Fall 2023 Data Report
Springdale Cleaners
Portland, Oregon
ECSI No. 2290

Prepared for:
Oregon Department of Environmental Quality
Task Order No. 71-18-5

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1.0 Introduction

This report describes the field activities and presents the results of the August and November 2023 monitoring events conducted at the Springdale Cleaners site (the Site) located at 6337 SW Capitol Highway in Portland, Oregon (Figure 1). On behalf of the Oregon Department of Environmental Quality (DEQ), Apex Companies, LLC (Apex) conducted routine groundwater and vapor sampling as part of the interim remedial measure monitoring program implemented at the Site. The groundwater monitoring was done in general accordance with the *Interim Remedial Action Work Plan* (Ash Creek, 2009). Vapor sampling was completed in general accordance with the *Vapor Mitigation Interim Remedial Action Work Plan* (Ash Creek, 2012) with deviations discussed in Section 1.3. Additionally, this report describes repair activities conducted on the vapor collection system.

1.1 Purpose

The purpose of the completed sampling is to assess the current groundwater quality at the Site, the effectiveness of the groundwater and vapor mitigation interim remedial actions that have been completed at the Site (including the 2022 supplemental interim action groundwater injections), and the effect of the interim actions on indoor air quality in the Site building and the building immediately adjacent to the west.

1.2 Scope of Work

To accomplish these objectives, the scope of work that is described in this report consists of the following general tasks:

- For the August 2023 groundwater monitoring event:
    - Measure water levels in Site groundwater monitoring wells (the locations of which are shown on Figure 2);
    - Collect groundwater samples from 14 groundwater monitoring wells (including JEMW-1, JEMW-2, JEMW-4, JEMW-5, JEMW-6, MW-1, MW-2, MW-3, MW-4, MW-5-20, MW-6-20, MW-7, MW-8, and MW-9); and
    - Analyze each of the collected groundwater samples for volatile organic compounds (VOCs) and four selected samples for dissolved gases (methane, ethane, and ethene).
- For the August 2023 and November 2023 monitoring events:
    - Collect nine ambient air samples (eight interior samples and one exterior sample) and analyze for VOCs to assess air quality in the occupied breathing spaces and surrounding vicinity concurrent with groundwater monitoring;
    - Collect two sub-slab soil vapor samples from the monitoring points installed in the western building; and

    - Prepare a brief summary report discussing the Site activities and analytical results.
- In October 2023, repair the onsite vapor mitigation system.

1.3 Deviations from the Scope of Work

Due to failure of the laboratory-supplied equipment, there was insufficient vapor volume in the sampling canister for the Hillsdale Veterinary Clinic sample during the August 2023 sampling event and therefore this sample could not be analyzed. Also, sub-slab monitoring point VP-6R was found damaged during the November 2023 event and could not be sampled.

2.0 Background

This section presents a description of the Site and its geology and hydrogeology and summarizes the results of previous environmental activities performed at the Site.

2.1 Site Location and Description

The Springdale Cleaners operates within a strip mall located at 6337 SW Capitol Highway in Portland, Oregon (the Site location is shown on Figure 1 and a Site Plan is shown on Figure 2). Various businesses occupy the other spaces in the mall and have been impacted by chloroethene VOCs (particularly tetrachloroethene [PCE] and its degradation byproducts such as trichloroethene [TCE], cis-1,2-dichloroethene [DCE], and vinyl chloride [VC]) that have volatilized from subsurface sources. A similar building is located west of Springdale Cleaners and contains the Hillsdale Veterinary Clinic. This building has also been impacted by chloroethene VOC solvent vapors originating from the Site-related contamination.

2.2 Geology and Hydrogeology

The soil types encountered at the Site generally consist of shallow sandy silts and silty sands that transition to finer-grained clayey sands, clayey silts, and sandy clays with increasing depth. A distinct clay zone has been encountered at the Site at depths of about 20 feet below the ground surface (bgs) and appears to extend to a depth of at least 25 feet bgs, the maximum exploration depth at the Site. The land surface slopes gently to the south-southwest.

Shallow groundwater encountered in area monitoring wells has been observed at the Site at depths of between 1.8 and 12.5 feet bgs (shallower to the south), though free water has been first encountered during drilling activities at a depth of about 12 feet bgs and then gradually rises in the shallow monitoring wells to the final static water levels (suggesting that the upper soil unit is acting as a confining unit for an underlying confined aquifer). The depth of saturated soil in the confining unit is generally similar to the depth to

groundwater (i.e. 2 to 10 feet bgs), though groundwater flow in this soil is significantly slower and thus may vary from observed groundwater depths at any given time due to delays in response to upward piezometric pressures from the underlying aquifer or downward pressures from precipitation events. The groundwater gradient observed in groundwater monitoring wells at the Site is generally on the order of 0.04 to 0.06 feet per foot (ft/ft) to the south-southwest, varying in magnitude seasonally.

2.3 Previous Work

1999 Hydrogen Release Compound Injection. Hydrogen Release Compound (HRC) manufactured by Regenesis, Inc. (Regenesis) was injected in 1999 to address high concentrations of PCE. Two types of HRC were used: (1) approximately 1,900 pounds of regular HRC were injected near monitoring wells MW-2 and MW-4 to address dissolved-phase contamination; and (2) approximately 700 pounds of slow-release HRC were injected near JEMW-4 to address a more highly contaminated source area. Decreases in PCE and TCE concentrations were observed in both treatment areas, though the impact in the area of slow-release HRC was considerably greater (and for a longer duration). Based on this work, Site biochemical conditions were determined to be favorable for enhanced bioremediation via reductive dechlorination despite concentrations that are indicative of dense non-aqueous phase liquids (DNAPL), with significant effects of slow-release HRC in DNAPL areas still evident nine years after treatment. However, the fine-grained nature of Site soils complicates the delivery of the bioremediation substrates.

2008 Focused Site Assessment. During May and June 2008, additional site assessment work was done at the Site to collect Site data to better characterize the magnitude and extent of areas requiring treatment. From this work, it was determined that chloroethene VOCs are present in soil, groundwater, and vapor in the vicinity of the Site building at concentrations that exceed DEQ risk-based concentration (RBC) screening level values (SLVs). The areas with the highest residual concentrations of chloroethene VOCs (in soil, groundwater, and soil vapor) exist beneath the Site building, particularly along the utility corridor on the west side of the building. Analytical results indicated that enhanced biodegradation of the impacted soil and groundwater in the vicinity of the historical HRC injection points resulted in the successful breakdown of chloroethene parent compounds, but that the rate of biodegradation may be limited by a scarcity of micronutrients.

2008 Bioremediation Pilot Study and Groundwater Monitoring. A pilot injection of the Regenesis 3DMe product at the Site was completed in November 2008. A total of 3,350 gallons of solution were injected into multiple application points (including within the building, beneath the utility corridor located along the west side of the building, and in a series of direct-push points angled beneath the utility corridor). Another 480 gallons of product were applied to a trench installed in the space west of the Site building. The subsequent observation of 3DMe material in monitoring wells MW-7 and MW-8 suggests that significant dispersal of the material occurred during the injection.

Approximately seven months after the initial injections of 3Dme product, collected data indicated a significant increase in reductive dechlorination activity in the immediate vicinity of the injections, though the observed extent and magnitude of total molar chloroethene VOCs remained relatively consistent with prior sampling events. However, analysis of natural attenuation parameters suggested that the rate of degradation may be hampered by the lack of available nutrients.

2010 Vapor Mitigation Interim Action. In February 2010, an Interim Remedial Action was implemented with a focus on addressing vapor exposures. The interim action included: completion of explorations and soil-gas sampling in the greenway west of the Site building; completion of one deep boring west of the Site building; installation of a new groundwater monitoring well (MW-9); installation of a ventilation system to evacuate chloroethene solvent vapors from the utility corridor beneath the Site building; and completion of a soil vapor extraction (SVE) pilot test to assess the operating parameters and soil vapor effluent concentrations that could be achieved with an SVE system.

No elevated concentrations of VOCs were identified in soil samples, and there did not appear to be a viable preferential pathway for vapors to migrate through soil from the eastern building to the western building. Elevated concentrations of chloroethene VOCs were detected in the groundwater sample collected from the new monitoring well. Analytical results in the soil vapor samples showed that chloroethene hydrocarbon concentrations are below the RBCs for soil gas. The areas of highest PCE and TCE concentrations in groundwater were found in wells JEMW-5, MW-6-20, and MW-9. Elevated chloroethene levels in groundwater were found to extend beneath the south end of the western building and were correlated with the highest PCE and/or TCE concentrations encountered in soil vapor. The ambient air sample collected from this area was also impacted by chloroethene VOCs. Based on these observations and the shallow depth to saturated soil (about 3 feet bgs at the time of this sampling), it was concluded that the concentrations of chloroethene VOCs in soil vapor are likely originating from chloroethene VOCs in groundwater and not from the lateral migration of vapors in unsaturated soil.

2011 Vapor Monitoring. Air monitoring was conducted in April and August 2011. For the western building, concentrations of PCE and/or TCE observed in the two sampling events remained above the RBCs in three of the four tenant spaces (excepting the Hillsdale Veterinary Clinic). In general, the concentrations of PCE in the western building were lower than in the eastern building, but the TCE concentrations were markedly higher. This was likely attributable to the migration of groundwater that continued to degrade PCE to TCE as a result of the interim action groundwater treatment.

Sub-slab soil vapor monitoring results beneath the western building showed that the PCE and TCE concentrations were consistently below the revised RBCs. A strong correlation between the distribution of sub-slab TCE and PCE concentrations and the ambient air concentrations in the western building suggested that the PCE and TCE in ambient air were predominantly due to the intrusion of the sub-slab soil vapors. Adjustments were made to the building HVAC system prior to these sampling events to reduce these

potential influences by increasing the pressure within the building; however, the sub-slab sample results indicated that these adjustments were not sufficient on their own to remedy the situation. Results from the outdoor ambient air samples collected in the median area between the buildings and from the building roofs in the vicinity of the HVAC system intakes (nearest the existing ventilation discharge stack) were low or non-detect.

2012 Vapor Mitigation Interim Action. Interim remedial action activities were performed in September through November 2012 to facilitate the control of vapor intrusion into the western building and to improve groundwater conditions contributing to vapor intrusion. Site activities included the installation of soil vapor collection points along the eastern edge of the western building, the installation of four bioremediation substrate injection wells, and the application of 3DMe bioremediation substrate to enhance the bioremediation of chloroethene solvent hydrocarbons in groundwater. Groundwater monitoring and soil vapor/ambient air sampling were conducted to measure the effectiveness of the mitigation measures.

Chloroethene VOCs were detected in each of the six wells sampled. Each of the six wells showed a decrease in PCE and TCE concentrations (most by an order of magnitude or more). The monitoring wells also showed an increase in DCE and VC concentrations (with the exception of DCE in well MW-5-20). Groundwater concentration trends showed strong evidence of reductive dechlorination as a result of the bioremediation injections.

Chloroethene VOCs were detected in five of the six indoor ambient air samples. Overall, the concentrations of total molar chloroethenes in indoor air were observed to have a decreasing trend with the exception of BE Salon, which had an increasing trend. Chloroethene VOCs were also detected in each of the three sub-slab soil vapor monitoring points. PCE, TCE, and DCE concentrations in VP-4 and VP-5 (beneath the yoga studio and Bellamy Studios, respectively) were the lowest that had been observed. Chloroethenes in indoor ambient air samples were below the occupational inhalation RBC in each of the samples, with the exception of PCE in the Key Bank breakroom (which exceeded the RBC by a factor of 1.2).

2013 Supplemental Vapor Mitigation Interim Remedial Action. Interim remedial action activities were conducted in May through September 2013 to improve air quality in the Site building and the building immediately to the west. Site activities included modification of the existing vapor collection system followed by soil vapor and ambient air sampling to measure the effectiveness of the system modifications. Soil vapor/ambient air sampling was conducted in October 2013 to measure the effectiveness of the system modifications. Chloroethene VOCs were detected in each of the eight indoor ambient air samples collected in the eastern and western Site buildings, and in each of the three sub-slab soil vapor monitoring points, with concentrations that were relatively highest in monitoring point VP-5 (located beneath the Bellamy Studios space). No exceedances of the RBCs for chloroethenes were observed in the ambient air or sub-slab samples during the October 2013 monitoring event.

2016 Bioremediation Injections. A bioremediation injection was completed in August and September 2016. Approximately 3,150 gallons of solution were injected into multiple application points (interior monitoring points, the utility corridor core beneath the west side of the building, previously installed injection wells, selected groundwater monitoring wells, and the previously installed exterior injection trench).

Prior to the bioremediation injection of 3DMe, an application of Bio-Dechlor Inoculum Plus (BDI Plus) was applied to the site wells. BDI Plus is an enriched microbial solution that enriches the natural microbial consortium with several species of dehalococcoides (a microbial strain known to facilitate the complete reductive dechlorination of PCE). The subsequent observations of 3DMe material in groundwater monitoring wells MW-6-10 and MW-6-20 suggest that significant dispersal of the material occurred during the injection, or the injected material encountered a preferential pathway also intersected by the monitoring wells.

Bi-Monthly System Inspection. Beginning in July 2015, Apex inspected the vapor collection system on a bi-monthly schedule to confirm its operating condition and to drain water from both the system knockout and the lateral pipe cleanout. These routine system checks have allowed for periodic system restarts, repair of the electrical relay switches, and the repair of system piping that had become loose. Since the bi-monthly inspections began in July 2015, approximately 65 gallons of water have been removed from the system (which has been managed as investigation-derived waste [IDW] as discussed in Section 3).

2022 Bioremediation Injections. A bioremediation injection was completed in August and September 2022. A total of 5,390 gallons of EOS Pro (emulsified oil), BAC-9 (microorganisms), and Clean-ER (zero valent iron [ZVI]) were injected into the subsurface during the expanded groundwater IRM activities. Slower-than-expected injection rates were encountered; therefore, solutions were concentrated and injected into fewer locations than originally planned. Injections were discontinued due to the discharge of a milky white fluid observed in Fanno Creek approximately a quarter mile southwest of the Site. Despite the work stoppage and slow injection rates, the majority of the EOS product was distributed across the Site through the 12 active and three passive injections that were completed.

3.0 Field Activities and Findings

3.1 August 2023 Groundwater Monitoring

Groundwater Levels. On August 16, 2023, groundwater levels were measured in Site monitoring wells to the nearest 0.01 foot bgs. During this monitoring event, the measured depths to groundwater ranged from 1.87 feet (MW-7) to 8.71 feet (MW-2) and groundwater elevations ranged from 81.58 feet above mean sea level (msl) at the south end of the Site (MW-9) to 94.59 feet above msl at the north end of the Site (JEMW-1). These elevations are similar to historically observed groundwater elevations. In general, the

groundwater gradient observed at the Site is to the south-southwest, with an overall average of about 0.051 ft/ft (also consistent with historical observations). Groundwater elevations are included in Table 1.

Monitoring Well Sampling. On August 16 and 17, 2023, groundwater samples were collected from 14 selected monitoring wells (JEMW-1, JEMW-2, JEMW-4, JEMW-5, JEMW-6, MW-1, MW-2, MW-3, MW-4, MW-5-20, MW-6-20, MW-7, MW-8, and MW-9). The locations of these wells are shown on Figure 2. Detailed groundwater sampling procedures are described in the Purging and Sampling Methods section below.

Purging and Sampling Methods. After groundwater levels were measured, each of the selected monitoring wells were purged with a peristaltic pump. Field parameters (including temperature, pH, dissolved oxygen [DO], oxidation-reduction potential [ORP], and electrical conductivity) were monitored using a multi-parameter meter and a flow-through cell to assess the effectiveness of purging activities. Field parameters are listed in Table 1. Field documentation of purging and sampling activities is included in Appendix A. Wells ME-5-20, MW-6-20, MW-7, MW-8, MW-9, JEMW-4, and JEMW-5 ran dry before completion of the stabilization and were then allowed to recharge before sampling. Once field parameters stabilized or the wells recharged, groundwater samples were collected using laboratory-supplied sample containers marked with identifying information and maintained under chain-of-custody (COC) protocols.

Handling of Investigation-Derived Waste. IDW consisted of decontamination water, purge water, and personal protective equipment (PPE). Decontamination and purge water were placed in an accumulation drum stored onsite. Personal protective equipment was disposed of as solid waste.

3.2 August and November 2023 Ambient Air and Soil Vapor Monitoring

Ambient Air and Soil Vapor Sampling. Samples were collected from eight indoor ambient air sampling locations, one outdoor air sampling location, and two sub-slab soil vapor points during the August and November 2023 sampling events. The ambient air sample locations included locations from within the former Key Bank space; State Farm Insurance; former BE Salon space; former OmBase Yoga space, and the Hillsdale Veterinary Clinic. The one outdoor ambient air sample was collected in the median space between the two buildings. The soil vapor samples were collected from existing sub-slab monitoring points located within the former BE Salon space and former OmBase Yoga space (Figure 2). Both of these spaces are currently vacant and used occasionally by the Hillsdale Veterinary Clinic.

Barometric pressures were essentially stable over the day on August 16, 2023 with pressures decreasing slightly from 30.0 inches of mercury (inHg) to 29.8 inHg over the day. Similarly, pressures were relatively stable on November 8, 2023, increasing slightly from 30.3 inHg to 30.5 inHg over the day. The ambient air samples were collected in accordance with the methods described in Appendix C (Sampling and Analysis Plan [SAP]) of the Vapor Mitigation Interim Remedial Action Work Plan (Ash Creek, 2012). The samples were collected in laboratory-supplied 6-liter Summa canisters.

4.0 August 2023 Chemical Analyses and Results

Groundwater, ambient air, and soil vapor samples collected on August 16 and 17, 2023 are discussed in the section below.

4.1 Analyses Performed

Groundwater Samples. Groundwater from each sampled monitoring well was analyzed for VOCs by U.S. Environmental Protection Agency (EPA) Method 8260D, and selected samples (JEMW-6, MW-2, MW-6-20, and MW-7) were also analyzed for dissolved gases (methane, ethane, and ethene) by Method RSK175.

Ambient Air and Soil Vapor Samples. The ambient air and soil vapor samples collected during the August 2023 events were analyzed for selected VOCs by TO-15 analysis.

Quality Assurance and Quality Control. Quality assurance/quality control (QA/QC) procedures were used throughout this project. The review in Appendix B includes the QA assessment for this project. This QA assessment includes sampling and custody procedures, QA sampling analyses (such as analysis of duplicates), detection limit goals, and laboratory QC and QA reporting. In summary, the review noted that the data are of acceptable quality and are suitable for their intended purposes.

4.2 Groundwater Chemical Results – VOCs

Table 2 summarizes the analytical results for the chloroethene VOCs and Table 3 presents the methane, ethane, and ethene results from the four selected groundwater samples. Historic concentrations are shown in Appendix C. The concentrations of key VOCs (PCE and associated degradation compounds) and dissolved gases (methane, ethane, and ethene) are shown on Figure 3. The analytical laboratory reports are included in Appendix B and trend plots are in Appendix D.

Chloroethene VOCs were detected in 11 of the 14 sampled monitoring wells, excepting JEMW-2, MW-1, and MW-3. Total chloroethene VOC concentrations were relatively highest in well MW-5-20 (consistent with prior monitoring events).

Tetrachloroethene. PCE concentrations ranged from non-detect in 11 wells to a concentration of 3,480 micrograms per liter (µg/L) in MW-8, although two of those non-detect values had significantly elevated detection limits due to the dilution of the sample required for analysis (MW-5-20 and MW-7). The average PCE concentration observed in August 2023 was lower than that observed in the previous monitoring event by an order of magnitude (708 µg/L in August 2023 compared to 7,705 µg/L in February 2023).

Degradation Byproducts. TCE was detected in four wells with detected concentrations ranging from 0.200 µg/L in JEMW-4 to 1,780 µg/L in well MW-8, with an overall average concentration of 616 µg/L. The average TCE concentration in August 2023 decreased by about 50 percent compared to February 2023 (from 1,219 µg/L to 616 µg/L). The detected concentrations of DCE and VC were relatively highest in MW-5-20, which is consistent with prior results. The average concentrations of DCE and VC slightly increased compared to the previous monitoring event by 2 and 24 percent respectively.

Total Molar Ethenes. Assessment of total molar ethene concentrations can be used to evaluate changes in the total population of the chloroethene molecules as the degradation continues from the chloride-saturated PCE (the heaviest molecular weight of the chloroethenes) through the relatively chloride-poor VC, without biasing the evaluation of the concentration data based on the different molecular weights of each compound. Total molar ethene concentrations in August 2023 decreased in six wells (JEMW-4, JEMW-5, JEMW-6, MW-4, MW-5-20, and MW-7) as compared to February 2023. Monitoring wells JEMW-5 and MW-4 showed the relatively lowest total molar concentrations that have been observed in these wells. Concentrations increased in four wells (MW-2, MW-6-20, MW-8, and MW-9) as compared to the February 2023 event. The average concentration of total molar ethenes across the Site has consistently decreased since April 2020. The average total molar concentration during the August 2023 event is the lowest since September 2007. A summary of concentrations of the chloroethene VOC compounds observed in the August 2023 monitoring event are presented in Table 2 and are shown on Figure 3.

Risk-Based Screening. Concentrations of detected chloroethene VOCs were compared to the RBC for excavation worker exposure to impacted groundwater (DEQ, 2023). Table 2 lists detected concentrations and the screening level for each analyte. Analytical results that exceeded the RBC have been shaded in the table.

PCE and TCE were not detected above the RBCs in any monitoring wells. However, the detection limit for both analytes was above the RBC in MW-5-20 due to sample dilution. DCE was detected above the RBC in wells MW-5-20, MW-7, and MW-8 (by a maximum factor of 29). VC was detected above the RBC in wells JEMW-5, MW-2, MW-5-20, MW-6-20, MW-7 (by a maximum factor of 63). None of the applicable RBCs were exceeded in wells JEMW-1, JEMW-2, JEMW-4, JEMW-6, MW-1, MW-2, MW-3, MW-4, and MW-9 (perimeter wells on the northern, eastern, and southern edges of the Site). These exceedances are generally consistent with prior monitoring events.

Reductive Dechlorination of PCE. Evidence of reductive dechlorination (the stepwise substitution of a chlorine atom on a saturated chloroethene molecule with a hydrogen atom) was observed in most monitoring wells (at varying degrees) during this event and is discussed in more detail below. Concentration trend plots for select monitoring wells are available in Appendix D.

Through reductive dechlorination it is expected that each successive stage would be characterized by a reduction in the concentration of the more saturated chloroethene and a corresponding increase in the less saturated chloroethene (e.g., PCE concentrations would decrease while TCE concentrations increase, then in sequence the TCE concentrations would decrease while DCE concentrations would increase, and the pattern would continue until the final reduction of vinyl chloride to ethene). Given the extended-release nature of the injection substrate and the tight clays and silty clays encountered in the top 15 to 20 feet of the subsurface (where the majority of the wells are screened), significant reductions in chlorinated VOC concentrations are expected for occur gradually over time. Expected results include a decrease in PCE concentrations and an initial increase of the associated degradation products (*i.e.* TCE, DCE, and VC) followed by significant decreases in the byproduct concentrations as the microorganisms continue the reductive dechlorination process.

The average PCE and TCE concentration at the site decreased significantly during the August 2023 event as compared to previous monitoring events. As expected with the decrease in PCE and TCE, an increase was observed in DCE and VC. Additionally, average total molar chloroethenes is the lowest seen at the site since September 2007. These results support that the recent bioremediation injections are being effective and reductive dechlorination processes are active at the site.

4.3 Groundwater Chemical Results – Dissolved Gases

Concentrations of methane, ethane, and ethene were detected in all sampled wells (JEMW-6, MW-2, MW-6-20, and MW-7). The detected concentrations of methane (which range from 8,840 µg/L to 17,700 µg/L) are indicative of microbial degradation of organics through processes other than the reductive dechlorination of the chloroethene hydrocarbons.

The ethene and ethane detections are normal byproducts of the degradation of PCE (particularly ethene, which is encountered in proportionally greater concentrations). The relatively higher ethene concentration in MW-7 suggests that reductive dechlorination continues to occur in the vicinity of this well. The concentrations of dissolved gases generally decrease with distance from the Cleaners and the bioremediation injection area.

4.4 Ambient Air and Soil Vapor Results

Table 4 summarizes the analytical results for chlorinated VOCs in the collected ambient air samples (the locations of each sample are shown on Figure 2). Table 5 presents the analytical results from the two sub-slab soil vapor samples (VP-4 in the OmBase Yoga, and VP-6R in the BE Salon). The concentrations of key VOCs (PCE and associated degradation compounds) are shown on Figure 4. The analytical laboratory reports are included in Appendix B.

Ambient Air Samples. Chlorinated VOCs were detected in three of seven indoor ambient air samples during the August 2023 sampling event. PCE and TCE were detected in two indoor samples (State Farm Insurance and the former OmBase Yoga). The average PCE concentration from August 2023 was 13.25 µg/m^3, which is increased from 5.80 µg/m^3 observed in February 2023 but similar to the concentrations observed in October 2022. Average TCE concentration was similar to that in the previous monitoring event (2.40 µg/m^3 compared to 2.52 µg/m^3). The relatively highest total molar VOC concentration was encountered in OmBase Yoga with 0.133 micromoles per meter cubed (µmol/m^3).

Plots of PCE, TCE, and total molar ethene concentrations in the ambient air samples are included in Appendix E. The concentrations of VOCs in the indoor air samples have fluctuated significantly following the completion of the groundwater and vapor interim actions. As compared to the February 2023 event, samples from within Springdale Cleaners, Key Bank, and BE Salon were lower in August 2023. The sample from within State Farm Insurance was higher while samples from within the Hillsdale Veterinary Clinic and OmBase Yoga had relatively stable concentrations as compared to the previous sampling event.

Sub-Slab Sample. Two sub-slab samples were collected during the August 2023 event from sample points VP-4 and VP-6R, which had detections of PCE (VP-4 and VP-6R), TCE (VP-4), and DCE (VP-4). VC was not detected in either sample. These concentrations were lower than those from the February 2023 sampling event.

Risk-Based Screening. Concentrations of chlorinated VOCs detected in the ambient air samples were compared to DEQ RBCs for commercial ambient air (both chronic and acute). Table 4 lists detected concentrations and the screening levels for each analyte. PCE slightly exceeded the RBC for chronic exposure in commercial settings (3.3 µg/m^3 compared to the RBC of 3 µg/m^3). No other concentrations exceeded applicable RBCs during this monitoring event.

VOC concentration from soil vapor samples were compared to DEQ RBCs for commercial soil vapor (both chronic and acute). The only detected concentration of PCE did not exceed the applicable RBCs.

5.0 November 2023 Chemical Analyses and Results

Ambient air and soil vapor samples were collected on November 8, 2023 to assess the impact of the repair of the vapor collection system. These results are discussed in the section below.

5.1 Analyses Performed

The ambient air and soil vapor samples collected during the November 2023 events were analyzed for selected VOCs by TO-15 analysis.

5.2 Ambient Air and Soil Vapor Results

Ambient Air Samples. Chlorinated VOCs were detected in five of eight indoor ambient air samples during the November sampling event. PCE was detected in three indoor samples (Springdale Cleaners and both samples with the former BE Salon). TCE was detected in one sample (BE Salon South). The average PCE concentration from November 2023 was 3.13 µg/m^3 which is decreased by an order of magnitude from 13.25 µg/m^3 in August 2023. The average TCE decreased by approximately 52 percent as compared to the previous event (1.25 µg/m^3 compared to 2.40 µg/m^3). The highest total molar VOC concentration was encountered in BE Salon South with 0.043 micromoles per meter cubed (µmol/m^3).

As compared to the August 2023 event, samples from within Springdale Cleaners, State Farm, Hillsdale Veterinary Clinic, and OmBase Yoga were lower in November 2023. The sample from within the former BE Salon was higher while samples from within the former Key Bank had relatively stable concentrations as compared to the previous sampling event. The average PCE and TCE concentrations measured across the Site in November 2023 was the lowest that have been recorded at the Site, indicating that the repair to the vapor collection system (discussed in Section 6, below) and the continued reduction of source-area concentrations is being effective at reducing potential vapor exposures.

Sub-Slab Sample. One sub-slab sample was collected during the November 2023 event from monitoring point VP-4, which had a detection of PCE of 1.7 µg/m^3. This concentration is lowest concentration that has been detected at this sample location. No other chloroethanes were detected above method detection limits. As described above, monitoring point VP-6R was damaged prior to this sampling event and could not be sampled.

Risk-Based Screening. Concentrations of chlorinated VOCs detected in the ambient air samples were compared to DEQ RBCs for commercial ambient air (both chronic and acute). Table 4 lists detected concentrations and the screening levels for each analyte. No concentrations exceeded applicable RBCs during this monitoring event.

VOC concentration from VP-4 were compared to DEQ RBCs for commercial soil vapor (both chronic and acute). The only detected concentration of PCE did not exceed the applicable RBC.

6.0 Vapor Collection System Repair

The vapor collection system at the Site was found not running during the May 2023 routine maintenance event. Further inspection found multiple system components needing repair (particularly the system blower and moisture separator). Apex procured a subcontractor (TerraHydr, Inc.) to repair the system. The repairs were conducted in October 2023. The scope of the repairs included replacement of the following components:

- Rotron EN303 (1/2 horsepower) regenerative blower;
- EPG CS-16c moisture separator;
- Vacuum/relief valve;
- Float switch;
- Vacuum gauge and associated piping; and
- Composite decking.

Once these components were installed, they were connected to the existing infrastructure and the system was turned on. The system has been running continuously since startup in October 2023 with routine maintenance to remove moisture collection within the system piping.

7.0 Conclusions

The gauging and sampling of 14 groundwater monitoring wells was completed in August 2023. Additionally, eight indoor ambient air, one outdoor ambient air sample, and two sub-slab soil vapor samples were collected during August and November 2023 (except for one sub-slab sample that was not able to be collected in November 2023).

Chloroethene VOCs were detected in 11 of the 14 monitoring wells sampled during the August 2023 event. There were no exceedances of PCE and TCE RBCs during this monitoring event, however, MW-5-20 had elevated method detection limits above the RBCs for these analytes due to sample dilution. The degradation byproducts DCE and/or VC were detected at concentrations above their RBCs in six wells. The results in northern, eastern, and southern perimeter wells indicate low or non-detectable concentrations of chloroethene VOCs. The concentrations of chloroethenes were elevated in MW-5-20, MW-7, and MW-8, which is consistent with historic events, and suggests that additional PCE mass is present as a source area in the vicinity of these wells.

On average, the PCE and TCE groundwater concentrations in August 2023 were lower than observed in the prior monitoring event (February 2023) with PCE being the lowest detected since monitoring began. The average concentrations of DCE and VC slightly increased compared to the previous monitoring event, consistent with the expectations for the ongoing reductive dechlorination process. Overall, the reduction of PCE and TCE concentrations has been significant since completion of the Bioremediation Pilot Study in 2008, and the total molar chloroethene concentrations for the site remain significantly lower than historical highs, suggesting that the bioremediation efforts have successfully reduced the mass of the chloroethenes in groundwater. Recent reductions in chloroethene concentrations indicate that the 2022 bioremediation injections have improved the effectiveness of the bioremediation treatment (particularly noticeable in MW-8).

PCE and TCE concentrations remain significantly below pre-interim action levels, though several wells show significant variability in the chloroethene concentrations (particularly in wells MW-6-20 and MW-8).

While the degradation of the chloroethene VOCs continues to occur across the Site, it is evident that residual source mass continues to exist beneath the Site building (in the vicinity of, or closely upgradient of, monitoring wells MW-7 and MW-8). This apparent source area was the target of the focused-area treatment which included more aggressive treatment compared with the larger area of the dissolved phase plume during the 2022 bioremediation injections. It is anticipated that the injections will continue to decrease the chloroethene concentrations through both biotic and abiotic pathways (via the reductive dechlorination and ZVI injections, respectively). The observed decrease in PCE and TCE along with short-term increase in concentrations of DCE and VC are consistent with an increase in reductive dechlorination, which is expected to be followed by significant decreases in the byproduct concentrations as the microorganisms continue the reductive dechlorination process.

There were no concentrations of VOCs above RBCs in ambient air or sub-slab soil vapor during the November 2023 sampling event. With the repair of the vapor collection system and the continued reductive dechlorination of PCE in the source area, it is anticipated that ambient air and soil vapor concentrations will remain stable or decrease.

8.0 References

Ash Creek Associates, Inc. (Ash Creek), 2009. *Interim Remedial Action Work Plan, Springdale Cleaners, ECSI No. 2290, Portland, Oregon*. November 24, 2009.

Ash Creek, 2012. *2012 Vapor Mitigation Interim Remedial Action Work Plan, Springdale Cleaners, ECSI No. 2290, Portland, Oregon.* March 14, 2012.

Oregon Department of Environmental Quality (DEQ), 2023. *Risk-Based Decision Making for the Remediation of Contaminated Sites*. September 22, 2003. Updated September, 2023.

Table 1
Groundwater Elevations and Field Parameters
Springdale Cleaners
Portland, Oregon

Well ID and Casing Elevation (in feet)	Sample Date	Depth to Water (feet)	Groundwater Elevation (feet)	Field Parameters				
				pH	Temperature (°C)	Conductivity (mS)	DO (ppm)	ORP (mV)
JEMW-1	5/24/2022	NA	--	6.55	16.9	330.6	4.20	-142.4
(98.09)	10/31/2022	4.80	93.29	6.42	17.6	386.7	0.86	-54.9
	2/22/2023	4.33	93.76	5.82	14.16	767.0	0.00	-42.5
	8/16/2023	3.50	94.59	6.13	20.31	442.0	13.80	-950
JEMW-2	5/24/2022	NA	--	6.47	15.8	313.6	4.90	-191.2
(93.10)	10/31/2022	4.35	88.75	6.40	16.9	323.7	0.90	-45.9
	2/22/2023	4.65	88.45	6.72	14.15	408	0.58	-21.6
	8/16/2023	4.10	89.00	6.16	18.61	433	5.80	-83.0
JEMW-4	5/24/2022	NA	--	6.22	14.7	1029	5.50	-37.3
(94.17)	10/31/2022	8.60	85.57	6.15	16.2	1091	0.79	-62.8
	2/22/2023	2.41	91.76	Well Dewatered				
	8/16/2023	4.96	89.21	6.26	21.39	1.05	4.56	-100.00
JEMW-5	5/24/2022	NA	--	Well Dewatered				
(90.68)	10/31/2022	10.59	80.09	Well Dewatered				
	2/22/2023	3.26	87.42	Well Dewatered				
	8/16/2023	4.63	86.05	Well Dewatered				
JEMW-6	5/24/2022	NA	--	6.29	14.7	419.9	5.00	-174.5
(87.04)	10/31/2022	3.00	84.04	6.43	15.9	359.7	3.80	-40.6
	2/22/2023	3.15	83.89	6.59	13.25	579	1.56	23.7
	8/16/2023	4.55	82.49	6.51	18.24	0.733	1.51	-124
MW-1	5/24/2022	NA	--	5.97	16.0	128.2	12.2	118.2
(NA)	10/31/2022	5.49	--	6.05	17.0	104.2	6.58	-22.7
	2/22/2023	4.59	--	6.02	13.6	182.0	5.82	203
	8/16/2023	8.60	--	5.37	3.9	210.0	13.4	180
MW-2	5/24/2022	NA	--	5.88	16.9	245.2	2.70	209.2
(NA)	10/31/2022	12.49	--	5.31	16.6	1,145	0.13	-26.4
	2/22/2023	7.50	--	6.26	14.08	932.0	0.20	-8.2
	8/16/2023	8.71	--	6.66	27.66	844.0	25.00	-134
MW-3	5/24/2022	NA	--	6.17	15.0	268.0	2.80	247.5
(NA)	10/31/2022	NA	--	6.32	15.2	74.3	1.78	-43.1
	2/22/2023	3.45	--	5.67	12.7	366.0	0.00	-3.2
	8/16/2023	6.87	--	5.87	18.6	291.0	9.90	-100
MW-4	5/24/2022	NA	--	6.2	16.4	234.6	2.10	217.2
(NA)	10/31/2022	5.40	--	6.04	16.4	365.7	0.24	-64.1
	2/22/2023	3.94	--	5.65	13.71	539.0	0.00	-42.7
	8/16/2023	6.10	--	5.84	18.24	490.0	18.80	-108
MW-5-20	5/24/2022	NA	--	--	--	--	--	--
(92.88)	10/31/2022	3.33	89.55	5.92	16.4	3,009	0.47	-83.7
	2/22/2023	2.27	90.61	5.42	13.7	3,804	0.00	-46.9
	8/16/2023	5.01	87.87	6.08	18.32	3.53	0.00	-101

Please see notes at end of table.

Table 1
Groundwater Elevations and Field Parameters
Springdale Cleaners
Portland, Oregon

Well ID and Casing Elevation (in feet)	Sample Date	Depth to Water (feet)	Groundwater Elevation (feet)	Field Parameters				
				pH	Temperature (°C)	Conductivity (mS)	DO (ppm)	ORP (mV)
MW-6-20	5/24/2022	NA	--	--	--	--	--	--
(88.70)	10/31/2022	7.71	80.99	6.25	15.4	530.0	0.61	-137.5
	2/22/2023	2.66	86.04	5.49	14.5	976.0	0.00	-251
	8/16/2023	4.15	84.55	5.91	23.0	494.0	0.00	-37
MW-7	5/24/2022	NA	--	Well Dewatered				
(NA)	10/31/2022	5.38	--	Well Dewatered				
	2/22/2023	6.63	--	5.86	14	2,227	0.00	-69.7
	8/16/2023	1.87	--	6.17	19.79	2.05	0.83	-103
MW-8	5/24/2022	NA	--	--	--	--	--	--
(NA)	10/31/2022	2.48	--	6.28	17.5	630	8.76	-101.3
	2/22/2023	2.21	--	5.84	14.23	563	0.00	-51.4
	8/16/2023	3.25	--	6.08	20.3	910	1.14	-47
MW-9	5/24/2022	NA	--	--	--	--	--	--
(87.28)	10/31/2022	10.74	76.54	6.05	16.2	840.0	0.28	-175.3
	2/22/2023	3.96	83.32	6.31	12.18	967.0	0.27	28.3
	8/16/2023	5.70	81.58	6.27	23.69	1.01	0.00	-98.0

Notes:
°C = Degrees Celsius.
mS = MicroSiemens.
DO (ppm) = Dissolved Oxygen (parts per million)].
mV = Millivolts
-- = Not Measured
NA = Not Available
ppm = parts per million

Table 2
Groundwater Sampling Analytical Results: Chloroethene VOCs
Springdale Cleaners
Portland, Oregon

Monitoring Well ID	Sample Date	Analyte Concentration in µg/L					Total Molar VOCs in µmol/L
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	
JEMW-1	5/23/2022	<1.00 UJ	<1.00 UJ	**0.393 J**	<1.00 UJ	<1.00 UJ	**0.024 J**
	11/1/2022	**0.558 J**	**0.222 J**	**0.480 J**	<1.00	<1.00	**0.023**
	2/22/2023	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
	8/16/2023	<1.00	<1.00	**0.379 J**	<1.00	<1.00 UJ	**0.024**
JEMW-2	5/24/2022	<1.00 UJ	<1.00 UJ	**0.176 J**	<1.00 UJ	<1.00 UJ	**0.022 J**
	11/1/2022	<1.00	**0.231 J**	**0.233 J**	<1.00	<1.00	**0.020**
	2/22/2023	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
	8/16/2023	<1.00	<1.00	<1.00	<1.00	<1.00 UJ	<1.00
JEMW-4	5/24/2022	<1.00 UJ	**0.313 J**	**2.58 J**	**3.42 J**	**5.04 J**	**0.148 J**
	11/1/2022	**0.538 J**	**0.287 J**	**2.87**	**4.75**	<1.00	**0.092**
	2/27/2023	<1.00	**0.235 J**	**57.5**	**3.94**	**7.98**	**0.766**
	8/16/2023	<1.00	<1.00	**11.4**	**3.78**	**5.52 J-**	**0.252**
JEMW-5	5/24/2022	**157 J**	<200 UJ	**16,900 J**	**710 J**	**7,250 J**	**299 J**
	10/31/2022	**127 J**	**45.6 J**	**8,550**	**401**	**2,870**	**139**
	2/22/2023	<50.0	<50.0	**3,340**	**474**	**2,860**	**85**
	8/16/2023	<200	<200	**1,500**	**192 J**	**3,310 J-**	**72**
JEMW-6	5/24/2022	**3.65 J**	**2.25 J**	**87.3 J**	**7.34 J**	**326 J**	**6.23 J**
	11/1/2022	**2.08**	**1.16**	**27.4**	**4.29**	**138 J-**	**2.56**
	2/22/2023	<1.00	**0.275 J**	**7.43**	**2.04**	**144**	**2.41**
	8/16/2023	<1.00	<1.00	**6.32**	**6.49**	**119 J-**	**2.04**
MW-1	5/23/2022	<1.00 UJ	<1.00 UJ	<1.00 UJ	<1.00 UJ	<1.00 UJ	<1.00 UJ
	11/1/2022	**0.493 J**	<1.00	<1.00	<1.00	<1.00	<1.00
	2/22/2023	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
	8/16/2023	<1.00	<1.00	<1.00	<1.00	<1.00 UJ	<1.00 UJ
MW-2	5/23/2022	**1,170 J**	**161 J**	**149 J**	**6.00 J**	<1.00 UJ	**9.89 J**
	11/1/2022	**37.6 J**	**29.2 J**	**7,960**	**101**	**337**	**89.0**
	2/22/2023	**24.6 J**	<50.0	**2,270 J**	**28.7 J**	**595**	**33.6**
	8/16/2023	<50.0	<50.0	**7,490**	**81.8**	**1,920 J-**	**109**
MW-3	5/23/2022	<1.00 UJ	<1.00 UJ	<1.00 UJ	<1.00 UJ	<1.00 UJ	<1.00 UJ
	11/1/2022	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
	2/22/2023	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
	8/16/2023	<1.00	<1.00	<1.00	<1.00	<1.00 UJ	<1.00 UJ
MW-4	5/23/2022	**5.48 J**	**64.4 J**	**115 J**	**1.39 J**	**3.55 J**	**1.78 J**
	11/1/2022	**1.16**	**0.937 J**	**482**	**10.1**	**158**	**7.62**
	2/22/2023	<1.00	<1.00	**18.8**	**0.554 J**	**25.3**	**0.61**
	8/16/2023	<1.00	**0.200 J**	**1.42**	**0.283 J**	**4.69 J-**	**0.10**
MW-5-20	5/24/2022	**29,500 J**	**5,660 J**	**658,000 J**	**2,390 J**	**24,400 J**	**7,423 J**
	10/31/2022	**41,800**	**3,140**	**614,000**	**3,690 J**	**84,900**	**8,006**
	2/27/2023	**5,490 J**	<10,000	**593,000**	**2,430 J**	**49,700**	**7,008**
	8/16/2023	<10,000	<10,000	**528,000**	**2,280 J**	**60,400 J-**	**6,505**

Please see notes at end of table.

Table 2
Groundwater Sampling Analytical Results: Chloroethene VOCs
Springdale Cleaners
Portland, Oregon

Monitoring Well ID	Sample Date	Analyte Concentration in µg/L					Total Molar VOCs in µmol/L
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	
MW-6-20	5/24/2022	**756 J**	**675 J**	**12,600 J**	**1,030 J**	**5,620 J**	**240 J**
	10/31/2022	**591**	**877**	**7,030**	**252**	**4,680**	**160**
	2/22/2023	**1,520**	**817**	**5,430**	**84.9 J**	**3,140**	**123**
	8/16/2023	**296**	**714**	**10,500**	**126**	**3,180 J-**	**168**
MW-7	5/24/2022	<2,000 UJ	<2,000 UJ	**98,800 J**	**1,160 J**	**2,540 J**	**1,085 J**
	11/1/2022	<2,000	**436 J**	**90,100**	**912 J**	**1,830**	**977**
	2/27/2023	<2,000	<2,000	**148,000**	**1570 J**	<2,000	**1,572**
	8/16/2023	<2,000	<2,000	**137,000**	**1560 J**	**2,810 J-**	**1,488**
MW-8	5/24/2022	**125,000 J**	**7,790 J**	**43,400 J**	**468 J**	<2,000 UJ	**1282 J**
	10/31/2022	**58,300**	**7,220**	**93,400**	**714**	**1,070 J**	**1,394**
	2/22/2023	**99,800**	**10,200**	**78,900**	**529 J**	<2,000	**1,515**
	8/16/2023	**3,480**	**1,780 J**	**161,000**	**1,410 J**	**790 J-**	**1,722**
MW-9	5/24/2022	**8.32 J**	**1.92 J**	**53.2 J**	**33.1 J**	**48.1 J**	**1.72 J**
	10/31/2022	**0.704 J**	**2.76**	**54.3**	**37.8**	**30.1**	**1.46**
	2/22/2023	<1.00	**2.06**	**31.5**	**25.4**	**23.1**	**0.98**
	8/16/2023	**0.614 J**	**0.858 J**	**64.8**	**16.0**	**14.7 J-**	**1.08**
Excavation Worker RBC		5,600	3,000	18,000	180,000	960	--
Average Concentrations							
	May 2022	**11,257**	**1,104**	**59,293**	**415**	**2,943**	**739**
	October 2022	**7,276**	**840**	**58,686**	**438**	**6,858**	**770**
	February 2023	**7,705**	**1,219**	**59,361**	**368**	**4,178**	**739**
	October 2023	**708**	**616**	**60,398**	**406**	**5,183**	**719**

Notes:
µg/L = Micrograms per Liter
PCE = Tetrachloroethene
TCE = Trichloroethene
DCE = Dichloroethene
VOCs = Volatile Organic Compounds
µmol/L = Mircomoles per Liter
< = Not Detected Above the Method Reporting Limit
ND = Not Detected
-- = Not Analyzed or Not Available
Bolded concentrations indicate detected concentration of listed analyte.
Shaded concentrations indicate concentration exceeds lower of one or more RBCs:
Concentration exceeds Excavation Worker RBC.
J = Data results are estimated values. Concentrations associated with this qualifier are approximate.
J+ = Data results are estimated values and may be biased high.
J- = Data results are estimated values and may be biased low.
UJ = The not detected result is estimated at the reporting limit.
Half the non-detect value is used in Total Molar VOC and Average concentrations
DEQ RBCs = Oregon Department of Environmental Quality's Risk-Based Decision Making for the Remediation of Contaminated Sites, revised September 2023.

Table 3
Groundwater Sampling Analytical Results: Dissolved Gases
Springdale Cleaners
Portland, Oregon

Monitoring Well ID	Sample Date	Analyte Concentration in µg/L		
		Methane	Ethane	Ethene
JEMW-6	8/16/2023	**16,300**	**1,340**	**336**
MW-2	8/16/2023	**17,700**	**138**	**753**
MW-6-20	8/16/2023	**14,400**	**45.4**	**1,590**
MW-7	5/24/2022	**8,840**	**21.2**	**6,590**
	11/1/2022	**1,660**	<13.0	**1,130**
	2/27/2023	**11,700**	**48.0**	**7,060**
	8/16/2023	**8,840**	**32.5**	**3,850**

Notes:
µg/L = Micrograms per Liter
< = Not Detected Above the Method Reporting Limit
ND = Not Detected
-- = Not Analyzed
Bolded concentrations indicate detected concentration of listed analyte.
J = Data results are estimated values. Concentrations associated with this qualifier are approximate.

Table 4
Ambient Air Sampling Analytical Results
Springdale Cleaners Site
Portland, Oregon

Sample	Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Total Molar VOCs
		Concentrations in µg/m^3					µmol/m^3
Indoor Air Samples - East Building							
Springdale Cleaners	10/31/2022	**17.2**	<1.07	<0.793	<0.793	<0.511	**0.104**
6337	2/28/2023	*Sample Not Analyzed - Insufficient Volume Due to Equipment Failure*					
	8/17/2023	<2.03	<1.34	<1.14	<0.979	<0.89	ND
	11/8/2023	**1.81**	<0.364	<0.311	<0.267	<0.243	**0.011**
State Farm Insurance	10/31/2022	**2.67**	<1.07	<0.793	<0.793	<0.511	**0.016**
6335A	2/28/2023	**4.11**	<1.07	**14.0**	<0.793	<0.511	**0.169**
	8/17/2023	**14.1**	**1.49**	<0.311	<0.267	<0.243	**0.096**
	11/8/2023	<0.553	<0.364	<0.311	<0.267	<0.243	ND
Key Bank (Rear)	11/1/2022	**4.94**	<1.07	<0.793	<0.793	<0.511	**0.030**
6335B2	2/28/2023	*Sample Not Analyzed - Insufficient Volume Due to Equipment Failure*					
	8/17/2023	<0.553	<0.364	**1.74**	<0.267	<0.243	**0.018**
	11/8/2023	<0.553	<0.364	**2.02**	<0.267	<0.243	**0.021**
Key Bank (Front)	10/31/2022	**6.16**	**6.48**	**0.939**	<0.793	<0.511	**0.095**
6335B1	2/28/2023	**3.37**	<1.07	<0.793	<0.793	<0.511	**0.020**
	8/17/2023	<0.553	<0.364	<0.311	<0.267	<0.243	ND
	11/8/2023	<0.553	<0.364	**1.62**	<0.267	<0.243	**0.017**
Indoor Air Samples - West Building							
Hillsdale Veterinary Clinic	10/31/2022	**5.03**	<1.07	<0.793	<0.793	<0.511	**0.030**
	2/28/2023	**6.56**	<1.07	<0.793	<0.793	<0.511	**0.040**
6359	8/17/2023	*Sample Not Analyzed - Insufficient Volume Due to Equipment Failure*					
	11/8/2023	<0.553	<0.364	<0.311	<0.267	<0.243	ND
OmBase Yoga	10/31/2022	**12.2**	**3.27**	**2.82**	<0.793	<0.511	**0.127**
6357	2/28/2023	**12.3**	**3.54**	**3.19**	<0.793	**1.35**	**0.155**
	8/17/2023	**12.4**	**3.3**	**3.27**	<0.267	<0.243	**0.133**
	11/8/2023	<0.553	<0.364	<0.311	<0.267	<0.243	ND
BE Salon [North]	10/31/2022	**20.1**	**5.41**	**8.6**	<0.793	<0.511	**0.250**
(Formerly Bellamie	2/28/2023	**2.66**	**2.07**	**1.54**	<0.793	<0.511	**0.047**
Studios)	8/17/2023	<0.553	<0.364	<0.311	<0.267	<0.243	ND
6351	11/8/2023	**3.84**	<0.364	**1.04**	<0.267	<0.243	**0.034**
BE Salon [South]	10/31/2022	**21.2**	**5.84**	**8.84**	<0.793	<0.511	**0.263**
(Former Cuts	2/28/2023	<1.07	**1.96**	**1.49**	<0.793	<0.511	**0.030**
and Chemistry)	8/17/2023	<0.553	<0.364	<0.311	<0.267	<0.243	ND
6349	11/8/2023	**3.75**	**1.25**	**1.11**	<0.267	<0.243	**0.043**

Please see notes at end of table.

Table 4
Ambient Air Sampling Analytical Results
Springdale Cleaners Site
Portland, Oregon

Sample	Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Total Molar VOCs
		Concentrations in µg/m^3					µmol/m^3
Outdoor Ambient	10/31/2022	**1.46**	<1.07	<0.793	<0.793	<0.511	**0.009**
	2/28/2023	**3.11**	<1.07	<0.793	<0.793	<0.511	**0.019**
	8/17/2023	<0.553	<0.364	<0.311	<0.267	<0.243	ND
	11/8/2023	<0.553	<0.364	<0.311	<0.267	<0.243	ND
DEQ RBCs -	Chronic	47	3	180	180	2.8	--
Commercial Air	Acute	120	6.3	--	2,400	3,900	--
Average Indoor Concentrations							
	October 2022	**11.19**	**5.25**	**5.30**	ND	ND	**0.114**
	February 2023	**5.80**	**2.52**	**5.06**	**0.35**	**1.35**	**0.077**
	August 2023	**13.25**	**2.40**	**2.51**	**1.35**	ND	**0.082**
	November 2023	**3.13**	**1.25**	**1.45**	**2.35**	ND	**0.025**

Notes:

µg/m^3= Micrograms per cubic meter.

µmol/m^3 = Micromole per Cubic Meter.

PCE = tetrachloroethene.

TCE = trichloroethene.

DCE = dichloroethene.

NA = Sample was not analyzed for that specific analyte.

ND = Not Detected Above Laboratory Reporting Limit

Bold values indicates a detected concentration of listed analyte.

DEQ RBCs = Oregon Department of Environmental Quality's Risk-Based Decision Making for the Remediation of Contaminated Sites, revised September 2023.

>Pv = Concentration above vapor pressure of analyte (maximum attainable concentration).

Table 5
Sub-Slab Soil Vapor Sampling Analytical Results
Springdale Cleaners
Portland, Oregon

Sample	Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Total Molar VOCs
		Concentrations in µg/m^3					µmol/m^3
VP-4	11/2/2022	**447**	**7.02**	**1.49**	<0.793	<0.511	**2.76**
	2/28/2023	**17.3**	**5.59**	**20.1**	<0.793	**2.07**	**0.39**
	8/17/2023	**2.3**	<0.364	<0.311	<0.267	<0.243	**0.01**
	11/8/2023	**1.7**	<0.364	<0.311	<0.267	<0.243	**0.01**
VP-6R	11/2/2022	**270**	**19.2**	**50.3**	**0.808**	<0.511	**2.30**
	2/28/2023	**117**	**8.03**	**28.7**	<0.793	<0.511	**1.06**
	8/17/2023	**11.8**	**3.9**	**3.3**	<0.267	<0.243	**0.13**
	11/8/2023	*Vapor Point Damaged*					
DEQ RBCs - Commercial Soil Vapor	Chronic	1,600	100	5,800	5,800	93	--
	Acute	4,000	210	--	80,000	130,000	--

Notes:

µg/m^3 = Micrograms per Cubic Meter.

µmol/m^3 = Micromole per Cubic Meter.

Bold values indicates a detected concentration of listed analyte.

Highlighted values exceed relevant RBC screening level.

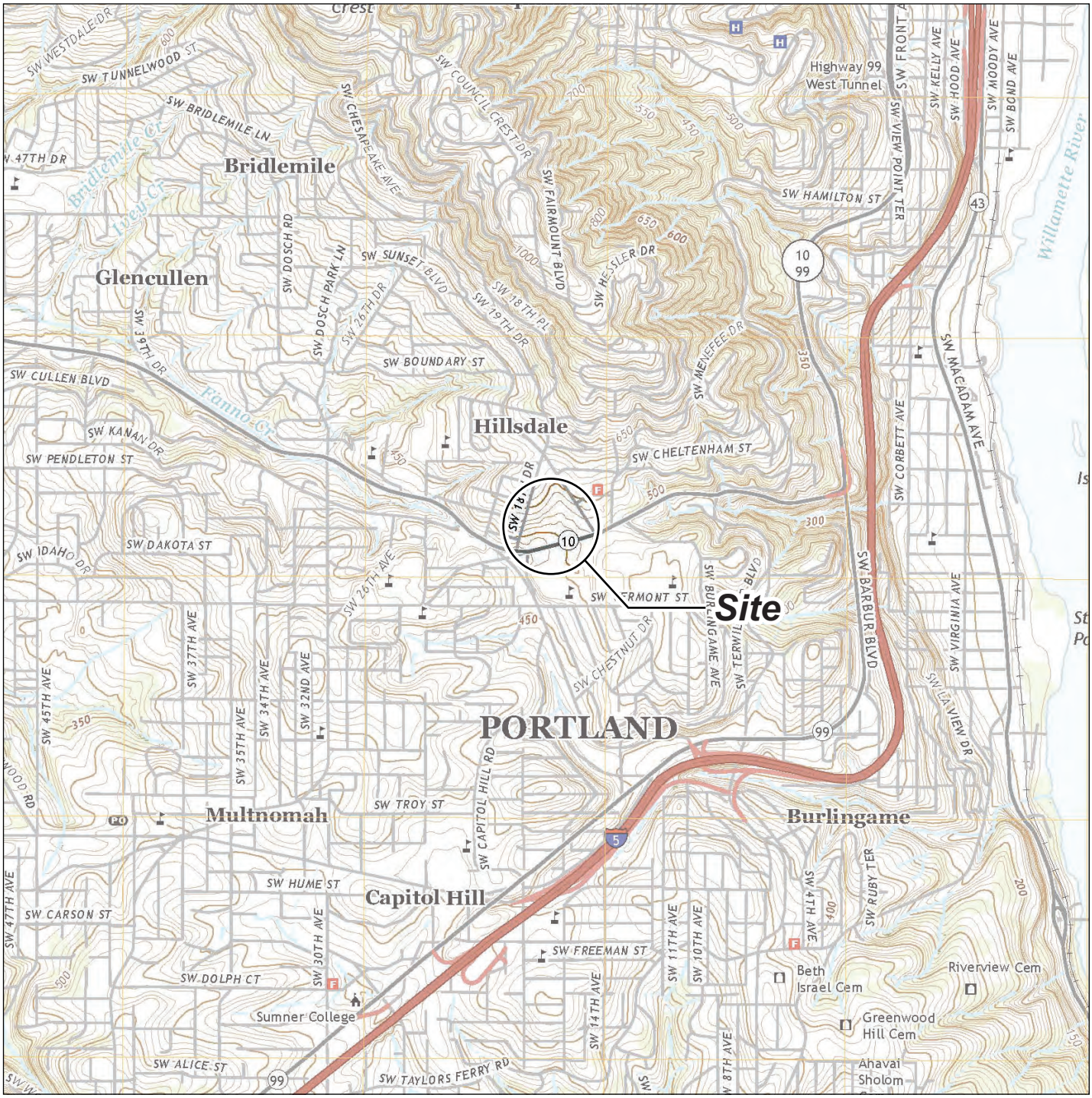
DEQ RBCs = Oregon Department of Environmental Quality's Risk-Based Decision Making for the Remediation of Contaminated Sites, revised September 2023.

>Pv = Concentration above vapor pressure of analyte (maximum attainable concentration).

DCE = dichloroethene.

PCE = tetrachloroethene.

TCE = trichloroethene.



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

0 2,000 4,000

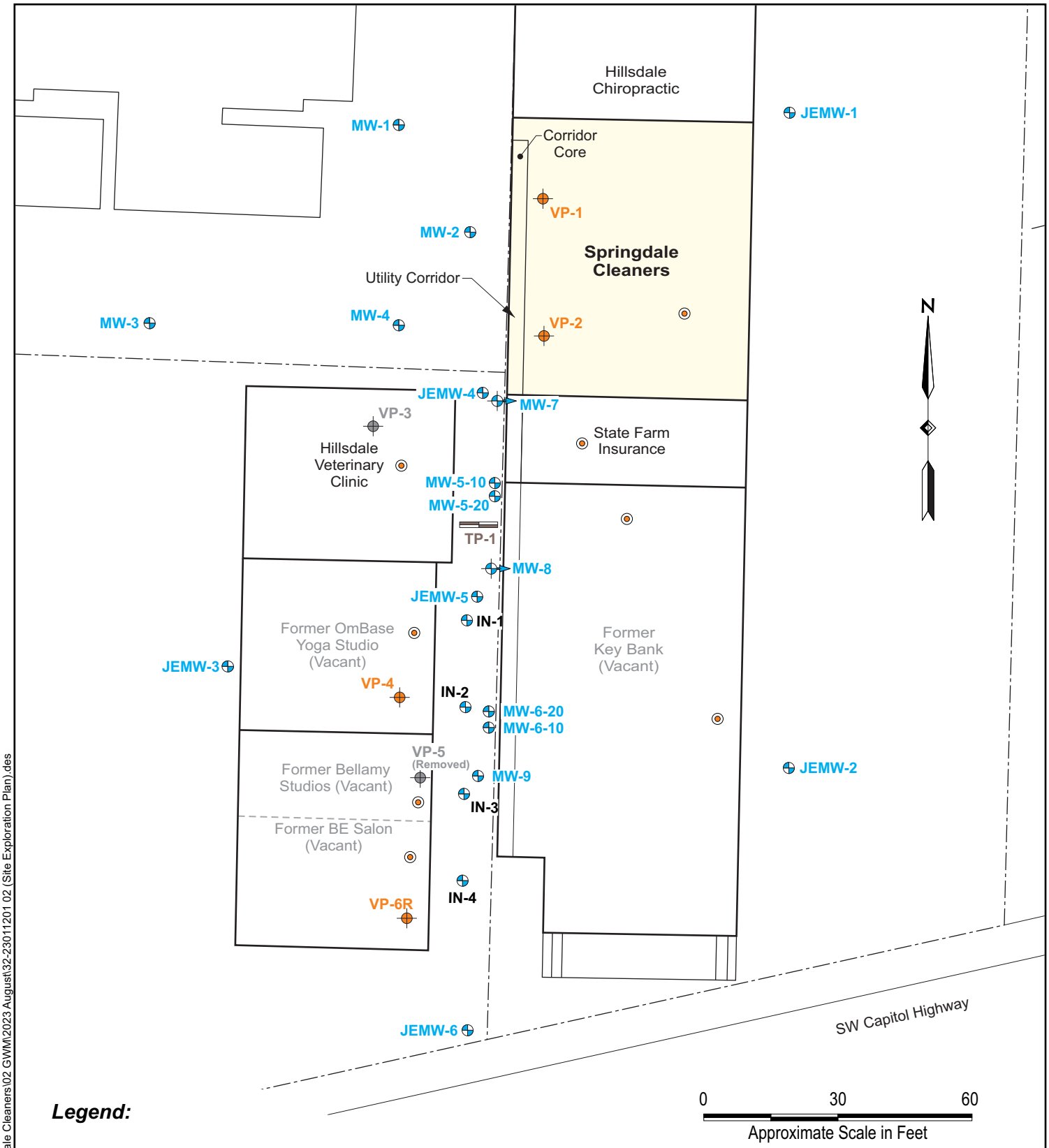
Approximate Scale in Feet

Site Location Map

August 2023 Data Summary Report
Springdale Cleaners
Portland, Oregon

Apex Companies, LLC 15618 SW 72nd Avenue Tigard, Oregon 97224	Project Number: 32-23011201	Drawn: JP	Approved: CO	Figure 1
	March 2024			

I:\Client\DEQ\Oregon\320001469-03 Springdale Cleaners\02 GWM\2023 August\32-23011201 01 (Site Location Map).des



Legend:

- Interior Ambient Vapor Sample Location
- VP-1 — Subslab Vapor Point
- TP-1 — Test Pit Trench
- MW-7 — Angled Monitoring Well Location
- MW-4 — Groundwater Monitoring Well Location

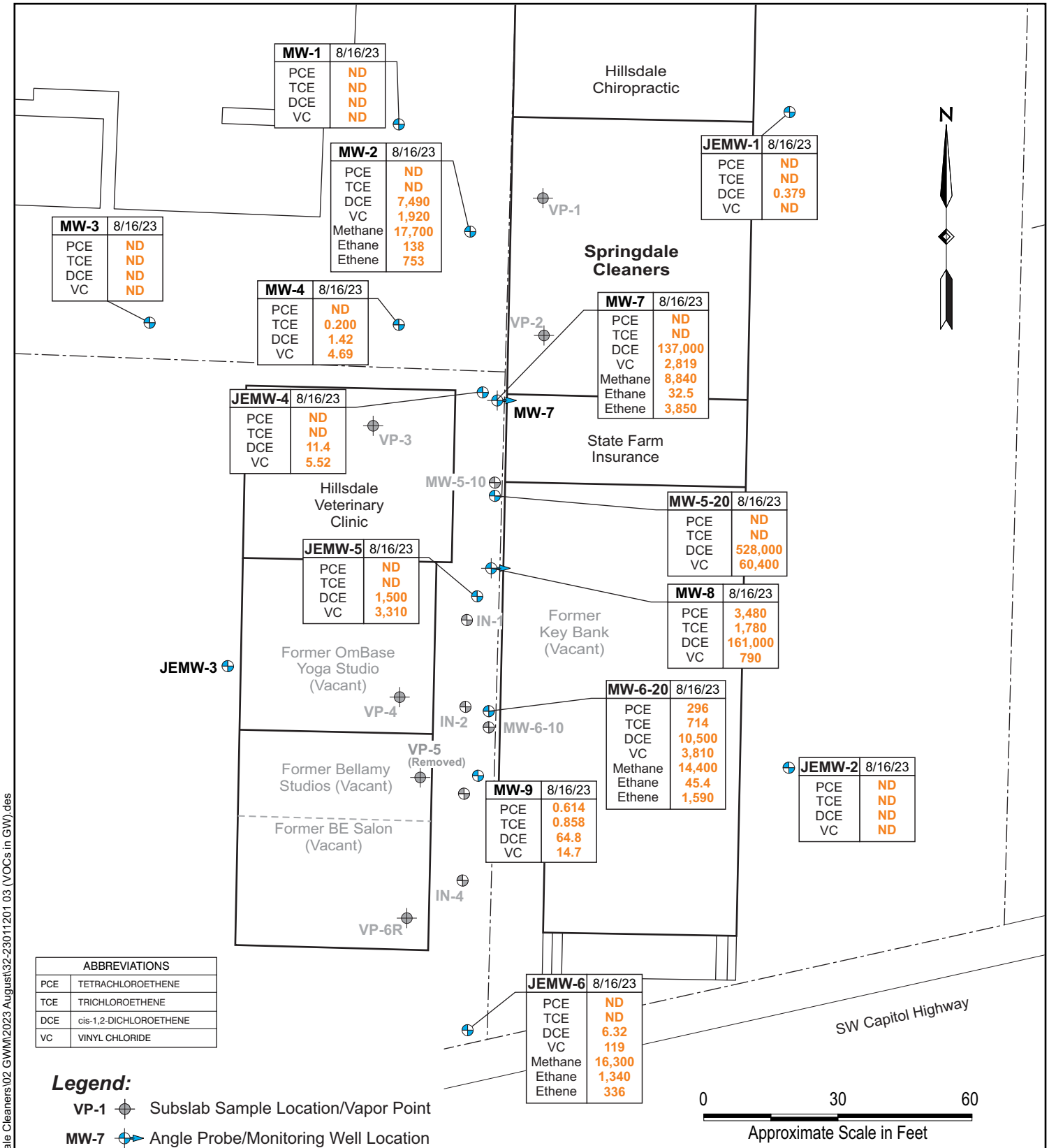
Note: Base map prepared from drawing provided by Jacobs Engineering (2001) and Tax Lot Map as provided by City of Portland GIS (PortlandMaps).

