupational/ Vapor Intrusion into Buildings	>S	>S	>S	2,800	>S	8,200	>S	11,000	870,000	>S	---	>S	>S	590	3,900	nv
Construction & Excavation Worker/ Groundwater in Excavation	**14,000**	>S	>S	**1,800**	220,000	4,500	23,000	500	63,000	51,000	---	1,700	15,000	27	630	>S
Urban Residential/ Ingestion & Inhalation from Tapwater	110	100	300	2.0	4,400	6.7	710	0.78	64	1,800	---	54	500	0.034	0.78	15
Urban Residential/ Volatilization to Outdoor Air	>S	>S	>S	7,400	>S	23,000	>S	8,500	830,000	>S	---	>S	>S	430	4,900	nv
Urban Residential/ Vapor Intrusion into Buildings	22,000	>S	>S	510	>S	1,500	86,000	2,000	160,000	>S	---	5,800	>S	110	700	nv

Notes: Risk-Based Concentrations (RBCs) are from DEQ's RBDM guidance, as amended November 1, 2015. Detected concentrations gasoline are shaded in green and benzene are shaded in red if they exceed their Groundwater in Excavation RBC. The exceeded RBC is also shaded in red or green. All diesel-range hydrocarbon detected values from February 2012 event were qualified F-02 by the laboratory ("results in the reported range are primarily due to a mid-range hydrocarbon"), are not compared to the RBCs, and were not analyzed for in subsequent groundwater monitoring events. DEQ has not identified RBDM RBCs for n-propylbenzene. na = not analyzed; --- no RBC available from the DEQ; nv = not volatile; >S = exceeds the solubility limit; D = duplicate sample; < = less than the method reporting limit (MRL).

Table 4. Field Parameter Results

Sampling Dates / Groundwater Parameters	Monitoring Well Designations (TOC elevations, ft)					
	MW-1 (157.24)	MW-2 (157.66)	MW-3 (156.73)	MW-4 (156.58)	MW-5 (157.04)	MW-6 (157.03)
12/02/11 (survey)						
water level depth (ft)	7.78	8.49	7.31	8.55	8.37	8.17
water level elevation (ft)	149.46	149.17	149.42	148.03	148.67	148.86
02/01/12 (1st Quarter)						
water level depth (ft)	5.80	7.28	6.62	8.00	7.25	7.42
water level elevation (ft)	151.44	150.38	150.11	148.58	149.79	149.61
pH	6.73	7.06	7.30	7.73	6.86	6.97
temperature (°C)	14.6	17.2	12.8	19.4	13.9	14.6
conductivity (µS/cm)	257.	1,147.	642.	902.	522.	897.
DO (mg/l)	4.25	2.6	3.8	3.8	4.5	3.45
Eh (mv)	56.	15.	97.	27.	110.	26.
06/04/12 (2nd Quarter)						
water level depth (ft)	8.14	9.10	7.66	8.88	8.84	8.85
water level elevation (ft)	149.10	148.56	149.07	147.70	148.20	148.18
pH	6.59	6.96	7.20	7.32	7.08	7.20
temperature (°C)	14.8	14.3	14.7	15.5	13.6	15.2
conductivity (µS/cm)	424.	1,099.	593.	905.	441.	931.
DO (mg/l)	nm	nm	nm	nm	nm	nm
Eh (mv)	12.	68.	77.	87.	46.	82.
08/27/12 (3rd Quarter)						
water level depth (ft)	12.29	13.33	11.05	12.44	13.43	12.35
water level elevation (ft)	144.95	144.33	145.68	144.14	143.61	144.68
pH	6.74	6.99	6.88	7.31	6.95	7.19
temperature (°C)	16.7	15.4	15.9	17.1	14.4	15.9
conductivity (µS/cm)	474.	841.	665.	909.	845.	823.
DO (mg/l)	0.2	0.0	2.0	0.9	0.4	0.2
Eh (mv)	-49.	-61.	-35.	-68.	-65.	-74.
12/04/12 (4th Quarter)						
water level depth (ft)	6.75	7.58	6.39	7.91	7.28	7.39
water level elevation (ft)	150.49	150.08	150.34	148.67	149.76	149.64
pH	6.56	6.85	7.13	7.38	6.88	6.99
temperature (°C)	15.5	14.8	14.6	15.5	13.7	15.4
conductivity (µS/cm)	275.	992.	688.	897.	673.	813.
DO (mg/l)	1.6	0.5	0.4	2.0	0.4	0.3
Eh (mv)	-28.	-66.	-35.	-55.	-61.	-88.

Notes: TOC = top of casing; ft = feet; °C = degrees celsius; µS/cm = micro Siemens per centimeter; mg/l = milligrams per liter; mv = millivolts; nm = not measured.

Table 4. Field Parameter Results

Sampling Dates / Groundwater Parameters	Monitoring Well Designations (TOC elevations, ft)					
	MW-1 (157.24)	MW-2 (157.66)	MW-3 (156.73)	MW-4 (156.58)	MW-5 (157.04)	MW-6 (157.03)
02/25/13 (5th Quarter)						
water level depth (ft)	7.48	8.10	6.84	8.29	7.88	7.78
water level elevation (ft)	149.76	149.56	149.89	148.29	149.16	149.25
pH	6.45	6.79	7.08	7.35	6.71	7.01
temperature (°C)	11.3	13.1	12.7	14.2	12.1	13.5
conductivity (µS/cm)	340.	1,137.	665.	923.	526.	923.
DO (mg/l)	0.8	0.0	4.0	1.4	2.4	0.3
Eh (mv)	121.	54	157.	99.	187.	38.
03/04/14 (sewer trench)						
water level depth (ft)	5.68	7.23	6.56	7.97	7.07	7.32
water level elevation (ft)	151.56	150.43	150.17	148.61	149.97	149.71
pH	nm	nm	nm	7.89	nm	6.73
temperature (°C)	nm	nm	nm	16.2	nm	15.8
conductivity (µS/cm)	nm	nm	nm	631.	nm	664.
DO (mg/l)	nm	nm	nm	nm	nm	nm
Eh (mv)	nm	nm	nm	-3.	nm	-11.
09/19/14 (Sidway Bas.)						
water level depth (ft)	nm	nm	11.69	13.04	nm	13.04
water level elevation (ft)	nm	nm	145.04	143.54	nm	143.99
pH	nm	nm	nm	nm	nm	nm
temperature (°C)	nm	nm	nm	nm	nm	nm
conductivity (µS/cm)	nm	nm	nm	nm	nm	nm
DO (mg/l)	nm	nm	nm	nm	nm	nm
Eh (mv)	nm	nm	nm	nm	nm	nm
10/02/14 (Sidway Bas.)						
water level depth (ft)	11.42	12.57	10.11	11.57	12.78	11.42
water level elevation (ft)	145.82	145.09	146.62	145.01	144.26	145.61
pH	nm	nm	nm	nm	nm	nm
temperature (°C)	nm	nm	nm	nm	nm	nm
conductivity (µS/cm)	nm	nm	nm	nm	nm	nm
DO (mg/l)	nm	nm	nm	nm	nm	nm
Eh (mv)	nm	nm	nm	nm	nm	nm

Notes: TOC = top of casing; ft = feet; °C = degrees celsius; µS/cm = micro Siemens per centimeter; mg/l = milligrams per liter; mv = millivolts; nm = not measured.

Table 4. Pilot Study Field Parameter Results

Sampling Dates / Groundwater Parameters	Monitoring Well Designations (TOC elevations, ft)					
	MW-1 (157.24)	MW-2 (157.66)	MW-3 (156.73)	MW-4 (156.58)	MW-5 (157.04)	MW-6 (157.03)
09/08/15 (Pre-Plt Study)						
water level depth (ft)	11.69	12.87	10.42	11.72	13.09	11.71
water level elevation (ft)	145.55	144.79	146.31	144.86	143.95	145.32
pH	nm	nm	nm	nm	nm	7.08
temperature (°C)	nm	nm	nm	nm	nm	16.0
conductivity (µS/cm)	nm	nm	nm	nm	nm	412.
DO (mg/l)	nm	nm	nm	nm	nm	0.64
Eh (mv)	nm	nm	nm	nm	nm	25.
09/29/15 (Pst-Plt Study)						
water level depth (ft)	11.00	12.12	9.79	10.79	12.31	10.92
water level elevation (ft)	146.24	145.54	146.94	145.79	144.73	146.11
pH	nm	nm	nm	nm	nm	6.04
temperature (°C)	nm	nm	nm	nm	nm	18.01
conductivity (µS/cm)	nm	nm	nm	nm	nm	9.13
DO (mg/l)	nm	nm	nm	nm	nm	1.26
Eh (mv)	nm	nm	nm	nm	nm	342
11/09/15 (Pst-Plt Study)						
water level depth (ft)	8.76	8.91	7.38	8.81	8.91	8.41
water level elevation (ft)	148.48	148.75	149.35	147.77	148.13	148.62
pH	nm	nm	nm	nm	nm	6.40
temperature (°C)	nm	nm	nm	nm	nm	13.5
conductivity (µS/cm)	nm	nm	nm	nm	nm	5.62
DO (mg/l)	nm	nm	nm	nm	nm	1.50
Eh (mv)	nm	nm	nm	nm	nm	265
2/18/16 (Data Gap Inv.)						
water level depth (ft)	5.43	7.01	6.54	7.86	6.99	7.20
water level elevation (ft)	151.81	150.65	150.19	148.72	150.05	149.83

Notes: TOC = top of casing; ft = feet; °C = degrees celsius; µS/cm = micro Siemens per centimeter; mg/l = milligrams per liter; mv = millivolts; nm = not measured.

Table 5. Groundwater Monitoring Analysis Results for Additional Parameters (mg/l) and Dissolved Gases (µg/l)

Sample ID (date)	BOD	COD	total alkalinity	total sulfate	total iron	dissolved iron	total manganese	dissolved manganese	methane	ethane	ethene
MW-1 (02/25/13)	**5.26**	<10.0	**139**	**8.47**	**0.648**	**0.48**	**0.446**	**0.473**	**2,000**	<0.10	<0.10
MW-2 (02/25/13)	**21.6**	**30.9**	**629**	<1.00	**11.2**	**10.4**	**12.2**	**11.8**	**2,700**	**1.9**	**0.23**
MW-3 (02/25/13)	<4.00	<10.0	**342**	<1.00	**1.35**	**1.84**	**4.53**	**4.6**	**180**	**0.2**	**0.22**
MW-4 (02/25/13)	**8.78**	**19.6**	**484**	<1.00	**1.76**	**1.93**	**1.75**	**1.78**	**340**	**10**	**4.8**
MW-5 (02/25/13)	<4.00	<10.0	**255**	**4.67**	**1.24**	**1.47**	**1.94**	**1.67**	**140**	<0.10	<0.10
MW-6 (02/26/13)	**26.2**	**53**	**521**	<1.00	**5.42**	**4.66**	**4.66**	**4.44**	**860**	**0.13**	**0.17**

Notes:
Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), total alkalinity is bicarbonate alkalinity, dissolved gases (methane, ethane, and ethene).

Table 6a. Soil-Gas Analysis Results (µg/m^3) for Gasoline and Gasoline COIs

Sample ID (Date)	benzene	toluene	ethylbenzene	xylenes	isopropylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	naphthalene	MTBE	1,2-dibromoethane (EDB)	1,2-dichloroethane (EDC)	gasoline-range hydrocarbon
3rd Quarter SG-1 (082712)	<0.88	1.3	<1.2	<1.2	<1.4	<1.4	<1.4	<7.2	4.0	<2.1	<1.1	<110
4th Quarter SG-1 (120412)	2.7	5.7	2.2	7.9	<1.4	<1.4	<1.4	<7.2	2.4	<2.1	<1.1	800
5th Quarter SG-1 (022613)	<0.76	25	<1.0	1.6	<1.2	1.2	<1.2	<6.2	<0.86	<1.8	<0.96	170
6th Quarter SG-1 (060613)	<0.82	1.7	<1.1	<1.1	<1.3	<1.3	<1.3	<6.8	<0.93	<2.0	<1.0	<100
Receptor Scenario/ Exposure Pathway	Risk-Based Concentrations (from DEQ's RBC table, dated November 1, 2016)											
Occupational/ Vapor Intrusion into Buildings	1,600	21,900,000	4,900	440,000	1,800,000	31,000	>Pv	360	47,000	20	470	1,700,000
Urban Residential/ Vapor Intrusion into Buildings	170	1,000,000	530	21,000	83,000	1,500	>Pv	39	5,100	2.2	51	79,000

Notes: RBCs are from DEQ's RBDM guidance, as amended November 1, 2015. Gasoline is total petroleum hydrocarbons reference to gasoline (molecular weight = 100). >Pv = the air concentration reported for the RBC exceeds the vapor pressure of the pure chemical. Isopropylbenzene is also known as cumene. Methyl tert-butyl ether (MTBE). Constituents of Interest (COIs).

Table 6b. Soil-Gas Analysis Results for Additional Detected Compounds (µg/m³) and Helium (%)

Sample ID (date)	acetone	2-butanone (MEK)	chloromethane	cyclohexane	trans-1,2-dichloroethene	ethanol	freon 11	freon 12	heptane	hexane	methylene chloride	2-propanol	tetrachloroethene (PCE)	helium
3rd Quarter SG-1 (082712)	160	<4.1	<0.57	<0.95	<1.1	<2.6	1.9	2.7	<1.1	<0.97	<1.9	10	6.7	<0.14
4th Quarter SG-1 (120412)	120	<4.1	0.58	<0.95	<1.1	<2.6	<1.6	3.7 J	3.4	3.3	<1.9	12	<1.9	<0.14
5th Quarter SG-1 (022613)	14	<3.5	<0.49	2.7	1.4	46	<1.3	2.6	1.4	3.1	2.7	4.0 J	24	<0.16
6th Quarter SG-1 (060613)	27	6.2	0.61	<0.89	<1.0	3.8	<1.4	2.3	<1.0	<0.91	<1.8	<3.2	<1.8	<0.13
Receptor Scenario/ Exposure Pathway	Risk-Based Concentrations (from DEQ's RBC table, dated November 1, 2016)													
Occupational/ Vapor Intrusion into Buildings	---	---	390,000	---	>Pv	---	3,100,000	---	---	---	1,200,000	---	47,000	---
Urban Residential/ Vapor Intrusion into Buildings	---	---	19,000	---	>Pv	---	150,000	---	---	---	37,000	---	5,100	---

Notes: RBCs are from DEQ's RBDM guidance, as amended November 1, 2015. --- = DEQ has not identified RBDM RBCs for acetone, 2-butanone, cyclohexane, ethanol, freon 12, heptane, hexane, 2-propanol, and helium.
Freon 11 is also known as trichlorofluoromethane. Methylene chloride is also known as dicloromethane. J = Estimated value due to bias in the CCV. >Pv = the air concentration reported for the RBC exceeds the vapor pressure of the pure chemical.

