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PHASE II SUBSURFACE INVESTIGATION REPORT

1606, 1614, and 1624 Bellevue Way Southeast

1606, 1614, and 1624 Bellevue Way Southeast
Bellevue, Washington 98004

Report Date

November 2, 2023

Partner Project No.

23-416301.1

Prepared for:

Okae Lee
5828 135th Place Southeast
Bellevue, Washington 98006



Building
Science



Environmental
Consulting



Construction &
Development



Energy &
Sustainability

PARTNER



November 9, 2023

Okae Lee
5828 135th Place Southeast
Bellevue, Washington 98006

Subject: Phase II Subsurface Investigation Report
1606, 1614, and 1624 Bellevue Way Southeast
Bellevue, Washington 98004
Partner Project No. 23-416301.1

Dear Okae Lee:

Partner Engineering and Science, Inc. (Partner) is pleased to provide the results of the assessment performed at the above-referenced property. The following report describes the field activities, methods, and findings of the Phase II Subsurface Investigation conducted at the above-referenced property.

This assessment was performed consistent with acceptable industry standards. The independent conclusions represent Partner's best professional judgment based upon existing conditions and the information and data available to us during the course of this assignment.

We appreciate the opportunity to provide these services. If you have any questions concerning this report, or if we can assist you in any other matter, please contact Lyly Churchill at 310-765-7271.

Sincerely,

Partner Engineering and Science, Inc.

Brian Godbois
Brian T. Godbois
Senior Project Manager

Lily Churchill
Lily Churchill
National Client Manager

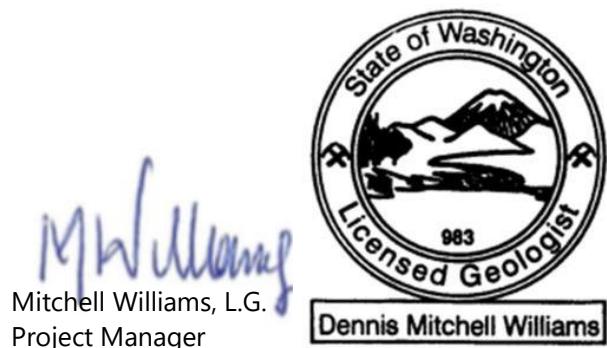


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The following Figures, Tables, and Appendices are attached at the end of this report.

- FIGURES** 1. Site Vicinity Map
 2. Topographic Map
 3. Sample Location Map

- TABLES** 1. Summary of Investigation Scope
 2. Soil Sample GRO/DRO/RRO Laboratory Results
 3. Soil Sample VOCs Laboratory Results
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- APPENDICES** A. Boring Logs
 B. Laboratory Analytical Reports

1.0 INTRODUCTION

1.1 Purpose

The purpose of the investigation was to evaluate the potential impact of petroleum hydrocarbons and volatile organic compounds (VOCs) to soil gas, soil, and/or groundwater as a consequence of a release or releases from the on-site dry cleaning facility and/or the former gasoline service station. Okae Lee provided project authorization of Partner Proposal Number P23-416301.2 and Change Order Number P23-416301.1R.

1.2 Limitations

This report presents a summary of work conducted by Partner. The work includes observations of site conditions encountered and the analytical results provided by an independent third-party laboratory of samples collected during the course of the project. The number and location of samples were selected to provide the required information. It cannot be assumed that the limited available data are representative of subsurface conditions in areas not sampled.

Conclusions and/or recommendations are based on the observations, laboratory analyses, and the governing regulations. Conclusions and/or recommendations beyond those stated and reported herein should not be inferred from this document.

Partner warrants that the environmental consulting services contained herein were accomplished in accordance with generally accepted practices in the environmental engineering, geology, and hydrogeology fields that existed at the time and location of work. No other warranties are implied or expressed.

1.3 User Reliance

Partner was engaged by Okae Lee (the Addressee), or their authorized representative, to perform this investigation. The engagement agreement specifically states the scope and purpose of the investigation, as well as the contractual obligations and limitations of both parties. This report and the information therein, are for the exclusive use of the Addressee. This report has no other purpose and may not be relied upon, or used, by any other person or entity without the written consent of Partner. Third parties that obtain this report, or the information therein, shall have no rights of recourse or recovery against Partner, its officers, employees, vendors, successors or assigns. Any such unauthorized user shall be responsible to protect, indemnify and hold Partner, the Addressee and their respective officers, employees, vendors, successors and assigns harmless from any and all claims, damages, losses, liabilities, expenses (including reasonable attorneys' fees) and costs attributable to such use. Unauthorized use of this report shall constitute acceptance of, and commitment to, these responsibilities, which shall be irrevocable and shall apply regardless of the cause of action or legal theory pled or asserted.

This report has been completed under specific Terms and Conditions relating to scope, relying parties, limitations of liability, indemnification, dispute resolution, and other factors relevant to any reliance on this report. Any parties relying on this report do so having accepted Partner's standard Terms and Conditions, a copy of which can be found at <http://www.partneresi.com/terms-and-conditions.php>.

2.0 SITE BACKGROUND

2.1 Site Description

The subject property consists of three parcels of land comprising 1.55 acres located to the southeast of the intersection of Southeast 16th Street and Bellevue Way Southeast within a mixed residential and commercial area of Bellevue, King County, Washington. The subject property is currently developed with two buildings totaling 5,110 square feet and is occupied by Chace's Pancake Corral, Enatai Dry Cleaners, Woodinville Shoe Repair. In addition to the structures, the subject property is improved with asphalt- and gravel-paved parking areas and associated landscaping.

The subject property is bound by commercial and residential properties to the north across Southeast 16th Street, residential properties to the east, commercial property to the south, and residential properties to the west across Bellevue Way Southeast. Refer to Figure 1 for a site vicinity map showing site features and surrounding properties.

2.2 Site History

Partner was provided with an AEI Consultants, Inc. (AEI) a *Phase I Environmental Site Assessment Report* (Phase I) for the subject property, dated August 21, 2023, on behalf of Okae Lee. According to AEI, the subject property was previously undeveloped as early as 1895, developed with a commercial building in the central portion of the property (1947), developed with a restaurant in the north portion of the subject property, developed with a gasoline station (1957), and developed in the current configuration (1966).

The following recognized environmental conditions (RECs) were identified in the Phase I:

- "A dry cleaners operated on the subject property between 1958 and 1983 (Kevik Cleaners, Penthouse Cleaners, Kwik Drive-In Cleaners). The subject property was first suspected as a source of PCE [tetrachloroethylene] in October, 1993 when PCE was found in soil and groundwater at the southern-adjoining Unocal property. The Unocal property was being remediated for petroleum-contaminated soils due to leaking USTs [underground storage tanks]. Kevik Cleaners was listed on WDOE's [State of Washington Department of Ecology] Known or Suspected Hazardous Waste Sites List in February, 1994. Subsequent subsurface investigations were conducted, with soil samples collected and groundwater monitoring wells installed. PCE was found on site, with most heavily contaminated area being located in front of the building under the asphalt. Concentrations of PCE in soil from the top two feet were found up to 32 mg/ kg [milligrams per kilogram], which is well above the Model Toxics Control Act (MTCA) Method A cleanup level of 0.5 mg/kg that was in place at the time of the sampling. AEI Note: The current MTCA Method A cleanup level for PCE in soil is 0.05 µg/L [micrograms per liter]. Periodic groundwater sampling was conducted between February, 1993 and April, 1994. PCE was detected in multiple wells with concentrations as high as 2,100 µg/L, well above the MTCA Method A cleanup level of 5 µg/L. An additional groundwater monitoring event was conducted in April, 1997, but was limited to wells located directly in front of the building. Concentrations of PCE and TCE were found as high as 1,280 µg/L (PCE) and 1.4 µg/L (TCE) [trichloroethylene], above their MTCA Method A cleanup levels of 0.05 µg/L (PCE) and 0.03 µg/L (TCE). The known soil and groundwater contamination on the subject property associated with former dry cleaning operations is indicative of a REC.

- The southern portion of the subject property was originally developed with a gasoline station in 1957, and included 4,000-gallon, 5,000-gallon and 6,000-gallon gasoline USTs, a 350-gallon heating oil UST and a 280-gallon waste oil UST. In 1971, three 10,000-gallon heating oil USTs were installed in the eastern portion of site, at the base of an embankment. In 1979 the original gasoline USTs were replaced with three 10,000-gallon gasoline USTs. In 1983, the gasoline station was converted to self-service, with the original station building, pump islands, heating oil USTs, waste oil USTs and loading rack removed, and a new service station building constructed with new pump islands installed. Additionally, one of the 10,000-gallon gasoline USTs was converted to store diesel and an oil-water separator installed. Various subsurface investigations and groundwater monitoring activities were conducted between August, 1990 and July, 1995. The 10,000-gallon gasoline and diesel USTs were removed between April and September, 1992. Approximately 1,054 tons of petroleum contaminated soils were excavated and removed from the former heating oil UST area in the eastern portion of the subject property. Residual soil contamination remained in the hillside to the east, with concentrations ranging from 47 to 5,000 mg/kg. The MTCA Method A cleanup level for diesel in soil is 2,000 mg/kg. The station was reportedly demolished in 1994, with 7 remaining USTs removed and approximately 1,190 cubic yards of petroleum contaminated soil excavated and removed from the site. Groundwater monitoring was conducted at the former Unocal site between April 1993 and July 1995. Groundwater depth ranged from 33 to 51-feet bgs, with a flow direction to the southeast. The most recent groundwater sampling data available (from July 1995) showed no gasoline, diesel or oil-range TPH or BTEX above MTCA Method A cleanup levels. However, PCE was found at concentrations ranging from 78 to 1,200 µg/L, well above the MTCA Method A cleanup level of 5 µg/L. The source of the PCE was presumed to be the former dry cleaners in [sic] the northern portion of the subject property. A 1,000-gallon waste oil UST, hoists and a sump were removed from this site in 2009. No impacts to soil were found in any of the confirmation samples collected. The remaining concentrations of diesel in soil along the eastern portion of this area and the concentrations of PCE in groundwater are indicative of a REC."

2.3 Geology and Hydrogeology

Review of the United States Geological Survey (USGS) *Mercer Island, Washington Quadrangle* topographic map indicates the subject property is situated approximately 100 feet above mean sea level, and the local topography is sloping gently to the southeast. Refer to Figure 2 for a topographic map of the site vicinity.

The subject property is situated in the Puget Lowland physiographic province of Washington state (Geologic Map of Washington, 2002). The Puget Lowland is a broad, low-lying trough located between the Cascade Range to the east and the Olympic Mountains to the northwest and the Willapa Hills to the southwest. As the Cascade Range began to form, much of the sediment deposited on the coastal plain was derived from volcanic eruptions. During the Quaternary, the Puget Lowland was covered a number of times by continental ice sheets. The most recent (Fraser) glaciation reached its peak about 14,000 years ago. The Fraser ice retreated quickly, leaving behind a landscape sculpted by glacial erosion and covered by newly deposited glacial drift.

Based on borings advanced during this investigation, the underlying subsurface consists predominantly of silty sand (SM) and sandy silt (ML) from the ground surface to approximately 25 feet below ground surface (bgs). Groundwater was not encountered in the borings advanced during this investigation; however, it was

encountered in the three on-site groundwater monitoring wells at a depth of 40 feet bgs. Refer to Appendix A for boring logs from this investigation.

3.0 FIELD ACTIVITIES

The Phase II Subsurface Investigation scope included the advancement of five borings (B1 through B5) and the collection of three groundwater samples from the on-site groundwater monitoring wells (GMW-1 through GMW-3) to collect representative soil, groundwater, and/or soil gas samples. Refer to Table 1 for a summary of the borings, sampling schedule, and laboratory analyses for this investigation.

3.1 Preparatory Activities

Prior to the initiation of fieldwork, Partner completed the following activities.

3.1.1 Utility Clearance

Partner delineated the work area with white spray paint and notified Washington Utility Notification Center (WUNC) to clear public utility lines as required by law at least two business days prior to drilling activities. Washington Utility Notification Center (WUNC) issued ticket numbers 23428943, 23428939, and 23428933 for the project.

In addition, Partner subcontracted with Blood Hound Underground, LLC. (BH) on October 29 and 30, 2023, to clear boring locations of utilities. BH systematically free-traversed each proposed boring location with a Radiodetection model RD7000 electromagnetic induction (EM) equipment unit with line-tracing capabilities, and a GSSI model SIR-3000 ground penetrating radar (GPR) unit. The data was interpreted in real time for evidence of utility lines and/or other subsurface features of potential concern. Based on the findings of the GPR survey, no subsurface utilities were identified within the proposed boring locations.

3.1.2 Health and Safety Plan

Partner prepared a site-specific Health and Safety Plan, which was reviewed with on-site personnel involved in the project prior to the commencement of drilling activities.

3.2 Drilling Equipment

On October 29 and 30, 2023, Partner subcontracted Holocene Drilling (Holocene) (State of Washington Contractor License Number HOLOCD*782MG) to provide and operate drilling equipment. Holocene, under the direction of Partner, advanced borings B1 and B2 with a limited-access AMS PowerProbe 9100-P and borings B3 through B5 with a truck-mounted Geoprobe Model 7800 direct push rig. Sampling equipment was decontaminated between sample intervals and boring locations to prevent cross-contamination.

3.3 Sample Locations

Borings B1 and B2 were advanced in the central and east interior of the dry cleaning facility, respectively. Borings B3 and B5 were advanced to the south and west exterior of the dry cleaning facility, respectively. Boring B4 was advanced in the east portion of the former gasoline service station area. Groundwater monitoring wells GMW-1 and GMW-2 were located to the west and south exterior of the dry cleaning facility. Groundwater monitoring well GMW-3 was located to the west of GMW-2.

Refer to Figure 3 for a map indicating sample locations.

3.4 Soil Sampling

Borings B1 and B2 were overlain by concrete, which was penetrated using a rotary hammer drill. Boring B3 was advanced in an area of gravel surface cover. Borings B4 and B5 were overlain by asphalt, which was penetrated using a punch bit attachment advanced by the direct-push drill rig. Borings B1 through B4 were advanced to drilling refusal at a terminal depths of 6, 9, 22, and 25 feet bgs. Boring B5 was advanced to a terminal depth of 25 feet bgs.

Soil samples were collected using a 4- or 5-foot long (4-foot for limited-access rig and 5-foot for truck-mounted rig) by 2.25-inch diameter MacroCore samplers with 4- or 5-foot long acetate liners, which were advanced by the direct-push drill rigs using 4- or 5-foot long by 1.5-inch diameter drill rods. The samplers were driven into the subsurface to allow undisturbed soil to enter the open MacroCore barrel and retrieved in 4-foot or 5-foot intervals to recover the soil-filled liners.

A lengthwise section of each acetate liner was removed with a splitting tool to expose the soil. The soil column was visually inspected for discoloration, monitored for odors, and classified in accordance with the Unified Soil Classification System (USCS). Select intervals were placed in sealable plastic bags and field-screened with a photoionization detector (PID) calibrated to isobutylene.

Soil depths selected for laboratory analysis were sampled directly from the liners using a disposable plastic syringe and retained in one methanol-preserved volatile organics analysis (VOA) vial in accordance with United States Environmental Protection Agency (EPA) Method 5035 sampling protocol. A sample was also collected by transferring soil into laboratory-supplied, 2-ounce and 4-ounce, wide-mouth, unpreserved glass jars, which was sealed with threaded, Teflon-lined lids. The jars were filled with soil to capacity to minimize headspace and reduce the potential for volatilization. The jars and VOA vials were labeled for identification and stored in an iced cooler. Various intervals in the soil cores exhibited discoloration, odors, and had former landfill constituents including wood, metal, glass, coal, brick, and other various landfill waste integrated with soil. None of the PID readings suggested the presence of elevated volatile organics concentrations.

Soil samples were collected from boring B1 at 2 and 6 feet bgs; from boring B2 at 2 and 9 feet bgs; from boring B3 at 16 and 22 feet bgs; from boring B4 at 20 and 25 feet bgs; and from boring B5 at 15 and 25 feet bgs.

3.5 Groundwater Sampling

On October 30, 2023, each of the three groundwater monitoring wells (GMW-1 through GMW-3) were sampled. Partner initially attempted to sample the groundwater monitoring wells using a peristaltic pump; however, the pump was unable to pull groundwater to the surface. As such, Partner used a new disposable bailer for each well to collect the samples. Samples were collected from the bailer and retained in three hydrochloric acid-preserved and five unpreserved VOA vials. The VOA vials were labeled for identification and stored in an iced cooler.

The well depth was gauged and water level of groundwater monitoring well GMW-2 was measured. The well was found to be 60 feet bgs deep, and the water column was present at 40 feet bgs. The remaining well depths were not measured due to equipment failure.

Groundwater samples were collected from groundwater monitoring wells GMW-1 through GMW-3.

3.6 Soil Gas Sampling

Soil Gas Probe Construction

Soil gas probes screened at 5 feet bgs were constructed within the boreholes upon completion of soil sampling. Boreholes were backfilled with dry, granular bentonite to approximately 6 inches below the desired sampling depth. A new section of 1/4-inch diameter polyethylene tubing with a new 1/4-inch diameter polypropylene filter at the terminal end was inserted into the borehole to the desired sampling depth. One-inch diameter PVC casing was used as a guide for the tubing to ensure that the desired sampling depth was achieved. Sand was poured into the boring annulus to form an approximately 1-foot long sand pack around the polypropylene filter, at which time the PVC piping was withdrawn. Approximately 1 foot of dry, granular bentonite was placed atop the sand pack and the remainder of the borehole was backfilled with hydrated bentonite to the ground surface to form a seal. The sampling end of the tubing was fitted with a valve and the probe was labeled for identification.

Soil Gas Sampling Methodology

Soil gas samples were collected in general accordance with Ecology's April 2018 Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action and the State of California July 2015 Department of Toxic Substances Control (DTSC) and LARWQCB "Advisory – Active Soil Gas Investigations."

Soil gas samples were collected using 1-liter, stainless-steel, cylindrical SUMMA canisters. The sampling containers were provided by Pace Analytical (Pace) a state-certified laboratory [Environmental Laboratory Accreditation Program (ELAP) certificate number C847] in Mount Juliet, Tennessee, which subjected each canister to a rigorous cleaning process using a combination of dilution, heat, and high vacuum. After cleaning, the canisters were batch certified to be free of target contaminants to a specified reporting limit via gas chromatography/mass spectroscopy prior to delivery.

Partner received the SUMMA canisters evacuated to approximately minus 30 inches of mercury. The SUMMA canisters were fitted with stainless-steel flow controllers, which Pace calibrated to maintain constant flow (approximately 0.1 liter per minute) for approximately 5 to 10 minutes of sampling time.

Each probe was allowed to equilibrate for a minimum of two hours after installation prior to sampling. After equilibration, the sample tubing and sampler screen were purged of three sample volumes (3 liters) of ambient air using a plastic syringe. A tracer gas [1,1-difluoroethane (1,1-DFA)] was placed around each probe at the ground surface while sampling to detect ambient air intrusion. Once the sampling tubing was purged of ambient air, the sampling end of the tubing was fitted to the sampling canister and the port valve was opened, causing air to enter the sample container due to the pressure differential. Partner closed the valves after the canister was evacuated to approximately minus 1 to 2 inches of mercury, with pertinent data (e.g., time, canister vacuum) recorded at the start and end of sampling.

Partner successfully connected individual 1-liter SUMMA canisters to each sampling point. The SUMMA canisters were labeled for identification and stored away from direct sunlight prior to analysis.

Soil gas samples were collected from each boring at 5 feet bgs.

3.7 Post-Sampling Activities

Probes were removed from the subsurface and the boreholes were backfilled with hydrated bentonite chips following sampling activities. Boreholes advanced in improved areas were capped with concrete or asphalt patch to match existing ground cover after being backfilled.

No significant amounts of derived wastes were generated during this investigation.

4.0 DATA ANALYSIS

4.1 Laboratory Analysis

Partner collected 10 soil samples, three groundwater samples, and five soil gas samples on October 29 and 30, 2023, which were transported in an iced cooler (soil and groundwater samples) or at ambient temperature (soil gas samples) under chain-of-custody protocol Pace for analysis. Based on field-screening results, visual observations, and/or olfactory observations, seven soil samples and each groundwater sample (three groundwater samples total) was analyzed for gasoline-, diesel-, and residual-range organics (GRO, DRO, and RRO, respectively) via Ecology Method NWTPH-Dx/Dx Extended and for VOCs via EPA Method 8260D. Each soil gas sample (five soil gas samples total) was analyzed for VOCs via EPA Method TO-15.

The remaining soil samples were placed on hold at the laboratory.

Laboratory analytical results are included in Appendix B and discussed below.

4.2 Regulatory Agency Comparison Criteria

Washington Department of Ecology Model Toxics Control Act (MTCA)

Ecology promulgated the MTCA Cleanup Regulation (Chapter 173-340 of the WAC) to establish administrative processes and standards for identifying, investigating, and cleaning up facilities where there has been a release or threatened release of a hazardous substance or substances that may pose a threat to human health and/or the environment. The MTCA Cleanup Regulation provides Method A for establishing cleanup levels for soil for unrestricted land use and Method B for establishing cleanup levels (CULs) for sites that do not have a Method A CULs. Method B consists of a Cancer CUL (soil and groundwater) or Screening Level (SL) (soil gas) and Noncancer CUL or SL. MTCA B Cancer establishes the concentration threshold for analytes at which the human health risk is cancer. MTCA B Noncancer establishes concentration thresholds for analytes at which the human health risk is a noncancer effect. In cases where MTCA Method B is used, data is compared to the most conservative CUL or SL. Per MTCA guidelines, soil gas samples collected at a depth shallower than 15 feet bgs were compared to sub-slab soil gas screening levels (SGSLs). Based on the current use and presumed future use of the subject property, results were compared to MTCA Method A and Method B CULs and SGSLs.

The MTCA Cleanup Regulation provides Method A for establishing CULs for soil and groundwater for unrestricted land use and industrial sites, Method B for establishing CULs for sites that do not have a Method A CUL, and Method C for industrial sites.