Site and Exploration Plan

August 2023 Data Summary Report
Springdale Cleaners
Portland, Oregon

Apex Companies, LLC 15618 SW 72nd Avenue Tigard, Oregon 97224	Project Number: 32-23011201	Drawn: JP	Approved: CO	Figure 2
	March 2024			

I:\Client\DEQ\Oregon\320001469-03 Springdale Cleaners\02 GWM\2023 August\32-23011201 02 (Site Exploration Plan).des



ABBREVIATIONS	
PCE	TETRACHLOROETHENE
TCE	TRICHLOROETHENE
DCE	cis-1,2-DICHLOROETHENE
VC	VINYL CHLORIDE

Legend:

- **VP-1** — Subslab Sample Location/Vapor Point
- **MW-7** — Angle Probe/Monitoring Well Location
- **MW-4** — Groundwater Monitoring Well Location

JEMW-5	2/22/23
PCE	ND
TCE	ND
DCE	1,500
VC	3,310

Sample Identification
Sample Date
Volatile Organic Compounds (VOCs) Concentration in µg/L

ND = Not Detected Above Reporting Limit

Note: Base map prepared from drawing provided by Jacobs Engineering (2001) and Tax Lot Map as provided by City of Portland GIS (PortlandMaps).

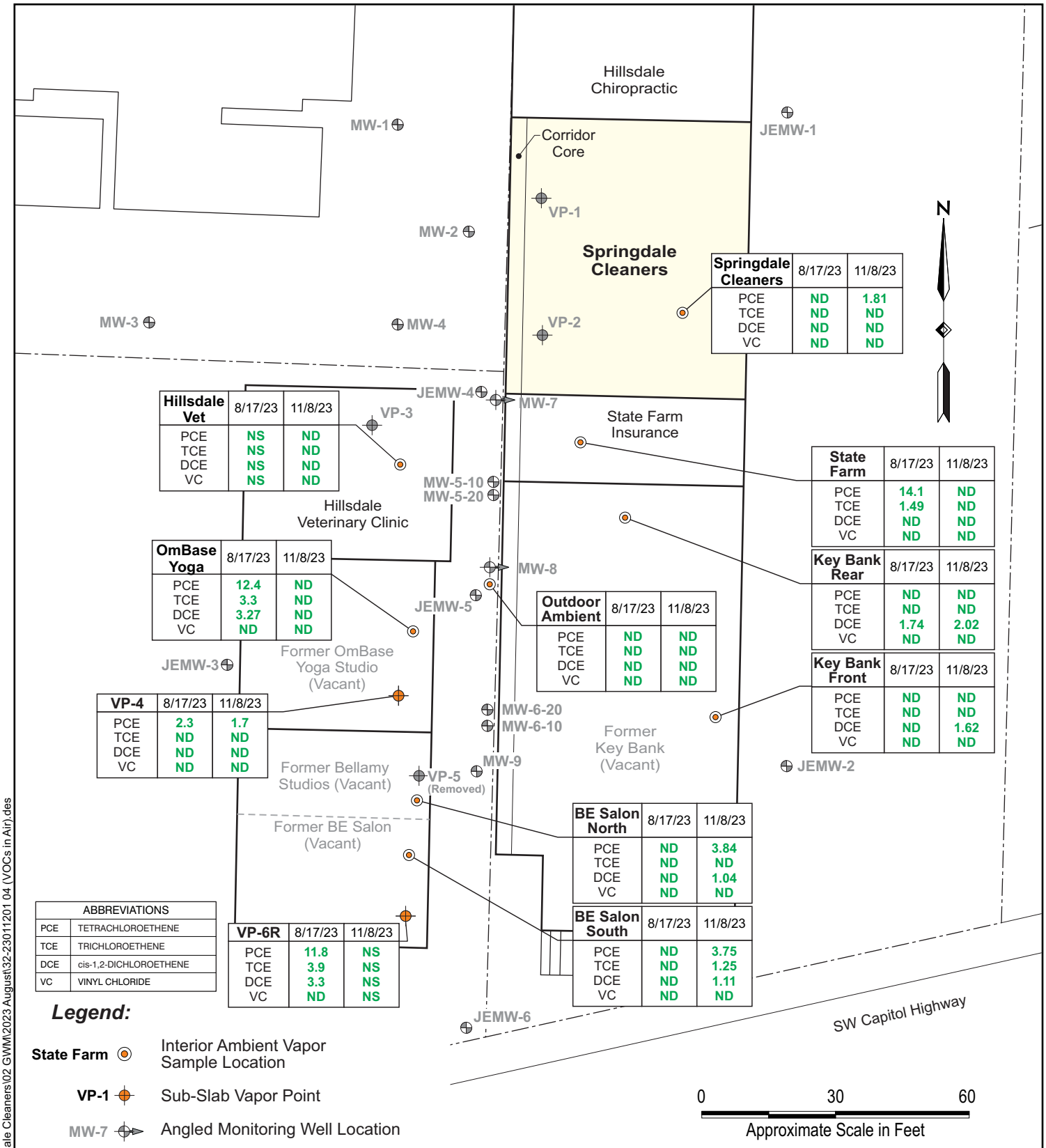
VOCs in Groundwater - August 2023

August 2023 Data Summary Report
Springdale Cleaners
Portland, Oregon

Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number: 32-23011201	Drawn: JP	Approved: CO	Figure 3
March 2024			

I:\Client\DEQ\Oregon\320001469-03 Springdale Cleaners\02 GWM\2023 August\32-23011201 03 (VOCs in GW).des



Springdale Cleaners	8/17/23	11/8/23
PCE	ND	1.81
TCE	ND	ND
DCE	ND	ND
VC	ND	ND

Hillsdale Vet	8/17/23	11/8/23
PCE	NS	ND
TCE	NS	ND
DCE	NS	ND
VC	NS	ND

State Farm	8/17/23	11/8/23
PCE	14.1	ND
TCE	1.49	ND
DCE	ND	ND
VC	ND	ND

OmBase Yoga	8/17/23	11/8/23
PCE	12.4	ND
TCE	3.3	ND
DCE	3.27	ND
VC	ND	ND

Key Bank Rear	8/17/23	11/8/23
PCE	ND	ND
TCE	ND	ND
DCE	1.74	2.02
VC	ND	ND

Outdoor Ambient	8/17/23	11/8/23
PCE	ND	ND
TCE	ND	ND
DCE	ND	ND
VC	ND	ND

Key Bank Front	8/17/23	11/8/23
PCE	ND	ND
TCE	ND	ND
DCE	ND	1.62
VC	ND	ND

VP-4	8/17/23	11/8/23
PCE	2.3	1.7
TCE	ND	ND
DCE	ND	ND
VC	ND	ND

BE Salon North	8/17/23	11/8/23
PCE	ND	3.84
TCE	ND	ND
DCE	ND	1.04
VC	ND	ND

BE Salon South	8/17/23	11/8/23
PCE	ND	3.75
TCE	ND	1.25
DCE	ND	1.11
VC	ND	ND

VP-6R	8/17/23	11/8/23
PCE	11.8	NS
TCE	3.9	NS
DCE	3.3	NS
VC	ND	NS

ABBREVIATIONS	
PCE	TETRACHLOROETHENE
TCE	TRICHLOROETHENE
DCE	cis-1,2-DICHLOROETHENE
VC	VINYL CHLORIDE

Legend:

State Farm — Interior Ambient Vapor Sample Location

VP-1 — Sub-Slab Vapor Point

MW-7 — Angled Monitoring Well Location

MW-4 — Groundwater Monitoring Well Location

VP-6R	8/17/23
PCE	11.8
TCE	3.9
DCE	3.3
VC	ND

Sample Identification

Sample Date

Volatile Organic Compounds (VOCs) Concentration in µg/L

ND = Not Detected Above Reporting Limit

NS = Not Sampled

Note: Base map prepared from drawing provided by Jacobs Engineering (2001) and Tax Lot Map as provided by City of Portland GIS (PortlandMaps).

VOCs in Ambient Air and Soil Vapor - August and November 2023

August 2023 Data Summary Report
Springdale Cleaners
Portland, Oregon

Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number: 32-23011201	Drawn: JP	Approved: CO	Figure 4
March 2024			

I:\Client\DEQ\Oregon\320001469-03 Springdale Cleaners\02 GWM\2023 August\32-23011201 04 (VOCs in Air).des

Appendix A

Sampling Sheets

WELL GAGING DATA SHEET

APEX

Client:	DEQ	Job Number:	320001469-03
Project:	Springdale	Date:	8/16/23
Weather:	Sunny 76°	Sampler:	A. Evernden
		Time In/Out:	0800 / 0930

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
JEMW-1	0838	-	4.105				
JEMW-2	0840	-	3.50				
JEMW-4	~~DRY~~ 0902	~~-~~	~~8.60~~	4.96			
JEMW-5	0917	-	4.63				
JEMW-6	0930	-	4.55				Little injection material
MW-1	0843	-	8.60				
MW-2	0853	-	8.71				
MW-3	0850	-	6.87				Little injection material
MW-4	0846	-	6.10				
MW-5D	0910	-	5.01				
~~MW-5D~~							
MW-6D	0921	-	4.15				
~~MW-6D~~							
MW-7	0903	-	1.87				
MW-8	0913	-	3.25				
MW-9	0925	-	5.70				

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-1	Job Number:	320001469-03
Client:	DEQ	Date:	8/16/23
Project:	Springdale	Sampler:	A. Evernden
Weather:	Sunny 81°	Time In/Out:	1025 / 11:05

WELL DATA

Well Depth:		Well Diameter:	2in	Water Height	
Depth to Water:	8.06	Screened Interval:		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
1029			8.06		5.80	26.16	0.206	8.2	154		
1032			8.50		5.56	24.63	0.209	7.8	157		
1035			8.66		5.42	23.93	0.209	8.3	159		
1038			8.65		5.41	23.51	0.209	9.1	162		
1041			8.94		5.39	23.48	0.208	10.00	164		
1044			8.94		5.39	23.43	0.209	12.2	167		
1047			8.94		5.40	23.47	0.210	13.7	171		
1050 ~~1058~~			8.94		5.38	23.45	0.210	13.4	172		
1053			9.25		5.37	23.65	0.209	12.6	175		
1056			9.45		5.37	23.72	0.210	13.3	177		

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

SAMPLING DATA

Sample ID:	MW-1	Sampling Flow Rate		Analytical Laboratory:	
Sample Time:		Final Depth to Water:		Did Well Dewater?	

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

P. 1

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-1	Job Number:	
Client:		Date:	
Project:		Sampler:	
Weather:		Time In/Out:	

WELL DATA

Well Depth:		Well Diameter:		Water Height	
Depth to Water:		Screened Interval:		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
1059			9.59		5.38	23.94	.210	13.2	178		
1102			9.70		5.37	23.91	.210	13.4	180		

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

SAMPLING DATA

Sample ID:		Sampling Flow Rate		Analytical Laboratory:	
Sample Time:	1105	Final Depth to Water:		Did Well Dewater?	

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

P2

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-2	Job Number:	320001469-03
Client:	DEQ	Date:	8/17/23
Project:	Springdale Cleaners	Sampler:	A. Evernden
Weather:	Overcast	Time In/Out:	

WELL DATA

Well Depth:		Well Diameter:	2in	Water Height	
Depth to Water:	8.19ft	Screened Interval:		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
1641			8.19		6.30	25.40	0.918	11.4	-121		
1644			8.64		6.25	25.35	0.831	23.9	-120		
1647			8.70		6.24	25.67	0.807	19.4	-121		
1650			8.70		6.28	25.69	0.833	20.2	-123		
1653			8.71		6.34	26.15	0.832	20.8	-125		
1656			8.71		6.43	26.25	0.800	21.7	-126		
1659			8.71		6.49	26.79	0.818	21.5	-129		
1702			8.71		6.54	26.99	0.885	20.9	-130		
1705			8.71		6.63	27.41	0.848	21.1	-130		
1708			8.71		6.66	27.66	0.844	25.0	-134		

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

SAMPLING DATA

Sample ID:	MW-2	Sampling Flow Rate		Analytical Laboratory:	
Sample Time:	1715	Final Depth to Water:		Did Well Dewater?	

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

DUP Taken

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-3	Job Number:	32000409-03
Client:	DEQ	Date:	8/16/2023
Project:	Springdale Cleaners	Sampler:	A. Evenden
Weather:	Sunny 88°	Time In/Out:	1135 / 1210

WELL DATA

Well Depth:		Well Diameter:		Water Height	
Depth to Water:	7.85'	Screened Interval:		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
11:38 ~~1139~~			7.85		~~6.06~~ 5.82	~~20~~.40	.299	~~46.2~~ 10.0%	-85		
1141			8.38		5.91	19.34	.290	7.6%	-93		
1144			8.45		5.94	18.98	.289	8.8%	-97		
1147			8.58		~~9~~.90	18.85	.290	9.9%	-98		
1150			8.60		5.84	18.74	.290	9.7%	-96		
1153			8.60		5.87	18.59	.291	9.9%	-100		

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

SAMPLING DATA

Sample ID:	MW-3	Sampling Flow Rate		Analytical Laboratory:	
Sample Time:	1159	Final Depth to Water:	8.60'	Did Well Dewater?	

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-4	Job Number:	320001489-03
Client:	DEQ	Date:	8/16/23
Project:	Springdale Cleaners	Sampler:	A. Evernden
Weather:	Sunny 90°	Time In/Out:	1215 / 1300

WELL DATA

Well Depth:		Well Diameter:		Water Height	
Depth to Water:	6.75	Screened Interval:		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
1227			6.75		5.88	18.38	.520	54.5%	-88		
1230			7.40		5.86	18.49	.516	18.2%	-93		
1233			7.51		5.86	18.37	.517	15.8%	-98		
1236			7.96		5.84	18.07	.510	15.9%	-101		
1239			7.97		5.85	18.07	.503	16.8%	-104		
1242			8.15		5.85	18.09	.494	17.9	-105		
1245			8.29		5.85	17.97	.492	18.7	-106		
1248			8.30		5.84	18.26	.487	18.5	-107		
1251			8.30		5.84	18.24	.490	18.8	-108		

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

SAMPLING DATA

Sample ID:		Sampling Flow Rate		Analytical Laboratory:	
Sample Time:	1259	Final Depth to Water:		Did Well Dewater?	

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-5-20	Job Number:	320001469-03
Client:	DEQ	Date:	8/17/23
Project:	Springdale Cleaners	Sampler:	A. Evernden
Weather:	Mostly Cloudy	Time In/Out:	1040 /

WELL DATA

Well Depth:		Well Diameter:	3/4in	Water Height	
Depth to Water:	4.82ft	Screened Interval:		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
1044			4.85		6.20	18.42	3.44	0.68	-84		
1047			5.00		6.13	18.21	3.33	0.12	-96		
1050					6.08	18.32	3.53	0	-101		
					De water - sampling						

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

SAMPLING DATA

Sample ID:	MW-5-20	Sampling Flow Rate		Analytical Laboratory:	
Sample Time:	1100	Final Depth to Water:		Did Well Dewater?	

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-6-20	Job Number:	320001469-03
Client:	DEQ	Date:	8/17/23
Project:	Springdale Cleaners	Sampler:	C. Weer
Weather:	Overcast	Time In/Out:	1300

WELL DATA

Well Depth:		Well Diameter:	3/4in	Water Height	
Depth to Water:	4.12 ft	Screened Interval:		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
1305			4.50		5.74	24.10	0.284	1.55	16		
1308			4.75		5.73	22.70	0.394	0.05	-5		
1312					5.91	22.98	0.494	0	-37		
1314				Dewatered - sampling							

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

SAMPLING DATA

Sample ID:	MW-6-20	Sampling Flow Rate		Analytical Laboratory:	
Sample Time:	~~1315~~ 1337	Final Depth to Water:		Did Well Dewater?	

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-7	Job Number:	320001469-03
Client:	DEQ	Date:	8/17/23
Project:	Springdale Cleaners	Sampler:	C. Weer
Weather:	Mostly Cloudy	Time In/Out:	~~0924~~ 1000/

WELL DATA

Well Depth:		Well Diameter:	3/4in	Water Height	
Depth to Water:	4.72ft	Screened Interval:		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
1018			4.72	0.20	6.20	19.89	2.01	1.16	-82		
1021				0.20	6.17	19.79	2.05	0.83	-103		
1024				0.20	DEWATERED - Sampling						

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

SAMPLING DATA

Sample ID:	MW-7	Sampling Flow Rate		Analytical Laboratory:	
Sample Time:	1029	Final Depth to Water:		Did Well Dewater?	

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-8	Job Number:	320009469-03
Client:	DEQ	Date:	8/17/23
Project:	Springdale Cleaners	Sampler:	C. Weer
Weather:	Mostly Cloudy	Time In/Out:	1105

WELL DATA

Well Depth:		Well Diameter:	3/4in	Water Height	
Depth to Water:	3.17	Screened Interval:		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
1111					6.08	20.30	0.910	1.14	-47		
1114			Dewatered - Sampling								
1117											

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

SAMPLING DATA

Sample ID:	MW-8	Sampling Flow Rate		Analytical Laboratory:	
Sample Time:	1130	Final Depth to Water:		Did Well Dewater?	

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

WELL MONITORING DATA SHEET

APEX

Well I.D.	MW-9	Job Number:	320001469-03
Client:	DEQ	Date:	8/17/23
Project:	Springdale Cleaners	Sampler:	C. Weer
Weather:	Overcast	Time In/Out:	1420

WELL DATA

Well Depth:		Well Diameter:	2in	Water Height	
Depth to Water:	4.73ft	Screened Interval:		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
1421			4.73		6.18	24.90	0.966	7.60	-43		
1424			4.80		6.23	20.63	1.03	1.2	72		
1427			4.81		6.25	20.29	1.04	0	-84		
1430			4.81		6.25	21.06	1.04	0	-92		
1333					6.27	23.69	1.01	0	-98		
1336				Dewatered - Sampling							

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

SAMPLING DATA

Sample ID:	MW-9	Sampling Flow Rate		Analytical Laboratory:	
Sample Time:	1457	Final Depth to Water:		Did Well Dewater?	

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

WELL MONITORING DATA SHEET

APEX

Well I.D.	JEMW-1	Job Number:	320001469-03
Client:	DEQ	Date:	8/16/23
Project:	Springdale Cleaners	Sampler:	A. Evernden
Weather:	Sunny	Time In/Out:	

WELL DATA

Well Depth:		Well Diameter:	3/4 in	Water Height	
Depth to Water:	6.11 ft	Screened Interval:		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:	
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
1445			6.24		6.28	23.44	0.608	29.4	98.4		
1448			6.30		6.26	20.27	0.595	18.3	-95.0		
1451			6.33		6.26	20.45	0.549	16.9	-91.0		
1454			6.37		6.25	20.20	0.499	18.0	-90.0		
1457			6.41		6.22	20.15	0.474	16.4	-90.0		
1500			6.44		6.18	20.14	0.461	15.6	-91.0		
1503			6.44		6.16	20.21	0.456	14.4	-92.0		
1506			6.49		6.15	20.15	0.452	13.2	-94.0		
1509			6.50		6.13	19.96	0.449	14.1	-94.0		
1512			6.60		6.13	20.31	0.442	13.8	-95.0		

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

SAMPLING DATA

Sample ID:	JEMW-1	Sampling Flow Rate		Analytical Laboratory:	
Sample Time:	1515	Final Depth to Water:		Did Well Dewater?	

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

WELL MONITORING DATA SHEET

APEX

Well I.D.	JEMW-2	Job Number:	320004469-03
Client:	DEQ	Date:	8/16/23
Project:	Springdale Cleaners	Sampler:	A. Evernden
Weather:		Time In/Out:	

WELL DATA

Well Depth:		Well Diameter:	3/4	Water Height	
Depth to Water:	5.11	Screened Interval:		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:	
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
1413			5.25		6.24	23.47	0.433	10.0	-25		
1416			5.30		6.16	19.20	0.451	4.8	-50		
1419			5.40		6.15	18.67	0.445	5.0	-67		
1422			5.45		6.16	18.52	0.438	5.1	-76		
1425			5.45		6.16	18.61	0.433	5.8	-88		

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

SAMPLING DATA

Sample ID:	JEMW-2	Sampling Flow Rate		Analytical Laboratory:	
Sample Time:	1426	Final Depth to Water:		Did Well Dewater?	

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

WELL MONITORING DATA SHEET

APEX

Well I.D.	JEMW-4	Job Number:	320001469-03
Client:	DEQ	Date:	8/17/23
Project:	Springdale Cleaners	Sampler:	C. Weer
Weather:	mostly Cloudy	Time In/Out:	0924

WELL DATA

Well Depth:		Well Diameter:	3/4 in	Water Height	
Depth to Water:	4.72 ft	Screened Interval:		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
0937					6.26	21.39	1.05	4.56	-100		
0940			Dewatered - Sampling								
0943											

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

SAMPLING DATA

Sample ID:	JEMW-4	Sampling Flow Rate		Analytical Laboratory:	
Sample Time:	0954	Final Depth to Water:		Did Well Dewater?	

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

WELL MONITORING DATA SHEET

APEX

Well I.D.	JEMW-5	Job Number:	320001460-03
Client:	DEQ	Date:	8/17/25
Project:	Springdale Cleaners	Sampler:	C. Weer
Weather:	Mostly Cloudy	Time In/Out:	1134

WELL DATA

Well Depth:		Well Diameter:	3/4in	Water Height	
Depth to Water:	4.07	Screened Interval:		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
1153			Dewatered - Not enough For Sat Param								
1156											
1159											

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

SAMPLING DATA

Sample ID:	JEMW-5	Sampling Flow Rate		Analytical Laboratory:	
Sample Time:	1210	Final Depth to Water:		Did Well Dewater?	

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

WELL MONITORING DATA SHEET

APEX

Well I.D.	JEMW-6	Job Number:	320001469-03
Client:	DEQ	Date:	8/17/23
Project:	Springdale Cleaners	Sampler:	A. Evernden
Weather:	Partly Cloudy	Time In/Out:	0841

WELL DATA

Well Depth:		Well Diameter:	3/4 in	Water Height	
Depth to Water:	4.74 ft	Screened Interval:		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
0900			4.91		6.61	19.04	0.744	2.13	-130		
0903			5.00		6.54	18.46	0.728	1.63	-127		
0906			5.00		6.53	18.45	0.726	1.56	-125		
0909 (AG)	0906				6.51	18.24	0.733	1.51	-124		

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

SAMPLING DATA

Sample ID:	JEMW-6	Sampling Flow Rate		Analytical Laboratory:	
Sample Time:	0911	Final Depth to Water:		Did Well Dewater?	

# Containers/Type	Preservative	Analysis/Method	Field Filtered	Filter Size	MS/MSD	Duplicate ID
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			
			yes no			

COMMENTS

Appendix B

Laboratory Reports and Quality Assurance Review

Appendix B – Quality Assurance Review of Laboratory Data

1.0 Introduction

This appendix documents the results of a quality assurance (QA) review of the analytical data for air/vapor and groundwater samples collected during the site assessment activities at the Springdale Cleaners site (the Site) in August and November 2023. Laboratory analysis of groundwater, air, and soil vapor samples was performed by Pace Analytical National (Pace) of Mt. Juliet, Tennessee. Copies of the analytical laboratory reports are included in this appendix, including:

Report	Report Date	Sampling Event
L1648045	August 23, 2023	Ambient Air and Soil Vapor Samples
L1648166	August 29, 2023	Groundwater Samples
L1676294	November 22, 2023	Ambient Air and Soil Vapor Samples

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;
- Method blank detections;
- Laboratory control samples, matrix spikes, and surrogates to assess laboratory accuracy;
- Laboratory control sample duplicates and matrix spike duplicates to assess laboratory precision; and
- Field duplicates to assess sampling and laboratory precision.

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

2.1 Data Qualifiers

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

J	Data results are estimated values. Concentrations associated with this qualifier are approximate.
J-	Data results are estimated values that may be biased low.
UJ	The not detected result is estimated at the reporting limit.

3.0 Analytical Methods

Groundwater samples were analyzed for volatile organic compounds (VOCs) by the United States Environmental Protection Agency (EPA) Method 8260D. Select groundwater samples were also analyzed for methane, ethane, and ethene by RSK175.

Air and soil vapor samples were analyzed by EPA Method TO-15 for tetrachloroethene (PCE), trichloroethene (TCE), cis- and trans-1,2-dichloroethene (DCE), and vinyl chloride.

4.0 Quality Assurance Review

Based on the review of the QA criteria, the data are considered to be of acceptable quality and are suitable for their intended purpose. Further detail of the review is discussed 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. The air and groundwater samples included in this QA review were analyzed within the EPA recommended holding times.

Samples were received intact and unbroken upon receipt by the analytical laboratories. Groundwater samples were received by Pace below 6°C and air samples were received at ambient temperature in summa canisters. Groundwater samples were received without headspace in volatile organic analysis (VOA) sampling containers. Samples with an acid preservative were pH checked and were within method-specified criteria.

All chain-of-custodies were appropriately relinquished by the Apex Companies sampler and received by Pace. They were filled out with the correct sample ID, sampling date, sampling time, and analyses requested. There were no discrepancies found between the bottles and the chain-of-custodies received.

4.2 Reporting Limits and Detection Limits

Reporting limits are the lowest concentration an instrument is capable of accurately detecting an analyte. They are determined by the laboratory and are based on instrumentation capabilities, the matrix of field samples, sample preparation procedures and EPA suggested reporting limits. In some cases, the reporting limits may be raised due to high concentrations of analytes or matrix interferences. Concentrations between the method detection limit and the reporting limit are estimated and 'J' flagged. Method detection limits were below applicable risk-based concentrations (RBCs) for groundwater. Reporting limits were below RBCs for ambient air and soil vapor samples.

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 analytical batch WG2172338 associated with the August air samples, ethanol, 2-propanol, and total petroleum hydrocarbon (TPH) low fraction was detected in the method blank at a trace levels between the detection and reporting limit. These are not target analytes and are not reported in data tables.

4.4 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.

4.4.1 Laboratory Control Samples

Laboratory control samples (LCS) and laboratory control duplicate samples (LCSD) were analyzed by the laboratory to assess the accuracy of the analytical methods. 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. This percent recovery must be within method or laboratory defined control limits for data to be considered acceptable. All percent recoveries were within control limits.

4.4.2 Matrix Spikes

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. Laboratory source samples for MS/MSDs were not from the August 2023 groundwater monitoring event and sample results are accepted based on LCS/LCSD recoveries.

4.4.3 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 control limits.

4.4.4 Instrument Calibration and Reported Results

The continuing calibration verification exceeded control limits for select VOCs in groundwater. Several VOCs had calibration verification responses below the lower control limit (acrolein, bromomethane, chloromethane, dichlorodifluoromethane, naphthalene, and vinyl chloride). Results with detections of vinyl chloride in the data tables are 'UJ' flagged for not detected results, and 'J-' for detected results. The other analytes are not target COCs, and therefore not reported in the data tables or flagged, but should be considered biased low.

4.5 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.

4.5.1 Laboratory Control Samples

The analytical batch LCS concentration of an analyte is compared to the LCSD concentration of the same analyte. The relative percent difference (RPD) is calculated from these two concentrations, which must be below a certain percentage to be considered acceptable. RPD values were within laboratory control limits for all target analytes.

4.5.2 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. Laboratory source samples for MS/MSDs were not from the August 2023 groundwater monitoring event and sample results are accepted based on LCS/LCSD and field duplicate RPDs.

4.5.3 Field Duplicate

A field duplicate is a second field sample collected from a selected sample location. Field duplicate samples serve as a check on laboratory precision, sampling quality, as well as potential variability of the sample matrix. The field duplicate is analyzed and compared to the original sample to assess precision. This comparison can be expressed by the RPD between the original and duplicate samples. Field duplicate samples are only controlled if the reported result is greater than five times the reporting limit.

A field duplicate was collected from monitoring well MW-2. All reported duplicate results were within quality control limits.

ANALYTICAL REPORT

August 23, 2023

Oregon Dept. of Env. Quality - ODEQ

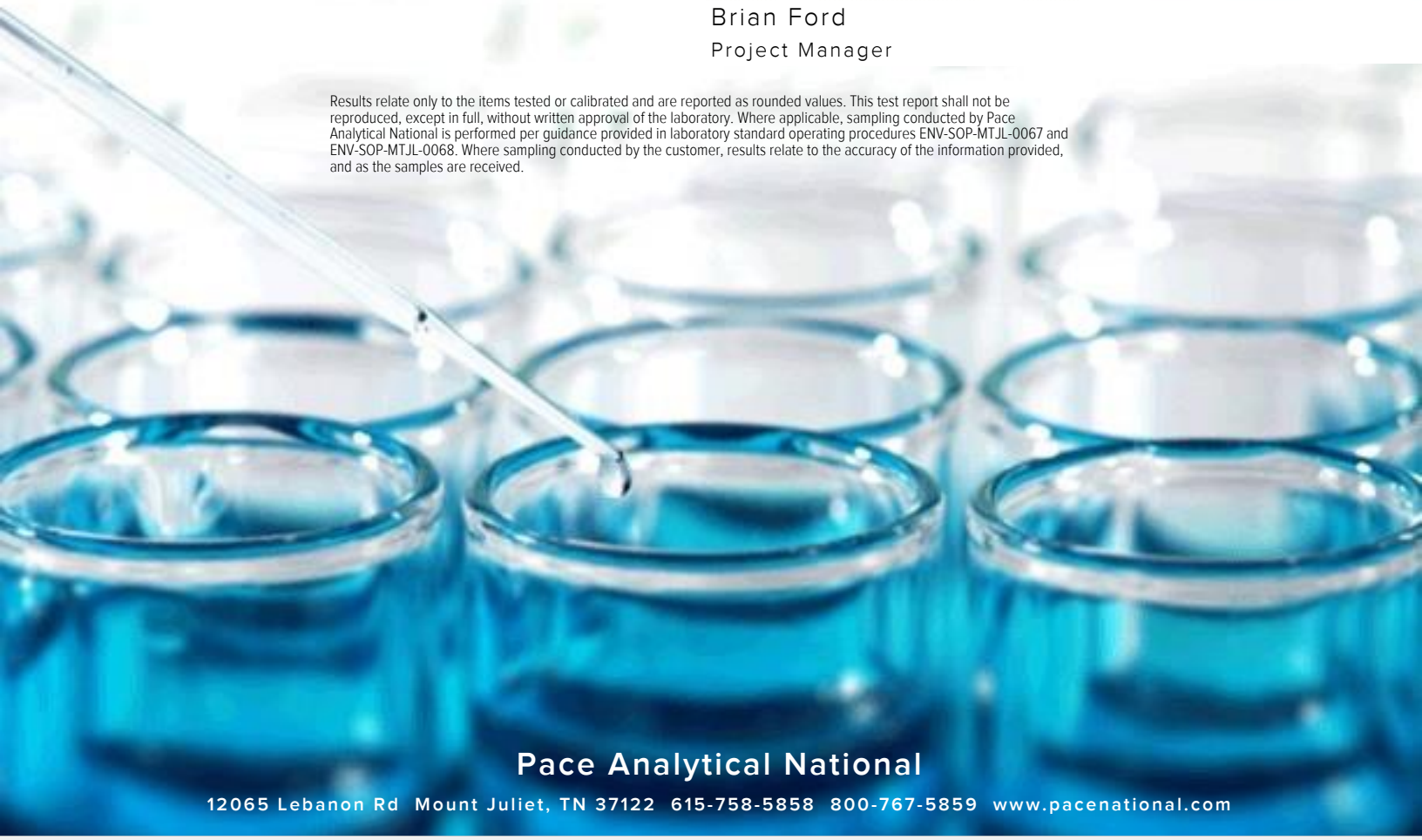
Sample Delivery Group:	L1648045
Samples Received:	08/19/2023
Project Number:	1469-03
Description:	Springdale Cleaners
Report To:	Mark Pugh

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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KEYBANK-FRONT L1648045-01 Air

Collected by: Alex Evernden | Collected date/time: 08/17/23 00:00 | Received date/time: 08/19/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2117633	1	08/20/23 20:00	08/20/23 20:00	SDS	Mt. Juliet, TN

KEYBANK-REAR L1648045-02 Air

Collected by: Alex Evernden | Collected date/time: 08/17/23 00:00 | Received date/time: 08/19/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2117633	1	08/20/23 20:38	08/20/23 20:38	SDS	Mt. Juliet, TN

SPRINGDALE CLEANERS L1648045-03 Air

Collected by: Alex Evernden | Collected date/time: 08/17/23 00:00 | Received date/time: 08/19/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2117633	3.67	08/20/23 21:17	08/20/23 21:17	SDS	Mt. Juliet, TN

STATE FARM L1648045-04 Air

Collected by: Alex Evernden | Collected date/time: 08/17/23 00:00 | Received date/time: 08/19/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2117633	1	08/20/23 21:55	08/20/23 21:55	SDS	Mt. Juliet, TN

OUTDOOR L1648045-05 Air

Collected by: Alex Evernden | Collected date/time: 08/17/23 00:00 | Received date/time: 08/19/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2118712	1	08/22/23 18:48	08/22/23 18:48	CEP	Mt. Juliet, TN

VP-4 L1648045-06 Air

Collected by: Alex Evernden | Collected date/time: 08/17/23 00:00 | Received date/time: 08/19/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2117633	1	08/21/23 00:01	08/21/23 00:01	SDS	Mt. Juliet, TN

VP-6R L1648045-07 Air

Collected by: Alex Evernden | Collected date/time: 08/17/23 00:00 | Received date/time: 08/19/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2117633	1	08/21/23 00:39	08/21/23 00:39	SDS	Mt. Juliet, TN

OMBASE YOGA L1648045-08 Air

Collected by: Alex Evernden | Collected date/time: 08/17/23 00:00 | Received date/time: 08/19/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2117633	1	08/21/23 01:17	08/21/23 01:17	SDS	Mt. Juliet, TN

BE SALON NORTH L1648045-09 Air

Collected by: Alex Evernden
Collected date/time: 08/17/23 00:00
Received date/time: 08/19/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2117633	1	08/21/23 01:55	08/21/23 01:55	SDS	Mt. Juliet, TN

BE SALON SOUTH L1648045-10 Air

Collected by: Alex Evernden
Collected date/time: 08/17/23 00:00
Received date/time: 08/19/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2117633	1	08/21/23 02:32	08/21/23 02:32	SDS	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 (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	1.25	2.97		1	WG2117633
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2117633
Benzene	71-43-2	78.10	0.200	0.639	0.373	1.19		1	WG2117633
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2117633
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2117633
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2117633
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2117633
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2117633
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2117633
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2117633
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2117633
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2117633
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2117633
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG2117633
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2117633
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2117633
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2117633
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2117633
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2117633
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2117633
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2117633
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2117633
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2117633
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2117633
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2117633
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2117633
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2117633
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2117633
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2117633
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG2117633
Ethanol	64-17-5	46.10	2.50	4.71	2.50	4.71		1	WG2117633
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2117633
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2117633
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG2117633
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG2117633
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2117633
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2117633
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2117633
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2117633
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2117633
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2117633
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG2117633
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2117633
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2117633
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2117633
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2117633
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2117633
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2117633
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG2117633
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2117633
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2117633
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2117633
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2117633
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG2117633
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2117633
Toluene	108-88-3	92.10	0.500	1.88	0.879	3.31		1	WG2117633

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2117633
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2117633
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2117633
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2117633
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2117633
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2117633
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2117633
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2117633
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2117633
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG2117633
m&p-Xylene	1330-20-7	106	0.400	1.73	0.691	3.00		1	WG2117633
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2117633
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2117633
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*97.8*				WG2117633

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
Acetone	67-64-1	58.10	1.25	2.97	8.97	21.3		1	WG2117633
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2117633
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2117633
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2117633
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2117633
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2117633
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2117633
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2117633
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2117633
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2117633
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2117633
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2117633
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2117633
Chloromethane	74-87-3	50.50	0.200	0.413	0.550	1.14		1	WG2117633
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2117633
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2117633
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2117633
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2117633
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2117633
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2117633
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2117633
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2117633
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2117633
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2117633
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	0.439	1.74		1	WG2117633
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2117633
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2117633
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2117633
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2117633
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG2117633
Ethanol	64-17-5	46.10	2.50	4.71	13.7	25.8		1	WG2117633
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2117633
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2117633
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.205	1.15		1	WG2117633
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.418	2.07		1	WG2117633
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2117633
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2117633
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2117633
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2117633
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2117633
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2117633
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG2117633
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2117633
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2117633
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2117633
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2117633
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2117633
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2117633
2-Propanol	67-63-0	60.10	1.25	3.07	2.17	5.33		1	WG2117633
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2117633
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2117633
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2117633
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2117633
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG2117633
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2117633
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2117633

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2117633
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2117633
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2117633
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2117633
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2117633
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2117633
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2117633
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2117633
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2117633
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG2117633
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG2117633
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2117633
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2117633
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.6*				WG2117633

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
Acetone	67-64-1	58.10	4.59	10.9	16.0	38.0		3.67	WG2117633
Allyl chloride	107-05-1	76.53	0.734	2.30	ND	ND		3.67	WG2117633
Benzene	71-43-2	78.10	0.734	2.34	ND	ND		3.67	WG2117633
Benzyl Chloride	100-44-7	127	0.734	3.81	ND	ND		3.67	WG2117633
Bromodichloromethane	75-27-4	164	0.734	4.92	ND	ND		3.67	WG2117633
Bromoform	75-25-2	253	2.20	22.8	ND	ND		3.67	WG2117633
Bromomethane	74-83-9	94.90	0.734	2.85	ND	ND		3.67	WG2117633
1,3-Butadiene	106-99-0	54.10	7.34	16.2	ND	ND		3.67	WG2117633
Carbon disulfide	75-15-0	76.10	0.734	2.28	ND	ND		3.67	WG2117633
Carbon tetrachloride	56-23-5	154	0.734	4.62	ND	ND		3.67	WG2117633
Chlorobenzene	108-90-7	113	0.734	3.39	ND	ND		3.67	WG2117633
Chloroethane	75-00-3	64.50	0.734	1.94	ND	ND		3.67	WG2117633
Chloroform	67-66-3	119	0.734	3.57	ND	ND		3.67	WG2117633
Chloromethane	74-87-3	50.50	0.734	1.52	1.84	3.80		3.67	WG2117633
2-Chlorotoluene	95-49-8	126	0.734	3.78	ND	ND		3.67	WG2117633
Cyclohexane	110-82-7	84.20	0.734	2.53	ND	ND		3.67	WG2117633
Dibromochloromethane	124-48-1	208	0.734	6.24	ND	ND		3.67	WG2117633
1,2-Dibromoethane	106-93-4	188	0.734	5.64	ND	ND		3.67	WG2117633
1,2-Dichlorobenzene	95-50-1	147	0.734	4.41	ND	ND		3.67	WG2117633
1,3-Dichlorobenzene	541-73-1	147	0.734	4.41	ND	ND		3.67	WG2117633
1,4-Dichlorobenzene	106-46-7	147	0.734	4.41	ND	ND		3.67	WG2117633
1,2-Dichloroethane	107-06-2	99	0.734	2.97	ND	ND		3.67	WG2117633
1,1-Dichloroethane	75-34-3	98	0.734	2.94	ND	ND		3.67	WG2117633
1,1-Dichloroethene	75-35-4	96.90	0.734	2.91	ND	ND		3.67	WG2117633
cis-1,2-Dichloroethene	156-59-2	96.90	0.734	2.91	ND	ND		3.67	WG2117633
trans-1,2-Dichloroethene	156-60-5	96.90	0.734	2.91	ND	ND		3.67	WG2117633
1,2-Dichloropropane	78-87-5	113	0.734	3.39	ND	ND		3.67	WG2117633
cis-1,3-Dichloropropene	10061-01-5	111	0.734	3.33	ND	ND		3.67	WG2117633
trans-1,3-Dichloropropene	10061-02-6	111	0.734	3.33	ND	ND		3.67	WG2117633
1,4-Dioxane	123-91-1	88.10	0.734	2.64	ND	ND		3.67	WG2117633
Ethanol	64-17-5	46.10	9.18	17.3	19.7	37.1		3.67	WG2117633
Ethylbenzene	100-41-4	106	0.734	3.18	ND	ND		3.67	WG2117633
4-Ethyltoluene	622-96-8	120	0.734	3.60	ND	ND		3.67	WG2117633
Trichlorofluoromethane	75-69-4	137.40	0.734	4.12	0.763	4.29		3.67	WG2117633
Dichlorodifluoromethane	75-71-8	120.92	0.734	3.63	1.52	7.52		3.67	WG2117633
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.734	5.63	ND	ND		3.67	WG2117633
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.734	5.13	ND	ND		3.67	WG2117633
Heptane	142-82-5	100	0.734	3.00	ND	ND		3.67	WG2117633
Hexachloro-1,3-butadiene	87-68-3	261	2.31	24.7	ND	ND		3.67	WG2117633
n-Hexane	110-54-3	86.20	2.31	8.14	ND	ND		3.67	WG2117633
Isopropylbenzene	98-82-8	120.20	0.734	3.61	ND	ND		3.67	WG2117633
Methylene Chloride	75-09-2	84.90	0.734	2.55	ND	ND		3.67	WG2117633
Methyl Butyl Ketone	591-78-6	100	4.59	18.8	ND	ND		3.67	WG2117633
2-Butanone (MEK)	78-93-3	72.10	4.59	13.5	ND	ND		3.67	WG2117633
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	4.59	18.8	ND	ND		3.67	WG2117633
Methyl methacrylate	80-62-6	100.12	0.734	3.01	ND	ND		3.67	WG2117633
MTBE	1634-04-4	88.10	0.734	2.64	ND	ND		3.67	WG2117633
Naphthalene	91-20-3	128	2.31	12.1	ND	ND		3.67	WG2117633
2-Propanol	67-63-0	60.10	4.59	11.3	ND	ND		3.67	WG2117633
Propene	115-07-1	42.10	4.59	7.90	ND	ND		3.67	WG2117633
n-Propylbenzene	103-65-1	120	0.734	3.60	ND	ND		3.67	WG2117633
Styrene	100-42-5	104	0.734	3.12	ND	ND		3.67	WG2117633
1,1,2,2-Tetrachloroethane	79-34-5	168	0.734	5.04	ND	ND		3.67	WG2117633
Tetrachloroethylene	127-18-4	166	0.734	4.98	ND	ND		3.67	WG2117633
Tetrahydrofuran	109-99-9	72.10	0.734	2.16	ND	ND		3.67	WG2117633
Toluene	108-88-3	92.10	1.84	6.93	ND	ND		3.67	WG2117633

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
1,2,4-Trichlorobenzene	120-82-1	181	2.31	17.1	ND	ND		3.67	WG2117633
1,1,1-Trichloroethane	71-55-6	133	0.734	3.99	ND	ND		3.67	WG2117633
1,1,2-Trichloroethane	79-00-5	133	0.734	3.99	ND	ND		3.67	WG2117633
Trichloroethylene	79-01-6	131	0.734	3.93	ND	ND		3.67	WG2117633
1,2,4-Trimethylbenzene	95-63-6	120	0.734	3.60	ND	ND		3.67	WG2117633
1,3,5-Trimethylbenzene	108-67-8	120	0.734	3.60	ND	ND		3.67	WG2117633
2,2,4-Trimethylpentane	540-84-1	114.22	0.734	3.43	ND	ND		3.67	WG2117633
Vinyl chloride	75-01-4	62.50	0.734	1.88	ND	ND		3.67	WG2117633
Vinyl Bromide	593-60-2	106.95	0.734	3.21	ND	ND		3.67	WG2117633
Vinyl acetate	108-05-4	86.10	0.734	2.58	ND	ND		3.67	WG2117633
m&p-Xylene	1330-20-7	106	1.47	6.37	ND	ND		3.67	WG2117633
o-Xylene	95-47-6	106	0.734	3.18	ND	ND		3.67	WG2117633
TPH (GC/MS) Low Fraction	8006-61-9	101	734	3030	ND	ND		3.67	WG2117633
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.5*				WG2117633

Sample Narrative:

L1648045-03 WG2117633: Dilution due to sample volume.

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
Acetone	67-64-1	58.10	1.25	2.97	24.9	59.2		1	WG2117633
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2117633
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2117633
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2117633
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2117633
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2117633
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2117633
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2117633
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2117633
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2117633
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2117633
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2117633
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2117633
Chloromethane	74-87-3	50.50	0.200	0.413	0.529	1.09		1	WG2117633
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2117633
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2117633
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2117633
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2117633
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2117633
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2117633
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2117633
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2117633
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2117633
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2117633
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2117633
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2117633
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2117633
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2117633
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2117633
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG2117633
Ethanol	64-17-5	46.10	2.50	4.71	70.8	133		1	WG2117633
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2117633
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2117633
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.208	1.17		1	WG2117633
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.413	2.04		1	WG2117633
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2117633
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2117633
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2117633
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2117633
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2117633
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2117633
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG2117633
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2117633
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2117633
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2117633
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2117633
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2117633
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2117633
2-Propanol	67-63-0	60.10	1.25	3.07	30.3	74.5		1	WG2117633
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2117633
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2117633
Styrene	100-42-5	104	0.200	0.851	1.06	4.51		1	WG2117633
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2117633
Tetrachloroethylene	127-18-4	166	0.200	1.36	2.08	14.1		1	WG2117633
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2117633
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2117633

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2117633
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2117633
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2117633
Trichloroethylene	79-01-6	131	0.200	1.07	0.279	1.49		1	WG2117633
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2117633
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2117633
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2117633
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2117633
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2117633
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG2117633
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG2117633
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2117633
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2117633
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.5*				WG2117633

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
Acetone	67-64-1	58.10	1.25	2.97	5.03	12.0		1	WG2118712
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2118712
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2118712
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2118712
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2118712
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2118712
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2118712
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND	J4	1	WG2118712
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2118712
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2118712
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2118712
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2118712
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2118712
Chloromethane	74-87-3	50.50	0.200	0.413	0.619	1.28		1	WG2118712
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2118712
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2118712
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2118712
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2118712
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2118712
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2118712
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2118712
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2118712
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2118712
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2118712
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2118712
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2118712
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2118712
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2118712
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2118712
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG2118712
Ethanol	64-17-5	46.10	2.50	4.71	6.42	12.1		1	WG2118712
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2118712
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2118712
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.300	1.69		1	WG2118712
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.411	2.03		1	WG2118712
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2118712
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2118712
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2118712
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2118712
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2118712
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2118712
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG2118712
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2118712
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2118712
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2118712
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2118712
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2118712
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2118712
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG2118712
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2118712
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2118712
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2118712
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2118712
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG2118712
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2118712
Toluene	108-88-3	92.10	0.500	1.88	0.605	2.28		1	WG2118712

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2118712
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2118712
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2118712
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2118712
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2118712
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2118712
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2118712
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2118712
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2118712
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG2118712
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG2118712
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2118712
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2118712
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*101*				WG2118712

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	13.2	31.4		1	WG2117633
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2117633
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2117633
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2117633
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2117633
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2117633
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2117633
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2117633
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2117633
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2117633
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2117633
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2117633
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2117633
Chloromethane	74-87-3	50.50	0.200	0.413	0.605	1.25		1	WG2117633
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2117633
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2117633
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2117633
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2117633
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2117633
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2117633
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2117633
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2117633
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2117633
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2117633
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2117633
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2117633
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2117633
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2117633
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2117633
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG2117633
Ethanol	64-17-5	46.10	2.50	4.71	25.7	48.5		1	WG2117633
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2117633
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2117633
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.217	1.22		1	WG2117633
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.427	2.11		1	WG2117633
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2117633
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2117633
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2117633
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2117633
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2117633
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2117633
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG2117633
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2117633
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2117633
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2117633
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2117633
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2117633
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2117633
2-Propanol	67-63-0	60.10	1.25	3.07	32.1	78.9		1	WG2117633
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2117633
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2117633
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2117633
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2117633
Tetrachloroethylene	127-18-4	166	0.200	1.36	0.334	2.27		1	WG2117633
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2117633
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2117633

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2117633
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2117633
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2117633
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2117633
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2117633
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2117633
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2117633
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2117633
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2117633
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG2117633
m&p-Xylene	1330-20-7	106	0.400	1.73	0.400	1.73		1	WG2117633
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2117633
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2117633
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.8*				WG2117633

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	22.4	53.2		1	WG2117633
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2117633
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2117633
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2117633
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2117633
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2117633
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2117633
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2117633
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2117633
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2117633
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2117633
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2117633
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2117633
Chloromethane	74-87-3	50.50	0.200	0.413	0.624	1.29		1	WG2117633
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2117633
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2117633
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2117633
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2117633
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2117633
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2117633
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2117633
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2117633
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2117633
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2117633
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	0.820	3.25		1	WG2117633
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2117633
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2117633
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2117633
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2117633
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG2117633
Ethanol	64-17-5	46.10	2.50	4.71	21.6	40.7		1	WG2117633
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2117633
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2117633
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.208	1.17		1	WG2117633
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.368	1.82		1	WG2117633
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2117633
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2117633
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2117633
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2117633
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2117633
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2117633
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG2117633
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2117633
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2117633
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2117633
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2117633
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2117633
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2117633
2-Propanol	67-63-0	60.10	1.25	3.07	13.2	32.4		1	WG2117633
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2117633
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2117633
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2117633
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2117633
Tetrachloroethylene	127-18-4	166	0.200	1.36	1.74	11.8		1	WG2117633
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2117633
Toluene	108-88-3	92.10	0.500	1.88	0.675	2.54		1	WG2117633

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2117633
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2117633
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2117633
Trichloroethylene	79-01-6	131	0.200	1.07	0.732	3.92		1	WG2117633
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2117633
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2117633
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2117633
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2117633
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2117633
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG2117633
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG2117633
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2117633
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2117633
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.5*				WG2117633

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
Acetone	67-64-1	58.10	1.25	2.97	21.7	51.6		1	WG2117633
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2117633
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2117633
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2117633
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2117633
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2117633
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2117633
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2117633
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2117633
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2117633
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2117633
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2117633
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2117633
Chloromethane	74-87-3	50.50	0.200	0.413	0.608	1.26		1	WG2117633
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2117633
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2117633
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2117633
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2117633
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2117633
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2117633
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2117633
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2117633
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2117633
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2117633
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	0.824	3.27		1	WG2117633
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2117633
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2117633
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2117633
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2117633
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG2117633
Ethanol	64-17-5	46.10	2.50	4.71	25.3	47.7		1	WG2117633
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2117633
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2117633
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.217	1.22		1	WG2117633
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.416	2.06		1	WG2117633
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2117633
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2117633
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2117633
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2117633
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2117633
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2117633
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG2117633
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2117633
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2117633
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2117633
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2117633
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2117633
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2117633
2-Propanol	67-63-0	60.10	1.25	3.07	12.7	31.2		1	WG2117633
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2117633
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2117633
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2117633
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2117633
Tetrachloroethylene	127-18-4	166	0.200	1.36	1.82	12.4		1	WG2117633
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2117633
Toluene	108-88-3	92.10	0.500	1.88	0.529	1.99		1	WG2117633

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2117633
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2117633
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2117633
Trichloroethylene	79-01-6	131	0.200	1.07	0.616	3.30		1	WG2117633
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2117633
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2117633
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2117633
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2117633
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2117633
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG2117633
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG2117633
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2117633
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2117633
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.9*				WG2117633

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	52.6	125		1	WG2117633
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2117633
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2117633
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2117633
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2117633
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2117633
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2117633
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2117633
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2117633
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2117633
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2117633
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2117633
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2117633
Chloromethane	74-87-3	50.50	0.200	0.413	0.637	1.32		1	WG2117633
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2117633
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2117633
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2117633
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2117633
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2117633
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2117633
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2117633
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2117633
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2117633
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2117633
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2117633
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2117633
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2117633
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2117633
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2117633
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG2117633
Ethanol	64-17-5	46.10	2.50	4.71	29.5	55.6		1	WG2117633
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2117633
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.216	1.06		1	WG2117633
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG2117633
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.433	2.14		1	WG2117633
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2117633
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2117633
Heptane	142-82-5	100	0.200	0.818	0.288	1.18		1	WG2117633
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2117633
n-Hexane	110-54-3	86.20	0.630	2.22	1.61	5.68		1	WG2117633
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2117633
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG2117633
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2117633
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	2.93	8.64		1	WG2117633
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2117633
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2117633
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2117633
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2117633
2-Propanol	67-63-0	60.10	1.25	3.07	4.34	10.7		1	WG2117633
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2117633
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2117633
Styrene	100-42-5	104	0.200	0.851	4.10	17.4		1	WG2117633
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2117633
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG2117633
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	1.41	4.16		1	WG2117633
Toluene	108-88-3	92.10	0.500	1.88	0.832	3.13		1	WG2117633

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2117633
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2117633
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2117633
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2117633
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	1.22	5.99		1	WG2117633
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.329	1.61		1	WG2117633
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2117633
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2117633
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2117633
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG2117633
m&p-Xylene	1330-20-7	106	0.400	1.73	0.698	3.03		1	WG2117633
o-Xylene	95-47-6	106	0.200	0.867	0.373	1.62		1	WG2117633
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2117633
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*99.5*				WG2117633

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
Acetone	67-64-1	58.10	1.25	2.97	87.0	207		1	WG2117633
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2117633
Benzene	71-43-2	78.10	0.200	0.639	0.223	0.712		1	WG2117633
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2117633
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2117633
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2117633
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2117633
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2117633
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2117633
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2117633
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2117633
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2117633
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2117633
Chloromethane	74-87-3	50.50	0.200	0.413	0.707	1.46		1	WG2117633
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2117633
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2117633
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2117633
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2117633
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2117633
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2117633
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2117633
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2117633
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2117633
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2117633
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2117633
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2117633
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2117633
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2117633
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2117633
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG2117633
Ethanol	64-17-5	46.10	2.50	4.71	26.4	49.8		1	WG2117633
Ethylbenzene	100-41-4	106	0.200	0.867	0.295	1.28		1	WG2117633
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2117633
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.207	1.16		1	WG2117633
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.446	2.21		1	WG2117633
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2117633
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2117633
Heptane	142-82-5	100	0.200	0.818	0.425	1.74		1	WG2117633
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2117633
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2117633
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2117633
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG2117633
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2117633
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	12.8	37.7		1	WG2117633
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2117633
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2117633
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2117633
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2117633
2-Propanol	67-63-0	60.10	1.25	3.07	10.8	26.5		1	WG2117633
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2117633
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2117633
Styrene	100-42-5	104	0.200	0.851	5.59	23.8		1	WG2117633
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2117633
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG2117633
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2117633
Toluene	108-88-3	92.10	0.500	1.88	2.77	10.4		1	WG2117633

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2117633
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2117633
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2117633
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2117633
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.663	3.25		1	WG2117633
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2117633
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2117633
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2117633
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2117633
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG2117633
m&p-Xylene	1330-20-7	106	0.400	1.73	0.718	3.11		1	WG2117633
o-Xylene	95-47-6	106	0.200	0.867	0.282	1.22		1	WG2117633
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	231	954		1	WG2117633
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*100*				WG2117633

Method Blank (MB)

(MB) R3963727-3 08/20/23 13:26

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	2.50
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) R3963727-3 08/20/23 13:26

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	0.100	J	0.0932	1.25
n-Propylbenzene	U		0.0773	0.200
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
TPH (GC/MS) Low Fraction	U		39.7	200
(S) 1,4-Bromofluorobenzene	*98.4*			*60.0-140*

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

(LCS) R3963727-1 08/20/23 12:10 • (LCSD) R3963727-2 08/20/23 12:48

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	3.47	3.50	92.5	93.3	70.0-130			0.861	25
Allyl chloride	3.75	4.12	4.23	110	113	70.0-130			2.63	25
Benzene	3.75	3.57	3.60	95.2	96.0	70.0-130			0.837	25

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

(LCS) R3963727-1 08/20/23 12:10 • (LCSD) R3963727-2 08/20/23 12:48

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzyl Chloride	3.75	3.60	3.61	96.0	96.3	70.0-152			0.277	25
Bromodichloromethane	3.75	3.50	3.50	93.3	93.3	70.0-130			0.000	25
Bromoform	3.75	2.98	2.96	79.5	78.9	70.0-130			0.673	25
Bromomethane	3.75	3.39	3.34	90.4	89.1	70.0-130			1.49	25
1,3-Butadiene	3.75	3.95	4.06	105	108	70.0-130			2.75	25
Carbon disulfide	3.75	3.55	3.60	94.7	96.0	70.0-130			1.40	25
Carbon tetrachloride	3.75	3.37	3.38	89.9	90.1	70.0-130			0.296	25
Chlorobenzene	3.75	3.27	3.27	87.2	87.2	70.0-130			0.000	25
Chloroethane	3.75	3.60	3.51	96.0	93.6	70.0-130			2.53	25
Chloroform	3.75	3.52	3.56	93.9	94.9	70.0-130			1.13	25
Chloromethane	3.75	3.93	4.03	105	107	70.0-130			2.51	25
2-Chlorotoluene	3.75	3.36	3.34	89.6	89.1	70.0-130			0.597	25
Cyclohexane	3.75	3.47	3.55	92.5	94.7	70.0-130			2.28	25
Dibromochloromethane	3.75	3.18	3.20	84.8	85.3	70.0-130			0.627	25
1,2-Dibromoethane	3.75	3.25	3.26	86.7	86.9	70.0-130			0.307	25
1,2-Dichlorobenzene	3.75	3.15	3.16	84.0	84.3	70.0-130			0.317	25
1,3-Dichlorobenzene	3.75	3.18	3.17	84.8	84.5	70.0-130			0.315	25
1,4-Dichlorobenzene	3.75	3.29	3.29	87.7	87.7	70.0-130			0.000	25
1,2-Dichloroethane	3.75	3.72	3.77	99.2	101	70.0-130			1.34	25
1,1-Dichloroethane	3.75	3.77	3.71	101	98.9	70.0-130			1.60	25
1,1-Dichloroethene	3.75	3.72	3.79	99.2	101	70.0-130			1.86	25
cis-1,2-Dichloroethene	3.75	3.31	3.43	88.3	91.5	70.0-130			3.56	25
trans-1,2-Dichloroethene	3.75	3.69	3.72	98.4	99.2	70.0-130			0.810	25
1,2-Dichloropropane	3.75	3.61	3.64	96.3	97.1	70.0-130			0.828	25
cis-1,3-Dichloropropene	3.75	3.48	3.54	92.8	94.4	70.0-130			1.71	25
trans-1,3-Dichloropropene	3.75	3.50	3.51	93.3	93.6	70.0-130			0.285	25
1,4-Dioxane	3.75	3.31	3.33	88.3	88.8	70.0-140			0.602	25
Ethanol	3.75	3.78	3.87	101	103	55.0-148			2.35	25
Ethylbenzene	3.75	3.44	3.44	91.7	91.7	70.0-130			0.000	25
4-Ethyltoluene	3.75	3.51	3.50	93.6	93.3	70.0-130			0.285	25
Trichlorofluoromethane	3.75	3.54	3.59	94.4	95.7	70.0-130			1.40	25
Dichlorodifluoromethane	3.75	3.60	3.67	96.0	97.9	64.0-139			1.93	25
1,1,2-Trichlorotrifluoroethane	3.75	3.30	3.30	88.0	88.0	70.0-130			0.000	25
1,2-Dichlorotetrafluoroethane	3.75	3.54	3.60	94.4	96.0	70.0-130			1.68	25
Heptane	3.75	3.92	3.96	105	106	70.0-130			1.02	25
Hexachloro-1,3-butadiene	3.75	3.00	3.01	80.0	80.3	70.0-151			0.333	25
n-Hexane	3.75	3.87	3.82	103	102	70.0-130			1.30	25
Isopropylbenzene	3.75	3.38	3.39	90.1	90.4	70.0-130			0.295	25
Methylene Chloride	3.75	3.80	3.84	101	102	70.0-130			1.05	25
Methyl Butyl Ketone	3.75	4.41	4.45	118	119	70.0-149			0.903	25

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

(LCS) R3963727-1 08/20/23 12:10 • (LCSD) R3963727-2 08/20/23 12:48

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
2-Butanone (MEK)	3.75	3.52	3.67	93.9	97.9	70.0-130			4.17	25
4-Methyl-2-pentanone (MIBK)	3.75	4.13	4.18	110	111	70.0-139			1.20	25
Methyl methacrylate	3.75	4.18	4.12	111	110	70.0-130			1.45	25
MTBE	3.75	3.51	3.58	93.6	95.5	70.0-130			1.97	25
Naphthalene	3.75	3.48	3.55	92.8	94.7	70.0-159			1.99	25
2-Propanol	3.75	3.98	4.04	106	108	70.0-139			1.50	25
Propene	3.75	4.07	4.26	109	114	64.0-144			4.56	25
n-Propylbenzene	3.75	3.70	3.68	98.7	98.1	70.0-130			0.542	25
Styrene	3.75	3.48	3.48	92.8	92.8	70.0-130			0.000	25
1,1,2,2-Tetrachloroethane	3.75	3.50	3.48	93.3	92.8	70.0-130			0.573	25
Tetrachloroethylene	3.75	2.95	2.96	78.7	78.9	70.0-130			0.338	25
Tetrahydrofuran	3.75	4.15	4.33	111	115	70.0-137			4.25	25
Toluene	3.75	3.39	3.41	90.4	90.9	70.0-130			0.588	25
1,2,4-Trichlorobenzene	3.75	3.18	3.21	84.8	85.6	70.0-160			0.939	25
1,1,1-Trichloroethane	3.75	3.52	3.51	93.9	93.6	70.0-130			0.284	25
1,1,2-Trichloroethane	3.75	3.31	3.30	88.3	88.0	70.0-130			0.303	25
Trichloroethylene	3.75	3.26	3.28	86.9	87.5	70.0-130			0.612	25
1,2,4-Trimethylbenzene	3.75	3.50	3.50	93.3	93.3	70.0-130			0.000	25
1,3,5-Trimethylbenzene	3.75	3.58	3.56	95.5	94.9	70.0-130			0.560	25
2,2,4-Trimethylpentane	3.75	3.85	3.95	103	105	70.0-130			2.56	25
Vinyl chloride	3.75	3.63	3.72	96.8	99.2	70.0-130			2.45	25
Vinyl Bromide	3.75	3.38	3.40	90.1	90.7	70.0-130			0.590	25
Vinyl acetate	3.75	3.12	3.16	83.2	84.3	70.0-130			1.27	25
m&p-Xylene	7.50	7.19	7.20	95.9	96.0	70.0-130			0.139	25
o-Xylene	3.75	3.45	3.48	92.0	92.8	70.0-130			0.866	25
TPH (GC/MS) Low Fraction	188	178	179	94.7	95.2	70.0-130			0.560	25
(S) 1,4-Bromofluorobenzene				*98.6*	*98.7*	*60.0-140*				

Method Blank (MB)

(MB) R3963838-3 08/22/23 10:49

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	2.50
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) R3963838-3 08/22/23 10:49

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	U		0.0932	1.25
n-Propylbenzene	U		0.0773	0.200
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
TPH (GC/MS) Low Fraction	U		39.7	200
(S) 1,4-Bromofluorobenzene	*101*			*60.0-140*

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

(LCS) R3963838-1 08/22/23 09:14 • (LCSD) R3963838-2 08/22/23 10:03

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	4.31	4.38	115	117	70.0-130			1.61	25
Allyl chloride	3.75	4.19	4.20	112	112	70.0-130			0.238	25
Benzene	3.75	4.33	4.34	115	116	70.0-130			0.231	25

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

(LCS) R3963838-1 08/22/23 09:14 • (LCSD) R3963838-2 08/22/23 10:03

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzyl Chloride	3.75	4.25	4.31	113	115	70.0-152			1.40	25
Bromodichloromethane	3.75	4.34	4.32	116	115	70.0-130			0.462	25
Bromoform	3.75	4.37	4.37	117	117	70.0-130			0.000	25
Bromomethane	3.75	4.44	4.48	118	119	70.0-130			0.897	25
1,3-Butadiene	3.75	4.89	5.00	130	133	70.0-130		J4	2.22	25
Carbon disulfide	3.75	4.27	4.34	114	116	70.0-130			1.63	25
Carbon tetrachloride	3.75	4.36	4.45	116	119	70.0-130			2.04	25
Chlorobenzene	3.75	4.40	4.46	117	119	70.0-130			1.35	25
Chloroethane	3.75	3.78	3.76	101	100	70.0-130			0.531	25
Chloroform	3.75	4.29	4.35	114	116	70.0-130			1.39	25
Chloromethane	3.75	4.46	4.60	119	123	70.0-130			3.09	25
2-Chlorotoluene	3.75	4.48	4.56	119	122	70.0-130			1.77	25
Cyclohexane	3.75	4.30	4.28	115	114	70.0-130			0.466	25
Dibromochloromethane	3.75	4.37	4.41	117	118	70.0-130			0.911	25
1,2-Dibromoethane	3.75	4.42	4.42	118	118	70.0-130			0.000	25
1,2-Dichlorobenzene	3.75	4.43	4.52	118	121	70.0-130			2.01	25
1,3-Dichlorobenzene	3.75	4.41	4.57	118	122	70.0-130			3.56	25
1,4-Dichlorobenzene	3.75	4.52	4.65	121	124	70.0-130			2.84	25
1,2-Dichloroethane	3.75	4.61	4.57	123	122	70.0-130			0.871	25
1,1-Dichloroethane	3.75	4.34	4.37	116	117	70.0-130			0.689	25
1,1-Dichloroethene	3.75	4.39	4.41	117	118	70.0-130			0.455	25
cis-1,2-Dichloroethene	3.75	4.38	4.45	117	119	70.0-130			1.59	25
trans-1,2-Dichloroethene	3.75	4.37	4.47	117	119	70.0-130			2.26	25
1,2-Dichloropropane	3.75	4.39	4.38	117	117	70.0-130			0.228	25
cis-1,3-Dichloropropene	3.75	4.31	4.31	115	115	70.0-130			0.000	25
trans-1,3-Dichloropropene	3.75	4.32	4.38	115	117	70.0-130			1.38	25
1,4-Dioxane	3.75	4.34	4.35	116	116	70.0-140			0.230	25
Ethanol	3.75	4.43	3.57	118	95.2	55.0-148			21.5	25
Ethylbenzene	3.75	4.34	4.33	116	115	70.0-130			0.231	25
4-Ethyltoluene	3.75	4.36	4.43	116	118	70.0-130			1.59	25
Trichlorofluoromethane	3.75	4.70	4.77	125	127	70.0-130			1.48	25
Dichlorodifluoromethane	3.75	3.60	3.49	96.0	93.1	64.0-139			3.10	25
1,1,2-Trichlorotrifluoroethane	3.75	4.44	4.52	118	121	70.0-130			1.79	25
1,2-Dichlorotetrafluoroethane	3.75	4.51	4.53	120	121	70.0-130			0.442	25
Heptane	3.75	4.29	4.35	114	116	70.0-130			1.39	25
Hexachloro-1,3-butadiene	3.75	4.44	4.55	118	121	70.0-151			2.45	25
n-Hexane	3.75	4.24	4.28	113	114	70.0-130			0.939	25
Isopropylbenzene	3.75	4.35	4.43	116	118	70.0-130			1.82	25
Methylene Chloride	3.75	4.37	4.46	117	119	70.0-130			2.04	25
Methyl Butyl Ketone	3.75	4.21	4.30	112	115	70.0-149			2.12	25

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

(LCS) R3963838-1 08/22/23 09:14 • (LCSD) R3963838-2 08/22/23 10:03

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
2-Butanone (MEK)	3.75	4.33	4.36	115	116	70.0-130			0.690	25
4-Methyl-2-pentanone (MIBK)	3.75	4.20	4.33	112	115	70.0-139			3.05	25
Methyl methacrylate	3.75	4.07	4.09	109	109	70.0-130			0.490	25
MTBE	3.75	4.25	4.28	113	114	70.0-130			0.703	25
Naphthalene	3.75	4.40	4.53	117	121	70.0-159			2.91	25
2-Propanol	3.75	4.18	4.26	111	114	70.0-139			1.90	25
Propene	3.75	4.29	4.43	114	118	64.0-144			3.21	25
n-Propylbenzene	3.75	4.50	4.60	120	123	70.0-130			2.20	25
Styrene	3.75	4.26	4.32	114	115	70.0-130			1.40	25
1,1,2,2-Tetrachloroethane	3.75	4.47	4.55	119	121	70.0-130			1.77	25
Tetrachloroethylene	3.75	4.40	4.38	117	117	70.0-130			0.456	25
Tetrahydrofuran	3.75	4.31	4.35	115	116	70.0-137			0.924	25
Toluene	3.75	4.29	4.30	114	115	70.0-130			0.233	25
1,2,4-Trichlorobenzene	3.75	4.51	4.62	120	123	70.0-160			2.41	25
1,1,1-Trichloroethane	3.75	4.37	4.43	117	118	70.0-130			1.36	25
1,1,2-Trichloroethane	3.75	4.42	4.37	118	117	70.0-130			1.14	25
Trichloroethylene	3.75	4.37	4.34	117	116	70.0-130			0.689	25
1,2,4-Trimethylbenzene	3.75	4.39	4.51	117	120	70.0-130			2.70	25
1,3,5-Trimethylbenzene	3.75	4.56	4.67	122	125	70.0-130			2.38	25
2,2,4-Trimethylpentane	3.75	4.21	4.23	112	113	70.0-130			0.474	25
Vinyl chloride	3.75	4.72	4.77	126	127	70.0-130			1.05	25
Vinyl Bromide	3.75	4.55	4.53	121	121	70.0-130			0.441	25
Vinyl acetate	3.75	4.17	3.91	111	104	70.0-130			6.44	25
m&p-Xylene	7.50	8.56	8.68	114	116	70.0-130			1.39	25
o-Xylene	3.75	4.27	4.28	114	114	70.0-130			0.234	25
TPH (GC/MS) Low Fraction	188	197	200	105	106	70.0-130			1.51	25
(S) 1,4-Bromofluorobenzene				*101*	*102*	*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
J	The identification of the analyte is acceptable; the reported value is an estimate.
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.