Table 7a. Air Sample Analysis Results (µg/m^3) for Gasoline and Gasoline COIs

Sample ID (date)	benzene	toluene	ethylbenzene	xylenes	isopropylbenzene (cumene)	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	naphthalene	MTBE	1,2-dibromoethane EDB	1,2-dichloroethane EDC	gasoline-range hydrocarbon
SIC-1-2/8 (02/08/03)	1	1.5	<0.56	0.77	not analyzed	<0.63	<0.63	not analyzed	<2.3	<0.99	<0.52	not analyzed
SIC-2-2/8 (02/08/03)	0.97	1.6	<0.71	<0.71	not analyzed	<0.80	<0.80	not analyzed	<2.9	<1.2	<0.66	not analyzed
1-1st floor (08/25/06)	<2.1	17	2.9	6.8	<16	4.8	<3.3	not analyzed	<12	<5.2	<2.7	not analyzed
2-2nd floor (08/25/06)	<0.62	2	<0.69	0.84	<3.9	<0.78	<0.78	not analyzed	<2.8	<1.2	<0.64	not analyzed
3-outside (08/25/06)	0.98	2.9	0.71	1.4	<4.0	<0.81	<0.81	not analyzed	<3.0	<1.3	<0.66	not analyzed
4-basement (08/25/06)	1.2	9.1	2.3	7.1	<3.3	2.5	0.67	not analyzed	<2.4	<1.0	<0.55	not analyzed
5-basement (08/25/06)	<2.5	10	<3.4	5.5	<19	<3.8	<3.8	not analyzed	<14	<6.0	<3.1	not analyzed
AS-1(07/25/13)	<0.54	6.9	0.78	1.9	<0.82	<0.82	<0.82	<4.4	<0.60	<1.3	**1**	420
AS-1(03/06/14)	1.2	17	2.2	9.3	1.2	9	3.5	<5.3	<0.72	<1.5	<0.81	1,200
AS-2(07/25/13)	<0.51	5.7	0.83	2.5	<0.79	<0.79	<0.79	<4.2	<0.58	<1.2	**0.79**	380
AS-2D(07/25/13)	<0.50	5.4	0.7	2.6	<0.76	<0.76	<0.76	<4.1	<0.56	<1.2	<0.63	370
AS-2(03/06/14)	0.96	7.9	1.5	7.4	1.2	8.9	3.6	<4.9	<0.76	<1.4	<0.76	1,100

Notes: Sample AS-2D is a duplicate sample of AS-2. Risk-Based Concentrations (RBCs) are from DEQ's RBDM guidance document, as amended November 1, 2015. Bolding highlights detected values greater than the Occupational RBC. Detected concentrations are shaded in red if they exceed an Occupational, Air, Inhalation RBC. The exceeded RBC is also shaded in red. >Pv = The air concentration reported for the RBC exceeds the vapor pressure of the pure chemical. It can be assured that this constituent cannot create an unacceptable risk this pathway. Constituents of Interest (COIs). Isopropylbenzene is also known as cumene. Methyl tert-butyl ether (MTBE).

Table 7a. Air Sample Analysis Results (µg/m^3) for Gasoline and Gasoline COIs

Sample ID (date)	benzene	toluene	ethylbenzene	xylenes	isopropylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	naphthalene	MTBE	1,2-dibromoethane EDB	1,2-dichloroethane EDC	gasoline-range hydrocarbon
AS-3(07/25/13)	<0.65	10	1.5	4.8	<1.0	<1.0	<1.0	<5.3	<0.73	<1.6	**0.83**	650
AS-3 (03/06/14)	1.1	8.2	1.5	8.3	1.3	10	3.8	<4.2	<0.58	<1.2	<0.65	1,100
AS-4(07/25/13)	<0.50	1.3	<0.68	0.82	<0.77	<0.77	<0.77	<4.1	<0.56	<1.2	<0.63	160
AS-5(07/25/13)	<0.54	1.2	<0.73	0.83	<0.82	<0.82	<0.82	<4.4	<0.60	<1.3	<0.68	160
AS-5(03/06/14)	0.79	1.9	<0.74	2.45	<0.84	1.3	<0.84	<4.5	<0.62	<1.3	<0.69	86
AS-6(07/25/13)	<0.88	<1.0	<1.2	<2.4	<1.4	<1.4	<1.4	<7.2	<1.0	<2.1	<1.1	340
AS-6 (03/06/14)	0.58	2.2	<0.67	2.1	<0.76	1	<0.76	<4.1	<0.56	<1.2	<0.63	74
AS-7(07/25/13)	0.75	4.3	<0.96	0.98	1.1	<1.1	<1.1	<5.8	<0.80	<1.7	<0.89	1,000
AS-7(03/06/14)	0.78	5.5	<0.78	2.78	<0.88	1.4	<0.88	<4.7	<0.64	<1.4	<0.72	110
AS-8(07/25/13)	0.56	7.6	<0.71	1.1	<0.81	<0.81	<0.81	<4.3	<0.59	<1.3	<0.66	1,200
AS-8(03/06/14)	0.74	19	1.1	3.4	<0.94	1.8	<0.94	<5.0	<0.69	<1.5	<0.77	250
AS-9(07/25/13)	<0.61	0.84	<0.82	<1.6	<0.93	<0.93	<0.93	<5.0	<0.68	<1.5	<0.77	130

Notes: Sample AS-2D is a duplicate sample of AS-2. Risk-Based Concentrations (RBCs) are from DEQ's RBDM guidance document, as amended November 1, 2015. Bolding highlights detected values greater than the Occupational RBC. Detected concentrations are shaded in red if they exceed an Occupational, Air, Inhalation RBC. The exceeded RBC is also shaded in red. >Pv = The air concentration reported for the RBC exceeds the vapor pressure of the pure chemical. It can be assured that this constituent cannot create an unacceptable risk this pathway. Constituents of Interest (COIs). Isopropylbenzene is also known as cumene. Methyl tert-butyl ether (MTBE).

Table 7a. Air Sample Analysis Results (µg/m^3) for Gasoline and Gasoline COIs

Sample ID (date)	benzene	toluene	ethylbenzene	xylenes	isopropylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	naphthalene	MTBE	1,2-dibromoethane EDB	1,2-dichloroethane EDC	gasoline-range hydrocarbon
AS-10(07/25/13)	<0.59	1.4	<0.81	<1.6	<0.91	<0.91	<0.91	<4.9	<0.67	<1.4	<0.75	<76
AS-10(03/06/14)	0.77	1.7	<0.74	1.6	<0.84	1.1	<0.84	<4.5	<0.62	<1.3	<0.69	<70
AS-11(03/06/14)	0.82	4.4	<0.79	1.5	<0.90	<0.90	<0.90	<4.8	<0.66	<1.4	<0.74	<75
Receptor Scenario/ Exposure Pathway	Risk-Based Concentrations (from DEQ's RBC table, dated November 1, 2015)											
Occupational/ Inhalation	1.6	22,000	4.9	440	1,800	31	>Pv	0.36	47	0.02	**0.47**	1,700
Urban Residential/ Inhalation	0.85	5,200	2.7	100	420	7.3	>Pv	0.2	26	0.011	0.26	390

Notes: Sample AS-2D is a duplicate sample of AS-2. Risk-Based Concentrations (RBCs) are from DEQ's RBDM guidance document, as amended November 1, 2015. Bolding highlights detected values greater than the Occupational RBC. Detected concentrations are shaded in red if they exceed an Occupational, Air, Inhalation RBC. The exceeded RBC is also shaded in red. >Pv = The air concentration reported for the RBC exceeds the vapor pressure of the pure chemical. It can be assured that this constituent cannot create an unacceptable risk this pathway. Constituents of Interest (COIs). Isopropylbenzene is also known as cumene. Methyl tert-butyl ether (MTBE).

Table 7b. Air Sample Analysis Results (µg/m^3) for Additional Detected Compounds

Sample ID (date)	acetone	2-butanone (MEK)	carbon tetrachloride	chloroform	chloromethane	cyclohexane	1,4-dioxane	ethanol	4-ethyltoluene	freon 11	freon 12	heptane	hexane	4-methyl-2-pentanone	methylene chloride	2-propanol	styrene	tetrachloroethene (PCE)	tetrahydrofuran	trichloroethene
SIC-1-2/8 (02/08/03)	12	2.3	<0.81	<0.63	1.2	<2.2	<2.3	35	<3.2	1.8	3.6	<2.6	<2.3	<2.6	0.61	2	<0.55	<0.88	<1.9	<0.69
SIC-2-2/8 (02/08/03)	9.6	<2.4	<1.0	<0.80	1.2	<2.8	<2.9	10	<4.0	1.9	3.5	<3.4	<2.9	<3.4	1.4	<2.0	<0.70	<1.1	<2.4	<0.88
1-1st floor (08/25/06)	62	9.9	4.2	3.3	1.8	12	12	200 J	<16	<3.8	<3.3	14	12	14	12	16	<2.9	13	9.9	<3.6
2-2nd floor (08/25/06)	1.1	<2.3	<0.99	<0.77	1.2	<2.7	<2.8	36 J	<3.9	1.1	2.3	<3.2	<2.8	<3.2	<1.1	2.8	<0.67	<1.1	<2.3	<0.85
3-outside (08/25/06)	8.8	<2.4	<1.0	<0.80	1.2	<2.8	<3.0	12 J	<4.0	1.4	2.2	<3.4	3.7	<3.4	<1.1	<2.0	<0.70	<1.1	<2.4	<0.88
4-basement (08/25/06)	40	3.5	<0.86	0.67	1.5	<2.3	<2.4	360 JE	<3.3	2.1	2.4	<2.8	11	<2.8	5.3	21	1	2.9	<2.0	<0.73
5-basement (08/25/06)	46	<11	<4.9	<3.8	<1.6	<13	<14	200 J	<19	<4.4	3.8	<16	<14	<16	9.8	12	<3.3	7	<11	<4.2
AS-1 (07/25/13)	47	6.4	<1.0	1.5	<1.7	1	<0.60	440 E	<0.82	2	2	1.1	<0.59	1.9 J	11	9.9	<0.72	<1.1	3.5	<0.90
AS-1(03/06/ 14)	44	5.8	<1.3	<0.98	<2.1	1.3	1.5	430 JE	3.6	1.8	3	1.8	2.3	1.4	4.6	15	1.2	<1.4	<3.0	<1.1
AS-2 (07/25/13)	50	7.2	<1.0	1.3	<1.6	0.93	<0.58	390 E	<0.79	1.6	1.8	1.1	<0.56	1.7 J	6.6	8.6	<0.68	<1.1	3.4	<0.86
AS-2D (07/25/13)	48	7.8	<0.98	1.2	<1.6	0.92	<0.56	350 E	<0.76	1.7	1.9	1	<0.55	1.5 J	6.8	8.9	<0.66	<1.0	3.5	<0.83
AS-2(03/06/ 14)	40	4.7	<1.2	<0.91	2.1	<0.64	<0.67	500 JE	12	1.8	2.9	1	0.69	1.3	1.6	14	<0.80	<1.3	<2.8	<1.0
AS-3 (07/25/13)	55	10	1.3	1.6	<2.1	3.2	<0.73	630 E	<1.0	1.9	2	1.6	0.92	3.1 J	18	13	<0.86	1.6	3.3	<1.1
AS-3(03/06/ 14)	36	4.9	<1.0	<0.79	1.8	0.75	0.74	400 JE	13	1.9	2.6	1.1	0.77	1.2	16	13	0.86	<1.1	<2.4	<0.86
AS-4 (07/25/13)	10	3.2	1	1.8	<1.6	<0.54	<0.56	42	<0.77	0.95	1.8	0.66	<0.55	<0.64 UJ	1.3	<1.9	<0.66	<1.0	<2.3	<0.84
AS-5 (07/25/13)	9.6	<2.5	1.2	1.8	<1.7	<0.58	<0.60	34	<0.82	1	1.8	<0.69	<0.59	<0.69 UJ	1.6	<2.1	<0.72	<1.1	<2.5	<0.90
AS-5(03/06/ 14)	12	<2.5	<1.1	<0.83	<1.8	<0.59	<0.62	72J	1.4	1.6	2.9	<0.70	<0.60	<0.70	<1.2	<2.1	<0.73	<1.2	<2.5	<0.92

Notes: Sample AS-2D is a duplicate sample of AS-2. Risk-Based Concentrations (RBCs) are from DEQ's RBDM guidance document, as amended November 1, 2015. Bolding highlights detected values greater than the most restrictive Urban Residential RBC. Methylene chloride is listed as dichloromethane in the DEQ's Table of RBCs. DEQ has not identified RBDM RBCs for the following detected compounds; acetone, 2-butanone (MEK), cyclohexane, ethanol, 4-ethyltoluene, freon 12, heptane, hexane, 4-methyl-2-pentanone, 2-propanol, and tetrahydrofuran. E = exceeds instrument calibration range. J = Estimated value due to bias in the CCV. UJ = Non-detected compound associated with low bias in the CCV and/or LCS.