4.3 Soil Sample Data Analysis

GRO, DRO, and RRO were detected in the analyzed soil samples at concentrations above laboratory reported detection limits (RDLs) and at trace concentrations below laboratory RDLs and above laboratory method detection limits (MDLs). Each of the detected concentrations of GRO, DRO, and RRO were below applicable CULs.

Methylene chloride; PCE; toluene; 1,2,4- trimethylbenzene (TMB); and total xylenes were detected in the analyzed soil samples at concentrations above laboratory RDLs/MDLs. None of the remaining VOCs were

detected in the analyzed soil samples at concentrations above laboratory RDLs/MDLs, which were below applicable CULs.

PCE was detected in soil samples B1-6, B2-9, and B5-15 at concentrations exceeding the Method A CUL but below Method B CULs. None of the remaining detected VOCs exceeded applicable CULs.

Based on the findings, the soil samples placed on hold at the laboratory were not analyzed.

Refer to Tables 2 and 3 for a summary of the soil sample GRO/DRO/RRO and VOCs laboratory analysis results, respectively.

4.4 Groundwater Sample Data Analysis

GRO, DRO, and RRO were detected in the groundwater samples at concentrations above laboratory RDLs/MDLs and exceeding applicable CULs. GRO was detected in groundwater sample GMW-2 at a concentration of 2,330 micrograms per liter ($\mu\text{g}/\text{L}$) which exceeds the CUL of 1000 $\mu\text{g}/\text{L}$. GRO was also detected in groundwater sample GMW-3 at a concentration of 270 $\mu\text{g}/\text{L}$, below the applicable CUL of 1000 $\mu\text{g}/\text{L}$. DRO and RRO were detected in groundwater sample GMW-2 at concentrations of 6,110 and 2,710 $\mu\text{g}/\text{L}$, which both exceeded their respective CULs of 500 $\mu\text{g}/\text{L}$. The remaining detected of DRO and RRO were below applicable CULs.

Acetone; chloroform; 1,1-dichloroethene; ethylbenzene; isopropylbenzene; 2-butanone (MEK); PCE; TCE; 1,1,2-trichloroethane; 4-methyl-2-pentanone (MIBK); toluene; 1,2,3-trichloropropane; 1,2,4-TMB; 1,2,3-TMB; 1,3,5-TMB; and total xylenes were detected in the groundwater samples at concentrations above laboratory RDLs/MDLs. None of the remaining VOCs were detected in the groundwater samples at concentrations above laboratory RDLs/MDLs.

PCE was detected in groundwater samples GMW-1 through GMW-3 at concentrations of 17; 5,690; and 829 $\mu\text{g}/\text{L}$ respectively, which exceeded the Method A CUL of 5 $\mu\text{g}/\text{L}$. The detected PCE concentrations in GMW-2 and GMW-3 additionally exceeded the Method B Noncancer and Cancer CULs of 48 and 21 $\mu\text{g}/\text{L}$, respectively. 1,1,2-Trichloroethane was detected in groundwater sample GMW-3 at a concentration of 4.74 $\mu\text{g}/\text{L}$ which exceeded the Method B Cancel CUL of 1 $\mu\text{g}/\text{L}$. None of the remaining detected VOCs exceeded applicable CULs.

Refer to Tables 4 and 5 for a summary of the groundwater sample GRO/DRO/RRO and VOCs laboratory analysis results, respectively.

4.5 Soil Gas Sample Data Analysis

Acetone; benzene; carbon disulfide; carbon tetrachloride; chlorobenzene; chloroform; chloromethane; cyclohexane; cis-1,2-dichloroethene; ethanol; ethylbenzene; 4-ethyltoluene; trichlorofluoromethane; dichlorodifluoromethane; heptane; n-hexane; methylene chloride; isopropylbenzene; 2-butanone (MEK); methyl methacrylate; naphthalene; 2-propanol; propene; styrene; tetrahydrofuran; PCE; toluene; TCE; 1,2,4-TMB; 1,3,5-TMB; 2,2,4-trimethylpentane; vinyl chloride; m&p-xylene; and o-xylene were detected in the soil gas samples at concentrations above laboratory RDLs. None of the remaining VOCs were detected in the soil gas samples at concentrations above laboratory RDLs.

Benzene was detected in soil gas samples B1-SG, B2-SG, B4-SG, and B5-SG at concentrations of 13.3, 11.9, 19.2, and 32.9 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) respectively, which exceed the Method B Cancer SGSL

of 11 µg/m³. Chloroform was detected in soil gas samples B1-SG and B2-SG at concentrations of 10.6 and 5.16 µg/m³ respectively, which exceed the Method B Cancer SGSL of 3.6. PCE was detected in soil gas samples B1-SG, B2-SG, and B5-SG at concentrations of 44,400; 6,020; and 3,580 µg/m³ respectively, which exceed the Method B Noncancer and Cancer SGSLs of 610 and 320 µg/m³ respectively. TCE was detected in soil gas sample B1-SG at a concentration of 135 µg/m³ which exceeded the Method B Noncancer and Cancer SGSLs of 30 and 11 µg/m³ respectively. None of the remaining detected VOCs exceeded applicable SGSLs.

The tracer compound (1,1-DFA) was detected in two of the five analyzed soil gas samples. Ecology has not developed guidance pertaining to tracer gas detections, as such, Partner utilized the DTSC guidance. According to the DTSC, detection of tracer compound at concentrations of less than 10 times the laboratory RDL of the target analyte are considered insignificant. For the purposes of this investigation, the lowest RDL [0.511 µg/m³ for vinyl chloride] was utilized for comparison, resulting in a significance threshold of 5.11 µg/m³. The 1,1-DFA concentrations detected in soil gas samples B3-SG and B4-SG were 69.4 and 30 µg/m³ respectively exceeding the significance threshold, which is indicative of a breach in the sampling train resulting in the introduction of ambient air into the sampling train. Therefore, the reported concentrations of target compounds in soil gas from these samples may be an underestimation of the actual conditions. Partner notes that, with the exception of B3-SG, the detected tracer compound concentration in soil gas sample B4-SG is less than an order of magnitude above the significance threshold and potential breaches are expected to be relatively minimal. Based on the foregoing and the lack of soil impacts, this limitation is not anticipated to materially impact the findings of this investigation.

Refer to Table 6 for a summary of the soil gas sample VOCs laboratory analysis results.

4.6 Discussion

GRO, DRO, and RRO were not detected in the analyzed soil samples at concentrations exceeding CULs.

PCE was detected in soil samples B1-6, B2-9, and B5-15 at concentrations exceeding the Method A CUL but below Method B CULs. None of the remaining detected VOCs exceeded applicable CULs.

GRO was detected in groundwater sample GMW-2 at a concentration of 2,330 µg/L which exceeds the CUL of 1000 µg/L. GRO was also detected in groundwater sample GMW-3 at a concentration of 270 µg/L, below the applicable CUL of 1000 µg/L. DRO and RRO were detected in groundwater sample GMW-2 at concentrations of 6,110 and 2,710 µg/L, which both exceeded their respective CULs of 500 µg/L. The remaining detected concentrations of DRO and RRO were below applicable CULs.

PCE was detected in groundwater samples GMW-1 through GMW-3 at concentrations of 17; 5,690; and 829 µg/L respectively, which exceeded the Method A CUL of 5 µg/L. The detected PCE concentrations in GMW-2 and GMW-3 additionally exceeded the Method B Noncancer and Cancer CULs of 48 and 21 µg/L, respectively. 1,1,2-Trichloroethane was detected in groundwater sample GMW-3 at a concentration of 4.74 µg/L which exceeded the Method B Cancel CUL of 1 µg/L. None of the remaining detected VOCs exceeded applicable CULs.

Benzene was detected in soil gas samples B1-SG, B2-SG, B4-SG, and B5-SG at concentrations of 13.3, 11.9, 19.2, and 32.9 µg/m³ respectively, which exceed the Method B Cancer SGSL of 11 µg/m³. PCE was detected in soil gas samples B1-SG, B2-SG, and B5-SG at concentrations of 44,400; 6,020; and 3,580 µg/m³

respectively, which exceed the Method B Noncancer and Cancer SGSLs of 610 and 320 µg/m³ respectively. TCE was detected in soil gas sample B1-SG at a concentration of 135 µg/m³ which exceeded the Method B Noncancer and Cancer SGSLs of 30 and 11 µg/m³ respectively. None of the remaining detected VOCs exceeded applicable SGSLs.

Chloroform was detected in soil gas samples B1-SG and B2-SG at concentrations of 10.6 and 5.16 µg/m³ respectively, which exceed the Method B Cancer SGSL of 3.6. Partner notes that trihalomethanes (THMs) (including bromoform, bromodichloromethane, dibromochloromethane, and chloroform) are formed in drinking water primarily as a result of the chlorination of organic matter present naturally in raw water supplies. The rate and degree of THM formation increases as a function of the chlorine and humic acid concentration; the temperature; the pH; and the bromide ion concentration. Chloroform is the most common THM, and the principal disinfection by-product (DBP) in chlorinated drinking water. In the presence of bromides, brominated THMs are formed preferentially and chloroform concentrations decrease proportionally. It is assumed that most THMs present in water are ultimately transferred to air as a result of their volatility. That said, it is Partner's opinion that the chloroform detected in the soil gas samples are likely attributable to leaking water lines in the vicinity of the sampling location.

Based on detected concentrations of GRO, DRO, RRO, PCE, and 1,1,2-trichloroethane in groundwater exceeding applicable CULs, and detected concentrations of benzene, PCE, and TCE in soil gas exceeding SGSLs, it appears that the subsurface of the subject property continues to be impacted at concentrations exceeding applicable CULs/SGSLs which represents an environmental and human health concern.

5.0 SUMMARY AND CONCLUSIONS

Partner conducted a Phase II Subsurface Investigation at the subject property to evaluate the potential impact of petroleum hydrocarbons and VOCs to soil gas, soil, and/or groundwater as a consequence of a release or releases from the on-site dry cleaning facility and/or the former gasoline service station. The scope of the Phase II Subsurface Investigation included the advancement of five borings and the collection of three groundwater samples from the on-site groundwater monitoring wells to collect representative soil, groundwater, and/or soil gas samples. Seven soil samples and three groundwater samples were analyzed for GRO, DRO, RRO and VOCs. Five soil gas samples were analyzed for VOCs.

Subsurface lithology encountered in the upper 25 feet bgs consisted predominantly of silty sand (SM) and sandy silt (ML). Groundwater was encountered in the on-site groundwater monitoring wells at a depth of 40 feet bgs.

GRO, DRO, and RRO were not detected in the analyzed soil samples at concentrations exceeding CULs.

PCE was detected in soil samples B1-6, B2-9, and B5-15 at concentrations exceeding the Method A CUL but below Method B CULs. None of the remaining detected VOCs exceeded applicable CULs.

GRO was detected in groundwater sample GMW-2 at a concentration of 2,330 µg/L which exceeds the CUL of 1000 µg/L. GRO was also detected in groundwater sample GMW-3 at a concentration of 270 µg/L, below the applicable CUL of 1000 µg/L. DRO and RRO were detected in groundwater sample GMW-2 at concentrations of 6,110 and 2,710 µg/L, which both exceeded their respective CULs of 500 µg/L. The remaining detected concentrations of DRO and RRO were below applicable CULs.

PCE was detected in groundwater samples GMW-1 through GMW-3 at concentrations of 17; 5,690; and 829 µg/L respectively, which exceeded the Method A CUL of 5 µg/L. The detected PCE concentrations in GMW-2 and GMW-3 additionally exceeded the Method B Noncancer and Cancer CULs of 48 and 21 µg/L, respectively. 1,1,2-Trichloroethane was detected in groundwater sample GMW-3 at a concentration of 4.74 µg/L which exceeded the Method B Cancel CUL of 1 µg/L. None of the remaining detected VOCs exceeded applicable CULs.

Benzene was detected in soil gas samples B1-SG, B2-SG, B4-SG, and B5-SG at concentrations of 13.3, 11.9, 19.2, and 32.9 µg/m³ respectively, which exceed the Method B Cancer SGSL of 11 µg/m³. PCE was detected in soil gas samples B1-SG, B2-SG, and B5-SG at concentrations of 44,400; 6,020; and 3,580 µg/m³ respectively, which exceed the Method B Noncancer and Cancer SGSLs of 610 and 320 µg/m³ respectively. TCE was detected in soil gas sample B1-SG at a concentration of 135 µg/m³ which exceeded the Method B Noncancer and Cancer SGSLs of 30 and 11 µg/m³ respectively. None of the remaining detected VOCs exceeded applicable SGSLs.

Chloroform was detected in soil gas samples B1-SG and B2-SG at concentrations of 10.6 and 5.16 µg/m³ respectively, which exceed the Method B Cancer SGSL of 3.6. Partner notes that THMs (including bromoform, bromodichloromethane, dibromochloromethane, and chloroform) are formed in drinking water primarily as a result of the chlorination of organic matter present naturally in raw water supplies. The rate and degree of THM formation increases as a function of the chlorine and humic acid concentration; the temperature; the pH; and the bromide ion concentration. Chloroform is the most common THM, and the principal disinfection by-product (DBP) in chlorinated drinking water. In the presence of bromides,

brominated THMs are formed preferentially and chloroform concentrations decrease proportionally. It is assumed that most THMs present in water are ultimately transferred to air as a result of their volatility. That said, it is Partner's opinion that the chloroform detected in the soil gas samples are likely attributable to leaking water lines in the vicinity of the sampling location.

Based on detected concentrations of GRO, DRO, RRO, PCE, and 1,1,2-trichloroethane in groundwater exceeding applicable CULs, and detected concentrations of benzene, PCE, and TCE in soil gas exceeding SGSLs, it appears that the subsurface of the subject property continues to be impacted at concentrations exceeding applicable CULs/SGSLs which represents an environmental and human health concern. Partner recommends additional investigation to determine the vertical and lateral extent of soil, soil gas and groundwater impacts below the subject property and provide data to support the development of remediation action plan to address the impacted soil gas and groundwater. Partner also recommends that an indoor air quality (IAQ) assessment be performed within the occupied subject property buildings in order to assess the health risk for building occupants.

FIGURES



45 22 0 45 90
Approximate Scale: 1" = 90'

PARTNER
2150 North 107th Street, Suite 475
Seattle, Washington 98133
Project Number: 23-416301.1



Subject Property



Legend

Site Vicinity Map

Figure	Prepared By	Date
1	B. Godbois	November 2023

1606, 1614, and 1624 Bellevue Way Southeast
Bellevue, Washington 98004



PARTNER

2150 North 107th Street, Suite 475
Seattle, Washington 98133

Project Number: 23-416301.1

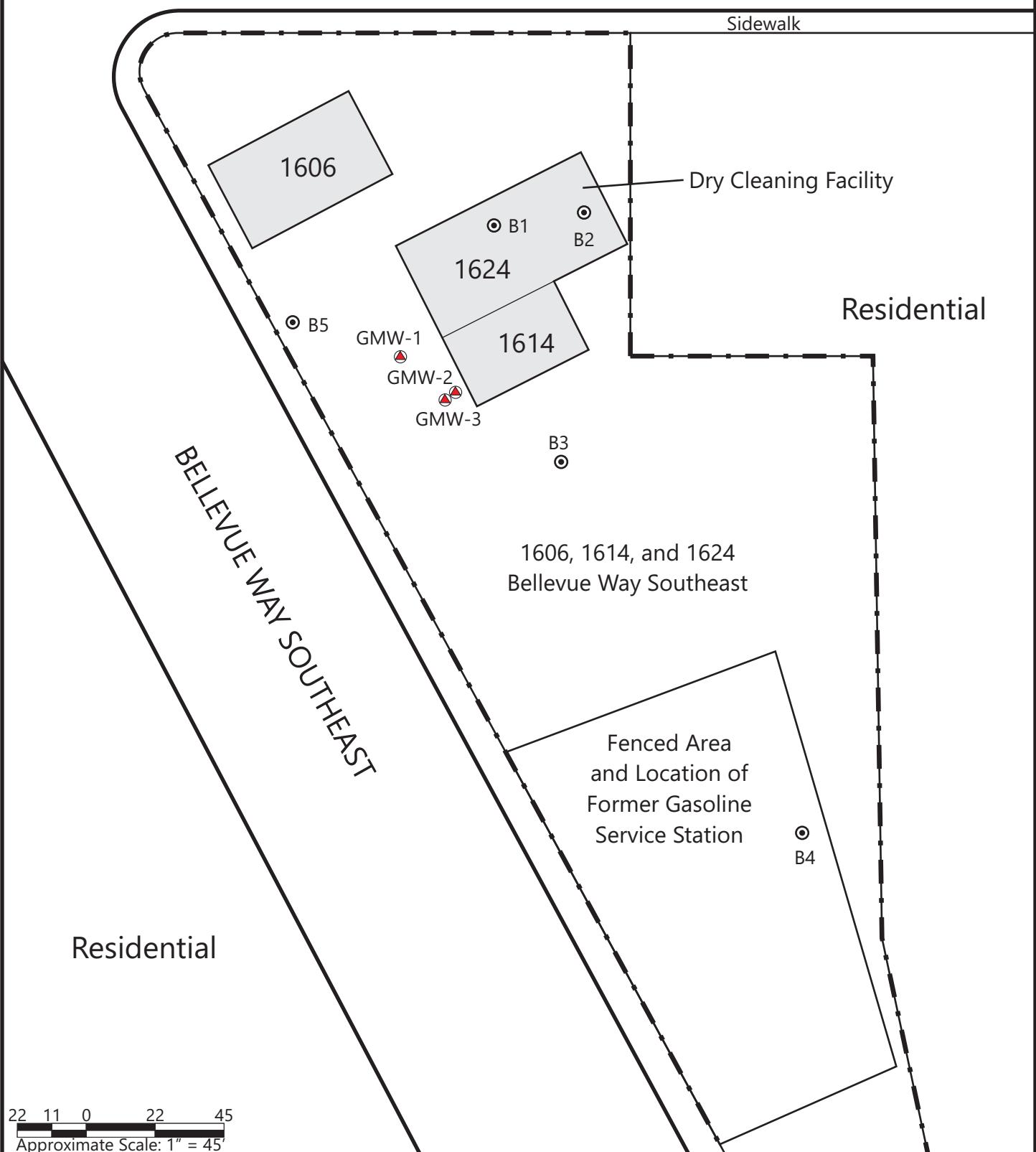


USGS *Mercer Island, Washington*
Quadrangle Version: 2023

Topographic Map

Figure	Prepared By	Date
2	B. Godbois	November 2023
1606, 1614, and 1624 Bellevue Way Southeast Bellevue, Washington 98004		

SOUTHEAST 16TH STREET



22 11 0 22 45
Approximate Scale: 1" = 45'

PARTNER

2150 North 107th Street, Suite 475
Seattle, Washington 98133

Project Number: 23-416301.1



Legend

Subject Property



Boring Location



Monitoring Well



Sample Location Map

Figure	Prepared By	Date
3	B. Godbois	November 2023

1606, 1614, and 1624 Bellevue Way Southeast
Bellevue, Washington 98004

TABLES

Table 1: Summary of Investigation Scope
 1606, 1614, and 1624 Bellevue Way Southeast
 Bellevue, Washington 98004
 Partner Project Number 23-416301.1
 October 29 and 30, 2023

Boring/Well Identification	REC/Issue	Location	Terminal Depth (feet bgs)	Matrix Sampled	Sampling Depths* (feet bgs)	Target Analytes
B1		Central interior of dry cleaning facility	6**	Soil Gas	5	VOCs
				Soil	2, 6	GRO/DRO/RRO, VOCs
B2	Known impacts from dry cleaning facility	East interior of dry cleaning facility	9**	Soil Gas	5	VOCs
				Soil	2, 9	GRO/DRO/RRO, VOCs
B3		South exterior of dry cleaning facility	22*	Soil Gas	5	VOCs
				Soil	16, 22	GRO/DRO/RRO, VOCs
B4	Known impacts from former gasoline service station	East portion of former gasoline service station area	25**	Soil Gas	5	VOCs
				Soil	20, 25	GRO/DRO/RRO, VOCs
B5	Known impacts from dry cleaning facility	West exterior of dry cleaning facility	25	Soil Gas	5	VOCs
				Soil	15, 25	GRO/DRO/RRO, VOCs
GMW-1	Known impacts from dry cleaning facility and former gasoline service station	West exterior of dry cleaning facility	Not Measured	Groundwater	Unknown depth	GRO/DRO/RRO, VOCs
GMW-2		South exterior of dry cleaning facility	60	Groundwater	40	GRO/DRO/RRO, VOCs
GMW-3		West of GMW-2	Not Measured	Groundwater	Unknown depth	GRO/DRO/RRO, VOCs

Notes:

*Depths in bold analyzed for gasoline-range organics (GRO) via State of Washington Department of Ecology (Ecology) Method NWTPH-Gx, diesel-range organics (DRO) and residual-range organics (RRO) via Ecology Method NWTPH-Dx/Dx Extended and for volatile organic compounds (VOCs) via United States Environmental Protection Agency (EPA) Method 8260D. Depths in *italics* analyzed for VOCs via EPA Method TO-15.