Agency, Authorized Purchaser or Agent: Oregon DEQ	Contract Laboratory Name: Pace National	Lab Selection Criteria:	Turn Around Time:
Send Lab Report To: Mark Pugh Address: Department of Environmental Quality 700 NE Multnomah St, Suite 600 Portland, OR 97232 E-mail: pugh.mark@deq.state.or.us	Lab Batch #: Invoice To: ODEQ/Business Office Address: 700 NE Multnomah Street, Suite 600 Portland, OR. 97232 Tel. #: (800) 452-4011	☐ Proximity (if TAT < 48 hrs) ☐ Prior work on same project ☒ Cost (for anticipated analyses) ☐ Other labs disqualified or unable to perform requested services ☐ Emergency work	☒ 10 days (std.) ☐ 5 days ☐ 72 hours ☐ 48 hours ☐ 24 hours ☐ Other

Project Name: **Springdale Cleaners**
Project #: **1469-03**
Sampler Name: Alex Evernden

J134
LIL48045

Sample ID#	Collection Date/Time	Matrix	Number of Containers	Sample Preservative: HCl	NONE	NONE	Requested Analyses: VOCs by 8260B	Methane, Ethane and Ethene	TO-15	Comments
Keybank – Front	8/17/23 -29.5/-3.5	A	1			X				-01
Keybank – Rear	8/17/23 -30/-.25	A	1			X				-02
Springdale Cleaners	8/17/23 -29/-19	A	1			X				-03
State Farm	8/17/23 -30/-4	A	1			X				-04
Outdoor	8/17/23 -29/-4	A	1			X				-05
VP-4	8/17/23 -28/-4.5	A	1			X				-06
VP-6R	8/17/23 -28/-3	A	1			X				-07
Ombase Yoga	8/17/23 -30/-4.5	A	1			X				-08
BE Salon North	8/17/23 -28.5/-4	A	1			X				-09
BE Salon South	8/17/23 -30/-4.5	A	1			X				-10

Notes: Report Results to: MStevens@apexcos.com; Carmen.Owens@apexcos.com; pugh.mark@deq.state.or.us

Relinquished By: Alexandra Evernden	Agency/Agent: Apex Companies	Received By:	Agency:
Signature:	Time & Date: 8/18/23 10:49	Signature:	Time & Date:
Relinquished By:	Agency/Agent:	Received By:	Agency/Agent:
Signature:	Time & Date:	Signature:	Time & Date: 8/19/23 0900

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		

ATION #102-1098-07 AND PRICE AGREEMENT # 8903. THE PRICE AGREEMENT INCLUDING CONTRACT
S (T'S &C'S) CONTAINED IN THE PRICE AGREEMENT ARE HEREBY INCORPORATED BY REFERENCE AND SHALL
R CONFLICTING T'S AND C'S, EXPRESS OR IMPLIED.

ANALYTICAL REPORT

August 29, 2023

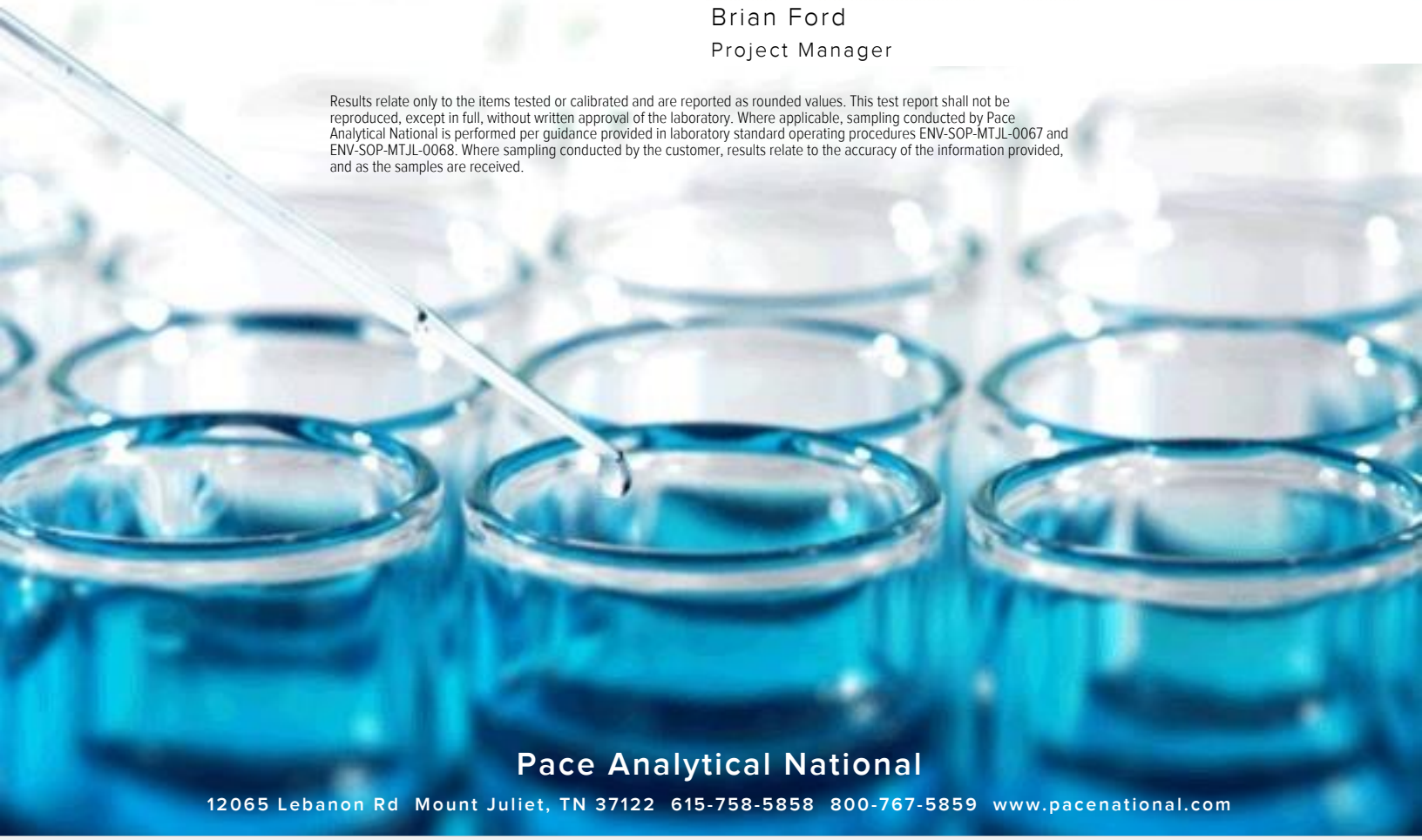
Oregon Dept. of Env. Quality - ODEQ

Sample Delivery Group:	L1648166
Samples Received:	08/19/2023
Project Number:	1469-03
Description:	Springdale Cleaners
Report To:	Mark Pugh

Entire Report Reviewed By:

Brian Ford

Project Manager



Pace Analytical National

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

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MW-1 L1648166-01 GW

Collected by: Alex Evernden | Collected date/time: 08/17/23 11:05 | Received date/time: 08/19/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2119345	1	08/23/23 11:26	08/23/23 11:26	TJJ	Mt. Juliet, TN

MW-2 L1648166-02 GW

Collected by: Alex Evernden | Collected date/time: 08/17/23 17:15 | Received date/time: 08/19/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method RSK175	WG2120925	1	08/27/23 14:34	08/27/23 14:34	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2122170	10	08/28/23 09:49	08/28/23 09:49	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2119345	50	08/23/23 16:37	08/23/23 16:37	TJJ	Mt. Juliet, TN

MW-3 L1648166-03 GW

Collected by: Alex Evernden | Collected date/time: 08/16/23 11:59 | Received date/time: 08/19/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2119345	1	08/23/23 11:46	08/23/23 11:46	TJJ	Mt. Juliet, TN

MW-4 L1648166-04 GW

Collected by: Alex Evernden | Collected date/time: 08/16/23 12:59 | Received date/time: 08/19/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2119345	1	08/23/23 12:06	08/23/23 12:06	TJJ	Mt. Juliet, TN

MW-5-20 L1648166-05 GW

Collected by: Alex Evernden | Collected date/time: 08/17/23 11:00 | Received date/time: 08/19/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2119345	10000	08/23/23 16:57	08/23/23 16:57	TJJ	Mt. Juliet, TN

MW-6-20 L1648166-06 GW

Collected by: Alex Evernden | Collected date/time: 08/17/23 13:37 | Received date/time: 08/19/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method RSK175	WG2120925	1	08/27/23 14:49	08/27/23 14:49	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2122170	10	08/28/23 09:54	08/28/23 09:54	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2119345	100	08/23/23 17:18	08/23/23 17:18	TJJ	Mt. Juliet, TN

MW-7 L1648166-07 GW

Collected by: Alex Evernden | Collected date/time: 08/17/23 10:29 | Received date/time: 08/19/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method RSK175	WG2120925	1	08/27/23 15:15	08/27/23 15:15	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2122170	10	08/28/23 10:16	08/28/23 10:16	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2119345	2000	08/23/23 17:39	08/23/23 17:39	TJJ	Mt. Juliet, TN

MW-8 L1648166-08 GW

Collected by: Alex Evernden | Collected date/time: 08/17/23 11:30 | Received date/time: 08/19/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2119345	2000	08/23/23 17:59	08/23/23 17:59	TJJ	Mt. Juliet, TN

MW-9 L1648166-09 GW

Collected by: Alex Evernden | Collected date/time: 08/17/23 14:57 | Received date/time: 08/19/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2119345	1	08/23/23 12:40	08/23/23 12:40	TJJ	Mt. Juliet, TN

JEMW-1 L1648166-10 GW

Collected by: Alex Evernden | Collected date/time: 08/16/23 15:17 | Received date/time: 08/19/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2119345	1	08/23/23 13:00	08/23/23 13:00	TJJ	Mt. Juliet, TN

JEMW-2 L1648166-11 GW

Collected by: Alex Evernden | Collected date/time: 08/16/23 14:26 | Received date/time: 08/19/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2119345	1	08/23/23 13:21	08/23/23 13:21	TJJ	Mt. Juliet, TN

JEMW-4 L1648166-12 GW

Collected by: Alex Evernden | Collected date/time: 08/17/23 09:54 | Received date/time: 08/19/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2119345	1	08/23/23 13:41	08/23/23 13:41	TJJ	Mt. Juliet, TN

JEMW-5 L1648166-13 GW

Collected by: Alex Evernden | Collected date/time: 08/17/23 12:10 | Received date/time: 08/19/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2119345	200	08/23/23 18:20	08/23/23 18:20	TJJ	Mt. Juliet, TN

JEMW-6 L1648166-14 GW

Collected by: Alex Evernden | Collected date/time: 08/17/23 09:11 | Received date/time: 08/19/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method RSK175	WG2120925	1	08/27/23 15:22	08/27/23 15:22	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2122170	10	08/28/23 10:22	08/28/23 10:22	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2119345	1	08/23/23 14:02	08/23/23 14:02	TJJ	Mt. Juliet, TN

DUP-1 L1648166-15 GW

Collected by: Alex Evernden | Collected date/time: 08/17/23 17:15 | Received date/time: 08/19/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2119345	1	08/23/23 14:22	08/23/23 14:22	TJJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2121412	50	08/26/23 04:53	08/26/23 04:53	JAH	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/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	08/23/2023 11:26	WG2119345
Acrolein	U	C3	2.54	50.0	1	08/23/2023 11:26	WG2119345
Acrylonitrile	U		0.671	10.0	1	08/23/2023 11:26	WG2119345
Benzene	U		0.0941	1.00	1	08/23/2023 11:26	WG2119345
Bromobenzene	U		0.118	1.00	1	08/23/2023 11:26	WG2119345
Bromodichloromethane	U		0.136	1.00	1	08/23/2023 11:26	WG2119345
Bromoform	U		0.129	1.00	1	08/23/2023 11:26	WG2119345
Bromomethane	U	C3	0.605	5.00	1	08/23/2023 11:26	WG2119345
n-Butylbenzene	U		0.157	1.00	1	08/23/2023 11:26	WG2119345
sec-Butylbenzene	U		0.125	1.00	1	08/23/2023 11:26	WG2119345
tert-Butylbenzene	U		0.127	1.00	1	08/23/2023 11:26	WG2119345
Carbon disulfide	U		0.0962	1.00	1	08/23/2023 11:26	WG2119345
Carbon tetrachloride	U		0.128	1.00	1	08/23/2023 11:26	WG2119345
Chlorobenzene	U		0.116	1.00	1	08/23/2023 11:26	WG2119345
Chlorodibromomethane	U		0.140	1.00	1	08/23/2023 11:26	WG2119345
Chloroethane	U		0.192	5.00	1	08/23/2023 11:26	WG2119345
Chloroform	U		0.111	5.00	1	08/23/2023 11:26	WG2119345
Chloromethane	U	C3	0.960	2.50	1	08/23/2023 11:26	WG2119345
2-Chlorotoluene	U		0.106	1.00	1	08/23/2023 11:26	WG2119345
4-Chlorotoluene	U		0.114	1.00	1	08/23/2023 11:26	WG2119345
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	08/23/2023 11:26	WG2119345
1,2-Dibromoethane	U		0.126	1.00	1	08/23/2023 11:26	WG2119345
Dibromomethane	U		0.122	1.00	1	08/23/2023 11:26	WG2119345
1,2-Dichlorobenzene	U		0.107	1.00	1	08/23/2023 11:26	WG2119345
1,3-Dichlorobenzene	U		0.110	1.00	1	08/23/2023 11:26	WG2119345
1,4-Dichlorobenzene	U		0.120	1.00	1	08/23/2023 11:26	WG2119345
Dichlorodifluoromethane	U	C3	0.374	5.00	1	08/23/2023 11:26	WG2119345
1,1-Dichloroethane	U		0.100	1.00	1	08/23/2023 11:26	WG2119345
1,2-Dichloroethane	U		0.0819	1.00	1	08/23/2023 11:26	WG2119345
1,1-Dichloroethene	U		0.188	1.00	1	08/23/2023 11:26	WG2119345
cis-1,2-Dichloroethene	U		0.126	1.00	1	08/23/2023 11:26	WG2119345
trans-1,2-Dichloroethene	U		0.149	1.00	1	08/23/2023 11:26	WG2119345
1,2-Dichloropropane	U		0.149	1.00	1	08/23/2023 11:26	WG2119345
1,1-Dichloropropene	U		0.142	1.00	1	08/23/2023 11:26	WG2119345
1,3-Dichloropropane	U		0.110	1.00	1	08/23/2023 11:26	WG2119345
cis-1,3-Dichloropropene	U		0.111	1.00	1	08/23/2023 11:26	WG2119345
trans-1,3-Dichloropropene	U		0.118	1.00	1	08/23/2023 11:26	WG2119345
2,2-Dichloropropane	U		0.161	1.00	1	08/23/2023 11:26	WG2119345
Di-isopropyl ether	U		0.105	1.00	1	08/23/2023 11:26	WG2119345
Ethylbenzene	U		0.137	1.00	1	08/23/2023 11:26	WG2119345
Hexachloro-1,3-butadiene	U		0.337	1.00	1	08/23/2023 11:26	WG2119345
Isopropylbenzene	U		0.105	1.00	1	08/23/2023 11:26	WG2119345
p-Isopropyltoluene	U		0.120	1.00	1	08/23/2023 11:26	WG2119345
2-Butanone (MEK)	U		1.19	10.0	1	08/23/2023 11:26	WG2119345
Methylene Chloride	U		0.430	5.00	1	08/23/2023 11:26	WG2119345
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	08/23/2023 11:26	WG2119345
Methyl tert-butyl ether	U		0.101	1.00	1	08/23/2023 11:26	WG2119345
Naphthalene	U	C3	1.00	5.00	1	08/23/2023 11:26	WG2119345
n-Propylbenzene	U		0.0993	1.00	1	08/23/2023 11:26	WG2119345
Styrene	U		0.118	1.00	1	08/23/2023 11:26	WG2119345
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	08/23/2023 11:26	WG2119345
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	08/23/2023 11:26	WG2119345
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	08/23/2023 11:26	WG2119345
Tetrachloroethene	U		0.300	1.00	1	08/23/2023 11:26	WG2119345
Toluene	U		0.278	1.00	1	08/23/2023 11:26	WG2119345
1,2,3-Trichlorobenzene	U		0.230	1.00	1	08/23/2023 11:26	WG2119345

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trichlorobenzene	U		0.481	1.00	1	08/23/2023 11:26	WG2119345
1,1,1-Trichloroethane	U		0.149	1.00	1	08/23/2023 11:26	WG2119345
1,1,2-Trichloroethane	U		0.158	1.00	1	08/23/2023 11:26	WG2119345
Trichloroethene	U		0.190	1.00	1	08/23/2023 11:26	WG2119345
Trichlorofluoromethane	U		0.160	5.00	1	08/23/2023 11:26	WG2119345
1,2,3-Trichloropropane	U		0.237	2.50	1	08/23/2023 11:26	WG2119345
1,2,4-Trimethylbenzene	U		0.322	1.00	1	08/23/2023 11:26	WG2119345
1,2,3-Trimethylbenzene	U		0.104	1.00	1	08/23/2023 11:26	WG2119345
1,3,5-Trimethylbenzene	U		0.104	1.00	1	08/23/2023 11:26	WG2119345
Vinyl chloride	U	C3	0.234	1.00	1	08/23/2023 11:26	WG2119345
Xylenes, Total	U		0.174	3.00	1	08/23/2023 11:26	WG2119345
(S) Toluene-d8	*110*			*80.0-120*		*08/23/2023 11:26*	WG2119345
(S) 4-Bromofluorobenzene	*96.8*			*77.0-126*		*08/23/2023 11:26*	WG2119345
(S) 1,2-Dichloroethane-d4	*99.2*			*70.0-130*		*08/23/2023 11:26*	WG2119345

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	17700		29.1	100	10	08/28/2023 09:49	WG2122170
Ethane	138		4.07	13.0	1	08/27/2023 14:34	WG2120925
Ethene	753		4.26	13.0	1	08/27/2023 14:34	WG2120925

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		565	2500	50	08/23/2023 16:37	WG2119345
Acrolein	U	C3	127	2500	50	08/23/2023 16:37	WG2119345
Acrylonitrile	U		33.6	500	50	08/23/2023 16:37	WG2119345
Benzene	U		4.71	50.0	50	08/23/2023 16:37	WG2119345
Bromobenzene	U		5.90	50.0	50	08/23/2023 16:37	WG2119345
Bromodichloromethane	U		6.80	50.0	50	08/23/2023 16:37	WG2119345
Bromoform	U		6.45	50.0	50	08/23/2023 16:37	WG2119345
Bromomethane	U	C3	30.3	250	50	08/23/2023 16:37	WG2119345
n-Butylbenzene	U		7.85	50.0	50	08/23/2023 16:37	WG2119345
sec-Butylbenzene	U		6.25	50.0	50	08/23/2023 16:37	WG2119345
tert-Butylbenzene	U		6.35	50.0	50	08/23/2023 16:37	WG2119345
Carbon disulfide	U		4.81	50.0	50	08/23/2023 16:37	WG2119345
Carbon tetrachloride	U		6.40	50.0	50	08/23/2023 16:37	WG2119345
Chlorobenzene	U		5.80	50.0	50	08/23/2023 16:37	WG2119345
Chlorodibromomethane	U		7.00	50.0	50	08/23/2023 16:37	WG2119345
Chloroethane	U		9.60	250	50	08/23/2023 16:37	WG2119345
Chloroform	U		5.55	250	50	08/23/2023 16:37	WG2119345
Chloromethane	U	C3	48.0	125	50	08/23/2023 16:37	WG2119345
2-Chlorotoluene	U		5.30	50.0	50	08/23/2023 16:37	WG2119345
4-Chlorotoluene	U		5.70	50.0	50	08/23/2023 16:37	WG2119345
1,2-Dibromo-3-Chloropropane	U		13.8	250	50	08/23/2023 16:37	WG2119345
1,2-Dibromoethane	U		6.30	50.0	50	08/23/2023 16:37	WG2119345
Dibromomethane	U		6.10	50.0	50	08/23/2023 16:37	WG2119345
1,2-Dichlorobenzene	U		5.35	50.0	50	08/23/2023 16:37	WG2119345
1,3-Dichlorobenzene	U		5.50	50.0	50	08/23/2023 16:37	WG2119345
1,4-Dichlorobenzene	U		6.00	50.0	50	08/23/2023 16:37	WG2119345
Dichlorodifluoromethane	U	C3	18.7	250	50	08/23/2023 16:37	WG2119345
1,1-Dichloroethane	U		5.00	50.0	50	08/23/2023 16:37	WG2119345
1,2-Dichloroethane	U		4.09	50.0	50	08/23/2023 16:37	WG2119345
1,1-Dichloroethene	U		9.40	50.0	50	08/23/2023 16:37	WG2119345
cis-1,2-Dichloroethene	7490		6.30	50.0	50	08/23/2023 16:37	WG2119345
trans-1,2-Dichloroethene	81.8		7.45	50.0	50	08/23/2023 16:37	WG2119345
1,2-Dichloropropane	U		7.45	50.0	50	08/23/2023 16:37	WG2119345
1,1-Dichloropropene	U		7.10	50.0	50	08/23/2023 16:37	WG2119345
1,3-Dichloropropane	U		5.50	50.0	50	08/23/2023 16:37	WG2119345
cis-1,3-Dichloropropene	U		5.55	50.0	50	08/23/2023 16:37	WG2119345
trans-1,3-Dichloropropene	U		5.90	50.0	50	08/23/2023 16:37	WG2119345
2,2-Dichloropropane	U		8.05	50.0	50	08/23/2023 16:37	WG2119345
Di-isopropyl ether	U		5.25	50.0	50	08/23/2023 16:37	WG2119345
Ethylbenzene	U		6.85	50.0	50	08/23/2023 16:37	WG2119345
Hexachloro-1,3-butadiene	U		16.9	50.0	50	08/23/2023 16:37	WG2119345
Isopropylbenzene	U		5.25	50.0	50	08/23/2023 16:37	WG2119345
p-Isopropyltoluene	U		6.00	50.0	50	08/23/2023 16:37	WG2119345
2-Butanone (MEK)	U		59.5	500	50	08/23/2023 16:37	WG2119345
Methylene Chloride	U		21.5	250	50	08/23/2023 16:37	WG2119345
4-Methyl-2-pentanone (MIBK)	U		23.9	500	50	08/23/2023 16:37	WG2119345
Methyl tert-butyl ether	U		5.05	50.0	50	08/23/2023 16:37	WG2119345
Naphthalene	U	C3	50.0	250	50	08/23/2023 16:37	WG2119345

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
n-Propylbenzene	U		4.97	50.0	50	08/23/2023 16:37	WG2119345
Styrene	U		5.90	50.0	50	08/23/2023 16:37	WG2119345
1,1,1,2-Tetrachloroethane	U		7.35	50.0	50	08/23/2023 16:37	WG2119345
1,1,2,2-Tetrachloroethane	U		6.65	50.0	50	08/23/2023 16:37	WG2119345
1,1,2-Trichlorotrifluoroethane	U		9.00	50.0	50	08/23/2023 16:37	WG2119345
Tetrachloroethene	U		15.0	50.0	50	08/23/2023 16:37	WG2119345
Toluene	U		13.9	50.0	50	08/23/2023 16:37	WG2119345
1,2,3-Trichlorobenzene	U		11.5	50.0	50	08/23/2023 16:37	WG2119345
1,2,4-Trichlorobenzene	U		24.1	50.0	50	08/23/2023 16:37	WG2119345
1,1,1-Trichloroethane	U		7.45	50.0	50	08/23/2023 16:37	WG2119345
1,1,2-Trichloroethane	U		7.90	50.0	50	08/23/2023 16:37	WG2119345
Trichloroethene	U		9.50	50.0	50	08/23/2023 16:37	WG2119345
Trichlorofluoromethane	U		8.00	250	50	08/23/2023 16:37	WG2119345
1,2,3-Trichloropropane	U		11.9	125	50	08/23/2023 16:37	WG2119345
1,2,4-Trimethylbenzene	U		16.1	50.0	50	08/23/2023 16:37	WG2119345
1,2,3-Trimethylbenzene	U		5.20	50.0	50	08/23/2023 16:37	WG2119345
1,3,5-Trimethylbenzene	U		5.20	50.0	50	08/23/2023 16:37	WG2119345
Vinyl chloride	1920	C3	11.7	50.0	50	08/23/2023 16:37	WG2119345
Xylenes, Total	U		8.70	150	50	08/23/2023 16:37	WG2119345
(S) Toluene-d8	*110*			*80.0-120*		*08/23/2023 16:37*	WG2119345
(S) 4-Bromofluorobenzene	*98.2*			*77.0-126*		*08/23/2023 16:37*	WG2119345
(S) 1,2-Dichloroethane-d4	*99.4*			*70.0-130*		*08/23/2023 16:37*	WG2119345

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	08/23/2023 11:46	WG2119345
Acrolein	U	C3	2.54	50.0	1	08/23/2023 11:46	WG2119345
Acrylonitrile	U		0.671	10.0	1	08/23/2023 11:46	WG2119345
Benzene	U		0.0941	1.00	1	08/23/2023 11:46	WG2119345
Bromobenzene	U		0.118	1.00	1	08/23/2023 11:46	WG2119345
Bromodichloromethane	U		0.136	1.00	1	08/23/2023 11:46	WG2119345
Bromoform	U		0.129	1.00	1	08/23/2023 11:46	WG2119345
Bromomethane	U	C3	0.605	5.00	1	08/23/2023 11:46	WG2119345
n-Butylbenzene	U		0.157	1.00	1	08/23/2023 11:46	WG2119345
sec-Butylbenzene	U		0.125	1.00	1	08/23/2023 11:46	WG2119345
tert-Butylbenzene	U		0.127	1.00	1	08/23/2023 11:46	WG2119345
Carbon disulfide	U		0.0962	1.00	1	08/23/2023 11:46	WG2119345
Carbon tetrachloride	U		0.128	1.00	1	08/23/2023 11:46	WG2119345
Chlorobenzene	U		0.116	1.00	1	08/23/2023 11:46	WG2119345
Chlorodibromomethane	U		0.140	1.00	1	08/23/2023 11:46	WG2119345
Chloroethane	U		0.192	5.00	1	08/23/2023 11:46	WG2119345
Chloroform	U		0.111	5.00	1	08/23/2023 11:46	WG2119345
Chloromethane	U	C3	0.960	2.50	1	08/23/2023 11:46	WG2119345
2-Chlorotoluene	U		0.106	1.00	1	08/23/2023 11:46	WG2119345
4-Chlorotoluene	U		0.114	1.00	1	08/23/2023 11:46	WG2119345
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	08/23/2023 11:46	WG2119345
1,2-Dibromoethane	U		0.126	1.00	1	08/23/2023 11:46	WG2119345
Dibromomethane	U		0.122	1.00	1	08/23/2023 11:46	WG2119345
1,2-Dichlorobenzene	U		0.107	1.00	1	08/23/2023 11:46	WG2119345
1,3-Dichlorobenzene	U		0.110	1.00	1	08/23/2023 11:46	WG2119345
1,4-Dichlorobenzene	U		0.120	1.00	1	08/23/2023 11:46	WG2119345
Dichlorodifluoromethane	U	C3	0.374	5.00	1	08/23/2023 11:46	WG2119345
1,1-Dichloroethane	U		0.100	1.00	1	08/23/2023 11:46	WG2119345
1,2-Dichloroethane	U		0.0819	1.00	1	08/23/2023 11:46	WG2119345
1,1-Dichloroethene	U		0.188	1.00	1	08/23/2023 11:46	WG2119345
cis-1,2-Dichloroethene	U		0.126	1.00	1	08/23/2023 11:46	WG2119345
trans-1,2-Dichloroethene	U		0.149	1.00	1	08/23/2023 11:46	WG2119345
1,2-Dichloropropane	U		0.149	1.00	1	08/23/2023 11:46	WG2119345
1,1-Dichloropropene	U		0.142	1.00	1	08/23/2023 11:46	WG2119345
1,3-Dichloropropane	U		0.110	1.00	1	08/23/2023 11:46	WG2119345
cis-1,3-Dichloropropene	U		0.111	1.00	1	08/23/2023 11:46	WG2119345
trans-1,3-Dichloropropene	U		0.118	1.00	1	08/23/2023 11:46	WG2119345
2,2-Dichloropropane	U		0.161	1.00	1	08/23/2023 11:46	WG2119345
Di-isopropyl ether	U		0.105	1.00	1	08/23/2023 11:46	WG2119345
Ethylbenzene	U		0.137	1.00	1	08/23/2023 11:46	WG2119345
Hexachloro-1,3-butadiene	U		0.337	1.00	1	08/23/2023 11:46	WG2119345
Isopropylbenzene	U		0.105	1.00	1	08/23/2023 11:46	WG2119345
p-Isopropyltoluene	U		0.120	1.00	1	08/23/2023 11:46	WG2119345
2-Butanone (MEK)	U		1.19	10.0	1	08/23/2023 11:46	WG2119345
Methylene Chloride	U		0.430	5.00	1	08/23/2023 11:46	WG2119345
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	08/23/2023 11:46	WG2119345
Methyl tert-butyl ether	U		0.101	1.00	1	08/23/2023 11:46	WG2119345
Naphthalene	U	C3	1.00	5.00	1	08/23/2023 11:46	WG2119345
n-Propylbenzene	U		0.0993	1.00	1	08/23/2023 11:46	WG2119345
Styrene	U		0.118	1.00	1	08/23/2023 11:46	WG2119345
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	08/23/2023 11:46	WG2119345
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	08/23/2023 11:46	WG2119345
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	08/23/2023 11:46	WG2119345
Tetrachloroethene	U		0.300	1.00	1	08/23/2023 11:46	WG2119345
Toluene	U		0.278	1.00	1	08/23/2023 11:46	WG2119345
1,2,3-Trichlorobenzene	U		0.230	1.00	1	08/23/2023 11:46	WG2119345

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trichlorobenzene	U		0.481	1.00	1	08/23/2023 11:46	WG2119345
1,1,1-Trichloroethane	U		0.149	1.00	1	08/23/2023 11:46	WG2119345
1,1,2-Trichloroethane	U		0.158	1.00	1	08/23/2023 11:46	WG2119345
Trichloroethene	U		0.190	1.00	1	08/23/2023 11:46	WG2119345
Trichlorofluoromethane	U		0.160	5.00	1	08/23/2023 11:46	WG2119345
1,2,3-Trichloropropane	U		0.237	2.50	1	08/23/2023 11:46	WG2119345
1,2,4-Trimethylbenzene	U		0.322	1.00	1	08/23/2023 11:46	WG2119345
1,2,3-Trimethylbenzene	U		0.104	1.00	1	08/23/2023 11:46	WG2119345
1,3,5-Trimethylbenzene	U		0.104	1.00	1	08/23/2023 11:46	WG2119345
Vinyl chloride	U	C3	0.234	1.00	1	08/23/2023 11:46	WG2119345
Xylenes, Total	U		0.174	3.00	1	08/23/2023 11:46	WG2119345
(S) Toluene-d8	*109*			*80.0-120*		*08/23/2023 11:46*	WG2119345
(S) 4-Bromofluorobenzene	*96.2*			*77.0-126*		*08/23/2023 11:46*	WG2119345
(S) 1,2-Dichloroethane-d4	*99.4*			*70.0-130*		*08/23/2023 11:46*	WG2119345

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	08/23/2023 12:06	WG2119345
Acrolein	U	C3	2.54	50.0	1	08/23/2023 12:06	WG2119345
Acrylonitrile	U		0.671	10.0	1	08/23/2023 12:06	WG2119345
Benzene	U		0.0941	1.00	1	08/23/2023 12:06	WG2119345
Bromobenzene	U		0.118	1.00	1	08/23/2023 12:06	WG2119345
Bromodichloromethane	U		0.136	1.00	1	08/23/2023 12:06	WG2119345
Bromoform	U		0.129	1.00	1	08/23/2023 12:06	WG2119345
Bromomethane	U	C3	0.605	5.00	1	08/23/2023 12:06	WG2119345
n-Butylbenzene	U		0.157	1.00	1	08/23/2023 12:06	WG2119345
sec-Butylbenzene	U		0.125	1.00	1	08/23/2023 12:06	WG2119345
tert-Butylbenzene	U		0.127	1.00	1	08/23/2023 12:06	WG2119345
Carbon disulfide	U		0.0962	1.00	1	08/23/2023 12:06	WG2119345
Carbon tetrachloride	U		0.128	1.00	1	08/23/2023 12:06	WG2119345
Chlorobenzene	U		0.116	1.00	1	08/23/2023 12:06	WG2119345
Chlorodibromomethane	U		0.140	1.00	1	08/23/2023 12:06	WG2119345
Chloroethane	U		0.192	5.00	1	08/23/2023 12:06	WG2119345
Chloroform	U		0.111	5.00	1	08/23/2023 12:06	WG2119345
Chloromethane	U	C3	0.960	2.50	1	08/23/2023 12:06	WG2119345
2-Chlorotoluene	U		0.106	1.00	1	08/23/2023 12:06	WG2119345
4-Chlorotoluene	U		0.114	1.00	1	08/23/2023 12:06	WG2119345
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	08/23/2023 12:06	WG2119345
1,2-Dibromoethane	U		0.126	1.00	1	08/23/2023 12:06	WG2119345
Dibromomethane	U		0.122	1.00	1	08/23/2023 12:06	WG2119345
1,2-Dichlorobenzene	U		0.107	1.00	1	08/23/2023 12:06	WG2119345
1,3-Dichlorobenzene	U		0.110	1.00	1	08/23/2023 12:06	WG2119345
1,4-Dichlorobenzene	U		0.120	1.00	1	08/23/2023 12:06	WG2119345
Dichlorodifluoromethane	U	C3	0.374	5.00	1	08/23/2023 12:06	WG2119345
1,1-Dichloroethane	U		0.100	1.00	1	08/23/2023 12:06	WG2119345
1,2-Dichloroethane	U		0.0819	1.00	1	08/23/2023 12:06	WG2119345
1,1-Dichloroethene	U		0.188	1.00	1	08/23/2023 12:06	WG2119345
cis-1,2-Dichloroethene	1.42		0.126	1.00	1	08/23/2023 12:06	WG2119345
trans-1,2-Dichloroethene	0.283	J	0.149	1.00	1	08/23/2023 12:06	WG2119345
1,2-Dichloropropane	U		0.149	1.00	1	08/23/2023 12:06	WG2119345
1,1-Dichloropropene	U		0.142	1.00	1	08/23/2023 12:06	WG2119345
1,3-Dichloropropane	U		0.110	1.00	1	08/23/2023 12:06	WG2119345
cis-1,3-Dichloropropene	U		0.111	1.00	1	08/23/2023 12:06	WG2119345
trans-1,3-Dichloropropene	U		0.118	1.00	1	08/23/2023 12:06	WG2119345
2,2-Dichloropropane	U		0.161	1.00	1	08/23/2023 12:06	WG2119345
Di-isopropyl ether	U		0.105	1.00	1	08/23/2023 12:06	WG2119345
Ethylbenzene	U		0.137	1.00	1	08/23/2023 12:06	WG2119345
Hexachloro-1,3-butadiene	U		0.337	1.00	1	08/23/2023 12:06	WG2119345
Isopropylbenzene	U		0.105	1.00	1	08/23/2023 12:06	WG2119345
p-Isopropyltoluene	U		0.120	1.00	1	08/23/2023 12:06	WG2119345
2-Butanone (MEK)	U		1.19	10.0	1	08/23/2023 12:06	WG2119345
Methylene Chloride	U		0.430	5.00	1	08/23/2023 12:06	WG2119345
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	08/23/2023 12:06	WG2119345
Methyl tert-butyl ether	U		0.101	1.00	1	08/23/2023 12:06	WG2119345
Naphthalene	U	C3	1.00	5.00	1	08/23/2023 12:06	WG2119345
n-Propylbenzene	U		0.0993	1.00	1	08/23/2023 12:06	WG2119345
Styrene	U		0.118	1.00	1	08/23/2023 12:06	WG2119345
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	08/23/2023 12:06	WG2119345
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	08/23/2023 12:06	WG2119345
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	08/23/2023 12:06	WG2119345
Tetrachloroethene	U		0.300	1.00	1	08/23/2023 12:06	WG2119345
Toluene	0.601	J	0.278	1.00	1	08/23/2023 12:06	WG2119345
1,2,3-Trichlorobenzene	U		0.230	1.00	1	08/23/2023 12:06	WG2119345

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trichlorobenzene	U		0.481	1.00	1	08/23/2023 12:06	WG2119345
1,1,1-Trichloroethane	U		0.149	1.00	1	08/23/2023 12:06	WG2119345
1,1,2-Trichloroethane	U		0.158	1.00	1	08/23/2023 12:06	WG2119345
Trichloroethene	0.200	J	0.190	1.00	1	08/23/2023 12:06	WG2119345
Trichlorofluoromethane	U		0.160	5.00	1	08/23/2023 12:06	WG2119345
1,2,3-Trichloropropane	U		0.237	2.50	1	08/23/2023 12:06	WG2119345
1,2,4-Trimethylbenzene	U		0.322	1.00	1	08/23/2023 12:06	WG2119345
1,2,3-Trimethylbenzene	U		0.104	1.00	1	08/23/2023 12:06	WG2119345
1,3,5-Trimethylbenzene	U		0.104	1.00	1	08/23/2023 12:06	WG2119345
Vinyl chloride	4.69	C3	0.234	1.00	1	08/23/2023 12:06	WG2119345
Xylenes, Total	U		0.174	3.00	1	08/23/2023 12:06	WG2119345
(S) Toluene-d8	*110*			*80.0-120*		*08/23/2023 12:06*	WG2119345
(S) 4-Bromofluorobenzene	*96.4*			*77.0-126*		*08/23/2023 12:06*	WG2119345
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*08/23/2023 12:06*	WG2119345

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		113000	500000	10000	08/23/2023 16:57	WG2119345
Acrolein	U	C3	25400	500000	10000	08/23/2023 16:57	WG2119345
Acrylonitrile	U		6710	100000	10000	08/23/2023 16:57	WG2119345
Benzene	U		941	10000	10000	08/23/2023 16:57	WG2119345
Bromobenzene	U		1180	10000	10000	08/23/2023 16:57	WG2119345
Bromodichloromethane	U		1360	10000	10000	08/23/2023 16:57	WG2119345
Bromoform	U		1290	10000	10000	08/23/2023 16:57	WG2119345
Bromomethane	U	C3	6050	50000	10000	08/23/2023 16:57	WG2119345
n-Butylbenzene	U		1570	10000	10000	08/23/2023 16:57	WG2119345
sec-Butylbenzene	U		1250	10000	10000	08/23/2023 16:57	WG2119345
tert-Butylbenzene	U		1270	10000	10000	08/23/2023 16:57	WG2119345
Carbon disulfide	U		962	10000	10000	08/23/2023 16:57	WG2119345
Carbon tetrachloride	U		1280	10000	10000	08/23/2023 16:57	WG2119345
Chlorobenzene	U		1160	10000	10000	08/23/2023 16:57	WG2119345
Chlorodibromomethane	U		1400	10000	10000	08/23/2023 16:57	WG2119345
Chloroethane	U		1920	50000	10000	08/23/2023 16:57	WG2119345
Chloroform	U		1110	50000	10000	08/23/2023 16:57	WG2119345
Chloromethane	U	C3	9600	25000	10000	08/23/2023 16:57	WG2119345
2-Chlorotoluene	U		1060	10000	10000	08/23/2023 16:57	WG2119345
4-Chlorotoluene	U		1140	10000	10000	08/23/2023 16:57	WG2119345
1,2-Dibromo-3-Chloropropane	U		2760	50000	10000	08/23/2023 16:57	WG2119345
1,2-Dibromoethane	U		1260	10000	10000	08/23/2023 16:57	WG2119345
Dibromomethane	U		1220	10000	10000	08/23/2023 16:57	WG2119345
1,2-Dichlorobenzene	U		1070	10000	10000	08/23/2023 16:57	WG2119345
1,3-Dichlorobenzene	U		1100	10000	10000	08/23/2023 16:57	WG2119345
1,4-Dichlorobenzene	U		1200	10000	10000	08/23/2023 16:57	WG2119345
Dichlorodifluoromethane	U	C3	3740	50000	10000	08/23/2023 16:57	WG2119345
1,1-Dichloroethane	U		1000	10000	10000	08/23/2023 16:57	WG2119345
1,2-Dichloroethane	U		819	10000	10000	08/23/2023 16:57	WG2119345
1,1-Dichloroethene	U		1880	10000	10000	08/23/2023 16:57	WG2119345
cis-1,2-Dichloroethene	528000		1260	10000	10000	08/23/2023 16:57	WG2119345
trans-1,2-Dichloroethene	2280	J	1490	10000	10000	08/23/2023 16:57	WG2119345
1,2-Dichloropropane	U		1490	10000	10000	08/23/2023 16:57	WG2119345
1,1-Dichloropropene	U		1420	10000	10000	08/23/2023 16:57	WG2119345
1,3-Dichloropropane	U		1100	10000	10000	08/23/2023 16:57	WG2119345
cis-1,3-Dichloropropene	U		1110	10000	10000	08/23/2023 16:57	WG2119345
trans-1,3-Dichloropropene	U		1180	10000	10000	08/23/2023 16:57	WG2119345
2,2-Dichloropropane	U		1610	10000	10000	08/23/2023 16:57	WG2119345
Di-isopropyl ether	U		1050	10000	10000	08/23/2023 16:57	WG2119345
Ethylbenzene	U		1370	10000	10000	08/23/2023 16:57	WG2119345
Hexachloro-1,3-butadiene	U		3370	10000	10000	08/23/2023 16:57	WG2119345
Isopropylbenzene	U		1050	10000	10000	08/23/2023 16:57	WG2119345
p-Isopropyltoluene	U		1200	10000	10000	08/23/2023 16:57	WG2119345
2-Butanone (MEK)	U		11900	100000	10000	08/23/2023 16:57	WG2119345
Methylene Chloride	U		4300	50000	10000	08/23/2023 16:57	WG2119345
4-Methyl-2-pentanone (MIBK)	U		4780	100000	10000	08/23/2023 16:57	WG2119345
Methyl tert-butyl ether	U		1010	10000	10000	08/23/2023 16:57	WG2119345
Naphthalene	U	C3	10000	50000	10000	08/23/2023 16:57	WG2119345
n-Propylbenzene	U		993	10000	10000	08/23/2023 16:57	WG2119345
Styrene	U		1180	10000	10000	08/23/2023 16:57	WG2119345
1,1,1,2-Tetrachloroethane	U		1470	10000	10000	08/23/2023 16:57	WG2119345
1,1,2,2-Tetrachloroethane	U		1330	10000	10000	08/23/2023 16:57	WG2119345
1,1,2-Trichlorotrifluoroethane	U		1800	10000	10000	08/23/2023 16:57	WG2119345
Tetrachloroethene	U		3000	10000	10000	08/23/2023 16:57	WG2119345
Toluene	U		2780	10000	10000	08/23/2023 16:57	WG2119345
1,2,3-Trichlorobenzene	U		2300	10000	10000	08/23/2023 16:57	WG2119345

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trichlorobenzene	U		4810	10000	10000	08/23/2023 16:57	WG2119345
1,1,1-Trichloroethane	U		1490	10000	10000	08/23/2023 16:57	WG2119345
1,1,2-Trichloroethane	U		1580	10000	10000	08/23/2023 16:57	WG2119345
Trichloroethene	U		1900	10000	10000	08/23/2023 16:57	WG2119345
Trichlorofluoromethane	U		1600	50000	10000	08/23/2023 16:57	WG2119345
1,2,3-Trichloropropane	U		2370	25000	10000	08/23/2023 16:57	WG2119345
1,2,4-Trimethylbenzene	U		3220	10000	10000	08/23/2023 16:57	WG2119345
1,2,3-Trimethylbenzene	U		1040	10000	10000	08/23/2023 16:57	WG2119345
1,3,5-Trimethylbenzene	U		1040	10000	10000	08/23/2023 16:57	WG2119345
Vinyl chloride	60400	C3	2340	10000	10000	08/23/2023 16:57	WG2119345
Xylenes, Total	U		1740	30000	10000	08/23/2023 16:57	WG2119345
(S) Toluene-d8	*112*			*80.0-120*		*08/23/2023 16:57*	WG2119345
(S) 4-Bromofluorobenzene	*98.3*			*77.0-126*		*08/23/2023 16:57*	WG2119345
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*08/23/2023 16:57*	WG2119345

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	14400		29.1	100	10	08/28/2023 09:54	WG2122170
Ethane	45.4		4.07	13.0	1	08/27/2023 14:49	WG2120925
Ethene	1590		4.26	13.0	1	08/27/2023 14:49	WG2120925

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		1130	5000	100	08/23/2023 17:18	WG2119345
Acrolein	U	C3	254	5000	100	08/23/2023 17:18	WG2119345
Acrylonitrile	U		67.1	1000	100	08/23/2023 17:18	WG2119345
Benzene	U		9.41	100	100	08/23/2023 17:18	WG2119345
Bromobenzene	U		11.8	100	100	08/23/2023 17:18	WG2119345
Bromodichloromethane	U		13.6	100	100	08/23/2023 17:18	WG2119345
Bromoform	U		12.9	100	100	08/23/2023 17:18	WG2119345
Bromomethane	U	C3	60.5	500	100	08/23/2023 17:18	WG2119345
n-Butylbenzene	U		15.7	100	100	08/23/2023 17:18	WG2119345
sec-Butylbenzene	U		12.5	100	100	08/23/2023 17:18	WG2119345
tert-Butylbenzene	U		12.7	100	100	08/23/2023 17:18	WG2119345
Carbon disulfide	U		9.62	100	100	08/23/2023 17:18	WG2119345
Carbon tetrachloride	U		12.8	100	100	08/23/2023 17:18	WG2119345
Chlorobenzene	U		11.6	100	100	08/23/2023 17:18	WG2119345
Chlorodibromomethane	U		14.0	100	100	08/23/2023 17:18	WG2119345
Chloroethane	U		19.2	500	100	08/23/2023 17:18	WG2119345
Chloroform	U		11.1	500	100	08/23/2023 17:18	WG2119345
Chloromethane	U	C3	96.0	250	100	08/23/2023 17:18	WG2119345
2-Chlorotoluene	U		10.6	100	100	08/23/2023 17:18	WG2119345
4-Chlorotoluene	U		11.4	100	100	08/23/2023 17:18	WG2119345
1,2-Dibromo-3-Chloropropane	U		27.6	500	100	08/23/2023 17:18	WG2119345
1,2-Dibromoethane	U		12.6	100	100	08/23/2023 17:18	WG2119345
Dibromomethane	U		12.2	100	100	08/23/2023 17:18	WG2119345
1,2-Dichlorobenzene	U		10.7	100	100	08/23/2023 17:18	WG2119345
1,3-Dichlorobenzene	U		11.0	100	100	08/23/2023 17:18	WG2119345
1,4-Dichlorobenzene	U		12.0	100	100	08/23/2023 17:18	WG2119345
Dichlorodifluoromethane	U	C3	37.4	500	100	08/23/2023 17:18	WG2119345
1,1-Dichloroethane	U		10.0	100	100	08/23/2023 17:18	WG2119345
1,2-Dichloroethane	U		8.19	100	100	08/23/2023 17:18	WG2119345
1,1-Dichloroethene	U		18.8	100	100	08/23/2023 17:18	WG2119345
cis-1,2-Dichloroethene	10500		12.6	100	100	08/23/2023 17:18	WG2119345
trans-1,2-Dichloroethene	126		14.9	100	100	08/23/2023 17:18	WG2119345
1,2-Dichloropropane	U		14.9	100	100	08/23/2023 17:18	WG2119345
1,1-Dichloropropene	U		14.2	100	100	08/23/2023 17:18	WG2119345
1,3-Dichloropropane	U		11.0	100	100	08/23/2023 17:18	WG2119345
cis-1,3-Dichloropropene	U		11.1	100	100	08/23/2023 17:18	WG2119345
trans-1,3-Dichloropropene	U		11.8	100	100	08/23/2023 17:18	WG2119345
2,2-Dichloropropane	U		16.1	100	100	08/23/2023 17:18	WG2119345
Di-isopropyl ether	U		10.5	100	100	08/23/2023 17:18	WG2119345
Ethylbenzene	U		13.7	100	100	08/23/2023 17:18	WG2119345
Hexachloro-1,3-butadiene	U		33.7	100	100	08/23/2023 17:18	WG2119345
Isopropylbenzene	U		10.5	100	100	08/23/2023 17:18	WG2119345
p-Isopropyltoluene	U		12.0	100	100	08/23/2023 17:18	WG2119345
2-Butanone (MEK)	U		119	1000	100	08/23/2023 17:18	WG2119345
Methylene Chloride	U		43.0	500	100	08/23/2023 17:18	WG2119345
4-Methyl-2-pentanone (MIBK)	U		47.8	1000	100	08/23/2023 17:18	WG2119345
Methyl tert-butyl ether	U		10.1	100	100	08/23/2023 17:18	WG2119345
Naphthalene	U	C3	100	500	100	08/23/2023 17:18	WG2119345

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
n-Propylbenzene	U		9.93	100	100	08/23/2023 17:18	WG2119345
Styrene	U		11.8	100	100	08/23/2023 17:18	WG2119345
1,1,1,2-Tetrachloroethane	U		14.7	100	100	08/23/2023 17:18	WG2119345
1,1,2,2-Tetrachloroethane	U		13.3	100	100	08/23/2023 17:18	WG2119345
1,1,2-Trichlorotrifluoroethane	U		18.0	100	100	08/23/2023 17:18	WG2119345
Tetrachloroethene	296		30.0	100	100	08/23/2023 17:18	WG2119345
Toluene	U		27.8	100	100	08/23/2023 17:18	WG2119345
1,2,3-Trichlorobenzene	U		23.0	100	100	08/23/2023 17:18	WG2119345
1,2,4-Trichlorobenzene	U		48.1	100	100	08/23/2023 17:18	WG2119345
1,1,1-Trichloroethane	U		14.9	100	100	08/23/2023 17:18	WG2119345
1,1,2-Trichloroethane	U		15.8	100	100	08/23/2023 17:18	WG2119345
Trichloroethene	714		19.0	100	100	08/23/2023 17:18	WG2119345
Trichlorofluoromethane	U		16.0	500	100	08/23/2023 17:18	WG2119345
1,2,3-Trichloropropane	U		23.7	250	100	08/23/2023 17:18	WG2119345
1,2,4-Trimethylbenzene	U		32.2	100	100	08/23/2023 17:18	WG2119345
1,2,3-Trimethylbenzene	U		10.4	100	100	08/23/2023 17:18	WG2119345
1,3,5-Trimethylbenzene	U		10.4	100	100	08/23/2023 17:18	WG2119345
Vinyl chloride	3180	C3	23.4	100	100	08/23/2023 17:18	WG2119345
Xylenes, Total	U		17.4	300	100	08/23/2023 17:18	WG2119345
(S) Toluene-d8	*108*			*80.0-120*		*08/23/2023 17:18*	WG2119345
(S) 4-Bromofluorobenzene	*93.1*			*77.0-126*		*08/23/2023 17:18*	WG2119345
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*08/23/2023 17:18*	WG2119345

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	8840		29.1	100	10	08/28/2023 10:16	WG2122170
Ethane	32.5		4.07	13.0	1	08/27/2023 15:15	WG2120925
Ethene	3850		4.26	13.0	1	08/27/2023 15:15	WG2120925

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		22600	100000	2000	08/23/2023 17:39	WG2119345
Acrolein	U	C3	5080	100000	2000	08/23/2023 17:39	WG2119345
Acrylonitrile	U		1340	20000	2000	08/23/2023 17:39	WG2119345
Benzene	U		188	2000	2000	08/23/2023 17:39	WG2119345
Bromobenzene	U		236	2000	2000	08/23/2023 17:39	WG2119345
Bromodichloromethane	U		272	2000	2000	08/23/2023 17:39	WG2119345
Bromoform	U		258	2000	2000	08/23/2023 17:39	WG2119345
Bromomethane	U	C3	1210	10000	2000	08/23/2023 17:39	WG2119345
n-Butylbenzene	U		314	2000	2000	08/23/2023 17:39	WG2119345
sec-Butylbenzene	U		250	2000	2000	08/23/2023 17:39	WG2119345
tert-Butylbenzene	U		254	2000	2000	08/23/2023 17:39	WG2119345
Carbon disulfide	U		192	2000	2000	08/23/2023 17:39	WG2119345
Carbon tetrachloride	U		256	2000	2000	08/23/2023 17:39	WG2119345
Chlorobenzene	U		232	2000	2000	08/23/2023 17:39	WG2119345
Chlorodibromomethane	U		280	2000	2000	08/23/2023 17:39	WG2119345
Chloroethane	U		384	10000	2000	08/23/2023 17:39	WG2119345
Chloroform	U		222	10000	2000	08/23/2023 17:39	WG2119345
Chloromethane	U	C3	1920	5000	2000	08/23/2023 17:39	WG2119345
2-Chlorotoluene	U		212	2000	2000	08/23/2023 17:39	WG2119345
4-Chlorotoluene	U		228	2000	2000	08/23/2023 17:39	WG2119345
1,2-Dibromo-3-Chloropropane	U		552	10000	2000	08/23/2023 17:39	WG2119345
1,2-Dibromoethane	U		252	2000	2000	08/23/2023 17:39	WG2119345
Dibromomethane	U		244	2000	2000	08/23/2023 17:39	WG2119345
1,2-Dichlorobenzene	U		214	2000	2000	08/23/2023 17:39	WG2119345
1,3-Dichlorobenzene	U		220	2000	2000	08/23/2023 17:39	WG2119345
1,4-Dichlorobenzene	U		240	2000	2000	08/23/2023 17:39	WG2119345
Dichlorodifluoromethane	U	C3	748	10000	2000	08/23/2023 17:39	WG2119345
1,1-Dichloroethane	U		200	2000	2000	08/23/2023 17:39	WG2119345
1,2-Dichloroethane	U		164	2000	2000	08/23/2023 17:39	WG2119345
1,1-Dichloroethene	U		376	2000	2000	08/23/2023 17:39	WG2119345
cis-1,2-Dichloroethene	137000		252	2000	2000	08/23/2023 17:39	WG2119345
trans-1,2-Dichloroethene	1560	J	298	2000	2000	08/23/2023 17:39	WG2119345
1,2-Dichloropropane	U		298	2000	2000	08/23/2023 17:39	WG2119345
1,1-Dichloropropene	U		284	2000	2000	08/23/2023 17:39	WG2119345
1,3-Dichloropropane	U		220	2000	2000	08/23/2023 17:39	WG2119345
cis-1,3-Dichloropropene	U		222	2000	2000	08/23/2023 17:39	WG2119345
trans-1,3-Dichloropropene	U		236	2000	2000	08/23/2023 17:39	WG2119345
2,2-Dichloropropane	U		322	2000	2000	08/23/2023 17:39	WG2119345
Di-isopropyl ether	U		210	2000	2000	08/23/2023 17:39	WG2119345
Ethylbenzene	U		274	2000	2000	08/23/2023 17:39	WG2119345
Hexachloro-1,3-butadiene	U		674	2000	2000	08/23/2023 17:39	WG2119345
Isopropylbenzene	U		210	2000	2000	08/23/2023 17:39	WG2119345
p-Isopropyltoluene	U		240	2000	2000	08/23/2023 17:39	WG2119345
2-Butanone (MEK)	U		2380	20000	2000	08/23/2023 17:39	WG2119345
Methylene Chloride	U		860	10000	2000	08/23/2023 17:39	WG2119345
4-Methyl-2-pentanone (MIBK)	U		956	20000	2000	08/23/2023 17:39	WG2119345
Methyl tert-butyl ether	U		202	2000	2000	08/23/2023 17:39	WG2119345
Naphthalene	U	C3	2000	10000	2000	08/23/2023 17:39	WG2119345