Table 7b. Air Sample Analysis Results (µg/m^3) for Additional Detected Compounds

Sample ID (date)	acetone	2-butanone (MEK)	carbon tetrachloride	chloroform	chloromethane	cyclohexane	1,4-dioxane	ethanol	4-ethyltoluene	freon 11	freon 12	heptane	hexane	4-methyl-2-pentanone	methylene chloride	2-propanol	styrene	tetrachloroethene (PCE)	tetrahydrofuran	trichloroethene
AS-6 (07/25/13)	8.5	4.2	<1.7	1.6	<2.8	<0.95	<0.99	13	<1.4	<1.6	1.8	<1.1	0.97	<1.1 UJ	<1.9	<3.4	<1.2	<1.9	<4.1	<1.5
AS-6(03/06/ 14)	12	<2.3	<0.98	0.94	<1.6	<0.53	<0.56	110J	0.92	1.5	2.7	<0.64	<0.55	<0.63	<1.1	<1.9	<0.66	<1.0	<2.3	<0.83
AS-7 (07/25/13)	20	5.3	<1.4	1.8	<2.3	<0.76	<0.80	770 E	<1.1	<1.2	1.9	1.6	2.3	<0.90 UJ	<1.5	33	1.1	<1.5	<3.2	<1.2
AS-7(03/06/ 14)	20	3.7	<1.1	1.3	<1.8	<0.62	<0.64	750JE	1.2	1.9	3.1	<0.73	1.6	<0.73	<1.2	14	<0.76	<1.2	<2.6	1.6
AS-8 (07/25/13)	19	6.5	<1.0	1.6	<1.7	0.62	<0.59	930 E	<0.81	1	2.1	1.7	2	<0.67 UJ	<1.1	38	<0.70	<1.1	<2.4	<0.88
AS-8(03/06/ 14)	23	8.9	<1.2	0.95	<2.0	<0.66	<0.69	1,600 JE	1.5	1.8	3.6	1.2	6.8	0.9	1.5	13	<0.81	<1.3	<2.8	<1.0
AS-9 (07/25/13)	9.3	<2.8	<1.2	6.3	<2.0	<0.65	<0.68	72	<0.93	1.2	3.6	<0.78	<0.67	<0.78 UJ	<1.3	<2.3	<0.81	<1.3	<2.8	<1.0
AS-10 (07/25/13)	14	6.2	<1.2	<0.91	<1.9	<0.64	<0.67	8.8	<0.91	1.1	1.9	<0.76	<0.66	<0.76 UJ	<1.3	<2.3	<0.79	<1.3	<2.7	<1.0
AS-10(03/06 /14)	9.4	<2.5	<1.1	<0.83	2.8	<0.59	<0.62	11J	1	1.6	3.1	<0.70	<0.60	<0.70	<1.2	<2.1	<0.73	<1.2	<2.5	<0.92
AS-11(03/06 /14)	18	<2.7	<1.2	1	2.1	<0.63	<0.66	820 JE	<0.90	1.4	3.2	<0.75	0.7	<0.75	<1.3	17	<0.78	<1.2	<2.7	<0.98
Receptor Scenario/ Exposure Pathway	Risk-Based Concentrations (from DEQ's RBC table, dated November 1, 2015)																			
Occupational/ Inhalation	---	---	2	0.53	390	---	1.6	---	---	3,100	---	---	---	---	26	---	4,400	47	---	3
Urban Residential/ Inhalation	---	---	1.1	0.29	94	---	0.86	---	---	730	---	---	---	---	14	---	1,000	26	---	1

Notes: Sample AS-2D is a duplicate sample of AS-2. Risk-Based Concentrations (RBCs) are from DEQ's RBDM guidance document, as amended November 1, 2015. Bolding highlights detected values greater than the most restrictive Urban Residential RBC. Methylene chloride is listed as dichloromethane in the DEQ's Table of RBCs. DEQ has not identified RBDM RBCs for the following detected compounds; acetone, 2-butanone (MEK), cyclohexane, ethanol, 4-ethyltoluene, freon 12, heptane, hexane, 4-methyl-2-pentanone, 2-propanol, and tetrahydrofuran. E = exceeds instrument calibration range. J = Estimated value due to bias in the CCV. UJ = Non-detected compound associated with low bias in the CCV and/or LCS.

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Table 8: Summary of Soil Results from the 2016 Data Gap Investigation

Oregon Lithoprint Site
McMinnville, Oregon
DEQ File No. 36-85-4001

	Units	OR RBDM Soil Ingestion, Dermal Contact, and Inhalation (Residential)	OR RBDM Soil Ingestion, Dermal Contact, and Inhalation (Urban Residential)	OR RBDM Soil Ingestion, Dermal Contact, and Inhalation (Occupational)	OR RBDM Soil Ingestion, Dermal Contact, and Inhalation (Const Worker)	OR RBDM Soil Ingestion, Dermal Contact, and Inhalation (ExcavationWorker)	R RBDM Soil Volatilization to Outdoor Air (Urban Residential)	R RBDM Soil Volatilization to Outdoor Air (Urban)	OR RBDM Soil Volatilization to Outdoor Air (Occupational)	OR RBDM Soil Vapor Intrusion into Buildings (Residential)	OR RBDM Soil Vapor Intrusion into Buildings (Urban Residential)	OR RBDM Soil Vapor Intrusion into Buildings (Occupational)	OR RBDM Soil Leaching to Groundwater (Residential)	OR RBDM Soil Leaching to Groundwater (Urban Residentail)	OR RBDM Soil Leaching to Groundwater (Occupational)	Sample Date	2/17/2016	2/17/2016	2/17/2016	2/17/2016	2/17/2016	2/17/2016	2/17/2016	2/17/2016	2/17/2016
																Depth Interval (ft)	9.5 - 10	10.5 - 11	9.5 - 10	10.5 - 11	9.5 - 10	10.5 - 11	10.5 - 11	14.5 - 15	14.5 - 15	9.5 - 10
																	DGB1-001	DGB2-001	DGB3-001	DGB3-002	DGB4-001	DGB4-002	DGB4-002 DUP	DGB5-001	DGB6-001	DGB7-001
NWTPH-Gx (MS)																										
Gasoline Range Organics	mg/kg	1,200	2,500	20,000	9,700		5,900	5,900	69,000	94	94		31	31	130		1,870	647 F-13	<7.88 V-15	<9.27	1,740	632	383	<7.73 V-15	498 F-13 V-15	222 F-13
EPA 6020A																										
Lead	mg/kg	400	400	800	800	800							30	30	30		-	-	**7.95**	**7.53**	-	-	-	-	-	-
5035/8260B																										
Acetone	mg/kg																<7.88	<5.55	<1.58 V-15	<1.85	<15.5	<9.05	<7.72	<1.55 V-15	<1.64 V-15	<1.74
Benzene	mg/kg	8.2	24	37	380	11,000	27	27	50	0.16	0.38	2.1	0.023	0.1	0.1		0.118	<0.0555	<0.0158 V-15	<0.0185	<0.155	<0.0905	<0.0772	<0.0155 V-15	<0.0164 V-15	<0.0174
Bromobenzene	mg/kg																<0.197	<0.139	<0.0394 V-15	<0.0463	<0.387	<0.226	<0.193	<0.0387 V-15	<0.041 V-15	<0.0435
Bromochloromethane	mg/kg																<0.394	<0.278	<0.0788 V-15	<0.0927	<0.774	<0.452	<0.386	<0.0773 V-15	<0.082 V-15	<0.0869
Bromodichloromethane	mg/kg	3.4	12	15	230	6,300	5.7	5.7	11	0.041	0.1	0.53	0.002	0.01	0.01		<0.788	<0.555	**<0.158 V-15**	**<0.185**	<1.55	<0.905	<0.772	**<0.155 V-15**	**<0.164 V-15**	**<0.174**
Bromoform	mg/kg	57	170	260	2,700	74,000	190	190	360	8.2	19	110	0.046	0.2	0.22		<0.788	<0.555	<0.158 V-15	<0.185	**<1.55**	<0.905	<0.772	<0.155 V-15	<0.164 V-15	<0.174
Bromomethane	mg/kg	46	92	750	370	10,000	170	170	700	1.3	1.3	17	0.093	0.19	0.4		**<3.94**	**<2.78**	<0.788 V-15	<0.927	**<7.74**	**<4.52**	**<3.86**	<0.773 V-15	<0.82 V-15	<0.869
2-Butanone (MEK)	mg/kg																<19.7 R-02	<2.78	<0.788 V-15	<0.927	<17.8 R-02	<6.33 R-02	<4.63 R-02	<0.773 V-15	<3.36 R-02 V-15	<1.04 R-02
n-butylbenzene	mg/kg																**4.81**	<0.278	<0.0788 V-15	<0.0927	**2.65**	**0.742**	**0.471**	<0.0773 V-15	<0.082 V-15	<0.0869
sec-butylbenzene	mg/kg																**2.21**	<0.278	<0.0788 V-15	<0.0927	**1.38**	<0.452	<0.386	<0.0773 V-15	**0.115 V-15**	<0.0869
Carbon tetrachloride	mg/kg	7.5	21	34	320	8,900	35	35	65	0.12	0.28	1.6	0.01	0.06	0.06		**<0.394**	**<0.278**	**<0.0788 V-15**	**<0.0927**	**<0.774**	**<0.452**	**<0.386**	**<0.0773 V-15**	**<0.082 V-15**	**<0.0869**
2-chlorotoluene	mg/kg																<0.394	<0.278	<0.0788 V-15	<0.0927	<0.774	<0.452	<0.386	<0.0773 V-15	<0.082 V-15	<0.0869
1,2-dibromo-3-chloropropane	mg/kg																<1.97	<1.39	<0.394 V-15	<0.463	<3.87	<2.26	<1.93	<0.387 V-15	<0.41 V-15	<0.435
1,1-dichloroethane	mg/kg	58	190	260	3,200	89,000	130	130	240	0.45	1.1	5.9	0.044	0.2	0.2		<0.197	<0.139	<0.0394 V-15	<0.0463	<0.387	<0.226	<0.193	<0.0387 V-15	<0.041 V-15	<0.0435
cis-1,3-dichloropropene	mg/kg																<0.394	<0.278	<0.0788 V-15	<0.0927	<0.774	<0.452	<0.386	<0.0773 V-15	<0.082 V-15	<0.0869
1,2-dichloropropane	mg/kg																<0.197	<0.139	<0.0394 V-15	<0.0463	<0.387	<0.226	<0.193	<0.0387 V-15	<0.041 V-15	<0.0435
1,3-dichloropropane	mg/kg																<0.394	<0.278	<0.0788 V-15	<0.0927	<0.774	<0.452	<0.386	<0.0773 V-15	<0.082 V-15	<0.0869
2,2-dichloropropane	mg/kg																<0.394	<0.278	<0.0788 V-15	<0.0927	<0.774	<0.452	<0.386	<0.0773 V-15	<0.082 V-15	<0.0869
1,1-dichloropropene	mg/kg																<0.394	<0.278	<0.0788 V-15	<0.0927	<0.774	<0.452	<0.386	<0.0773 V-15	<0.082 V-15	<0.0869
tert-butylbenzene	mg/kg																<0.394	<0.278	<0.0788 V-15	<0.0927	<0.774	<0.452	<0.386	<0.0773 V-15	<0.082 V-15	<0.0869
Chlorobenzene	mg/kg	530	1,100	8,700	4,700	130,000				77	77		6.7	14	27		<0.197	<0.139	<0.0394 V-15	<0.0463	<0.387	<0.226	<0.193	<0.0387 V-15	<0.041 V-15	<0.0435
4-chlorotoluene	mg/kg																<0.394	<0.278	<0.0788 V-15	<0.0927	<0.774	<0.452	<0.386	<0.0773 V-15	<0.082 V-15	<0.0869
1,2-dibromoethane (EDB)	mg/kg	0.16	0.53	0.73	9	250	0.35	0.35	0.65	0.012	0.028	0.16	2.1E-05	0.00056	0.00056		<0.394	<0.278	**<0.0788 V-15**	**<0.0927**	<0.774	<0.452	<0.386	**<0.0773 V-15**	**<0.082 V-15**	**<0.0869**
1,1-dichloroethene	mg/kg	1,800	3,500	29,000	13,000	370,000				54	54	680	7.8	16	32		<0.197	<0.139	<0.0394 V-15	<0.0463	<0.387	<0.226	<0.193	<0.0387 V-15	<0.041 V-15	<0.0435
Chloroethane	mg/kg	160,000	320,000										310	620	1,300		<3.94	<2.78	<0.788 V-15	<0.927	<7.74	<4.52	<3.86	<0.773 V-15	<0.82 V-15	<0.869
1,2-dichlorobenzene	mg/kg	2,200	4,400	36,000	20,000	560,000							43	86	160		<0.197	<0.139	<0.0394 V-15	<0.0463	<0.387	<0.226	<0.193	<0.0387 V-15	<0.041 V-15	<0.0435
1,2-dichloroethane	mg/kg	3.6	12	16	200	5,600	8.1	8.1	15	0.077	0.18	1	0.0028	0.013	0.013		**<0.197**	**<0.139**	**<0.0394 V-15**	**<0.0463**	**<0.387**	**<0.226**	**<0.193**	**<0.0387 V-15**	**<0.041 V-15**	**<0.0435**
Chloroform	mg/kg	5.8	22	26	410	11,000	9.2	9.2	17	0.031	0.074	0.41	0.0034	0.016	0.015		**<0.394**	**<0.278**	**<0.0788 V-15**	**<0.0927**	<0.774	<0.452	**<0.386**	**<0.0773 V-15**	**<0.082 V-15**	**<0.0869**
1,3-dichlorobenzene	mg/kg																<0.197	<0.139	<0.0394 V-15	<0.0463	<0.387	<0.226	<0.193	<0.0387 V-15	<0.041 V-15	<0.0435
cis-1,2-dichloroethene	mg/kg	160	310	2,300	710	20,000							1.1	2.3	4.5		<0.197	<0.139	<0.0394 V-15	<0.0463	<0.387	<0.226	<0.193	<0.0387 V-15	<0.041 V-15	<0.0435
Chloromethane	mg/kg	1,400	2,900	25,000	25,000	700,000				24	24	300	2.2	4.3	9.1		<1.97	<1.39	<0.394 V-15	<0.463	**<3.87**	**<2.26**	<1.93	<0.387 V-15	<0.41 V-15	<0.435
1,4-dichlorobenzene	mg/kg	14	62	64	1,300	36,000	19	19	36	0.99	2.3	13	0.057	0.27	0.25		**<0.197**	**<0.139**	<0.0394 V-15	<0.0463	**<0.387**	**<0.226**	**<0.193**	<0.0387 V-15	<0.041 V-15	<0.0435
trans-1,2-dichloroethene	mg/kg	1,600	3,100	23,000	7,100	200,000							13	26	51		<0.197	<0.139	<0.0394 V-15	<0.0463	<0.387	<0.226	<0.193	<0.0387 V-15	<0.041 V-15	<0.0435
Dibromochloromethane	mg/kg	3.7	12	17	210	5,800	7.8	7.8	14	0.22	0.53	2.9	0.0024	0.011	0.011		**<0.788**	**<0.555**	**<0.158 V-15**	**<0.185**	**<1.55**	**<0.905**	**<0.772**	**<0.155 V-15**	**<0.164 V-15**	**<0.174**
trans-1,3-dichloropropene	mg/kg																<0.394	<0.278	<0.0788 V-15	<0.0927	<0.774	<0.452	<0.386	<0.0773 V-15	<0.082 V-15	<0.0869
Dibromomethane	mg/kg																<0.394	<0.278	<0.0788 V-15	<0.0927	<0.774	<0.452	<0.386	<0.0773 V-15	<0.082 V-15	<0.0869
Dichlorodifluoromethane	mg/kg																<0.788	<0.555	<0.158 V-15	<0.185	<1.55	<0.905	<0.772	<0.155 V-15	<0.164 V-15	<0.174
Ethylbenzene	mg/kg	34	110	150	1,700	49,000	85	85	160	1.3	3	17	0.22	0.94	0.9		21.1	<0.139	<0.0394 V-15	<0.0463	**8.82**	**5.72**	**3.74**	<0.0387 V-15	<0.041 V-15	<0.0435
Hexachlorobutadiene	mg/kg																<0.788	<0.555	<0.158 V-15	<0.185	<1.55	<0.905	<0.772	<0.155 V-15	<0.164 V-15	<0.174
2-hexanone	mg/kg																<3.94	<2.78	<0.788 V-15	<0.927	<7.74	<4.52	<3.86	<0.773 V-15	<0.82 V-15	<0.869
Isopropylbenzene	mg/kg	3,500	7,000	57,000	27,000	750,000							140	280			**4.53**	<0.278	<0.0788 V-15	<0.0927	**2.17**	**0.737**	**0.483**	<0.0773 V-15	<0.082 V-15	<0.0869
4-isopropyltoluene	mg/kg																<0.394	<0.278	<0.0788 V-15	<0.0927	<0.774	<0.452	<0.386	<0.0773 V-15	<0.082 V-15	<0.0869
4-Methyl-2-pentanone (MiBK)	mg/kg																<12.2 R-02	<4.44 R-02	<0.788 V-15	<0.927	<10.1 R-02	<4.52	<3.86	<0.773 V-15	<1.8 R-02 V-15	<2.26 R-02
Methyl tert-butyl ether (MTBE)	mg/kg	250	730	1,100	12,000	320,000	810	810	1,500	8.5	20	110	0.11	0.5	0.54		<0.394	<0.278	<0.0788 V-15	<0.0927	<0.774	<0.452	<0.386	<0.0773 V-15	<0.082 V-15	<0.0869
Methylene Chloride	mg/kg	76	170	1,600	2,100	58,000		450		26	48	950	0.14	0.44	2.4		**<1.97**	**<1.39**	**<0.394 V-15**	**<0.463**	**<3.87**	**<2.26**	**<1.93**	**<0.387 V-15**	**<0.41 V-15**	**<0.435**
Naphthalene	mg/kg	5.3	25	23	580	16,000	15	15	83	6.4	15	83	0.077	0.37	0.34		**5.87**	**<0.555**	**<0.158 V-15**	**<0.185**	**2.31**	**0.941**	**<0.772**	**<0.155 V-15**	**<0.164 V-15**	**<0.174**
n-propylbenzene	mg/kg																**20.6**	<0.139	<0.0394 V-15	<0.0463	**9.05**	**2.64**	**1.68**	<0.0387 V-15	<0.041 V-15	**0.0582**
Styrene	mg/kg	7,900	16,000	130,000	56,000								210	430	800		<0.394	<0.278	<0.0788 V-15	<0.0927	<0.774	<0.452	<0.386	<0.0773 V-15	<0.082 V-15	<0.0869
1,1,1,2-tetrachloroethane	mg/kg																<0.197	<0.139	<0.0394 V-15	<0.0463	<0.387	<0.226	<0.193	<0.0387 V-15	<0.041 V-15	<0.0435
1,1,2,2-tetrachloroethane	mg/kg																<0.788 R-02	<0.555 R-02	<0.0788 V-15	<0.0927	<0.774	<0.452	<0.386	<0.0773 V-15	<0.41 R-02 V-15	<0.348 R-02
Tetrachloroethene (PCE)	mg/kg	220	540	1,000	1,800	50,000				2.8	6.6	36	0.46	1.9	1.9		<0.197	<0.139	<0.0394 V-15	<0.0463	<0.387	<0.226	<0.193	<0.0387 V-15	<0.041 V-15	<0.0435
Toluene	mg/kg	5,800	12,000	88,000	28,000	770,000							150	310	490		<0.394	<0.278	<0.0788 V-15	<0.0927	<0.774	<0.452	<0.386	<0.0773 V-15	<0.082 V-15	<0.0869
1,2,3-trichlorobenzene	mg/kg																<1.97	<1.39	<0.394 V-15	<0.463	<3.87	<2.26	<1.93	<0.387 V-15	<0.41 V-15	<0.435
1,2,4-trichlorobenzene	mg/kg																<1.97	<1.39	<0.394 V-15	<0.463	<3.87	<2.26	<1.93	<0.387 V-15	<0.41 V-15	<0.435
1,1,1-trichloroethane	mg/kg	53,000	110,000	870,000	470,000								210	430	880		<0.197	<0.139	<0.0394 V-15	<0.0463	<0.387	<0.226	<0.193	<0.0387 V-15	<0.041 V-15	<0.0435
1,1,2-trichloroethane	mg/kg	3.2	6.3	26	54	1,500	6.7	6.7	24	0.32	0.38	4.2	0.0063	0.019	0.029		**<0.394 R-02**	**<0.139**	**<0.0394 V-15**	**<0.0463**	**<0.774 R-02**	**<0.226**	**<0.193**	**<0.0387 V-15**	**<0.164 R-02 V-15**	**<0.0435**
Trichloroethene (TCE)	mg/kg	6.7	17	51	470	3,400	33	33	96	0.12	0.26	2.3	0.013	0.053	0.087		**<0.197**	**<0.139**	**<0.0394 V-15**	**<0.0463**	**<0.387**	**<0.226**	**<0.193**	**<0.0387 V-15**	**<0.041 V-15**	**<0.0435**
1,2,3-trichloropropane	mg/kg																<0.788 R-02	<0.555 R-02	<0.0788 V-15	<0.0927	<0.774	<0.452	<0.386	<0.0773 V-15	<0.41 R-02 V-15	<0.174 R-02
1,3,5-trimethylbenzene	mg/kg	780	1,600	12,000	3,500	98,000							50	110	110		<0.394	<0.278	<0.0788 V-15	<0.0927	**1.21**	<0.452	<0.386	<0.0773 V-15	<0.082 V-15	<0.0869
Vinyl chloride	mg/kg	0.36	0.8	4.4	34	950	6.5	6.5	89	0.043	0.053	2.2	0.0006	0.0014	0.01		**<0.197**	**<0.139**	**<0.0394 V-15**	**<0.0463**	**<0.387**	**<0.226**	**<0.193**	**<0.0387 V-15**	**<0.041 V-15**	**<0.0435**
Xylene (m & p)	mg/kg																<0.394	<0.278	<0.0788 V-15	<0.0927	<0.774	<0.452	<0.386	<0.0773 V-15	<0.082 V-15	<0.0869
Trichlorofluoromethane	mg/kg	7,600	15,000	130,000	69,000					190	190		68	140	280		<0.788	<0.555	<0.158 V-15	<0.185	<1.55	<0.905	<0.772	<0.155 V-15	<0.164 V-15	<0.174
1,2,4-trimethylbenzene	mg/kg	110	220	2,000	2,000	54,000	230	230	980	16	16	210	2.8	5.6	12		**0.619**	<0.278	<0.0788 V-15	<0.0927	<0.774	**0.561**	<0.386	<0.0773 V-15	<0.082 V-15	<0.0869
Xylene (o)	mg/kg																<0.197	<0.139	<0.0394 V-15	<0.0463	<0.387	<0.226	<0.193	<0.0387 V-15	<0.041 V-15	<0.0435
Xylene (Sum of Total Hits)	mg/kg	1,400	2,900	25,000	20,000	560,000				160	160		24	49	100		<0.591	<0.417	<0.1182	<0.139	<1.161	<0.678	<0.579	<0.116	<0.123	<0.1304
EPA 8000C																										
Percentage Solids	%																**70.4**	**72.9**	**73**	**73.9**	**73.3**	**72.6**	**73**	**74.5**	**72.5**	**71.6**