REC = recognized environmental condition

bgs = below ground surface

PARTNER

Table 2: Soil Sample GRO/DRO/RRO Laboratory Results

1606, 1614, and 1624 Bellevue Way Southeast

Bellevue, Washington 98004

Partner Project Number 23-416301.1

October 29 and 30, 2023

Method	GRO/DRO/RRO via NWTPH-Gx/Dx/Extended							
Units	(mg/kg)							
Analyte	MTCA Method A ULU	B1-2	B1-6	B2-2	B2-9	B3-16	B4-20	B5-15
GRO	30/100*	1.83 J	1.87 J	1.38 J	1.53 J	12.7	1.91 J	2.29 J
DRO	2,000	< 4.25	< 4.19	< 4.23	< 4.31	22	< 4.29	< 4.23
RRO	2,000	< 10.6	< 10.5	< 10.6	< 10.8	5.99 J	< 10.7	< 10.6

Notes:

GRO = gasoline-range organics (Gx)

DRO = diesel-range organics (Dx)

RRO = residual-range organics (Extended)

NWTPH = Northwest Total Petroleum Hydrocarbons

mg/kg = milligrams per kilogram

MTCA Method A = Soil cleanup levels for unrestricted land use (ULU) (Washington State Department of Ecology [Ecology], Model Toxics Control Act [MTCA], July 2022)

* MTCA Method A Cleanup Level for soil is 30 mg/kg if benzene is present in the sample and 100 mg/kg if benzene is not present in the sample

< = not detected above indicated laboratory Reporting Detection Limit (RDL)

Values in bold exceed laboratory RDLS

Table 3: Soil Sample VOCs Laboratory Results
 1606, 1614, and 1624 Bellevue Way Southeast
 Bellevue, Washington 98004
 Partner Project Number 23-416301.1
 October 29 and 30, 2023

EPA Method	VOCs via 8260D									
Units	(mg/kg)									
Analyte	MTCA Method A ULU	MTCA Method B Noncancer	MTCA Method B Cancer	B1-2	B1-6	B2-2	B2-9	B3-16	B4-20	B5-15
Methylene Chloride	0.02	480	94	0.0121 J	0.0123 J	< 0.0398	< 0.0385	0.0118 J	0.0124 J	0.014 J
PCE	0.05	480	480	0.0824	0.223	0.0489	0.194	0.0088	< 0.00467	0.174
Toluene	7	6,400	NE	< 0.00819	< 0.00893	< 0.00795	< 0.00771	< 0.00804	< 0.00932	0.0602
1,2,4-TMB	NE	800	NE	< 0.00819	< 0.00893	< 0.00795	< 0.00771	0.00398 J	< 0.00932	< 0.00917
Total Xylenes	9	16,000	NE	< 0.0106	< 0.0106	< 0.0103	< 0.01	0.00402 J	< 0.0122	0.00399 J
Other VOCs	Varies	Varies	Varies	ND	ND	ND	ND	ND	ND	ND

Notes:

VOCs = volatile organic compounds

EPA = United States Environmental Protection Agency

mg/kg = milligrams per kilogram

MTCA Method A = Soil cleanup levels for unrestricted land use (Washington State Department of Ecology [Ecology], Model Toxics Control Act [MTCA], July 2022)

MTCA Method B = Soil cleanup levels when a Method A cleanup level does not exist (Ecology, MTCA, July 2022)

NE = not established

< = not detected above indicated laboratory Method Detection Limit (MDL)

J = trace detection [less than the laboratory Reporting Detection Limit (RDL), but more than the MDL and is an estimated value]

PCE = tetrachloroethylene

TMB = trimethylbenzene

ND = not detected above laboratory MDLs

Values in bold exceed laboratory RDLs

Highlighted values exceeds Method A cleanup level

Table 4: Groundwater Sample GRO/DRO/RRO Laboratory Results
 1606, 1614, and 1624 Bellevue Way Southeast
 Bellevue, Washington 98004
 Partner Project Number 23-416301.1
 October 29 and 30, 2023

EPA Method	GRO/DRO/RRO via NWTPH-Gx/Dx/Extended			
Units	(µg/L)			
Analyte	MTCA Method A ULU	GMW-1	GMW-2	GMW-3
GRO	1000/800*	< 100	2,330	270
DRO	500	152 J	6,110	< 200
RRO	500	213 J	2,710	249 J

Notes:

GRO = gasoline-range organics (Gx)

DRO = diesel-range organics (Dx)

RRO = residual-range organics (Extended)

NWTPH = Northwest Total Petroleum Hydrocarbons

µg/L = micrograms per liter

MTCA Method A = groundwater cleanup levels for unrestricted land use (ULU) (Washington State Department of Ecology [Ecology], Model Toxics Control Act [MTCA], July 2022)

* MTCA Method A Cleanup Level for groundwater is 1000 µg/L if benzene is present in the sample and 800 µg/L if benzene is not present in the sample

< = not detected above indicated laboratory Reporting Detection Limit (RDL) or Method Detection Limit (MDL)

J = detection is less than the laboratory RDL, but more than the MDL

Values in bold exceed laboratory RDLS

Highlighted value exceeds Method A cleanup level

Table 5: Groundwater Sample VOCs Laboratory Results
 1606, 1614, and 1624 Bellevue Way Southeast
 Bellevue, Washington 98004
 Partner Project Number 23-416301.1
 October 29 and 30, 2023

EPA Method Units	VOCs via 8260D					
	(µg/L)					
Analyte	MTCA Method A ULU	MTCA Method B Noncancer	MTCA Method B Cancer	GMW-1	GMW-2	GMW-3
Acetone	NE	7,200	NE	< 50	69	< 50
Chloroform	NE	80	1.4	< 5	0.218 J	< 5
1,1-Dichloroethene	NE	1,600	7.7	< 1	0.519 J	< 1
Ethylbenzene	700	800	NE	< 1	0.158 J	< 1
Isopropylbenzene	NE	800	NE	< 1	0.111 J	< 1
2-Butanone (MEK)	NE	4,800	NE	< 10	6.38 J	< 10
PCE	5	48	21	17	5,690	829
TCE	5	4	0.54	< 1	< 1	1.5
1,1,2-Trichloroethane	NE	32	1	< 1	< 1	4.71
4-Methyl-2-pentanone (MIBK)	NE	640	NE	< 10	444	< 10
Toluene	1,000	640	NE	< 1	0.436 J	< 1
1,2,3-Trichloropropane	NE	32	0.00038	< 2.5	0.287 J	< 2.5
1,2,4-TMB	NE	80	NE	< 1	0.42 J	< 1
1,2,3-TMB	NE	80	NE	< 1	0.226 J	< 1
1,3,5-TMB	NE	80	NE	< 1	0.319 J	< 1
Total Xylenes	1,000	1,600	NE	< 3	0.576 J	< 3
Other VOCs	Varies	Varies	Varies	ND	ND	ND

Notes:

VOCs = volatile organic compounds

EPA = United States Environmental Protection Agency

µg/L = micrograms per liter

MTCA Method A = groundwater cleanup levels for unrestricted land use (ULU) (Washington State Department of Ecology [Ecology], Model Toxics Control Act [MTCA], July 2022)

MTCA Method B = Groundwater cleanup levels when a Method A cleanup level does not exist (Ecology, MTCA, July 2022)

< = not detected above indicated laboratory Reporting Detection Limit (RDL) or Method Detection Limit (MDL)

J = detected at a concentration below the laboratory RDL, but above the MDL

NE = not established

PCE = tetrachloroethylene

TCE = trichloroethylene

TMB = trimethylbenzene

ND = not detected above laboratory RDLs and MDLs

Values in bold exceed laboratory RDLs

Highlighted values exceed one or more cleanup level

Table 6: Soil Gas Sample VOCs Laboratory Results
 1606, 1614, and 1624 Bellevue Way Southeast
 Bellevue, Washington 98004
 Partner Project Number 23-416301.1
 October 29 and 30, 2023

EPA Method	VOCs via TO-15						
Units	(µg/m³)						
Analyte	Method B Noncancer	Method B Cancer	B1-SG	B2-SG	B3-SG	B4-SG	B5-SG
Acetone	NE	NE	41.3	57.3	174	28.8	337
Benzene	460	11	13.3	11.9	8.5	19.2	32.9
Carbon Disulfide	11,000	NE	32.4	25.6	6.69	4.26	11.2
Carbon tetrachloride	1,500	14	< 1.26	< 1.26	< 1.26	< 1.26	< 1.26
Chlorobenzene	760	NE	< 0.924	< 0.924	< 0.924	< 0.924	< 0.924
Chloroform	1,500	3.6	10.6	5.16	< 0.973	< 0.973	< 0.973
Chloromethane	1,400	NE	0.909	< 0.413	4.23	0.952	2.93
Cyclohexane	91,000	NE	35.1	58.9	25.7	11.5	47.5
cis-1,2-Dichloroethene	610	NE	5.94	< 0.793	1.95	< 0.793	< 0.793
Ethanol	NE	NE	18.1 B	16 B	138	33.4	24.7
Ethylbenzene	15,000	NE	11.7	9.32	5.07	8.37	7.15
4-Ethyltoluene	NE	NE	9.67	7.07	3.37	1.14	2.06
Trichlorofluoromethane	11,000	NE	1.39	2.14	1.7	1.76	1.26
Dichlorodifluoromethane	1,500	NE	2.03	2.44	1.76	1.54	1.87
Heptane	6,100	NE	13.5	26.6	8.79	23	45.8
n-Hexane	11,000	NE	51.8	71.2	49.4	42.7	138
Methylene Chloride	9,100	2,200	6.04	4.93	2.45	1.04	< 0.694
Isopropylbenzene	6,100	NE	1.38	1.2	< 0.983	< 0.983	< 0.983
2-Butanone (MEK)	76,000	NE	13.4	16.8	29.5	17.7	84.9
Methyl methacrylate	11,000	NE	< 0.819	< 0.819	8.93	< 0.819	< 0.819
Naphthalene	46	2.5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
2-Propanol	NE	NE	4.01	6.46	30.5	6.96	9.56
Propene	NE	NE	88.2	506	2270	616	2310
Styrene	15,000	NE	1.62	1.59	< 0.22	< 0.851	1.18
Tetrahydrofuran	30,000	NE	6.55	6.52	0.936	1.55	< 0.59
PCE	610	320	44,400	6,020	113	3.88	3,580
Toluene	76,000	NE	99.8	97.6	84.8	228	180
TCE	30	11	135	10.2	2.09	< 1.07	2.8
1,2,4-TMB	910	NE	38	30.3	14.1	4.67	9.08
1,3,5-TMB	910	NE	9.77	7.8	4.05	1.34	2.48
2,2,4-Trimethylpentane	NE	NE	2.24	2.53	20.1	19.9	36.3
Vinyl chloride	1,500	10	< 0.511	< 0.511	0.92	< 0.511	1.37
m&p-Xylene	1,500	NE	51.2	39.5	21.7	26.2	21.7
o-Xylene	1,500	NE	24	18	9.71	10.7	9.41
1,1-Difluoroethane	610,000	NE	< 13.5	< 13.5	69.4	30	< 13.5
Other VOCs	Varies	Varies	ND	ND	ND	ND	ND

Notes:

VOCs = volatile organic compounds

EPA = United States Environmental Protection Agency

µg/m³ = micrograms per cubic meter

MTCA Method B = Soil gas screening levels (SGSLs) for commercial land use (Washington State Department of Ecology [Ecology], Model Toxics Control Act [MTCA], July 2022)

TMB = trimethylbenzene

< = not detected above indicated laboratory Reporting Detection Limit (RDL)

NE = not established

PCE = tetrachloroethylene

TCE = trichloroethylene

TMB = trimethylbenzene

ND = not detected above laboratory RDLs

Values in bold exceed laboratory RDLs

Highlighted values exceed one or more SGSL

PARTNER

APPENDIX A: BORING LOGS

Boring Identification:	B1			Page 1 of 1
Boring Location:	Central interior of dry cleaning facility			PARTNER
Site Address:	1606, 1614, and 1624 Bellevue Way Southeast Bellevue, Washington 98004			2150 North 107th Street, Suite 475 Seattle, Washington 98133
Project Number:	23-416301.1			Date Started: 10/29/2023
Drill Rig Type:	Limited-access AMS PowerProbe 9100-P			Date Completed: 10/29/2023
Sampling Equipment:	Acetate liners, plastic syringes, VOAs, summas			Depth to Groundwater (feet bgs): Not Encountered
Borehole Diameter:	2.25"			Field Technician: B. Godbois
Depth	Sample	PID	USCS	Description
1		0.0		
2	B1-2	0.0	SM	Silty Sand with gravel: gray and tan, very fine grained, moist, medium-dense
3		0.0		
4		0.0		
5		0.0	SM	Same as above but very dense
6	B1-6	0.0		Soil gas probe installed
7				Boring terminated due to drilling refusal. Boring backfilled with hydrated bentonite and capped with concrete upon completion
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Boring Identification:	B2			Page 1 of 1
Boring Location:	East interior of dry cleaning facility			PARTNER
Site Address:	1606, 1614, and 1624 Bellevue Way Southeast Bellevue, Washington 98004			2150 North 107th Street, Suite 475 Seattle, Washington 98133
Project Number:	23-416301.1			Date Started: 10/29/2023
Drill Rig Type:	Limited-access AMS PowerProbe 9100-P			Date Completed: 10/29/2023
Sampling Equipment:	Acetate liners, plastic syringes, VOAs, summas			Depth to Groundwater (feet bgs): Not Encountered
Borehole Diameter:	2.25"			Field Technician: B. Godbois
Depth	Sample	PID	USCS	Description
1		0.0		
2	B2-2	0.0	SM	Silty Sand with gravel: gray and tan, very fine grained, moist, medium-dense
3		0.0		
4		0.0		
5		0.0		
6		0.0		
7		0.0	SM	Same as above but very dense
8		0.0		
9	B2-9	0.0		
10				Boring terminated due to drilling refusal. Boring backfilled with hydrated bentonite and capped with concrete upon completion
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Boring Identification:	B3			Page 1 of 1	
Boring Location:	South exterior of dry cleaning facility			PARTNER	
Site Address:	1606, 1614, and 1624 Bellevue Way Southeast Bellevue, Washington 98004			2150 North 107th Street, Suite 475 Seattle, Washington 98133	
Project Number:	23-416301.1			Date Started: 10/29/2023	
Drill Rig Type:	Truck-mounted GeoProbe Model 7800			Date Completed: 10/29/2023	
Sampling Equipment:	Acetate liners, plastic syringes, VOAs, summas			Depth to Groundwater (feet bgs): Not Encountered	
Borehole Diameter:	2.25"			Field Technician: B. Godbois	
Depth	Sample	PID	USCS	Description	Notes
1		0.0			Gravel at surface
2		0.0	SM	Silty Sand with gravel: gray and tan, very fine grained, moist, medium-dense	
3		0.0			
4		0.0			
5		0.0			
6		0.0			
7		0.0			
8		0.0	SM	Same as above but very dense	
9		0.0			
10		0.0			
11		0.0			
12		0.0			
13		0.0			
14		0.0			
15		0.0			
16	B3-16	<u>3.8</u>			
17		0.0	ML	Sandy Silt: light brown, dense, moist	
18		0.0			
19		0.0			
20		0.0			
21		0.0			
22	B3-22	0.0			
23					Boring terminated due to drilling refusal. Boring backfilled with hydrated bentonite and capped with surrounding gravel upon completion
24					
25					

Boring Identification:	B4			Page 1 of 1
Boring Location:	East portion of former gasoline service station area			PARTNER
Site Address:	1606, 1614, and 1624 Bellevue Way Southeast Bellevue, Washington 98004			2150 North 107th Street, Suite 475 Seattle, Washington 98133
Project Number:	23-416301.1			Date Started: 10/29/2023
Drill Rig Type:	Truck-mounted GeoProbe Model 7800			Date Completed: 10/29/2023
Sampling Equipment:	Acetate liners, plastic syringes, VOAs, summas			Depth to Groundwater (feet bgs): Not Encountered
Borehole Diameter:	2.25"			Field Technician: B. Godbois
Depth	Sample	PID	USCS	Description
1		0.0		
2		0.0		
3		0.0		
4		0.0	ML	Sandy Silt with trace gravel: light brown and brown, very fine grained, moist, medium-soft
5		0.0		
6		0.0		
7		0.0		
8		0.0		
9		0.0		
10		0.0		
11		0.0		
12		0.0		
13		0.0		
14		0.0		
15		0.0		
16		0.0		
17		0.0	SM	Silty Sand with trace gravel: brown, very fine to medium grained, moist, medium dense
18		0.0		
19		0.0		
20	B4-20	0.0		
21		0.0		
22		0.0		
23		0.0		
24		0.0		
25	B4-25	0.0		Boring terminated due to drilling refusal. Boring backfilled with hydrated bentonite and capped with asphalt upon completion

Boring Identification:	B5			Page 1 of 1
Boring Location:	West exterior of dry cleaning facility			PARTNER
Site Address:	1606, 1614, and 1624 Bellevue Way Southeast Bellevue, Washington 98004			2150 North 107th Street, Suite 475 Seattle, Washington 98133
Project Number:	23-416301.1			Date Started: 10/29/2023
Drill Rig Type:	Truck-mounted GeoProbe Model 7800			Date Completed: 10/29/2023
Sampling Equipment:	Acetate liners, plastic syringes, VOAs, summas			Depth to Groundwater (feet bgs): Not Encountered
Borehole Diameter:	2.25"			Field Technician: B. Godbois
Depth	Sample	PID	USCS	Description
1		0.0		
2		0.0		
3		0.0		
4		0.0		
5		0.0		
6		0.0		
7		0.0		
8		0.0		
9		0.0	SM	Silty Sand with trace gravel: light brown and brown, very fine to medium grained, moist, medium dense
10		0.0		
11		0.0		
12		0.0		
13		0.0		
14		0.0		
15	B5-15	0.0		
16		0.0		
17		0.0		
18		0.0		
19		0.0		
20		0.0	ML	
21		0.0		Sandy Silt: brown, very fine grained, moist, medium-soft
22		0.0		
23		0.0		
24		0.0		
25	B5-25	0.0		Boring terminated. Boring backfilled with hydrated bentonite and capped with asphalt upon completion

APPENDIX B: LABORATORY ANALYTICAL REPORTS



ANALYTICAL REPORT

November 07, 2023

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Partner Engineering & Science - WA

Sample Delivery Group: L1672502
Samples Received: 11/01/2023
Project Number: 23-416301.2
Description: 1606,1614, & 1624 Bellevue Way Southeast

Report To: Brian Godbois
2708 James Street
Bellingham, WA 98225

Entire Report Reviewed By:

Haley Torrence
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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SAMPLE SUMMARY

				Collected by	Collected date/time	Received date/time
					10/28/23 13:56	11/01/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2163973	1	11/03/23 13:24	11/03/23 13:24	MNP	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG2164466	100	11/04/23 15:53	11/04/23 15:53	SDS	Mt. Juliet, TN
				Collected by	Collected date/time	Received date/time
					10/28/23 14:51	11/01/23 09:00
B2-SG L1672502-02 Air				Collected by	Collected date/time	Received date/time
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2163973	1	11/03/23 13:52	11/03/23 13:52	MNP	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG2164466	20	11/04/23 14:03	11/04/23 14:03	SDS	Mt. Juliet, TN
				Collected by	Collected date/time	Received date/time
					10/28/23 17:29	11/01/23 09:00
B3-SG L1672502-03 Air				Collected by	Collected date/time	Received date/time
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2163973	1	11/03/23 14:19	11/03/23 14:19	MNP	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG2165547	100	11/07/23 01:16	11/07/23 01:16	SDS	Mt. Juliet, TN
				Collected by	Collected date/time	Received date/time
					10/28/23 17:31	11/01/23 09:00
B4-SG L1672502-04 Air				Collected by	Collected date/time	Received date/time
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2163973	1	11/03/23 14:47	11/03/23 14:47	MNP	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG2164466	10	11/04/23 14:57	11/04/23 14:57	SDS	Mt. Juliet, TN
				Collected by	Collected date/time	Received date/time
					10/28/23 18:06	11/01/23 09:00
B5-SG L1672502-05 Air				Collected by	Collected date/time	Received date/time
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2163973	1	11/03/23 15:14	11/03/23 15:14	MNP	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG2164466	10	11/04/23 16:20	11/04/23 16:20	SDS	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG2165325	100	11/06/23 14:09	11/06/23 14:09	JAP	Mt. Juliet, TN

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

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.