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
n-Propylbenzene	U		199	2000	2000	08/23/2023 17:39	WG2119345
Styrene	U		236	2000	2000	08/23/2023 17:39	WG2119345
1,1,1,2-Tetrachloroethane	U		294	2000	2000	08/23/2023 17:39	WG2119345
1,1,2,2-Tetrachloroethane	U		266	2000	2000	08/23/2023 17:39	WG2119345
1,1,2-Trichlorotrifluoroethane	2610		360	2000	2000	08/23/2023 17:39	WG2119345
Tetrachloroethene	U		600	2000	2000	08/23/2023 17:39	WG2119345
Toluene	U		556	2000	2000	08/23/2023 17:39	WG2119345
1,2,3-Trichlorobenzene	U		460	2000	2000	08/23/2023 17:39	WG2119345
1,2,4-Trichlorobenzene	U		962	2000	2000	08/23/2023 17:39	WG2119345
1,1,1-Trichloroethane	U		298	2000	2000	08/23/2023 17:39	WG2119345
1,1,2-Trichloroethane	U		316	2000	2000	08/23/2023 17:39	WG2119345
Trichloroethene	U		380	2000	2000	08/23/2023 17:39	WG2119345
Trichlorofluoromethane	U		320	10000	2000	08/23/2023 17:39	WG2119345
1,2,3-Trichloropropane	U		474	5000	2000	08/23/2023 17:39	WG2119345
1,2,4-Trimethylbenzene	U		644	2000	2000	08/23/2023 17:39	WG2119345
1,2,3-Trimethylbenzene	U		208	2000	2000	08/23/2023 17:39	WG2119345
1,3,5-Trimethylbenzene	U		208	2000	2000	08/23/2023 17:39	WG2119345
Vinyl chloride	2810	C3	468	2000	2000	08/23/2023 17:39	WG2119345
Xylenes, Total	U		348	6000	2000	08/23/2023 17:39	WG2119345
(S) Toluene-d8	*110*			*80.0-120*		*08/23/2023 17:39*	WG2119345
(S) 4-Bromofluorobenzene	*94.5*			*77.0-126*		*08/23/2023 17:39*	WG2119345
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*08/23/2023 17:39*	WG2119345

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		22600	100000	2000	08/23/2023 17:59	WG2119345
Acrolein	U	C3	5080	100000	2000	08/23/2023 17:59	WG2119345
Acrylonitrile	U		1340	20000	2000	08/23/2023 17:59	WG2119345
Benzene	U		188	2000	2000	08/23/2023 17:59	WG2119345
Bromobenzene	U		236	2000	2000	08/23/2023 17:59	WG2119345
Bromodichloromethane	U		272	2000	2000	08/23/2023 17:59	WG2119345
Bromoform	U		258	2000	2000	08/23/2023 17:59	WG2119345
Bromomethane	U	C3	1210	10000	2000	08/23/2023 17:59	WG2119345
n-Butylbenzene	U		314	2000	2000	08/23/2023 17:59	WG2119345
sec-Butylbenzene	U		250	2000	2000	08/23/2023 17:59	WG2119345
tert-Butylbenzene	U		254	2000	2000	08/23/2023 17:59	WG2119345
Carbon disulfide	U		192	2000	2000	08/23/2023 17:59	WG2119345
Carbon tetrachloride	U		256	2000	2000	08/23/2023 17:59	WG2119345
Chlorobenzene	U		232	2000	2000	08/23/2023 17:59	WG2119345
Chlorodibromomethane	U		280	2000	2000	08/23/2023 17:59	WG2119345
Chloroethane	U		384	10000	2000	08/23/2023 17:59	WG2119345
Chloroform	U		222	10000	2000	08/23/2023 17:59	WG2119345
Chloromethane	U	C3	1920	5000	2000	08/23/2023 17:59	WG2119345
2-Chlorotoluene	U		212	2000	2000	08/23/2023 17:59	WG2119345
4-Chlorotoluene	U		228	2000	2000	08/23/2023 17:59	WG2119345
1,2-Dibromo-3-Chloropropane	U		552	10000	2000	08/23/2023 17:59	WG2119345
1,2-Dibromoethane	U		252	2000	2000	08/23/2023 17:59	WG2119345
Dibromomethane	U		244	2000	2000	08/23/2023 17:59	WG2119345
1,2-Dichlorobenzene	U		214	2000	2000	08/23/2023 17:59	WG2119345
1,3-Dichlorobenzene	U		220	2000	2000	08/23/2023 17:59	WG2119345
1,4-Dichlorobenzene	U		240	2000	2000	08/23/2023 17:59	WG2119345
Dichlorodifluoromethane	U	C3	748	10000	2000	08/23/2023 17:59	WG2119345
1,1-Dichloroethane	U		200	2000	2000	08/23/2023 17:59	WG2119345
1,2-Dichloroethane	U		164	2000	2000	08/23/2023 17:59	WG2119345
1,1-Dichloroethene	U		376	2000	2000	08/23/2023 17:59	WG2119345
cis-1,2-Dichloroethene	161000		252	2000	2000	08/23/2023 17:59	WG2119345
trans-1,2-Dichloroethene	1410	J	298	2000	2000	08/23/2023 17:59	WG2119345
1,2-Dichloropropane	U		298	2000	2000	08/23/2023 17:59	WG2119345
1,1-Dichloropropene	U		284	2000	2000	08/23/2023 17:59	WG2119345
1,3-Dichloropropane	U		220	2000	2000	08/23/2023 17:59	WG2119345
cis-1,3-Dichloropropene	U		222	2000	2000	08/23/2023 17:59	WG2119345
trans-1,3-Dichloropropene	U		236	2000	2000	08/23/2023 17:59	WG2119345
2,2-Dichloropropane	U		322	2000	2000	08/23/2023 17:59	WG2119345
Di-isopropyl ether	U		210	2000	2000	08/23/2023 17:59	WG2119345
Ethylbenzene	U		274	2000	2000	08/23/2023 17:59	WG2119345
Hexachloro-1,3-butadiene	U		674	2000	2000	08/23/2023 17:59	WG2119345
Isopropylbenzene	U		210	2000	2000	08/23/2023 17:59	WG2119345
p-Isopropyltoluene	U		240	2000	2000	08/23/2023 17:59	WG2119345
2-Butanone (MEK)	U		2380	20000	2000	08/23/2023 17:59	WG2119345
Methylene Chloride	U		860	10000	2000	08/23/2023 17:59	WG2119345
4-Methyl-2-pentanone (MIBK)	U		956	20000	2000	08/23/2023 17:59	WG2119345
Methyl tert-butyl ether	U		202	2000	2000	08/23/2023 17:59	WG2119345
Naphthalene	U	C3	2000	10000	2000	08/23/2023 17:59	WG2119345
n-Propylbenzene	U		199	2000	2000	08/23/2023 17:59	WG2119345
Styrene	U		236	2000	2000	08/23/2023 17:59	WG2119345
1,1,1,2-Tetrachloroethane	U		294	2000	2000	08/23/2023 17:59	WG2119345
1,1,2,2-Tetrachloroethane	U		266	2000	2000	08/23/2023 17:59	WG2119345
1,1,2-Trichlorotrifluoroethane	2790		360	2000	2000	08/23/2023 17:59	WG2119345
Tetrachloroethene	3480		600	2000	2000	08/23/2023 17:59	WG2119345
Toluene	U		556	2000	2000	08/23/2023 17:59	WG2119345
1,2,3-Trichlorobenzene	U		460	2000	2000	08/23/2023 17:59	WG2119345

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trichlorobenzene	U		962	2000	2000	08/23/2023 17:59	WG2119345
1,1,1-Trichloroethane	U		298	2000	2000	08/23/2023 17:59	WG2119345
1,1,2-Trichloroethane	U		316	2000	2000	08/23/2023 17:59	WG2119345
Trichloroethene	1780	J	380	2000	2000	08/23/2023 17:59	WG2119345
Trichlorofluoromethane	U		320	10000	2000	08/23/2023 17:59	WG2119345
1,2,3-Trichloropropane	U		474	5000	2000	08/23/2023 17:59	WG2119345
1,2,4-Trimethylbenzene	U		644	2000	2000	08/23/2023 17:59	WG2119345
1,2,3-Trimethylbenzene	U		208	2000	2000	08/23/2023 17:59	WG2119345
1,3,5-Trimethylbenzene	U		208	2000	2000	08/23/2023 17:59	WG2119345
Vinyl chloride	790	C3 J	468	2000	2000	08/23/2023 17:59	WG2119345
Xylenes, Total	U		348	6000	2000	08/23/2023 17:59	WG2119345
(S) Toluene-d8	*110*			*80.0-120*		*08/23/2023 17:59*	WG2119345
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*08/23/2023 17:59*	WG2119345
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*08/23/2023 17:59*	WG2119345

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	08/23/2023 12:40	WG2119345
Acrolein	U	C3	2.54	50.0	1	08/23/2023 12:40	WG2119345
Acrylonitrile	U		0.671	10.0	1	08/23/2023 12:40	WG2119345
Benzene	0.192	J	0.0941	1.00	1	08/23/2023 12:40	WG2119345
Bromobenzene	U		0.118	1.00	1	08/23/2023 12:40	WG2119345
Bromodichloromethane	U		0.136	1.00	1	08/23/2023 12:40	WG2119345
Bromoform	U		0.129	1.00	1	08/23/2023 12:40	WG2119345
Bromomethane	U	C3	0.605	5.00	1	08/23/2023 12:40	WG2119345
n-Butylbenzene	U		0.157	1.00	1	08/23/2023 12:40	WG2119345
sec-Butylbenzene	U		0.125	1.00	1	08/23/2023 12:40	WG2119345
tert-Butylbenzene	U		0.127	1.00	1	08/23/2023 12:40	WG2119345
Carbon disulfide	0.536	J	0.0962	1.00	1	08/23/2023 12:40	WG2119345
Carbon tetrachloride	U		0.128	1.00	1	08/23/2023 12:40	WG2119345
Chlorobenzene	U		0.116	1.00	1	08/23/2023 12:40	WG2119345
Chlorodibromomethane	U		0.140	1.00	1	08/23/2023 12:40	WG2119345
Chloroethane	1.95	J	0.192	5.00	1	08/23/2023 12:40	WG2119345
Chloroform	U		0.111	5.00	1	08/23/2023 12:40	WG2119345
Chloromethane	U	C3	0.960	2.50	1	08/23/2023 12:40	WG2119345
2-Chlorotoluene	U		0.106	1.00	1	08/23/2023 12:40	WG2119345
4-Chlorotoluene	U		0.114	1.00	1	08/23/2023 12:40	WG2119345
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	08/23/2023 12:40	WG2119345
1,2-Dibromoethane	U		0.126	1.00	1	08/23/2023 12:40	WG2119345
Dibromomethane	U		0.122	1.00	1	08/23/2023 12:40	WG2119345
1,2-Dichlorobenzene	U		0.107	1.00	1	08/23/2023 12:40	WG2119345
1,3-Dichlorobenzene	U		0.110	1.00	1	08/23/2023 12:40	WG2119345
1,4-Dichlorobenzene	U		0.120	1.00	1	08/23/2023 12:40	WG2119345
Dichlorodifluoromethane	U	C3	0.374	5.00	1	08/23/2023 12:40	WG2119345
1,1-Dichloroethane	U		0.100	1.00	1	08/23/2023 12:40	WG2119345
1,2-Dichloroethane	U		0.0819	1.00	1	08/23/2023 12:40	WG2119345
1,1-Dichloroethene	U		0.188	1.00	1	08/23/2023 12:40	WG2119345
cis-1,2-Dichloroethene	64.8		0.126	1.00	1	08/23/2023 12:40	WG2119345
trans-1,2-Dichloroethene	16.0		0.149	1.00	1	08/23/2023 12:40	WG2119345
1,2-Dichloropropane	U		0.149	1.00	1	08/23/2023 12:40	WG2119345
1,1-Dichloropropene	U		0.142	1.00	1	08/23/2023 12:40	WG2119345
1,3-Dichloropropane	U		0.110	1.00	1	08/23/2023 12:40	WG2119345
cis-1,3-Dichloropropene	U		0.111	1.00	1	08/23/2023 12:40	WG2119345
trans-1,3-Dichloropropene	U		0.118	1.00	1	08/23/2023 12:40	WG2119345
2,2-Dichloropropane	U		0.161	1.00	1	08/23/2023 12:40	WG2119345
Di-isopropyl ether	U		0.105	1.00	1	08/23/2023 12:40	WG2119345
Ethylbenzene	U		0.137	1.00	1	08/23/2023 12:40	WG2119345
Hexachloro-1,3-butadiene	U		0.337	1.00	1	08/23/2023 12:40	WG2119345
Isopropylbenzene	0.169	J	0.105	1.00	1	08/23/2023 12:40	WG2119345
p-Isopropyltoluene	U		0.120	1.00	1	08/23/2023 12:40	WG2119345
2-Butanone (MEK)	1.61	J	1.19	10.0	1	08/23/2023 12:40	WG2119345
Methylene Chloride	U		0.430	5.00	1	08/23/2023 12:40	WG2119345
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	08/23/2023 12:40	WG2119345
Methyl tert-butyl ether	U		0.101	1.00	1	08/23/2023 12:40	WG2119345
Naphthalene	U	C3	1.00	5.00	1	08/23/2023 12:40	WG2119345
n-Propylbenzene	U		0.0993	1.00	1	08/23/2023 12:40	WG2119345
Styrene	U		0.118	1.00	1	08/23/2023 12:40	WG2119345
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	08/23/2023 12:40	WG2119345
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	08/23/2023 12:40	WG2119345
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	08/23/2023 12:40	WG2119345
Tetrachloroethene	0.614	J	0.300	1.00	1	08/23/2023 12:40	WG2119345
Toluene	2.09		0.278	1.00	1	08/23/2023 12:40	WG2119345
1,2,3-Trichlorobenzene	U		0.230	1.00	1	08/23/2023 12:40	WG2119345

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trichlorobenzene	U		0.481	1.00	1	08/23/2023 12:40	WG2119345
1,1,1-Trichloroethane	U		0.149	1.00	1	08/23/2023 12:40	WG2119345
1,1,2-Trichloroethane	U		0.158	1.00	1	08/23/2023 12:40	WG2119345
Trichloroethene	0.858	J	0.190	1.00	1	08/23/2023 12:40	WG2119345
Trichlorofluoromethane	U		0.160	5.00	1	08/23/2023 12:40	WG2119345
1,2,3-Trichloropropane	U		0.237	2.50	1	08/23/2023 12:40	WG2119345
1,2,4-Trimethylbenzene	0.691	J	0.322	1.00	1	08/23/2023 12:40	WG2119345
1,2,3-Trimethylbenzene	0.571	J	0.104	1.00	1	08/23/2023 12:40	WG2119345
1,3,5-Trimethylbenzene	0.440	J	0.104	1.00	1	08/23/2023 12:40	WG2119345
Vinyl chloride	14.7	C3	0.234	1.00	1	08/23/2023 12:40	WG2119345
Xylenes, Total	0.628	J	0.174	3.00	1	08/23/2023 12:40	WG2119345
(S) Toluene-d8	*109*			*80.0-120*		*08/23/2023 12:40*	WG2119345
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*08/23/2023 12:40*	WG2119345
(S) 1,2-Dichloroethane-d4	*98.0*			*70.0-130*		*08/23/2023 12:40*	WG2119345

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	08/23/2023 13:00	WG2119345
Acrolein	U	C3	2.54	50.0	1	08/23/2023 13:00	WG2119345
Acrylonitrile	U		0.671	10.0	1	08/23/2023 13:00	WG2119345
Benzene	U		0.0941	1.00	1	08/23/2023 13:00	WG2119345
Bromobenzene	U		0.118	1.00	1	08/23/2023 13:00	WG2119345
Bromodichloromethane	U		0.136	1.00	1	08/23/2023 13:00	WG2119345
Bromoform	U		0.129	1.00	1	08/23/2023 13:00	WG2119345
Bromomethane	U	C3	0.605	5.00	1	08/23/2023 13:00	WG2119345
n-Butylbenzene	U		0.157	1.00	1	08/23/2023 13:00	WG2119345
sec-Butylbenzene	U		0.125	1.00	1	08/23/2023 13:00	WG2119345
tert-Butylbenzene	U		0.127	1.00	1	08/23/2023 13:00	WG2119345
Carbon disulfide	U		0.0962	1.00	1	08/23/2023 13:00	WG2119345
Carbon tetrachloride	U		0.128	1.00	1	08/23/2023 13:00	WG2119345
Chlorobenzene	U		0.116	1.00	1	08/23/2023 13:00	WG2119345
Chlorodibromomethane	U		0.140	1.00	1	08/23/2023 13:00	WG2119345
Chloroethane	U		0.192	5.00	1	08/23/2023 13:00	WG2119345
Chloroform	U		0.111	5.00	1	08/23/2023 13:00	WG2119345
Chloromethane	U	C3	0.960	2.50	1	08/23/2023 13:00	WG2119345
2-Chlorotoluene	U		0.106	1.00	1	08/23/2023 13:00	WG2119345
4-Chlorotoluene	U		0.114	1.00	1	08/23/2023 13:00	WG2119345
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	08/23/2023 13:00	WG2119345
1,2-Dibromoethane	U		0.126	1.00	1	08/23/2023 13:00	WG2119345
Dibromomethane	U		0.122	1.00	1	08/23/2023 13:00	WG2119345
1,2-Dichlorobenzene	U		0.107	1.00	1	08/23/2023 13:00	WG2119345
1,3-Dichlorobenzene	U		0.110	1.00	1	08/23/2023 13:00	WG2119345
1,4-Dichlorobenzene	U		0.120	1.00	1	08/23/2023 13:00	WG2119345
Dichlorodifluoromethane	U	C3	0.374	5.00	1	08/23/2023 13:00	WG2119345
1,1-Dichloroethane	U		0.100	1.00	1	08/23/2023 13:00	WG2119345
1,2-Dichloroethane	U		0.0819	1.00	1	08/23/2023 13:00	WG2119345
1,1-Dichloroethene	U		0.188	1.00	1	08/23/2023 13:00	WG2119345
cis-1,2-Dichloroethene	0.379	J	0.126	1.00	1	08/23/2023 13:00	WG2119345
trans-1,2-Dichloroethene	U		0.149	1.00	1	08/23/2023 13:00	WG2119345
1,2-Dichloropropane	U		0.149	1.00	1	08/23/2023 13:00	WG2119345
1,1-Dichloropropene	U		0.142	1.00	1	08/23/2023 13:00	WG2119345
1,3-Dichloropropane	U		0.110	1.00	1	08/23/2023 13:00	WG2119345
cis-1,3-Dichloropropene	U		0.111	1.00	1	08/23/2023 13:00	WG2119345
trans-1,3-Dichloropropene	U		0.118	1.00	1	08/23/2023 13:00	WG2119345
2,2-Dichloropropane	U		0.161	1.00	1	08/23/2023 13:00	WG2119345
Di-isopropyl ether	U		0.105	1.00	1	08/23/2023 13:00	WG2119345
Ethylbenzene	U		0.137	1.00	1	08/23/2023 13:00	WG2119345
Hexachloro-1,3-butadiene	U		0.337	1.00	1	08/23/2023 13:00	WG2119345
Isopropylbenzene	U		0.105	1.00	1	08/23/2023 13:00	WG2119345
p-Isopropyltoluene	U		0.120	1.00	1	08/23/2023 13:00	WG2119345
2-Butanone (MEK)	U		1.19	10.0	1	08/23/2023 13:00	WG2119345
Methylene Chloride	U		0.430	5.00	1	08/23/2023 13:00	WG2119345
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	08/23/2023 13:00	WG2119345
Methyl tert-butyl ether	U		0.101	1.00	1	08/23/2023 13:00	WG2119345
Naphthalene	U	C3	1.00	5.00	1	08/23/2023 13:00	WG2119345
n-Propylbenzene	U		0.0993	1.00	1	08/23/2023 13:00	WG2119345
Styrene	U		0.118	1.00	1	08/23/2023 13:00	WG2119345
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	08/23/2023 13:00	WG2119345
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	08/23/2023 13:00	WG2119345
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	08/23/2023 13:00	WG2119345
Tetrachloroethene	U		0.300	1.00	1	08/23/2023 13:00	WG2119345
Toluene	U		0.278	1.00	1	08/23/2023 13:00	WG2119345
1,2,3-Trichlorobenzene	U		0.230	1.00	1	08/23/2023 13:00	WG2119345

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trichlorobenzene	U		0.481	1.00	1	08/23/2023 13:00	WG2119345
1,1,1-Trichloroethane	U		0.149	1.00	1	08/23/2023 13:00	WG2119345
1,1,2-Trichloroethane	U		0.158	1.00	1	08/23/2023 13:00	WG2119345
Trichloroethene	U		0.190	1.00	1	08/23/2023 13:00	WG2119345
Trichlorofluoromethane	U		0.160	5.00	1	08/23/2023 13:00	WG2119345
1,2,3-Trichloropropane	U		0.237	2.50	1	08/23/2023 13:00	WG2119345
1,2,4-Trimethylbenzene	U		0.322	1.00	1	08/23/2023 13:00	WG2119345
1,2,3-Trimethylbenzene	U		0.104	1.00	1	08/23/2023 13:00	WG2119345
1,3,5-Trimethylbenzene	U		0.104	1.00	1	08/23/2023 13:00	WG2119345
Vinyl chloride	U	C3	0.234	1.00	1	08/23/2023 13:00	WG2119345
Xylenes, Total	U		0.174	3.00	1	08/23/2023 13:00	WG2119345
(S) Toluene-d8	*106*			*80.0-120*		*08/23/2023 13:00*	WG2119345
(S) 4-Bromofluorobenzene	*98.8*			*77.0-126*		*08/23/2023 13:00*	WG2119345
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*08/23/2023 13:00*	WG2119345

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	08/23/2023 13:21	WG2119345
Acrolein	U	C3	2.54	50.0	1	08/23/2023 13:21	WG2119345
Acrylonitrile	U		0.671	10.0	1	08/23/2023 13:21	WG2119345
Benzene	U		0.0941	1.00	1	08/23/2023 13:21	WG2119345
Bromobenzene	U		0.118	1.00	1	08/23/2023 13:21	WG2119345
Bromodichloromethane	U		0.136	1.00	1	08/23/2023 13:21	WG2119345
Bromoform	U		0.129	1.00	1	08/23/2023 13:21	WG2119345
Bromomethane	U	C3	0.605	5.00	1	08/23/2023 13:21	WG2119345
n-Butylbenzene	U		0.157	1.00	1	08/23/2023 13:21	WG2119345
sec-Butylbenzene	U		0.125	1.00	1	08/23/2023 13:21	WG2119345
tert-Butylbenzene	U		0.127	1.00	1	08/23/2023 13:21	WG2119345
Carbon disulfide	U		0.0962	1.00	1	08/23/2023 13:21	WG2119345
Carbon tetrachloride	U		0.128	1.00	1	08/23/2023 13:21	WG2119345
Chlorobenzene	U		0.116	1.00	1	08/23/2023 13:21	WG2119345
Chlorodibromomethane	U		0.140	1.00	1	08/23/2023 13:21	WG2119345
Chloroethane	U		0.192	5.00	1	08/23/2023 13:21	WG2119345
Chloroform	U		0.111	5.00	1	08/23/2023 13:21	WG2119345
Chloromethane	U	C3	0.960	2.50	1	08/23/2023 13:21	WG2119345
2-Chlorotoluene	U		0.106	1.00	1	08/23/2023 13:21	WG2119345
4-Chlorotoluene	U		0.114	1.00	1	08/23/2023 13:21	WG2119345
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	08/23/2023 13:21	WG2119345
1,2-Dibromoethane	U		0.126	1.00	1	08/23/2023 13:21	WG2119345
Dibromomethane	U		0.122	1.00	1	08/23/2023 13:21	WG2119345
1,2-Dichlorobenzene	U		0.107	1.00	1	08/23/2023 13:21	WG2119345
1,3-Dichlorobenzene	U		0.110	1.00	1	08/23/2023 13:21	WG2119345
1,4-Dichlorobenzene	U		0.120	1.00	1	08/23/2023 13:21	WG2119345
Dichlorodifluoromethane	U	C3	0.374	5.00	1	08/23/2023 13:21	WG2119345
1,1-Dichloroethane	U		0.100	1.00	1	08/23/2023 13:21	WG2119345
1,2-Dichloroethane	U		0.0819	1.00	1	08/23/2023 13:21	WG2119345
1,1-Dichloroethene	U		0.188	1.00	1	08/23/2023 13:21	WG2119345
cis-1,2-Dichloroethene	U		0.126	1.00	1	08/23/2023 13:21	WG2119345
trans-1,2-Dichloroethene	U		0.149	1.00	1	08/23/2023 13:21	WG2119345
1,2-Dichloropropane	U		0.149	1.00	1	08/23/2023 13:21	WG2119345
1,1-Dichloropropene	U		0.142	1.00	1	08/23/2023 13:21	WG2119345
1,3-Dichloropropane	U		0.110	1.00	1	08/23/2023 13:21	WG2119345
cis-1,3-Dichloropropene	U		0.111	1.00	1	08/23/2023 13:21	WG2119345
trans-1,3-Dichloropropene	U		0.118	1.00	1	08/23/2023 13:21	WG2119345
2,2-Dichloropropane	U		0.161	1.00	1	08/23/2023 13:21	WG2119345
Di-isopropyl ether	U		0.105	1.00	1	08/23/2023 13:21	WG2119345
Ethylbenzene	U		0.137	1.00	1	08/23/2023 13:21	WG2119345
Hexachloro-1,3-butadiene	U		0.337	1.00	1	08/23/2023 13:21	WG2119345
Isopropylbenzene	U		0.105	1.00	1	08/23/2023 13:21	WG2119345
p-Isopropyltoluene	U		0.120	1.00	1	08/23/2023 13:21	WG2119345
2-Butanone (MEK)	U		1.19	10.0	1	08/23/2023 13:21	WG2119345
Methylene Chloride	U		0.430	5.00	1	08/23/2023 13:21	WG2119345
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	08/23/2023 13:21	WG2119345
Methyl tert-butyl ether	U		0.101	1.00	1	08/23/2023 13:21	WG2119345
Naphthalene	U	C3	1.00	5.00	1	08/23/2023 13:21	WG2119345
n-Propylbenzene	U		0.0993	1.00	1	08/23/2023 13:21	WG2119345
Styrene	U		0.118	1.00	1	08/23/2023 13:21	WG2119345
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	08/23/2023 13:21	WG2119345
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	08/23/2023 13:21	WG2119345
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	08/23/2023 13:21	WG2119345
Tetrachloroethene	U		0.300	1.00	1	08/23/2023 13:21	WG2119345
Toluene	U		0.278	1.00	1	08/23/2023 13:21	WG2119345
1,2,3-Trichlorobenzene	U		0.230	1.00	1	08/23/2023 13:21	WG2119345

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trichlorobenzene	U		0.481	1.00	1	08/23/2023 13:21	WG2119345
1,1,1-Trichloroethane	U		0.149	1.00	1	08/23/2023 13:21	WG2119345
1,1,2-Trichloroethane	U		0.158	1.00	1	08/23/2023 13:21	WG2119345
Trichloroethene	U		0.190	1.00	1	08/23/2023 13:21	WG2119345
Trichlorofluoromethane	U		0.160	5.00	1	08/23/2023 13:21	WG2119345
1,2,3-Trichloropropane	U		0.237	2.50	1	08/23/2023 13:21	WG2119345
1,2,4-Trimethylbenzene	U		0.322	1.00	1	08/23/2023 13:21	WG2119345
1,2,3-Trimethylbenzene	U		0.104	1.00	1	08/23/2023 13:21	WG2119345
1,3,5-Trimethylbenzene	U		0.104	1.00	1	08/23/2023 13:21	WG2119345
Vinyl chloride	U	C3	0.234	1.00	1	08/23/2023 13:21	WG2119345
Xylenes, Total	U		0.174	3.00	1	08/23/2023 13:21	WG2119345
(S) Toluene-d8	*106*			*80.0-120*		*08/23/2023 13:21*	WG2119345
(S) 4-Bromofluorobenzene	*94.2*			*77.0-126*		*08/23/2023 13:21*	WG2119345
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*08/23/2023 13:21*	WG2119345

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	08/23/2023 13:41	WG2119345
Acrolein	U	C3	2.54	50.0	1	08/23/2023 13:41	WG2119345
Acrylonitrile	U		0.671	10.0	1	08/23/2023 13:41	WG2119345
Benzene	0.103	J	0.0941	1.00	1	08/23/2023 13:41	WG2119345
Bromobenzene	U		0.118	1.00	1	08/23/2023 13:41	WG2119345
Bromodichloromethane	U		0.136	1.00	1	08/23/2023 13:41	WG2119345
Bromoform	U		0.129	1.00	1	08/23/2023 13:41	WG2119345
Bromomethane	U	C3	0.605	5.00	1	08/23/2023 13:41	WG2119345
n-Butylbenzene	U		0.157	1.00	1	08/23/2023 13:41	WG2119345
sec-Butylbenzene	0.183	J	0.125	1.00	1	08/23/2023 13:41	WG2119345
tert-Butylbenzene	U		0.127	1.00	1	08/23/2023 13:41	WG2119345
Carbon disulfide	U		0.0962	1.00	1	08/23/2023 13:41	WG2119345
Carbon tetrachloride	U		0.128	1.00	1	08/23/2023 13:41	WG2119345
Chlorobenzene	U		0.116	1.00	1	08/23/2023 13:41	WG2119345
Chlorodibromomethane	U		0.140	1.00	1	08/23/2023 13:41	WG2119345
Chloroethane	U		0.192	5.00	1	08/23/2023 13:41	WG2119345
Chloroform	U		0.111	5.00	1	08/23/2023 13:41	WG2119345
Chloromethane	U	C3	0.960	2.50	1	08/23/2023 13:41	WG2119345
2-Chlorotoluene	0.256	J	0.106	1.00	1	08/23/2023 13:41	WG2119345
4-Chlorotoluene	U		0.114	1.00	1	08/23/2023 13:41	WG2119345
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	08/23/2023 13:41	WG2119345
1,2-Dibromoethane	U		0.126	1.00	1	08/23/2023 13:41	WG2119345
Dibromomethane	U		0.122	1.00	1	08/23/2023 13:41	WG2119345
1,2-Dichlorobenzene	U		0.107	1.00	1	08/23/2023 13:41	WG2119345
1,3-Dichlorobenzene	U		0.110	1.00	1	08/23/2023 13:41	WG2119345
1,4-Dichlorobenzene	U		0.120	1.00	1	08/23/2023 13:41	WG2119345
Dichlorodifluoromethane	U	C3	0.374	5.00	1	08/23/2023 13:41	WG2119345
1,1-Dichloroethane	U		0.100	1.00	1	08/23/2023 13:41	WG2119345
1,2-Dichloroethane	U		0.0819	1.00	1	08/23/2023 13:41	WG2119345
1,1-Dichloroethene	U		0.188	1.00	1	08/23/2023 13:41	WG2119345
cis-1,2-Dichloroethene	11.4		0.126	1.00	1	08/23/2023 13:41	WG2119345
trans-1,2-Dichloroethene	3.78		0.149	1.00	1	08/23/2023 13:41	WG2119345
1,2-Dichloropropane	U		0.149	1.00	1	08/23/2023 13:41	WG2119345
1,1-Dichloropropene	U		0.142	1.00	1	08/23/2023 13:41	WG2119345
1,3-Dichloropropane	U		0.110	1.00	1	08/23/2023 13:41	WG2119345
cis-1,3-Dichloropropene	U		0.111	1.00	1	08/23/2023 13:41	WG2119345
trans-1,3-Dichloropropene	U		0.118	1.00	1	08/23/2023 13:41	WG2119345
2,2-Dichloropropane	U		0.161	1.00	1	08/23/2023 13:41	WG2119345
Di-isopropyl ether	U		0.105	1.00	1	08/23/2023 13:41	WG2119345
Ethylbenzene	0.201	J	0.137	1.00	1	08/23/2023 13:41	WG2119345
Hexachloro-1,3-butadiene	U		0.337	1.00	1	08/23/2023 13:41	WG2119345
Isopropylbenzene	0.296	J	0.105	1.00	1	08/23/2023 13:41	WG2119345
p-Isopropyltoluene	0.587	J	0.120	1.00	1	08/23/2023 13:41	WG2119345
2-Butanone (MEK)	U		1.19	10.0	1	08/23/2023 13:41	WG2119345
Methylene Chloride	U		0.430	5.00	1	08/23/2023 13:41	WG2119345
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	08/23/2023 13:41	WG2119345
Methyl tert-butyl ether	U		0.101	1.00	1	08/23/2023 13:41	WG2119345
Naphthalene	U	C3	1.00	5.00	1	08/23/2023 13:41	WG2119345
n-Propylbenzene	0.669	J	0.0993	1.00	1	08/23/2023 13:41	WG2119345
Styrene	U		0.118	1.00	1	08/23/2023 13:41	WG2119345
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	08/23/2023 13:41	WG2119345
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	08/23/2023 13:41	WG2119345
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	08/23/2023 13:41	WG2119345
Tetrachloroethene	U		0.300	1.00	1	08/23/2023 13:41	WG2119345
Toluene	0.914	J	0.278	1.00	1	08/23/2023 13:41	WG2119345
1,2,3-Trichlorobenzene	U		0.230	1.00	1	08/23/2023 13:41	WG2119345

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trichlorobenzene	U		0.481	1.00	1	08/23/2023 13:41	WG2119345
1,1,1-Trichloroethane	U		0.149	1.00	1	08/23/2023 13:41	WG2119345
1,1,2-Trichloroethane	U		0.158	1.00	1	08/23/2023 13:41	WG2119345
Trichloroethene	U		0.190	1.00	1	08/23/2023 13:41	WG2119345
Trichlorofluoromethane	U		0.160	5.00	1	08/23/2023 13:41	WG2119345
1,2,3-Trichloropropane	U		0.237	2.50	1	08/23/2023 13:41	WG2119345
1,2,4-Trimethylbenzene	5.18		0.322	1.00	1	08/23/2023 13:41	WG2119345
1,2,3-Trimethylbenzene	2.11		0.104	1.00	1	08/23/2023 13:41	WG2119345
1,3,5-Trimethylbenzene	2.24		0.104	1.00	1	08/23/2023 13:41	WG2119345
Vinyl chloride	5.52	C3	0.234	1.00	1	08/23/2023 13:41	WG2119345
Xylenes, Total	1.54	J	0.174	3.00	1	08/23/2023 13:41	WG2119345
(S) Toluene-d8	*105*			*80.0-120*		*08/23/2023 13:41*	WG2119345
(S) 4-Bromofluorobenzene	*98.4*			*77.0-126*		*08/23/2023 13:41*	WG2119345
(S) 1,2-Dichloroethane-d4	*99.8*			*70.0-130*		*08/23/2023 13:41*	WG2119345

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		2260	10000	200	08/23/2023 18:20	WG2119345
Acrolein	U	C3	508	10000	200	08/23/2023 18:20	WG2119345
Acrylonitrile	U		134	2000	200	08/23/2023 18:20	WG2119345
Benzene	U		18.8	200	200	08/23/2023 18:20	WG2119345
Bromobenzene	U		23.6	200	200	08/23/2023 18:20	WG2119345
Bromodichloromethane	U		27.2	200	200	08/23/2023 18:20	WG2119345
Bromoform	U		25.8	200	200	08/23/2023 18:20	WG2119345
Bromomethane	U	C3	121	1000	200	08/23/2023 18:20	WG2119345
n-Butylbenzene	U		31.4	200	200	08/23/2023 18:20	WG2119345
sec-Butylbenzene	U		25.0	200	200	08/23/2023 18:20	WG2119345
tert-Butylbenzene	U		25.4	200	200	08/23/2023 18:20	WG2119345
Carbon disulfide	U		19.2	200	200	08/23/2023 18:20	WG2119345
Carbon tetrachloride	U		25.6	200	200	08/23/2023 18:20	WG2119345
Chlorobenzene	U		23.2	200	200	08/23/2023 18:20	WG2119345
Chlorodibromomethane	U		28.0	200	200	08/23/2023 18:20	WG2119345
Chloroethane	U		38.4	1000	200	08/23/2023 18:20	WG2119345
Chloroform	U		22.2	1000	200	08/23/2023 18:20	WG2119345
Chloromethane	U	C3	192	500	200	08/23/2023 18:20	WG2119345
2-Chlorotoluene	U		21.2	200	200	08/23/2023 18:20	WG2119345
4-Chlorotoluene	U		22.8	200	200	08/23/2023 18:20	WG2119345
1,2-Dibromo-3-Chloropropane	U		55.2	1000	200	08/23/2023 18:20	WG2119345
1,2-Dibromoethane	U		25.2	200	200	08/23/2023 18:20	WG2119345
Dibromomethane	U		24.4	200	200	08/23/2023 18:20	WG2119345
1,2-Dichlorobenzene	U		21.4	200	200	08/23/2023 18:20	WG2119345
1,3-Dichlorobenzene	U		22.0	200	200	08/23/2023 18:20	WG2119345
1,4-Dichlorobenzene	U		24.0	200	200	08/23/2023 18:20	WG2119345
Dichlorodifluoromethane	U	C3	74.8	1000	200	08/23/2023 18:20	WG2119345
1,1-Dichloroethane	U		20.0	200	200	08/23/2023 18:20	WG2119345
1,2-Dichloroethane	U		16.4	200	200	08/23/2023 18:20	WG2119345
1,1-Dichloroethene	U		37.6	200	200	08/23/2023 18:20	WG2119345
cis-1,2-Dichloroethene	1500		25.2	200	200	08/23/2023 18:20	WG2119345
trans-1,2-Dichloroethene	192	J	29.8	200	200	08/23/2023 18:20	WG2119345
1,2-Dichloropropane	U		29.8	200	200	08/23/2023 18:20	WG2119345
1,1-Dichloropropene	U		28.4	200	200	08/23/2023 18:20	WG2119345
1,3-Dichloropropane	U		22.0	200	200	08/23/2023 18:20	WG2119345
cis-1,3-Dichloropropene	U		22.2	200	200	08/23/2023 18:20	WG2119345
trans-1,3-Dichloropropene	U		23.6	200	200	08/23/2023 18:20	WG2119345
2,2-Dichloropropane	U		32.2	200	200	08/23/2023 18:20	WG2119345
Di-isopropyl ether	U		21.0	200	200	08/23/2023 18:20	WG2119345
Ethylbenzene	U		27.4	200	200	08/23/2023 18:20	WG2119345
Hexachloro-1,3-butadiene	U		67.4	200	200	08/23/2023 18:20	WG2119345
Isopropylbenzene	U		21.0	200	200	08/23/2023 18:20	WG2119345
p-Isopropyltoluene	U		24.0	200	200	08/23/2023 18:20	WG2119345
2-Butanone (MEK)	U		238	2000	200	08/23/2023 18:20	WG2119345
Methylene Chloride	U		86.0	1000	200	08/23/2023 18:20	WG2119345
4-Methyl-2-pentanone (MIBK)	U		95.6	2000	200	08/23/2023 18:20	WG2119345
Methyl tert-butyl ether	U		20.2	200	200	08/23/2023 18:20	WG2119345
Naphthalene	U	C3	200	1000	200	08/23/2023 18:20	WG2119345
n-Propylbenzene	U		19.9	200	200	08/23/2023 18:20	WG2119345
Styrene	U		23.6	200	200	08/23/2023 18:20	WG2119345
1,1,1,2-Tetrachloroethane	U		29.4	200	200	08/23/2023 18:20	WG2119345
1,1,2,2-Tetrachloroethane	U		26.6	200	200	08/23/2023 18:20	WG2119345
1,1,2-Trichlorotrifluoroethane	U		36.0	200	200	08/23/2023 18:20	WG2119345
Tetrachloroethene	U		60.0	200	200	08/23/2023 18:20	WG2119345
Toluene	U		55.6	200	200	08/23/2023 18:20	WG2119345
1,2,3-Trichlorobenzene	U		46.0	200	200	08/23/2023 18:20	WG2119345

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trichlorobenzene	U		96.2	200	200	08/23/2023 18:20	WG2119345
1,1,1-Trichloroethane	U		29.8	200	200	08/23/2023 18:20	WG2119345
1,1,2-Trichloroethane	U		31.6	200	200	08/23/2023 18:20	WG2119345
Trichloroethene	U		38.0	200	200	08/23/2023 18:20	WG2119345
Trichlorofluoromethane	U		32.0	1000	200	08/23/2023 18:20	WG2119345
1,2,3-Trichloropropane	U		47.4	500	200	08/23/2023 18:20	WG2119345
1,2,4-Trimethylbenzene	U		64.4	200	200	08/23/2023 18:20	WG2119345
1,2,3-Trimethylbenzene	U		20.8	200	200	08/23/2023 18:20	WG2119345
1,3,5-Trimethylbenzene	U		20.8	200	200	08/23/2023 18:20	WG2119345
Vinyl chloride	3310	C3	46.8	200	200	08/23/2023 18:20	WG2119345
Xylenes, Total	U		34.8	600	200	08/23/2023 18:20	WG2119345
(S) Toluene-d8	*112*			*80.0-120*		*08/23/2023 18:20*	WG2119345
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*08/23/2023 18:20*	WG2119345
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*08/23/2023 18:20*	WG2119345

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	16300		29.1	100	10	08/28/2023 10:22	WG2122170
Ethane	1340		4.07	13.0	1	08/27/2023 15:22	WG2120925
Ethene	336		4.26	13.0	1	08/27/2023 15:22	WG2120925

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		11.3	50.0	1	08/23/2023 14:02	WG2119345
Acrolein	U	C3	2.54	50.0	1	08/23/2023 14:02	WG2119345
Acrylonitrile	U		0.671	10.0	1	08/23/2023 14:02	WG2119345
Benzene	0.242	J	0.0941	1.00	1	08/23/2023 14:02	WG2119345
Bromobenzene	U		0.118	1.00	1	08/23/2023 14:02	WG2119345
Bromodichloromethane	U		0.136	1.00	1	08/23/2023 14:02	WG2119345
Bromoform	U		0.129	1.00	1	08/23/2023 14:02	WG2119345
Bromomethane	U	C3	0.605	5.00	1	08/23/2023 14:02	WG2119345
n-Butylbenzene	U		0.157	1.00	1	08/23/2023 14:02	WG2119345
sec-Butylbenzene	U		0.125	1.00	1	08/23/2023 14:02	WG2119345
tert-Butylbenzene	U		0.127	1.00	1	08/23/2023 14:02	WG2119345
Carbon disulfide	U		0.0962	1.00	1	08/23/2023 14:02	WG2119345
Carbon tetrachloride	U		0.128	1.00	1	08/23/2023 14:02	WG2119345
Chlorobenzene	U		0.116	1.00	1	08/23/2023 14:02	WG2119345
Chlorodibromomethane	U		0.140	1.00	1	08/23/2023 14:02	WG2119345
Chloroethane	U		0.192	5.00	1	08/23/2023 14:02	WG2119345
Chloroform	U		0.111	5.00	1	08/23/2023 14:02	WG2119345
Chloromethane	U	C3	0.960	2.50	1	08/23/2023 14:02	WG2119345
2-Chlorotoluene	U		0.106	1.00	1	08/23/2023 14:02	WG2119345
4-Chlorotoluene	U		0.114	1.00	1	08/23/2023 14:02	WG2119345
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	08/23/2023 14:02	WG2119345
1,2-Dibromoethane	U		0.126	1.00	1	08/23/2023 14:02	WG2119345
Dibromomethane	U		0.122	1.00	1	08/23/2023 14:02	WG2119345
1,2-Dichlorobenzene	U		0.107	1.00	1	08/23/2023 14:02	WG2119345
1,3-Dichlorobenzene	U		0.110	1.00	1	08/23/2023 14:02	WG2119345
1,4-Dichlorobenzene	U		0.120	1.00	1	08/23/2023 14:02	WG2119345
Dichlorodifluoromethane	U	C3	0.374	5.00	1	08/23/2023 14:02	WG2119345
1,1-Dichloroethane	U		0.100	1.00	1	08/23/2023 14:02	WG2119345
1,2-Dichloroethane	U		0.0819	1.00	1	08/23/2023 14:02	WG2119345
1,1-Dichloroethene	U		0.188	1.00	1	08/23/2023 14:02	WG2119345
cis-1,2-Dichloroethene	6.32		0.126	1.00	1	08/23/2023 14:02	WG2119345
trans-1,2-Dichloroethene	6.49		0.149	1.00	1	08/23/2023 14:02	WG2119345
1,2-Dichloropropane	U		0.149	1.00	1	08/23/2023 14:02	WG2119345
1,1-Dichloropropene	U		0.142	1.00	1	08/23/2023 14:02	WG2119345
1,3-Dichloropropane	U		0.110	1.00	1	08/23/2023 14:02	WG2119345
cis-1,3-Dichloropropene	U		0.111	1.00	1	08/23/2023 14:02	WG2119345
trans-1,3-Dichloropropene	U		0.118	1.00	1	08/23/2023 14:02	WG2119345
2,2-Dichloropropane	U		0.161	1.00	1	08/23/2023 14:02	WG2119345
Di-isopropyl ether	U		0.105	1.00	1	08/23/2023 14:02	WG2119345
Ethylbenzene	U		0.137	1.00	1	08/23/2023 14:02	WG2119345
Hexachloro-1,3-butadiene	U		0.337	1.00	1	08/23/2023 14:02	WG2119345
Isopropylbenzene	0.166	J	0.105	1.00	1	08/23/2023 14:02	WG2119345
p-Isopropyltoluene	U		0.120	1.00	1	08/23/2023 14:02	WG2119345
2-Butanone (MEK)	U		1.19	10.0	1	08/23/2023 14:02	WG2119345
Methylene Chloride	U		0.430	5.00	1	08/23/2023 14:02	WG2119345
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	08/23/2023 14:02	WG2119345
Methyl tert-butyl ether	U		0.101	1.00	1	08/23/2023 14:02	WG2119345
Naphthalene	U	C3	1.00	5.00	1	08/23/2023 14:02	WG2119345

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
n-Propylbenzene	U		0.0993	1.00	1	08/23/2023 14:02	WG2119345
Styrene	U		0.118	1.00	1	08/23/2023 14:02	WG2119345
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	08/23/2023 14:02	WG2119345
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	08/23/2023 14:02	WG2119345
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	08/23/2023 14:02	WG2119345
Tetrachloroethene	U		0.300	1.00	1	08/23/2023 14:02	WG2119345
Toluene	0.397	J	0.278	1.00	1	08/23/2023 14:02	WG2119345
1,2,3-Trichlorobenzene	U		0.230	1.00	1	08/23/2023 14:02	WG2119345
1,2,4-Trichlorobenzene	U		0.481	1.00	1	08/23/2023 14:02	WG2119345
1,1,1-Trichloroethane	U		0.149	1.00	1	08/23/2023 14:02	WG2119345
1,1,2-Trichloroethane	U		0.158	1.00	1	08/23/2023 14:02	WG2119345
Trichloroethene	U		0.190	1.00	1	08/23/2023 14:02	WG2119345
Trichlorofluoromethane	U		0.160	5.00	1	08/23/2023 14:02	WG2119345
1,2,3-Trichloropropane	U		0.237	2.50	1	08/23/2023 14:02	WG2119345
1,2,4-Trimethylbenzene	U		0.322	1.00	1	08/23/2023 14:02	WG2119345
1,2,3-Trimethylbenzene	0.106	J	0.104	1.00	1	08/23/2023 14:02	WG2119345
1,3,5-Trimethylbenzene	U		0.104	1.00	1	08/23/2023 14:02	WG2119345
Vinyl chloride	119	C3	0.234	1.00	1	08/23/2023 14:02	WG2119345
Xylenes, Total	0.299	J	0.174	3.00	1	08/23/2023 14:02	WG2119345
(S) Toluene-d8	*106*			*80.0-120*		*08/23/2023 14:02*	WG2119345
(S) 4-Bromofluorobenzene	*98.6*			*77.0-126*		*08/23/2023 14:02*	WG2119345
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*08/23/2023 14:02*	WG2119345

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	08/23/2023 14:22	WG2119345
Acrolein	U	C3	2.54	50.0	1	08/23/2023 14:22	WG2119345
Acrylonitrile	U		0.671	10.0	1	08/23/2023 14:22	WG2119345
Benzene	0.101	J	0.0941	1.00	1	08/23/2023 14:22	WG2119345
Bromobenzene	U		0.118	1.00	1	08/23/2023 14:22	WG2119345
Bromodichloromethane	U		0.136	1.00	1	08/23/2023 14:22	WG2119345
Bromoform	U		0.129	1.00	1	08/23/2023 14:22	WG2119345
Bromomethane	U	C3	0.605	5.00	1	08/23/2023 14:22	WG2119345
n-Butylbenzene	U		0.157	1.00	1	08/23/2023 14:22	WG2119345
sec-Butylbenzene	U		0.125	1.00	1	08/23/2023 14:22	WG2119345
tert-Butylbenzene	U		0.127	1.00	1	08/23/2023 14:22	WG2119345
Carbon disulfide	U		0.0962	1.00	1	08/23/2023 14:22	WG2119345
Carbon tetrachloride	U		0.128	1.00	1	08/23/2023 14:22	WG2119345
Chlorobenzene	U		0.116	1.00	1	08/23/2023 14:22	WG2119345
Chlorodibromomethane	U		0.140	1.00	1	08/23/2023 14:22	WG2119345
Chloroethane	U		0.192	5.00	1	08/23/2023 14:22	WG2119345
Chloroform	U		0.111	5.00	1	08/23/2023 14:22	WG2119345
Chloromethane	U	C3	0.960	2.50	1	08/23/2023 14:22	WG2119345
2-Chlorotoluene	U		0.106	1.00	1	08/23/2023 14:22	WG2119345
4-Chlorotoluene	U		0.114	1.00	1	08/23/2023 14:22	WG2119345
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	08/23/2023 14:22	WG2119345
1,2-Dibromoethane	U		0.126	1.00	1	08/23/2023 14:22	WG2119345
Dibromomethane	U		0.122	1.00	1	08/23/2023 14:22	WG2119345
1,2-Dichlorobenzene	U		0.107	1.00	1	08/23/2023 14:22	WG2119345
1,3-Dichlorobenzene	U		0.110	1.00	1	08/23/2023 14:22	WG2119345
1,4-Dichlorobenzene	U		0.120	1.00	1	08/23/2023 14:22	WG2119345
Dichlorodifluoromethane	U	C3	0.374	5.00	1	08/23/2023 14:22	WG2119345
1,1-Dichloroethane	U		0.100	1.00	1	08/23/2023 14:22	WG2119345
1,2-Dichloroethane	U		0.0819	1.00	1	08/23/2023 14:22	WG2119345
1,1-Dichloroethene	4.44		0.188	1.00	1	08/23/2023 14:22	WG2119345
cis-1,2-Dichloroethene	U		0.126	1.00	1	08/23/2023 14:22	WG2119345
trans-1,2-Dichloroethene	106		0.149	1.00	1	08/23/2023 14:22	WG2119345
1,2-Dichloropropane	U		0.149	1.00	1	08/23/2023 14:22	WG2119345
1,1-Dichloropropene	U		0.142	1.00	1	08/23/2023 14:22	WG2119345
1,3-Dichloropropane	U		0.110	1.00	1	08/23/2023 14:22	WG2119345
cis-1,3-Dichloropropene	U		0.111	1.00	1	08/23/2023 14:22	WG2119345
trans-1,3-Dichloropropene	U		0.118	1.00	1	08/23/2023 14:22	WG2119345
2,2-Dichloropropane	U		0.161	1.00	1	08/23/2023 14:22	WG2119345
Di-isopropyl ether	U		0.105	1.00	1	08/23/2023 14:22	WG2119345
Ethylbenzene	U		0.137	1.00	1	08/23/2023 14:22	WG2119345
Hexachloro-1,3-butadiene	U		0.337	1.00	1	08/23/2023 14:22	WG2119345
Isopropylbenzene	U		0.105	1.00	1	08/23/2023 14:22	WG2119345
p-Isopropyltoluene	U		0.120	1.00	1	08/23/2023 14:22	WG2119345
2-Butanone (MEK)	8.77	J	1.19	10.0	1	08/23/2023 14:22	WG2119345
Methylene Chloride	U		0.430	5.00	1	08/23/2023 14:22	WG2119345
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	08/23/2023 14:22	WG2119345
Methyl tert-butyl ether	U		0.101	1.00	1	08/23/2023 14:22	WG2119345
Naphthalene	U	C3	1.00	5.00	1	08/23/2023 14:22	WG2119345
n-Propylbenzene	0.171	J	0.0993	1.00	1	08/23/2023 14:22	WG2119345
Styrene	U		0.118	1.00	1	08/23/2023 14:22	WG2119345
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	08/23/2023 14:22	WG2119345
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	08/23/2023 14:22	WG2119345
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	08/23/2023 14:22	WG2119345
Tetrachloroethene	1.66		0.300	1.00	1	08/23/2023 14:22	WG2119345
Toluene	0.394	J	0.278	1.00	1	08/23/2023 14:22	WG2119345
1,2,3-Trichlorobenzene	U		0.230	1.00	1	08/23/2023 14:22	WG2119345

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trichlorobenzene	U		0.481	1.00	1	08/23/2023 14:22	WG2119345
1,1,1-Trichloroethane	U		0.149	1.00	1	08/23/2023 14:22	WG2119345
1,1,2-Trichloroethane	U		0.158	1.00	1	08/23/2023 14:22	WG2119345
Trichloroethene	2.31		0.190	1.00	1	08/23/2023 14:22	WG2119345
Trichlorofluoromethane	U		0.160	5.00	1	08/23/2023 14:22	WG2119345
1,2,3-Trichloropropane	U		0.237	2.50	1	08/23/2023 14:22	WG2119345
1,2,4-Trimethylbenzene	0.617	J	0.322	1.00	1	08/23/2023 14:22	WG2119345
1,2,3-Trimethylbenzene	0.409	J	0.104	1.00	1	08/23/2023 14:22	WG2119345
1,3,5-Trimethylbenzene	0.253	J	0.104	1.00	1	08/23/2023 14:22	WG2119345
Vinyl chloride	2340		11.7	50.0	50	08/26/2023 04:53	WG2121412
Xylenes, Total	0.512	J	0.174	3.00	1	08/23/2023 14:22	WG2119345
(S) Toluene-d8	*107*			*80.0-120*		*08/23/2023 14:22*	WG2119345
(S) Toluene-d8	*112*			*80.0-120*		*08/26/2023 04:53*	WG2121412
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*08/23/2023 14:22*	WG2119345
(S) 4-Bromofluorobenzene	*92.5*			*77.0-126*		*08/26/2023 04:53*	WG2121412
(S) 1,2-Dichloroethane-d4	*99.1*			*70.0-130*		*08/23/2023 14:22*	WG2119345
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*08/26/2023 04:53*	WG2121412

Method Blank (MB)

(MB) R3965938-2 08/27/23 14:25

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethane	U		4.07	13.0
Ethene	U		4.26	13.0

L1648710-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1648710-01 08/27/23 15:40 • (DUP) R3965938-3 08/27/23 16:20

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Ethane	U	U	1	0.000		20
Ethene	U	U	1	200	P1	20

L1649124-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1649124-03 08/27/23 16:45 • (DUP) R3965938-4 08/27/23 17:41

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

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

(LCS) R3965938-1 08/27/23 14:19 • (LCSD) R3965938-5 08/27/23 17:45

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Ethane	129	116	113	89.9	87.6	85.0-115			2.62	20
Ethene	127	118	120	92.9	94.5	85.0-115			1.68	20

Method Blank (MB)

(MB) R3966120-2 08/28/23 09:42

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		2.91	10.0

L1648166-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1648166-02 08/28/23 09:49 • (DUP) R3966120-3 08/28/23 10:39

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	17700	17800	10	0.563		20

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

(LCS) R3966120-1 08/28/23 09:39 • (LCSD) R3966120-4 08/28/23 11:04

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	67.6	70.7	99.7	104	85.0-115			4.48	20

Method Blank (MB)

(MB) R3965024-3 08/23/23 08:01

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 disulfide	U		0.0962	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

Method Blank (MB)

(MB) R3965024-3 08/23/23 08:01

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Hexachloro-1,3-butadiene	U		0.337	1.00
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
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00
Tetrachloroethene	U		0.300	1.00
Toluene	U		0.278	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
1,2,4-Trimethylbenzene	U		0.322	1.00
1,2,3-Trimethylbenzene	U		0.104	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	*108*			*80.0-120*
(S) 4-Bromofluorobenzene	*94.2*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*97.9*			*70.0-130*

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

(LCS) R3965024-1 08/23/23 07:00 • (LCSD) R3965024-2 08/23/23 07:20

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	22.2	21.9	88.8	87.6	19.0-160			1.36	27
Acrolein	25.0	14.4	14.3	57.6	57.2	10.0-160			0.697	26
Acrylonitrile	25.0	22.4	23.4	89.6	93.6	55.0-149			4.37	20

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

(LCS) R3965024-1 08/23/23 07:00 • (LCSD) R3965024-2 08/23/23 07:20

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 %
Benzene	5.00	4.72	4.73	94.4	94.6	70.0-123			0.212	20
Bromobenzene	5.00	4.66	4.65	93.2	93.0	73.0-121			0.215	20
Bromodichloromethane	5.00	4.86	4.96	97.2	99.2	75.0-120			2.04	20
Bromoform	5.00	5.76	5.61	115	112	68.0-132			2.64	20
Bromomethane	5.00	3.01	3.28	60.2	65.6	10.0-160			8.59	25
n-Butylbenzene	5.00	4.42	4.57	88.4	91.4	73.0-125			3.34	20
sec-Butylbenzene	5.00	4.51	4.69	90.2	93.8	75.0-125			3.91	20
tert-Butylbenzene	5.00	4.64	4.85	92.8	97.0	76.0-124			4.43	20
Carbon disulfide	5.00	4.30	4.14	86.0	82.8	61.0-128			3.79	20
Carbon tetrachloride	5.00	4.84	4.90	96.8	98.0	68.0-126			1.23	20
Chlorobenzene	5.00	4.86	4.90	97.2	98.0	80.0-121			0.820	20
Chlorodibromomethane	5.00	4.96	4.83	99.2	96.6	77.0-125			2.66	20
Chloroethane	5.00	4.21	3.99	84.2	79.8	47.0-150			5.37	20
Chloroform	5.00	4.95	4.80	99.0	96.0	73.0-120			3.08	20
Chloromethane	5.00	3.56	3.75	71.2	75.0	41.0-142			5.20	20
2-Chlorotoluene	5.00	4.71	4.71	94.2	94.2	76.0-123			0.000	20
4-Chlorotoluene	5.00	4.56	4.62	91.2	92.4	75.0-122			1.31	20
1,2-Dibromo-3-Chloropropane	5.00	4.27	4.41	85.4	88.2	58.0-134			3.23	20
1,2-Dibromoethane	5.00	4.93	5.07	98.6	101	80.0-122			2.80	20
Dibromomethane	5.00	4.65	4.68	93.0	93.6	80.0-120			0.643	20
1,2-Dichlorobenzene	5.00	4.72	5.07	94.4	101	79.0-121			7.15	20
1,3-Dichlorobenzene	5.00	4.90	4.86	98.0	97.2	79.0-120			0.820	20
1,4-Dichlorobenzene	5.00	4.85	4.98	97.0	99.6	79.0-120			2.64	20
Dichlorodifluoromethane	5.00	3.52	3.04	70.4	60.8	51.0-149			14.6	20
1,1-Dichloroethane	5.00	4.46	4.47	89.2	89.4	70.0-126			0.224	20
1,2-Dichloroethane	5.00	4.60	4.84	92.0	96.8	70.0-128			5.08	20
1,1-Dichloroethene	5.00	4.37	4.40	87.4	88.0	71.0-124			0.684	20
cis-1,2-Dichloroethene	5.00	4.48	4.56	89.6	91.2	73.0-120			1.77	20
trans-1,2-Dichloroethene	5.00	4.73	4.63	94.6	92.6	73.0-120			2.14	20
1,2-Dichloropropane	5.00	4.60	4.96	92.0	99.2	77.0-125			7.53	20
1,1-Dichloropropene	5.00	4.53	4.60	90.6	92.0	74.0-126			1.53	20
1,3-Dichloropropane	5.00	4.89	5.06	97.8	101	80.0-120			3.42	20
cis-1,3-Dichloropropene	5.00	4.69	4.81	93.8	96.2	80.0-123			2.53	20
trans-1,3-Dichloropropene	5.00	4.81	4.78	96.2	95.6	78.0-124			0.626	20
2,2-Dichloropropane	5.00	4.26	4.43	85.2	88.6	58.0-130			3.91	20
Di-isopropyl ether	5.00	4.45	4.56	89.0	91.2	58.0-138			2.44	20
Ethylbenzene	5.00	4.89	4.80	97.8	96.0	79.0-123			1.86	20
Hexachloro-1,3-butadiene	5.00	4.70	5.06	94.0	101	54.0-138			7.38	20
Isopropylbenzene	5.00	4.99	4.89	99.8	97.8	76.0-127			2.02	20
p-Isopropyltoluene	5.00	4.68	4.74	93.6	94.8	76.0-125			1.27	20

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

(LCS) R3965024-1 08/23/23 07:00 • (LCSD) R3965024-2 08/23/23 07:20

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 %
2-Butanone (MEK)	25.0	22.2	23.0	88.8	92.0	44.0-160			3.54	20
Methylene Chloride	5.00	4.78	4.78	95.6	95.6	67.0-120			0.000	20
4-Methyl-2-pentanone (MIBK)	25.0	23.4	23.8	93.6	95.2	68.0-142			1.69	20
Methyl tert-butyl ether	5.00	4.85	5.03	97.0	101	68.0-125			3.64	20
Naphthalene	5.00	3.93	4.14	78.6	82.8	54.0-135			5.20	20
n-Propylbenzene	5.00	4.45	4.60	89.0	92.0	77.0-124			3.31	20
Styrene	5.00	4.64	4.68	92.8	93.6	73.0-130			0.858	20
1,1,1,2-Tetrachloroethane	5.00	5.08	5.00	102	100	75.0-125			1.59	20
1,1,2,2-Tetrachloroethane	5.00	4.36	4.80	87.2	96.0	65.0-130			9.61	20
1,1,2-Trichlorotrifluoroethane	5.00	4.28	3.92	85.6	78.4	69.0-132			8.78	20
Tetrachloroethene	5.00	5.11	5.02	102	100	72.0-132			1.78	20
Toluene	5.00	4.87	4.97	97.4	99.4	79.0-120			2.03	20
1,2,3-Trichlorobenzene	5.00	4.19	4.26	83.8	85.2	50.0-138			1.66	20
1,2,4-Trichlorobenzene	5.00	4.58	4.71	91.6	94.2	57.0-137			2.80	20
1,1,1-Trichloroethane	5.00	4.88	4.90	97.6	98.0	73.0-124			0.409	20
1,1,2-Trichloroethane	5.00	4.89	5.04	97.8	101	80.0-120			3.02	20
Trichloroethene	5.00	4.84	4.66	96.8	93.2	78.0-124			3.79	20
Trichlorofluoromethane	5.00	4.56	4.23	91.2	84.6	59.0-147			7.51	20
1,2,3-Trichloropropane	5.00	4.70	5.03	94.0	101	73.0-130			6.78	20
1,2,4-Trimethylbenzene	5.00	4.72	4.89	94.4	97.8	76.0-121			3.54	20
1,2,3-Trimethylbenzene	5.00	4.63	4.84	92.6	96.8	77.0-120			4.44	20
1,3,5-Trimethylbenzene	5.00	4.60	4.69	92.0	93.8	76.0-122			1.94	20
Vinyl chloride	5.00	3.76	3.52	75.2	70.4	67.0-131			6.59	20
Xylenes, Total	15.0	15.0	14.9	100	99.3	79.0-123			0.669	20
(S) Toluene-d8				*108*	*105*	*80.0-120*				
(S) 4-Bromofluorobenzene				*101*	*101*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*99.2*	*98.4*	*70.0-130*				

Method Blank (MB)

(MB) R3966292-3 08/26/23 00:32

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Vinyl chloride	U		0.234	1.00
(S) Toluene-d8	*111*			*80.0-120*
(S) 4-Bromofluorobenzene	*92.8*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*

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

(LCS) R3966292-1 08/25/23 23:34 • (LCSD) R3966292-2 08/25/23 23:53

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 %
Vinyl chloride	5.00	4.95	4.83	99.0	96.6	67.0-131			2.45	20
(S) Toluene-d8				*109*	*111*	*80.0-120*				
(S) 4-Bromofluorobenzene				*94.1*	*96.7*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*111*	*109*	*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.
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
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.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.

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.