Table 8: Summary of Soil Results from the 2016 Data Gap Investigation

Oregon Lithoprint Site
McMinnville, Oregon
DEQ File No. 36-85-4001

	Units	*OR RBDM Soil Ingestion, Dermal Contact, and Inhalation (Residential)*	*OR RBDM Soil Ingestion, Dermal Contact, and Inhalation (Urban Residential)*	*OR RBDM Soil Ingestion, Dermal Contact, and Inhalation (Occupational)*	*OR RBDM Soil Ingestion, Dermal Contact, and Inhalation (Const Worker)*	*OR RBDM Soil Ingestion, Dermal Contact, and Inhalation (ExcavationWorker)*	*R RBDM Soil Volatilization to Outdoor Air (Urban Residential)*	*R RBDM Soil Volatilization to Outdoor Air (Urban)*	*OR RBDM Soil Volatilization to Outdoor Air (Occupational)*	*OR RBDM Soil Vapor Intrusion into Buildings (Residential)*	*OR RBDM Soil Vapor Intrusion into Buildings (Urban Residential)*	*OR RBDM Soil Vapor Intrusion into Buildings (Occupational)*	*OR RBDM Soil Leaching to Groundwater (Residential)*	*OR RBDM Soil Leaching to Groundwater (Urban Residentail)*	*OR RBDM Soil Leaching to Groundwater (Occupational)*	**Sample Date**	2/17/2016	2/17/2016	2/17/2016	2/17/2016	2/17/2016	2/17/2016	2/17/2016	2/17/2016	2/17/2016	2/17/2016
															Depth Internval (ft)	9.5 - 10	10.5 - 11	9.5 - 10	10.5 - 11	9.5 - 10	10.5 - 11	10.5 - 11	14.5 - 15	14.5 - 15	9.5 - 10
																DGB1-001	DGB2-001	DGB3-001	DGB3-002	DGB4-001	DGB4-002	DGB4-002 DUP	DGB5-001	DGB6-001	DGB7-001

NOTES
Color denotes concentrations exceeding the cleanup level.
Samples analyzed by Apex Laboratories of Tigard, Oregon or Fremont Analytical of Seattle, Washington.
Oregon Department of Environmental Quality, Environmental Cleanup and Tanks Program, Risk-Based concentration for Individual Chemicals, revised November 1, 2015.
mg/kg = milligram per kilogram

Lab Qualifiers
F-13 - The chromatographic pattern does not resemble the fuel standard used for quantitation
R-02 - The Reporting Limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.
V-15 - Sample aliquot was subsampled from the sample container. The subsampled aliquot was preserved in the laboratory within 48 hours of sampling.

Coles & Associates • LLC

Table 9: Summary of Soil Results Above Laboratory Reporting Limits from the 2016 Data Gap Investigation

Oregon Lithoprint Site
McMinnville, Oregon
DEQ File No. 36-85-4001

	Units	OR RBDM Soil Ingestion, Dermal Contact, and Inhalation (Residential)	OR RBDM Soil Ingestion, Dermal Contact, and Inhalation (Urban Residential)	OR RBDM Soil Ingestion, Dermal Contact, and Inhalation (Occupational)	OR RBDM Soil Ingestion, Dermal Contact, and Inhalation (Const Worker)	OR RBDM Soil Ingestion, Dermal Contact, and Inhalation (Exc Worker	R RBDM Soil Volatilization to Outdoor Air (Urban Residential)	R RBDM Soil Volatilization to Outdoor Air (Urban)	OR RBDM Soil Volatilization to Outdoor Air (Occupational)	OR RBDM Soil Vapor Intrusion into Buildings (Residential)	OR RBDM Soil Vapor Intrusion into Buildings (Urban Residential)	OR RBDM Soil Vapor Intrusion into Buildings (Occupational)	OR RBDM Soil Leaching to Groundwater (Residential)	OR RBDM Soil Leaching to Groundwater (Urban Residentail)	OR RBDM Soil Leaching to Groundwater (Occupational)
Sample Date															
Depth Interval (ft)															
NWTPH-Gx (MS)															
Gasoline Range Organics	mg/kg	1,200	2,500	20,000	9,700		5,900	5,900	69,000	94	94		31	31	130
EPA 6020A															
Lead	mg/kg	400	400	800	800	800							30	30	30
5035/8260B															
Benzene	mg/kg	8.2	24	37	380	11,000	27	27	50	0.16	0.38	2.1	0.023	0.1	0.1
n-butylbenzene	mg/kg														
sec-butylbenzene	mg/kg														
Ethylbenzene	mg/kg	34	110	150	1,700	49,000	85	85	160	1.3	3	17	0.22	0.94	0.9
Isopropylbenzene	mg/kg	3,500	7,000	57,000	27,000	750,000							140	280	
Naphthalene	mg/kg	5.3	25	23	580	16,000	15	15	83	6.4	15	83	0.077	0.37	0.34
n-propylbenzene	mg/kg														
1,3,5-trimethylbenzene	mg/kg	780	1,600	12,000	3,500	98,000							50	110	110
1,2,4-trimethylbenzene	mg/kg	110	220	2,000	2,000	54,000	230	230	980	16	16	210	2.8	5.6	12
EPA 8000C															
Percentage Solids	%														