Haley Torrence
Project Manager

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ GI
- ⁸ AI
- ⁹ Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	17.4	41.3		1	WG2163973
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2163973
Benzene	71-43-2	78.10	0.200	0.639	4.17	13.3		1	WG2163973
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2163973
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2163973
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2163973
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2163973
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2163973
Carbon disulfide	75-15-0	76.10	0.200	0.622	10.4	32.4		1	WG2163973
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2163973
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2163973
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2163973
Chloroform	67-66-3	119	0.200	0.973	2.18	10.6		1	WG2163973
Chloromethane	74-87-3	50.50	0.200	0.413	0.440	0.909		1	WG2163973
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2163973
Cyclohexane	110-82-7	84.20	0.200	0.689	10.2	35.1		1	WG2163973
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2163973
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2163973
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2163973
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2163973
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2163973
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2163973
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2163973
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2163973
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	1.50	5.94		1	WG2163973
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2163973
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2163973
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2163973
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2163973
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2163973
Ethanol	64-17-5	46.10	2.50	4.71	9.60	18.1	B	1	WG2163973
Ethylbenzene	100-41-4	106	0.200	0.867	2.70	11.7		1	WG2163973
4-Ethyltoluene	622-96-8	120	0.200	0.982	1.97	9.67		1	WG2163973
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.248	1.39		1	WG2163973
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.411	2.03		1	WG2163973
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2163973
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2163973
Heptane	142-82-5	100	0.200	0.818	3.31	13.5		1	WG2163973
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2163973
n-Hexane	110-54-3	86.20	0.630	2.22	14.7	51.8		1	WG2163973
Isopropylbenzene	98-82-8	120.20	0.200	0.983	0.281	1.38		1	WG2163973
Methylene Chloride	75-09-2	84.90	0.200	0.694	1.74	6.04		1	WG2163973
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2163973
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	4.53	13.4		1	WG2163973
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2163973
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2163973
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2163973
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2163973
2-Propanol	67-63-0	60.10	1.25	3.07	1.63	4.01		1	WG2163973
Propene	115-07-1	42.10	1.25	2.15	51.2	88.2		1	WG2163973
Styrene	100-42-5	104	0.200	0.851	0.380	1.62		1	WG2163973
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2163973
Tetrachloroethylene	127-18-4	166	20.0	136	6540	44400		100	WG2164466
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	2.22	6.55		1	WG2163973
Toluene	108-88-3	92.10	0.500	1.88	26.5	99.8		1	WG2163973
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2163973

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 GI

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	<u>Qualifier</u>	Dilution	<u>Batch</u>
			ppbv	ug/m3	ppbv	ug/m3			
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2163973
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2163973
Trichloroethylene	79-01-6	131	0.200	1.07	25.2	135		1	WG2163973
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	7.75	38.0		1	WG2163973
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	1.99	9.77		1	WG2163973
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	0.479	2.24		1	WG2163973
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2163973
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2163973
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2163973
m&p-Xylene	1330-20-7	106	0.400	1.73	11.8	51.2		1	WG2163973
o-Xylene	95-47-6	106	0.200	0.867	5.53	24.0		1	WG2163973
1,1-Difluoroethane	75-37-6	66.05	5.00	13.5	ND	ND		1	WG2163973
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		114				WG2163973
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.3				WG2164466

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	24.1	57.3		1	WG2163973
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2163973
Benzene	71-43-2	78.10	0.200	0.639	3.71	11.9		1	WG2163973
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2163973
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2163973
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2163973
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2163973
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2163973
Carbon disulfide	75-15-0	76.10	0.200	0.622	8.24	25.6		1	WG2163973
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2163973
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2163973
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2163973
Chloroform	67-66-3	119	0.200	0.973	1.06	5.16		1	WG2163973
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG2163973
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2163973
Cyclohexane	110-82-7	84.20	0.200	0.689	17.1	58.9		1	WG2163973
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2163973
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2163973
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2163973
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2163973
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2163973
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2163973
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2163973
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2163973
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2163973
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2163973
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2163973
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2163973
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2163973
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2163973
Ethanol	64-17-5	46.10	2.50	4.71	8.47	16.0	B	1	WG2163973
Ethylbenzene	100-41-4	106	0.200	0.867	2.15	9.32		1	WG2163973
4-Ethyltoluene	622-96-8	120	0.200	0.982	1.44	7.07		1	WG2163973
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.381	2.14		1	WG2163973
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.493	2.44		1	WG2163973
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2163973
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2163973
Heptane	142-82-5	100	0.200	0.818	6.51	26.6		1	WG2163973
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2163973
n-Hexane	110-54-3	86.20	0.630	2.22	20.2	71.2		1	WG2163973
Isopropylbenzene	98-82-8	120.20	0.200	0.983	0.245	1.20		1	WG2163973
Methylene Chloride	75-09-2	84.90	0.200	0.694	1.42	4.93		1	WG2163973
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2163973
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	5.71	16.8		1	WG2163973
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2163973
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2163973
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2163973
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2163973
2-Propanol	67-63-0	60.10	1.25	3.07	2.63	6.46		1	WG2163973
Propene	115-07-1	42.10	25.0	43.0	294	506		20	WG2164466
Styrene	100-42-5	104	0.200	0.851	0.373	1.59		1	WG2163973
1,1,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2163973
Tetrachloroethylene	127-18-4	166	4.00	27.2	886	6020		20	WG2164466
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	2.21	6.52		1	WG2163973
Toluene	108-88-3	92.10	0.500	1.88	25.9	97.6		1	WG2163973
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2163973

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 GI

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	<u>Qualifier</u>	Dilution	<u>Batch</u>
			ppbv	ug/m3	ppbv	ug/m3			
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2163973
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2163973
Trichloroethylene	79-01-6	131	0.200	1.07	1.90	10.2		1	WG2163973
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	6.17	30.3		1	WG2163973
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	1.59	7.80		1	WG2163973
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	0.541	2.53		1	WG2163973
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2163973
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2163973
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2163973
m&p-Xylene	1330-20-7	106	0.400	1.73	9.11	39.5		1	WG2163973
o-Xylene	95-47-6	106	0.200	0.867	4.16	18.0		1	WG2163973
1,1-Difluoroethane	75-37-6	66.05	5.00	13.5	ND	ND		1	WG2163973
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		105				WG2163973
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.1				WG2164466

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	73.2	174		1	WG2163973
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2163973
Benzene	71-43-2	78.10	0.200	0.639	2.66	8.50		1	WG2163973
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2163973
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2163973
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2163973
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2163973
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2163973
Carbon disulfide	75-15-0	76.10	0.200	0.622	2.15	6.69		1	WG2163973
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2163973
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2163973
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2163973
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2163973
Chloromethane	74-87-3	50.50	0.200	0.413	2.05	4.23		1	WG2163973
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2163973
Cyclohexane	110-82-7	84.20	0.200	0.689	7.47	25.7		1	WG2163973
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2163973
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2163973
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2163973
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2163973
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2163973
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2163973
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2163973
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2163973
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	0.493	1.95		1	WG2163973
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2163973
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2163973
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2163973
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2163973
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2163973
Ethanol	64-17-5	46.10	2.50	4.71	73.1	138		1	WG2163973
Ethylbenzene	100-41-4	106	0.200	0.867	1.17	5.07		1	WG2163973
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.686	3.37		1	WG2163973
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.302	1.70		1	WG2163973
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.355	1.76		1	WG2163973
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2163973
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2163973
Heptane	142-82-5	100	0.200	0.818	2.15	8.79		1	WG2163973
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2163973
n-Hexane	110-54-3	86.20	0.630	2.22	14.0	49.4		1	WG2163973
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2163973
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.707	2.45		1	WG2163973
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2163973
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	10.0	29.5		1	WG2163973
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2163973
Methyl methacrylate	80-62-6	100.12	0.200	0.819	2.18	8.93		1	WG2163973
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2163973
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2163973
2-Propanol	67-63-0	60.10	1.25	3.07	12.4	30.5		1	WG2163973
Propene	115-07-1	42.10	125	215	1320	2270		100	WG2165547
Styrene	100-42-5	104	0.200	0.851	0.220	0.936		1	WG2163973
1,1,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2163973
Tetrachloroethylene	127-18-4	166	0.200	1.36	16.6	113		1	WG2163973
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2163973
Toluene	108-88-3	92.10	0.500	1.88	22.5	84.8		1	WG2163973
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2163973

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 GI

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	<u>Qualifier</u>	Dilution	<u>Batch</u>
			ppbv	ug/m3	ppbv	ug/m3			
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2163973
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2163973
Trichloroethylene	79-01-6	131	0.200	1.07	0.391	2.09		1	WG2163973
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	2.88	14.1		1	WG2163973
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.826	4.05		1	WG2163973
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	4.31	20.1		1	WG2163973
Vinyl chloride	75-01-4	62.50	0.200	0.511	0.360	0.920		1	WG2163973
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2163973
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2163973
m&p-Xylene	1330-20-7	106	0.400	1.73	5.01	21.7		1	WG2163973
o-Xylene	95-47-6	106	0.200	0.867	2.24	9.71		1	WG2163973
1,1-Difluoroethane	75-37-6	66.05	5.00	13.5	25.7	69.4		1	WG2163973
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		104				WG2163973
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		94.0				WG2165547

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	12.1	28.8	1	WG2163973	¹ Cp
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND	1	WG2163973	² Tc
Benzene	71-43-2	78.10	0.200	0.639	6.01	19.2	1	WG2163973	³ Ss
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND	1	WG2163973	⁴ Cn
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND	1	WG2163973	⁵ Sr
Bromoform	75-25-2	253	0.600	6.21	ND	ND	1	WG2163973	⁶ Qc
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND	1	WG2163973	⁷ Gl
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND	1	WG2163973	⁸ Al
Carbon disulfide	75-15-0	76.10	0.200	0.622	1.37	4.26	1	WG2163973	⁹ Sc
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND	1	WG2163973	
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND	1	WG2163973	
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND	1	WG2163973	
Chloroform	67-66-3	119	0.200	0.973	ND	ND	1	WG2163973	
Chloromethane	74-87-3	50.50	0.200	0.413	0.461	0.952	1	WG2163973	
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND	1	WG2163973	
Cyclohexane	110-82-7	84.20	0.200	0.689	3.33	11.5	1	WG2163973	
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND	1	WG2163973	
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND	1	WG2163973	
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND	1	WG2163973	
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND	1	WG2163973	
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND	1	WG2163973	
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND	1	WG2163973	
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND	1	WG2163973	
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND	1	WG2163973	
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND	1	WG2163973	
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND	1	WG2163973	
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND	1	WG2163973	
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND	1	WG2163973	
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND	1	WG2163973	
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND	1	WG2163973	
Ethanol	64-17-5	46.10	2.50	4.71	17.7	33.4	1	WG2163973	
Ethylbenzene	100-41-4	106	0.200	0.867	1.93	8.37	1	WG2163973	
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.232	1.14	1	WG2163973	
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.313	1.76	1	WG2163973	
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.312	1.54	1	WG2163973	
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND	1	WG2163973	
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND	1	WG2163973	
Heptane	142-82-5	100	0.200	0.818	5.62	23.0	1	WG2163973	
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND	1	WG2163973	
n-Hexane	110-54-3	86.20	0.630	2.22	12.1	42.7	1	WG2163973	
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND	1	WG2163973	
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.300	1.04	1	WG2163973	
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND	1	WG2163973	
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	5.99	17.7	1	WG2163973	
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND	1	WG2163973	
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND	1	WG2163973	
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND	1	WG2163973	
Naphthalene	91-20-3	128	0.630	3.30	ND	ND	1	WG2163973	
2-Propanol	67-63-0	60.10	1.25	3.07	2.83	6.96	1	WG2163973	
Propene	115-07-1	42.10	12.5	21.5	358	616	10	WG2164466	
Styrene	100-42-5	104	0.200	0.851	ND	ND	1	WG2163973	
1,1,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND	1	WG2163973	
Tetrachloroethylene	127-18-4	166	0.200	1.36	0.572	3.88	1	WG2163973	
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	0.525	1.55	1	WG2163973	
Toluene	108-88-3	92.10	0.500	1.88	60.6	228	1	WG2163973	
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND	1	WG2163973	

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	<u>Qualifier</u>	Dilution	<u>Batch</u>
			ppbv	ug/m3	ppbv	ug/m3			
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2163973
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2163973
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2163973
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.951	4.67		1	WG2163973
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.273	1.34		1	WG2163973
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	4.27	19.9		1	WG2163973
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2163973
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2163973
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2163973
m&p-Xylene	1330-20-7	106	0.400	1.73	6.04	26.2		1	WG2163973
o-Xylene	95-47-6	106	0.200	0.867	2.47	10.7		1	WG2163973
1,1-Difluoroethane	75-37-6	66.05	5.00	13.5	11.1	30.0		1	WG2163973
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.1				WG2163973
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		100				WG2164466

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	12.5	29.7	142	337		10	WG2164466
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2163973
Benzene	71-43-2	78.10	0.200	0.639	10.3	32.9		1	WG2163973
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2163973
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2163973
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2163973
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2163973
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2163973
Carbon disulfide	75-15-0	76.10	0.200	0.622	3.61	11.2		1	WG2163973
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2163973
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2163973
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2163973
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2163973
Chloromethane	74-87-3	50.50	0.200	0.413	1.42	2.93		1	WG2163973
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2163973
Cyclohexane	110-82-7	84.20	0.200	0.689	13.8	47.5		1	WG2163973
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2163973
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2163973
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2163973
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2163973
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2163973
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2163973
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2163973
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2163973
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2163973
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2163973
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2163973
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2163973
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2163973
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2163973
Ethanol	64-17-5	46.10	2.50	4.71	13.1	24.7		1	WG2163973
Ethylbenzene	100-41-4	106	0.200	0.867	1.65	7.15		1	WG2163973
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.420	2.06		1	WG2163973
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.225	1.26		1	WG2163973
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.379	1.87		1	WG2163973
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2163973
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2163973
Heptane	142-82-5	100	0.200	0.818	11.2	45.8		1	WG2163973
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2163973
n-Hexane	110-54-3	86.20	0.630	2.22	39.1	138		1	WG2163973
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2163973
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG2163973
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2163973
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	28.8	84.9		1	WG2163973
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2163973
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2163973
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2163973
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2163973
2-Propanol	67-63-0	60.10	1.25	3.07	3.89	9.56		1	WG2163973
Propene	115-07-1	42.10	125	215	1340	2310		100	WG2165325
Styrene	100-42-5	104	0.200	0.851	0.277	1.18		1	WG2163973
1,1,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2163973
Tetrachloroethylene	127-18-4	166	2.00	13.6	528	3580		10	WG2164466
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2163973
Toluene	108-88-3	92.10	0.500	1.88	47.8	180		1	WG2163973
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2163973

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 GI

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	<u>Qualifier</u>	Dilution	<u>Batch</u>
			ppbv	ug/m3	ppbv	ug/m3			
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2163973
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2163973
Trichloroethylene	79-01-6	131	0.200	1.07	0.523	2.80		1	WG2163973
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	1.85	9.08		1	WG2163973
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.505	2.48		1	WG2163973
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	7.77	36.3		1	WG2163973
Vinyl chloride	75-01-4	62.50	0.200	0.511	0.537	1.37		1	WG2163973
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2163973
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2163973
m&p-Xylene	1330-20-7	106	0.400	1.73	5.01	21.7		1	WG2163973
o-Xylene	95-47-6	106	0.200	0.867	2.17	9.41		1	WG2163973
1,1-Difluoroethane	75-37-6	66.05	5.00	13.5	ND	ND		1	WG2163973
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		108				WG2163973
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		99.4				WG2164466
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.2				WG2165325

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

WG2163973

Volatile Organic Compounds (MS) by Method TO-15

QUALITY CONTROL SUMMARY

[L1672502-01,02,03,04,05](#)

Method Blank (MB)

(MB) R3995364-3 11/03/23 12:39

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv	
Acetone	U		0.584	1.25	¹ Cp
Allyl chloride	U		0.114	0.200	² Tc
Benzene	U		0.0715	0.200	³ Ss
Benzyl Chloride	U		0.0598	0.200	⁴ Cn
Bromodichloromethane	U		0.0702	0.200	⁵ Sr
Bromoform	U		0.0732	0.600	⁶ Qc
Bromomethane	U		0.0982	0.200	⁷ Gl
1,3-Butadiene	U		0.104	2.00	⁸ Al
Carbon disulfide	U		0.102	0.200	⁹ Sc
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	1.22	<u>J</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	

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Method Blank (MB)

(MB) R3995364-3 11/03/23 12:39

Analyte	MB Result ppbv	<u>MB Qualifier</u>	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								
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								
1,1-Difluoroethane	U		0.129	5.00								
(S) 1,4-Bromofluorobenzene	99.3			60.0-140								

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

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

(LCS) R3995364-1 11/03/23 08:50 • (LCSD) R3995364-2 11/03/23 09:19

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Acetone	3.75	3.17	3.16	84.5	84.3	70.0-130			0.316	25
Allyl chloride	3.75	3.16	3.19	84.3	85.1	70.0-130			0.945	25
Benzene	3.75	3.48	3.38	92.8	90.1	70.0-130			2.92	25
Benzyl Chloride	3.75	4.21	4.19	112	112	70.0-152			0.476	25

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

(LCS) R3995364-1 11/03/23 08:50 • (LCSD) R3995364-2 11/03/23 09:19

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Bromodichloromethane	3.75	3.40	3.38	90.7	90.1	70.0-130			0.590	25
Bromoform	3.75	4.13	4.19	110	112	70.0-130			1.44	25
Bromomethane	3.75	3.21	3.19	85.6	85.1	70.0-130			0.625	25
1,3-Butadiene	3.75	3.19	3.21	85.1	85.6	70.0-130			0.625	25
Carbon disulfide	3.75	2.86	2.83	76.3	75.5	70.0-130			1.05	25
Carbon tetrachloride	3.75	3.64	3.63	97.1	96.8	70.0-130			0.275	25
Chlorobenzene	3.75	3.45	3.43	92.0	91.5	70.0-130			0.581	25
Chloroethane	3.75	2.98	3.02	79.5	80.5	70.0-130			1.33	25
Chloroform	3.75	3.44	3.44	91.7	91.7	70.0-130			0.000	25
Chloromethane	3.75	3.20	3.19	85.3	85.1	70.0-130			0.313	25
2-Chlorotoluene	3.75	4.11	4.09	110	109	70.0-130			0.488	25
Cyclohexane	3.75	3.59	3.61	95.7	96.3	70.0-130			0.556	25
Dibromochloromethane	3.75	3.61	3.63	96.3	96.8	70.0-130			0.552	25
1,2-Dibromoethane	3.75	3.60	3.57	96.0	95.2	70.0-130			0.837	25
1,2-Dichlorobenzene	3.75	4.31	4.17	115	111	70.0-130			3.30	25
1,3-Dichlorobenzene	3.75	4.50	4.28	120	114	70.0-130			5.01	25
1,4-Dichlorobenzene	3.75	4.46	4.30	119	115	70.0-130			3.65	25
1,2-Dichloroethane	3.75	3.52	3.49	93.9	93.1	70.0-130			0.856	25
1,1-Dichloroethane	3.75	3.27	3.27	87.2	87.2	70.0-130			0.000	25
1,1-Dichloroethene	3.75	3.30	3.31	88.0	88.3	70.0-130			0.303	25
cis-1,2-Dichloroethene	3.75	3.48	3.49	92.8	93.1	70.0-130			0.287	25
trans-1,2-Dichloroethene	3.75	3.26	3.25	86.9	86.7	70.0-130			0.307	25
1,2-Dichloropropane	3.75	3.13	3.16	83.5	84.3	70.0-130			0.954	25
cis-1,3-Dichloropropene	3.75	3.67	3.51	97.9	93.6	70.0-130			4.46	25
trans-1,3-Dichloropropene	3.75	3.66	3.60	97.6	96.0	70.0-130			1.65	25
1,4-Dioxane	3.75	3.65	3.57	97.3	95.2	70.0-140			2.22	25
Ethanol	3.75	3.88	3.98	103	106	55.0-148			2.54	25
Ethylbenzene	3.75	4.13	4.01	110	107	70.0-130			2.95	25
4-Ethyltoluene	3.75	4.50	4.43	120	118	70.0-130			1.57	25
Trichlorofluoromethane	3.75	3.52	3.50	93.9	93.3	70.0-130			0.570	25
Dichlorodifluoromethane	3.75	3.38	3.39	90.1	90.4	64.0-139			0.295	25
1,1,2-Trichlorotrifluoroethane	3.75	3.33	3.37	88.8	89.9	70.0-130			1.19	25
1,2-Dichlorotetrafluoroethane	3.75	3.29	3.30	87.7	88.0	70.0-130			0.303	25
Heptane	3.75	3.44	3.46	91.7	92.3	70.0-130			0.580	25
Hexachloro-1,3-butadiene	3.75	4.90	4.75	131	127	70.0-151			3.11	25
n-Hexane	3.75	3.57	3.51	95.2	93.6	70.0-130			1.69	25
Isopropylbenzene	3.75	4.12	4.02	110	107	70.0-130			2.46	25
Methylene Chloride	3.75	3.05	3.07	81.3	81.9	70.0-130			0.654	25
Methyl Butyl Ketone	3.75	3.47	3.48	92.5	92.8	70.0-149			0.288	25
2-Butanone (MEK)	3.75	3.38	3.31	90.1	88.3	70.0-130			2.09	25

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1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

QUALITY CONTROL SUMMARY

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

(LCS) R3995364-1 11/03/23 08:50 • (LCSD) R3995364-2 11/03/23 09:19

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
4-Methyl-2-pentanone (MIBK)	3.75	3.01	3.11	80.3	82.9	70.0-139			3.27	25
Methyl methacrylate	3.75	3.50	3.37	93.3	89.9	70.0-130			3.78	25
MTBE	3.75	3.66	3.65	97.6	97.3	70.0-130			0.274	25
Naphthalene	3.75	4.68	4.59	125	122	70.0-159			1.94	25
2-Propanol	3.75	3.42	3.44	91.2	91.7	70.0-139			0.583	25
Propene	3.75	3.26	3.26	86.9	86.9	64.0-144			0.000	25
Styrene	3.75	4.36	4.29	116	114	70.0-130			1.62	25
1,1,2,2-Tetrachloroethane	3.75	3.62	3.57	96.5	95.2	70.0-130			1.39	25
Tetrachloroethylene	3.75	3.92	3.97	105	106	70.0-130			1.27	25
Tetrahydrofuran	3.75	3.45	3.46	92.0	92.3	70.0-137			0.289	25
Toluene	3.75	3.71	3.70	98.9	98.7	70.0-130			0.270	25
1,2,4-Trichlorobenzene	3.75	4.63	4.47	123	119	70.0-160			3.52	25
1,1,1-Trichloroethane	3.75	3.59	3.64	95.7	97.1	70.0-130			1.38	25
1,1,2-Trichloroethane	3.75	3.41	3.42	90.9	91.2	70.0-130			0.293	25
Trichloroethylene	3.75	3.54	3.44	94.4	91.7	70.0-130			2.87	25
1,2,4-Trimethylbenzene	3.75	4.62	4.55	123	121	70.0-130			1.53	25
1,3,5-Trimethylbenzene	3.75	4.65	4.40	124	117	70.0-130			5.52	25
2,2,4-Trimethylpentane	3.75	3.41	3.47	90.9	92.5	70.0-130			1.74	25
Vinyl chloride	3.75	3.10	3.11	82.7	82.9	70.0-130			0.322	25
Vinyl Bromide	3.75	3.33	3.32	88.8	88.5	70.0-130			0.301	25
Vinyl acetate	3.75	3.28	3.26	87.5	86.9	70.0-130			0.612	25
m&p-Xylene	7.50	8.68	8.38	116	112	70.0-130			3.52	25
o-Xylene	3.75	4.40	4.24	117	113	70.0-130			3.70	25
1,1-Difluoroethane	3.75	3.34	3.37	89.1	89.9	70.0-130			0.894	25
(S) 1,4-Bromofluorobenzene				99.0	98.3	60.0-140				

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

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Volatile Organic Compounds (MS) by Method TO-15

QUALITY CONTROL SUMMARY

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Method Blank (MB)