Agency, Authorized Purchaser or Agent:
Oregon DEQ

Send Lab Report To: **Mark Pugh**
Address: Department of Environmental Quality
700 NE Multnomah St, Suite 600
Portland, OR 97232

E-mail: pugh.mark@deq.state.or.us

Contract Laboratory Name:
Pace National

Lab Batch #:

Invoice To: ODEQ/Business Office
Address: 700 NE Multnomah
Street, Suite 600
Portland, OR. 97232

Tel. #: (800) 452-4011

Lab Selection Criteria:
- ☐ Proximity (if TAT < 48 hrs)
- ☐ Prior work on same project
- ☒ Cost (for anticipated analyses)
- ☐ Other labs disqualified or unable to perform requested services
- ☐ Emergency work

Turn Around Time:
- ☒ 10 days (std.)
- ☐ 5 days
- ☐ 72 hours
- ☐ 48 hours
- ☐ 24 hours
- ☐ Other

Project Name: **Springdale Cleaners**
Project #: **1469-03**

Sample Preservative

G076

Sample ID#	Collection Date/Time	Matrix	Number of Containers	VOCs by 8260B (HCl)	Methane, Ethane and Ethene (NONE)	Comments
MW-1	8/17/23 1105	W	3	X		-01
MW-2	8/17/23 1715	W	5	X	X	-02
MW-3	8/16/23 1159	W	3	X		-03
MW-4	8/16/23 1259	W	3	X		-04
MW-5-20	8/17/23 1100	W	3	X		-05
MW-6-20	8/17/23 1337	W	4	X	X	-06
MW-7	8/17/23 1029	W	4	X	X	-07
MW-8	8/17/23 1130	W	3	X		-08
MW-9	8/17/23 1457	W	3	X		-09
JEMW-1	8/16/23 1517	W	3	X		-10
JEMW-2	8/16/23 1426	W	3	X		-11
JEMW-4	8/17/23 0954	W	3	X		-12

L1698166

Notes: Report Results to: MStevens@apexcos.com; Carmen.Owens@apexcos.com; pugh.mark@deq.state.or.us

Relinquished By: Chris Weer	Agency/Agent: Apex Companies	Received By: Eli Dossett	Agency: Pace
Signature: Chris Weer	Time & Date: 8/18/2023 1038	Signature: Eli Dossett 17	Time & Date: 8-19-23 / 900
Relinquished By:	Agency/Agent:	Received By:	Agency/Agent:
Signature:	Time & Date:	Signature:	Time & Date:

THIS PURCHASE IS SUBMITTED PURSUANT TO STATE OF OREGON SOLICITATION #**102-1098-07** AND PRICE AGREEMENT # **8903**. THE PRICE AGREEMENT INCLUDING CONTRACT TERMS AND CONDITIONS AND SPECIAL CONTRACT TERMS AND CONDITIONS (T'S &C'S) CONTAINED IN THE PRICE AGREEMENT ARE HEREBY INCORPORATED BY REFERENCE AND SHALL APPLY TO THIS PURCHASE AND SHALL TAKE PRECEDENCE OVER ALL OTHER CONFLICTING T'S AND C'S, EXPRESS OR IMPLIED.

Agency, Authorized Purchaser or Agent:
Oregon DEQ

Send Lab Report To: **Mark Pugh**
Address: Department of Environmental Quality
700 NE Multnomah St, Suite 600
Portland, OR 97232

E-mail: pugh.mark@deq.state.or.us

Contract Laboratory Name: **Pace National**

Lab Batch #:

Invoice To: ODEQ/Business Office
Address: 700 NE Multnomah
Street, Suite 600
Portland, OR. 97232

Tel. #: (800) 452-4011

Lab Selection Criteria:
- ☐ Proximity (if TAT < 48 hrs)
- ☐ Prior work on same project
- ☒ Cost (for anticipated analyses)
- ☐ Other labs disqualified or unable to perform requested services
- ☐ Emergency work

Turn Around Time:
- ☒ 10 days (std.)
- ☐ 5 days
- ☐ 72 hours
- ☐ 48 hours
- ☐ 24 hours
- ☐ Other

Project Name: **Springdale Cleaners**
Project #: **1469-03**
Sampler Name: Alex Evernden

L1648166

Sample ID#	Collection Date/Time	Matrix	Number of Containers	Sample Preservative: HCl	Sample Preservative: NONE	Requested Analyses: VOCs by 8260B	Requested Analyses: Methane, Ethane and Ethene	Comments
JEMW-5	8/17/23 1210	W	3			X		-13
JEMW-6	8/17/23 0911	W	4			X	X	-14
DUP-1	8/17/23 1715	W	3			X		-15

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

Notes: Report Results to: MStevens@apexcos.com; Carmen.Owens@apexcos.com; pugh.mark@deq.state.or.us

Relinquished By: Alexandra Evernden	Agency/Agent: Apex Companies	Received By: Eli Dossett	Agency: Pace
Signature:	Time & Date: 8/18/2023 1043	Signature: Eli Dossett 17	Time & Date: 8-19-23/900
Relinquished By:	Agency/Agent:	Received By:	Agency/Agent:
Signature:	Time & Date:	Signature:	Time & Date:

THIS PURCHASE IS SUBMITTED PURSUANT TO STATE OF OREGON SOLICITATION #**102-1098-07** AND PRICE AGREEMENT # **8903**. THE PRICE AGREEMENT INCLUDING CONTRACT TERMS AND CONDITIONS AND SPECIAL CONTRACT TERMS AND CONDITIONS (T'S &C'S) CONTAINED IN THE PRICE AGREEMENT ARE HEREBY INCORPORATED BY REFERENCE AND SHALL APPLY TO THIS PURCHASE AND SHALL TAKE PRECEDENCE OVER ALL OTHER CONFLICTING T'S AND C'S, EXPRESS OR IMPLIED.

ANALYTICAL REPORT

November 22, 2023

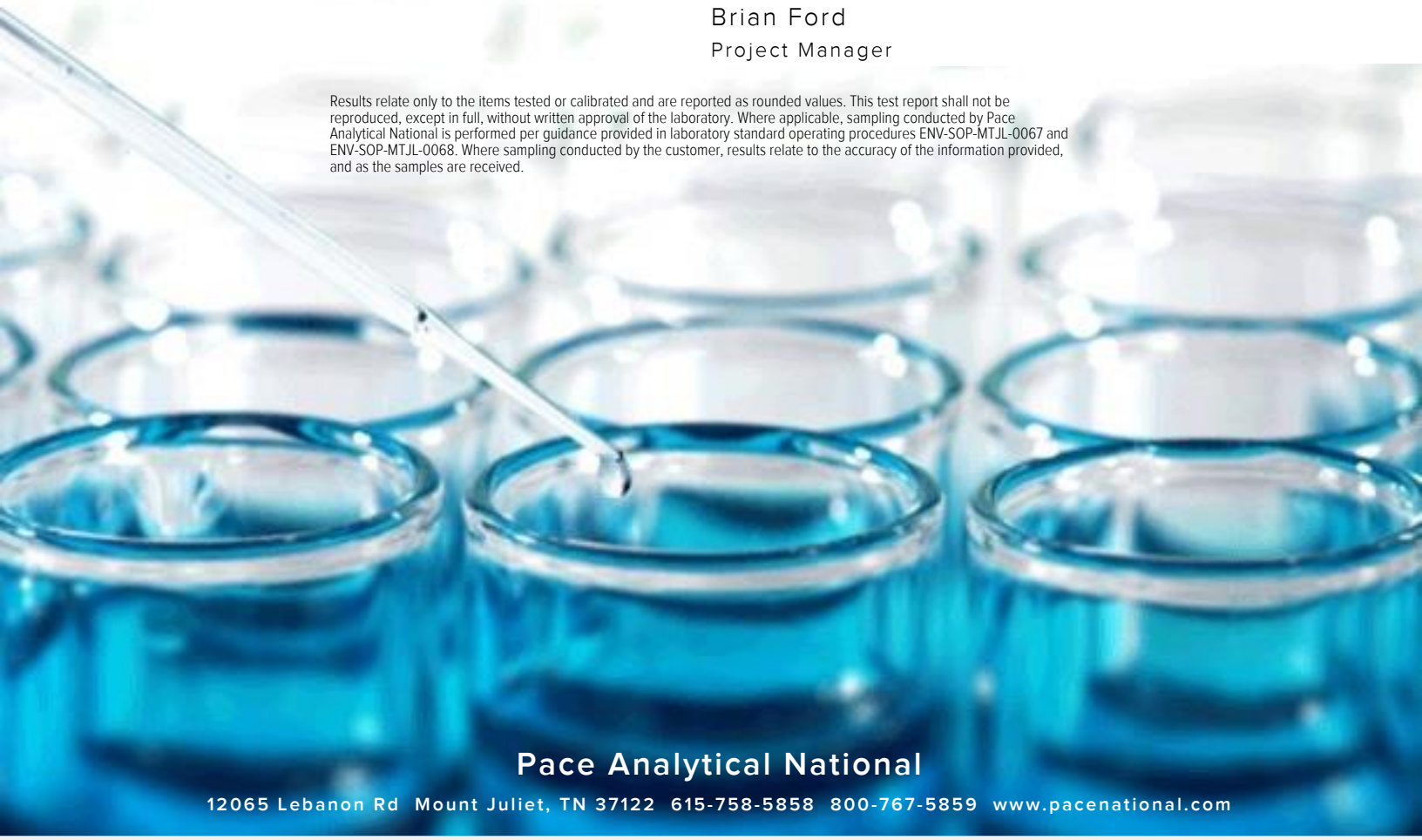
Oregon Dept. of Env. Quality - ODEQ

Sample Delivery Group:	L1676294
Samples Received:	11/10/2023
Project Number:	320001469-03
Description:	ODEQ - Springdale Cleaners
Report To:	Mark Pugh

Entire Report Reviewed By:

Brian Ford

Project Manager



Pace Analytical National

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

TABLE OF CONTENTS

KEY BANK REAR L1676294-01 Air

Collected by | Collected date/time 11/08/23 11:57 | Received date/time 11/10/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2172338	1	11/16/23 15:34	11/16/23 15:34	GH	Mt. Juliet, TN

KEY BANK FRONT L1676294-02 Air

Collected by | Collected date/time 11/08/23 17:48 | Received date/time 11/10/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2172338	1	11/16/23 16:02	11/16/23 16:02	GH	Mt. Juliet, TN

STATE FARRM L1676294-03 Air

Collected by | Collected date/time 11/08/23 16:49 | Received date/time 11/10/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2172338	1	11/16/23 16:29	11/16/23 16:29	GH	Mt. Juliet, TN

SPRINGDALE CLEANERS L1676294-04 Air

Collected by | Collected date/time 11/08/23 11:05 | Received date/time 11/10/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2172338	1	11/16/23 16:57	11/16/23 16:57	GH	Mt. Juliet, TN

BE SALON SOUTH L1676294-05 Air

Collected by | Collected date/time 11/08/23 11:48 | Received date/time 11/10/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2172338	1	11/16/23 17:24	11/16/23 17:24	GH	Mt. Juliet, TN

BE SALON NORTH L1676294-06 Air

Collected by | Collected date/time 11/08/23 10:50 | Received date/time 11/10/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2172338	1	11/16/23 17:52	11/16/23 17:52	GH	Mt. Juliet, TN

OMBASE YOGA L1676294-07 Air

Collected by | Collected date/time 11/08/23 17:21 | Received date/time 11/10/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2172338	1	11/16/23 18:19	11/16/23 18:19	GH	Mt. Juliet, TN

HILLSDALE VET L1676294-08 Air

Collected by | Collected date/time 11/08/23 15:01 | Received date/time 11/10/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2172338	1	11/16/23 18:46	11/16/23 18:46	GH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG2173718	20	11/18/23 16:02	11/18/23 16:02	MBF	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG2174575	20	11/20/23 12:40	11/20/23 12:40	DBB	Mt. Juliet, TN

OUTDOOR AMBIENT L1676294-09 Air

Collected by	Collected date/time	Received date/time
	11/08/23 18:00	11/10/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2172338	1	11/16/23 19:14	11/16/23 19:14	GH	Mt. Juliet, TN

VP-4 L1676294-10 Air

Collected by	Collected date/time	Received date/time
	11/08/23 13:04	11/10/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2172338	1	11/16/23 19:41	11/16/23 19:41	GH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG2173718	20	11/18/23 16:33	11/18/23 16:33	MBF	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

-11, VP-6R: could not be analyzed due to insufficient sample volume. -28"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	5.06	12.0		1	WG2172338
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2172338
Benzene	71-43-2	78.10	0.200	0.639	0.249	0.795		1	WG2172338
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2172338
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2172338
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2172338
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2172338
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2172338
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2172338
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2172338
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2172338
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2172338
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2172338
Chloromethane	74-87-3	50.50	0.200	0.413	0.397	0.820		1	WG2172338
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2172338
Cyclohexane	110-82-7	84.20	0.200	0.689	0.252	0.868		1	WG2172338
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2172338
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2172338
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2172338
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2172338
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2172338
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2172338
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2172338
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2172338
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	0.510	2.02		1	WG2172338
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2172338
1,2-Dichloropropane	78-87-5	113	0.200	0.924	2.58	11.9		1	WG2172338
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2172338
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2172338
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2172338
Ethanol	64-17-5	46.10	2.50	4.71	7.71	14.5	B	1	WG2172338
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2172338
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2172338
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG2172338
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.421	2.08		1	WG2172338
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2172338
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2172338
Heptane	142-82-5	100	0.200	0.818	0.304	1.24		1	WG2172338
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2172338
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2172338
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2172338
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.459	1.59		1	WG2172338
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2172338
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2172338
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2172338
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2172338
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2172338
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2172338
2-Propanol	67-63-0	60.10	1.25	3.07	2.41	5.92	B	1	WG2172338
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2172338
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2172338
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2172338
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2172338
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG2172338
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2172338
Toluene	108-88-3	92.10	0.500	1.88	5.06	19.1		1	WG2172338

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2172338
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2172338
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2172338
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2172338
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.353	1.73		1	WG2172338
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2172338
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2172338
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2172338
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2172338
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2172338
m&p-Xylene	1330-20-7	106	0.400	1.73	0.584	2.53		1	WG2172338
o-Xylene	95-47-6	106	0.200	0.867	0.248	1.08		1	WG2172338
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2172338
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*95.4*				WG2172338

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	3.29	7.82		1	WG2172338
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2172338
Benzene	71-43-2	78.10	0.200	0.639	0.214	0.684		1	WG2172338
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2172338
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2172338
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2172338
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2172338
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2172338
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2172338
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2172338
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2172338
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2172338
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2172338
Chloromethane	74-87-3	50.50	0.200	0.413	0.432	0.892		1	WG2172338
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2172338
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2172338
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2172338
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2172338
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2172338
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2172338
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2172338
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2172338
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2172338
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2172338
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	0.408	1.62		1	WG2172338
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2172338
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2172338
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2172338
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2172338
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2172338
Ethanol	64-17-5	46.10	2.50	4.71	22.7	42.8		1	WG2172338
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2172338
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2172338
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.213	1.20		1	WG2172338
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.428	2.12		1	WG2172338
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2172338
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2172338
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2172338
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2172338
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2172338
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2172338
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.384	1.33		1	WG2172338
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2172338
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2172338
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2172338
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2172338
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2172338
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2172338
2-Propanol	67-63-0	60.10	1.25	3.07	3.79	9.32	B	1	WG2172338
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2172338
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2172338
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2172338
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2172338
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG2172338
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2172338
Toluene	108-88-3	92.10	0.500	1.88	0.597	2.25		1	WG2172338

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2172338
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2172338
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2172338
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2172338
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2172338
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2172338
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2172338
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2172338
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2172338
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2172338
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG2172338
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2172338
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2172338
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.6*				WG2172338

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	10.2	24.2		1	WG2172338
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2172338
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2172338
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2172338
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2172338
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2172338
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2172338
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2172338
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2172338
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2172338
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2172338
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2172338
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2172338
Chloromethane	74-87-3	50.50	0.200	0.413	0.490	1.01		1	WG2172338
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2172338
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2172338
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2172338
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2172338
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2172338
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2172338
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2172338
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2172338
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2172338
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2172338
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2172338
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2172338
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2172338
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2172338
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2172338
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2172338
Ethanol	64-17-5	46.10	2.50	4.71	9.77	18.4	B	1	WG2172338
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2172338
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2172338
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.225	1.26		1	WG2172338
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.446	2.21		1	WG2172338
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2172338
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2172338
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2172338
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2172338
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2172338
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2172338
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.284	0.986		1	WG2172338
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2172338
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2172338
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2172338
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2172338
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2172338
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2172338
2-Propanol	67-63-0	60.10	1.25	3.07	4.81	11.8	B	1	WG2172338
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2172338
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2172338
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2172338
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2172338
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG2172338
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2172338
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2172338

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2172338
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2172338
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2172338
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2172338
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2172338
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2172338
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2172338
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2172338
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2172338
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2172338
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG2172338
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2172338
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2172338
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.6*				WG2172338

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	4.17	9.91		1	WG2172338
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2172338
Benzene	71-43-2	78.10	0.200	0.639	0.216	0.690		1	WG2172338
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2172338
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2172338
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2172338
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2172338
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2172338
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2172338
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2172338
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2172338
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2172338
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2172338
Chloromethane	74-87-3	50.50	0.200	0.413	0.450	0.929		1	WG2172338
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2172338
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2172338
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2172338
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2172338
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2172338
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2172338
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2172338
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2172338
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2172338
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2172338
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2172338
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2172338
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2172338
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2172338
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2172338
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2172338
Ethanol	64-17-5	46.10	2.50	4.71	9.91	18.7	B	1	WG2172338
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2172338
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2172338
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.216	1.21		1	WG2172338
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.467	2.31		1	WG2172338
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2172338
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2172338
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2172338
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2172338
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2172338
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2172338
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG2172338
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2172338
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2172338
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2172338
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2172338
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2172338
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2172338
2-Propanol	67-63-0	60.10	1.25	3.07	1.59	3.91	B	1	WG2172338
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2172338
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2172338
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2172338
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2172338
Tetrachloroethylene	127-18-4	166	0.200	1.36	0.266	1.81		1	WG2172338
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2172338
Toluene	108-88-3	92.10	0.500	1.88	5.93	22.3		1	WG2172338

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2172338
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2172338
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2172338
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2172338
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.223	1.09		1	WG2172338
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2172338
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2172338
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2172338
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2172338
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2172338
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG2172338
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2172338
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2172338
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*97.7*				WG2172338

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	4.56	10.8		1	WG2172338
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2172338
Benzene	71-43-2	78.10	0.200	0.639	0.233	0.744		1	WG2172338
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2172338
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2172338
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2172338
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2172338
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2172338
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2172338
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2172338
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2172338
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2172338
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2172338
Chloromethane	74-87-3	50.50	0.200	0.413	0.419	0.865		1	WG2172338
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2172338
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2172338
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2172338
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2172338
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2172338
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2172338
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2172338
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2172338
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2172338
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2172338
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	0.281	1.11		1	WG2172338
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2172338
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2172338
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2172338
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2172338
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2172338
Ethanol	64-17-5	46.10	2.50	4.71	4.70	8.86	B	1	WG2172338
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2172338
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2172338
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.212	1.19		1	WG2172338
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.421	2.08		1	WG2172338
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2172338
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2172338
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2172338
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2172338
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2172338
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2172338
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.202	0.701		1	WG2172338
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2172338
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2172338
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2172338
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2172338
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2172338
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2172338
2-Propanol	67-63-0	60.10	1.25	3.07	2.70	6.64	B	1	WG2172338
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2172338
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2172338
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2172338
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2172338
Tetrachloroethylene	127-18-4	166	0.200	1.36	0.553	3.75		1	WG2172338
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2172338
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2172338

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2172338
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2172338
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2172338
Trichloroethylene	79-01-6	131	0.200	1.07	0.234	1.25		1	WG2172338
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2172338
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2172338
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2172338
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2172338
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2172338
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2172338
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG2172338
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2172338
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2172338
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*95.3*				WG2172338

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	50.2	119		1	WG2172338
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2172338
Benzene	71-43-2	78.10	0.200	0.639	0.225	0.719		1	WG2172338
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2172338
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2172338
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2172338
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2172338
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2172338
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2172338
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2172338
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2172338
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2172338
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2172338
Chloromethane	74-87-3	50.50	0.200	0.413	0.419	0.865		1	WG2172338
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2172338
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2172338
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2172338
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2172338
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2172338
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2172338
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2172338
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2172338
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2172338
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2172338
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	0.263	1.04		1	WG2172338
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2172338
1,2-Dichloropropane	78-87-5	113	0.200	0.924	0.485	2.24		1	WG2172338
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2172338
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2172338
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2172338
Ethanol	64-17-5	46.10	2.50	4.71	20.7	39.0		1	WG2172338
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2172338
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2172338
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.207	1.16		1	WG2172338
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.496	2.45		1	WG2172338
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2172338
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2172338
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2172338
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2172338
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2172338
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2172338
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG2172338
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2172338
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	1.49	4.39		1	WG2172338
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2172338
Methyl methacrylate	80-62-6	100.12	0.200	0.819	0.222	0.909		1	WG2172338
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2172338
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2172338
2-Propanol	67-63-0	60.10	1.25	3.07	14.8	36.4		1	WG2172338
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2172338
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2172338
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2172338
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2172338
Tetrachloroethylene	127-18-4	166	0.200	1.36	0.565	3.84		1	WG2172338
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2172338
Toluene	108-88-3	92.10	0.500	1.88	1.15	4.33		1	WG2172338

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2172338
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2172338
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2172338
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2172338
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2172338
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2172338
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2172338
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2172338
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2172338
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2172338
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG2172338
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2172338
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2172338
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*97.2*				WG2172338

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	6.55	15.6		1	WG2172338
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2172338
Benzene	71-43-2	78.10	0.200	0.639	0.208	0.664		1	WG2172338
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2172338
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2172338
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2172338
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2172338
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2172338
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2172338
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2172338
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2172338
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2172338
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2172338
Chloromethane	74-87-3	50.50	0.200	0.413	0.375	0.775		1	WG2172338
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2172338
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2172338
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2172338
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2172338
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2172338
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2172338
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2172338
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2172338
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2172338
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2172338
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2172338
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2172338
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2172338
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2172338
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2172338
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2172338
Ethanol	64-17-5	46.10	2.50	4.71	4.91	9.26	B	1	WG2172338
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2172338
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2172338
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG2172338
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.365	1.81		1	WG2172338
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2172338
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2172338
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2172338
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2172338
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2172338
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2172338
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.294	1.02		1	WG2172338
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2172338
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2172338
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2172338
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2172338
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2172338
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2172338
2-Propanol	67-63-0	60.10	1.25	3.07	7.43	18.3	B	1	WG2172338
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2172338
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2172338
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2172338
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2172338
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG2172338
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2172338
Toluene	108-88-3	92.10	0.500	1.88	0.573	2.16		1	WG2172338

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2172338
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2172338
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2172338
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2172338
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2172338
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2172338
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2172338
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2172338
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2172338
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2172338
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG2172338
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2172338
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2172338
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*97.1*				WG2172338

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	23.4	55.6		1	WG2172338
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2172338
Benzene	71-43-2	78.10	0.200	0.639	0.226	0.722		1	WG2172338
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2172338
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2172338
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2172338
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2172338
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2172338
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2172338
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2172338
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2172338
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2172338
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2172338
Chloromethane	74-87-3	50.50	0.200	0.413	0.527	1.09		1	WG2172338
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2172338
Cyclohexane	110-82-7	84.20	0.200	0.689	0.624	2.15		1	WG2172338
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2172338
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2172338
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2172338
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2172338
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2172338
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2172338
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2172338
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2172338
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2172338
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2172338
1,2-Dichloropropane	78-87-5	113	0.200	0.924	8.58	39.7		1	WG2172338
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2172338
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2172338
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2172338
Ethanol	64-17-5	46.10	50.0	94.3	242	456		20	WG2174575
Ethylbenzene	100-41-4	106	0.200	0.867	0.266	1.15		1	WG2172338
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.217	1.07		1	WG2172338
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.214	1.20		1	WG2172338
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.482	2.38		1	WG2172338
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2172338
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2172338
Heptane	142-82-5	100	0.200	0.818	0.778	3.18		1	WG2172338
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2172338
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2172338
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2172338
Methylene Chloride	75-09-2	84.90	0.200	0.694	1.01	3.51		1	WG2172338
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2172338
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2172338
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2172338
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2172338
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2172338
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2172338
2-Propanol	67-63-0	60.10	25.0	61.5	1660	4080		20	WG2173718
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2172338
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2172338
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2172338
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2172338
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG2172338
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2172338
Toluene	108-88-3	92.10	0.500	1.88	16.0	60.3		1	WG2172338

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2172338
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2172338
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2172338
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2172338
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.959	4.71		1	WG2172338
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.332	1.63		1	WG2172338
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2172338
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2172338
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2172338
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2172338
m&p-Xylene	1330-20-7	106	0.400	1.73	0.902	3.91		1	WG2172338
o-Xylene	95-47-6	106	0.200	0.867	0.438	1.90		1	WG2172338
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2172338
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.6*				WG2172338
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*94.8*				WG2173718
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*102*				WG2174575

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
Acetone	67-64-1	58.10	1.25	2.97	3.51	8.34		1	WG2172338
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2172338
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2172338
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2172338
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2172338
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2172338
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2172338
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2172338
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2172338
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2172338
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2172338
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2172338
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2172338
Chloromethane	74-87-3	50.50	0.200	0.413	0.412	0.851		1	WG2172338
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2172338
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2172338
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2172338
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2172338
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2172338
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2172338
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2172338
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2172338
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2172338
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2172338
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2172338
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2172338
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2172338
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2172338
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2172338
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2172338
Ethanol	64-17-5	46.10	2.50	4.71	3.12	5.88	B	1	WG2172338
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2172338
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2172338
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	1.12		1	WG2172338
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.429	2.12		1	WG2172338
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2172338
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2172338
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2172338
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2172338
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2172338
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2172338
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG2172338
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2172338
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2172338
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2172338
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2172338
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2172338
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2172338
2-Propanol	67-63-0	60.10	1.25	3.07	4.18	10.3	B	1	WG2172338
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2172338
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2172338
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2172338
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2172338
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG2172338
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2172338
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2172338

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2172338
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2172338
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2172338
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2172338
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2172338
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2172338
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2172338
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2172338
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2172338
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2172338
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG2172338
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2172338
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2172338
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*95.7*				WG2172338

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	6.50	15.4		1	WG2172338
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2172338
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2172338
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2172338
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2172338
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2172338
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2172338
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2172338
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2172338
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2172338
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2172338
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2172338
Chloroform	67-66-3	119	0.200	0.973	0.391	1.90		1	WG2172338
Chloromethane	74-87-3	50.50	0.200	0.413	0.242	0.500		1	WG2172338
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2172338
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2172338
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2172338
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2172338
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2172338
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	5.77	34.7		1	WG2172338
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2172338
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2172338
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2172338
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2172338
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2172338
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2172338
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2172338
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2172338
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2172338
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2172338
Ethanol	64-17-5	46.10	2.50	4.71	ND	ND		1	WG2172338
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2172338
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2172338
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.228	1.28		1	WG2172338
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.476	2.35		1	WG2172338
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2172338
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2172338
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2172338
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2172338
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2172338
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2172338
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.562	1.95		1	WG2172338
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2172338
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2172338
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2172338
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2172338
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2172338
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2172338
2-Propanol	67-63-0	60.10	25.0	61.5	663	1630		20	WG2173718
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2172338
n-Propylbenzene	103-65-1	120	0.200	0.982	ND	ND		1	WG2172338
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2172338
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2172338
Tetrachloroethylene	127-18-4	166	0.200	1.36	0.256	1.74		1	WG2172338
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2172338
Toluene	108-88-3	92.10	0.500	1.88	1.18	4.44		1	WG2172338

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
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2172338
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2172338
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2172338
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2172338
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2172338
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2172338
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2172338
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2172338
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2172338
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2172338
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG2172338
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2172338
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG2172338
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.4*				WG2172338
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*95.6*				WG2173718

Method Blank (MB)

(MB) R4001391-3 11/16/23 09:51

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	0.630
Ethanol	1.06	J	0.265	2.50
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) R4001391-3 11/16/23 09:51

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	0.902	J	0.264	1.25
Propene	U		0.0932	1.25
n-Propylbenzene	U		0.0773	0.200
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	0.630
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
TPH (GC/MS) Low Fraction	43.8	J	39.7	200
(S) 1,4-Bromofluorobenzene	*95.5*			*60.0-140*

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

(LCS) R4001391-1 11/16/23 08:55 • (LCSD) R4001391-2 11/16/23 09:24

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	3.48	3.42	92.8	91.2	70.0-130			1.74	25
Allyl chloride	3.75	3.22	3.11	85.9	82.9	70.0-130			3.48	25
Benzene	3.75	3.52	3.44	93.9	91.7	70.0-130			2.30	25

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

(LCS) R4001391-1 11/16/23 08:55 • (LCSD) R4001391-2 11/16/23 09:24

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzyl Chloride	3.75	3.41	3.34	90.9	89.1	70.0-152			2.07	25
Bromodichloromethane	3.75	3.33	3.29	88.8	87.7	70.0-130			1.21	25
Bromoform	3.75	3.50	3.46	93.3	92.3	70.0-130			1.15	25
Bromomethane	3.75	3.82	3.79	102	101	70.0-130			0.788	25
1,3-Butadiene	3.75	3.34	3.24	89.1	86.4	70.0-130			3.04	25
Carbon disulfide	3.75	3.55	3.47	94.7	92.5	70.0-130			2.28	25
Carbon tetrachloride	3.75	3.37	3.32	89.9	88.5	70.0-130			1.49	25
Chlorobenzene	3.75	3.54	3.55	94.4	94.7	70.0-130			0.282	25
Chloroethane	3.75	3.55	3.46	94.7	92.3	70.0-130			2.57	25
Chloroform	3.75	3.48	3.43	92.8	91.5	70.0-130			1.45	25
Chloromethane	3.75	3.58	3.47	95.5	92.5	70.0-130			3.12	25
2-Chlorotoluene	3.75	3.67	3.62	97.9	96.5	70.0-130			1.37	25
Cyclohexane	3.75	3.35	3.29	89.3	87.7	70.0-130			1.81	25
Dibromochloromethane	3.75	3.40	3.40	90.7	90.7	70.0-130			0.000	25
1,2-Dibromoethane	3.75	3.62	3.57	96.5	95.2	70.0-130			1.39	25
1,2-Dichlorobenzene	3.75	4.03	3.97	107	106	70.0-130			1.50	25
1,3-Dichlorobenzene	3.75	4.13	4.11	110	110	70.0-130			0.485	25
1,4-Dichlorobenzene	3.75	4.10	4.03	109	107	70.0-130			1.72	25
1,2-Dichloroethane	3.75	3.51	3.43	93.6	91.5	70.0-130			2.31	25
1,1-Dichloroethane	3.75	3.37	3.30	89.9	88.0	70.0-130			2.10	25
1,1-Dichloroethene	3.75	3.55	3.49	94.7	93.1	70.0-130			1.70	25
cis-1,2-Dichloroethene	3.75	3.39	3.36	90.4	89.6	70.0-130			0.889	25
trans-1,2-Dichloroethene	3.75	3.41	3.60	90.9	96.0	70.0-130			5.42	25
1,2-Dichloropropane	3.75	3.37	3.32	89.9	88.5	70.0-130			1.49	25
cis-1,3-Dichloropropene	3.75	3.35	3.36	89.3	89.6	70.0-130			0.298	25
trans-1,3-Dichloropropene	3.75	3.26	3.12	86.9	83.2	70.0-130			4.39	25
1,4-Dioxane	3.75	3.94	3.83	105	102	70.0-140			2.83	25
Ethanol	3.75	3.94	3.99	105	106	55.0-148			1.26	25
Ethylbenzene	3.75	3.61	3.54	96.3	94.4	70.0-130			1.96	25
4-Ethyltoluene	3.75	3.77	3.73	101	99.5	70.0-130			1.07	25
Trichlorofluoromethane	3.75	3.73	3.68	99.5	98.1	70.0-130			1.35	25
Dichlorodifluoromethane	3.75	3.81	3.76	102	100	64.0-139			1.32	25
1,1,2-Trichlorotrifluoroethane	3.75	3.86	3.83	103	102	70.0-130			0.780	25
1,2-Dichlorotetrafluoroethane	3.75	3.79	3.73	101	99.5	70.0-130			1.60	25
Heptane	3.75	3.37	3.28	89.9	87.5	70.0-130			2.71	25
Hexachloro-1,3-butadiene	3.75	3.95	3.89	105	104	70.0-151			1.53	25
n-Hexane	3.75	3.38	3.34	90.1	89.1	70.0-130			1.19	25
Isopropylbenzene	3.75	3.68	3.61	98.1	96.3	70.0-130			1.92	25
Methylene Chloride	3.75	3.42	3.31	91.2	88.3	70.0-130			3.27	25
Methyl Butyl Ketone	3.75	3.67	3.59	97.9	95.7	70.0-149			2.20	25

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

(LCS) R4001391-1 11/16/23 08:55 • (LCSD) R4001391-2 11/16/23 09:24

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
2-Butanone (MEK)	3.75	3.44	3.32	91.7	88.5	70.0-130			3.55	25
4-Methyl-2-pentanone (MIBK)	3.75	2.93	2.93	78.1	78.1	70.0-139			0.000	25
Methyl methacrylate	3.75	3.29	3.23	87.7	86.1	70.0-130			1.84	25
MTBE	3.75	3.26	3.18	86.9	84.8	70.0-130			2.48	25
Naphthalene	3.75	4.11	4.02	110	107	70.0-159			2.21	25
2-Propanol	3.75	3.60	3.70	96.0	98.7	70.0-139			2.74	25
Propene	3.75	3.16	3.09	84.3	82.4	64.0-144			2.24	25
n-Propylbenzene	3.75	3.78	3.72	101	99.2	70.0-130			1.60	25
Styrene	3.75	3.71	3.67	98.9	97.9	70.0-130			1.08	25
1,1,2,2-Tetrachloroethane	3.75	3.73	3.68	99.5	98.1	70.0-130			1.35	25
Tetrachloroethylene	3.75	3.75	3.74	100	99.7	70.0-130			0.267	25
Tetrahydrofuran	3.75	2.99	2.95	79.7	78.7	70.0-137			1.35	25
Toluene	3.75	3.47	3.39	92.5	90.4	70.0-130			2.33	25
1,2,4-Trichlorobenzene	3.75	4.07	3.83	109	102	70.0-160			6.08	25
1,1,1-Trichloroethane	3.75	3.37	3.28	89.9	87.5	70.0-130			2.71	25
1,1,2-Trichloroethane	3.75	3.59	3.51	95.7	93.6	70.0-130			2.25	25
Trichloroethylene	3.75	3.62	3.52	96.5	93.9	70.0-130			2.80	25
1,2,4-Trimethylbenzene	3.75	3.79	3.71	101	98.9	70.0-130			2.13	25
1,3,5-Trimethylbenzene	3.75	3.77	3.71	101	98.9	70.0-130			1.60	25
2,2,4-Trimethylpentane	3.75	3.33	3.30	88.8	88.0	70.0-130			0.905	25
Vinyl chloride	3.75	3.68	3.60	98.1	96.0	70.0-130			2.20	25
Vinyl Bromide	3.75	3.79	3.70	101	98.7	70.0-130			2.40	25
Vinyl acetate	3.75	3.01	2.87	80.3	76.5	70.0-130			4.76	25
m&p-Xylene	7.50	7.39	7.23	98.5	96.4	70.0-130			2.19	25
o-Xylene	3.75	3.69	3.58	98.4	95.5	70.0-130			3.03	25
TPH (GC/MS) Low Fraction	188	188	187	100	99.5	70.0-130			0.533	25
(S) 1,4-Bromofluorobenzene				*97.9*	*99.3*	*60.0-140*				

Method Blank (MB)

(MB) R4002091-3 11/18/23 09:11

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
2-Propanol	U		0.264	1.25
(S) 1,4-Bromofluorobenzene	*98.1*			*60.0-140*

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

(LCS) R4002091-1 11/18/23 08:01 • (LCSD) R4002091-2 11/18/23 08:37

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
2-Propanol	3.75	4.65	4.53	124	121	70.0-139			2.61	25
(S) 1,4-Bromofluorobenzene				*101*	*99.1*	*60.0-140*				

Method Blank (MB)

(MB) R4002872-3 11/20/23 10:08

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Ethanol	0.802	J	0.265	2.50
(S) 1,4-Bromofluorobenzene	*98.6*			*60.0-140*

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

(LCS) R4002872-1 11/20/23 09:09 • (LCSD) R4002872-2 11/20/23 09:39

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	4.03	4.45	107	119	55.0-148			9.91	25
(S) 1,4-Bromofluorobenzene				*101*	*103*	*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.
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	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.

Agency, Authorized Purchaser or Agent: **Oregon DEQ**	**Contract Laboratory Name:** **Pace National** Lab Batch #:	**Lab Selection Criteria:** ☐ Proximity (if TAT < 48 hrs) ☐ Prior work on same project ☒ Cost (for anticipated analyses) ☐ Other labs disqualified or unable to perform requested services ☐ Emergency work	**Turn Around Time:** ☒ 10 days (std.) ☐ 5 days ☐ 72 hours ☐ 48 hours ☐ 24 hours ☐ Other
Send Lab Report To: Mark Pugh Address: Department of Environmental Quality 700 NE Multnomah St, Suite 600 Portland, OR 97232 E-mail: mark.pugh@DEQ.Oregon.gov	**Invoice To:** ODEQ/Business Office Address: 700 NE Multnomah Street, Suite 600 Portland, OR. 97232 Tel. #: (800) 452-4011		

Project Name: **Springdale Cleaners**
Project #:
320001469-03

Sample Preservative
n/a

J177

L1676294

Sample ID#	Matrix	Can #	FC #	Start date/time	End Date/Time	Total minutes	Start Pres (In Hg)	End Press (In Hg)	Requested Analyses TO-15					Comments	
Key Bank Rear	A	020689	022628	11/8/23; 1036	11/8/23; 1157	81	-28	-1	X						-01
Key Bank Front	A	012551	013548	11/8/23; 1035	11/8/23; 1748	433	-29	-4	X					Control did not seem to be working for the first 2 hours	-02
State Farrm	A	008756	024100	11/8/23; 1041	11/8/23;1649	368	-30	-4.5	X						-03
Springdale Cleaners	A	023341	022749	11/8/23; 1040	11/8/23; 1105	25	-24	-3.5	X						-04
BE Salon South	A	022539	029330	11/8/23; 958	11/8/23; 1148	110	-29	-3	X						-05
BE Salon North	A	013851	028597	11/8/23; 1010	11/8/23; 1050	40	-30	-3	X						-06
OmBase Yoga	A	015064	029026	11/8/23; 1003	11/8/23; 1721	438	-27	-4.5	X						-07
Hillsdale Vet	A	015229	012971	11/8/23; 1019	11/8/23; 1501	282	-25	-3.5	X						-08
Outdoor Ambient	A	015382	013003	11/8/23; 1015	11/8/23; 1800	465	-30	0	X						-09
VP-4	SV	013944	011546	11/8/23; 1227	11/8/23; 1304	37	-29.5	-3	X						-10
VP-6R	SV	024222	029126	11/8/23; 1150	11/8/23; 1217	27	-28.5	-28.5	X					Control valve did not seem to be working	-11

Notes: Report Results to:

Relinquished By: Christine Weer	Agency/Agent: Apex Companies	Received By:	Agency:
Signature: Chris Weer	Time & Date: 11/9/2023; 1055	Signature:	Time & Date:
Relinquished By:	Agency/Agent:	Received By: Jamcem 11/10/23	Agency/Agent:
Signature:	Time & Date:	Signature: 0900	Time & Date:

THIS PURCHASE IS [illegible] ...TION #**102-1098-07** AND PRICE AGREEMENT # **8903**. THE PRICE AGREEMENT INCLUDING CONTRACT TE... T'S &C'S) CONTAINED IN THE PRICE AGREEMENT ARE HEREBY INCORPORATED BY REFERENCE AND SHALL AP... CONFLICTING T'S AND C'S, EXPRESS OR IMPLIED.

Sample Receipt Checklist

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

Appendix C

Historical Data

Table C-1
Groundwater Elevations and Field Parameters
Springdale Cleaners
Portland, Oregon

Well ID and Casing Elevation (in feet)	Sample Date	Depth to Water (feet)	Groundwater Elevation (feet)	Field Parameters				
				pH	Temperature (°C)	Conductivity (mS)	DO (ppm)	ORP (mV)
JEMW-1	5/14/2009	4.33	93.76	6.51	14.94	651	0.47	309.7
(98.09)	2/18/2010	--	--	--	--	--	--	--
	12/15/2010	4.00	94.09	6.51	15.89	538	1.21	312.9
	8/16/2011	4.93	93.16	6.07	17.01	288	1.13	280
	11/26/2012	4.20	93.89	--	--	--	--	--
	7/22/2014	4.71	93.38	--	--	--	--	--
	4/15/2015	4.34	93.75	--	--	--	--	--
	4/27/2016	4.51	93.58	--	--	--	--	--
	10/17/2016	4.44	93.65	--	--	--	--	--
	4/18/2017	4.16	93.93	--	--	--	--	--
	10/19/2017	5.22	92.87	--	--	--	--	--
	4/17/2018	4.15	93.94	--	--	--	--	--
	10/10/2018	6.06	92.03	--	--	--	--	--
	4/17/2019	4.53	93.56	--	--	--	--	--
	10/14/2019	5.39	92.70	--	--	--	--	--
	4/20/2020	4.65	93.44	5.99	15.8	328.5	0.49	6.0
	10/28/2020	5.71	92.38	6.37	17.5	360.2	0.6	18.7
	4/14/2021	4.75	93.34	6.28	15.2	330.0	1.57	20.1
	10/26/2021	5.09	93.00	6.22	16.8	381.1	0.57	-43.4
	5/24/2022	3.43	94.66	6.55	16.9	330.6	4.2	-142.4
	10/31/2022	4.80	93.29	6.42	17.6	386.7	0.86	-54.9
	2/22/2023	4.33	93.76	5.82	14.16	767	0	-42.5
	8/16/2023	3.50	94.59	6.13	20.31	442.0	13.80	-950
JEMW-2	12/15/2010	4.48	88.62	--	--	--	--	--
(93.10)	8/16/2011	5.07	88.03	--	--	--	--	--
	11/26/2012	4.50	88.60	--	--	--	--	--
	7/22/2014	4.68	88.42	--	--	--	--	--
	4/15/2015	4.58	88.52	--	--	--	--	--
	4/27/2016	4.70	88.40	--	--	--	--	--
	10/17/2016	4.48	88.62	--	--	--	--	--
	4/18/2017	4.66	88.44	--	--	--	--	--
	10/19/2017	4.81	88.29	--	--	--	--	--
	4/17/2018	4.55	88.55	--	--	--	--	--
	10/10/2018	4.66	88.44	--	--	--	--	--
	4/17/2019	4.64	88.46	--	--	--	--	--
	10/14/2019	5.09	88.01	--	--	--	--	--
	4/20/2020	4.75	88.35	5.83	15.6	325.2	0.29	21.4
	10/28/2020	5.19	87.91	6.36	17.2	345.9	0.52	39
	4/14/2021	5.12	87.98	6.48	15.9	364.9	1.55	33.1
	10/26/2021	4.86	88.24	6.19	16.4	324.2	0.67	-48.6
	5/24/2022	4.94	88.16	6.47	15.8	313.6	4.90	-191.2
	10/31/2022	4.35	88.75	6.4	16.9	323.7	0.90	-45.9
	2/22/2023	4.65	88.45	6.72	14.15	408	0.58	-21.6
	8/16/2023	4.10	89.00	6.16	18.61	433	5.80	-83

Please see notes at end of table.

Table C-1
Groundwater Elevations and Field Parameters
Springdale Cleaners
Portland, Oregon

Well ID and Casing Elevation (in feet)	Sample Date	Depth to Water (feet)	Groundwater Elevation (feet)	Field Parameters				
				pH	Temperature (°C)	Conductivity (mS)	DO (ppm)	ORP (mV)
JEMW-3	5/14/2009	2.55	87.28	6.75	14.68	518	0.70	654.4
(89.83)	2/18/2010	--	--	--	--	--	--	--
	12/15/2010	2.28	87.55	6.52	16.04	508	1.18	218.5
	8/16/2011	3.82	86.01	6.19	17.09	250	0.75	259
	11/26/2012	2.53	87.30	--	--	--	--	--
	7/22/2014	3.00	86.83	--	--	--	--	--
	4/15/2015	NA	--	--	--	--	--	--
	4/27/2016	NA	--	--	--	--	--	--
	10/17/2016	NA	--	--	--	--	--	--
	4/18/2017	NA	--	--	--	--	--	--
	10/19/2017	NA	--	--	--	--	--	--
	4/17/2018	NA	--	--	--	--	--	--
	10/10/2018	NA	--	--	--	--	--	--
	4/17/2019	NA	--	--	--	--	--	--
	10/14/2019	NA	--	--	--	--	--	--
	4/20/2020	NA	--	--	--	--	--	--
	10/28/2020	NA	--	--	--	--	--	--
	4/14/2021	NA	--	--	--	--	--	--
	10/25/2021	NA	--	--	--	--	--	--
	5/24/2022	NA	--	--	--	--	--	--
	10/31/2022	NA	--	--	--	--	--	--
	2/22/2023	Well Inaccessible						
	8/16/2023	Well Inaccessible						
JEMW-4	5/14/2009	2.31	91.86	6.21	14.71	2910	0.74	620.9
(94.17)	2/18/2010	--	--	--	--	--	--	--
	12/15/2010	1.60	92.57	6.02	13.07	2,468	1.87	293.4
	8/16/2011	4.78	89.39	5.28	15.30	1,118	1.31	282
	11/26/2012	3.09	91.08	--	--	--	--	--
	7/22/2014	8.90	85.27	--	--	--	--	--
	4/15/2015	2.74	91.43	--	--	--	--	--
	4/27/2016	2.95	91.22	--	--	--	--	--
	10/17/2016	NA	--	--	--	--	--	--
	4/18/2017	NA	--	--	--	--	--	--
	10/19/2017	NA	--	--	--	--	--	--
	4/17/2018	NA	--	--	--	--	--	--
	10/10/2018	NA	--	--	--	--	--	--
	4/19/2019	NA	--	5.40	14.81	1221	5.19	36.3
	10/14/2019	4.16	90.01	5.79	15.8	--	14.7	46.8
	4/20/2020	3.83	90.34	5.67	13.5	1194	0.66	11.1
	10/28/2020	5.24	88.93	6.29	16.3	1278	0.79	11.9
	4/14/2021	1.92	92.25	5.85	14.1	1104	0.78	-18.4
	10/26/2021	6.21	87.96	6.08	15.8	759	1.80	-51.4
	5/24/2022	2.23	91.94	6.22	14.7	1029	5.50	-37.3
	10/31/2022	8.60	85.57	6.15	16.2	1091	0.79	-62.8
	2/22/2023	2.41	91.76	Well Dewatered				
	8/16/2023	4.96	89.21	6.26	21.39	1.05	4.56	-100.00

Please see notes at end of table.

Table C-1
Groundwater Elevations and Field Parameters
Springdale Cleaners
Portland, Oregon

Well ID and Casing Elevation (in feet)	Sample Date	Depth to Water (feet)	Groundwater Elevation (feet)	Field Parameters				
				pH	Temperature (°C)	Conductivity (mS)	DO (ppm)	ORP (mV)
JEMW-5	5/14/2009	5.57	85.11	6.17	14.64	611	1.21	697.7
(90.68)	2/18/2010	--	--	--	--	--	--	--
	12/15/2010	1.67	89.01	6.39	13.16	995	6.20	270.0
	8/16/2011	3.65	87.03	5.85	17.49	888	1.60	235
	11/26/2012	2.56	88.12	6.16	15.6	788	2.15	33.6
	7/22/2014	3.63	87.05	6.45	15.68	900	1.09	50.2
	4/15/2015	2.66	88.02	5.73	15.20	1636	1.46	-17.4
	4/27/2016	2.21	88.47	5.9	10.48	1011	0.96	-17.6
	10/17/2016	2.67	88.01	5.74	16.76	1184	1.31	180.5
	4/18/2017	1.66	89.02	6.31	14.34	--	2.13	-41.1
	10/19/2017	2.42	88.26	NA	NA	NA	NA	NA
	4/17/2018	2.34	88.34	Well Dewatered				
	10/10/2018	4.51	86.17	7.75	17.7	566	0.32	-37.9
	4/17/2019	2.50	88.18	Well Dewatered				
	10/14/2019	3.78	86.90	Well Dewatered				
	4/20/2020	NA	--	6.07	14.9	340.3	0.38	-1.0
	10/28/2020	4.04	86.64	Well Dewatered				
	4/14/2021	0.90	89.78	Well Dewatered				
	10/26/2021	3.00	87.68	Well Dewatered				
	5/24/2022	NA	--	Well Dewatered				
	10/31/2022	10.59	80.09	Well Dewatered				
	2/22/2023	3.26	87.42	Well Dewatered				
	8/16/2023	4.63	86.05	Well Dewatered				
JEMW-6	5/14/2009	3.49	83.55	6.52	14.15	798	0.69	665.3
(87.04)	2/18/2010	--	--	--	--	--	--	--
	12/15/2010	3.25	83.79	6.49	14.70	714	0.77	221.7
	8/16/2011	4.20	82.84	5.48	14.96	359	0.61	269
	11/26/2012	3.22	83.82	6.82	15.38	334	0.6	-1.5
	10/17/2016	3.16	83.88	5.59	16.03	1016	0.88	187.8
	4/18/2017	3.35	83.69	6.59	14.27	1032	1.49	-78.4
	10/20/2017	5.62	81.42	6.34	16.3	255.3	1.19	-160.8
	7/22/2014	3.41	83.63	6.76	15.21	473	0.41	-11.5
	4/15/2015	3.44	83.60	7.41	14.21	872	0.70	-36.4
	4/27/2016	3.60	83.44	7.2	14.39	831	0.68	-32.1
	4/17/2018	2.90	84.14	7.05	13.9	270.1	--	11.7
	10/10/2018	4.17	82.87	7.00	17.4	570	1.63	-184.2
	4/17/2019	5.33	81.71	6.62	13.7	157.7	1.75	27.8
	10/15/2019	4.06	82.98	6.33	16.2	371.2	2.91	46.4
	4/20/2020	3.06	83.98	5.70	13.7	119.2	5.77	128.7
	10/28/2020	4.30	82.74	6.21	16.3	312.9	0.56	45.4
	4/14/2021	4.05	82.99	6.21	16.1	206.0	1.04	41.2
	10/27/2021	3.17	83.87	6.18	15.7	186.6	4.11	52.9
	5/24/2022	4.13	82.91	6.29	14.7	419.9	5.00	-174.5
	10/31/2022	3.00	84.04	6.43	15.9	359.7	3.80	-40.6
	2/22/2023	3.15	83.89	6.59	13.25	579	1.56	23.7
	8/16/2023	4.55	82.49	6.51	18.24	0.733	1.51	-124

Please see notes at end of table.

Table C-1
Groundwater Elevations and Field Parameters
Springdale Cleaners
Portland, Oregon

Well ID and Casing Elevation (in feet)	Sample Date	Depth to Water (feet)	Groundwater Elevation (feet)	Field Parameters				
				pH	Temperature (°C)	Conductivity (mS)	DO (ppm)	ORP (mV)
MW-1	12/15/2010	4.19	--	--	--	--	--	--
(NA)	8/16/2011	7.57	--	--	--	--	--	--
	11/26/2012	5.05	--	--	--	--	--	--
	7/22/2014	6.40	--	--	--	--	--	--
	4/15/2015	4.65	--	--	--	--	--	--
	4/27/2016	4.85	--	--	--	--	--	--
	10/17/2016	4.75	--	--	--	--	--	--
	4/18/2017	4.15	--	--	--	--	--	--
	10/19/2017	6.33	--	--	--	--	--	--
	4/17/2018	3.95	--	--	--	--	--	--
	10/10/2018	9.01	--	--	--	--	--	--
	4/17/2019	4.68	--	--	--	--	--	--
	10/14/2019	7.70	--	--	--	--	--	--
	4/20/2020	5.68	--	5.47	15.5	184.2	4.39	95.3
	10/28/2020	8.56	--	5.84	7.2	161.5	1.23	90.3
	4/14/2021	5.09	--	5.90	16.6	168.0	2.11	84.1
	10/25/2021	5.49	--	6.04	16.8	140.0	4.37	126.5
	5/24/2022	4.63	--	5.97	16.0	128.2	12.2	118.2
	10/31/2022	5.49	--	6.05	17.0	104.2	6.58	-22.7
	2/22/2023	4.59	--	6.02	13.6	182.0	5.82	203
	8/16/2023	8.60	--	5.37	3.9	210.0	13.4	180
MW-2	5/14/2009	4.80	--	6.31	15.00	967	0.50	315.4
(NA)	2/18/2010	--	--	--	--	--	--	--
	12/15/2010	3.96	--	6.38	15.33	676	1.07	232.7
	8/16/2011	7.26	--	5.75	16.72	385	0.48	254
	11/26/2012	4.58	--	--	--	--	--	--
	7/22/2014	7.02	--	--	--	--	--	--
	4/15/2015	4.60	--	--	--	--	--	--
	4/27/2016	4.69	--	--	--	--	--	--
	10/17/2016	5.15	--	--	--	--	--	--
	4/18/2017	3.82	--	6.24	14.24	--	3.11	59.8
	10/20/2017	6.88	--	6.12	16.1	284.5	0.33	-110.8
	4/17/2018	3.92	--	6.00	14.7	379.5	--	196.1
	10/10/2018	8.12	--	6.34	17.1	250.4	0.87	65.3
	4/17/2019	4.88	--	5.98	15.6	247.7	0.34	45.3
	10/14/2019	6.76	--	5.97	17.1	269.9	0.70	57.9
	4/20/2020	5.59	--	5.44	16.1	299.4	0.32	82.9
	10/28/2020	7.84	--	5.9	17.7	273.8	0.57	64.1
	4/14/2021	4.60	--	5.94	16.2	266.0	2.85	62.7
	10/25/2021	5.88	--	5.86	16.9	264.0	0.48	116.8
	5/24/2022	5.34	--	5.88	16.9	245.2	2.70	209.2
	10/31/2022	12.49	--	5.31	16.6	1145	0.13	-26.4
	2/22/2023	7.50	--	6.26	14.08	932	0.20	-8.2
	8/16/2023	8.71	--	6.66	27.66	844	25.00	-134

Please see notes at end of table.

Table C-1
Groundwater Elevations and Field Parameters
Springdale Cleaners
Portland, Oregon

Well ID and Casing Elevation (in feet)	Sample Date	Depth to Water (feet)	Groundwater Elevation (feet)	Field Parameters				
				pH	Temperature (°C)	Conductivity (mS)	DO (ppm)	ORP (mV)
MW-3	12/15/2010	2.11	--	--	--	--	--	--
(NA)	8/16/2011	5.86	--	--	--	--	--	--
	11/26/2012	2.97	--	--	--	--	--	--
	7/22/2014	5.78	--	--	--	--	--	--
	4/15/2015	2.82	--	--	--	--	--	--
	4/27/2016	2.99	--	--	--	--	--	--
	10/17/2016	3.91	--	--	--	--	--	--
	4/18/2017	1.71	--	--	--	--	--	--
	10/19/2017	5.09	--	--	--	--	--	--
	4/17/2018	2.02	--	--	--	--	--	--
	10/10/2018	6.49	--	--	--	--	--	--
	4/17/2019	3.27	--	--	--	--	--	--
	10/14/2019	5.71	--	--	--	--	--	--
	4/20/2020	4.26	--	6.05	14.2	264.3	0.22	1.9
	10/28/2020	6.79	--	6.42	15.5	231.9	0.63	0.3
	4/14/2021	3.52	--	6.26	15.0	261.0	1.51	61.6
	10/25/2021	4.50	--	6.37	15.8	255.6	195	-56.5
	5/24/2022	3.08	--	6.17	15.0	268.0	2.80	247.5
	10/31/2022	--	--	6.32	15.2	74.3	1.78	-43.1
	2/22/2023	3.45	--	5.67	12.7	366.0	0.00	-3.2
	8/16/2023	6.87	--	5.87	18.6	291.0	9.90	-100
MW-4	12/15/2010	2.15	--	--	--	--	--	--
(NA)	8/16/2011	5.65	--	--	--	--	--	--
	11/26/2012	2.71	--	--	--	--	--	--
	7/22/2014	5.41	--	--	--	--	--	--
	4/15/2015	2.88	--	--	--	--	--	--
	4/27/2016	3.01	--	--	--	--	--	--
	4/17/2018	2.31	--	--	--	--	--	--
	10/10/2018	6.31	--	--	--	--	--	--
	4/17/2019	3.32	--	--	--	--	--	--
	10/14/2019	5.24	--	--	--	--	--	--
	10/17/2016	3.27	--	--	--	--	--	--
	4/18/2017	2.19	--	--	--	--	--	--
	10/19/2017	5.71	--	--	--	--	--	--
	4/20/2020	4.10	--	5.87	14.9	242.3	0.19	19.9
	10/28/2020	6.15	--	6.36	17	335.6	0.58	-17.6
	4/14/2021	3.71	--	6.09	15.8	306.0	1.28	10.8
	10/25/2021	2.08	--	6.03	16.3	382.0	0.92	-24.3
	5/24/2022	3.19	--	6.2	16.4	234.6	2.10	217.2
	10/31/2022	5.40	--	6.04	16.4	365.7	0.24	-64.1
	2/22/2023	3.94	--	5.65	13.71	539.0	0.00	-42.7
	8/16/2023	6.10	--	5.84	18.24	490.0	18.80	-108

Please see notes at end of table.

Table C-1
Groundwater Elevations and Field Parameters
Springdale Cleaners
Portland, Oregon

Well ID and Casing Elevation (in feet)	Sample Date	Depth to Water (feet)	Groundwater Elevation (feet)	Field Parameters				
				pH	Temperature (°C)	Conductivity (mS)	DO (ppm)	ORP (mV)
MW-5-10	12/15/2010	2.54	90.64	--	--	--	--	--
(93.18)	8/16/2011	2.94	90.24	--	--	--	--	--
	11/26/2012	3.15	90.03	--	--	--	--	--
	7/22/2014	4.24	88.94	--	--	--	--	--
	4/15/2015	3.18	90.00	--	--	--	--	--
	4/27/2016	3.32	89.86	--	--	--	--	--
	10/17/2016	NA	--	--	--	--	--	--
	4/18/2017	2.68	90.50	--	--	--	--	--
	10/19/2017	NA	--	--	--	--	--	--
	4/17/2018	NA	--	--	--	--	--	--
	10/10/2018	NA	--	--	--	--	--	--
	4/17/2019	4.45	88.73	--	--	--	--	--
	10/14/2019	4.90	88.28	--	--	--	--	--
	4/20/2020	4.54	88.64	--	--	--	--	--
	10/28/2020	4.82	88.36	--	--	--	--	--
	4/14/2021	6.70	86.48	--	--	--	--	--
	10/25/2021	3.82	89.36	--	--	--	--	--
	5/24/2022	NA	--	--	--	--	--	--
	10/31/2022	NA	--	--	--	--	--	--
	2/22/2023	NA	--	--	--	--	--	--
	2/22/2023	NA	--	--	--	--	--	--
MW-5-20	5/14/2009	2.85	90.03	5.97	15.89	5206	0.73	660.8
(92.88)	2/18/2010	--	--	--	--	--	--	--
	12/15/2010	NA	--	5.40	15.00	4,835	7.05	327.2
	8/16/2011	3.90	88.98	5.08	17.30	2,450	0.92	164
	11/26/2012	2.35	90.53	5.75	15.63	2,386	6.81	41.4
	7/22/2014	3.80	89.08	6.55	18.05	4,713	0.47	7.0
	4/15/2015	2.64	90.24	7.14	14.32	5,309	0.69	-16.8
	4/27/2016	2.75	90.13	6.93	14.51	5,490	0.99	9.5
	10/17/2016	2.88	90.00	--	--	--	--	--
	4/18/2017	2.56	90.32	6.01	14.61	--	1.29	-67.5
	10/19/2017	5.67	87.21	5.92	15.9	305.5	0.51	-205.2
	4/17/2018	2.59	90.29	6.12	15.4	3425	--	-28.6
	10/10/2018	4.76	88.12	8.52	17.9	3180	1.91	-55.2
	4/17/2019	4.55	88.33	6.00	15.1	2343	0.33	0.9
	10/14/2019	4.11	88.77	6.05	16.6	2891	0.74	22.1
	4/20/2020	3.57	89.31	Well Dewatered				
	10/28/2020	4.53	88.35	5.89	17.3	3,164	0.81	3.7
	4/14/2021	3.78	89.10	5.85	14.9	3,187	0.97	51.6
	10/26/2021	4.48	88.40	5.81	16.3	2,526	0.69	-48.1
	5/24/2022	NA	--	--	--	--	--	--
	10/31/2022	3.33	89.55	5.92	16.4	3,009	0.47	-83.7
	2/22/2023	2.27	90.61	5.42	13.7	3,804	0.00	-46.9
	8/16/2023	5.01	87.87	6.08	18.32	3.53	0	-101

Please see notes at end of table.

Table C-1
Groundwater Elevations and Field Parameters
Springdale Cleaners
Portland, Oregon

Well ID and Casing Elevation (in feet)	Sample Date	Depth to Water (feet)	Groundwater Elevation (feet)	Field Parameters				
				pH	Temperature (°C)	Conductivity (mS)	DO (ppm)	ORP (mV)
MW-6-10	12/15/2010	2.49	86.30	--	--	--	--	--
(88.79)	8/16/2011	3.36	85.43	--	--	--	--	--
	11/26/2012	2.39	86.40	--	--	--	--	--
	7/22/2014	3.02	85.77	--	--	--	--	--
	4/15/2015	2.36	86.43	--	--	--	--	--
	4/27/2016	2.68	86.11	--	--	--	--	--
	10/17/2016	NA	--	--	--	--	--	--
	4/18/2017	NA	--	--	--	--	--	--
	10/19/2017	NA	--	--	--	--	--	--
	4/17/2018	NA	--	--	--	--	--	--
	10/10/2018	NA	--	--	--	--	--	--
	4/17/2019	NA	--	--	--	--	--	--
	10/14/2019	NA	--	--	--	--	--	--
	4/20/2020	NA	--	--	--	--	--	--
	10/28/2020	NA	--	--	--	--	--	--
	4/1/2021	NA	--	--	--	--	--	--
	10/25/2021	2.92	85.87	--	--	--	--	--
	5/24/2022	NA	--	--	--	--	--	--
	10/31/2022	NA	--	--	--	--	--	--
	2/22/2023	NA	--	--	--	--	--	--
	2/22/2023	NA	--	--	--	--	--	--
MW-6-20	5/14/2009	2.84	85.86	6.61	14.78	668	2.17	195.3
(88.70)	2/18/2010	--	--	--	--	--	--	--
	12/15/2010	2.76	85.94	6.48	15.31	1,110	4.35	242.2
	8/16/2011	3.63	85.07	4.81	15.63	787	2.11	213
	11/26/2012	2.66	86.04	6.49	15.34	545	2.42	25.2
	7/22/2014	3.46	85.24	6.40	15.16	693	1.31	28.6
	4/15/2015	2.78	85.92	6.47	15.13	797	5.02	-3.4
	4/27/2016	2.97	85.73	6.77	14.31	555	4.74	-1.2
	4/17/2018	2.45	86.25	6.63	15.5	455.1	--	-18.9
	10/10/2018	3.94	84.76	7.02	17.4	489.2	0.44	-103.3
	4/17/2019	NA	--	6.35	14.5	171.4	1.64	27.3
	10/14/2019	3.52	85.18	6.4	16.5	271.4	2.75	44.2
	10/17/2016	2.77	85.93	6.03	16.52	469	2.32	175.7
	4/19/2017	NA	--	6.42	14.26	--	2.37	-25
	10/20/2017	NA	--	6.21	15.9	308.4	0.53	-143.7
	4/20/2020	2.81	85.89	6.02	15.4	322.4	1.6	-1.2
	10/28/2020	3.95	84.75	6.32	16.7	449.9	1.21	14.8
	4/14/2021	2.79	85.91	6.35	14.9	341.0	1.64	14.6
	10/27/2021	2.96	85.74	6.05	16.0	493.2	0.53	-45.4
	5/24/2022	NA	--	--	--	--	--	--
	10/31/2022	7.71	80.99	6.25	15.4	530	0.61	-137.5
	2/22/2023	2.66	86.04	5.49	14.5	976	0.00	-251
	8/16/2023	4.15	84.55	5.91	23.0	494	0.00	-37

Please see notes at end of table.