Sample Date	2/17/2016	2/17/2016	2/17/2016	2/17/2016	2/17/2016	2/17/2016	2/17/2016	2/17/2016	2/17/2016
Depth Interval (ft)	9.5 - 10	10.5 - 11	9.5 - 10	10.5 - 11	9.5 - 10	10.5 - 11	10.5 - 11	14.5 - 15	9.5 - 10
	DGB1-001	DGB2-001	DGB3-001	DGB3-002	DGB4-001	DGB4-002	DGB4-002 DUP	DGB6-001	DGB7-001
NWTPH-Gx (MS)									
Gasoline Range Organics	1,870	647 F-13	-	-	1,740	632	383	498 F-13 V-15	222 F-13
EPA 6020A									
Lead	-	-	7.95	7.53	-	-	-	-	-
5035/8260B									
Benzene	0.118	-	-	-	-	-	-	-	-
n-butylbenzene	4.81	-	-	-	2.65	0.742	0.471	-	-
sec-butylbenzene	2.21	-	-	-	1.38	-	-	0.115 V-15	-
Ethylbenzene	21.1	-	-	-	8.82	5.72	3.74	-	-
Isopropylbenzene	4.53	-	-	-	2.17	0.737	0.483	-	-
Naphthalene	5.87	-	-	-	2.31	0.941	-	-	-
n-propylbenzene	20.6	-	-	-	9.05	2.64	1.68	-	0.0582
1,3,5-trimethylbenzene		-	-	-	1.21	-	-	-	-
1,2,4-trimethylbenzene	0.619	-	-	-	-	0.561	-	-	-
EPA 8000C									
Percentage Solids	70.4	72.9	73	73.9	73.3	72.6	73	72.5	71.6

NOTES
Color denotes concentrations exceeding the cleanup level.
Samples analyzed by Apex Laboratories of Tigard, Oregon or Fremont Analytical of Seattle, Washington.
Oregon Department of Environmental Quality, Environmental Cleanup and Tanks Program, Risk-Based concentration for Individual Chemicals, revised November 1, 2015.
mg/kg = milligram per kilogram

Lab Qualifiers
F-13 - The chromatographic pattern does not resemble the fuel standard used for quantitation
V-15 - Sample aliquot was subsampled from the sample container. The subsampled aliquot was preserved in the laboratory within 48 hours of sampling.

Coles & Associates • LLC

Table 10: Summary of Groundwater Results from the 2016 Data Gap Investigation

Oregon Lithoprint Site
McMinnville, Oregon
DEQ File No. 36-85-4001

	Units	*OR DEQ RBC Groundwater Volatilization to Outdoor Air (Residential)*	*OR DEQ RBC Groundwater Volatilization to Outdoor Air (Urban Residential)*	*OR DEQ RBC Groundwater Volatilization to Outdoor Air (Occupational)*	*OR DEQ RBC Groundwater Vapour Intrusion into Buildings (Residential)*	*OR DEQ RBC Groundwater Vapour Intrusion into Buildings (Urban Residential)*	*OR DEQ RBC Groundwater Vapour Intrusion into Buildings (Occupational)*	*OR DEQ RBC Groundwater in Excavation*	2/17/2016 DGB1	2/17/2016 DGB1-DUP	2/17/2016 DGB2	2/17/2016 DGB3	2/17/2016 DGB4	2/17/2016 DGB5	2/17/2016 DGB6	2/17/2016 DGB7	2/18/2016 MW-3	2/17/2016 Trip Blank #1169
NWTPH-Gx (MS)																		
Gasoline Range Organics	µg/L				*22,000*	*22,000*		*14,000*	*17,600*	*15,300*	<100 V-04	**5,100**	**4,970 V-04**	<100 V-04	**3,200**	**7,350**	**3,610**	<100
EPA 200.8 (Diss)																		
Lead (filtered)	µg/L								-	-	-	-	-	-	-	-	**0.478 FILT1**	-
EPA 8260B																		
Acetone	µg/L								<100	<100	<20 V-04	<100	<200 V-04	<20 V-04	<100 Q-31 R-03	<100	<20	<20
Benzene	µg/L	*3,100*	*7,400*	*14,000*	*210*	*510*	*2,800*	*1,800*	*214*	*225*	<0.2 V-04	<1	**11.3 V-04**	<0.2 V-04	<1 R-03	<1	**31.5**	<0.2
Bromobenzene	µg/L								<2.5	<2.5	<0.5 V-04	<2.5	<5 V-04	<0.5 V-04	<2.5 R-03	<2.5	<0.5	<0.5
Bromochloromethane	µg/L								<5	<5	<1 V-04	<5	<10 V-04	<1 V-04	<5 R-03	<5	<1	<1
Bromodichloromethane	µg/L	*1,400*	*3,200*	*6,000*	*180*	*420*	*2,300*	*450*	<5	<5	<1 V-04	<5	<10 V-04	<1 V-04	<5 R-03	<5	<1	<1
Bromoform	µg/L	*130,000*	*300,000*	*550,000*	*36,000*	*85,000*	*470,000*	*14,000*	<5	<5	<1 V-04	<5	<10 V-04	<1 V-04	<5 R-03	<5	<1	<1
Bromomethane	µg/L	*32,000*	*32,000*	*130,000*	*2,100*	*2,100*	*27,000*	*1,200*	<25 Q-31	<25 Q-31	<5 Q-31 V-04	<25 Q-31	<50 Q-31 V-04	<5 Q-31 V-04	<25 Q-31 R-03	<25 Q-31	<5	<5
2-Butanone (MEK)	µg/L								<110 R-02	<90 R-02	<10 V-04	<65 R-02	<100 V-04	<10 V-04	<52.5 R-02 R-03	<85 R-02	<22 R-02	<10
n-butylbenzene	µg/L								**42.1 M-02**	**37 M-02**	<1 V-04	**5.1 M-02**	<10 V-04	<1 V-04	<5 R-03	**8.8**	**2.3 M-02**	<1
sec-butylbenzene	µg/L								**25.2**	**22.8**	<1 V-04	**5.85**	<10 V-04	<1 V-04	**5.9 R-03**	**9.45**	**4.47**	<1
Carbon tetrachloride	µg/L	*1,800*	*4,200*	*7,700*	*92*	*220*	*1,200*	*1,800*	<5	<5	<1 V-04	<5	<10 V-04	<1 V-04	<5 R-03	<5	<1	<1
2-chlorotoluene	µg/L								<5	<5	<1 V-04	<5	<10 V-04	<1 V-04	<5 R-03	<5	<1	<1
1,2-dibromo-3-chloropropane	µg/L								<25	<25	<5 V-04	<25	<50 V-04	<5 V-04	<25 R-03	<25	<5	<5
tert-butylbenzene	µg/L								<5	<5	<1 V-04	<5	<10 V-04	<1 V-04	<5 R-03	<5	<1	<1
Chlorobenzene	µg/L				*67,000*	*67,000*		*10,000*	<2.5	<2.5	<0.5 V-04	<2.5	<5 V-04	<0.5 V-04	<2.5 R-03	<2.5	<0.5	<0.5
4-chlorotoluene	µg/L								<5	<5	<1 V-04	<5	<10 V-04	<1 V-04	<5 R-03	<5	<1	<1
1,2-dibromoethane (EDB)	µg/L	*180*	*430*	*790*	*45*	*110*	*590*	*27*	<2.5	<2.5	<0.5 V-04	<2.5	<5 V-04	<0.5 V-04	<2.5 R-03	<2.5	<0.5	<0.5
Chloroethane	µg/L				*2,800,000*	*2,800,000*		*2,400,000*	<25	<25	<5 V-04	<25	<50 V-04	<5 V-04	<25 R-03	<25	<5 Q-31	<5
1,2-dichlorobenzene	µg/L							*37,000*	<2.5	<2.5	<0.5 V-04	<2.5	<5 V-04	<0.5 V-04	<2.5 R-03	<2.5	<0.5	<0.5
Chloroform	µg/L	*1,400*	*3,400*	*6,300*	*120*	*290*	*1,600*	*720*	<5	<5	<1 V-04	<5	<10 V-04	<1 V-04	<5 R-03	<5	<1	<1
1,3-dichlorobenzene	µg/L								<2.5	<2.5	<0.5 V-04	<2.5	<5 V-04	<0.5 V-04	<2.5 R-03	<2.5	<0.5	<0.5
1,4-dichlorobenzene	µg/L	*4,900*	*12,000*	*21,000*	*540*	*1,300*	*7,100*	*1,500*	<2.5	<2.5	<0.5 V-04	<2.5	<5 V-04	<0.5 V-04	<2.5 R-03	<2.5	<0.5	<0.5
Dichlorodifluoromethane	µg/L								<5	<5	<1 V-04	<5	<10 V-04	<1 V-04	<5 R-03	<5	<1	<1
1,1-dichloroethane	µg/L	*16,000*	*37,000*	*68,000*	*1,100*	*2,600*	*14,000*	*10,000*	<2.5	<2.5	<0.5 V-04	<2.5	<5 V-04	<0.5 V-04	<2.5 R-03	<2.5	<0.5	<0.5
1,2-dichloroethane	µg/L	*2,100*	*4,900*	*9,000*	*300*	*700*	*3,900*	*630*	<2.5	<2.5	<0.5 V-04	<2.5	<5 V-04	<0.5 V-04	<2.5 R-03	<2.5	**0.772**	<0.5
1,1-dichloroethene	µg/L	*570,000*	*570,000*	*2,400,000*	*29,000*	*29,000*	*360,000*	*44,000*	<2.5	<2.5	<0.5 V-04	<2.5	<5 V-04	<0.5 V-04	<2.5 R-03	<2.5	<0.5	<0.5
cis-1,2-dichloroethene	µg/L							*18,000*	<2.5	<2.5	<0.5 V-04	<2.5	<5 V-04	<0.5 V-04	<2.5 R-03	<2.5	<0.5	<0.5
trans-1,2-dichloroethene	µg/L							*180,000*	<2.5	<2.5	<0.5 V-04	<2.5	<5 V-04	<0.5 V-04	<2.5 R-03	<2.5	<0.5	<0.5
1,2-dichloropropane	µg/L								<2.5	<2.5	<0.5 V-04	<2.5	<5 V-04	<0.5 V-04	<2.5 R-03	<2.5	<0.5	<0.5
1,3-dichloropropane	µg/L								<5	<5	<1 V-04	<5	<10 V-04	<1 V-04	<5 R-03	<5	<1	<1
1,1-dichloropropene	µg/L								<5	<5	<1 V-04	<5	<10 V-04	<1 V-04	<5 R-03	<5	<1	<1
trans-1,3-dichloropropene	µg/L								<5	<5	<1 V-04	<5	<10 V-04	<1 V-04	<5 R-03	<5	<1	<1
Chloromethane	µg/L	*440,000*	*440,000*	*1,800,000*	*26,000*	*26,000*	*330,000*	*22,000*	<25	<25	<5 V-04	<25	<50 V-04	<5 V-04	<25 R-03	<25	<5	<5
Dibromochloromethane	µg/L	*3,900*	*9,300*	*17,000*	*980*	*2,300*	*13,000*	*610*	<5	<5	<1 V-04	<5	<10 V-04	<1 V-04	<5 R-03	<5	<1	<1
Dibromomethane	µg/L								<5	<5	<1 V-04	<5	<10 V-04	<1 V-04	<5 R-03	<5	<1	<1
2,2-dichloropropane	µg/L								<5	<5	<1 V-04	<5	<10 V-04	<1 V-04	<5 R-03	<5	<1	<1
cis-1,3-dichloropropene	µg/L								<5	<5	<1 V-04	<5	<10 V-04	<1 V-04	<5 R-03	<5	<2	<2
Ethylbenzene	µg/L	*9,900*	*23,000*	*43,000*	*620*	*1,500*	*8,200*	*4,500*	*1,940*	*2,070*	<0.5 V-04	**8.1**	**194 V-04**	<0.5 V-04	<2.5 R-03	**3.2**	**8.05**	<0.5
Hexachlorobutadiene	µg/L								<25	<25	<5 V-04	<25	<50 V-04	<5 V-04	<25 R-03	<25	<5	<5
2-hexanone	µg/L								<50	<50	<10 V-04	<50	<100 V-04	<10 V-04	<50 R-03	<50	<10	<10
Isopropylbenzene	µg/L							*51,000*	**160**	**141**	<1 V-04	**25.8**	**21.4 V-04**	<1 V-04	<5 R-03	**34.4**	**11.8**	<1
4-isopropyltoluene	µg/L								<5	<5	<1 V-04	<5	<10 V-04	<1 V-04	<5 R-03	<5	**1.46 M-02**	<1
4-Methyl-2-pentanone (MiBK)	µg/L								<50	<50	<10 V-04	<50	<100 V-04	<10 V-04	<50 R-03	<50	<10	<10