(MB) R3995450-3 11/04/23 08:41

Analyte	MB Result ppbv	<u>MB Qualifier</u>	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Propene	U		0.0932	1.25
Tetrachloroethylene	U		0.0814	0.200
(S) 1,4-Bromofluorobenzene	97.8		60.0-140	

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

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

(LCS) R3995450-1 11/04/23 07:42 • (LCSD) R3995450-2 11/04/23 08:12

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Acetone	3.75	3.52	3.53	93.9	94.1	70.0-130			0.284	25
Propene	3.75	3.88	3.79	103	101	64.0-144			2.35	25
Tetrachloroethylene	3.75	3.80	3.77	101	101	70.0-130			0.793	25
(S) 1,4-Bromofluorobenzene			99.6	100	60.0-140					

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L1672502-05

Method Blank (MB)

(MB) R3996052-3 11/06/23 10:14

Analyte	MB Result ppbv	<u>MB Qualifier</u>	MB MDL ppbv	MB RDL ppbv
Propene	U		0.0932	1.25
(S) 1,4-Bromofluorobenzene	93.9		60.0-140	

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

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

(LCS) R3996052-1 11/06/23 08:56 • (LCSD) R3996052-2 11/06/23 09:36

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Propene	3.75	4.38	4.48	117	119	64.0-144			2.26	25
(S) 1,4-Bromofluorobenzene			94.9	94.5	94.5	60.0-140				

QUALITY CONTROL SUMMARY

L1672502-03

Method Blank (MB)

(MB) R3996255-2 11/06/23 11:32

Analyte	MB Result ppbv	<u>MB Qualifier</u>	MB MDL ppbv	MB RDL ppbv
Propene	U		0.0932	1.25
(S) 1,4-Bromofluorobenzene	95.4			60.0-140

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

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

(LCS) R3996255-1 11/06/23 09:30 • (LCSD) R3996255-5 11/06/23 12:37

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Propene	3.75	3.39	3.46	90.4	92.3	64.0-144			2.04	25
Propene	3.75	3.39	3.13	90.4	83.5	64.0-144			7.98	25
(S) 1,4-Bromofluorobenzene			113	104	60.0-140					
(S) 1,4-Bromofluorobenzene			113	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.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gi

⁸ Al

⁹ Sc

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Pace

Pace® Location Requested (City/State):

Air CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

D177

Company Name:
Partner Engineering & Science - WAStreet Address:
2708 James Street
Bellingham, WA 98225

City, State Zip:

Customer Project #: **23-416301.2**Project Name:
1606, 1614, & 1624 Bellevue Way Southeast

Site Collection Info/Facility ID (as applicable):

PARENGSWA-234163012

Time Zone Collected: [] AK [] PT [] MT [] CT [] ET

Data Deliverables:

[] Level II [] Level III [] Level IV

[] EQUIS

[] Other _____

Contact/Report To: **Brian Godbois**Phone #: **206-518-4274**E-Mail: **BGodbois@partneresi.com, Brian_Godbois@partneresi.com**

Cc E-Mail:

Invoice to:

Invoice

E-Mail:

Purchase Order # (if applicable):

Quote #:

State origin of sample(s):

WA

Regulatory Program (CAA, RCRA, etc.) as applicable:

Rush (Pre-approval required):

2 Day 3 day 5 day Other

24-Hour

Date Results Requested:

Units for Reporting: ug/m³ PPBV mg/m³ PPMV

* Matrix Codes (Insert in Matrix box below): Ambient (A), Indoor (I), Soil Vapor (SV), Other (O)



Scan QR code for instructions

Analyses Requested

Field Information

Canister
Pressure / Vacuum

PUF / FILTER

TO-15 Summa

X

Proj. Manager:
3813 - Marty Edwards IIIAcctNum / Client ID:
PARENGSWA

Table #:

Profile / Template:
T237039Prelog / Bottle Ord. ID:
P1021871**L1672S02**
Sample Comment

-01

-02

-03

-04

-05

Customer Sample ID	Matrix *	Summa Canister ID	Flow Controller ID	Begin Collection		End Collection		Start Pressure / Vacuum (in Hg)	End Pressure / Vacuum (in Hg)	Duration (minutes)	Flow Rate m³/min or L/min	Total Volume m³ or L	Sampled
				Date	Time	Date	Time						
B1-SG	Soil gas	21786		10-29	1350	10-29	1356	-28	-2				X
B2-SG		22015			1446		1451	-30	-2				X
B3-SG					1720		1729	-30	-2				X
B4-SG		21396		10-30	1722	1731	1722	-30	-2				X
B5-SG				1802	1802	1806	1806	-265	-2				X

Sample Receipt Checklist

- CC Seal Present/Intact: N Y Airs
 COC Signed/Accurate: N Y Size: 1L 6L
 Bottles arrive intact: N Y Tag Color: G W
 Correct bottles used: N Y
 Sufficient volume sent: N Y T/P#: _____
 RA Screen <0.5 mR/hr: N Y

Trk#7019 5683 087C

Customer Remarks / Special Conditions / Possible Hazards:

I-I-DFA Tracer

Collected By:

Printed Name:

Signature:

Brian Godbois**BG**

Additional Instructions from Pace®:

Coolers: Thermometer ID: Correction Factor (°C): Obs. Temp. (°C): Corrected Temp. (°C):

Relinquished by/Company: (Signature)

Date/Time:

Received by/Company: (Signature)

Date/Time:

Tracking Number:

Relinquished by/Company: (Signature)

Date/Time:

Received by/Company: (Signature)

Date/Time:

Delivered by: In-Person Courier

Relinquished by/Company: (Signature)

Date/Time:

Received by/Company: (Signature)

Date/Time:

FedEX UPS Other

Relinquished by/Company: (Signature)

Date/Time:

Received by/Company: (Signature)

Date/Time:

0900

Page: _____ of _____



ANALYTICAL REPORT

November 03, 2023

Revised Report

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Partner Engineering & Science - WA

Sample Delivery Group: L1672416

Samples Received: 11/01/2023

Project Number: 23-416301.2

Description: Bellevue, WA

Report To: Brian Godbois
2708 James Street
Bellingham, WA 98225

Entire Report Reviewed By:

Marty Edwards III
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

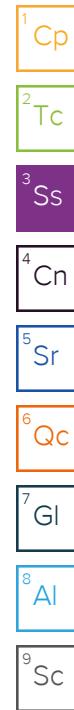
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

<p>Cp: Cover Page</p> <p>Tc: Table of Contents</p> <p>Ss: Sample Summary</p> <p>Cn: Case Narrative</p> <p>Sr: Sample Results</p> <ul style="list-style-type: none"> B1-2 L1672416-01 B1-6 L1672416-02 B2-2 L1672416-03 B2-9 L1672416-04 B3-16 L1672416-05 B4-20 L1672416-07 B5-15 L1672416-09 GMW-1 L1672416-11 GMW-2 L1672416-12 GMW-3 L1672416-13 <p>Qc: Quality Control Summary</p> <ul style="list-style-type: none"> Total Solids by Method 2540 G-2011 Volatile Organic Compounds (GC) by Method NWTPHGX Volatile Organic Compounds (GC/MS) by Method 8260D Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT <p>Gl: Glossary of Terms</p> <p>Al: Accreditations & Locations</p> <p>Sc: Sample Chain of Custody</p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10px;"></td> <td style="width: 10px; text-align: center;">1</td> <td style="width: 10px; border: 1px solid orange; padding: 2px;">Cp</td> </tr> <tr> <td></td> <td style="text-align: center;">2</td> <td style="border: 1px solid green; padding: 2px;">Tc</td> </tr> <tr> <td></td> <td style="text-align: center;">3</td> <td style="border: 1px solid purple; padding: 2px;">Ss</td> </tr> <tr> <td></td> <td style="text-align: center;">5</td> <td style="border: 1px solid black; padding: 2px;">Cn</td> </tr> <tr> <td></td> <td style="text-align: center;">6</td> <td style="border: 1px solid blue; padding: 2px;">Sr</td> </tr> <tr> <td></td> <td style="text-align: center;">10</td> <td style="border: 1px solid orange; padding: 2px;">Qc</td> </tr> <tr> <td></td> <td style="text-align: center;">12</td> <td style="border: 1px solid black; padding: 2px;">Gl</td> </tr> <tr> <td></td> <td style="text-align: center;">14</td> <td style="border: 1px solid blue; padding: 2px;">Al</td> </tr> <tr> <td></td> <td style="text-align: center;">16</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">18</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">20</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">22</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">24</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">26</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">26</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">27</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">29</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">40</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">42</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">44</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">45</td> <td></td> </tr> </table>		1	Cp		2	Tc		3	Ss		5	Cn		6	Sr		10	Qc		12	Gl		14	Al		16			18			20			22			24			26			26			27			29			40			42			44			45	
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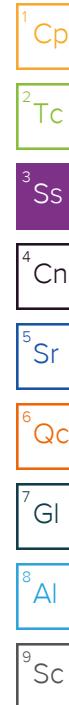
SAMPLE SUMMARY

				Collected by Brian Godbois	Collected date/time 10/29/23 11:00	Received date/time 11/01/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2162403	1	11/01/23 14:50	11/01/23 14:54	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2162686	37	10/29/23 11:00	11/01/23 22:33	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2162557	1.48	10/29/23 11:00	11/01/23 17:45	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2162731	1	11/02/23 04:33	11/02/23 08:42	JAS	Mt. Juliet, TN
				Collected by Brian Godbois	Collected date/time 10/29/23 11:05	Received date/time 11/01/23 09:00
B1-6 L1672416-02 Solid						
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2162403	1	11/01/23 14:50	11/01/23 14:54	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2162686	41.5	10/29/23 11:05	11/01/23 22:52	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2162557	1.66	10/29/23 11:05	11/01/23 18:04	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2162731	1	11/02/23 04:33	11/02/23 08:55	JAS	Mt. Juliet, TN
				Collected by Brian Godbois	Collected date/time 10/29/23 12:20	Received date/time 11/01/23 09:00
B2-2 L1672416-03 Solid						
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2162403	1	11/01/23 14:50	11/01/23 14:54	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2162686	36.3	10/29/23 12:20	11/01/23 23:12	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2162557	1.45	10/29/23 12:20	11/01/23 18:23	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2162731	1	11/02/23 04:33	11/02/23 09:08	JAS	Mt. Juliet, TN
				Collected by Brian Godbois	Collected date/time 10/29/23 12:25	Received date/time 11/01/23 09:00
B2-9 L1672416-04 Solid						
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2162403	1	11/01/23 14:50	11/01/23 14:54	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2162686	34	10/29/23 12:25	11/02/23 00:17	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2162557	1.36	10/29/23 12:25	11/01/23 18:42	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2162731	1	11/02/23 04:33	11/02/23 08:16	JAS	Mt. Juliet, TN
				Collected by Brian Godbois	Collected date/time 10/29/23 14:35	Received date/time 11/01/23 09:00
B3-16 L1672416-05 Solid						
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2162403	1	11/01/23 14:50	11/01/23 14:54	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2162686	36.5	10/29/23 14:35	11/02/23 00:36	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2162557	1.46	10/29/23 14:35	11/01/23 19:01	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2162731	1	11/02/23 04:33	11/02/23 09:21	JAS	Mt. Juliet, TN
				Collected by Brian Godbois	Collected date/time 10/30/23 14:05	Received date/time 11/01/23 09:00
B4-20 L1672416-07 Solid						
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2162403	1	11/01/23 14:50	11/01/23 14:54	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2162686	41.8	10/30/23 14:05	11/02/23 00:55	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2162557	1.67	10/30/23 14:05	11/01/23 19:20	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2162731	1	11/02/23 04:33	11/02/23 08:29	JAS	Mt. Juliet, TN



SAMPLE SUMMARY

			Collected by Brian Godbois	Collected date/time 10/30/23 15:40	Received date/time 11/01/23 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2162403	1	11/01/23 14:50	11/01/23 14:54	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2162686	42	10/30/23 15:40	11/02/23 01:54	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2162557	1.68	10/30/23 15:40	11/01/23 19:39	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2162731	1	11/02/23 04:33	11/02/23 08:03	JAS	Mt. Juliet, TN
GMW-1 L1672416-11 GW			Collected by Brian Godbois	Collected date/time 10/30/23 16:50	Received date/time 11/01/23 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2161783	1	11/01/23 17:38	11/01/23 17:38	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2162318	1	11/01/23 15:32	11/01/23 15:32	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2162307	1	11/01/23 23:15	11/02/23 02:08	MAA	Mt. Juliet, TN
GMW-2 L1672416-12 GW			Collected by Brian Godbois	Collected date/time 10/30/23 17:00	Received date/time 11/01/23 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2161783	1	11/01/23 18:03	11/01/23 18:03	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2162318	1	11/01/23 15:54	11/01/23 15:54	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2163373	250	11/02/23 15:35	11/02/23 15:35	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2162307	1	11/01/23 23:15	11/02/23 02:27	MAA	Mt. Juliet, TN
GMW-3 L1672416-13 GW			Collected by Brian Godbois	Collected date/time 10/30/23 17:10	Received date/time 11/01/23 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2161783	1	11/01/23 18:27	11/01/23 18:27	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2162318	1	11/01/23 16:16	11/01/23 16:16	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2163373	20	11/02/23 15:54	11/02/23 15:54	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2162307	1	11/01/23 23:15	11/02/23 02:47	MAA	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.



Marty Edwards III
Project Manager

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ GI
- ⁸ AI
- ⁹ SC

Report Revision History

Level II Report - Version 1: 11/02/23 17:01

Project Narrative

Revised deliverable to remove the metals data.

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	94.0		1	11/01/2023 14:54	WG2162403

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Gasoline Range Organics-NWTPH	1.83	J	1.38	4.09	37	11/01/2023 22:33	WG2162686
(S) a,a,a-Trifluorotoluene(FID)	93.5			77.0-120		11/01/2023 22:33	WG2162686

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Acetone	U	C3	0.0598	0.0819	1.48	11/01/2023 17:45	WG2162557
Acrylonitrile	U		0.00591	0.0205	1.48	11/01/2023 17:45	WG2162557
Benzene	U		0.000765	0.00164	1.48	11/01/2023 17:45	WG2162557
Bromobenzene	U		0.00147	0.0205	1.48	11/01/2023 17:45	WG2162557
Bromodichloromethane	U		0.000118	0.00409	1.48	11/01/2023 17:45	WG2162557
Bromoform	U		0.00191	0.0409	1.48	11/01/2023 17:45	WG2162557
Bromomethane	U		0.00323	0.0205	1.48	11/01/2023 17:45	WG2162557
n-Butylbenzene	U		0.00860	0.0205	1.48	11/01/2023 17:45	WG2162557
sec-Butylbenzene	U		0.00471	0.0205	1.48	11/01/2023 17:45	WG2162557
tert-Butylbenzene	U		0.00320	0.00819	1.48	11/01/2023 17:45	WG2162557
Carbon tetrachloride	U		0.00147	0.00819	1.48	11/01/2023 17:45	WG2162557
Chlorobenzene	U		0.000344	0.00409	1.48	11/01/2023 17:45	WG2162557
Chlorodibromomethane	U		0.00100	0.00409	1.48	11/01/2023 17:45	WG2162557
Chloroethane	U	C3	0.00279	0.00819	1.48	11/01/2023 17:45	WG2162557
Chloroform	U		0.00168	0.00409	1.48	11/01/2023 17:45	WG2162557
Chloromethane	U		0.00713	0.0205	1.48	11/01/2023 17:45	WG2162557
2-Chlorotoluene	U		0.00142	0.00409	1.48	11/01/2023 17:45	WG2162557
4-Chlorotoluene	U		0.000737	0.00819	1.48	11/01/2023 17:45	WG2162557
1,2-Dibromo-3-Chloropropane	U		0.00639	0.0409	1.48	11/01/2023 17:45	WG2162557
1,2-Dibromoethane	U		0.00106	0.00409	1.48	11/01/2023 17:45	WG2162557
Dibromomethane	U		0.00123	0.00819	1.48	11/01/2023 17:45	WG2162557
1,2-Dichlorobenzene	U		0.000696	0.00819	1.48	11/01/2023 17:45	WG2162557
1,3-Dichlorobenzene	U		0.000983	0.00819	1.48	11/01/2023 17:45	WG2162557
1,4-Dichlorobenzene	U		0.00115	0.00819	1.48	11/01/2023 17:45	WG2162557
Dichlorodifluoromethane	U		0.00263	0.00819	1.48	11/01/2023 17:45	WG2162557
1,1-Dichloroethane	U		0.000805	0.00409	1.48	11/01/2023 17:45	WG2162557
1,2-Dichloroethane	U		0.00106	0.00409	1.48	11/01/2023 17:45	WG2162557
1,1-Dichloroethene	U		0.000993	0.00409	1.48	11/01/2023 17:45	WG2162557
cis-1,2-Dichloroethene	U		0.00121	0.00409	1.48	11/01/2023 17:45	WG2162557
trans-1,2-Dichloroethene	U		0.00170	0.00819	1.48	11/01/2023 17:45	WG2162557
1,2-Dichloropropane	U		0.00232	0.00819	1.48	11/01/2023 17:45	WG2162557
1,1-Dichloropropene	U		0.00133	0.00409	1.48	11/01/2023 17:45	WG2162557
1,3-Dichloropropane	U		0.000820	0.00819	1.48	11/01/2023 17:45	WG2162557
cis-1,3-Dichloropropene	U		0.00124	0.00409	1.48	11/01/2023 17:45	WG2162557
trans-1,3-Dichloropropene	U		0.00187	0.00819	1.48	11/01/2023 17:45	WG2162557
2,2-Dichloropropane	U		0.00226	0.00409	1.48	11/01/2023 17:45	WG2162557
Di-isopropyl ether	U		0.000672	0.00164	1.48	11/01/2023 17:45	WG2162557
Ethylbenzene	U		0.00121	0.00409	1.48	11/01/2023 17:45	WG2162557
Hexachloro-1,3-butadiene	U		0.00983	0.0409	1.48	11/01/2023 17:45	WG2162557
Isopropylbenzene	U		0.000696	0.00409	1.48	11/01/2023 17:45	WG2162557
p-Isopropyltoluene	U		0.00417	0.00819	1.48	11/01/2023 17:45	WG2162557
2-Butanone (MEK)	U		0.104	0.164	1.48	11/01/2023 17:45	WG2162557
Methylene Chloride	0.0121	J	0.0109	0.0409	1.48	11/01/2023 17:45	WG2162557
4-Methyl-2-pentanone (MIBK)	U		0.00373	0.0409	1.48	11/01/2023 17:45	WG2162557

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch	
	mg/kg		mg/kg	mg/kg				
Methyl tert-butyl ether	U		0.000573	0.00164	1.48	11/01/2023 17:45	WG2162557	¹ Cp
Naphthalene	U	C3	0.00799	0.0205	1.48	11/01/2023 17:45	WG2162557	² Tc
n-Propylbenzene	U		0.00156	0.00819	1.48	11/01/2023 17:45	WG2162557	³ Ss
Styrene	U		0.000375	0.0205	1.48	11/01/2023 17:45	WG2162557	⁴ Cn
1,1,1,2-Tetrachloroethane	U		0.00155	0.00409	1.48	11/01/2023 17:45	WG2162557	⁵ Sr
1,1,2,2-Tetrachloroethane	U		0.00114	0.00409	1.48	11/01/2023 17:45	WG2162557	⁶ Qc
1,1,2-Trichlorotrifluoroethane	U		0.00124	0.00409	1.48	11/01/2023 17:45	WG2162557	⁷ Gl
Tetrachloroethylene	0.0824	C5	0.00147	0.00409	1.48	11/01/2023 17:45	WG2162557	⁸ Al
Toluene	U		0.00212	0.00819	1.48	11/01/2023 17:45	WG2162557	⁹ Sc
1,2,3-Trichlorobenzene	U	C3 J4	0.0120	0.0205	1.48	11/01/2023 17:45	WG2162557	
1,2,4-Trichlorobenzene	U		0.00720	0.0205	1.48	11/01/2023 17:45	WG2162557	
1,1,1-Trichloroethane	U		0.00152	0.00409	1.48	11/01/2023 17:45	WG2162557	
1,1,2-Trichloroethane	U		0.000978	0.00409	1.48	11/01/2023 17:45	WG2162557	
Trichloroethylene	U		0.000956	0.00164	1.48	11/01/2023 17:45	WG2162557	
Trichlorofluoromethane	U		0.00135	0.00409	1.48	11/01/2023 17:45	WG2162557	
1,2,3-Trichloropropane	U		0.00266	0.0205	1.48	11/01/2023 17:45	WG2162557	
1,2,4-Trimethylbenzene	U		0.00259	0.00819	1.48	11/01/2023 17:45	WG2162557	
1,2,3-Trimethylbenzene	U		0.00259	0.00819	1.48	11/01/2023 17:45	WG2162557	
1,3,5-Trimethylbenzene	U		0.00328	0.00819	1.48	11/01/2023 17:45	WG2162557	
Vinyl chloride	U		0.00190	0.00409	1.48	11/01/2023 17:45	WG2162557	
Xylenes, Total	U		0.00144	0.0106	1.48	11/01/2023 17:45	WG2162557	
(S) Toluene-d8	107			75.0-131		11/01/2023 17:45	WG2162557	
(S) 4-Bromofluorobenzene	104			67.0-138		11/01/2023 17:45	WG2162557	
(S) 1,2-Dichloroethane-d4	101			70.0-130		11/01/2023 17:45	WG2162557	

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Diesel Range Organics (DRO)	U		1.41	4.25	1	11/02/2023 08:42	WG2162731
Residual Range Organics (RRO)	U		3.54	10.6	1	11/02/2023 08:42	WG2162731
(S) o-Terphenyl	66.1			18.0-148		11/02/2023 08:42	WG2162731

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	95.5		1	11/01/2023 14:54	WG2162403

¹ Cp

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Gasoline Range Organics-NWTPH	1.87	J	1.52	4.46	41.5	11/01/2023 22:52	WG2162686
(S) a,a,a-Trifluorotoluene(FID)	96.8			77.0-120		11/01/2023 22:52	WG2162686