Table C-1
Groundwater Elevations and Field Parameters
Springdale Cleaners
Portland, Oregon

Well ID and Casing Elevation (in feet)	Sample Date	Depth to Water (feet)	Groundwater Elevation (feet)	Field Parameters				
				pH	Temperature (°C)	Conductivity (mS)	DO (ppm)	ORP (mV)
MW-7	5/14/2009	4.46	--	5.92	14.85	1445	1.39	668.1
(NA)	2/18/2010	--	--	--	--	--	--	--
	12/15/2010	2.93	--	6.35	14.66	927	1.85	266.7
	8/16/2011	4.71	--	5.91	16.87	1,294	2.52	272.8
	11/26/2012	5.03	--	6.29	1551	1,409	7.86	26.8
	7/22/2014	6.33	--	6.89	18.62	3,429	0.78	2.4
	4/15/2015	4.99	--	7.37	14.80	3,244	0.69	-23.8
	4/27/2016	5.10	--	7.04	14.33	157	0.79	-7.24
	10/17/2016	4.57	--	--	--	--	--	--
	4/18/2017	4.98	--	6.16	14.37	--	2.23	-86
	10/19/2017	5.44	--	5.94	17.9	1874	0.70	-206.6
	4/17/2018	4.88	--	Well Dewatered				
	10/10/2018	6.61	--	7.17	18.0	1795	0.48	-35.3
	4/17/2019	4.90	--	6.12	14.6	1263	1.47	0.8
	10/14/2019	3.31	--	6.24	17.2	1722	6.9	7.0
	4/20/2020	4.94	--	6.24	17.2	1722	6.9	7
	10/28/2020	6.46	--	Well Dewatered				
	4/14/2021	3.52	--	Well Dewatered				
	10/26/2021	5.11	--	Well Dewatered				
	5/24/2022	NA	--	Well Dewatered				
	10/31/2022	5.38	--	Well Dewatered				
	2/22/2023	6.63	--	5.86	14	2227	0	-69.7
	8/16/2023	1.87	--	6.17	19.79	2.05	0.83	-103
MW-8	5/14/2009	2.48	--	5.58	14.85	1318	0.60	708.4
(NA)	2/18/2010	--	--	--	--	--	--	--
	12/15/2010	2.33	--	6.10	13.47	949	5.36	278.1
	8/16/2011	3.09	--	6.14	18.4	528	NA	NA
	11/26/2012	2.39	--	6.23	15.73	469	3.85	28.4
	7/22/2014	2.99	--	6.60	16.48	623	3.60	30.4
	4/15/2015	2.50	--	Well Dewatered				
	4/27/2016	2.50	--	6.95	10.5	1121	1.86	68.1
	10/17/2016	2.51	--	--	--	--	--	--
	4/18/2017	2.70	--	6.62	14.55	--	1.08	-94.5
	10/19/2017	2.99	--	6.18	17.5	429	0.33	-204.1
	4/17/2018	2.41	--	7.04	15.3	446.6	--	-46.8
	10/10/2018	4.12	--	8.35	17.9	510	0.48	-70.2
	4/17/2019	2.38	--	6.58	14.7	315.6	0.49	-8.3
	10/14/2019	3.35	--	6.44	17.3	482.2	0.70	19.5
	4/20/2020	2.73	--	Well Dewatered				
	10/28/2020	3.80	--	6.45	17.4	466.7	0.5	-9.2
	4/14/2021	2.44	--	6.34	15.8	497.0	1.83	4.3
	10/26/2021	2.78	--	6.28	15.8	390.9	3.13	13.3
	5/24/2022	NA	--	--	--	--	--	--
	10/31/2022	2.48	--	6.28	17.5	630	8.76	-101.3
	2/22/2023	2.21	--	5.84	14.23	563	0	-51.4
	8/16/2023	3.25	--	6.08	20.3	910	1.14	-47

Please see notes at end of table.

Table C-1
Groundwater Elevations and Field Parameters
Springdale Cleaners
Portland, Oregon

Well ID and Casing Elevation (in feet)	Sample Date	Depth to Water (feet)	Groundwater Elevation (feet)	Field Parameters				
				pH	Temperature (°C)	Conductivity (mS)	DO (ppm)	ORP (mV)
MW-9	12/15/2010	2.14	85.14	6.39	14.61	685	0.97	264.8
(87.28)	8/16/2011	3.10	84.18	5.94	15.64	374	0.73	256
	11/26/2012	3.26	84.02	--	--	--	--	--
	7/22/2014	3.22	84.06	6.18	15.82	2512	0.29	84.1
	4/15/2015	7.72	79.56	5.95	14.24	2119	1.94	31.2
	4/27/2016	8.90	78.38	5.69	14.11	995	2.91	33.2
	10/17/2016	2.61	84.67	4.74	16.1	490	0.53	245.5
	4/18/2017	4.26	83.02	5.57	14.05	--	2.41	-17.4
	10/20/2017	NA	--	5.35	16.4	840	0.26	-116.1
	4/17/2018	NA	--	5.88	14.9	939	--	37.8
	10/10/2018	3.36	83.92	7.41	17.6	865	0.34	-50.2
	4/17/2019	NA	--	5.61	14.3	582	0.21	38.6
	10/14/2019	NA	--	5.64	16.2	825	0.59	46.3
	4/20/2020	NA	--	5.46	14.6	624.0	0.20	20.1
	10/28/2020	3.92	83.36	5.60	16.5	773.0	0.41	38.2
	4/14/2021	2.98	84.30	5.43	15.4	731.0	1.82	39.7
	10/27/2021	2.02	85.26	5.50	16.2	378.0	0.54	24.2
	5/24/2022	NA	--	--	--	--	--	--
	10/31/2022	10.74	76.54	6.05	16.2	840.0	0.28	-175.3
	2/22/2023	3.96	83.32	6.31	12.18	967.0	0.27	28.3
	8/16/2023	5.70	81.58	6.27	23.69	1.0	0.00	-98

Please see notes at end of table.

Table C-1
Groundwater Elevations and Field Parameters
Springdale Cleaners
Portland, Oregon

Notes:
°C = Degrees Celsius.
mS = MicroSiemens.
DO (ppm) = Dissolved Oxygen (parts per million)].
mV = Millivolts
-- = Not Measured
NA = Not Available

Table C-2
Groundwater Sampling Analytical Results: Chloroethene VOCs
Springdale Cleaners
Portland, Oregon

Monitoring Well ID	Sample Date	Analyte Concentration in µg/L					Total Molar VOCs in µmol/L
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	
JEMW-1	5/27/1999	< 1	< 1	< 1	< 1	< 1	< 1
	12/5/1999	--	--	--	--	--	--
	1/6/2000	--	--	--	--	--	--
	2/8/2000	--	--	--	--	--	--
	3/7/2000	--	--	--	--	--	--
	6/14/2000	--	--	--	--	--	--
	9/11/2000	--	--	--	--	--	--
	12/6/2000	--	--	--	--	--	--
	6/5/2001	--	--	--	--	--	--
	3/6/2002	--	--	--	--	--	--
	8/12/2002	--	--	--	--	--	--
	9/9/2002	--	--	--	--	--	--
	4/10/2003	--	--	--	--	--	--
	4/15/2003	--	--	--	--	--	--
	10/27/2003	--	--	--	--	--	--
	10/12/2004	--	--	--	--	--	--
	7/6/2005	--	--	--	--	--	--
	9/17/2007	**1.52**	< 1	< 1	< 1	< 1	< 1
	5/30/2008	< 1	< 1	< 1	< 1	< 1	< 1
	8/12/2008	--	--	--	--	--	--
	11/11/2008	**19**	< 1.0	**5.0**	< 1.0	< 0.20	**0.18**
	5/14/2009	< 1.0	< 1.0	< 1.0	< 1.0	< 0.20	< 0.20
	2/18/2010	--	--	--	--	--	--
	12/15/2010	< 1.0	< 1.0	< 1.0	< 1.0	< 0.20	< 0.20
	8/17/2011	< 1.0	< 1.0	< 1.0	< 1.0	< 0.20	< 0.20
	11/26/2012	--	--	--	--	--	--
	7/23/2014	--	--	--	--	--	--
	4/16/2015	--	--	--	--	--	--
	4/27/2016	--	--	--	--	--	--
	10/18/2016	--	--	--	--	--	--
	4/19/2017	--	--	--	--	--	--
	10/20/2017	--	--	--	--	--	--
	4/19/2018	--	--	--	--	--	--
	10/10/2018	--	--	--	--	--	--
	4/17/2019	--	--	--	--	--	--
	10/15/2019	--	--	--	--	--	--
	4/20/2020	<1.00	<1.00	**0.364 J**	<1.00	<1.00	**0.02**
	10/28/2020	<1.00	<1.00	**1.65 J**	<1.00	**0.377 J**	**0.04**
	4/14/2021	**0.402 J**	<1.00	**0.206 J**	<1.00	<1.00	**0.02**
	10/26/2021	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
	5/23/2022	<1.00 UJ	<1.00 UJ	**0.393 J**	<1.00 UJ	<1.00 UJ	**0.024 J**
	11/1/2022	**0.558 J**	**0.222 J**	**0.480 J**	<1.00	<1.00	**0.023**
	2/22/2023	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
	8/16/2023	<1.00	<1.00	**0.379 J**	<1.00	<1.00 UJ	**0.024**

Please see notes at end of table.

Table C-2
Groundwater Sampling Analytical Results: Chloroethene VOCs
Springdale Cleaners
Portland, Oregon

Monitoring Well ID	Sample Date	Analyte Concentration in µg/L					Total Molar VOCs in µmol/L
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	
JEMW-2	5/27/1999	< 1	< 1	< 1	< 1	< 1	< 1
	12/5/1999	--	--	--	--	--	--
	1/6/2000	--	--	--	--	--	--
	2/8/2000	--	--	--	--	--	--
	3/7/2000	--	--	--	--	--	--
	6/14/2000	--	--	--	--	--	--
	9/11/2000	--	--	--	--	--	--
	12/6/2000	--	--	--	--	--	--
	6/5/2001	--	--	--	--	--	--
	3/6/2002	--	--	--	--	--	--
	8/12/2002	--	--	--	--	--	--
	9/9/2002	--	--	--	--	--	--
	4/10/2003	--	--	--	--	--	--
	4/15/2003	--	--	--	--	--	--
	10/27/2003	--	--	--	--	--	--
	10/12/2004	--	--	--	--	--	--
	7/6/2005	--	--	--	--	--	--
	9/17/2007	< 1	< 1	< 1	< 1	< 1	< 1
	5/30/2008	--	--	--	--	--	--
	8/12/2008	--	--	--	--	--	--
	11/10/2008	--	--	--	--	--	--
	5/14/2009	--	--	--	--	--	--
	2/18/2010	--	--	--	--	--	--
	12/15/2010	--	--	--	--	--	--
	8/17/2011	--	--	--	--	--	--
	11/26/2012	--	--	--	--	--	--
	7/23/2014	--	--	--	--	--	--
	4/16/2015	--	--	--	--	--	--
	4/27/2016	--	--	--	--	--	--
	10/18/2016	--	--	--	--	--	--
	4/19/2017	--	--	--	--	--	--
	10/20/2017	--	--	--	--	--	--
	4/19/2018	--	--	--	--	--	--
	10/10/2018	--	--	--	--	--	--
	4/17/2019	--	--	--	--	--	--
	10/15/2019	--	--	--	--	--	--
	4/20/2020	<1.00	<1.00	**0.167 J**	<1.00	<1.00	**0.02**
	10/28/2020	<1.00	<1.00	**0.7 J**	<1.00	<1.00	**0.03**
	4/14/2021	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
	10/26/2021	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
	5/24/2022	<1.00 UJ	<1.00 UJ	**0.176 J**	<1.00 UJ	<1.00 UJ	**0.022 J**
	11/1/2022	<1.00	**0.231 J**	**0.233 J**	<1.00	<1.00	**0.020**
	2/22/2023	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
	8/16/2023	<1.00	<1.00	<1.00	<1.00	<1.00 UJ	<1.00

Please see notes at end of table.

Table C-2
Groundwater Sampling Analytical Results: Chloroethene VOCs
Springdale Cleaners
Portland, Oregon

Monitoring Well ID	Sample Date	Analyte Concentration in µg/L					Total Molar VOCs in µmol/L
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	
JEMW-3	5/28/1999	< 1	**26**	**6**	< 1	--	0.27
	12/8/1999	**69.3**	**29.5**	< 10	< 10	< 10	0.83
	1/6/2000	--	--	--	--	--	--
	2/8/2000	--	--	--	--	--	--
	3/7/2000	--	--	--	--	--	--
	6/16/2000	**1.5**	**11.3**	**7.6**	< 1	< 1	0.19
	9/11/2000	--	--	--	--	--	--
	12/5/2000	< 1	**34.8**	**14.6**	**1.7**	< 1	**0.44**
	6/5/2001	< 1	**20.3**	**10.9**	**1.1**	< 1	**0.29**
	3/6/2002	< 1	**19.5**	**99.4**	**30.8**	**23.6**	**1.87**
	8/12/2002	< 1	**13.4**	**16.6**	**1.8**	< 1	**0.30**
	9/9/2002	< 0.5	**9.3**	**15**	**1.6**	< 0.5	**0.25**
	4/10/2003	< 0.5	**16.0**	**25**	**2.8**	< 0.5	**0.41**
	4/15/2003	< 1	**8.8**	**20.3**	**2**	< 1	**0.31**
	10/27/2003	< 1	**7.1**	**22**	**2.8**	< 1	**0.32**
	10/12/2004	< 1	**2.2**	**16**	**1.54**	< 1	**0.21**
	7/6/2005	< 1	**3.9**	**21**	**2.55**	< 1	**0.29**
	9/17/2007	< 1	< 1	**12.3**	**1.48**	< 1	**0.16**
	5/30/2008	< 1	**1.28**	**8.60**	**1.41**	< 1	**0.12**
	8/12/2008	--	--	--	--	--	--
	11/11/2008	**3.0**	**2.4**	**18**	**2.2**	< 0.20	**0.25**
	5/15/2009	< 1.0	**1.2**	**9.5**	**1.5**	< 0.20	**0.13**
	2/18/2010	--	--	--	--	--	--
	12/15/2010	< 1.0	< 1.0	**7.5**	**1.1**	< 0.20	**0.10**
	8/17/2011	< 1.0	< 1.0	**6.0**	< 1.0	< 0.20	**0.08**
	11/26/2012	--	--	--	--	--	--
	7/23/2014	--	--	--	--	--	--
	4/16/2015	--	--	--	--	--	--
	4/27/2016	--	--	--	--	--	--
	10/18/2016	--	--	--	--	--	--
	4/19/2017	--	--	--	--	--	--
	10/20/2017	--	--	--	--	--	--
	4/19/2018	--	--	--	--	--	--
	10/10/2018	--	--	--	--	--	--
	4/17/2019	--	--	--	--	--	--
	10/15/2019	--	--	--	--	--	--
	4/20/2020	--	--	--	--	--	--
	10/28/2020	--	--	--	--	--	--
	4/14/2021	--	--	--	--	--	--
	10/25/2021	--	--	--	--	--	--
	5/23/2022	--	--	--	--	--	--
	11/1/2022	--	--	--	--	--	--
	2/22/2023	--	--	--	--	--	--
	8/16/2023	--	--	--	--	--	--

Please see notes at end of table.

Table C-2
Groundwater Sampling Analytical Results: Chloroethene VOCs
Springdale Cleaners
Portland, Oregon

Monitoring Well ID	Sample Date	Analyte Concentration in µg/L					Total Molar VOCs in µmol/L
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	
JEMW-4	5/28/1999	**98,000**	**8,300**	**740**	**170**	--	**664**
	12/8/1999	**63,900**	**6,430**	**871**	**137**	--	**445**
	1/6/2000	**39,800**	**5,450**	**608**	< 1	< 1	**288**
	2/8/2000	**30,600**	**4,200**	**580**	< 1	< 1	**222**
	3/7/2000	**47,400**	**9,730**	**1,330**	< 200	< 200	**376**
	6/15/2000	**4,420**	**35,900**	**37,900**	**628**	< 100	**698**
	9/12/2000	< 200	**680**	**73,700**	**588**	< 200	**774**
	12/6/2000	**79.9**	**623**	**91,400**	**1,380**	**366**	**968**
	6/5/2001	< 250	**298**	**43,900**	**808**	**9,510**	**616**
	3/6/2002	< 200	< 200	**38,400**	**816**	**9,690**	**561**
	8/12/2002	< 200	< 200	**54,700**	**532**	**4,060**	**636**
	9/9/2002	< 250	< 250	**61,000**	**750**	**7,700**	**762**
	4/10/2003	< 100	< 100	**66,000**	**570**	**5,700**	**779**
	4/15/2003	< 200	< 200	**53,500**	**558**	**4,900**	**637**
	10/27/2003	< 100	< 100	**32,300**	**810**	**5,740**	**434**
	10/12/2004	< 500	< 500	**55,200**	**990**	**8,900**	**725**
	7/6/2005	**2.9**	**1.2**	**35,700**	**929**	**9,240**	**526**
	9/17/2007	< 50	< 50	**10,500**	**1,460**	**4,310**	**193**
	5/30/2008	< 200	< 200	**4,420**	**974**	**1,150**	**75.4**
	8/12/2008	--	--	--	--	--	--
	11/10/2008	< 1.0	**2.6**	**5,600**	**960**	**1,500**	**91.7**
	5/14/2009	**1.2 HA,HP**	**1.4 HA,HP**	**8500 HA,HP**	**580 HA,HP**	**1500 HA,HP**	**118**
	2/18/2010	--	--	--	--	--	--
	12/15/2010	**1.2**	< 1.0	**303**	**470**	**323**	**13.2**
	8/17/2011	**2.7**	**4.6**	**454**	**131**	**58**	**7.0**
	11/26/2012	--	--	--	--	--	--
	7/23/2014	--	--	--	--	--	--
	4/16/2015	--	--	--	--	--	--
	4/27/2016	--	--	--	--	--	--
	10/18/2016	--	--	--	--	--	--
	4/19/2017	--	--	--	--	--	--
	10/20/2017	--	--	--	--	--	--
	4/19/2018	--	--	--	--	--	--
	10/10/2018	--	--	--	--	--	--
	4/19/2019	**2.11**	**1.58**	**17.4**	**6.02**	**5.96**	**0.4**
	10/15/2019	**0.408 J**	**0.546 J**	**7.01**	**5.31**	**12.3**	**0.3**
	4/21/2020	<1.00	**0.537 J**	**6.84**	**4.03**	**4.80**	**0.2**
	10/29/2020	<1.00	**0.43 J**	**5.15**	**3.29**	**4.40**	**0.2**
	4/14/2021	<1.00	<1.00	**1.15**	**3.03**	**2.08**	**0.1**
	10/26/2021	<1.00	**0.226 J**	**24.6**	**6.14**	**163 J+**	**2.9**
	5/24/2022	<1.00 UJ	**0.313 J**	**2.58 J**	**3.42 J**	**5.04 J**	**0.148 J**
	11/1/2022	**0.538 J**	**0.287 J**	**2.87**	**4.75**	<1.00	**0.092**
	2/27/2023	<1.00	**0.235 J**	**57.5**	**3.94**	**7.98**	**0.766**
	8/16/2023	<1.00	<1.00	**11.4**	**3.78**	**5.52 J-**	**0.252**

Table C-2
Groundwater Sampling Analytical Results: Chloroethene VOCs
Springdale Cleaners
Portland, Oregon

Monitoring Well ID	Sample Date	Analyte Concentration in µg/L					Total Molar VOCs in µmol/L
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	
JEMW-5	5/28/1999	**120,000**	**4,600**	**250**	< 1	--	**761**
	12/8/1999	**60,600**	**5,630**	**355**	< 100	< 100	**413**
	1/6/2000	**39,000**	**3,630**	< 400	< 400	< 400	**270**
	2/8/2000	**63,700**	**5,590**	**406**	< 200	< 200	**433**
	3/7/2000	**51,400**	**3,860**	**248**	< 200	< 200	**345**
	6/15/2000	**40,600**	**8,010**	**526**	< 100	< 100	**313**
	9/12/2000	**87,300**	**7,660**	**775**	< 500	< 500	**599**
	12/6/2000	**108,000**	**9,850**	**1,000**	< 500	< 500	**743**
	6/5/2001	**132,000**	**4,020**	< 500	< 500	< 500	**836**
	3/6/2002	**121,000**	**3,130**	< 1,000	< 1,000	< 1,000	**772**
	8/12/2002	**66,300**	**5,340**	< 500	< 500	< 500	**450**
	9/9/2002	**43,000**	**3,200**	< 500	< 500	< 500	**293**
	4/10/2003	**54,000**	**4,600**	**270**	**93**	< 50	**365**
	4/15/2003	**74,000**	**4,500**	< 500	< 500	< 500	**490**
	10/27/2003	**65,800**	**4,750**	< 200	< 200	< 200	**437**
	10/12/2004	**108,000**	**2,760**	< 1,000	< 1,000	< 1,000	**691**
	7/6/2005	**116,000**	**3,270**	< 1,000	< 1,000	< 1,000	**743**
	9/18/2007	**118,000**	**4,560**	**1,000**	< 500	< 500	**763**
	5/29/2008	**103,000**	**6,980**	< 1,000	< 1,000	< 1,000	**693**
	8/12/2008	--	--	--	--	--	--
	11/11/2008	**48,000**	**6,600**	**1,000**	**39**	**10**	**351**
	5/14/2009	**62,000**	**24,000**	**13,000**	**190**	**11**	**693**
	2/18/2010	--	--	--	--	--	--
	12/15/2010	**160**	**231**	**120,000**	**2,100**	**1,600**	**1,288**
	8/17/2011	**3,010**	**2,840**	**217,000**	**2,770**	**14,900**	**2,545**
	11/26/2012	**700**	< 500	**630,000**	**3,300**	**56,000**	**7,435**
	7/23/2014	< 5,000	< 5,000	**49,000**	< 5,000	**21,000**	**901**
	4/16/2015	< 50	< 50	**49,000**	**1,400**	**41,000**	**1,176**
	4/27/2016	< 50	< 50	**30,400**	**969**	**25,300**	**729**
	10/18/2016	**603**	**239**	**72,500**	**1,880**	**21,300**	**1,114**
	4/20/2017	**49.6 J**	< 50	**20,800**	**1,370**	**26,300**	**650**
	10/19/2017	<250	<20	**21,600**	**1,350**	**21,100**	**575**
	4/18/2018	<200	<200	**16,200**	**1,410**	**18,100**	**473**
	10/10/2018	<200	<200	**18,900**	**1,050**	**7,010**	**319**
	4/17/2019	**13.7**	<2,000	**28,600**	**754**	**8,650**	**449**
	10/15/2019	**1.26**	**1.34**	**17,600**	**1,050**	**10,400**	**359**
	4/21/2020	<200	<200	**21,100**	**881**	**7,610**	**350**
	10/29/2020	<200	<100	**7,660**	**214**	**3,060**	**131**
	4/14/2021	**668 J+**	**182 J**	**14,800**	**748**	**8,900**	**308**
	10/26/2021	**96.4 J**	**47.5 J**	**18,500**	**430**	**6,410 J+**	**299**
	5/24/2022	**157 J**	<200 UJ	**16900 J**	**710 J**	**7250 J**	**299 J**
	10/31/2022	**127 J**	**45.6 J**	**8,550**	**401**	**2,870**	**139**
	2/22/2023	<50.0	<50.0	**3,340**	**474**	**2,860**	**85**
	8/16/2023	<200	<200	**1,500**	**192 J**	**3,310 J-**	**72**

Please see notes at end of table.

Table C-2
Groundwater Sampling Analytical Results: Chloroethene VOCs
Springdale Cleaners
Portland, Oregon

Monitoring Well ID	Sample Date	Analyte Concentration in µg/L					Total Molar VOCs in µmol/L
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	
JEMW-6	12/8/1999	**104**	**612**	**6,490**	**3,390**	**1,920**	**138**
	1/6/2000	**52**	**348**	**4,480**	**2,460**	**1,470**	**98**
	2/8/2000	**39.6**	**389**	**5,440**	**3,070**	**1,650**	**117**
	3/7/2000	**44.3**	**446**	**5,340**	**2,790**	**1,780**	**116**
	6/15/2000	**20.7**	**218**	**6,860**	**3,310**	**2,090**	**140**
	9/12/2000	< 50	**456**	**6,140**	**2,900**	**2,040**	**130**
	12/6/2000	< 50	**348**	**8,100**	**4,200**	**2,870**	**176**
	6/5/2001	< 20	**339**	**5,650**	**2,970**	**2,330**	**129**
	3/6/2002	< 100	**435**	**7,340**	**3,330**	**2,120**	**148**
	8/12/2002	< 100	**179**	**8,290**	**3,250**	**2,060**	**154**
	9/9/2002	< 130	< 130	**18,000**	**4,300**	**1,100**	**249**
	4/10/2003	< 50	**110.0**	**13,000**	**3,300**	**1,600**	**195**
	4/15/2003	< 100	< 100	**8,230**	**4,040**	**3,210**	**179**
	10/27/2003	**31**	**102.0**	**5,340**	**2,930**	**2,190**	**121**
	10/12/2004	< 50	< 50	**7,590**	**3,280**	**3,430**	**167**
	7/6/2005	**93**	**65.0**	**6,870**	**3,070**	**3,960**	**167**
	9/17/2007	< 100	< 100	**5,740**	**2,660**	**3,310**	**140**
	5/29/2008	< 200	< 200	**5,590**	**2,700**	**3,800**	**148**
	8/12/2008	--	--	--	--	--	--
	11/11/2008	**170**	**110**	**5,000**	**2,600**	**3,800**	**141**
	5/15/2009	**8.7**	**25**	**5,500**	**2,700**	**3,400**	**139**
	2/18/2010	--	--	--	--	--	--
	12/15/2010	**19.5**	**69**	**4,290**	**2,180**	**3,260**	**120**
	8/17/2011	**9.1**	**82**	**2,480**	**1,420**	**2,500**	**81**
	11/26/2012	**3.8**	**12**	**5,100**	**2,400**	**4,000**	**141**
	7/23/2014	< 50	< 50	**2,500**	**860**	**2,500**	**75**
	4/16/2015	**5.6**	**18**	**2,100**	**630**	**1,500**	**52**
	4/28/2016	**1.8**	**7.1**	**2,780**	**752**	**1,590**	**62**
	10/18/2016	< 25	< 25	**1,280**	**215**	**475**	**23**
	4/20/2017	< 25	< 25	**1,880**	**358**	**1,130**	**41**
	10/20/2017	**0.956 J**	**0.766 J**	**70.5**	**23.2**	**108**	**2.7**
	4/18/2018	<10	<10	**525**	**23.8**	**116**	**7.6**
	10/10/2018	<10.0	<10.0	**337**	**128**	**718**	**16.4**
	4/17/2019	**7.88**	**21.3**	**731**	**10.9**	**67.1**	**8.9**
	10/15/2019	<1.00	**1.88**	**508**	**65.5**	**1,390**	**28.2**
	4/21/2020	**0.663 J**	**1.20**	**70.1**	**4.47**	**61.6**	**1.8**
	10/29/2020	<1.00	**0.520 J**	**138**	**21.6**	**0.191 J**	**1.7**
	4/14/2021	**187**	**48.4**	**765**	**12.5**	**43.3**	**10.2**
	10/27/2021	**0.612 J**	**1.08**	**29.2**	<1.00	**0.369 J**	**0.3**
	5/24/2022	**3.65 J**	**2.25 J**	**87.3 J**	**7.34 J**	**326 J**	**6.23 J**
	11/1/2022	**2.08**	**1.16**	**27.4**	**4.29**	**138.0 J-**	**2.56**
	2/22/2023	<1.00	**0.275 J**	**7.43**	**2.04**	**144**	**2.41**
	8/16/2023	<1.00	<1.00	**6.32**	**6.49**	**119 J-**	**2.04**

Table C-2
Groundwater Sampling Analytical Results: Chloroethene VOCs
Springdale Cleaners
Portland, Oregon

Monitoring Well ID	Sample Date	Analyte Concentration in µg/L					Total Molar VOCs in µmol/L
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	
JEMW-7	12/5/1999	< 1	**5.8**	**2.7**	< 1	< 1	**0.088**
	1/6/2000	--	--	--	--	--	--
	2/8/2000	--	--	--	--	--	--
	3/7/2000	--	--	--	--	--	--
	6/16/2000	< 1	< 1	< 1	< 1	< 1	< 1
	9/11/2000	--	--	--	--	--	--
	12/5/2000	< 1	< 1	< 1	< 1	**10.1**	**0.18**
	6/5/2001	--	--	--	--	--	--
	3/6/2002	< 1	**1.7**	**21.7**	**5.2**	**3.1**	**0.34**
	8/12/2002	< 1	< 1	< 1	< 1	< 1	< 1
	9/9/2002	< 0.5	< 0.5	< 0.5	< 0.5	**0.98**	**0.024**
	4/10/2003	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	4/15/2003	< 1	< 1	< 1	< 1	< 1	< 1
	10/27/2003	< 1	< 1	< 1	< 1	< 1	< 1
	10/12/2004	< 1	< 1	< 1	< 1	< 1	< 1
	7/6/2005	< 1	< 1	< 1	< 1	< 1	< 1
	9/17/2007	< 1	< 1	< 1	< 1	< 1	< 1
	5/30/2008	--	--	--	--	--	--
	8/12/2008	--	--	--	--	--	--
	11/10/2008	--	--	--	--	--	--
	5/14/2009	--	--	--	--	--	--
	2/18/2010	--	--	--	--	--	--
	12/15/2010	--	--	--	--	--	--
	8/17/2011	--	--	--	--	--	--
	11/26/2012	--	--	--	--	--	--
	7/23/2014	--	--	--	--	--	--
	4/16/2015	--	--	--	--	--	--
	4/27/2016	--	--	--	--	--	--
	10/18/2016	--	--	--	--	--	--
	4/19/2017	--	--	--	--	--	--
	10/20/2017	--	--	--	--	--	--
	4/19/2018	--	--	--	--	--	--
	10/10/2018	--	--	--	--	--	--
	4/17/2019	--	--	--	--	--	--
	10/15/2019	--	--	--	--	--	--
	4/20/2020	--	--	--	--	--	--
	10/28/2020	--	--	--	--	--	--
	4/14/2021	--	--	--	--	--	--
	10/25/2021	--	--	--	--	--	--
	5/23/2022	--	--	--	--	--	--
	11/1/2022	--	--	--	--	--	--
	2/22/2023	--	--	--	--	--	--
	8/16/2023	--	--	--	--	--	--

Please see notes at end of table.

Table C-2
Groundwater Sampling Analytical Results: Chloroethene VOCs
Springdale Cleaners
Portland, Oregon

Monitoring Well ID	Sample Date	Analyte Concentration in µg/L					Total Molar VOCs in µmol/L
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	
MW-1	4/16/1998	< 1	< 1	< 1	< 1	< 1	<1
	May 1998	< 1	< 1	< 1	< 1	< 1	<1
	5/27/1999	< 1	< 1	< 1	< 1	< 1	<1
	12/5/1999	--	--	--	--	--	--
	1/6/2000	--	--	--	--	--	--
	2/8/2000	--	--	--	--	--	--
	3/7/2000	--	--	--	--	--	--
	6/14/2000	--	--	--	--	--	--
	9/11/2000	--	--	--	--	--	--
	12/6/2000	--	--	--	--	--	--
	6/5/2001	--	--	--	--	--	--
	3/6/2002	--	--	--	--	--	--
	8/12/2002	--	--	--	--	--	--
	9/9/2002	--	--	--	--	--	--
	4/10/2003	--	--	--	--	--	--
	4/15/2003	--	--	--	--	--	--
	10/27/2003	--	--	--	--	--	--
	10/12/2004	--	--	--	--	--	--
	7/6/2005	--	--	--	--	--	--
	9/17/2007	< 1	< 1	**1.35**	**1.34**	< 1	**0.043**
	5/30/2008	--	--	--	--	--	--
	8/12/2008	--	--	--	--	--	--
	11/10/2008	--	--	--	--	--	--
	5/14/2009	--	--	--	--	--	--
	2/18/2010	--	--	--	--	--	--
	12/15/2010	--	--	--	--	--	--
	8/17/2011	--	--	--	--	--	--
	11/26/2012	--	--	--	--	--	--
	7/23/2014	--	--	--	--	--	--
	4/16/2015	--	--	--	--	--	--
	4/27/2016	--	--	--	--	--	--
	10/18/2016	--	--	--	--	--	--
	4/19/2017	--	--	--	--	--	--
	10/20/2017	--	--	--	--	--	--
	4/19/2018	--	--	--	--	--	--
	10/10/2018	--	--	--	--	--	--
	4/17/2019	--	--	--	--	--	--
	10/15/2019	--	--	--	--	--	--
	4/20/2020	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
	10/28/2020	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
	4/14/2021	**0.75 J**	<1.00	<1.00	<1.00	<1.00	**0.027**
	10/25/2021	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
	5/23/2022	<1.00 UJ	<1.00 UJ	<1.00 UJ	<1.00 UJ	<1.00 UJ	<1.00 UJ
	11/1/2022	**0.493 J**	<1.00	<1.00	<1.00	<1.00	<1.00
	2/22/2023	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
	8/16/2023	<1.00	<1.00	<1.00	<1.00	<1.00 UJ	<1.00 UJ

Please see notes at end of table.

Table C-2
Groundwater Sampling Analytical Results: Chloroethene VOCs
Springdale Cleaners
Portland, Oregon

Monitoring Well ID	Sample Date	Analyte Concentration in µg/L					Total Molar VOCs in µmol/L
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	
MW-2	4/16/1998	**240**	**250**	**190**	**390**	--	**9.33**
	May 1998	**11,600**	**330**	**270**	**300**	--	**78.3**
	5/27/1999	**7,000**	**480**	**130**	**93**	--	**48.2**
	12/5/1999	**818**	**1,190**	**542**	**381**	< 10	**23.6**
	1/6/2000	**4,210**	**1,460**	**677**	**141**	< 10	**45.0**
	2/8/2000	**4,180**	**1,480**	**1,010**	**86**	< 20	**47.9**
	3/7/2000	**3,360**	**825**	**2,350**	**100**	< 20	**52.0**
	6/14/2000	**3,870**	**3,550**	**2,050**	**145**	**180**	**75.9**
	9/11/2000	**635**	**1,580**	**7,900**	**323**	**1,230**	**120**
	12/6/2000	< 50	< 50	**1,370**	**300**	**433**	**24.5**
	6/5/2001	**92**	**159**	**672**	**130**	**145**	**12.4**
	3/6/2002	**274**	**1,790**	**1,210**	**135**	**197**	**32.3**
	8/12/2002	< 10	**109**	**1,150**	**112**	**152**	**16.3**
	9/9/2002	< 1	**4.5**	**410**	**110**	**77**	**6.63**
	4/10/2003	< 0.5	**51.0**	**60**	**120**	**14**	**2.47**
	4/15/2003	**101**	**488**	**486**	**140**	**110**	**12.5**
	10/27/2003	< 10	**120**	**234**	**347**	**114**	**8.76**
	10/12/2004	**13**	**238**	**2,000**	**1,030**	**632**	**43.3**
	7/6/2005	**7,730**	**3,040**	**1,520**	**302**	**254**	**92.6**
	9/17/2007	< 2	**9.7**	**780**	**498**	**301**	**18.1**
	5/30/2008	--	--	--	--	--	--
	8/12/2008	--	--	--	--	--	--
	11/10/2008	**5.0**	**890**	**2,200**	**1,200**	**400**	**48.3**
	5/14/2009	**710**	**2,400**	**1,200**	**340**	**140**	**40.7**
	2/18/2010	--	--	--	--	--	--
	12/15/2010	**377**	**829**	**1,160**	**509**	**363**	**31.6**
	8/17/2011	**312**	**1,460**	**1,170**	**384**	**279**	**33.5**
	11/26/2012	--	--	--	--	--	--
	7/23/2014	--	--	--	--	--	--
	4/16/2015	--	--	--	--	--	--
	4/27/2016	--	--	--	--	--	--
	10/18/2016	**3,090**	**1,130**	**2,050**	**448**	**221**	**56.5**
	4/19/2017	**692**	**2,060**	**2,370**	**641**	**329**	**56.2**
	10/20/2017	**1,450**	**1,040**	**2,360**	**825**	**656**	**60.0**
	4/19/2018	**1,600**	**261**	**315**	**15.3**	**3.02**	**15.1**
	10/10/2018	**1,390**	**2,220**	**3,660**	**1,490**	**508**	**86.5**
	4/17/2019	**1,200**	**218**	**305**	**9.57**	**0.87 J**	**12.2**
	10/15/2019	**1,630**	**991**	**1,500**	**491**	**185**	**40.9**
	4/20/2020	**1,380**	**169**	**206**	**7.70 J**	<50.0	**12.2**
	10/28/2020	**1,570**	**1,340**	**1,810**	**665**	**149**	**47.6**
	4/14/2021	**742**	**105**	**101**	**5.00 J**	<10.0	**6.4**
	10/25/2021	**1,170**	**886**	**1,580**	**545**	**251 J+**	**39.7**
	5/23/2022	**1170 J**	**161 J**	**149 J**	**6.00 J**	<1.00 UJ	**9.89 J**
	11/1/2022	**37.6 J**	**29.2 J**	**7,960**	**101**	**337**	**88.99**
	2/22/2023	**24.6 J**	<50.0	**2,270**	**28.7 J**	**595**	**33.57**
	8/16/2023	<50.0	<50.0	**7,490**	**81.8**	**1,920 J-**	**109.17**

Please see notes at end of table.

Table C-2
Groundwater Sampling Analytical Results: Chloroethene VOCs
Springdale Cleaners
Portland, Oregon

Monitoring Well ID	Sample Date	Analyte Concentration in µg/L					Total Molar VOCs in µmol/L
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	
MW-3	4/16/1998	< 1	< 1	< 1	< 1	--	< 1
	May 1998	**1.8**	< 1	< 1	< 1	--	**0.025**
	5/27/1999	< 1	< 1	< 1	< 1	--	< 1
	12/5/1999	< 1	**6.8**	**1.2**	< 1	< 1	**0.080**
	1/6/2000	--	--	--	--	--	--
	2/8/2000	--	--	--	--	--	--
	3/7/2000	--	--	--	--	--	--
	6/14/2000	--	--	--	--	--	--
	9/11/2000	--	--	--	--	--	--
	12/5/2000	< 1	< 1	< 1	< 1	< 1	< 1
	6/5/2001	--	--	--	--	--	--
	3/6/2002	--	--	--	--	--	--
	8/12/2002	< 1	< 1	< 1	< 1	< 1	< 1
	9/9/2002	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	4/10/2003	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	4/15/2003	< 1	< 1	< 1	< 1	< 1	< 1
	10/27/2003	< 1	< 1	< 1	< 1	< 1	< 1
	10/12/2004	< 1	< 1	< 1	< 1	< 1	< 1
	7/6/2005	< 1	< 1	< 1	< 1	< 1	< 1
	9/17/2007	< 1	< 1	< 1	< 1	< 1	< 1
	5/30/2008	--	--	--	--	--	--
	8/12/2008	--	--	--	--	--	--
	11/10/2008	--	--	--	--	--	--
	5/14/2009	--	--	--	--	--	--
	2/18/2010	--	--	--	--	--	--
	12/15/2010	--	--	--	--	--	--
	8/17/2011	--	--	--	--	--	--
	11/26/2012	--	--	--	--	--	--
	7/23/2014	--	--	--	--	--	--
	4/16/2015	--	--	--	--	--	--
	4/27/2016	--	--	--	--	--	--
	10/18/2016	--	--	--	--	--	--
	4/19/2017	--	--	--	--	--	--
	10/20/2017	--	--	--	--	--	--
	4/19/2018	--	--	--	--	--	--
	10/10/2018	--	--	--	--	--	--
	4/17/2019	--	--	--	--	--	--
	10/15/2019	--	--	--	--	--	--
	4/20/2020	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
	10/28/2020	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
	4/14/2021	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
	10/25/2021	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
	5/23/2022	<1.00 UJ	<1.00 UJ	<1.00 UJ	<1.00 UJ	<1.00 UJ	<1.00 UJ
	11/1/2022	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
	2/22/2023	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
	8/16/2023	<1.00	<1.00	<1.00	<1.00	<1.00 UJ	<1.00

Please see notes at end of table.

Table C-2
Groundwater Sampling Analytical Results: Chloroethene VOCs
Springdale Cleaners
Portland, Oregon

Monitoring Well ID	Sample Date	Analyte Concentration in µg/L					Total Molar VOCs in µmol/L
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	
MW-4	May 1998	**1,200**	**610**	**640**	**520**	--	**23.8**
	5/27/1999	**340**	**180**	**230**	**160**	--	**7.44**
	12/6/1999	**648**	**926**	**658**	**543**	--	**23.3**
	1/7/2000	**22.3**	**621**	**904**	**468**	< 5	**19.1**
	2/8/2000	**25.5**	**534**	**504**	**232**	< 5	**11.9**
	3/7/2000	**26.6**	**380**	**386**	**140**	< 5	**8.52**
	6/14/2000	**4.5**	**17.5**	**489**	**174**	**2.6**	**7.04**
	9/11/2000	< 5	**12.4**	**351**	**302**	**62.1**	**7.84**
	12/6/2000	< 5	< 5	**45.2**	**420**	**10.6**	**5.00**
	6/6/2001	**17.8**	**74.4**	**497**	**144**	**159**	**9.83**
	3/6/2002	**65**	**306**	**654**	**41.4**	**91.6**	**11.4**
	8/12/2002	**1**	**2.2**	**16.2**	**6.2**	**5.5**	**0.34**
	9/9/2002	< 0.5	**2.2**	**100**	**18**	**28**	**1.68**
	4/10/2003	< 1.3	**260**	**610**	**19**	**27**	**8.90**
	4/15/2003	**10.6**	**122**	**539**	**19.6**	**38**	**7.37**
	10/27/2003	< 1	**1.7**	**5.4**	**2.0**	< 1	**0.10**
	10/12/2004	< 1	< 1	**2.58**	**1.58**	**1.03**	**0.066**
	7/6/2005	< 1	< 1	**20.3**	**1.79**	**6.21**	**0.33**
	9/17/2007	< 1	< 1	**5.0**	**2.24**	**1.94**	**0.11**
	5/30/2008	--	--	--	--	--	--
	8/12/2008	--	--	--	--	--	--
	11/10/2008	--	--	--	--	--	--
	5/14/2009	--	--	--	--	--	--
	2/18/2010	--	--	--	--	--	--
	12/15/2010	--	--	--	--	--	--
	8/17/2011	--	--	--	--	--	--
	11/26/2012	--	--	--	--	--	--
	7/23/2014	--	--	--	--	--	--
	4/16/2015	--	--	--	--	--	--
	4/27/2016	--	--	--	--	--	--
	10/18/2016	--	--	--	--	--	--
	4/19/2017	--	--	--	--	--	--
	10/20/2017	--	--	--	--	--	--
	4/19/2018	--	--	--	--	--	--
	10/10/2018	--	--	--	--	--	--
	4/17/2019	--	--	--	--	--	--
	10/15/2019	--	--	--	--	--	--
	4/20/2020	**1.79**	**40.7**	**145**	**1.96**	**5.95**	**1.93**
	10/28/2020	<1.00	<1.00	**80.7**	**2.39**	**34.8**	**1.42**
	4/14/2021	**5.85 J+**	**71.7**	**137 J**	**0.923 J**	**3.57**	**2.06**
	10/25/2021	<5.00	**3.72 J**	**125**	**2.45 J**	**37.5 J+**	**1.96**
	5/23/2022	**5.48 J**	**64.4 J**	**115 J**	**1.39 J**	**3.55 J**	**1.78 J**
	11/1/2022	**1.16**	**0.937 J**	**482**	**10.1**	**158**	**7.62**
	2/22/2023	<1.00	<1.00	**18.8**	**0.554 J**	**25.3**	**0.61**
	8/16/2023	<1.00	**0.200 J**	**1.42**	**0.283 J**	**4.69 J-**	**0.10**
MW-5-10	5/29/2008	**85,900**	**4,760**	**14,600**	< 200	< 200	**707**

Please see notes at end of table.

Table C-2
Groundwater Sampling Analytical Results: Chloroethene VOCs
Springdale Cleaners
Portland, Oregon

Monitoring Well ID	Sample Date	Analyte Concentration in µg/L					Total Molar VOCs in µmol/L
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	
MW-5-20	5/29/2008	**30,000**	< 5,000	**457,000**	< 5,000	**9,900**	**5,098**
	8/12/2008	--	--	--	--	--	--
	11/10/2008	**14,000**	**2,500**	**540,000**	**3,000**	**15,000**	**5,945**
	5/14/2009	**320**	**77**	**700,000**	**3,300**	**21,000**	**7,599**
	2/18/2010	--	--	--	--	--	--
	12/15/2010	< 500	**26.7**	**420,000**	**3,220**	**21,600**	**4,713**
	8/16/2011	**6,250**	**6,680**	**618,000**	**4,620**	**44,700**	**7,226**
	11/26/2012	< 250	< 250	**120,000**	**1,900**	**30,000**	**1,739**
	7/22/2014	< 1,000	< 1,000	**590,000**	**1,400**	**16,000**	**6,363**
	4/16/2015	< 250	< 250	**1,500,000**	**2,600**	**33,000**	**16,029**
	4/27/2016	**1,480**	**272**	**679,000**	**3,040**	**38,400**	**7,661**
	10/18/2016	< 5,000	< 5,000	**486,000**	**2,960**	**23,400**	**5,452**
	4/19/2017	**2,420**	**381**	**530,000**	**3,860**	**42,300**	**6,201**
	10/19/2017	<10,000	<250	**554,000**	**2,920**	**26,000**	**6,192**
	4/18/2018	**1,800**	<10,000	**572,000**	**5,150**	**41,000**	**6,658**
	10/10/2018	<10,000	<10,000	**667,000**	<10,000	**38,900**	**7,622**
	4/17/2019	**1,320 E**	**96.8**	**683,000**	**2,470**	**32,900**	**7,606**
	10/15/2019	**1,600 E**	**169**	**747,000**	**4,530 E**	**41,400**	**8,426**
	4/21/2020	<10,000	<10,000	**670,000**	**3,440 J**	**38,000**	**7,623**
	10/29/2020	**11,700**	<10,000	**693,000**	<10,000	**63,000**	**8,317**
	4/14/2021	<10,000	<10,000	**605,000**	**3,050 J**	**55,500**	**7,228**
	10/26/2021	<10,000	<10,000	**647,000**	**3,830 J**	**37,300**	**7,378**
	5/24/2022	**29500 J**	**5660 J**	**658000 J**	**2390 J**	**24400 J**	**7423 J**
	10/31/2022	**41,800**	**3,140**	**614,000**	**3,690 J**	**84,900**	**8,006**
	2/27/2023	**5490 J**	<10,000	**593,000**	**2430 J**	**49,700**	**7,008**
	8/16/2023	<10000	<10000	**528,000**	**2,280 J**	**60,400 J-**	**6,505**
MW-6-10	5/29/2008	**31,400**	**670**	**975**	< 500	< 500	**211**
MW-6-20	5/29/2008	**114,000**	**24,100**	**11,900**	< 1,000	< 1,000	**1,007**
	8/12/2008	--	--	--	--	--	--
	11/11/2008	**71,000**	**21,000**	**10,000**	< 1.0	**18**	**691**
	5/14/2009	**97000 HA,HP**	**40000 HA,HP**	**7500 HA,HP**	**200 HA,HP**	**25 HA,HP**	**969**
	2/18/2010	--	--	--	--	--	--
	12/15/2010	**9,310**	**3,160**	**120,000**	**4,410**	**38.9**	**1,364**
	8/17/2011	**2,150**	**739**	**200,000**	**2,430**	**564**	**2,116**
	11/26/2012	**25,000**	**730**	**65,000**	**1,800**	**17,000**	**1,117**
	7/22/2014	< 500	< 500	**26,000**	**890**	**11,000**	**457**
	4/16/2015	**7,200**	**480**	**9,100**	**490**	**9,800**	**303**
	4/27/2016	**8.57**	**4.2**	**5,040**	**187**	**2,970**	**102**
	10/18/2016	**119 J**	< 200	**12,900**	**452**	**7,440**	**258**
	4/19/2017	< 200	< 200	**10,200**	**383**	**6,470**	**214**
	10/20/2017	**24.0 J**	**17.2 J**	**14,700**	**486**	**7,730**	**281**
	4/18/2018	**2,630**	**307**	**8,730**	**339**	**6,000**	**208**
	10/10/2018	**617**	**229**	**9,310**	**338**	**4,440**	**176**
	4/17/2019	**832**	**605**	**5,930**	**271**	**3,990**	**137**
	10/15/2019	**169**	**160**	**8,340**	**58.8**	**4,010**	**153**
	4/21/2020	**6,370**	**1,030**	**7,500**	**638**	**6,590**	**236**
	10/29/2020	**2,950**	**797**	**6,920**	**599**	**5,020**	**182**
	4/14/2021	**270**	**107**	**2,350**	**302**	**2,370**	**68**
	10/27/2021	**3,120**	**565**	**9,880**	**1,040**	**5,890**	**230**
	5/24/2022	**756 J**	**675 J**	**12600 J**	**1030 J**	**5620 J**	**240 J**
	10/31/2022	**591**	**877**	**7,030**	**252**	**4,680**	**160**
	2/22/2023	**1,520**	**817**	**5,430**	**84.9 J**	**3,140**	**123**
	8/16/2023	**296**	**714**	**10,500**	**126**	**3,180 J-**	**168**

Please see notes at end of table.

Table C-2
Groundwater Sampling Analytical Results: Chloroethene VOCs
Springdale Cleaners
Portland, Oregon

Monitoring Well ID	Sample Date	Analyte Concentration in µg/L					Total Molar VOCs in µmol/L
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	
MW-7	8/12/2008	**139,000**	**9,340**	**6,540**	< 2,000	< 2,000	**1,003**
	11/10/2008	**16,000**	**2,200**	**4,300**	**310**	**160**	**163**
	5/14/2009	**780**	**680**	**160,000**	**1,400**	**450**	**1,682**
	2/18/2010	--	--	--	--	--	--
	12/16/2010	< 100	**79**	**107,000**	**1,430**	**495**	**1,127**
	8/16/2011	< 100	< 100	**156,000**	**902**	**450**	**1,626**
	11/26/2012	**120**	**150**	**200,000**	**1,300**	**1,100**	**2,096**
	7/22/2014	< 2,000	< 2,000	**160,000**	**1,100**	**1,600**	**1,701**
	4/16/2015	**140**	**60 J**	**200,000**	**1,800**	**2,600**	**2,125**
	4/27/2016	< 50	**26.6 J**	**228,000**	**2,170**	**5,480**	**2,462**
	10/18/2016	< 50	**35 J**	**124,000**	**3,850**	**2,520**	**1,360**
	4/19/2017	**32.6 J**	**84.8**	**19,200**	**3,420**	**5,600**	**324**
	10/19/2017	<5,000	**3,060 J**	**209,000**	**2,910**	**6,400**	**2,327**
	4/18/2018	<1,000	<1,000	**197,000**	**2,220**	**6,300**	**2,163**
	10/10/2018	<1,000	<1,000	**160,000**	**2,290**	**5,510**	**1,769**
	4/17/2019	<1,000	<1,000	**181,000**	**2,010**	**7,280**	**2,011**
	10/15/2019	**19.8 J**	**15.7 J**	**209,000**	**1,960**	**2,940**	**2,223**
	4/21/2020	<5,000	<5,000	**214,000**	**2,620 J**	**7,170**	**2,383**
	10/29/2020	<5,000	<5,000	**155,000**	**1,700 J**	**4,330 J**	**1,720**
	4/14/2021	<5,000	<5,000	**132,000**	**1,470 J**	**5,400 J**	**1,497**
	10/26/2021	<5,000	<5,000	**171,000**	**2,410 J**	**6,540 J+**	**1,928**
	5/24/2022	<2,000 UJ	<2,000 UJ	**98800 J**	**1160 J**	**2540 J**	**1085 J**
	11/1/2022	<2,000	**436 J**	**90,100**	**912 J**	**1,830**	**977**
	2/27/2023	<2,000	<2,000	**148,000**	**1570 J**	<2,000	**1,572**
	8/16/2023	<2000	<2000	**137,000**	**1560 J**	**2,810 J-**	**1,488**
MW-8	8/12/2008	**221,000**	**6,640**	< 2,000	< 2,000	< 2,000	**1,420**
	11/10/2008	**170,000**	**4,300**	**3,600**	**150**	**120**	**1,098**
	5/14/2009	**2,300**	**33,000**	**100,000**	**1,200**	**44**	**1,310**
	2/18/2010	--	--	--	--	--	--
	12/16/2010	**563**	**1,810**	**95,500**	< 1.0	**504**	**1,010**
	8/16/2011	**3,870**	**4,470**	**114,000**	**630**	**337**	**1,245**
	11/26/2012	**73**	**1,100**	**95,000**	**840**	**2,500**	**1,037**
	7/22/2014	**17,000**	**6,600**	**95,000**	**700**	**660**	**1,150**
	4/16/2015	--	--	--	--	--	--
	4/28/2016	**85,100**	**9,400**	**44,400**	**356**	**335**	**1,052**
	10/18/2016	**74,300**	**11,400**	**37,900**	**382**	**234**	**933**
	4/19/2017	**106,000**	**7,210**	**26,500**	**299**	**95.3 J**	**972**
	10/19/2017	**117,000**	**10,900**	**29,800**	**351**	**141**	**1,102**
	4/18/2018	**136,000**	**8,770**	**25,300**	**297**	<1,000	**1,159**
	10/10/2018	**58,400**	**9,800**	**51,400**	**497 J**	**320 J**	**967**
	4/17/2019	**117,000**	**8,840**	**30,400**	**312**	**352 J**	**1,095**
	10/15/2019	**61,900**	**14,500**	**49,300**	<2,000	<2,000	**1,018**
	4/21/2020	**144,000**	**10,600**	**39,700**	**352 J**	<2,000	**1,378**
	10/29/2020	**94,300**	**9,380**	**43,700**	**498 J**	<2,000	**1,112**
	4/14/2021	**88,600 J+**	**20,400**	**77,100**	**766 J**	**862 J**	**1,507**
	10/26/2021	**63,200**	**4,700**	**39,900**	<2000	**1,140 J**	**857**
	5/24/2022	**125000 J**	**7790 J**	**43400 J**	**468 J**	<2,000 UJ	**1282 J**
	10/31/2022	**58,300**	**7,220**	**93,400**	**714**	**1,070 J**	**1,394**
	2/22/2023	**99,800**	**10,200**	**78,900**	**529 J**	<2,000	**1,515**
	8/16/2023	**3,480**	**1,780 J**	**161,000**	**1,410 J**	**790 J-**	**1,722**

Please see notes at end of table.

Table C-2
Groundwater Sampling Analytical Results: Chloroethene VOCs
Springdale Cleaners
Portland, Oregon

Monitoring Well ID	Sample Date	Analyte Concentration in µg/L					Total Molar VOCs in µmol/L
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	
MW-9	2/18/2010	17,000	28,000	11,000	95	90	432
	12/16/2010	3,880	16,200	12,800	984	278	293
	8/16/2011	11,700	26,800	23,000	780	700	531
	11/26/2012	--	--	--	--	--	--
	7/22/2014	< 250	< 250	26,000	1,100	6,800	390
	4/16/2015	22 J	77	22,000	1,500	9,900	402
	4/27/2016	6.43 J	36.7	20,000	1,340	10,700	392
	10/18/2016	< 200	87.2 J	13,100	1,020	5,130	229
	4/19/2017	< 200	< 200	10,400	881	7,990	246
	10/20/2017	20.7	33.4	11,300	865	9,200	273
	4/18/2018	<200	<200	8,210	799	8,980	238
	10/10/2018	<200	<200	6,670	640	5,590	166
	4/17/2019	<200	<200	5,010	599	6,200	158
	10/15/2019	<10.0	9.38 J	3,050	417	5,360	122
	4/21/2020	<100	<100	1,740	315	2,800	67
	10/29/2020	<100	<100	1,460	216	1,840	47
	4/14/2021	383	63.8 J	1,290	140	1,020	34
	10/27/2021	<5.00	1.65 J	127	34.2	154	4.2
	5/24/2022	8.32 J	1.92 J	53.2 J	33.1 J	48.1 J	1.72 J
	10/31/2022	0.704 J	2.76	54.3	37.8	30.1	1.46
	2/22/2023	<1.00	2.06	31.5	25.4	23.1	0.98
	8/16/2023	0.614 J	0.858 J	64.8	16.0	14.7 J-	1.08
Average Concentration							
	May 1999	25,038	1,510	151	47	0.50	165
	December 1999	15,768	1,854	1,116	563	330	130
	January 2000	16,617	2,302	1,374	654	336	144
	February 2000	19,709	2,439	1,588	698	353	167
	March 2000	20,446	3,048	1,931	646	399	179
	June 2000	6,988	6,815	6,833	615	339	176
	September 2000	17,613	2,078	17,773	873	736	326
	December 2000	13,517	1,361	12,741	819	493	240
	June 2001	22,041	818	8,497	717	2,066	267
	March 2002	17,356	826	6,889	694	1,804	218
	August 2002	8,307	718	8,053	519	816	157
	September 2002	5,399	426	9,972	679	1,145	164
	April 10, 2003	6,760	636	9,996	513	921	169
	April 15, 2003	9,283	659	7,878	626	1,064	166
	October 2003	8,236	629	4,750	524	1,018	125
	October 2004	13,536	410	8,164	726	1,683	203
	July 2005	15,478	798	5,579	601	1,745	191
	September 2007	10,735	423	1,640	443	743	102
	May 2008	40,500	4,357	54,999	836	1,800	882
	November 2008	31,920	3,761	57,172	826	2,101	853
	May 2009	16,312	10,019	99,571	991	2,657	1,255
	December 2010	1,328	2,037	80,096	1,391	2,587	905
	August 2011	2,487	3,921	121,101	1,279	5,863	1,401
	November 2012	4,337	395	185,850	1,923	18,433	2,261
	July 2014	3,057	1,571	135,500	1,221	8,509	1,577
	April 2015	1,253	131	297,033	1,403	16,300	3,348
	April 2016	12,378	1,396	144,231	1,259	12,111	1,780
	October 2016	10,094	1,938	93,716	1,401	7,590	1,178
	April 2017	13,676	1,247	77,669	1,402	11,277	1,088

Please see notes at end of table.

Table C-2
Groundwater Sampling Analytical Results: Chloroethene VOCs
Springdale Cleaners
Portland, Oregon

Monitoring Well ID	Sample Date	Analyte Concentration in µg/L					Total Molar VOCs in µmol/L
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	
Average Concentration							
	October 2017	**15,765**	**1,898**	**105,354**	**1,216**	**8,917**	**1,351**
	April 2018	**17,842**	**1,880**	**103,535**	**1,282**	**10,125**	**1,365**
	October 2018	**8,264**	**2,244**	**114,660**	**1,429**	**7,875**	**1,390**
	April 2019	**13,442**	**1,265**	**103,888**	**716**	**6,605**	**1,275**
	October 2019	**7,258**	**1,761**	**115,145**	**1,064**	**7,411**	**1,374**
	April 2020	**11,386**	**1,392**	**68,176**	**590**	**4,519**	**861**
	October 2020	**8,084**	**1,366**	**64,984**	**637**	**5,603**	**826**
	April 2021	**7,026**	**2,034**	**59,539**	**464**	**5,293**	**762**
	October 2021	**5,364**	**979**	**63,441**	**664**	**4,135**	**767**
	May 2022	**11,257**	**1,104**	**59,293**	**415**	**2,943**	**739**
	October 2022	**7,276**	**840**	**58,686**	**438**	**6,858**	**770**
	February 2023	**7,705**	**1,219**	**59,361**	**368**	**4,178**	**739**
	August 2023	**708**	**616**	**60,398**	**406**	**5,183**	**719**

Table C-2
Groundwater Sampling Analytical Results: Chloroethene VOCs
Springdale Cleaners
Portland, Oregon

Notes:
µg/L = Micrograms per Lite
PCE = Tetrachloroethene
TCE = Trichloroethene
DCE = Dichloroethene
VOCs = Volatile Organic Co
µmol/L = Mircomoles per Li
< = Not Detected Above the Method Repo
ND = Not Detected
-- = Not Analyzed
Bolded concentrations indicate detected concentration
J = Data results are estimated values. Concentrations associated with
HA = Method analytical hold time exceede
HP = Method analytical preparation time e
E = The analyte concentration exceeds the upper limit of the calibration range. Data results are estimated.
J+ = Data results are estimated values and may be biased high.

Table C-3
Groundwater Sampling Analytical Results: Dissolved Gases
Springdale Cleaners
Portland, Oregon

Monitoring Well ID	Sample Date	Analyte Concentration in µg/L		
		Methane	Ethane	Ethene
JEMW-6	8/16/2023	**16,300**	**1,340**	**336**
MW-2	8/16/2023	**17,700**	**138**	**753**
MW-6-20	8/16/2023	**14,400**	**45.4**	**1,590**
MW-5-20	4/21/2020	**2,140**	**54.1**	**7,790**
	10/29/2020	**2,890**	**65.6**	**10,300**
	4/14/2021	--	--	--
	10/26/2021	--	--	--
	5/24/2022	--	--	--
	11/1/2022	--	--	--
	2/27/2023	--	--	--
MW-7	4/21/2020	**8,770**	**17.9**	**5,740**
	10/29/2020	**4,250**	**12.8 J**	**3,830**
	4/14/2021	**18,900**	**89.9**	**11,800**
	10/26/2021	**6,650**	**19.7**	**4,560**
	5/24/2022	**8,840**	**21.2**	**6,590**
	11/1/2022	**1,660**	**<13.0**	**1,130**
	2/27/2023	**11,700**	**48.0**	**7,060**
	8/16/2023	**8,840**	**32.5**	**3,850**
MW-8	4/21/2020	**752**	**<10.0**	**46**
	10/29/2020	**2,150**	**<13.0**	**103**
	4/14/2021	**3,110**	**<13.0**	**227**
	10/26/2021	**835**	**<13.0**	**64**
	5/24/2022	--	--	--
	11/1/2022	--	--	--
	2/27/2023	--	--	--

Table C-3
Groundwater Sampling Analytical Results: Dissolved Gases
Springdale Cleaners
Portland, Oregon

Monitoring Well ID	Sample Date	Analyte Concentration in µg/L		
		Methane	Ethane	Ethene
MW-9	4/21/2020	--	--	--
	10/29/2020	--	--	--
	4/14/2021	--	--	--
	10/26/2021	--	--	--
	5/24/2022	**13,700**	**367**	**1,360**
	10/31/2022	**6,470**	**130**	**553**
	2/22/2023	**11,600**	**241**	**399**
	2/22/2023	**11,600**	**241**	**399**

Notes:
µg/L = Micrograms per Liter
< = Not Detected Above the Method Reporting Limit
ND = Not Detected
-- = Not Analyzed
Bolded concentrations indicate detected concentration of listed analyte.
J = Data results are estimated values. Concentrations associated with this qualifier are approximate.