Coles & Associates • LLC

Table 10: Summary of Groundwater Results from the 2016 Data Gap Investigation

Oregon Lithoprint Site
McMinnville, Oregon
DEQ File No. 36-85-4001

	Units	*OR DEQ RBC Groundwater Volatilization to Outdoor Air (Residential)*	*OR DEQ RBC Groundwater Volatilization to Outdoor Air (Urban Residential)*	*OR DEQ RBC Groundwater Volatilization to Outdoor Air (Occupational)*	*OR DEQ RBC Groundwater Vapour Intrusion into Buildings (Residential)*	*OR DEQ RBC Groundwater Vapour Intrusion into Buildings (Urban Residential)*	*OR DEQ RBC Groundwater Vapour Intrusion into Buildings (Occupational)*	*OR DEQ RBC Groundwater in Excavation*	2/17/2016 DGB1	2/17/2016 DGB1-DUP	2/17/2016 DGB2	2/17/2016 DGB3	2/17/2016 DGB4	2/17/2016 DGB5	2/17/2016 DGB6	2/17/2016 DGB7	2/18/2016 MW-3	2/17/2016 Trip Blank #1169
Methyl tert-butyl ether (MTBE)	µg/L	*350,000*	*830,000*	*1,500,000*	*67,000*	*160,000*	*870,000*	*63,000*	<5	<5	<1 V-04	<5	<10 V-04	<1 V-04	<5 R-03	<5	<1	<1
Methylene Chloride	µg/L	*1,000,000*	*1,900,000*	*12,581,128*	*90,000*	*160,000*	*3,300,000*	*79,000*	<15	<15	<3 V-04	<15	<30 V-04	<3 V-04	<15 R-03	<15	<3	<3
Naphthalene	µg/L	*3,600*	*8,500*	*16,000*	*840*	*2,000*	*11,000*	*500*	**163**	**133**	<2 V-04	<10	<20 V-04	<2 V-04	<10 R-03	<10	<2	<2
n-propylbenzene	µg/L								**442**	**383**	<0.5 V-04	**27.5**	**42.4 V-04**	<0.5 V-04	**3.85 R-03**	**13.8**	**10.3**	<0.5
Styrene	µg/L							*170,000*	<5	<5	<1 V-04	<5	<10 V-04	<1 V-04	<5 R-03	<5	<1	<1
1,1,1,2-tetrachloroethane	µg/L								<2.5	<2.5	<0.5 V-04	<2.5	<5 V-04	<0.5 V-04	<2.5 R-03	<2.5	<0.5	<0.5
1,1,2,2-tetrachloroethane	µg/L								<2.5	<2.5	<0.5 V-04	<2.5	<5 V-04	<0.5 V-04	<2.5 R-03	<2.5	<1	<1
Tetrachloroethene (PCE)	µg/L	*64,000*	*150,000*		*3,700*	*8,700*	*48,000*	*5,600*	<2.5	<2.5	<0.5 V-04	<2.5	<5 V-04	<0.5 V-04	<2.5 R-03	<2.5	<0.5	<0.5
Toluene	µg/L							*220,000*	<5	<5	**1.05 V-04**	<5	<10 V-04	<1 V-04	<5 R-03	<5	**2.87**	<1
1,2,3-trichlorobenzene	µg/L								<10	<10	<2 V-04	<10	<20 V-04	<2 V-04	<10 R-03	<10	<2	<2
1,2,4-trichlorobenzene	µg/L								<10	<10	<2 V-04	<10	<20 V-04	<2 V-04	<10 R-03	<10	<2	<2
1,1,1-trichloroethane	µg/L							*1,100,000*	<2.5	<2.5	<0.5 V-04	<2.5	<5 V-04	<0.5 V-04	<2.5 R-03	<2.5	<0.5	<0.5
1,1,2-trichloroethane	µg/L	*4,700*	*5,600*	*21,000*	*870*	*1,000*	*11,000*	*49*	<2.5	<2.5	<0.5 V-04	<2.5	<5 V-04	<0.5 V-04	<2.5 R-03	<2.5	<0.5	<0.5
Trichloroethene (TCE)	µg/L	*3,300*	*6,900*	*20,000*	*200*	*430*	*3,700*	*3,000*	<2.5	<2.5	<0.5 V-04	<2.5	<5 V-04	<0.5 V-04	<2.5 R-03	<2.5	<0.5	<0.5
1,2,3-trichloropropane	µg/L								<5	<5	<1 V-04	<5	<10 V-04	<1 V-04	<5 R-03	<5	<2	<2
1,3,5-trimethylbenzene	µg/L							*15,000*	**81.2**	**76.7**	<1 V-04	<5	**12.8 V-04**	<1 V-04	<5 R-03	<5	<1	<1
Vinyl chloride	µg/L	*350*	*430*	*5,900*	*17*	*21*	*880*	*960*	<2.5	<2.5	<0.5 V-04	<2.5	<5 V-04	<0.5 V-04	<2.5 R-03	<2.5	<0.5	<0.5
Trichlorofluoromethane	µg/L	*780,000*	*780,000*		*36,000*	*36,000*	*460,000*	*160,000*	<10	<10	<2 V-04	<10	<20 V-04	<2 V-04	<10 R-03	<10	<2	<2
1,2,4-trimethylbenzene	µg/L				*5,800*	*5,800*		*1,700*	**308**	**281**	<1 V-04	<5	**41.4 V-04**	<1 V-04	<5 R-03	<5	**2.29**	<1
Xylene (m & p)	µg/L								**224**	**170**	<1 V-04	<5	**12.5 V-04**	<1 V-04	<5 R-03	<5	**3.42**	<1
Xylene (o)	µg/L								**23.3**	**30.7**	<0.5 V-04	<2.5	<5 V-04	<0.5 V-04	<2.5 R-03	<2.5	**0.871**	<0.5
Xylene Total (Sum of Hits)	µg/L				*86,000*	*86,000*		*23,000*	**247.3**	**200.7**	<1.5	<7.5	**12.5**	<1.5	<7.5	<7.5	**4.291**	<1.5

NOTES
Color denotes concentrations exceeding the cleanup level.
Samples analyzed by Apex Laboratories of Tigard, Oregon or Fremont Analytical of Seattle, Washington.
Oregon Department of Environmental Quality, Environmental Cleanup and Tanks Program, Risk-Based concentration for Individual Chemicals, revised November 1, 2015.
µg/L = micrograms per liter

Lab Qualifiers
FILT1 - Sample was lab filtered and acid preserved prior to analysis. See sample preparation section of report for date and time of filtration.
M-02 - Due to matrix interference, this analyte cannot be accurately quantified. The reported result is estimated.
Q-31 - Estimated Results. Recovery of Continuing Calibration Verification sample below lower control limit for this analyte. Results are likely biased low.
R-02 - The Reporting Limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.
R-03 - Elevated Reporting Limits due to limited sample volume.
V-04 - Composite of VOA vials analyzed due to sediment in vials.

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Table 11: Summary of Groundwater Results Above Laboratory Reporting Limits from the 2016 Data Gap Investigation

Oregon Lithoprint Site
McMinnville, Oregon
DEQ File No. 36-85-4001

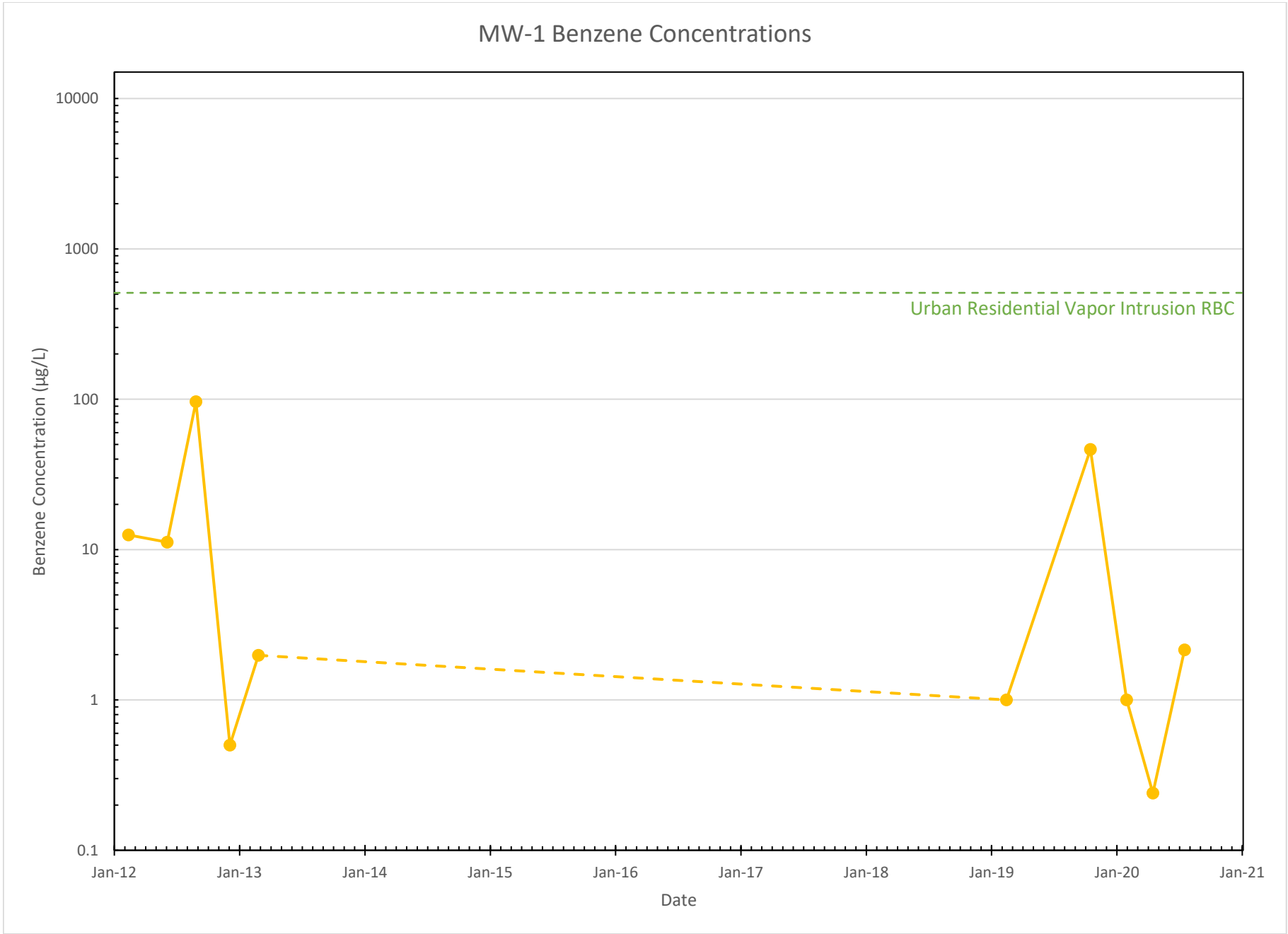
	Units	*OR DEQ RBC Groundwater Volatilization to Outdoor Air (Residential)*	*OR DEQ RBC Groundwater Volatilization to Outdoor Air (Urban Residential)*	*OR DEQ RBC Groundwater Volatilization to Outdoor Air (Occupational)*	*OR DEQ RBC Groundwater VaporIntrusion into Buildings (Residential)*	*OR DEQ RBC Groundwater VaporIntrusion into Buildings (Urban Residential)*	*OR DEQ RBC Groundwater VaporIntrusion into Buildings (Occupational)*	*OR DEQ RBC Groundwater in Excavation*	2/17/2016 DGB1	2/17/2016 DGB1-DUP	2/17/2016 DGB2	2/17/2016 DGB3	2/17/2016 DGB4	2/17/2016 DGB6	2/17/2016 DGB7	2/18/2016 MW-3
NWTPH-Gx (MS)																
Gasoline Range Organics	µg/L				*22,000*	*22,000*		*14,000*	*17,600*	*15,300*	-	**5,100**	**4,970 V-04**	**3,200**	**7,350**	**3,610**
EPA 200.8 (Diss)																
Lead (filtered)	µg/L								-	-	-	-	-	-	-	**0.478 FILT1**
EPA 8260B																
Benzene	µg/L	*3,100*	*7,400*	*14,000*	*210*	*510*	*2,800*	*1,800*	*214*	*225*	-	-	**11.3 V-04**	-	-	**31.5**
n-butylbenzene	µg/L								**42.1 M-02**	**37 M-02**	-	**5.1 M-02**	-	-	**8.8**	**2.3 M-02**
sec-butylbenzene	µg/L								**25.2**	**22.8**	-	**5.85**	-	**5.9 R-03**	**9.45**	**4.47**
1,2-dichloroethane	µg/L	*2,100*	*4,900*	*9,000*	*300*	*700*	*3,900*	*630*	-	-	-	-	-	-	-	**0.772**
Ethylbenzene	µg/L	*9,900*	*23,000*	*43,000*	*620*	*1,500*	*8,200*	*4,500*	*1,940*	*2,070*	-	**8.1**	**194 V-04**	-	**3.2**	**8.05**
Isopropylbenzene	µg/L							*51,000*	**160**	**141**	-	**25.8**	**21.4 V-04**	-	**34.4**	**11.8**
4-isopropyltoluene	µg/L								-	-	-	-	-	-	-	**1.46 M-02**
Naphthalene	µg/L	*3,600*	*8,500*	*16,000*	*840*	*2,000*	*11,000*	*500*	**163**	**133**	-	-	-	-	-	
n-propylbenzene	µg/L								**442**	**383**	-	**27.5**	**42.4 V-04**	**3.85 R-03**	**13.8**	**10.3**
Toluene	µg/L							*220,000*	-	-	**1.05 V-04**	-	-	-	-	**2.87**
1,3,5-trimethylbenzene	µg/L							*15,000*	**81.2**	**76.7**	-	-	**12.8 V-04**	-	-	-
1,2,4-trimethylbenzene	µg/L				*5,800*	*5,800*		*1,700*	**308**	**281**	-	-	**41.4 V-04**	-	-	**2.29**
Xylene (m & p)	µg/L								**224**	**170**	-	-	**12.5 V-04**	-	-	**3.42**
Xylene (o)	µg/L								**23.3**	**30.7**	-	-	-	-	-	**0.871**
Xylene Total (Sum of Hits)	µg/L				*86,000*	*86,000*		*23,000*	**247.3**	**200.7**	-	-	**12.5**	-	-	**4.291**