² Tc³ Ss⁴ Cn⁵ Sr

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Acetone	U	C3	0.0652	0.0893	1.66	11/01/2023 18:04	WG2162557
Acrylonitrile	U		0.00644	0.0224	1.66	11/01/2023 18:04	WG2162557
Benzene	U		0.000834	0.00179	1.66	11/01/2023 18:04	WG2162557
Bromobenzene	U		0.00160	0.0224	1.66	11/01/2023 18:04	WG2162557
Bromodichloromethane	U		0.00129	0.00446	1.66	11/01/2023 18:04	WG2162557
Bromoform	U		0.00209	0.0446	1.66	11/01/2023 18:04	WG2162557
Bromomethane	U		0.00352	0.0224	1.66	11/01/2023 18:04	WG2162557
n-Butylbenzene	U		0.00938	0.0224	1.66	11/01/2023 18:04	WG2162557
sec-Butylbenzene	U		0.00514	0.0224	1.66	11/01/2023 18:04	WG2162557
tert-Butylbenzene	U		0.00349	0.00893	1.66	11/01/2023 18:04	WG2162557
Carbon tetrachloride	U		0.00160	0.00893	1.66	11/01/2023 18:04	WG2162557
Chlorobenzene	U		0.000375	0.00446	1.66	11/01/2023 18:04	WG2162557
Chlorodibromomethane	U		0.00110	0.00446	1.66	11/01/2023 18:04	WG2162557
Chloroethane	U	C3	0.00303	0.00893	1.66	11/01/2023 18:04	WG2162557
Chloroform	U		0.00184	0.00446	1.66	11/01/2023 18:04	WG2162557
Chloromethane	U		0.00777	0.0224	1.66	11/01/2023 18:04	WG2162557
2-Chlorotoluene	U		0.00155	0.00446	1.66	11/01/2023 18:04	WG2162557
4-Chlorotoluene	U		0.000804	0.00893	1.66	11/01/2023 18:04	WG2162557
1,2-Dibromo-3-Chloropropane	U		0.00696	0.0446	1.66	11/01/2023 18:04	WG2162557
1,2-Dibromoethane	U		0.00116	0.00446	1.66	11/01/2023 18:04	WG2162557
Dibromomethane	U		0.00134	0.00893	1.66	11/01/2023 18:04	WG2162557
1,2-Dichlorobenzene	U		0.000759	0.00893	1.66	11/01/2023 18:04	WG2162557
1,3-Dichlorobenzene	U		0.00107	0.00893	1.66	11/01/2023 18:04	WG2162557
1,4-Dichlorobenzene	U		0.00125	0.00893	1.66	11/01/2023 18:04	WG2162557
Dichlorodifluoromethane	U		0.00287	0.00893	1.66	11/01/2023 18:04	WG2162557
1,1-Dichloroethane	U		0.000877	0.00446	1.66	11/01/2023 18:04	WG2162557
1,2-Dichloroethane	U		0.00116	0.00446	1.66	11/01/2023 18:04	WG2162557
1,1-Dichloroethene	U		0.00109	0.00446	1.66	11/01/2023 18:04	WG2162557
cis-1,2-Dichloroethene	U		0.00131	0.00446	1.66	11/01/2023 18:04	WG2162557
trans-1,2-Dichloroethene	U		0.00186	0.00893	1.66	11/01/2023 18:04	WG2162557
1,2-Dichloropropane	U		0.00254	0.00893	1.66	11/01/2023 18:04	WG2162557
1,1-Dichloropropene	U		0.00144	0.00446	1.66	11/01/2023 18:04	WG2162557
1,3-Dichloropropane	U		0.000895	0.00893	1.66	11/01/2023 18:04	WG2162557
cis-1,3-Dichloropropene	U		0.00136	0.00446	1.66	11/01/2023 18:04	WG2162557
trans-1,3-Dichloropropene	U		0.00203	0.00893	1.66	11/01/2023 18:04	WG2162557
2,2-Dichloropropane	U		0.00246	0.00446	1.66	11/01/2023 18:04	WG2162557
Di-isopropyl ether	U		0.000733	0.00179	1.66	11/01/2023 18:04	WG2162557
Ethylbenzene	U		0.00131	0.00446	1.66	11/01/2023 18:04	WG2162557
Hexachloro-1,3-butadiene	U		0.0107	0.0446	1.66	11/01/2023 18:04	WG2162557
Isopropylbenzene	U		0.000759	0.00446	1.66	11/01/2023 18:04	WG2162557
p-Isopropyltoluene	U		0.00455	0.00893	1.66	11/01/2023 18:04	WG2162557
2-Butanone (MEK)	U		0.113	0.179	1.66	11/01/2023 18:04	WG2162557
Methylene Chloride	0.0123	J	0.0118	0.0446	1.66	11/01/2023 18:04	WG2162557
4-Methyl-2-pentanone (MIBK)	U		0.00407	0.0446	1.66	11/01/2023 18:04	WG2162557

⁶ Qc⁷ GI⁸ Al⁹ Sc

B1-6

Collected date/time: 10/29/23 11:05

SAMPLE RESULTS - 02

L1672416

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Methyl tert-butyl ether	U		0.000625	0.00179	1.66	11/01/2023 18:04	WG2162557
Naphthalene	U	C3	0.00871	0.0224	1.66	11/01/2023 18:04	WG2162557
n-Propylbenzene	U		0.00170	0.00893	1.66	11/01/2023 18:04	WG2162557
Styrene	U		0.000409	0.0224	1.66	11/01/2023 18:04	WG2162557
1,1,1,2-Tetrachloroethane	U		0.00169	0.00446	1.66	11/01/2023 18:04	WG2162557
1,1,2,2-Tetrachloroethane	U		0.00124	0.00446	1.66	11/01/2023 18:04	WG2162557
1,1,2-Trichlorotrifluoroethane	U		0.00134	0.00446	1.66	11/01/2023 18:04	WG2162557
Tetrachloroethylene	0.223	C5	0.00160	0.00446	1.66	11/01/2023 18:04	WG2162557
Toluene	U		0.00232	0.00893	1.66	11/01/2023 18:04	WG2162557
1,2,3-Trichlorobenzene	U	C3 J4	0.0131	0.0224	1.66	11/01/2023 18:04	WG2162557
1,2,4-Trichlorobenzene	U		0.00785	0.0224	1.66	11/01/2023 18:04	WG2162557
1,1,1-Trichloroethane	U		0.00165	0.00446	1.66	11/01/2023 18:04	WG2162557
1,1,2-Trichloroethane	U		0.00107	0.00446	1.66	11/01/2023 18:04	WG2162557
Trichloroethylene	U		0.00104	0.00179	1.66	11/01/2023 18:04	WG2162557
Trichlorofluoromethane	U		0.00147	0.00446	1.66	11/01/2023 18:04	WG2162557
1,2,3-Trichloropropane	U		0.00289	0.0224	1.66	11/01/2023 18:04	WG2162557
1,2,4-Trimethylbenzene	U		0.00282	0.00893	1.66	11/01/2023 18:04	WG2162557
1,2,3-Trimethylbenzene	U		0.00282	0.00893	1.66	11/01/2023 18:04	WG2162557
1,3,5-Trimethylbenzene	U		0.00357	0.00893	1.66	11/01/2023 18:04	WG2162557
Vinyl chloride	U		0.00208	0.00446	1.66	11/01/2023 18:04	WG2162557
Xylenes, Total	U		0.00157	0.0116	1.66	11/01/2023 18:04	WG2162557
(S) Toluene-d8	106			75.0-131		11/01/2023 18:04	WG2162557
(S) 4-Bromofluorobenzene	102			67.0-138		11/01/2023 18:04	WG2162557
(S) 1,2-Dichloroethane-d4	97.8			70.0-130		11/01/2023 18:04	WG2162557

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Diesel Range Organics (DRO)	U		1.39	4.19	1	11/02/2023 08:55	WG2162731
Residual Range Organics (RRO)	U		3.49	10.5	1	11/02/2023 08:55	WG2162731
(S) o-Terphenyl	55.4			18.0-148		11/02/2023 08:55	WG2162731

ACCOUNT:

Partner Engineering & Science - WA

PROJECT:

23-416301.2

SDG:

L1672416

DATE/TIME:

11/03/23 13:31

PAGE:

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Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	94.6		1	11/01/2023 14:54	WG2162403

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Gasoline Range Organics-NWTPH	1.38	J	1.35	3.98	36.3	11/01/2023 23:12	WG2162686
(S) a,a,a-Trifluorotoluene(FID)	96.4			77.0-120		11/01/2023 23:12	WG2162686

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Acetone	U	C3	0.0580	0.0795	1.45	11/01/2023 18:23	WG2162557
Acrylonitrile	U		0.00573	0.0198	1.45	11/01/2023 18:23	WG2162557
Benzene	U		0.000742	0.00159	1.45	11/01/2023 18:23	WG2162557
Bromobenzene	U		0.00144	0.0198	1.45	11/01/2023 18:23	WG2162557
Bromodichloromethane	U		0.00115	0.00398	1.45	11/01/2023 18:23	WG2162557
Bromoform	U		0.00186	0.0398	1.45	11/01/2023 18:23	WG2162557
Bromomethane	U		0.00314	0.0198	1.45	11/01/2023 18:23	WG2162557
n-Butylbenzene	U		0.00834	0.0198	1.45	11/01/2023 18:23	WG2162557
sec-Butylbenzene	U		0.00458	0.0198	1.45	11/01/2023 18:23	WG2162557
tert-Butylbenzene	U		0.00310	0.00795	1.45	11/01/2023 18:23	WG2162557
Carbon tetrachloride	U		0.00143	0.00795	1.45	11/01/2023 18:23	WG2162557
Chlorobenzene	U		0.000334	0.00398	1.45	11/01/2023 18:23	WG2162557
Chlorodibromomethane	U		0.000972	0.00398	1.45	11/01/2023 18:23	WG2162557
Chloroethane	U	C3	0.00271	0.00795	1.45	11/01/2023 18:23	WG2162557
Chloroform	U		0.00163	0.00398	1.45	11/01/2023 18:23	WG2162557
Chloromethane	U		0.00692	0.0198	1.45	11/01/2023 18:23	WG2162557
2-Chlorotoluene	U		0.00137	0.00398	1.45	11/01/2023 18:23	WG2162557
4-Chlorotoluene	U		0.000716	0.00795	1.45	11/01/2023 18:23	WG2162557
1,2-Dibromo-3-Chloropropane	U		0.00620	0.0398	1.45	11/01/2023 18:23	WG2162557
1,2-Dibromoethane	U		0.00103	0.00398	1.45	11/01/2023 18:23	WG2162557
Dibromomethane	U		0.00119	0.00795	1.45	11/01/2023 18:23	WG2162557
1,2-Dichlorobenzene	U		0.000675	0.00795	1.45	11/01/2023 18:23	WG2162557
1,3-Dichlorobenzene	U		0.000954	0.00795	1.45	11/01/2023 18:23	WG2162557
1,4-Dichlorobenzene	U		0.00112	0.00795	1.45	11/01/2023 18:23	WG2162557
Dichlorodifluoromethane	U		0.00255	0.00795	1.45	11/01/2023 18:23	WG2162557
1,1-Dichloroethane	U		0.000780	0.00398	1.45	11/01/2023 18:23	WG2162557
1,2-Dichloroethane	U		0.00103	0.00398	1.45	11/01/2023 18:23	WG2162557
1,1-Dichloroethene	U		0.000964	0.00398	1.45	11/01/2023 18:23	WG2162557
cis-1,2-Dichloroethene	U		0.00116	0.00398	1.45	11/01/2023 18:23	WG2162557
trans-1,2-Dichloroethene	U		0.00166	0.00795	1.45	11/01/2023 18:23	WG2162557
1,2-Dichloropropane	U		0.00226	0.00795	1.45	11/01/2023 18:23	WG2162557
1,1-Dichloropropene	U		0.00128	0.00398	1.45	11/01/2023 18:23	WG2162557
1,3-Dichloropropane	U		0.000796	0.00795	1.45	11/01/2023 18:23	WG2162557
cis-1,3-Dichloropropene	U		0.00121	0.00398	1.45	11/01/2023 18:23	WG2162557
trans-1,3-Dichloropropene	U		0.00181	0.00795	1.45	11/01/2023 18:23	WG2162557
2,2-Dichloropropane	U		0.00219	0.00398	1.45	11/01/2023 18:23	WG2162557
Di-isopropyl ether	U		0.000651	0.00159	1.45	11/01/2023 18:23	WG2162557
Ethylbenzene	U		0.00117	0.00398	1.45	11/01/2023 18:23	WG2162557
Hexachloro-1,3-butadiene	U		0.00954	0.0398	1.45	11/01/2023 18:23	WG2162557
Isopropylbenzene	U		0.000675	0.00398	1.45	11/01/2023 18:23	WG2162557
p-Isopropyltoluene	U		0.00406	0.00795	1.45	11/01/2023 18:23	WG2162557
2-Butanone (MEK)	U		0.101	0.159	1.45	11/01/2023 18:23	WG2162557
Methylene Chloride	U		0.0106	0.0398	1.45	11/01/2023 18:23	WG2162557
4-Methyl-2-pentanone (MIBK)	U		0.00363	0.0398	1.45	11/01/2023 18:23	WG2162557

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch	
	mg/kg		mg/kg	mg/kg				
Methyl tert-butyl ether	U		0.000557	0.00159	1.45	11/01/2023 18:23	WG2162557	¹ Cp
Naphthalene	U	C3	0.00776	0.0198	1.45	11/01/2023 18:23	WG2162557	² Tc
n-Propylbenzene	U		0.00151	0.00795	1.45	11/01/2023 18:23	WG2162557	³ Ss
Styrene	U		0.000364	0.0198	1.45	11/01/2023 18:23	WG2162557	⁴ Cn
1,1,1,2-Tetrachloroethane	U		0.00150	0.00398	1.45	11/01/2023 18:23	WG2162557	⁵ Sr
1,1,2,2-Tetrachloroethane	U		0.00111	0.00398	1.45	11/01/2023 18:23	WG2162557	⁶ Qc
1,1,2-Trichlorotrifluoroethane	U		0.00119	0.00398	1.45	11/01/2023 18:23	WG2162557	⁷ Gl
Tetrachloroethylene	0.0489	C5	0.00143	0.00398	1.45	11/01/2023 18:23	WG2162557	⁸ Al
Toluene	U		0.00207	0.00795	1.45	11/01/2023 18:23	WG2162557	⁹ Sc
1,2,3-Trichlorobenzene	U	C3 J4	0.0116	0.0198	1.45	11/01/2023 18:23	WG2162557	
1,2,4-Trichlorobenzene	U		0.00699	0.0198	1.45	11/01/2023 18:23	WG2162557	
1,1,1-Trichloroethane	U		0.00147	0.00398	1.45	11/01/2023 18:23	WG2162557	
1,1,2-Trichloroethane	U		0.000949	0.00398	1.45	11/01/2023 18:23	WG2162557	
Trichloroethylene	U		0.000928	0.00159	1.45	11/01/2023 18:23	WG2162557	
Trichlorofluoromethane	U		0.00132	0.00398	1.45	11/01/2023 18:23	WG2162557	
1,2,3-Trichloropropane	U		0.00258	0.0198	1.45	11/01/2023 18:23	WG2162557	
1,2,4-Trimethylbenzene	U		0.00251	0.00795	1.45	11/01/2023 18:23	WG2162557	
1,2,3-Trimethylbenzene	U		0.00251	0.00795	1.45	11/01/2023 18:23	WG2162557	
1,3,5-Trimethylbenzene	U		0.00318	0.00795	1.45	11/01/2023 18:23	WG2162557	
Vinyl chloride	U		0.00184	0.00398	1.45	11/01/2023 18:23	WG2162557	
Xylenes, Total	U		0.00140	0.0103	1.45	11/01/2023 18:23	WG2162557	
(S) Toluene-d8	106			75.0-131		11/01/2023 18:23	WG2162557	
(S) 4-Bromofluorobenzene	102			67.0-138		11/01/2023 18:23	WG2162557	
(S) 1,2-Dichloroethane-d4	98.3			70.0-130		11/01/2023 18:23	WG2162557	

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Diesel Range Organics (DRO)	U		1.41	4.23	1	11/02/2023 09:08	WG2162731
Residual Range Organics (RRO)	U		3.52	10.6	1	11/02/2023 09:08	WG2162731
(S) o-Terphenyl	68.6			18.0-148		11/02/2023 09:08	WG2162731

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	92.9		1	11/01/2023 14:54	WG2162403

¹ Cp

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Gasoline Range Organics-NWTPH	1.53	J	1.30	3.85	34	11/02/2023 00:17	WG2162686
(S) a,a,a-Trifluorotoluene(FID)	95.9			77.0-120		11/02/2023 00:17	WG2162686

² Tc³ Ss⁴ Cn⁵ Sr

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Acetone	U	C3	0.0562	0.0771	1.36	11/01/2023 18:42	WG2162557
Acrylonitrile	U		0.00557	0.0193	1.36	11/01/2023 18:42	WG2162557
Benzene	U		0.000720	0.00154	1.36	11/01/2023 18:42	WG2162557
Bromobenzene	U		0.00138	0.0193	1.36	11/01/2023 18:42	WG2162557
Bromodichloromethane	U		0.00112	0.00385	1.36	11/01/2023 18:42	WG2162557
Bromoform	U		0.00180	0.0385	1.36	11/01/2023 18:42	WG2162557
Bromomethane	U		0.00304	0.0193	1.36	11/01/2023 18:42	WG2162557
n-Butylbenzene	U		0.00809	0.0193	1.36	11/01/2023 18:42	WG2162557
sec-Butylbenzene	U		0.00444	0.0193	1.36	11/01/2023 18:42	WG2162557
tert-Butylbenzene	U		0.00300	0.00771	1.36	11/01/2023 18:42	WG2162557
Carbon tetrachloride	U		0.00138	0.00771	1.36	11/01/2023 18:42	WG2162557
Chlorobenzene	U		0.000324	0.00385	1.36	11/01/2023 18:42	WG2162557
Chlorodibromomethane	U		0.000943	0.00385	1.36	11/01/2023 18:42	WG2162557
Chloroethane	U	C3	0.00262	0.00771	1.36	11/01/2023 18:42	WG2162557
Chloroform	U		0.00159	0.00385	1.36	11/01/2023 18:42	WG2162557
Chloromethane	U		0.00671	0.0193	1.36	11/01/2023 18:42	WG2162557
2-Chlorotoluene	U		0.00134	0.00385	1.36	11/01/2023 18:42	WG2162557
4-Chlorotoluene	U		0.000694	0.00771	1.36	11/01/2023 18:42	WG2162557
1,2-Dibromo-3-Chloropropane	U		0.00601	0.0385	1.36	11/01/2023 18:42	WG2162557
1,2-Dibromoethane	U		0.000999	0.00385	1.36	11/01/2023 18:42	WG2162557
Dibromomethane	U		0.00116	0.00771	1.36	11/01/2023 18:42	WG2162557
1,2-Dichlorobenzene	U		0.000655	0.00771	1.36	11/01/2023 18:42	WG2162557
1,3-Dichlorobenzene	U		0.000925	0.00771	1.36	11/01/2023 18:42	WG2162557
1,4-Dichlorobenzene	U		0.00108	0.00771	1.36	11/01/2023 18:42	WG2162557
Dichlorodifluoromethane	U		0.00248	0.00771	1.36	11/01/2023 18:42	WG2162557
1,1-Dichloroethane	U		0.000757	0.00385	1.36	11/01/2023 18:42	WG2162557
1,2-Dichloroethane	U		0.00100	0.00385	1.36	11/01/2023 18:42	WG2162557
1,1-Dichloroethene	U		0.000934	0.00385	1.36	11/01/2023 18:42	WG2162557
cis-1,2-Dichloroethene	U		0.00113	0.00385	1.36	11/01/2023 18:42	WG2162557
trans-1,2-Dichloroethene	U		0.00160	0.00771	1.36	11/01/2023 18:42	WG2162557
1,2-Dichloropropane	U		0.00219	0.00771	1.36	11/01/2023 18:42	WG2162557
1,1-Dichloropropene	U		0.00125	0.00385	1.36	11/01/2023 18:42	WG2162557
1,3-Dichloropropane	U		0.000772	0.00771	1.36	11/01/2023 18:42	WG2162557
cis-1,3-Dichloropropene	U		0.00117	0.00385	1.36	11/01/2023 18:42	WG2162557
trans-1,3-Dichloropropene	U		0.00176	0.00771	1.36	11/01/2023 18:42	WG2162557
2,2-Dichloropropane	U		0.00213	0.00385	1.36	11/01/2023 18:42	WG2162557
Di-isopropyl ether	U		0.000633	0.00154	1.36	11/01/2023 18:42	WG2162557
Ethylbenzene	U		0.00113	0.00385	1.36	11/01/2023 18:42	WG2162557
Hexachloro-1,3-butadiene	U		0.00925	0.0385	1.36	11/01/2023 18:42	WG2162557
Isopropylbenzene	U		0.000655	0.00385	1.36	11/01/2023 18:42	WG2162557
p-Isopropyltoluene	U		0.00393	0.00771	1.36	11/01/2023 18:42	WG2162557
2-Butanone (MEK)	U		0.0979	0.154	1.36	11/01/2023 18:42	WG2162557
Methylene Chloride	U		0.0102	0.0385	1.36	11/01/2023 18:42	WG2162557
4-Methyl-2-pentanone (MIBK)	U		0.00351	0.0385	1.36	11/01/2023 18:42	WG2162557