Table C-4
Ambient Air Sampling Analytical Results
Springdale Cleaners
Portland, Oregon

Sample	Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Total Molar VOCs
		Concentrations in µg/m^3					µmol/m^3
Indoor Air Samples - East Building							
Springdale Cleaners	12/7/1999	**6,500**	**32**	ND	ND	ND	**39.4**
6337	6/16/2000	**3,300**	**6.6**	<1	<1	<1	**19.9**
	6/24/2000	**810**	**3.2**	<1	<1	<1	**4.91**
	6/24/2000	**690**	**2.8**	<1	<1	<1	**4.18**
	6/5/2001	**5,100**	**13**	ND	ND	NA	**30.9**
	11/14/2007	**51**	**470**	<0.67	<3.3	<0.21	**3.83**
	6/9/2009	**1.8**	**1**	**0.19**	<0.04	<0.04	**0.020**
	10/26/2009	**18**	**43**	**2.8**	< 0.079	< 0.051	**0.460**
	5/11/2010	**1.5**	**12**	< 0.079	< 0.079	< 0.051	**0.099**
	10/10/2010	**56**	**47**	**3.5**	< 0.079	< 0.92	**0.726**
	4/22/2011	**6.8**	**0.7**	<0.079	<0.079	<0.051	**0.046**
	8/16/2011	**1.5**	**5.6**	< 0.067	--	< 0.043	**0.051**
	6/6/2012	< 5.3	< 4.2	< 3.1	< 3.1	< 2.0	ND
	10/16/2013	**17**	**2.0**	< 0.79	< 0.79	< 0.51	**0.118**
	1/21/2014	**20**	**3.2**	< 0.79	< 0.79	< 0.51	**0.145**
	7/22/2014	**2.0**	**2.0**	< 0.79	< 0.79	< 0.51	**0.027**
	12/2/2014	**33**	**19**	< 0.79	< 0.79	< 0.51	**0.341**
	4/16/2015	**49**	**16**	< 0.79	< 0.79	< 0.51	**0.415**
	11/3/2015	**13.5**	**8.79**	< 0.79	< 0.79	< 0.51	**0.147**
	4/26/2016	**35.1**	**4.87**	< 0.79	< 0.79	< 0.51	**0.248**
	10/17/2016	**1.82**	**3.45**	< 0.793	< 0.793	< 0.511	**0.037**
	4/18/2017	<1.36	**1.44**	<0.793	<0.793	<0.511	**0.011**
	10/18/2017	<1.36	**1.57**	<0.793	<0.793	<0.511	**0.012**
	4/17/2018	<1.36	**1.33**	<0.793	<0.793	<0.511	**0.010**
	10/11/2018	<1.36	<1.07	<0.793	<0.793	<0.511	ND
	4/4/2019	**1.40**	**2.02**	<0.793	<0.793	<0.511	**0.024**
	10/14/2019	<1.36	**1.63**	<0.793	<0.793	<0.511	**0.012**
	10/29/2020	**1.97**	**2.94**	<0.793	<0.793	<0.511	**0.034**
	4/14/2021	**22.1**	**34.8**	<0.793	<0.793	<0.511	**0.394**
	10/25/2021	**18.5**	**33.8**	<3.17	<3.17	<2.04	**0.365**
	5/27/2022	**2.76**	<1.07	<0.793	<0.793	<0.511	**0.017**
	10/31/2022	**17.2**	<1.07	<0.793	<0.793	<0.511	**0.104**
	2/28/2023	*Sample Not Analyzed - Insufficient Volume Due to Equipment Failure*					
	8/17/2023	<2.03	<1.34	<1.14	<0.979	<0.89	ND
	11/8/2023	**1.81**	<0.364	<0.311	<0.267	<0.243	**0.011**

Please see notes at end of table.

Table C-4
Ambient Air Sampling Analytical Results
Springdale Cleaners
Portland, Oregon

Sample	Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Total Molar VOCs
		Concentrations in µg/m^3					µmol/m^3
State Farm Insurance	5/1/1999	**137.8**	NA	NA	NA	NA	**0.831**
6335A	5/1/1999	**69.9**	NA	NA	NA	NA	**0.422**
	12/7/1999	**120**	ND	ND	ND	ND	**0.724**
	6/16/2000	**240**	**2.9**	**1.0**	<1	<1	**1.48**
	6/24/2000	**200**	**2.3**	<1	<1	<1	**1.22**
	11/14/2007	**61**	**2.8**	**0.31**	<0.69	<0.045	**0.392**
	6/9/2009	**30**	**3.4**	**14**	**0.28**	**0.11**	**0.355**
	10/26/2009	**44**	**3.8**	**16**	**0.31**	**0.41**	**0.469**
	5/11/2010	**3.9**	**1.0**	**2.9**	< 0.079	**0.061**	**0.062**
	10/10/2010	**19**	**1.7**	**1.9**	< 0.079	< 0.051	**0.147**
	4/22/2011	**24**	**1.6**	**4.8**	<0.079	<0.051	**0.206**
	8/16/2011	**29.9**	**1.2**	**2.5**	--	< 0.045	**0.215**
	6/6/2012	**16.7**	**0.93**	< 1.4	< 1.4	< 0.44	**0.108**
	10/16/2013	**4.1**	< 1.1	< 0.79	< 0.79	< 0.51	**0.025**
	1/21/2014	**6.8**	< 1.1	**2.2**	< 0.79	< 0.51	**0.064**
	7/22/2014	**1.9**	< 1.1	< 0.79	< 0.79	< 0.51	**0.011**
	12/2/2014	< 1.4	< 1.1	< 0.79	< 0.79	< 0.51	ND
	4/16/2015	**2.9**	< 1.1	**2.7**	< 0.79	< 0.51	**0.045**
	11/3/2015	**6.5**	< 1.1	**2.4**	< 0.79	< 0.51	**0.064**
	4/26/2016	**35.8**	**3.13**	**32.0**	< 0.79	< 0.51	**0.569**
	10/17/2016	**4.92**	< 1.07	**1.64**	< 0.793	< 0.511	**0.047**
	4/18/2017	**4.00**	<1.07	**7.68**	<0.793	<0.511	**0.103**
	10/18/2017	**3.62 B**	<1.07	**1.29**	<0.793	<0.511	**0.035**
	4/17/2018	**2.03**	<1.07	<0.793	<0.793	<0.511	**0.012**
	10/11/2018	**2.85**	**1.22**	<0.793	<0.793	<0.511	**0.026**
	4/4/2019	**2.41**	<1.07	**3.19**	<0.793	<0.511	**0.047**
	10/14/2019	**2.26**	<1.07	<0.793	<0.793	<0.511	**0.014**
	10/29/2020	**2.55**	<1.07	<0.793	<0.793	<0.511	**0.015**
	4/14/2021	*Sample Not Collected - Tenant was not at Site.*					
	10/25/2021	**1.72**	<1.07	<0.793	<0.793	<0.511	**0.010**
	5/27/2022	**7.47**	**1.99**	**17.8**	<0.793	<0.511	**0.244**
	10/31/2022	**2.67**	<1.07	<0.793	<0.793	<0.511	**0.016**
	2/28/2023	**4.11**	<1.07	**14.0**	<0.793	<0.511	**0.169**
	8/17/2023	**14.1**	**1.49**	<0.311	<0.267	<0.243	**0.096**
	11/8/2023	<0.553	<0.364	<0.311	<0.267	<0.243	**0.000**

Please see notes at end of table.

Table C-4
Ambient Air Sampling Analytical Results
Springdale Cleaners
Portland, Oregon

Sample	Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Total Molar VOCs
		Concentrations in µg/m^3					µmol/m^3
Key Bank (Rear)	12/7/1999	**470**	**2**	ND	ND	ND	**2.85**
6335B2	6/16/2000	**440**	**4.4**	**1.3**	<1	<1	**2.70**
	6/5/2001	**180**	ND	ND	ND	NA	**1.09**
	11/14/2007	**110**	**4.6**	**0.59**	<0.67	<0.043	**0.70**
	6/9/2009	**95**	**9.1**	**37**	**0.63**	**0.27**	**1.03**
	10/26/2009	**81**	**5.3**	**15**	**0.3**	**0.36**	**0.692**
	5/11/2010	**4.1**	**0.96**	**2.5**	< 0.079	**0.056**	**0.059**
	10/10/2010	< 0.14	< 0.11	< 0.079	< 0.079	< 0.11	ND
	4/22/2011	**81**	**3.0**	**6.3**	**0.14**	**0.095**	**0.579**
	8/16/2011	**36.7**	**0.89**	**2.6**	--	< 0.045	**0.255**
	6/6/2012	**23.4**	< 0.89	< 1.3	< 1.3	< 0.42	**0.141**
	11/30/2012	**56**	**1.1**	**4.0**	< 0.79	< 0.51	**0.387**
	10/16/2013	**7.5**	< 1.1	< 0.79	< 0.79	< 0.51	**0.045**
	1/21/2014	**12**	< 1.1	**1.7**	< 0.79	< 0.51	**0.090**
	7/22/2014	**4.8**	< 1.1	< 0.79	< 0.79	< 0.51	**0.029**
	12/2/2014	**15**	< 1.1	< 0.79	< 0.79	< 0.51	**0.090**
	4/16/2015	**7.5**	< 1.1	**2.1**	< 0.79	< 0.51	**0.067**
	11/3/2015	**14.6**	< 1.1	**1.8**	< 0.79	< 0.51	**0.107**
	4/26/2016	**44.7**	**3.51**	**39.6**	< 0.79	< 0.51	**0.704**
	10/17/2016	**12.1**	< 1.07	**1.34**	< 0.793	< 0.511	**0.087**
	4/18/2017	**7.73**	<1.07	**6.70**	<0.793	<0.511	**0.116**
	10/18/2017	**7.16**	<1.07	**0.894**	<0.793	<0.511	**0.052**
	4/17/2018	**18.0**	<1.07	<0.793	<0.793	<0.511	**0.109**
	10/11/2018	**5.18**	**1.11**	<0.793	<0.793	<0.511	**0.040**
	4/4/2019	**6.10**	<1.07	**3.23**	<0.793	<0.511	**0.070**
	10/15/2019	**5.58**	<1.07	<0.793	<0.793	<0.511	**0.034**
	10/29/2020	**6.05**	<1.07	<0.793	<0.793	<0.511	**0.036**
	4/12/2021	**6.25**	<1.07	**1.97**	<0.793	<0.511	**0.058**
	10/25/2021	**5.64**	**1.13**	<0.793	<0.793	<0.511	**0.042**
	5/27/2022	**8.76**	**2.27**	**25.0**	<0.793	<0.511	**0.328**
	11/1/2022	**4.94**	<1.07	<0.793	<0.793	<0.511	**0.030**
	2/28/2023	*Sample Not Analyzed - Insufficient Volume Due to Equipment Failure*					
	8/17/2023	<0.553	<0.364	**1.74**	<0.267	<0.243	**0.018**
	11/8/2023	<0.553	<0.364	**2.02**	<0.267	<0.243	**0.021**

Please see notes at end of table.

Table C-4
Ambient Air Sampling Analytical Results
Springdale Cleaners
Portland, Oregon

Sample	Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Total Molar VOCs
		Concentrations in µg/m^3					µmol/m^3
Key Bank (Front)	12/7/1999	**220**	ND	ND	ND	ND	**1.33**
6335B1	6/16/2000	**270**	**3.7**	**0.86**	<1	<1	**1.66**
6335B1	6/5/2001	**170**	ND	ND	ND	NA	**1.03**
	11/14/2007	**75**	**3.2**	**0.7**	<0.59	<0.038	**0.483**
	6/9/2009	**74**	**8.3**	**34**	**0.58**	**0.25**	**0.869**
	10/26/2009	**37**	**3.3**	**12**	**0.24**	**0.31**	**0.379**
	5/11/2010	**3.1**	**1.0**	**1.8**	< 0.079	**0.061**	**0.046**
	10/10/2010	**0.66**	< 0.11	**0.10**	< 0.079	< 0.051	**0.005**
	4/22/2011	**9.5**	**1.2**	**3.9**	<0.079	**0.066**	**0.108**
	8/16/2011	**31.1**	**0.95**	**2.2**	--	< 0.045	**0.217**
	6/6/2012	**13.2**	< 0.92	< 1.4	< 1.4	< 0.44	**0.080**
	11/30/2012	**36**	< 1.1	**1.1**	< 0.79	< 0.51	**0.228**
	10/16/2013	**3.8**	< 1.1	< 0.79	< 0.79	< 0.51	**0.023**
	1/21/2014	**2.2**	< 1.1	< 0.79	< 0.79	< 0.51	**0.013**
	7/22/2014	**1.6**	< 1.1	< 0.79	< 0.79	< 0.51	**0.010**
	12/2/2014	< 1.4	< 1.1	< 0.79	< 0.79	< 0.51	**ND**
	4/16/2015	**3.1**	< 1.1	**3.4**	< 0.79	< 0.51	**0.054**
	11/3/2015	**5.1**	< 1.1	**1.7**	< 0.79	< 0.51	**0.048**
	4/26/2016	**31**	**2.91**	**32.7**	< 0.79	< 0.51	**0.546**
	10/17/2016	**4.55**	< 1.07	**1.25**	< 0.793	< 0.511	**0.040**
	4/18/2017	**2.74**	<1.07	**5.27**	<0.793	<0.511	**0.071**
	10/18/2017	**3.21 B**	<1.07	<0.793	<0.793	<0.511	**0.019**
	4/17/2018	**1.61**	<1.07	<0.793	<0.793	<0.511	**0.010**
	10/11/2018	**2.36**	<1.07	<0.793	<0.793	<0.511	**0.014**
	4/4/2019	**2.40**	<1.07	**3.04**	<0.793	<0.511	**0.046**
	10/15/2019	**3.94**	<1.07	<0.793	<0.793	<0.511	**0.024**
	10/29/2020	**1.79**	<1.07	<0.793	<0.793	<0.511	**0.011**
	4/12/2021	<1.36	<1.07	**1.73**	<0.793	<0.511	**0.018**
	10/25/2021	**1.72**	<1.07	<0.793	<0.793	<0.511	**0.010**
	5/27/2022	**7.81**	**1.89**	<0.793	<0.793	<0.511	**0.061**
	10/31/2022	**6.16**	**6.48**	**0.939**	<0.793	<0.511	**0.095**
	2/28/2023	**3.37**	<1.07	8.72	<0.793	<0.511	**0.110**
	8/17/2023	<0.553	<0.364	<0.311	<0.267	<0.243	ND
	11/8/2023	<0.553	<0.364	**1.62**	<0.267	<0.243	**0.017**

Table C-4
Ambient Air Sampling Analytical Results
Springdale Cleaners
Portland, Oregon

Sample	Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Total Molar VOCs
		Concentrations in µg/m^3					µmol/m^3
Indoor Air Samples - West Building							
Hillsdale Veterinary Clinic 6359	6/5/2001	**26**	ND	ND	ND	NA	**0.157**
	11/14/2007	**8.1**	**0.74**	<0.17	<0.85	<0.055	**0.054**
	6/9/2009	**12**	**1.5**	**1.5**	<0.16	<0.16	**0.099**
	10/26/2009	**26**	**3.1**	**3.1**	< 0.32	< 0.20	**0.212**
	5/11/2010	**0.55**	< 0.11	**0.25**	< 0.079	< 0.051	**0.006**
	10/10/2010	**0.95**	**0.20**	**0.24**	< 0.079	< 0.051	**0.010**
	4/22/2011	**0.54**	<0.11	<0.079	<0.079	<0.051	**0.003**
	8/16/2011	**0.51**	**0.18**	**0.076**	--	< 0.35	**0.005**
	6/6/2012	< 1.0	< 0.82	< 1.2	< 1.2	< 0.39	ND
	10/16/2013	**1.5**	< 1.1	< 0.79	< 0.79	< 0.51	**0.009**
	1/21/2014	< 1.4	< 1.1	< 0.79	< 0.79	< 0.51	ND
	7/22/2014	< 1.4	< 1.1	< 0.79	< 0.79	< 0.51	ND
	12/2/2014	< 1.4	< 1.1	< 0.79	< 0.79	< 0.51	ND
	4/16/2015	< 1.4	< 1.1	< 0.79	< 0.79	< 0.51	ND
	11/3/2015	**2.1**	< 1.1	< 0.79	< 0.79	< 0.51	**0.012**
	4/26/2016	< 1.4	< 1.1	< 0.79	< 0.79	< 0.51	ND
	10/17/2016	< 1.36	< 1.07	< 0.793	< 0.793	< 0.511	ND
	4/18/2017	--	--	--	--	--	--
	10/18/2017	<1.36	<1.07	<0.793	<0.793	<0.511	ND
	4/17/2018	<1.36	<1.07	**2.52**	<0.793	<0.511	**0.026**
	10/11/2018	<1.36	<1.07	<0.793	<0.793	<0.511	ND
	4/4/2019	**3.02**	<1.07	<0.793	<0.793	<0.511	**0.018**
	10/14/2019	**1.43**	<1.07	<0.793	<0.793	<0.511	**0.009**
	10/29/2020	--	--	--	--	--	--
	4/12/2021	**1.73**	**2.61**	<0.793	<0.793	<0.511	**0.030**
	10/26/2021	**3.73**	<1.07	<0.793	<0.793	<0.511	**0.022**
	5/27/2022	**1.55**	<1.07	<0.793	<0.793	<0.511	**0.009**
	10/31/2022	**5.03**	<1.07	<0.793	<0.793	<0.511	**0.030**
	2/28/2023	**6.56**	<1.07	<0.793	<0.793	<0.511	**0.040**
	8/17/2023	--	--	--	--	--	--
	11/8/2023	<0.553	<0.364	<0.311	<0.267	<0.243	**0.000**

Please see notes at end of table.

Table C-4
Ambient Air Sampling Analytical Results
Springdale Cleaners
Portland, Oregon

Sample	Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Total Molar VOCs
		Concentrations in µg/m^3					µmol/m^3
OmBase Yoga	12/7/1999	**58**	**3.6**	ND	ND	ND	**0.377**
6357	12/7/1999	**59**	**3.7**	ND	ND	ND	**0.384**
	6/16/2000	**74**	**2.8**	<1	<1	<1	**0.467**
	6/24/2000	**63**	**3.9**	<1	<1	<1	**0.409**
	6/5/2001	**50**	ND	ND	ND	NA	**0.302**
	11/14/2007	**71**	**5.4**	**0.59**	<0.58	<0.037	**0.475**
	6/9/2009	**18**	**2.1**	**1.7**	<0.037	<0.037	**0.142**
	10/26/2009	**26**	**3.1**	**2.2**	< 0.079	< 0.051	**0.203**
	5/11/2010	**16**	**2.9**	**2.2**	< 0.079	< 0.051	**0.141**
	10/10/2010	**75**	**8.0**	**4.8**	**0.16**	< 0.051	**0.563**
	4/22/2011	**25**	**4.0**	**3.6**	<0.079	<0.051	**0.218**
	8/16/2011	**66.6**	**7.2**	**3.3**	--	< 0.041	**0.490**
	6/6/2012	**16**	**3.2**	**1.9**	< 1.5	< 0.48	**0.140**
	11/30/2012	< 1.4	< 1.1	< 0.79	< 0.79	< 0.51	ND
	11/30/2012	**1.4**	< 1.1	< 0.79	< 0.79	< 0.51	**0.008**
	10/16/2013	**5.6**	< 1.1	< 0.79	< 0.79	< 0.51	**0.034**
	1/21/2014	**8.8**	**1.4**	**1.1**	< 0.79	< 0.51	**0.075**
	7/22/2014	**20**	**3.7**	**2.9**	< 0.79	< 0.51	**0.178**
	12/2/2014	< 1.4	< 1.1	< 0.79	< 0.79	< 0.51	ND
	4/16/2015	< 1.4	< 1.1	< 0.79	< 0.79	< 0.51	ND
	11/3/2015	<1.4	< 1.1	< 0.79	< 0.79	< 0.51	ND
	4/26/2016	**2.66**	< 1.07	**0.822**	< 0.79	< 0.51	**0.025**
	10/17/2016	**2.01**	< 1.07	< 0.793	< 0.793	< 0.511	**0.012**
	4/18/2017	**3.64**	<1.07	**2.08**	<0.793	<0.511	**0.043**
	10/18/2017	<1.36	<1.07	**0.863**	<0.793	<0.511	**0.009**
	4/17/2018	**1.79**	<1.07	**2.25**	<0.793	<0.511	**0.034**
	11/1/2018	<1.36	<1.07	<0.793	<0.793	<0.511	ND
	4/4/2019	**3.10**	<1.07	**3.73**	<0.793	<0.511	**0.057**
	10/14/2019	<1.36	<1.07	<0.793	<0.793	<0.511	ND
	10/29/2020	--	--	--	--	--	--
	4/14/2021	*Sample Not Collected - Tenant was not at Site.*					--
	10/26/2021	*Sample Not Collected - Tenant was not at Site.*					--
	5/27/2022	**20.6**	**4.15**	**10.7**	<0.793	<0.511	**0.266**
	10/31/2022	**12.2**	**3.27**	**2.82**	<0.793	<0.511	**0.127**
	2/28/2023	**12.3**	**3.54**	**3.19**	<0.793	**1.35**	**0.155**
	8/17/2023	**12.4**	**3.3**	**3.27**	<0.267	<0.243	**0.133**
	11/8/2023	<0.553	<0.364	<0.311	<0.267	<0.243	**0.000**

Please see notes at end of table.

Table C-4
Ambient Air Sampling Analytical Results
Springdale Cleaners
Portland, Oregon

Sample	Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Total Molar VOCs
		Concentrations in µg/m^3					µmol/m^3
BE Salon [North]	11/14/2007	**10**	**1.3**	**0.43**	<0.53	<0.034	**0.074**
(Formerly Bellamie	6/9/2009	**13**	**2**	**1.6**	<0.059	<0.059	**0.110**
Studios)	10/26/2009	**4.3**	**0.91**	**4**	< 0.079	< 0.051	**0.074**
6351	5/11/2010	**1.4**	**0.33**	**0.75**	< 0.079	< 0.051	**0.019**
	10/10/2010	**19**	**4.0**	**3.5**	< 0.079	< 0.051	**0.181**
	4/22/2011	**42**	**8.6**	**13**	**0.15**	<0.051	**0.453**
	8/17/2011	**7.1**	**17.3**	**2.2**	--	< 0.043	**0.195**
	6/6/2012	< 1.6	< 1.3	< 1.9	< 1.9	< 0.62	ND
	11/30/2012	**1.4**	< 1.1	**1.1**	< 0.79	< 0.51	**0.020**
	10/16/2013	**9.5**	**1.6**	**1.6**	< 0.79	< 0.51	**0.086**
	1/21/2014	**3.7**	< 1.1	< 0.79	< 0.79	< 0.51	**0.022**
	7/22/2014	< 1.4	< 1.1	< 0.79	< 0.79	< 0.51	ND
	12/2/2014	< 1.4	< 1.1	< 0.79	< 0.79	< 0.51	ND
	4/16/2015	**0.22**	< 0.11	**0.35**	< 0.079	< 0.051	**0.005**
	11/3/2015	**1.62**	< 1.1	< 0.79	< 0.79	< 0.51	**0.010**
	4/26/2016	**1.54**	**0.459**	**1.93**	< 0.79	< 0.51	**0.033**
	10/17/2016	**3.35**	< 1.07	< 0.793	< 0.793	< 0.511	**0.020**
	4/19/2017	**6.21**	**2.35**	<0.793	<0.793	<0.511	**0.055**
	10/18/2017	*Sample Not Collected - Duplicate with BE Salon South*					--
	4/17/2018	**3.91**	<1.07	**2.71**	<0.793	<0.511	**0.052**
	10/11/2018	**1.96**	<1.07	<0.793	<0.793	<0.511	**0.012**
	4/8/2019	**1.71**	<1.07	**5.24**	<0.793	<0.511	**0.064**
	10/15/2019	**7.13**	**1.21**	**1.32**	<0.793	**1.04**	**0.082**
	10/29/2020	--	--	--	--	--	--
	4/12/2021	**20.8**	**6.32**	**33.1**	<0.793	<0.511	**0.514**
	4/28/2021	**24.2**	**6.75**	**21.5**	<0.793	<0.511	**0.418**
	10/28/2021	**8.28**	**2.31**	**10.1**	<0.793	<0.511	**0.171**
	5/27/2022	**51.7**	**10.4**	**44.4**	<0.793	**1.38**	**0.870**
	10/31/2022	**20.1**	**5.41**	**8.6**	<0.793	<0.511	**0.250**
	2/28/2023	**2.66**	**2.07**	**1.54**	<0.793	<0.511	**0.047**
	8/17/2023	<0.553	<0.364	<0.311	<0.267	<0.243	ND
	11/8/2023	**3.84**	<0.364	**1.04**	<0.267	<0.243	**0.034**

Table C-4
Ambient Air Sampling Analytical Results
Springdale Cleaners
Portland, Oregon

Sample	Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Total Molar VOCs
		Concentrations in µg/m^3					µmol/m^3
BE Salon [South]	6/16/2000	**6.2**	<1	<1	<1	<1	**0.037**
(Former Cuts and	6/24/2000	--	--	--	--	--	--
Chemistry)	6/5/2001	**30**	ND	ND	ND	NA	**0.181**
6349	6/9/2009	**14**	**2.1**	**1.4**	<0.041	<0.041	**0.115**
	10/26/2009	**20**	**3.2**	**1.9**	< 0.079	< 0.051	**0.164**
	6/9/2010	**13**	**3.3**	**5.2**	**0.1**	< 0.051	**0.158**
	10/10/2010	< 0.14	< 0.11	< 0.079	< 0.079	< 0.11	ND
	4/22/2011	**26**	**5.9**	**6.3**	<0.079	<0.051	**0.266**
	8/20/2011	**31.4**	**4.7**	**3.2**	--	< 0.060	**0.258**
	6/6/2012	**23.5**	**8.6**	**14.3**	< 1.6	< 0.52	**0.354**
	11/30/2012	**14**	< 1.1	< 0.79	< 0.79	< 0.51	**0.084**
	10/16/2013	**9.5**	**1.5**	**1.4**	< 0.79	< 0.51	**0.083**
	1/21/2014	**5.9**	**1.2**	**1.8**	< 0.79	< 0.51	**0.063**
	7/22/2014	**2.2**	< 1.1	< 0.79	< 0.79	< 0.51	**0.013**
	12/2/2014	< 1.4	< 1.1	< 0.79	< 0.79	< 0.51	ND
	4/16/2015	--	--	--	--	--	--
	11/3/2015	**4.3**	< 1.1	**2.25**	< 0.79	< 0.51	**0.049**
	4/26/2016	**16.3**	**4.2**	**8.52**	< 0.79	< 0.51	**0.218**
	10/17/2016	**5.61**	< 1.07	< 0.793	< 0.793	< 0.511	**0.034**
	4/19/2017	**5.88**	**1.48**	<0.793	<0.793	<0.511	**0.047**
	10/18/2017	**4.48 B**	**1.07**	**2.07**	<0.793	<0.511	**0.056**
	4/17/2018	**2.18**	<1.07	<0.793	<0.793	<0.511	**0.013**
	10/11/2018	<1.36	<1.07	**1.27**	<0.793	<0.511	**0.013**
	4/8/2019	**1.41**	<1.07	**2.93**	<0.793	<0.511	**0.039**
	10/15/2019	**2.80**	<1.07	<0.793	<0.793	**0.818**	**0.030**
	10/29/2020	--	--	--	--	--	--
	4/12/2021	**13.6**	**31.1**	**14.4**	<0.793	<0.511	**0.464**
	4/18/2021	**13.9**	**5.07**	**9.51**	<0.793	<0.511	**0.220**
	10/28/2021	**7.47**	**2.08**	**10.1**	<0.793	<0.511	**0.165**
	5/27/2022	**17.1**	**3.72**	**13.6**	<0.793	<0.511	**0.271**
	10/31/2022	**21.2**	**5.84**	**8.84**	<0.793	<0.511	**0.263**
	2/28/2023	<1.07	**1.96**	**1.49**	<0.793	<0.511	**0.030**
	8/17/2023	<0.553	<0.364	<0.311	<0.267	<0.243	ND
	11/8/2023	**3.75**	**1.25**	**1.11**	<0.267	<0.243	**0.043**
Outdoor Ambient	2/16/2010	**0.36**	**0.25**	**0.18**	< 0.079	< 0.051	**0.006**
	10/16/2013	< 1.4	< 1.1	< 0.79	< 0.79	< 0.51	ND
	1/21/2014	< 2.7	< 2.1	< 1.6	< 1.6	< 1.0	ND
	7/22/2014	< 1.4	< 1.1	**0.87**	< 0.79	< 0.51	**0.009**
	12/2/2014	< 1.4	< 1.1	< 0.79	< 0.79	< 0.51	ND
	4/16/2015	< 1.4	< 1.1	< 0.79	< 0.79	< 0.51	ND
	11/3/2015	< 1.4	< 1.1	< 0.79	< 0.79	< 0.51	ND
	4/26/2016	< 1.4	< 1.1	< 0.79	< 0.79	< 0.51	ND
	10/17/2016	**5.11**	< 1.07	< 0.793	< 0.793	< 0.511	**0.031**
	4/18/2017	<1.36	<1.07	<0.793	<0.793	<0.511	ND
	10/18/2017	**2.04 B**	<1.07	<0.793	<0.793	<0.511	**0.012**
	4/17/2018	<1.36	<1.07	<0.793	<0.793	<0.511	ND
	10/11/2018	<1.36	<1.07	**2.04**	<0.793	<0.511	**0.021**
	4/4/2019	<1.36	<1.07	<0.793	<0.793	<0.511	ND
	10/14/2019	<1.36	<1.07	<0.793	<0.793	<0.511	ND
	10/29/2020	<1.36	<1.07	**1.61**	<0.793	<0.511	**0.017**
	4/12/2021	<1.36	<1.07	**0.872**	<0.793	<0.511	**0.009**
	10/25/2021	<1.36	<1.07	<0.793	<0.793	<0.511	ND
	5/27/2022	<1.36	<1.07	<0.793	<0.793	<0.512	ND
	10/31/2022	**1.46**	<1.07	<0.793	<0.793	<0.511	**0.009**
	2/28/2023	**3.11**	<1.07	<0.793	<0.793	<0.511	**0.019**
	8/17/2023	<0.553	<0.364	<0.311	<0.267	<0.243	ND
	11/8/2023	<0.553	<0.364	<0.311	<0.267	<0.243	**0.000**

Please see notes at end of table.

Table C-4
Ambient Air Sampling Analytical Results
Springdale Cleaners
Portland, Oregon

Sample	Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Total Molar VOCs
		Concentrations in µg/m^3					µmol/m^3
Average Indoor Concentrations							
	December 1999	**1,474**	**12.5**	ND	ND	ND	**8.94**
	June 16, 2000	**722**	**3.48**	**0.777**	ND	ND	**4.38**
	June 24, 2000	**358**	**3.13**	ND	ND	ND	**2.18**
	June 2001	**926**	**13.0**	ND	ND	ND	**5.60**
	November 2007	**55.2**	**69.7**	**0.434**	ND	ND	**0.859**
	June 2009	**32.2**	**3.69**	**11.4**	**0.207**	**0.100**	**0.343**
	October 2009	**32.0**	**8.21**	**7.13**	**0.146**	**0.160**	**0.332**
	May 2010	**4.36**	**2.61**	**1.49**	ND	**0.040**	**0.062**
	October 2010	**21.3**	**7.63**	**1.76**	**0.055**	ND	**0.272**
	April 2011	**26.9**	**3.13**	**4.75**	**0.066**	**0.039**	**0.235**
	August 2011	**25.6**	**4.75**	**2.01**	ND	ND	**0.211**
	June 2012	**12.1**	**2.10**	**2.67**	ND	ND	**0.164**
	October 2013	**7.81**	**1.04**	**0.71**	ND	ND	**0.057**
	January 2014	**7.51**	**1.07**	**1.05**	ND	ND	**0.067**
	July 2014	**4.24**	**1.13**	**0.708**	ND	ND	**0.045**
	December 2014	**6.53**	**2.86**	**ND**	ND	ND	**0.216**
	April 2015	**9.16**	**2.69**	**1.39**	ND	ND	**0.117**
	November 2015	**6.05**	**1.58**	**1.22**	ND	ND	**0.063**
	April 2016	**21.0**	**2.52**	**15**	ND	ND	**0.335**
	October 2016	**4.38**	**0.901**	**0.776**	ND	ND	**0.040**
	April 2017	**4.41**	**1.06**	**3.27**	ND	ND	**0.064**
	October 2017	**2.30**	**0.664**	**0.788**	ND	ND	**0.031**
	April 2018	**4.10**	**0.649**	**1.30**	ND	ND	**0.036**
	October 2018	**1.88**	**0.693**	**0.506**	ND	ND	**0.021**
	April 2019	**2.69**	**0.721**	**2.77**	ND	ND	**0.046**
	October 2019	**3.06**	**0.756**	**0.512**	ND	**0.424**	**0.029**
	October 2020	**3.09**	**1.14**	ND	ND	ND	**0.024**
	April 2021	**11.5**	**6.29**	**4.44**	ND	ND	**0.163**
	October 2021	**6.72**	**5.12**	**2.92**	ND	ND	**0.112**
	May 2022	**14.7**	**3.19**	**14.1**	ND	**0.396**	**0.258**
	October 2022	**11.2**	**2.89**	**2.85**	ND	ND	**0.114**
	February 2023	**5.93**	**2.52**	**5.79**	**0.35**	**1.35**	**0.084**
	August 2023	**243.96**	**6.06**	**4.85**	**1.35**	ND	**1.049**
	October 2023	**19.15**	**18.72**	**1.67**	**2.35**	ND	**0.242**

Please see notes at end of table.

Table C-4
Ambient Air Sampling Analytical Results
Springdale Cleaners
Portland, Oregon

Notes:

µg/m^3= Micrograms per cubic meter.
µmol/m^3 = Micromole per Cubic Meter.
PCE = tetrachloroethene.
TCE = trichloroethene.
DCE = dichloroethene.
NA = Sample was not analyzed for that specific analyte.
ND = Not Detected (Laboratory Reporting Limit not identified) or average not calculated because all samples were not detected.
Bold values indicates a detected concentration of listed analyte.
>Pv = Concentration above vapor pressure of analyte (maximum attainable concentration).
B = Analyte was detected in the method blank and associated sample. Result may be biased high.

Table C-5
Sub-Slab Vapor Sampling Analytical Results
Springdale Cleaners
Portland, Oregon

Sample	Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Total Molar VOCs
		Concentrations in µg/m^3					µmol/m^3
West Building Monitoring Points							
VP-4	11/10/2010	**46.8**	**8.6**	**4.36**	< 3.73	< 2.40	0.39
	12/16/2010	**107**	**32.8**	**22.2**	< 2.85	< 1.84	1.12
	4/22/2011	**34**	**7.5**	**6.3**	<0.79	<0.51	0.33
	8/16/2011	**13.9**	**2.2**	< 1.1	< 1.1	< 0.36	0.10
	11/30/2012	**8.8**	**2.4**	**1.9**	< 0.79	< 0.51	0.091
	10/16/2013	**16**	**2.0**	< 0.79	< 0.79	< 0.51	0.11
	1/21/2014	**4.5**	**1.1**	< 0.79	< 0.79	< 0.51	0.035
	7/22/2014	**75**	**13**	**2.8**	< 0.79	< 0.51	0.58
	12/2/2014	**11**	< 1.1	< 0.79	< 0.79	< 0.51	0.066
	4/16/2015	**12**	**2.6**	**2.7**	< 0.79	< 0.51	0.12
	11/3/2015	**5.38**	< 1.07	< 0.79	< 0.79	< 0.51	0.03
	4/26/2016	**17.3**	**1.22**	< 0.79	< 0.79	< 0.51	0.11
	10/17/2016	**28.7**	**4.26**	**0.876**	< 0.793	< 0.511	0.21
	4/18/2017	**5.42**	<1.07	**2.45**	<0.793	<0.511	0.06
	10/18/2017	**7.36**	**1.77**	**1.69**	<0.793	<0.511	0.08
	4/17/2018	**24.0**	**4.94**	**14.4**	<0.793	<0.511	0.33
	10/9/2018	<1.36	<1.07	<0.793	<0.793	<0.511	ND
	4/4/2019	**4.38**	**1.28**	**5.26**	<0.793	<0.511	0.09
	10/14/2019	**168**	**1.32**	**1.03**	<0.793	<0.511	1.03
	10/29/2020	*Sample Not Collected - Due to Access Restrictions*					
	4/12/2021	*Sample Not Collected - Due to Access Restrictions*					
	10/28/2021	*Sample Not Collected - Due to Access Restrictions*					
	5/27/2022	**38.6 J**	**5.52 J**	**3.39 J**	<0.793 UJ	<0.511 UJ	**0.309**
	11/2/2022	**447**	**7.02**	**1.49**	<0.793	<0.511	2.76
	2/28/2023	**17.3**	**5.59**	**20.1**	<0.793	**2.07**	**0.39**
	8/17/2023	**2.3**	<0.364	<0.311	<0.267	<0.243	**0.01**
	11/8/2023	**1.7**	<0.364	<0.311	<0.267	<0.243	**0.01**
VP-5	11/10/2010	**997**	**623**	**698**	< 61.1	< 39.4	17.9
	12/16/2010	**828**	**520**	**1205**	< 42.4	< 27.4	21.3
	4/22/2011	**810**	**510**	**1,900**	**7.5**	**0.56**	28.4
	8/17/2011	**283**	**106**	**217**	< 1.2	< 0.40	4.74
	11/30/2012	**5.0**	**1.4**	**18**	< 0.79	< 0.51	0.23
	10/16/2013	**150**	**47**	**100**	< 0.79	< 0.51	2.29
	1/21/2014	**30**	**7.5**	**75**	< 0.79	< 0.51	1.01
	7/22/2014	**390**	**64**	**330**	**0.79**	< 0.51	6.24
	12/2/2014	**290**	**80**	**340**	**6.3**	< 0.51	5.92
	4/15/2015	**1,300**	**700**	**2,500**	**39**	**2.1**	39.3
	11/3/2015	**282**	**50.2**	**58.3**	**1.45**	< 0.51	2.7
	4/26/2016	**1,780**	**1060**	**4,400**	**7.49**	< 0.51	64.1
	10/17/2016	**133**	**1.32**	**596**	**3.31**	**1.32**	7.0
	4/18/2017	*Vapor point destroyed*					

Please see notes at end of table.

Table C-5
Sub-Slab Vapor Sampling Analytical Results
Springdale Cleaners
Portland, Oregon

Sample	Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Total Molar VOCs
		Concentrations in µg/m^3					µmol/m^3
VP-6	11/10/2010	**45.4**	**10.2**	**5.55**	< 2.93	< 1.89	0.41
	12/16/2010	**61.0**	**15.6**	**16.3**	< 3.17	< 2.04	0.65
	4/22/2011	**68**	**21**	**180**	**2.4**	<0.51	2.45
	8/16/2011	**35.7**	**5.4**	**69.2**	< 2.2	< 0.70	0.97
	11/30/2012	**88**	**19**	**39**	**1.0**	< 0.51	1.09
	10/16/2013	**51**	**8.6**	**24**	< 0.79	< 0.51	0.62
	1/21/2014	**11**	**2.0**	**7.9**	< 0.79	< 0.51	0.16
	7/22/2014	**190**	**41**	**750**	**7.5**	< 0.51	9.27
	12/2/2014	**7.5**	< 1.1	< 0.79	< 0.79	< 0.51	0.045
	4/15/2015	*Vapor point destroyed*					
VP-6R	4/17/2018	**16.1**	**7.24**	**126**	<0.793	<0.511	1.45
	10/9/2018	**8.15**	**2.55**	**4.81**	<0.793	<0.511	0.12
	4/8/2019	**18.7**	**14.6**	**168**	**1.62**	<0.511	1.97
	10/16/2019	**27.5**	**7.39**	**7.17**	<0.793	<0.511	0.30
	10/29/2020	*Sample Not Collected - Due to Access Restrictions*					
	4/12/2021	**38.5**	**19.9**	**158**	<0.793	<0.511	2.01
	10/28/2021	**22.7**	**8.73**	**35.8**	<0.793	<0.511	0.57
	5/22/2022	**539**	**101**	**1,260**	**8.52**	<0.511	**17.1**
	11/2/2022	**270**	**19.2**	**50.3**	**0.808**	<0.511	2.30
	2/28/2023	**117**	**8.03**	**28.7**	<0.793	<0.511	**1.06**
	8/17/2023	**11.8**	**3.9**	**3.3**	<0.267	<0.243	**0.13**
	11/8/2023	--	--	--	--	--	--

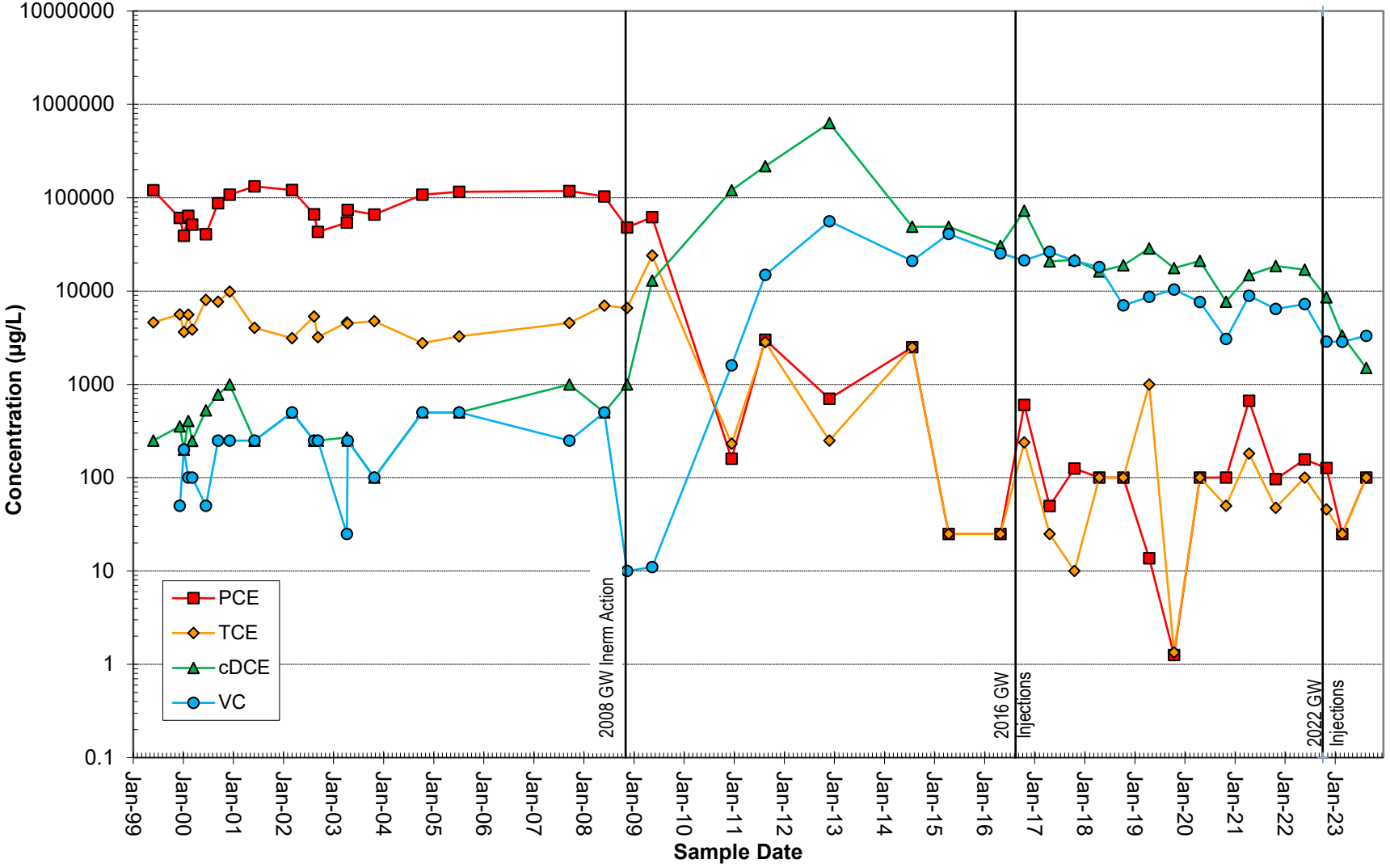
Table C-5
Sub-Slab Vapor Sampling Analytical Results
Springdale Cleaners
Portland, Oregon

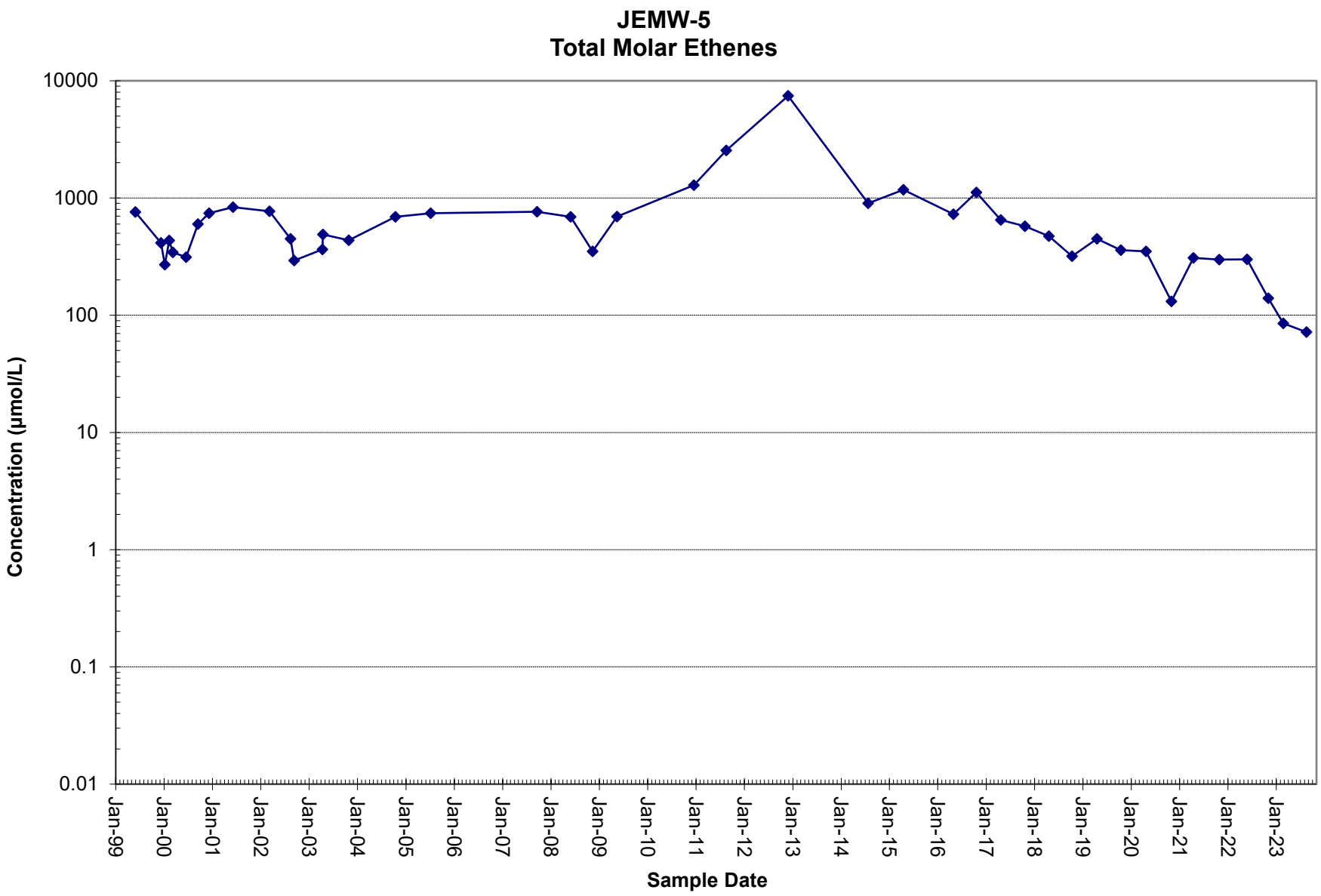
Notes:

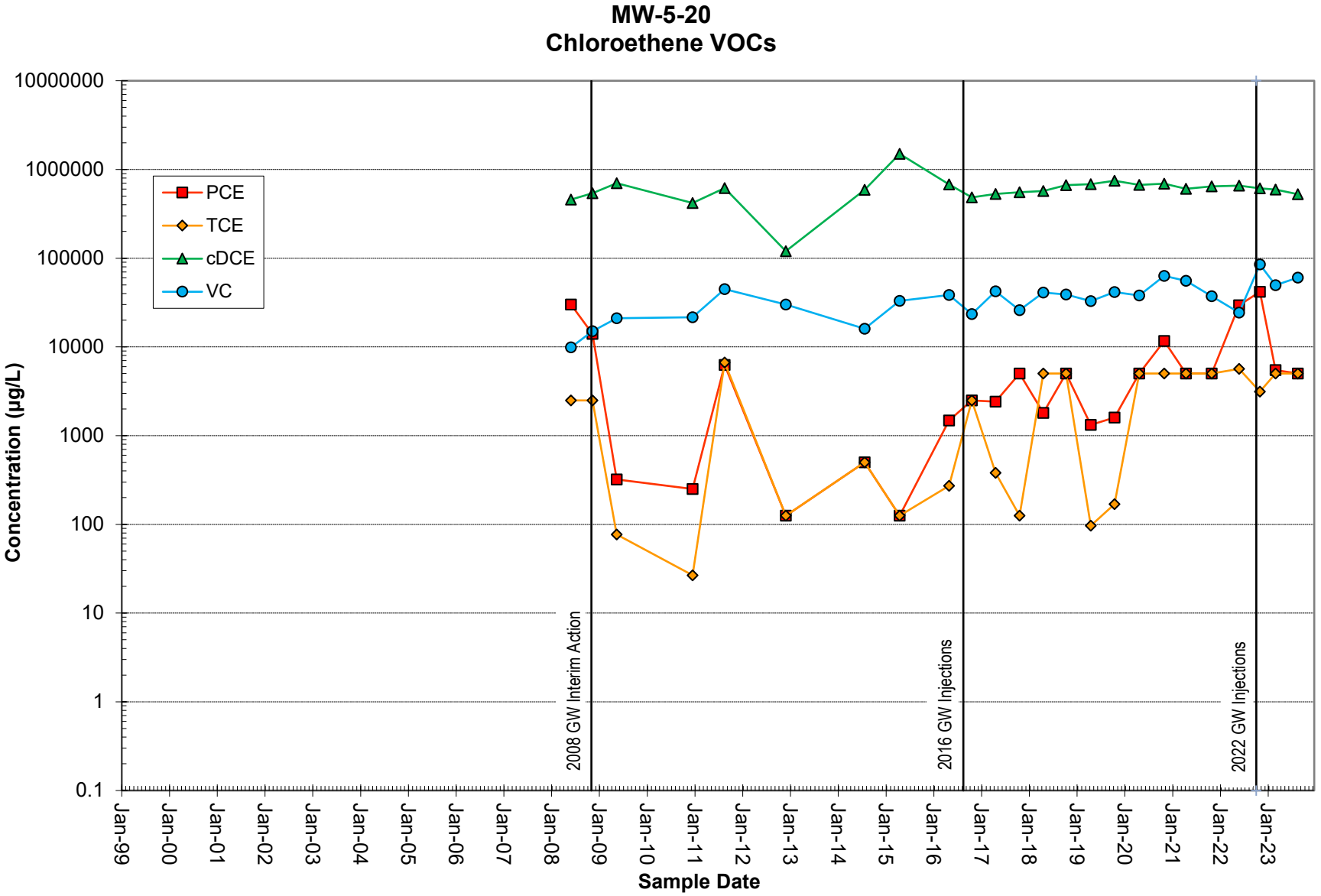
µg/m^3 = Micrograms per Cubic Meter.
µmol/m^3 = Micromole per Cubic Meter.
Bold values indicates a detected concentration of listed analyte.
Highlighted values exceed relevant RBC screening level.
>Pv = Concentration above vapor pressure of analyte (maximum attainable concentration).
DCE = dichloroethene.
PCE = tetrachloroethene.
TCE = trichloroethene.

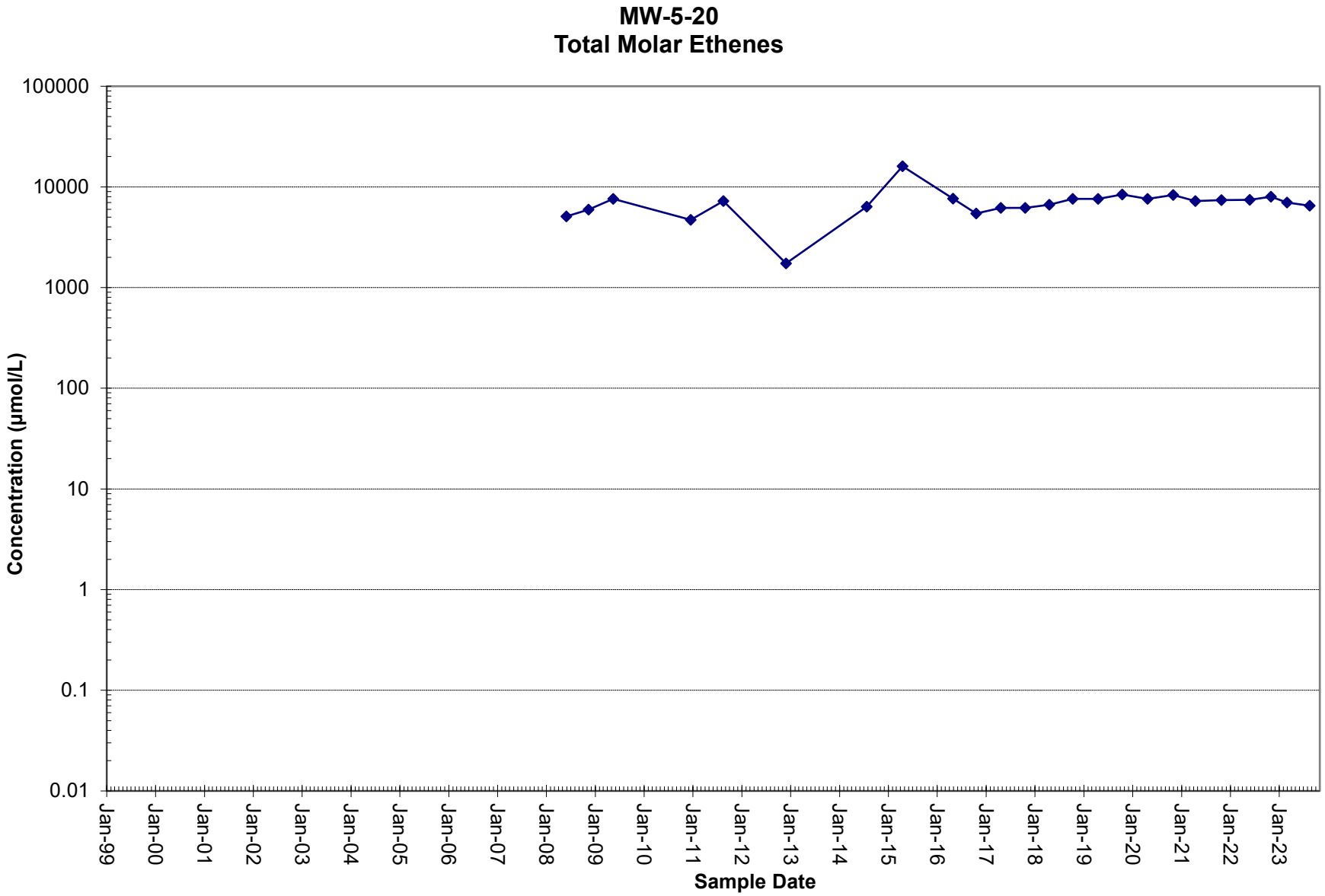
Appendix D

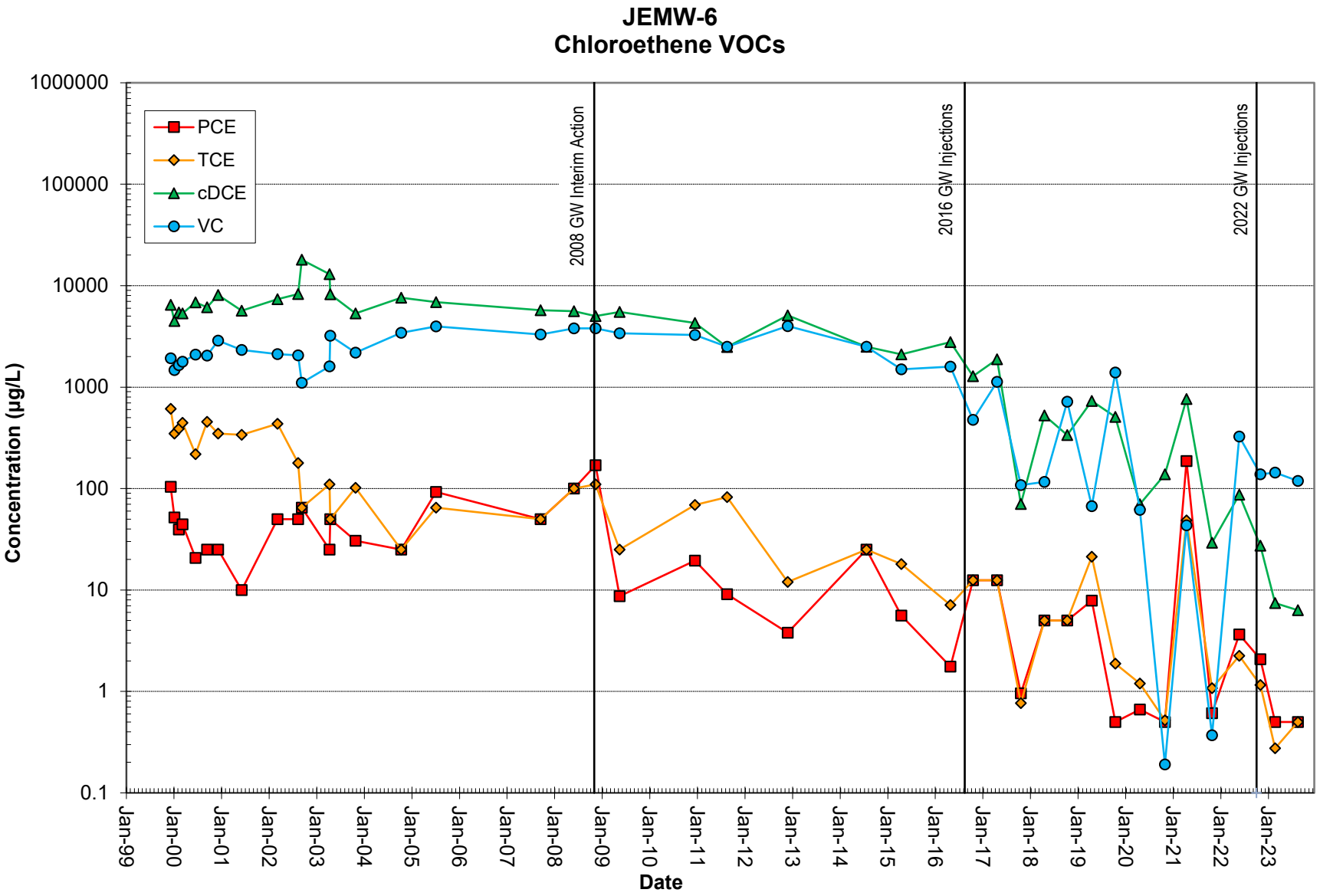
Groundwater Concentration Trend Plots

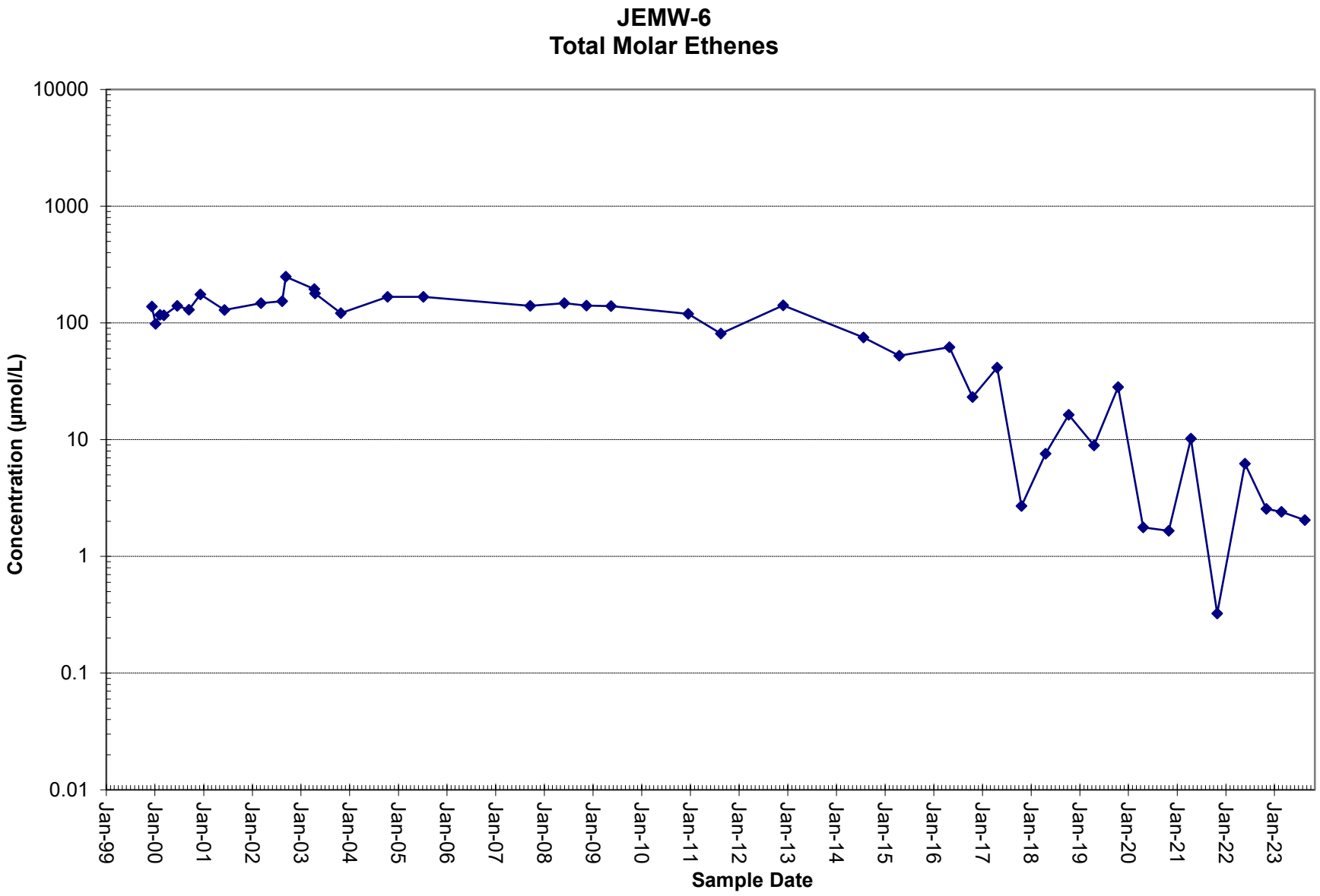

JEMW-5
Chloroethene VOCs
Concentration (µg/L)
10000000
1000000
100000
10000
1000
100
10
1
0.1
PCE
TCE
cDCE
VC
2008 GW Inerm Action
2016 GW Injections
2022 GW Injections
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23
Sample Date