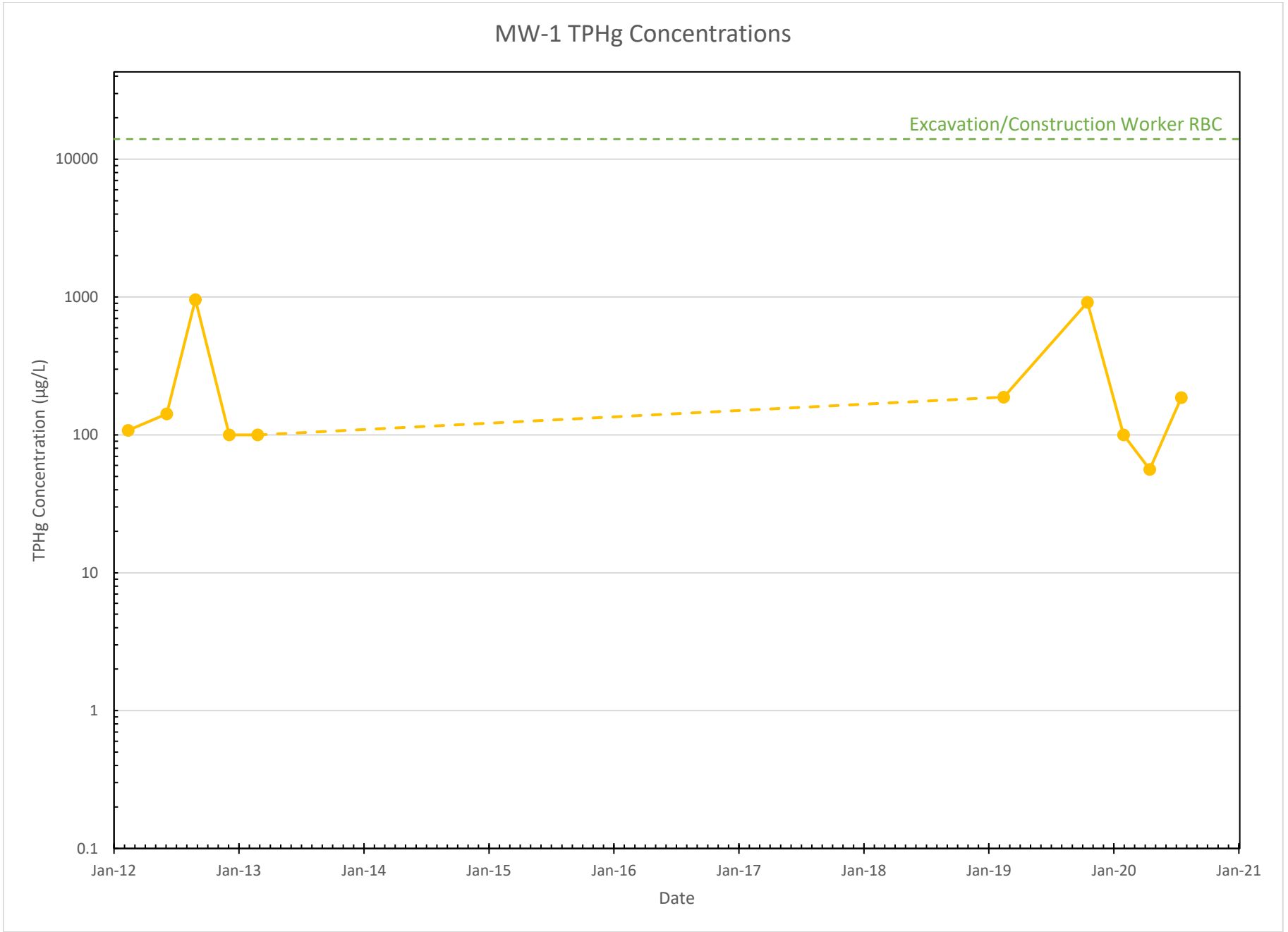
NOTES
Color denotes concentrations exceeding the cleanup level.
Samples analyzed by Apex Laboratories of Tigard, Oregon or Fremont Analytical of Seattle, Washington.
Oregon Department of Environmental Quality, Environmental Cleanup and Tanks Program, Risk-Based concentration for Individual Chemicals, revised November 1, 2015.
µg/L = micrograms per liter

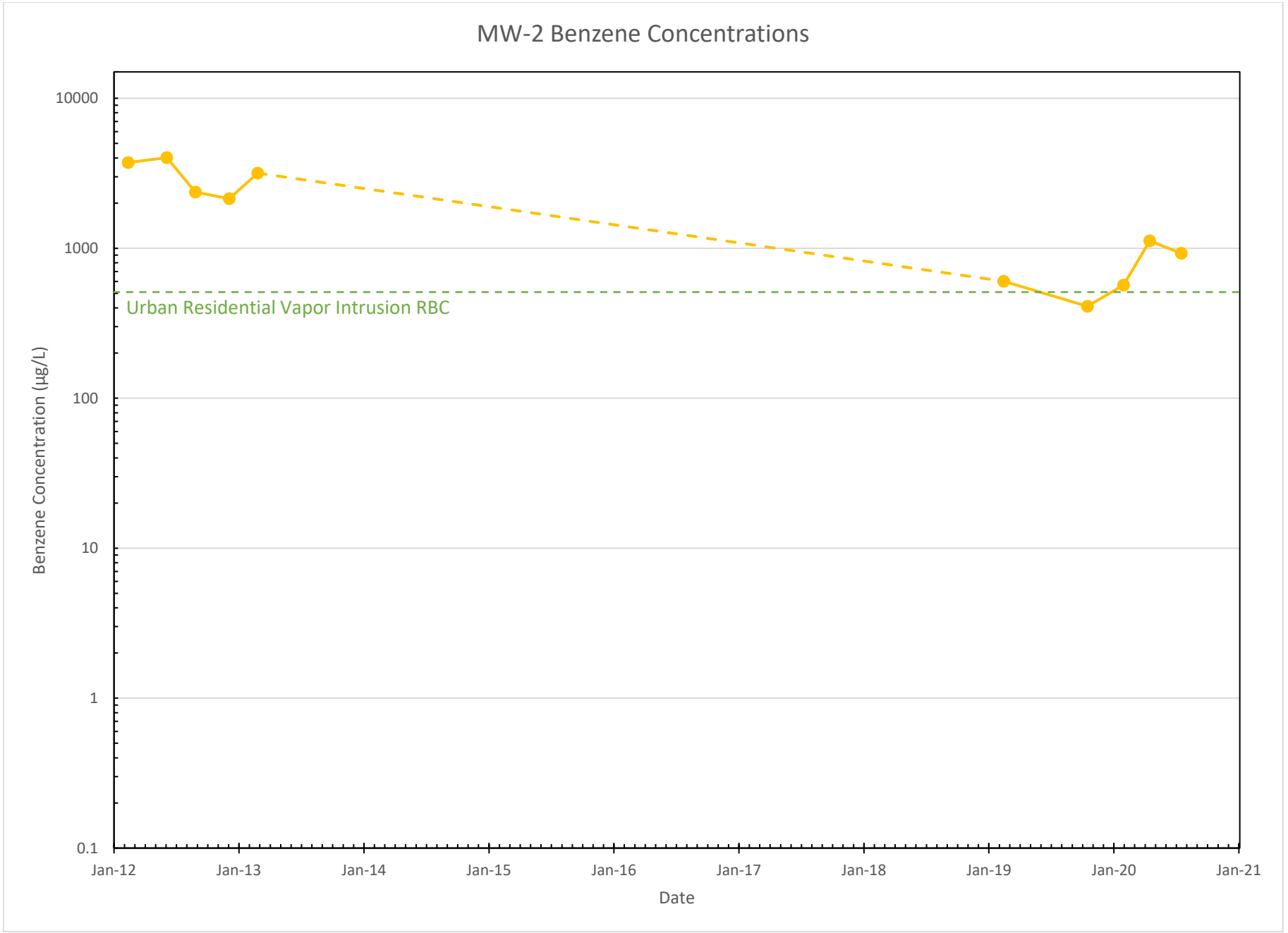
Lab Qualifiers
FILT1 - Sample was lab filtered and acid preserved prior to analysis. See sample preparation section of report for date and time of filtration.
M-02 - Due to matrix interference, this analyte cannot be accurately quantified. The reported result is estimated.
R-03 - Elevated Reporting Limits due to limited sample volume.
V-04 - Composite of VOA vials analyzed due to sediment in vials.

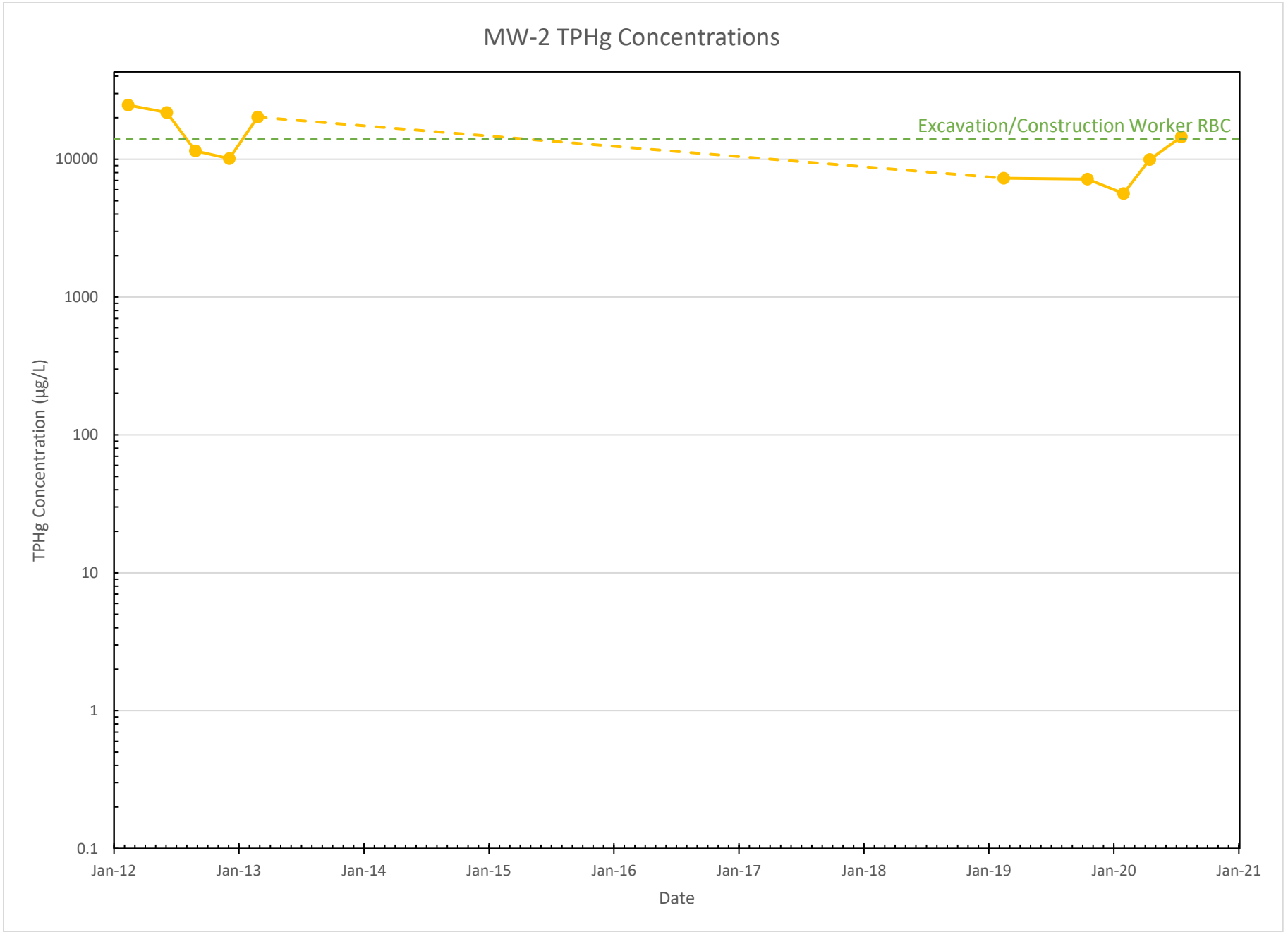
Appendix F

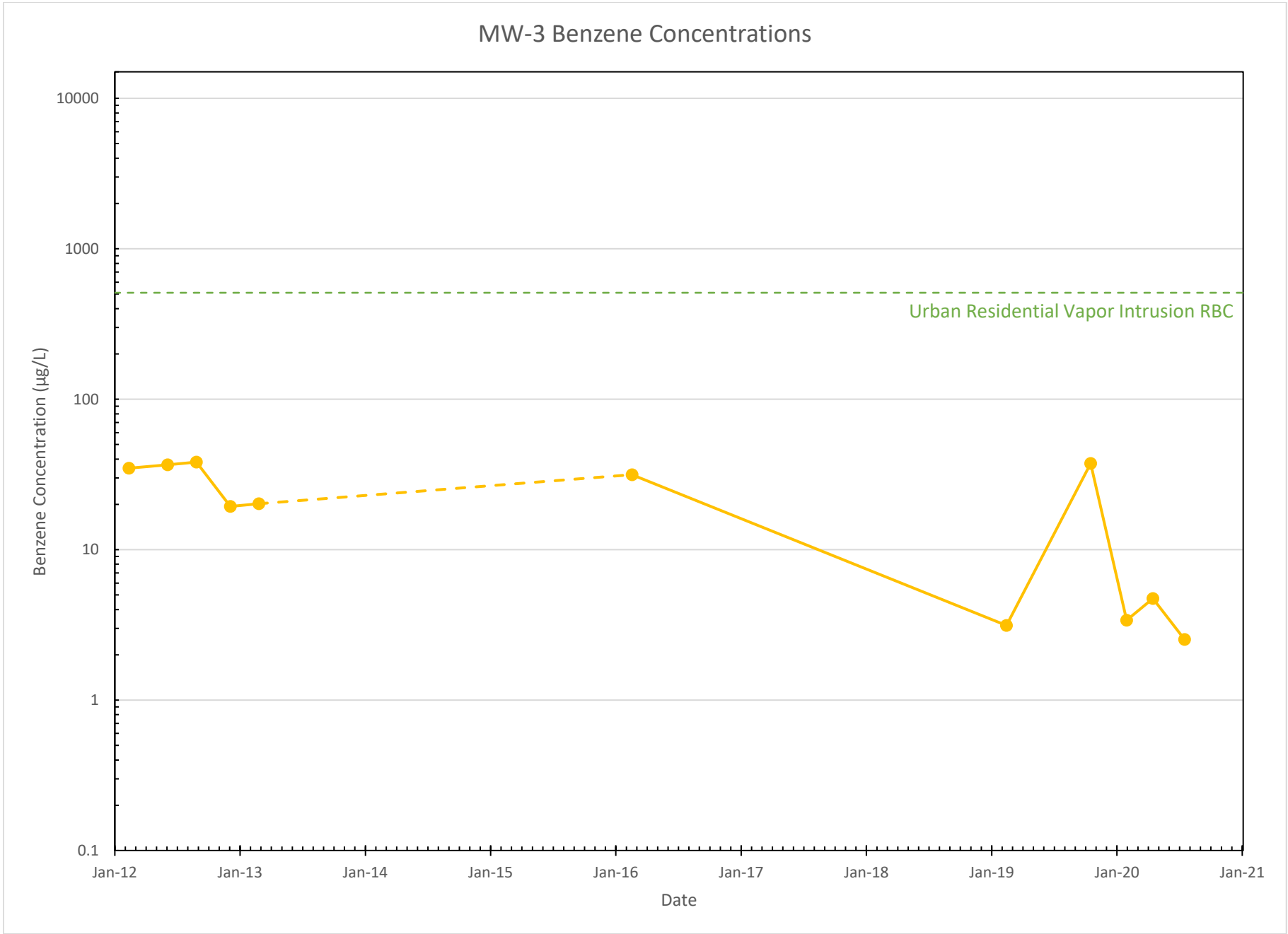
Monitoring Well Trend Graphs


MW-1 Benzene Concentrations
10000
1000
100
10
1
0.1
Benzene Concentration (µg/L)
Urban Residential Vapor Intrusion RBC
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Date