⁶ Qc⁷ GI⁸ Al⁹ Sc

B2-9

Collected date/time: 10/29/23 12:25

SAMPLE RESULTS - 04

L1672416

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Methyl tert-butyl ether	U		0.000540	0.00154	1.36	11/01/2023 18:42	WG2162557
Naphthalene	U	C3	0.00753	0.0193	1.36	11/01/2023 18:42	WG2162557
n-Propylbenzene	U		0.00146	0.00771	1.36	11/01/2023 18:42	WG2162557
Styrene	U		0.000353	0.0193	1.36	11/01/2023 18:42	WG2162557
1,1,1,2-Tetrachloroethane	U		0.00146	0.00385	1.36	11/01/2023 18:42	WG2162557
1,1,2,2-Tetrachloroethane	U		0.00107	0.00385	1.36	11/01/2023 18:42	WG2162557
1,1,2-Trichlorotrifluoroethane	U		0.00117	0.00385	1.36	11/01/2023 18:42	WG2162557
Tetrachloroethylene	0.194	C5	0.00138	0.00385	1.36	11/01/2023 18:42	WG2162557
Toluene	U		0.00201	0.00771	1.36	11/01/2023 18:42	WG2162557
1,2,3-Trichlorobenzene	U	C3 J4	0.0113	0.0193	1.36	11/01/2023 18:42	WG2162557
1,2,4-Trichlorobenzene	U		0.00678	0.0193	1.36	11/01/2023 18:42	WG2162557
1,1,1-Trichloroethane	U		0.00143	0.00385	1.36	11/01/2023 18:42	WG2162557
1,1,2-Trichloroethane	U		0.000920	0.00385	1.36	11/01/2023 18:42	WG2162557
Trichloroethylene	U		0.000900	0.00154	1.36	11/01/2023 18:42	WG2162557
Trichlorofluoromethane	U		0.00127	0.00385	1.36	11/01/2023 18:42	WG2162557
1,2,3-Trichloropropane	U		0.00249	0.0193	1.36	11/01/2023 18:42	WG2162557
1,2,4-Trimethylbenzene	U		0.00244	0.00771	1.36	11/01/2023 18:42	WG2162557
1,2,3-Trimethylbenzene	U		0.00244	0.00771	1.36	11/01/2023 18:42	WG2162557
1,3,5-Trimethylbenzene	U		0.00308	0.00771	1.36	11/01/2023 18:42	WG2162557
Vinyl chloride	U		0.00179	0.00385	1.36	11/01/2023 18:42	WG2162557
Xylenes, Total	U		0.00136	0.0100	1.36	11/01/2023 18:42	WG2162557
(S) Toluene-d8	108			75.0-131		11/01/2023 18:42	WG2162557
(S) 4-Bromofluorobenzene	101			67.0-138		11/01/2023 18:42	WG2162557
(S) 1,2-Dichloroethane-d4	96.9			70.0-130		11/01/2023 18:42	WG2162557

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Diesel Range Organics (DRO)	U		1.43	4.31	1	11/02/2023 08:16	WG2162731
Residual Range Organics (RRO)	U		3.59	10.8	1	11/02/2023 08:16	WG2162731
(S) o-Terphenyl	59.0			18.0-148		11/02/2023 08:16	WG2162731

ACCOUNT:

Partner Engineering & Science - WA

PROJECT:

23-416301.2

SDG:

L1672416

DATE/TIME:

11/03/23 13:31

PAGE:

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Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	94.3		1	11/01/2023 14:54	WG2162403

¹ Cp

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Gasoline Range Organics-NWTPH	12.7		1.37	4.02	36.5	11/02/2023 00:36	WG2162686
(S) a,a,a-Trifluorotoluene(FID)	96.7			77.0-120		11/02/2023 00:36	WG2162686

² Tc³ Ss⁴ Cn⁵ Sr

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Acetone	U	C3	0.0587	0.0804	1.46	11/01/2023 19:01	WG2162557
Acrylonitrile	U		0.00581	0.0202	1.46	11/01/2023 19:01	WG2162557
Benzene	U		0.000752	0.00161	1.46	11/01/2023 19:01	WG2162557
Bromobenzene	U		0.00144	0.0202	1.46	11/01/2023 19:01	WG2162557
Bromodichloromethane	U		0.00117	0.00402	1.46	11/01/2023 19:01	WG2162557
Bromoform	U		0.00188	0.0402	1.46	11/01/2023 19:01	WG2162557
Bromomethane	U		0.00317	0.0202	1.46	11/01/2023 19:01	WG2162557
n-Butylbenzene	U		0.00844	0.0202	1.46	11/01/2023 19:01	WG2162557
sec-Butylbenzene	U		0.00463	0.0202	1.46	11/01/2023 19:01	WG2162557
tert-Butylbenzene	U		0.00314	0.00804	1.46	11/01/2023 19:01	WG2162557
Carbon tetrachloride	U		0.00144	0.00804	1.46	11/01/2023 19:01	WG2162557
Chlorobenzene	U		0.000338	0.00402	1.46	11/01/2023 19:01	WG2162557
Chlorodibromomethane	U		0.000985	0.00402	1.46	11/01/2023 19:01	WG2162557
Chloroethane	U	C3	0.00273	0.00804	1.46	11/01/2023 19:01	WG2162557
Chloroform	U		0.00165	0.00402	1.46	11/01/2023 19:01	WG2162557
Chloromethane	U		0.00700	0.0202	1.46	11/01/2023 19:01	WG2162557
2-Chlorotoluene	U		0.00139	0.00402	1.46	11/01/2023 19:01	WG2162557
4-Chlorotoluene	U		0.000724	0.00804	1.46	11/01/2023 19:01	WG2162557
1,2-Dibromo-3-Chloropropane	U		0.00627	0.0402	1.46	11/01/2023 19:01	WG2162557
1,2-Dibromoethane	U		0.00104	0.00402	1.46	11/01/2023 19:01	WG2162557
Dibromomethane	U		0.00121	0.00804	1.46	11/01/2023 19:01	WG2162557
1,2-Dichlorobenzene	U		0.000683	0.00804	1.46	11/01/2023 19:01	WG2162557
1,3-Dichlorobenzene	U		0.000965	0.00804	1.46	11/01/2023 19:01	WG2162557
1,4-Dichlorobenzene	U		0.00112	0.00804	1.46	11/01/2023 19:01	WG2162557
Dichlorodifluoromethane	U		0.00259	0.00804	1.46	11/01/2023 19:01	WG2162557
1,1-Dichloroethane	U		0.000790	0.00402	1.46	11/01/2023 19:01	WG2162557
1,2-Dichloroethane	U		0.00104	0.00402	1.46	11/01/2023 19:01	WG2162557
1,1-Dichloroethene	U		0.000975	0.00402	1.46	11/01/2023 19:01	WG2162557
cis-1,2-Dichloroethene	U		0.00118	0.00402	1.46	11/01/2023 19:01	WG2162557
trans-1,2-Dichloroethene	U		0.00167	0.00804	1.46	11/01/2023 19:01	WG2162557
1,2-Dichloropropane	U		0.00228	0.00804	1.46	11/01/2023 19:01	WG2162557
1,1-Dichloropropene	U		0.00130	0.00402	1.46	11/01/2023 19:01	WG2162557
1,3-Dichloropropane	U		0.000806	0.00804	1.46	11/01/2023 19:01	WG2162557
cis-1,3-Dichloropropene	U		0.00122	0.00402	1.46	11/01/2023 19:01	WG2162557
trans-1,3-Dichloropropene	U		0.00183	0.00804	1.46	11/01/2023 19:01	WG2162557
2,2-Dichloropropane	U		0.00221	0.00402	1.46	11/01/2023 19:01	WG2162557
Di-isopropyl ether	U		0.000660	0.00161	1.46	11/01/2023 19:01	WG2162557
Ethylbenzene	U		0.00119	0.00402	1.46	11/01/2023 19:01	WG2162557
Hexachloro-1,3-butadiene	U		0.00965	0.0402	1.46	11/01/2023 19:01	WG2162557
Isopropylbenzene	U		0.000683	0.00402	1.46	11/01/2023 19:01	WG2162557
p-Isopropyltoluene	U		0.00410	0.00804	1.46	11/01/2023 19:01	WG2162557
2-Butanone (MEK)	U		0.102	0.161	1.46	11/01/2023 19:01	WG2162557
Methylene Chloride	0.0118	J	0.0107	0.0402	1.46	11/01/2023 19:01	WG2162557
4-Methyl-2-pentanone (MIBK)	U		0.00367	0.0402	1.46	11/01/2023 19:01	WG2162557

⁶ Qc⁷ GI⁸ Al⁹ Sc

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch	
	mg/kg		mg/kg	mg/kg				
Methyl tert-butyl ether	U		0.000563	0.00161	1.46	11/01/2023 19:01	WG2162557	¹ Cp
Naphthalene	U	C3	0.00785	0.0202	1.46	11/01/2023 19:01	WG2162557	² Tc
n-Propylbenzene	U		0.00153	0.00804	1.46	11/01/2023 19:01	WG2162557	³ Ss
Styrene	U		0.000368	0.0202	1.46	11/01/2023 19:01	WG2162557	⁴ Cn
1,1,1,2-Tetrachloroethane	U		0.00152	0.00402	1.46	11/01/2023 19:01	WG2162557	⁵ Sr
1,1,2,2-Tetrachloroethane	U		0.00111	0.00402	1.46	11/01/2023 19:01	WG2162557	⁶ Qc
1,1,2-Trichlorotrifluoroethane	U		0.00121	0.00402	1.46	11/01/2023 19:01	WG2162557	⁷ Gl
Tetrachloroethylene	0.00880	C5	0.00144	0.00402	1.46	11/01/2023 19:01	WG2162557	⁸ Al
Toluene	U		0.00209	0.00804	1.46	11/01/2023 19:01	WG2162557	⁹ Sc
1,2,3-Trichlorobenzene	U	C3 J4	0.0118	0.0202	1.46	11/01/2023 19:01	WG2162557	
1,2,4-Trichlorobenzene	U		0.00707	0.0202	1.46	11/01/2023 19:01	WG2162557	
1,1,1-Trichloroethane	U		0.00149	0.00402	1.46	11/01/2023 19:01	WG2162557	
1,1,2-Trichloroethane	U		0.000961	0.00402	1.46	11/01/2023 19:01	WG2162557	
Trichloroethylene	U		0.000940	0.00161	1.46	11/01/2023 19:01	WG2162557	
Trichlorofluoromethane	U		0.00133	0.00402	1.46	11/01/2023 19:01	WG2162557	
1,2,3-Trichloropropane	U		0.00261	0.0202	1.46	11/01/2023 19:01	WG2162557	
1,2,4-Trimethylbenzene	0.00398	J	0.00255	0.00804	1.46	11/01/2023 19:01	WG2162557	
1,2,3-Trimethylbenzene	U		0.00255	0.00804	1.46	11/01/2023 19:01	WG2162557	
1,3,5-Trimethylbenzene	U		0.00322	0.00804	1.46	11/01/2023 19:01	WG2162557	
Vinyl chloride	U		0.00186	0.00402	1.46	11/01/2023 19:01	WG2162557	
Xylenes, Total	0.00402	J	0.00141	0.0105	1.46	11/01/2023 19:01	WG2162557	
(S) Toluene-d8	107			75.0-131		11/01/2023 19:01	WG2162557	
(S) 4-Bromofluorobenzene	105			67.0-138		11/01/2023 19:01	WG2162557	
(S) 1,2-Dichloroethane-d4	98.7			70.0-130		11/01/2023 19:01	WG2162557	

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Diesel Range Organics (DRO)	22.0		1.41	4.24	1	11/02/2023 09:21	WG2162731
Residual Range Organics (RRO)	5.99	J	3.53	10.6	1	11/02/2023 09:21	WG2162731
(S) o-Terphenyl	53.2			18.0-148		11/02/2023 09:21	WG2162731

Sample Narrative:

L1672416-05 WG2162731: Sample does not resemble laboratory standards.

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	93.2		1	11/01/2023 14:54	WG2162403

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Gasoline Range Organics-NWTPH	1.91	J	1.59	4.67	41.8	11/02/2023 00:55	WG2162686
(S) a,a,a-Trifluorotoluene(FID)	98.2			77.0-120		11/02/2023 00:55	WG2162686

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Acetone	U	C3	0.0681	0.0932	1.67	11/01/2023 19:20	WG2162557
Acrylonitrile	U		0.00673	0.0233	1.67	11/01/2023 19:20	WG2162557
Benzene	U		0.000871	0.00186	1.67	11/01/2023 19:20	WG2162557
Bromobenzene	U		0.00167	0.0233	1.67	11/01/2023 19:20	WG2162557
Bromodichloromethane	U		0.00135	0.00467	1.67	11/01/2023 19:20	WG2162557
Bromoform	U		0.00218	0.0467	1.67	11/01/2023 19:20	WG2162557
Bromomethane	U		0.00367	0.0233	1.67	11/01/2023 19:20	WG2162557
n-Butylbenzene	U		0.00979	0.0233	1.67	11/01/2023 19:20	WG2162557
sec-Butylbenzene	U		0.00537	0.0233	1.67	11/01/2023 19:20	WG2162557
tert-Butylbenzene	U		0.00364	0.00932	1.67	11/01/2023 19:20	WG2162557
Carbon tetrachloride	U		0.00167	0.00932	1.67	11/01/2023 19:20	WG2162557
Chlorobenzene	U		0.000392	0.00467	1.67	11/01/2023 19:20	WG2162557
Chlorodibromomethane	U		0.00114	0.00467	1.67	11/01/2023 19:20	WG2162557
Chloroethane	U	C3	0.00317	0.00932	1.67	11/01/2023 19:20	WG2162557
Chloroform	U		0.00192	0.00467	1.67	11/01/2023 19:20	WG2162557
Chloromethane	U		0.00811	0.0233	1.67	11/01/2023 19:20	WG2162557
2-Chlorotoluene	U		0.00161	0.00467	1.67	11/01/2023 19:20	WG2162557
4-Chlorotoluene	U		0.000840	0.00932	1.67	11/01/2023 19:20	WG2162557
1,2-Dibromo-3-Chloropropane	U		0.00727	0.0467	1.67	11/01/2023 19:20	WG2162557
1,2-Dibromoethane	U		0.00121	0.00467	1.67	11/01/2023 19:20	WG2162557
Dibromomethane	U		0.00140	0.00932	1.67	11/01/2023 19:20	WG2162557
1,2-Dichlorobenzene	U		0.000793	0.00932	1.67	11/01/2023 19:20	WG2162557
1,3-Dichlorobenzene	U		0.00112	0.00932	1.67	11/01/2023 19:20	WG2162557
1,4-Dichlorobenzene	U		0.00131	0.00932	1.67	11/01/2023 19:20	WG2162557
Dichlorodifluoromethane	U		0.00300	0.00932	1.67	11/01/2023 19:20	WG2162557
1,1-Dichloroethane	U		0.000916	0.00467	1.67	11/01/2023 19:20	WG2162557
1,2-Dichloroethane	U		0.00121	0.00467	1.67	11/01/2023 19:20	WG2162557
1,1-Dichloroethene	U		0.00113	0.00467	1.67	11/01/2023 19:20	WG2162557
cis-1,2-Dichloroethene	U		0.00137	0.00467	1.67	11/01/2023 19:20	WG2162557
trans-1,2-Dichloroethene	U		0.00194	0.00932	1.67	11/01/2023 19:20	WG2162557
1,2-Dichloropropane	U		0.00265	0.00932	1.67	11/01/2023 19:20	WG2162557
1,1-Dichloropropene	U		0.00151	0.00467	1.67	11/01/2023 19:20	WG2162557
1,3-Dichloropropane	U		0.000935	0.00932	1.67	11/01/2023 19:20	WG2162557
cis-1,3-Dichloropropene	U		0.00141	0.00467	1.67	11/01/2023 19:20	WG2162557
trans-1,3-Dichloropropene	U		0.00212	0.00932	1.67	11/01/2023 19:20	WG2162557
2,2-Dichloropropane	U		0.00257	0.00467	1.67	11/01/2023 19:20	WG2162557
Di-isopropyl ether	U		0.000765	0.00186	1.67	11/01/2023 19:20	WG2162557
Ethylbenzene	U		0.00137	0.00467	1.67	11/01/2023 19:20	WG2162557
Hexachloro-1,3-butadiene	U		0.0112	0.0467	1.67	11/01/2023 19:20	WG2162557
Isopropylbenzene	U		0.000793	0.00467	1.67	11/01/2023 19:20	WG2162557
p-Isopropyltoluene	U		0.00476	0.00932	1.67	11/01/2023 19:20	WG2162557
2-Butanone (MEK)	U		0.118	0.186	1.67	11/01/2023 19:20	WG2162557
Methylene Chloride	0.0124	J	0.0124	0.0467	1.67	11/01/2023 19:20	WG2162557
4-Methyl-2-pentanone (MIBK)	U		0.00425	0.0467	1.67	11/01/2023 19:20	WG2162557

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch	
	mg/kg		mg/kg	mg/kg				
Methyl tert-butyl ether	U		0.000652	0.00186	1.67	11/01/2023 19:20	WG2162557	¹ Cp
Naphthalene	U	C3	0.00910	0.0233	1.67	11/01/2023 19:20	WG2162557	² Tc
n-Propylbenzene	U		0.00178	0.00932	1.67	11/01/2023 19:20	WG2162557	³ Ss
Styrene	U		0.000427	0.0233	1.67	11/01/2023 19:20	WG2162557	⁴ Cn
1,1,1,2-Tetrachloroethane	U		0.00176	0.00467	1.67	11/01/2023 19:20	WG2162557	⁵ Sr
1,1,2,2-Tetrachloroethane	U		0.00130	0.00467	1.67	11/01/2023 19:20	WG2162557	⁶ Qc
1,1,2-Trichlorotrifluoroethane	U		0.00141	0.00467	1.67	11/01/2023 19:20	WG2162557	⁷ Gl
Tetrachloroethylene	U		0.00167	0.00467	1.67	11/01/2023 19:20	WG2162557	⁸ Al
Toluene	U		0.00242	0.00932	1.67	11/01/2023 19:20	WG2162557	⁹ Sc
1,2,3-Trichlorobenzene	U	C3 J4	0.0136	0.0233	1.67	11/01/2023 19:20	WG2162557	
1,2,4-Trichlorobenzene	U		0.00821	0.0233	1.67	11/01/2023 19:20	WG2162557	
1,1,1-Trichloroethane	U		0.00172	0.00467	1.67	11/01/2023 19:20	WG2162557	
1,1,2-Trichloroethane	U		0.00111	0.00467	1.67	11/01/2023 19:20	WG2162557	
Trichloroethylene	U		0.00109	0.00186	1.67	11/01/2023 19:20	WG2162557	
Trichlorofluoromethane	U		0.00154	0.00467	1.67	11/01/2023 19:20	WG2162557	
1,2,3-Trichloropropane	U		0.00303	0.0233	1.67	11/01/2023 19:20	WG2162557	
1,2,4-Trimethylbenzene	U		0.00295	0.00932	1.67	11/01/2023 19:20	WG2162557	
1,2,3-Trimethylbenzene	U		0.00295	0.00932	1.67	11/01/2023 19:20	WG2162557	
1,3,5-Trimethylbenzene	U		0.00373	0.00932	1.67	11/01/2023 19:20	WG2162557	
Vinyl chloride	U		0.00217	0.00467	1.67	11/01/2023 19:20	WG2162557	
Xylenes, Total	U		0.00164	0.0122	1.67	11/01/2023 19:20	WG2162557	
(S) Toluene-d8	106			75.0-131		11/01/2023 19:20	WG2162557	
(S) 4-Bromofluorobenzene	106			67.0-138		11/01/2023 19:20	WG2162557	
(S) 1,2-Dichloroethane-d4	96.8			70.0-130		11/01/2023 19:20	WG2162557	

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Diesel Range Organics (DRO)	U		1.43	4.29	1	11/02/2023 08:29	WG2162731
Residual Range Organics (RRO)	U		3.57	10.7	1	11/02/2023 08:29	WG2162731
(S) o-Terphenyl	61.4			18.0-148		11/02/2023 08:29	WG2162731

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	94.6		1	11/01/2023 14:54	WG2162403

¹ Cp

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Gasoline Range Organics-NWTPH	2.29	J	1.55	4.59	42	11/02/2023 01:54	WG2162686
(S) a,a,a-Trifluorotoluene(FID)	96.5			77.0-120		11/02/2023 01:54	WG2162686