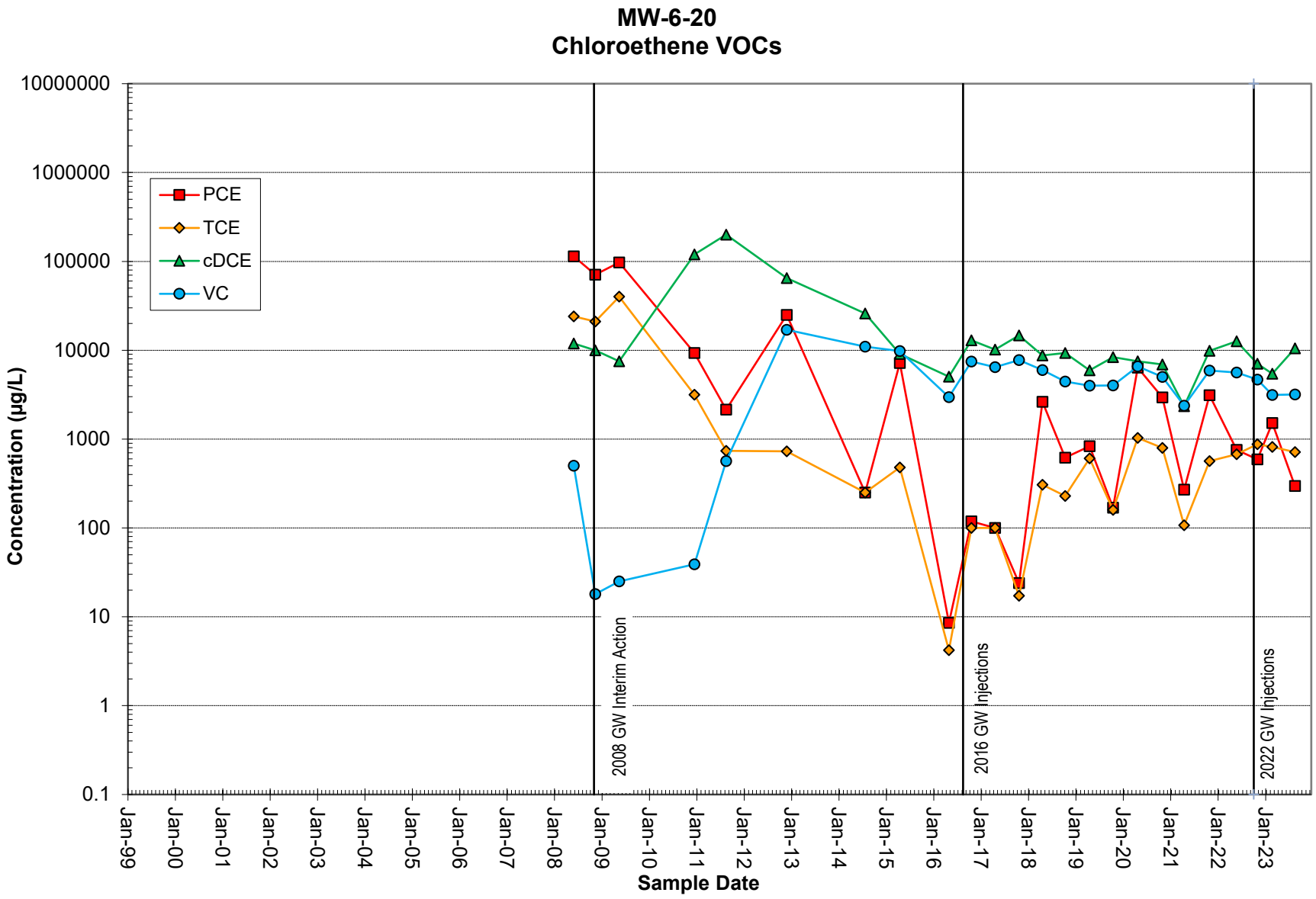

JEMW-5
Total Molar Ethenes
Concentration (µmol/L)
10000
1000
100
10
1
0.1
0.01
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23
Sample Date

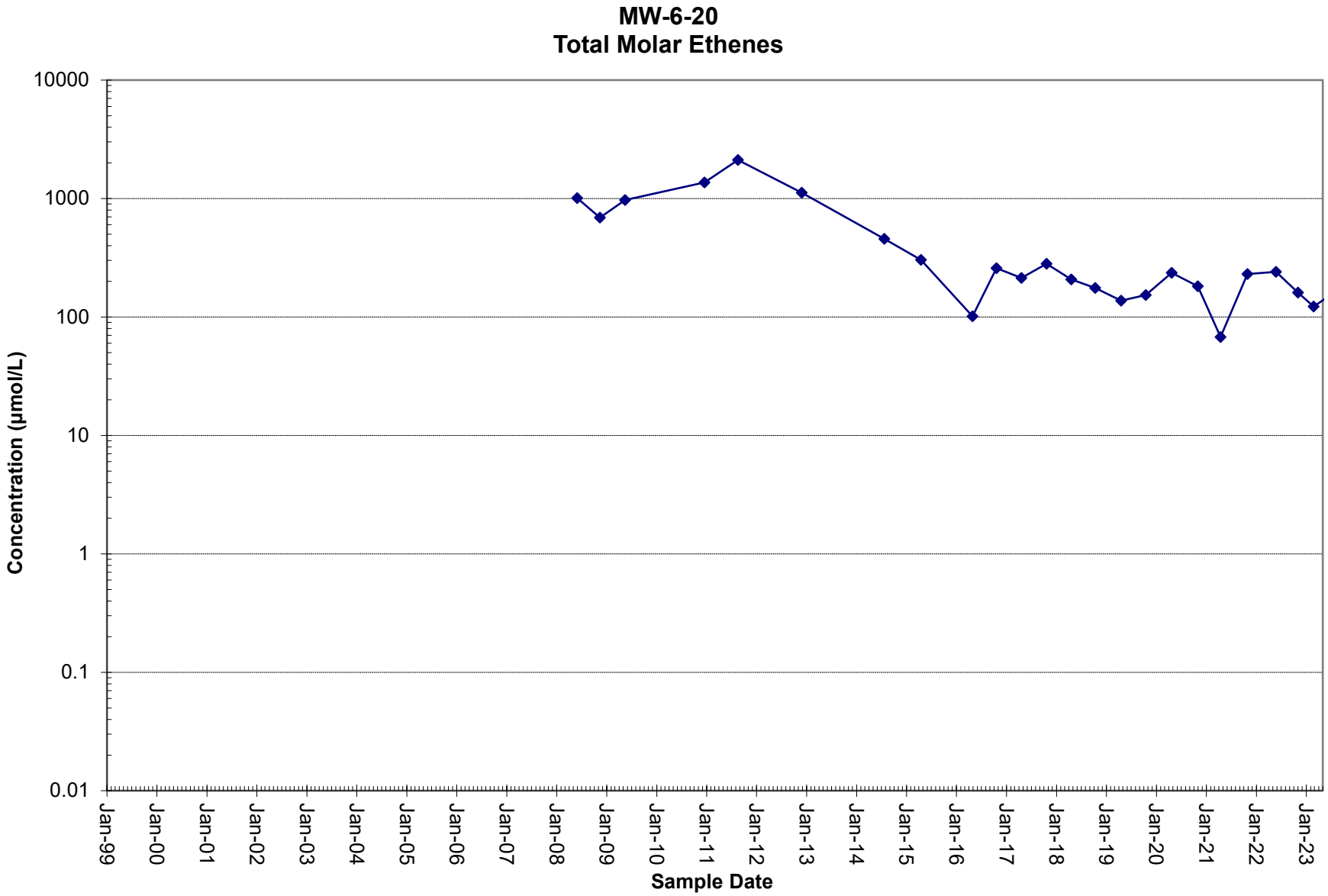

MW-5-20
Chloroethene VOCs
PCE
TCE
cDCE
VC
Concentration (µg/L)
10000000
1000000
100000
10000
1000
100
10
1
0.1
2008 GW Interim Action
2016 GW Injections
2022 GW Injections
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23
Sample Date

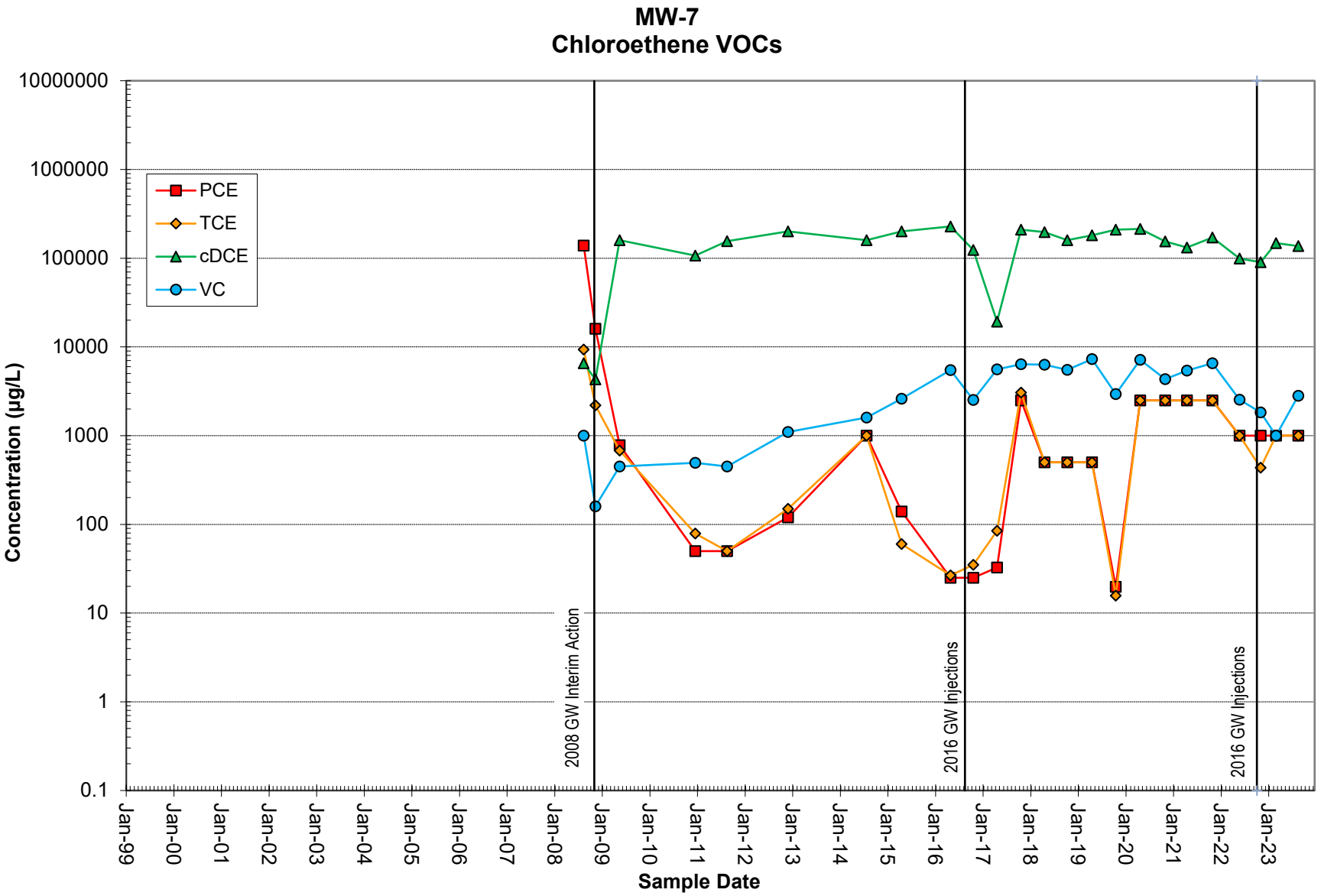

MW-5-20
Total Molar Ethenes
100000
10000
1000
100
10
1
0.1
0.01
Concentration (µmol/L)
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23
Sample Date

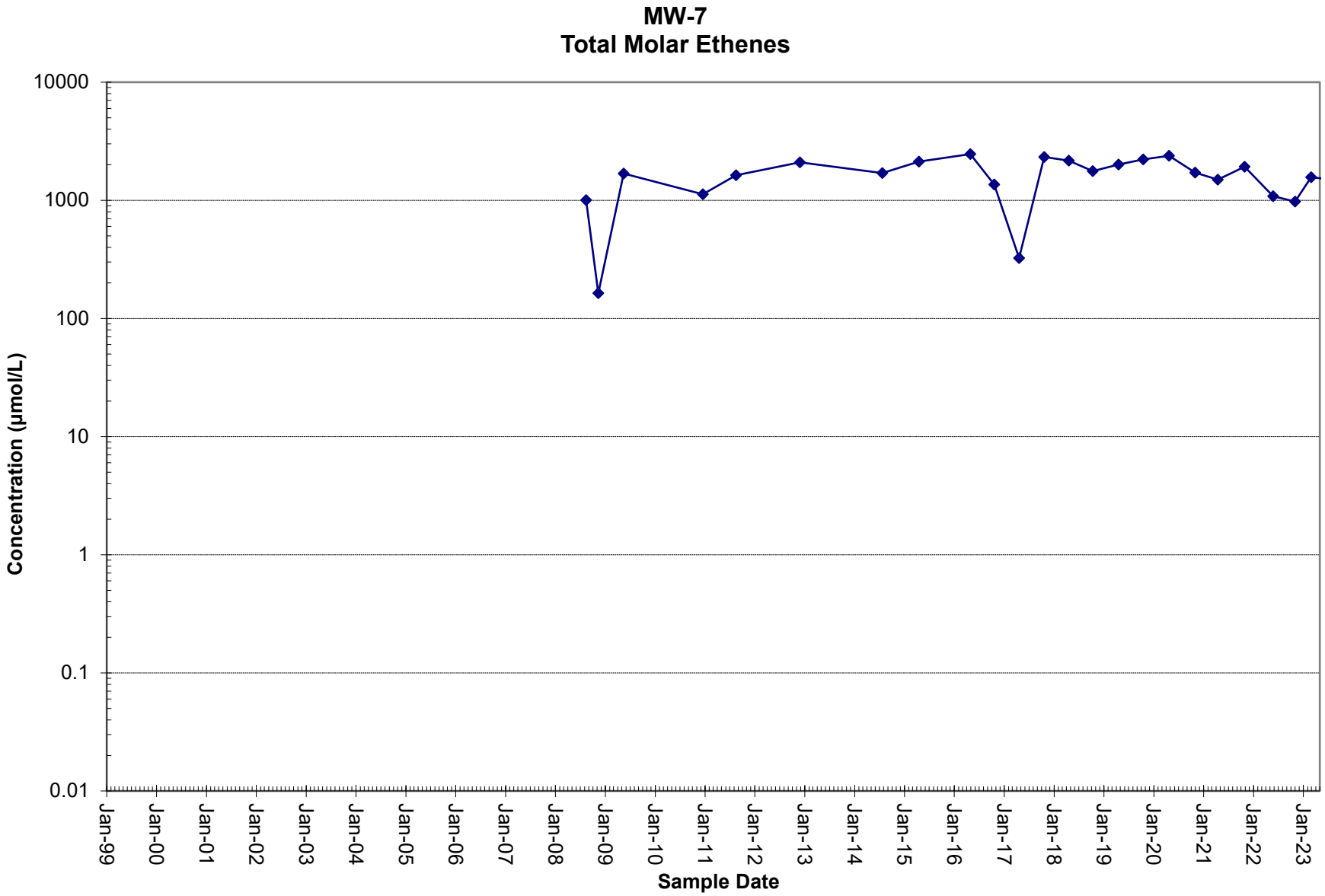

JEMW-6
Chloroethene VOCs
PCE
TCE
cDCE
VC
2008 GW Interim Action
2016 GW Injections
2022 GW Injections
Concentration (µg/L)
1000000
100000
10000
1000
100
10
1
0.1
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23
Date

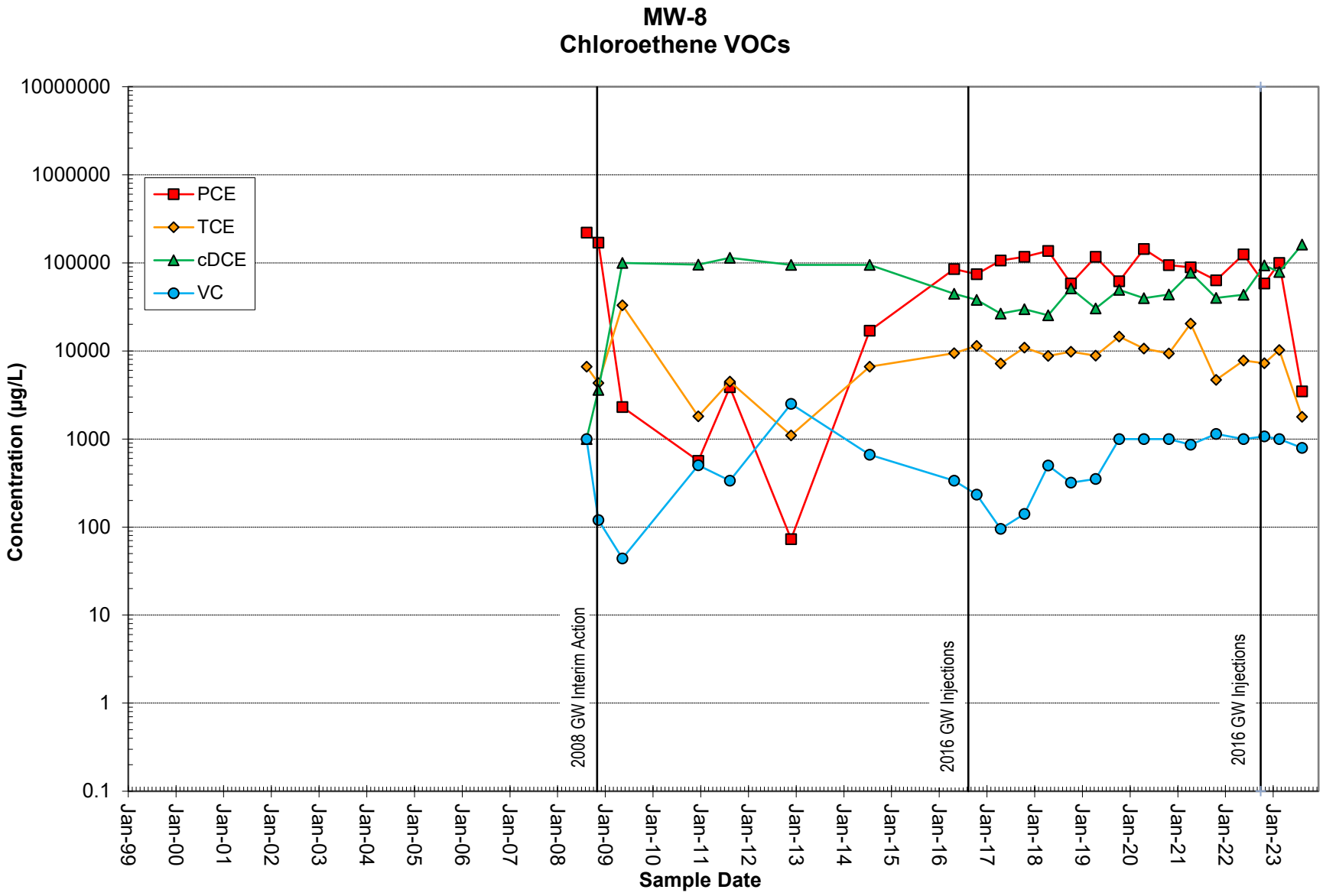

JEMW-6
Total Molar Ethenes
Concentration (µmol/L)
10000
1000
100
10
1
0.1
0.01
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23
Sample Date

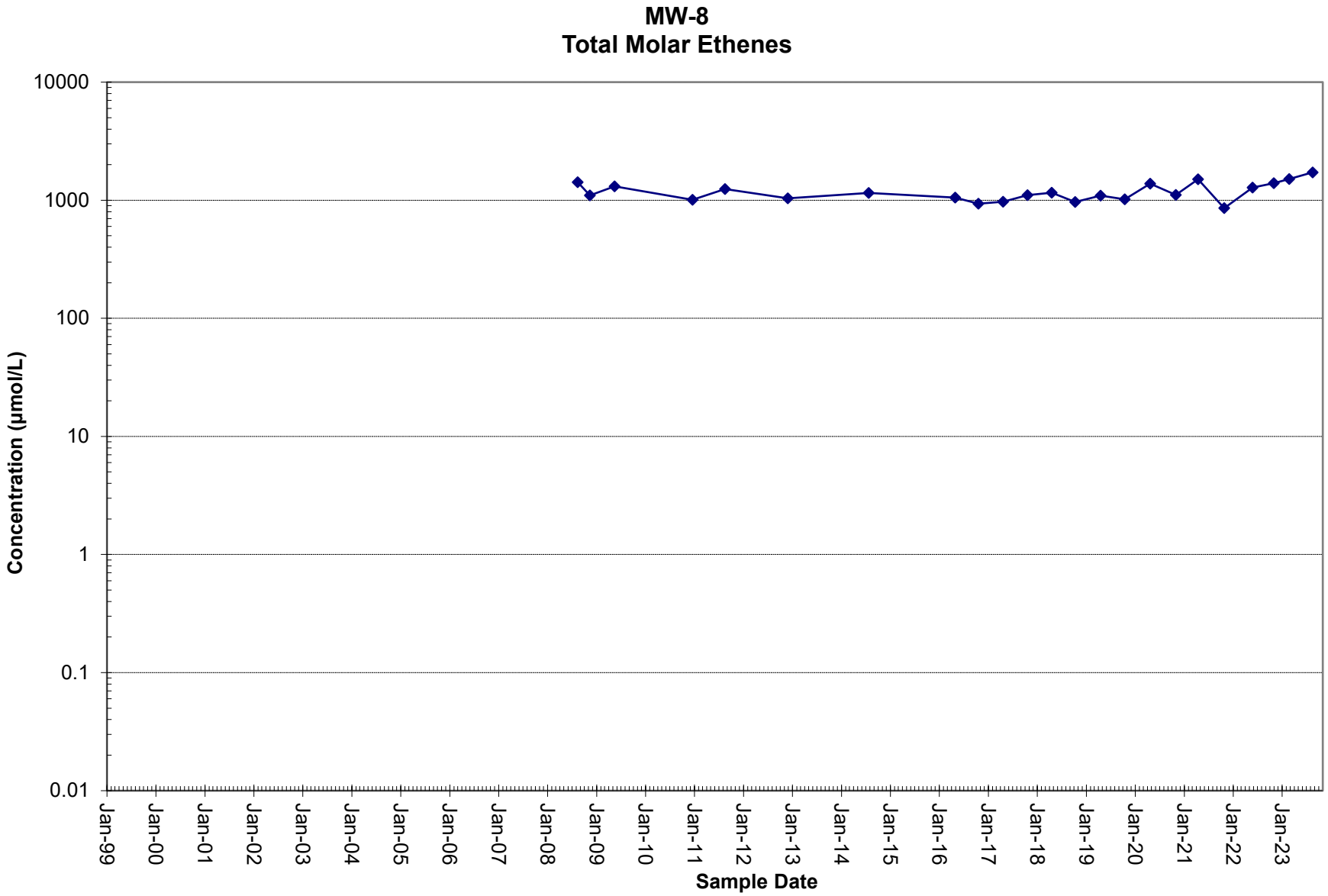

MW-6-20
Chloroethene VOCs
PCE
TCE
cDCE
VC
Concentration (µg/L)
10000000
1000000
100000
10000
1000
100
10
1
0.1
2008 GW Interim Action
2016 GW Injections
2022 GW Injections
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23
Sample Date

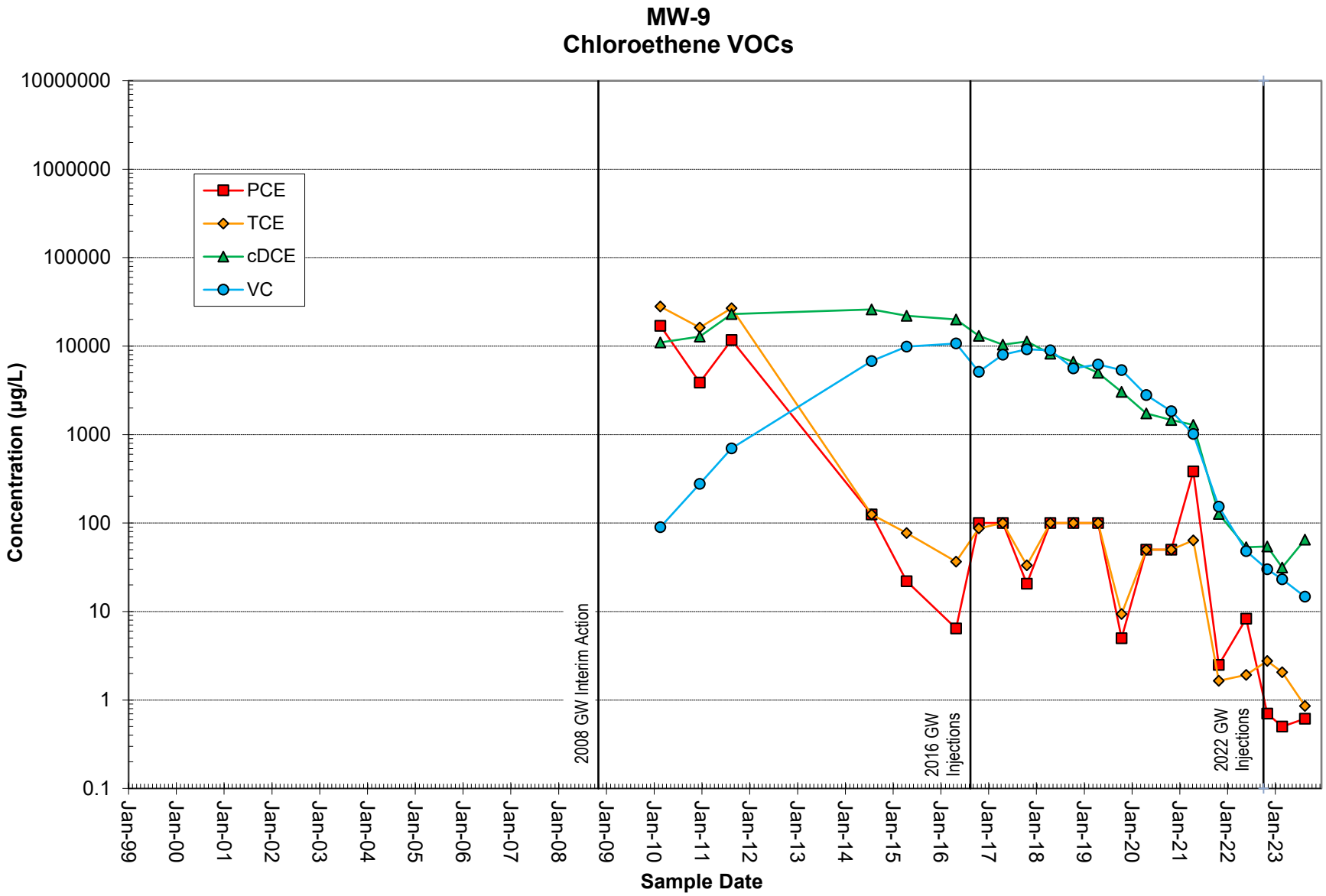

MW-6-20
Total Molar Ethenes
10000
1000
100
10
1
0.1
0.01
Concentration (µmol/L)
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23
Sample Date

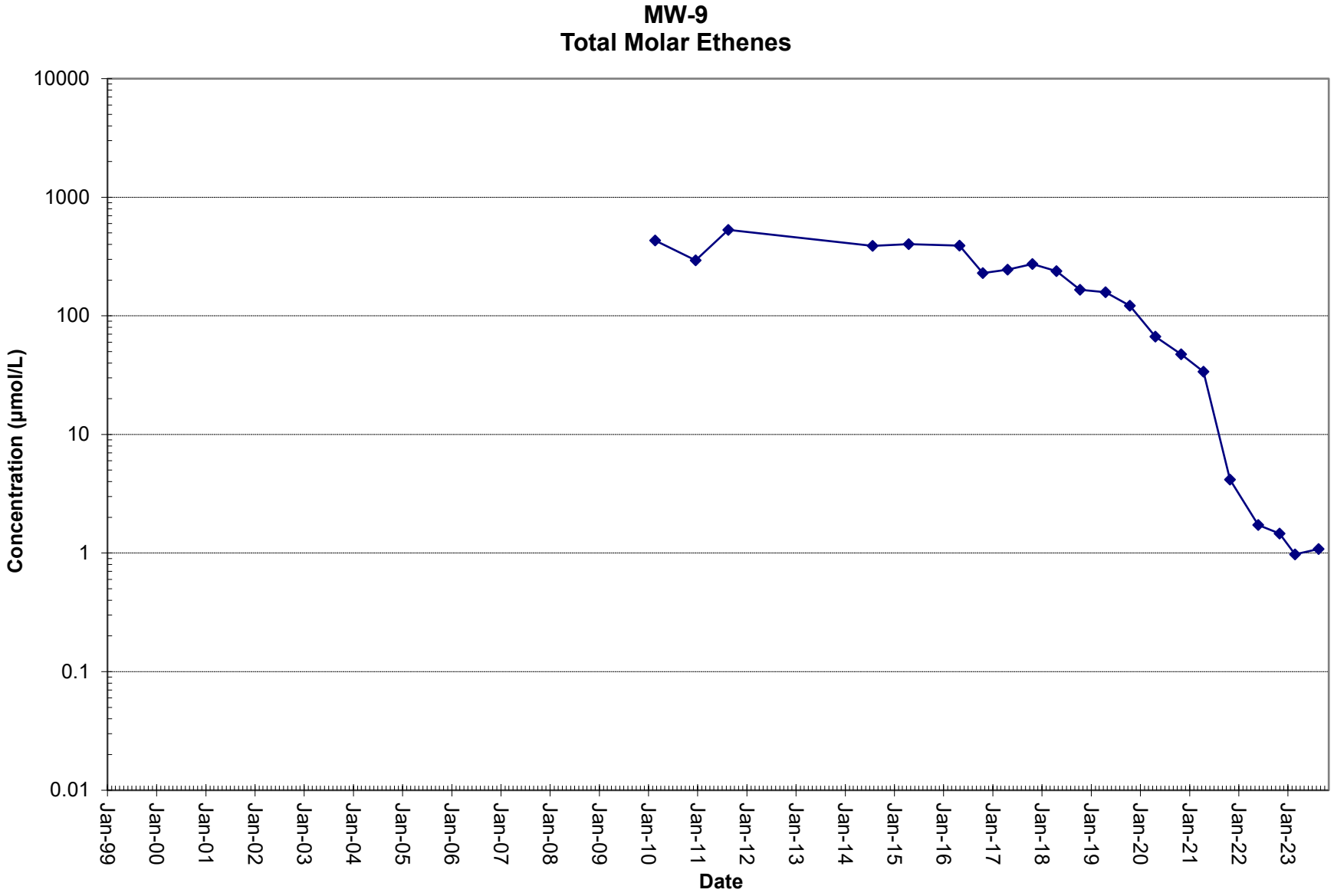

MW-7
Chloroethene VOCs
Concentration (µg/L)
10000000
1000000
100000
10000
1000
100
10
1
0.1
PCE
TCE
cDCE
VC
2008 GW Interim Action
2016 GW Injections
2016 GW Injections
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23
Sample Date


MW-7
Total Molar Ethenes
10000
1000
100
10
1
0.1
0.01
Concentration (µmol/L)
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23
Sample Date


MW-8
Chloroethene VOCs
Concentration (µg/L)
10000000
1000000
100000
10000
1000
100
10
1
0.1
PCE
TCE
cDCE
VC
2008 GW Interim Action
2016 GW Injections
2016 GW Injections
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23
Sample Date

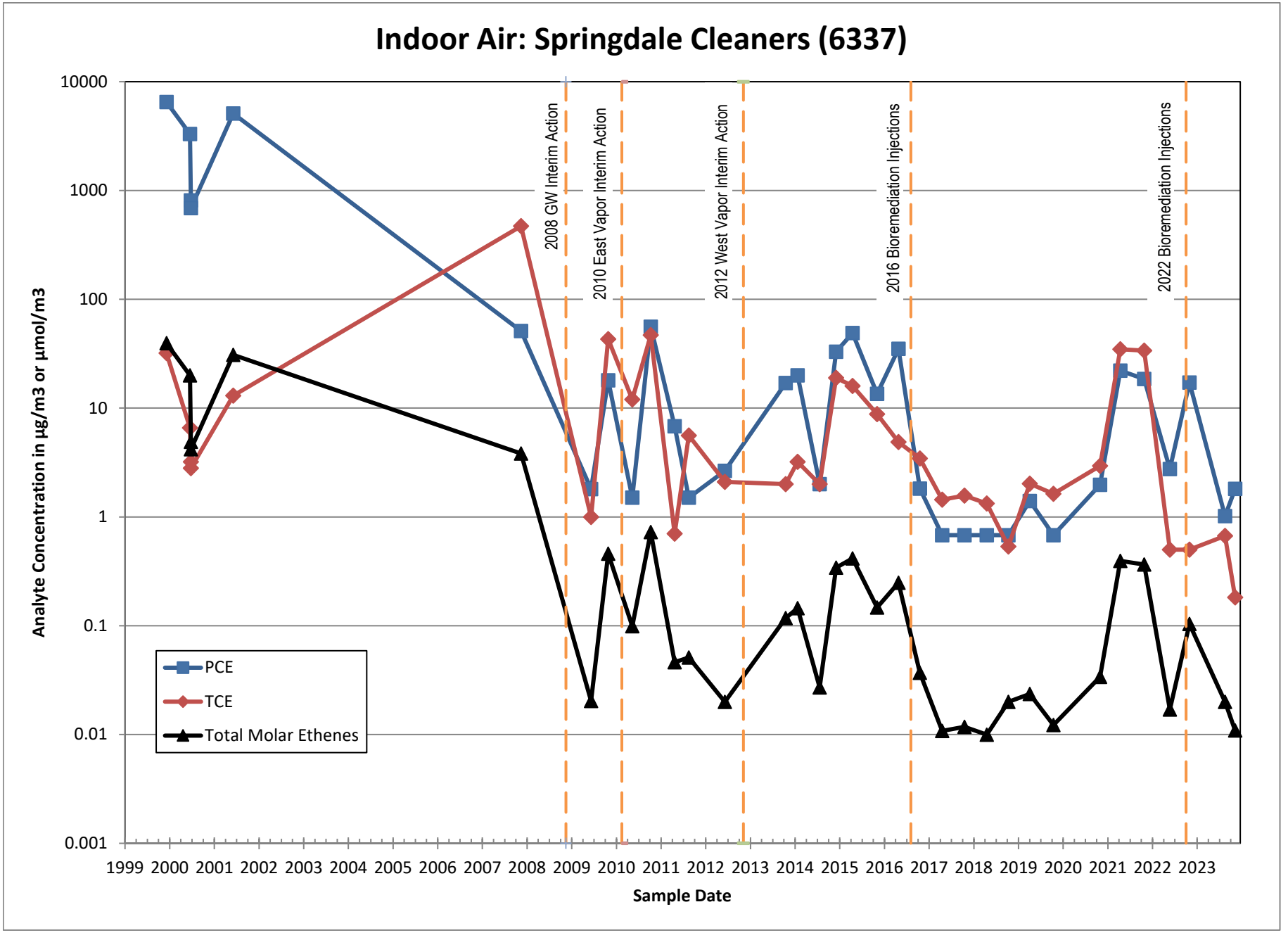

MW-8
Total Molar Ethenes
10000
1000
100
10
1
0.1
0.01
Concentration (µmol/L)
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23
Sample Date

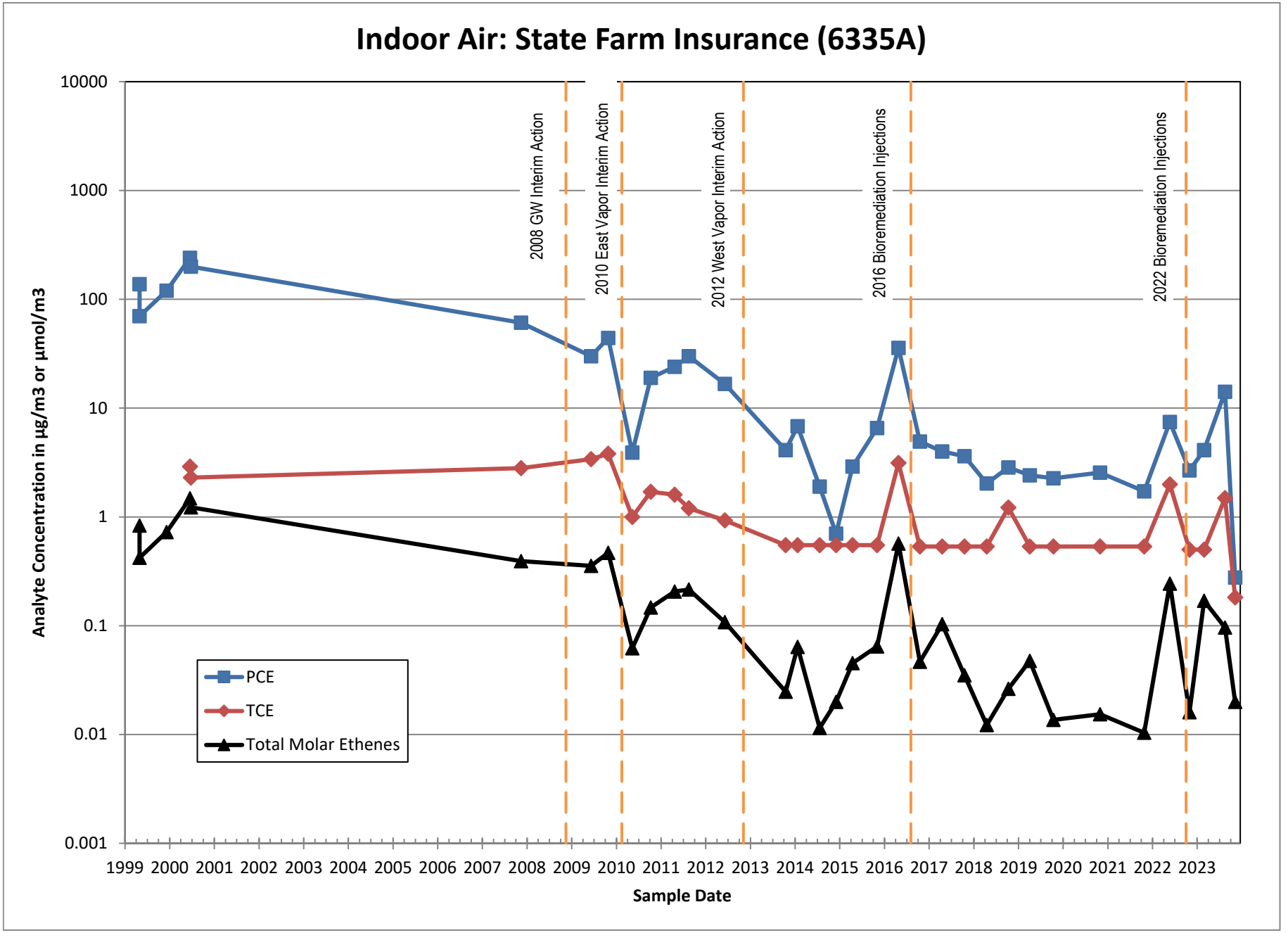

MW-9
Chloroethene VOCs
Concentration (µg/L)
10000000
1000000
100000
10000
1000
100
10
1
0.1
PCE
TCE
cDCE
VC
2008 GW Interim Action
2016 GW Injections
2022 GW Injections
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23
Sample Date

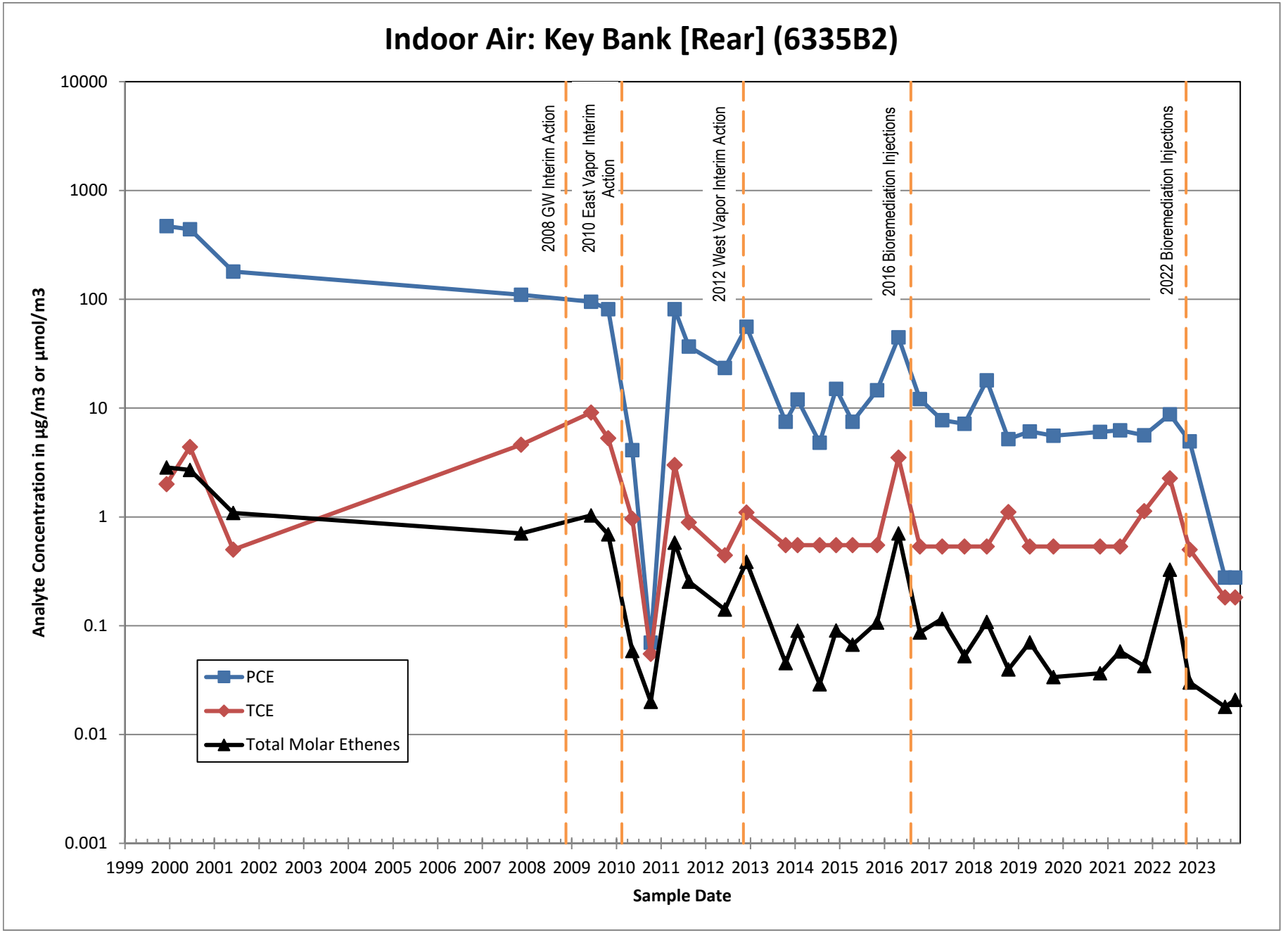

MW-9
Total Molar Ethenes
Concentration (µmol/L)
10000
1000
100
10
1
0.1
0.01
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
Jan-18
Jan-19
Jan-20
Jan-21
Jan-22
Jan-23
Date

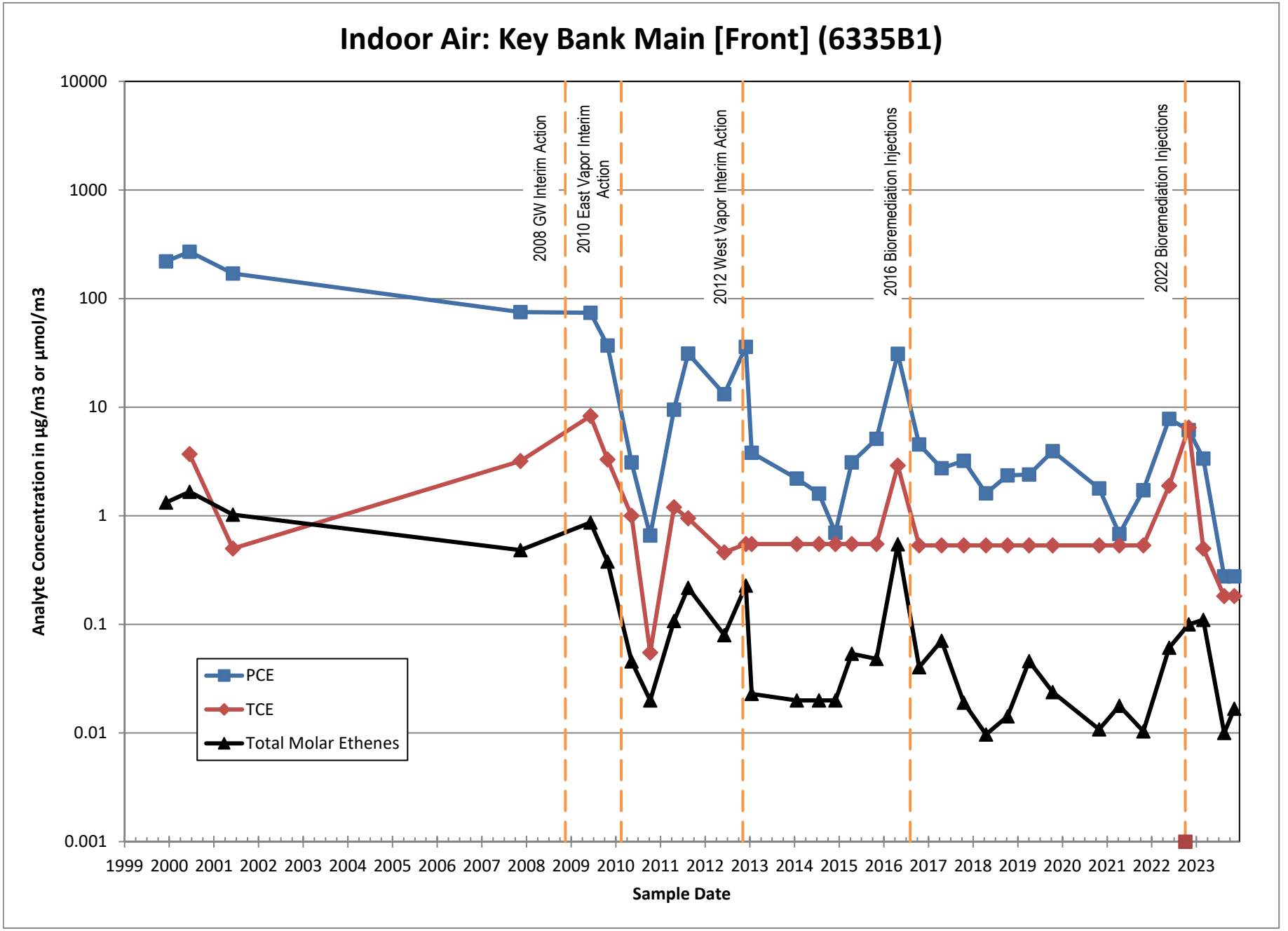
Appendix E

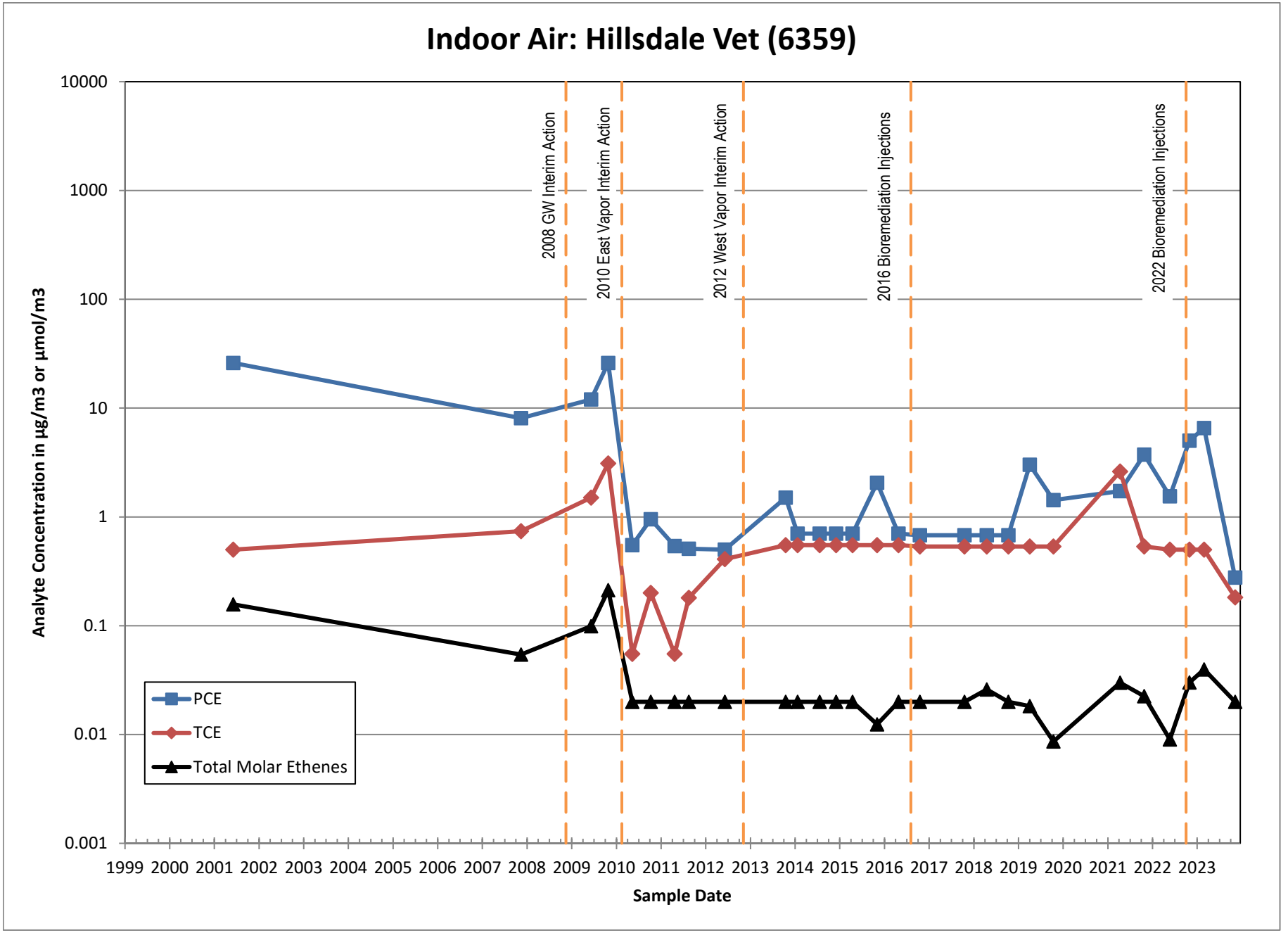
Air Concentration Trend Plots

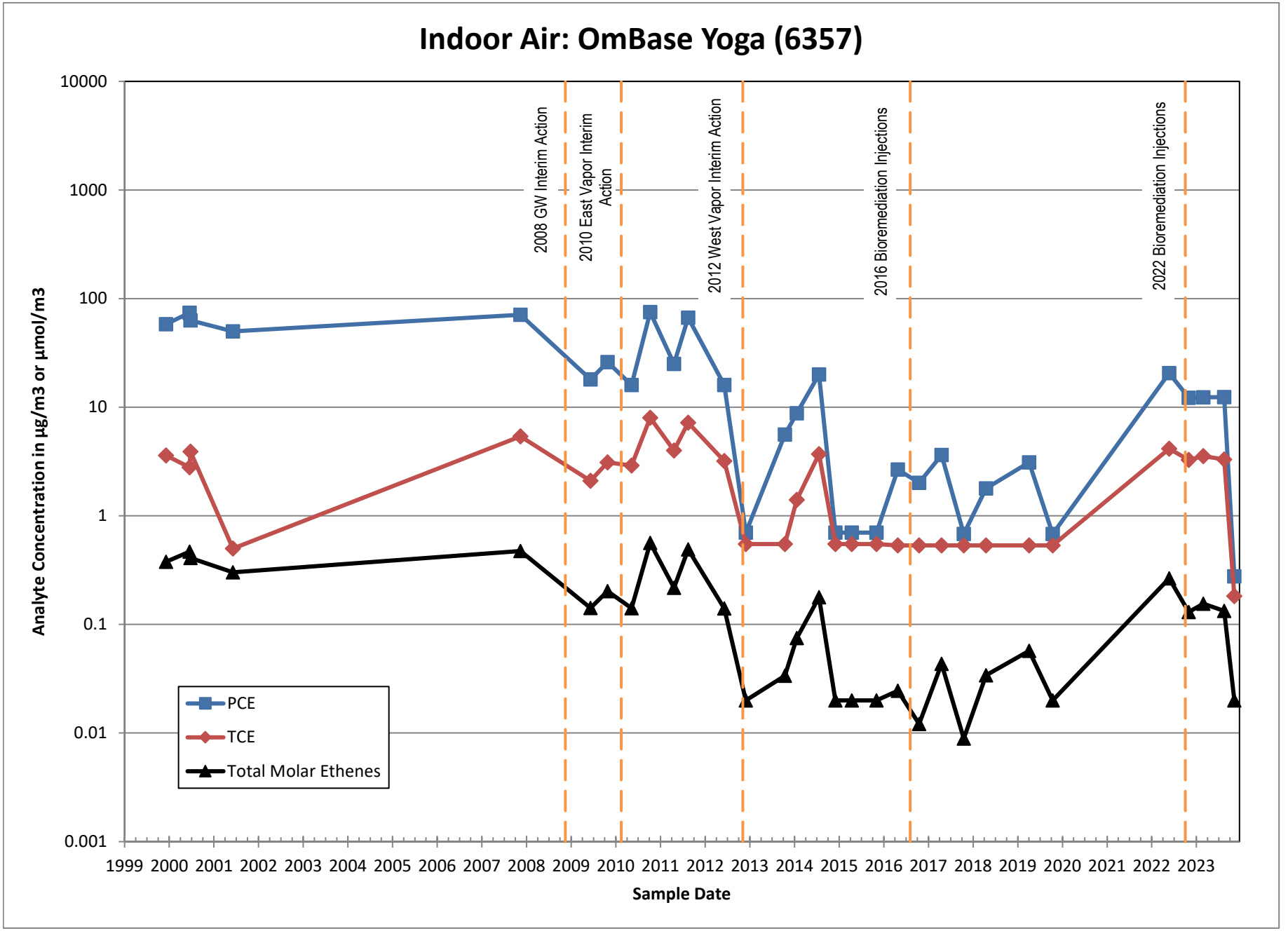

Indoor Air: Springdale Cleaners (6337)
Analyte Concentration in µg/m3 or µmol/m3
10000
1000
100
10
1
0.1
0.01
0.001
2008 GW Interim Action
2010 East Vapor Interim Action
2012 West Vapor Interim Action
2016 Bioremediation Injections
2022 Bioremediation Injections
PCE
TCE
Total Molar Ethenes
1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023
Sample Date

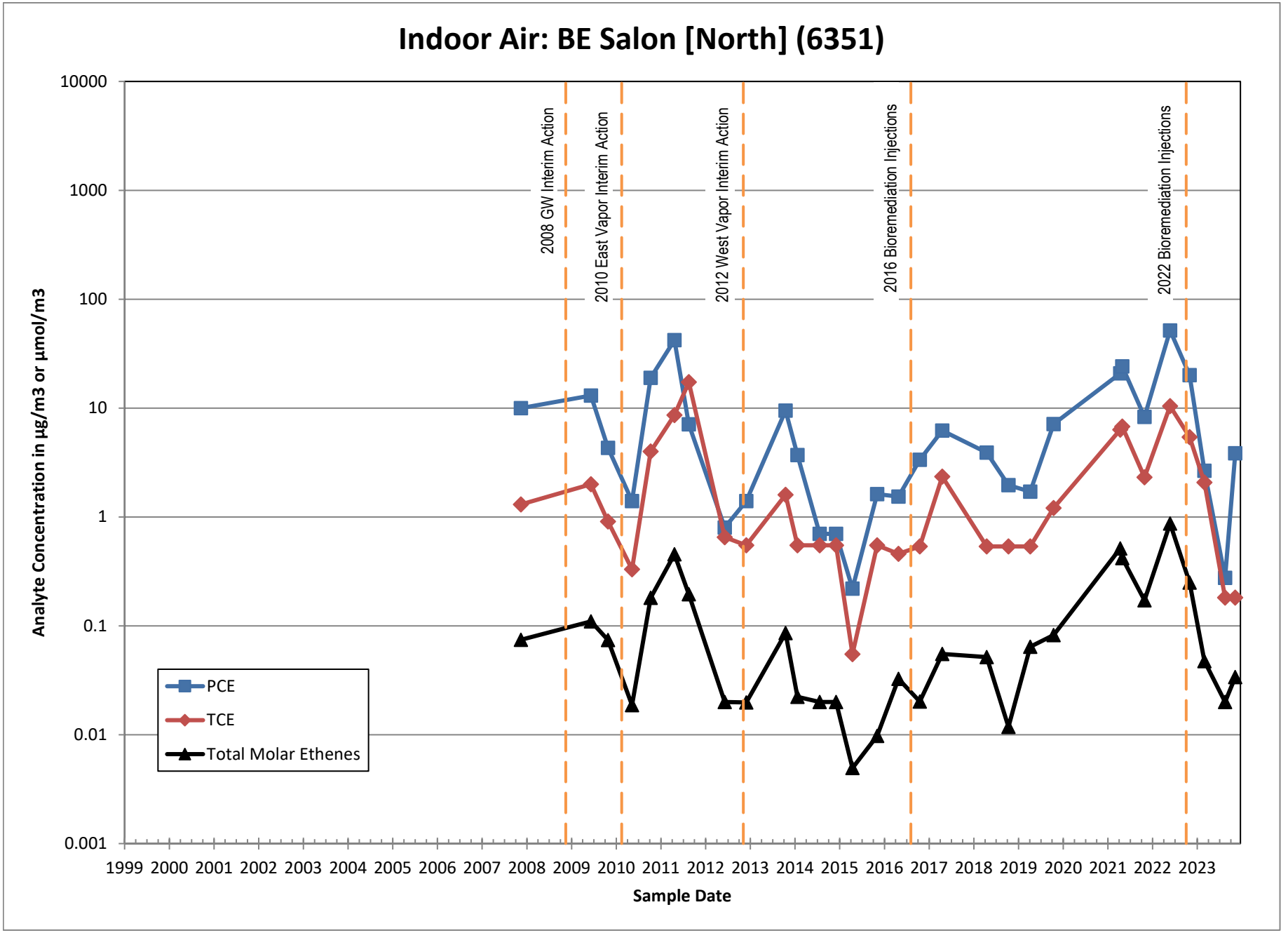

Indoor Air: State Farm Insurance (6335A)
Analyte Concentration in µg/m3 or µmol/m3
10000
1000
100
10
1
0.1
0.01
0.001
2008 GW Interim Action
2010 East Vapor Interim Action
2012 West Vapor Interim Action
2016 Bioremediation Injections
2022 Bioremediation Injections
PCE
TCE
Total Molar Ethenes
1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023
Sample Date

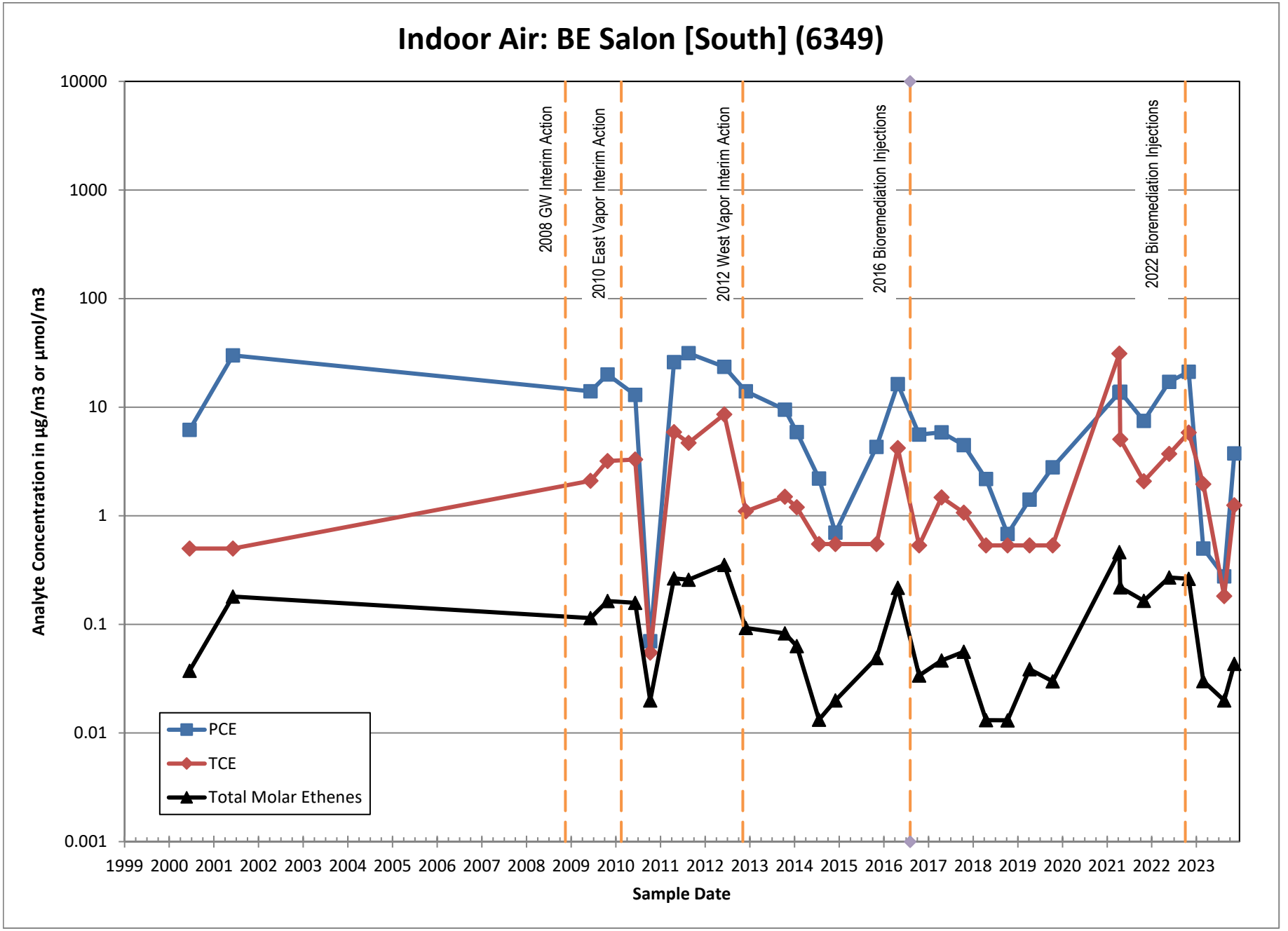

Indoor Air: Key Bank [Rear] (6335B2)
Analyte Concentration in µg/m3 or µmol/m3
10000
1000
100
10
1
0.1
0.01
0.001
2008 GW Interim Action
2010 East Vapor Interim Action
2012 West Vapor Interim Action
2016 Bioremediation Injections
2022 Bioremediation Injections
PCE
TCE
Total Molar Ethenes
1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023
Sample Date


Indoor Air: Key Bank Main [Front] (6335B1)
Analyte Concentration in µg/m3 or µmol/m3
10000
1000
100
10
1
0.1
0.01
0.001
2008 GW Interim Action
2010 East Vapor Interim Action
2012 West Vapor Interim Action
2016 Bioremediation Injections
2022 Bioremediation Injections
PCE
TCE
Total Molar Ethenes
1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023
Sample Date


Indoor Air: Hillsdale Vet (6359)
Analyte Concentration in µg/m3 or µmol/m3
10000
1000
100
10
1
0.1
0.01
0.001
2008 GW Interim Action
2010 East Vapor Interim Action
2012 West Vapor Interim Action
2016 Bioremediation Injections
2022 Bioremediation Injections
PCE
TCE
Total Molar Ethenes
1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023
Sample Date


Indoor Air: OmBase Yoga (6357)
Analyte Concentration in µg/m3 or µmol/m3
10000
1000
100
10
1
0.1
0.01
0.001
2008 GW Interim Action
2010 East Vapor Interim Action
2012 West Vapor Interim Action
2016 Bioremediation Injections
2022 Bioremediation Injections
PCE
TCE
Total Molar Ethenes
1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023
Sample Date


Indoor Air: BE Salon [North] (6351)
Analyte Concentration in µg/m3 or µmol/m3
10000
1000
100
10
1
0.1
0.01
0.001
2008 GW Interim Action
2010 East Vapor Interim Action
2012 West Vapor Interim Action
2016 Bioremediation Injections
2022 Bioremediation Injections
PCE
TCE
Total Molar Ethenes
1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023
Sample Date


Indoor Air: BE Salon [South] (6349)
Analyte Concentration in µg/m3 or µmol/m3
10000
1000
100
10
1
0.1
0.01
0.001
2008 GW Interim Action
2010 East Vapor Interim Action
2012 West Vapor Interim Action
2016 Bioremediation Injections
2022 Bioremediation Injections
PCE
TCE
Total Molar Ethenes
1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023
Sample Date