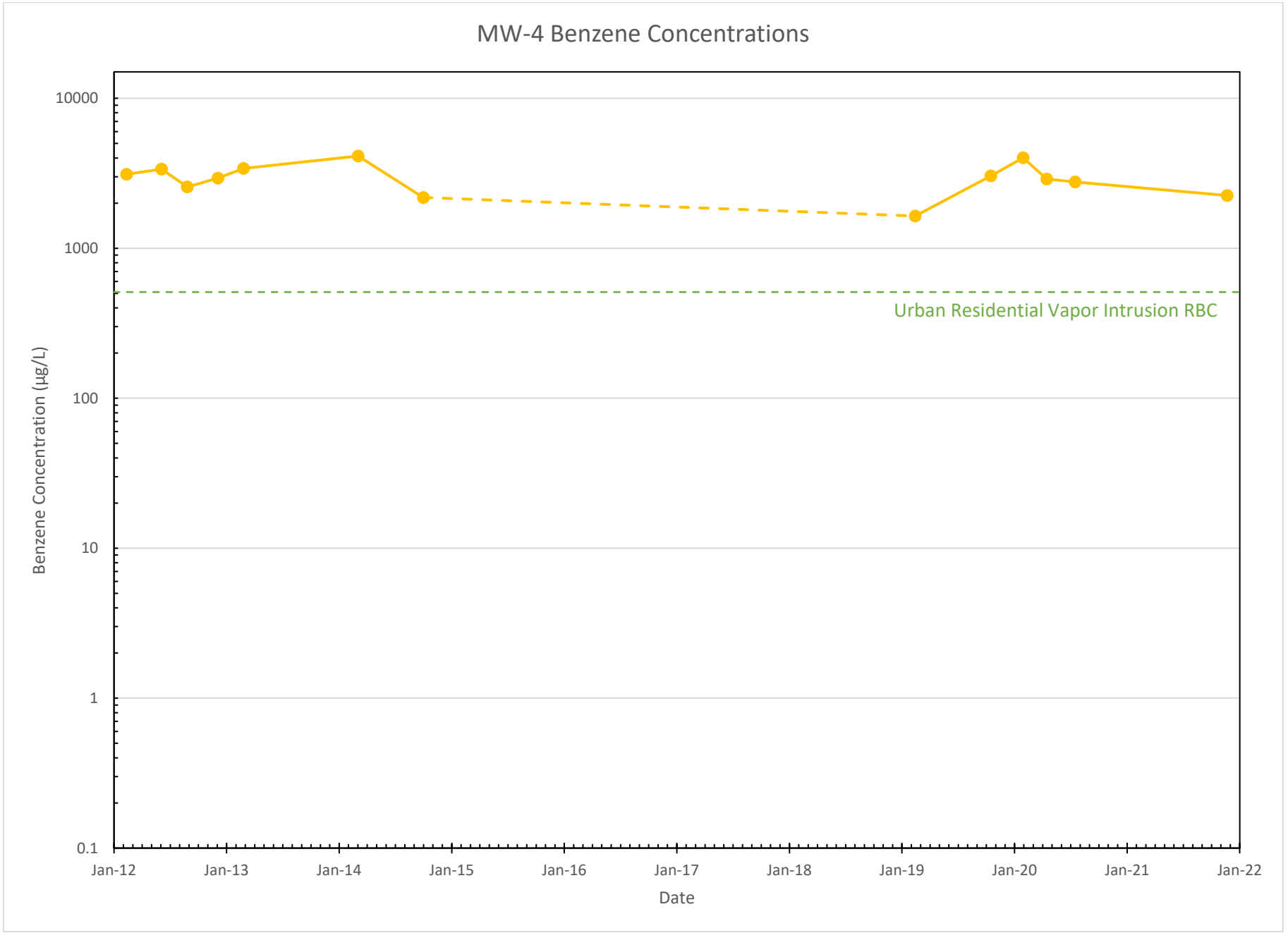

MW-1 TPHg Concentrations
Excavation/Construction Worker RBC
10000
1000
100
10
1
0.1
TPHg Concentration (µg/L)
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Date


MW-2 Benzene Concentrations
10000
1000
100
10
1
0.1
Benzene Concentration (µg/L)
Urban Residential Vapor Intrusion RBC
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Date

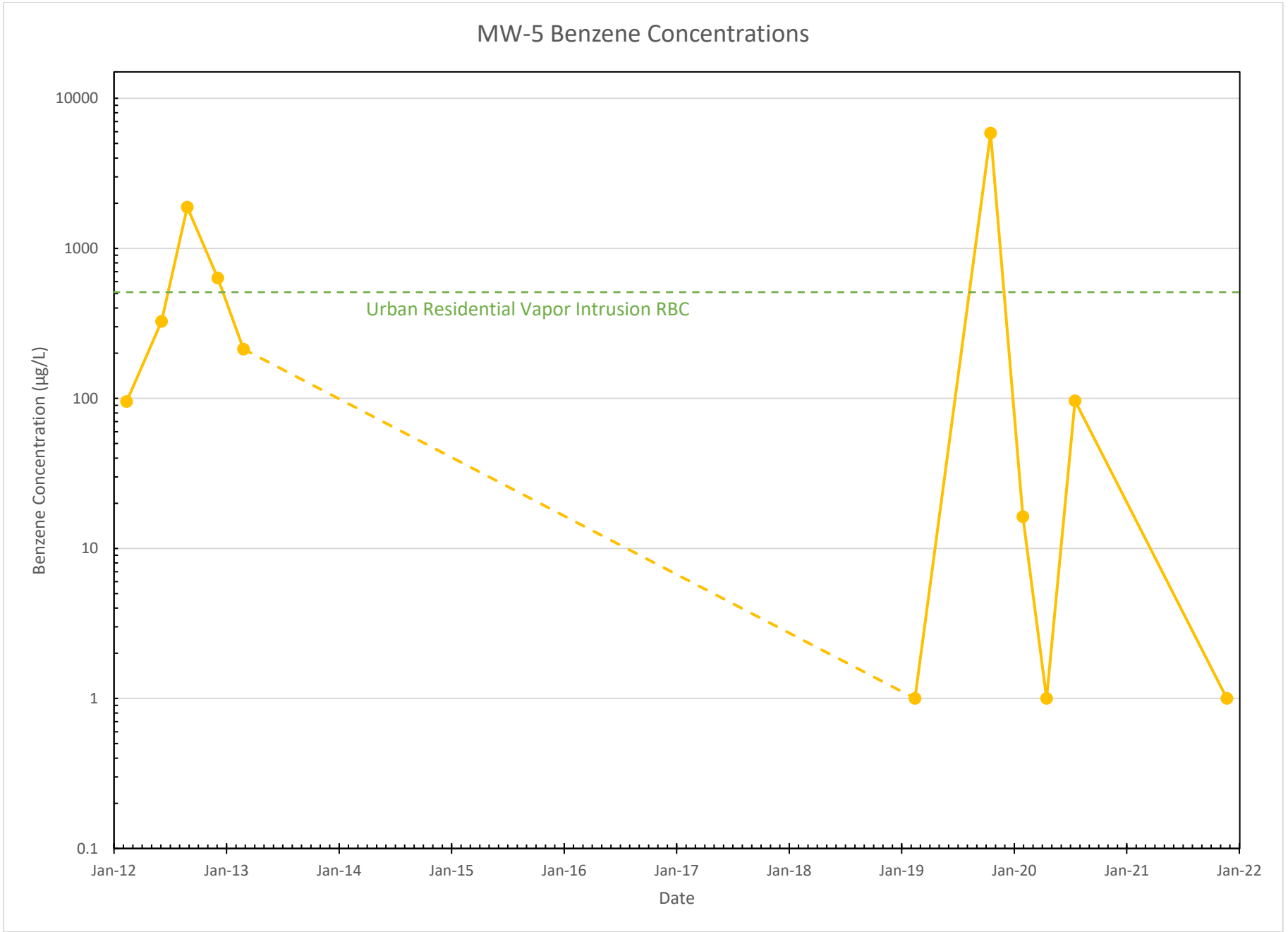

MW-2 TPHg Concentrations
Excavation/Construction Worker RBC
10000
1000
100
10
1
0.1
TPHg Concentration (µg/L)
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Date


MW-3 Benzene Concentrations
10000
1000
100
10
1
0.1
Benzene Concentration (µg/L)
Urban Residential Vapor Intrusion RBC
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Date

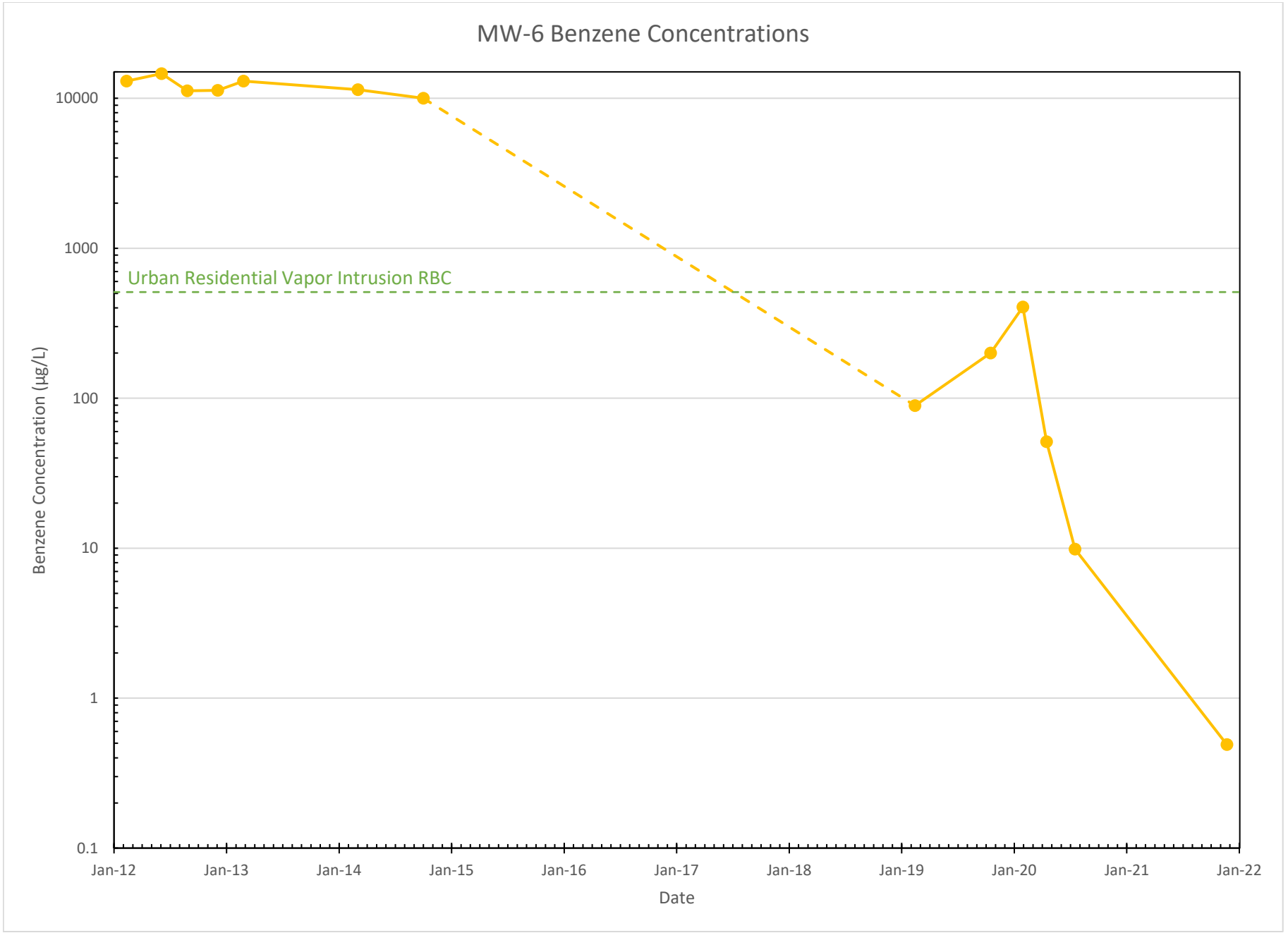
MW-3 TPHg Concentrations
Excavation/Construction Worker RBC
10000
1000
100
10
1
0.1
TPHg Concentration (µg/L)
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Date


MW-4 Benzene Concentrations
10000
1000
100
10
1
0.1
Benzene Concentration (µg/L)
Urban Residential Vapor Intrusion RBC
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Date

MW-4 TPHg Concentrations
Excavation/Construction Worker RBC
10000
1000
100
10
1
0.1
TPHg Concentration (µg/L)
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Date


MW-5 Benzene Concentrations
10000
1000
100
10
1
0.1
Benzene Concentration (µg/L)
Urban Residential Vapor Intrusion RBC
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Date

MW-5 TPHg Concentrations
Excavation/Construction Worker RBC
10000
1000
100
10
1
0.1
TPHg Concentration (µg/L)
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Date


MW-6 Benzene Concentrations
10000
1000
100
10
1
0.1
Benzene Concentration (µg/L)
Urban Residential Vapor Intrusion RBC
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Date

MW-6 TPHg Concentrations
Excavation/Construction Worker RBC
10000
1000
100
10
1
0.1
TPHg Concentration (µg/L)
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Date