² Tc³ Ss⁴ Cn⁵ Sr

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Acetone	U	C3	0.0669	0.0917	1.68	11/01/2023 19:39	WG2162557
Acrylonitrile	U		0.00662	0.0229	1.68	11/01/2023 19:39	WG2162557
Benzene	U		0.000857	0.00183	1.68	11/01/2023 19:39	WG2162557
Bromobenzene	U		0.00165	0.0229	1.68	11/01/2023 19:39	WG2162557
Bromodichloromethane	U		0.00133	0.00459	1.68	11/01/2023 19:39	WG2162557
Bromoform	U		0.00215	0.0459	1.68	11/01/2023 19:39	WG2162557
Bromomethane	U		0.00361	0.0229	1.68	11/01/2023 19:39	WG2162557
n-Butylbenzene	U		0.00963	0.0229	1.68	11/01/2023 19:39	WG2162557
sec-Butylbenzene	U		0.00529	0.0229	1.68	11/01/2023 19:39	WG2162557
tert-Butylbenzene	U		0.00358	0.00917	1.68	11/01/2023 19:39	WG2162557
Carbon tetrachloride	U		0.00165	0.00917	1.68	11/01/2023 19:39	WG2162557
Chlorobenzene	U		0.000385	0.00459	1.68	11/01/2023 19:39	WG2162557
Chlorodibromomethane	U		0.00112	0.00459	1.68	11/01/2023 19:39	WG2162557
Chloroethane	U	C3	0.00312	0.00917	1.68	11/01/2023 19:39	WG2162557
Chloroform	U		0.00189	0.00459	1.68	11/01/2023 19:39	WG2162557
Chloromethane	U		0.00798	0.0229	1.68	11/01/2023 19:39	WG2162557
2-Chlorotoluene	U		0.00158	0.00459	1.68	11/01/2023 19:39	WG2162557
4-Chlorotoluene	U		0.000826	0.00917	1.68	11/01/2023 19:39	WG2162557
1,2-Dibromo-3-Chloropropane	U		0.00715	0.0459	1.68	11/01/2023 19:39	WG2162557
1,2-Dibromoethane	U		0.00119	0.00459	1.68	11/01/2023 19:39	WG2162557
Dibromomethane	U		0.00138	0.00917	1.68	11/01/2023 19:39	WG2162557
1,2-Dichlorobenzene	U		0.000780	0.00917	1.68	11/01/2023 19:39	WG2162557
1,3-Dichlorobenzene	U		0.00110	0.00917	1.68	11/01/2023 19:39	WG2162557
1,4-Dichlorobenzene	U		0.00129	0.00917	1.68	11/01/2023 19:39	WG2162557
Dichlorodifluoromethane	U		0.00295	0.00917	1.68	11/01/2023 19:39	WG2162557
1,1-Dichloroethane	U		0.000901	0.00459	1.68	11/01/2023 19:39	WG2162557
1,2-Dichloroethane	U		0.00119	0.00459	1.68	11/01/2023 19:39	WG2162557
1,1-Dichloroethene	U		0.00111	0.00459	1.68	11/01/2023 19:39	WG2162557
cis-1,2-Dichloroethene	U		0.00134	0.00459	1.68	11/01/2023 19:39	WG2162557
trans-1,2-Dichloroethene	U		0.00191	0.00917	1.68	11/01/2023 19:39	WG2162557
1,2-Dichloropropane	U		0.00261	0.00917	1.68	11/01/2023 19:39	WG2162557
1,1-Dichloropropene	U		0.00149	0.00459	1.68	11/01/2023 19:39	WG2162557
1,3-Dichloropropane	U		0.000919	0.00917	1.68	11/01/2023 19:39	WG2162557
cis-1,3-Dichloropropene	U		0.00139	0.00459	1.68	11/01/2023 19:39	WG2162557
trans-1,3-Dichloropropene	U		0.00210	0.00917	1.68	11/01/2023 19:39	WG2162557
2,2-Dichloropropane	U		0.00253	0.00459	1.68	11/01/2023 19:39	WG2162557
Di-isopropyl ether	U		0.000752	0.00183	1.68	11/01/2023 19:39	WG2162557
Ethylbenzene	U		0.00135	0.00459	1.68	11/01/2023 19:39	WG2162557
Hexachloro-1,3-butadiene	U		0.0110	0.0459	1.68	11/01/2023 19:39	WG2162557
Isopropylbenzene	U		0.000780	0.00459	1.68	11/01/2023 19:39	WG2162557
p-Isopropyltoluene	U		0.00467	0.00917	1.68	11/01/2023 19:39	WG2162557
2-Butanone (MEK)	U		0.117	0.183	1.68	11/01/2023 19:39	WG2162557
Methylene Chloride	0.0124	J	0.0122	0.0459	1.68	11/01/2023 19:39	WG2162557
4-Methyl-2-pentanone (MIBK)	U		0.00418	0.0459	1.68	11/01/2023 19:39	WG2162557

⁶ Qc⁷ GI⁸ Al⁹ Sc

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch	
	mg/kg		mg/kg	mg/kg				
Methyl tert-butyl ether	U		0.000642	0.00183	1.68	11/01/2023 19:39	WG2162557	¹ Cp
Naphthalene	U	C3	0.00895	0.0229	1.68	11/01/2023 19:39	WG2162557	² Tc
n-Propylbenzene	U		0.00175	0.00917	1.68	11/01/2023 19:39	WG2162557	³ Ss
Styrene	U		0.000420	0.0229	1.68	11/01/2023 19:39	WG2162557	⁴ Cn
1,1,1,2-Tetrachloroethane	U		0.00174	0.00459	1.68	11/01/2023 19:39	WG2162557	
1,1,2,2-Tetrachloroethane	U		0.00128	0.00459	1.68	11/01/2023 19:39	WG2162557	
1,1,2-Trichlorotrifluoroethane	U		0.00139	0.00459	1.68	11/01/2023 19:39	WG2162557	
Tetrachloroethylene	0.174	C5	0.00165	0.00459	1.68	11/01/2023 19:39	WG2162557	
Toluene	0.0602		0.00238	0.00917	1.68	11/01/2023 19:39	WG2162557	⁵ Sr
1,2,3-Trichlorobenzene	U	C3 J4	0.0134	0.0229	1.68	11/01/2023 19:39	WG2162557	⁶ Qc
1,2,4-Trichlorobenzene	U		0.00807	0.0229	1.68	11/01/2023 19:39	WG2162557	
1,1,1-Trichloroethane	U		0.00169	0.00459	1.68	11/01/2023 19:39	WG2162557	
1,1,2-Trichloroethane	U		0.00109	0.00459	1.68	11/01/2023 19:39	WG2162557	
Trichloroethylene	U		0.00107	0.00183	1.68	11/01/2023 19:39	WG2162557	⁷ Gl
Trichlorofluoromethane	U		0.00152	0.00459	1.68	11/01/2023 19:39	WG2162557	
1,2,3-Trichloropropane	U		0.00297	0.0229	1.68	11/01/2023 19:39	WG2162557	
1,2,4-Trimethylbenzene	U		0.00289	0.00917	1.68	11/01/2023 19:39	WG2162557	
1,2,3-Trimethylbenzene	U		0.00289	0.00917	1.68	11/01/2023 19:39	WG2162557	
1,3,5-Trimethylbenzene	U		0.00367	0.00917	1.68	11/01/2023 19:39	WG2162557	
Vinyl chloride	U		0.00213	0.00459	1.68	11/01/2023 19:39	WG2162557	
Xylenes, Total	0.00399	J	0.00162	0.0119	1.68	11/01/2023 19:39	WG2162557	
(S) Toluene-d8	108			75.0-131		11/01/2023 19:39	WG2162557	
(S) 4-Bromofluorobenzene	105			67.0-138		11/01/2023 19:39	WG2162557	
(S) 1,2-Dichloroethane-d4	94.8			70.0-130		11/01/2023 19:39	WG2162557	

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Diesel Range Organics (DRO)	U		1.41	4.23	1	11/02/2023 08:03	WG2162731
Residual Range Organics (RRO)	U		3.52	10.6	1	11/02/2023 08:03	WG2162731
(S) o-Terphenyl	65.8			18.0-148		11/02/2023 08:03	WG2162731

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	11/01/2023 17:38	WG2161783
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	94.0			78.0-120		11/01/2023 17:38	WG2161783

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

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	11/01/2023 15:32	WG2162318
Acrolein	U		2.54	50.0	1	11/01/2023 15:32	WG2162318
Acrylonitrile	U		0.671	10.0	1	11/01/2023 15:32	WG2162318
Benzene	U		0.0941	1.00	1	11/01/2023 15:32	WG2162318
Bromobenzene	U		0.118	1.00	1	11/01/2023 15:32	WG2162318
Bromodichloromethane	U		0.136	1.00	1	11/01/2023 15:32	WG2162318
Bromoform	U		0.129	1.00	1	11/01/2023 15:32	WG2162318
Bromomethane	U	C3	0.605	5.00	1	11/01/2023 15:32	WG2162318
n-Butylbenzene	U		0.157	1.00	1	11/01/2023 15:32	WG2162318
sec-Butylbenzene	U		0.125	1.00	1	11/01/2023 15:32	WG2162318
tert-Butylbenzene	U		0.127	1.00	1	11/01/2023 15:32	WG2162318
Carbon tetrachloride	U		0.128	1.00	1	11/01/2023 15:32	WG2162318
Chlorobenzene	U		0.116	1.00	1	11/01/2023 15:32	WG2162318
Chlorodibromomethane	U		0.140	1.00	1	11/01/2023 15:32	WG2162318
Chloroethane	U		0.192	5.00	1	11/01/2023 15:32	WG2162318
Chloroform	U		0.111	5.00	1	11/01/2023 15:32	WG2162318
Chloromethane	U		0.960	2.50	1	11/01/2023 15:32	WG2162318
2-Chlorotoluene	U		0.106	1.00	1	11/01/2023 15:32	WG2162318
4-Chlorotoluene	U		0.114	1.00	1	11/01/2023 15:32	WG2162318
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/01/2023 15:32	WG2162318
1,2-Dibromoethane	U		0.126	1.00	1	11/01/2023 15:32	WG2162318
Dibromomethane	U		0.122	1.00	1	11/01/2023 15:32	WG2162318
1,2-Dichlorobenzene	U		0.107	1.00	1	11/01/2023 15:32	WG2162318
1,3-Dichlorobenzene	U		0.110	1.00	1	11/01/2023 15:32	WG2162318
1,4-Dichlorobenzene	U		0.120	1.00	1	11/01/2023 15:32	WG2162318
Dichlorodifluoromethane	U		0.374	5.00	1	11/01/2023 15:32	WG2162318
1,1-Dichloroethane	U		0.100	1.00	1	11/01/2023 15:32	WG2162318
1,2-Dichloroethane	U		0.0819	1.00	1	11/01/2023 15:32	WG2162318
1,1-Dichloroethene	U		0.188	1.00	1	11/01/2023 15:32	WG2162318
cis-1,2-Dichloroethene	U		0.126	1.00	1	11/01/2023 15:32	WG2162318
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/01/2023 15:32	WG2162318
1,2-Dichloropropane	U		0.149	1.00	1	11/01/2023 15:32	WG2162318
1,1-Dichloropropene	U		0.142	1.00	1	11/01/2023 15:32	WG2162318
1,3-Dichloropropane	U		0.110	1.00	1	11/01/2023 15:32	WG2162318
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/01/2023 15:32	WG2162318
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/01/2023 15:32	WG2162318
2,2-Dichloropropane	U		0.161	1.00	1	11/01/2023 15:32	WG2162318
Di-isopropyl ether	U		0.105	1.00	1	11/01/2023 15:32	WG2162318
Ethylbenzene	U		0.137	1.00	1	11/01/2023 15:32	WG2162318
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/01/2023 15:32	WG2162318
Isopropylbenzene	U		0.105	1.00	1	11/01/2023 15:32	WG2162318
p-Isopropyltoluene	U		0.120	1.00	1	11/01/2023 15:32	WG2162318
2-Butanone (MEK)	U		1.19	10.0	1	11/01/2023 15:32	WG2162318
Methylene Chloride	U		0.430	5.00	1	11/01/2023 15:32	WG2162318
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/01/2023 15:32	WG2162318
Methyl tert-butyl ether	U		0.101	1.00	1	11/01/2023 15:32	WG2162318
n-Propylbenzene	U		0.0993	1.00	1	11/01/2023 15:32	WG2162318
Styrene	U		0.118	1.00	1	11/01/2023 15:32	WG2162318

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	11/01/2023 15:32	WG2162318	¹ Cp
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/01/2023 15:32	WG2162318	² Tc
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/01/2023 15:32	WG2162318	³ Ss
Tetrachloroethene	16.7		0.300	1.00	1	11/01/2023 15:32	WG2162318	⁴ Cn
Toluene	U		0.278	1.00	1	11/01/2023 15:32	WG2162318	⁵ Sr
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/01/2023 15:32	WG2162318	⁶ Qc
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/01/2023 15:32	WG2162318	⁷ Gl
1,1,1-Trichloroethane	U		0.149	1.00	1	11/01/2023 15:32	WG2162318	⁸ Al
1,1,2-Trichloroethane	U		0.158	1.00	1	11/01/2023 15:32	WG2162318	
Trichloroethene	U		0.190	1.00	1	11/01/2023 15:32	WG2162318	
Trichlorofluoromethane	U		0.160	5.00	1	11/01/2023 15:32	WG2162318	
1,2,3-Trichloropropane	U		0.237	2.50	1	11/01/2023 15:32	WG2162318	
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/01/2023 15:32	WG2162318	
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/01/2023 15:32	WG2162318	
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/01/2023 15:32	WG2162318	
Vinyl chloride	U		0.234	1.00	1	11/01/2023 15:32	WG2162318	
Xylenes, Total	U		0.174	3.00	1	11/01/2023 15:32	WG2162318	
(S) Toluene-d8	106			80.0-120		11/01/2023 15:32	WG2162318	
(S) 4-Bromofluorobenzene	94.4			77.0-126		11/01/2023 15:32	WG2162318	
(S) 1,2-Dichloroethane-d4	105			70.0-130		11/01/2023 15:32	WG2162318	⁹ Sc

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	152	J	66.7	200	1	11/02/2023 02:08	WG2162307
Residual Range Organics (RRO)	213	J	83.3	250	1	11/02/2023 02:08	WG2162307
(S) o-Terphenyl	96.3			52.0-156		11/02/2023 02:08	WG2162307

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	2330		31.6	100	1	11/01/2023 18:03	WG2161783
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	97.9			78.0-120		11/01/2023 18:03	WG2161783

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

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	69.0		11.3	50.0	1	11/01/2023 15:54	WG2162318
Acrolein	U		2.54	50.0	1	11/01/2023 15:54	WG2162318
Acrylonitrile	U		0.671	10.0	1	11/01/2023 15:54	WG2162318
Benzene	U		0.0941	1.00	1	11/01/2023 15:54	WG2162318
Bromobenzene	U		0.118	1.00	1	11/01/2023 15:54	WG2162318
Bromodichloromethane	U		0.136	1.00	1	11/01/2023 15:54	WG2162318
Bromoform	U		0.129	1.00	1	11/01/2023 15:54	WG2162318
Bromomethane	U	C3	0.605	5.00	1	11/01/2023 15:54	WG2162318
n-Butylbenzene	U		0.157	1.00	1	11/01/2023 15:54	WG2162318
sec-Butylbenzene	U		0.125	1.00	1	11/01/2023 15:54	WG2162318
tert-Butylbenzene	U		0.127	1.00	1	11/01/2023 15:54	WG2162318
Carbon tetrachloride	U		0.128	1.00	1	11/01/2023 15:54	WG2162318
Chlorobenzene	U		0.116	1.00	1	11/01/2023 15:54	WG2162318
Chlorodibromomethane	U		0.140	1.00	1	11/01/2023 15:54	WG2162318
Chloroethane	U		0.192	5.00	1	11/01/2023 15:54	WG2162318
Chloroform	0.218	J	0.111	5.00	1	11/01/2023 15:54	WG2162318
Chloromethane	U		0.960	2.50	1	11/01/2023 15:54	WG2162318
2-Chlorotoluene	U		0.106	1.00	1	11/01/2023 15:54	WG2162318
4-Chlorotoluene	U		0.114	1.00	1	11/01/2023 15:54	WG2162318
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/01/2023 15:54	WG2162318
1,2-Dibromoethane	U		0.126	1.00	1	11/01/2023 15:54	WG2162318
Dibromomethane	U		0.122	1.00	1	11/01/2023 15:54	WG2162318
1,2-Dichlorobenzene	U		0.107	1.00	1	11/01/2023 15:54	WG2162318
1,3-Dichlorobenzene	U		0.110	1.00	1	11/01/2023 15:54	WG2162318
1,4-Dichlorobenzene	U		0.120	1.00	1	11/01/2023 15:54	WG2162318
Dichlorodifluoromethane	U		0.374	5.00	1	11/01/2023 15:54	WG2162318
1,1-Dichloroethane	U		0.100	1.00	1	11/01/2023 15:54	WG2162318
1,2-Dichloroethane	U		0.0819	1.00	1	11/01/2023 15:54	WG2162318
1,1-Dichloroethene	0.519	J	0.188	1.00	1	11/01/2023 15:54	WG2162318
cis-1,2-Dichloroethene	U		0.126	1.00	1	11/01/2023 15:54	WG2162318
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/01/2023 15:54	WG2162318
1,2-Dichloropropane	U		0.149	1.00	1	11/01/2023 15:54	WG2162318
1,1-Dichloropropene	U		0.142	1.00	1	11/01/2023 15:54	WG2162318
1,3-Dichloropropane	U		0.110	1.00	1	11/01/2023 15:54	WG2162318
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/01/2023 15:54	WG2162318
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/01/2023 15:54	WG2162318
2,2-Dichloropropane	U		0.161	1.00	1	11/01/2023 15:54	WG2162318
Di-isopropyl ether	U		0.105	1.00	1	11/01/2023 15:54	WG2162318
Ethylbenzene	0.158	J	0.137	1.00	1	11/01/2023 15:54	WG2162318
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/01/2023 15:54	WG2162318
Isopropylbenzene	0.111	J	0.105	1.00	1	11/01/2023 15:54	WG2162318
p-Isopropyltoluene	U		0.120	1.00	1	11/01/2023 15:54	WG2162318
2-Butanone (MEK)	6.38	J	1.19	10.0	1	11/01/2023 15:54	WG2162318
Methylene Chloride	U		0.430	5.00	1	11/01/2023 15:54	WG2162318
4-Methyl-2-pentanone (MIBK)	444		0.478	10.0	1	11/01/2023 15:54	WG2162318
Methyl tert-butyl ether	U		0.101	1.00	1	11/01/2023 15:54	WG2162318
n-Propylbenzene	U		0.0993	1.00	1	11/01/2023 15:54	WG2162318
Styrene	U		0.118	1.00	1	11/01/2023 15:54	WG2162318

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	11/01/2023 15:54	WG2162318
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/01/2023 15:54	WG2162318
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/01/2023 15:54	WG2162318
Tetrachloroethene	5690		75.0	250	250	11/02/2023 15:35	WG2163373
Toluene	0.436	J	0.278	1.00	1	11/01/2023 15:54	WG2162318
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/01/2023 15:54	WG2162318
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/01/2023 15:54	WG2162318
1,1,1-Trichloroethane	U		0.149	1.00	1	11/01/2023 15:54	WG2162318
1,1,2-Trichloroethane	4.17		0.158	1.00	1	11/01/2023 15:54	WG2162318
Trichloroethene	5.42		0.190	1.00	1	11/01/2023 15:54	WG2162318
Trichlorofluoromethane	U		0.160	5.00	1	11/01/2023 15:54	WG2162318
1,2,3-Trichloropropane	0.287	J	0.237	2.50	1	11/01/2023 15:54	WG2162318
1,2,4-Trimethylbenzene	0.420	J	0.322	1.00	1	11/01/2023 15:54	WG2162318
1,2,3-Trimethylbenzene	0.226	J	0.104	1.00	1	11/01/2023 15:54	WG2162318
1,3,5-Trimethylbenzene	0.319	J	0.104	1.00	1	11/01/2023 15:54	WG2162318
Vinyl chloride	U		0.234	1.00	1	11/01/2023 15:54	WG2162318
Xylenes, Total	0.576	J	0.174	3.00	1	11/01/2023 15:54	WG2162318
(S) Toluene-d8	106			80.0-120		11/01/2023 15:54	WG2162318
(S) Toluene-d8	98.8			80.0-120		11/02/2023 15:35	WG2163373
(S) 4-Bromofluorobenzene	96.8			77.0-126		11/01/2023 15:54	WG2162318
(S) 4-Bromofluorobenzene	92.7			77.0-126		11/02/2023 15:35	WG2163373
(S) 1,2-Dichloroethane-d4	100			70.0-130		11/01/2023 15:54	WG2162318
(S) 1,2-Dichloroethane-d4	107			70.0-130		11/02/2023 15:35	WG2163373

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	6110		66.7	200	1	11/02/2023 02:27	WG2162307
Residual Range Organics (RRO)	2710		83.3	250	1	11/02/2023 02:27	WG2162307
(S) o-Terphenyl	34.1	J2		52.0-156		11/02/2023 02:27	WG2162307

Sample Narrative:

L1672416-12 WG2162307: Sample resembles laboratory standard for Gasoline.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	270		31.6	100	1	11/01/2023 18:27	WG2161783
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	93.3			78.0-120		11/01/2023 18:27	WG2161783

¹ Cp
² Tc
³ Ss
⁴ Cn
⁵ Sr
⁶ Qc
⁷ GI
⁸ AI
⁹ SC

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	11/01/2023 16:16	WG2162318
Acrolein	U		2.54	50.0	1	11/01/2023 16:16	WG2162318
Acrylonitrile	U		0.671	10.0	1	11/01/2023 16:16	WG2162318
Benzene	U		0.0941	1.00	1	11/01/2023 16:16	WG2162318
Bromobenzene	U		0.118	1.00	1	11/01/2023 16:16	WG2162318
Bromodichloromethane	U		0.136	1.00	1	11/01/2023 16:16	WG2162318
Bromoform	U		0.129	1.00	1	11/01/2023 16:16	WG2162318
Bromomethane	U	C3	0.605	5.00	1	11/01/2023 16:16	WG2162318
n-Butylbenzene	U		0.157	1.00	1	11/01/2023 16:16	WG2162318
sec-Butylbenzene	U		0.125	1.00	1	11/01/2023 16:16	WG2162318
tert-Butylbenzene	U		0.127	1.00	1	11/01/2023 16:16	WG2162318
Carbon tetrachloride	U		0.128	1.00	1	11/01/2023 16:16	WG2162318
Chlorobenzene	U		0.116	1.00	1	11/01/2023 16:16	WG2162318
Chlorodibromomethane	U		0.140	1.00	1	11/01/2023 16:16	WG2162318
Chloroethane	U		0.192	5.00	1	11/01/2023 16:16	WG2162318
Chloroform	U		0.111	5.00	1	11/01/2023 16:16	WG2162318
Chloromethane	U		0.960	2.50	1	11/01/2023 16:16	WG2162318
2-Chlorotoluene	U		0.106	1.00	1	11/01/2023 16:16	WG2162318
4-Chlorotoluene	U		0.114	1.00	1	11/01/2023 16:16	WG2162318
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/01/2023 16:16	WG2162318
1,2-Dibromoethane	U		0.126	1.00	1	11/01/2023 16:16	WG2162318
Dibromomethane	U		0.122	1.00	1	11/01/2023 16:16	WG2162318
1,2-Dichlorobenzene	U		0.107	1.00	1	11/01/2023 16:16	WG2162318
1,3-Dichlorobenzene	U		0.110	1.00	1	11/01/2023 16:16	WG2162318
1,4-Dichlorobenzene	U		0.120	1.00	1	11/01/2023 16:16	WG2162318
Dichlorodifluoromethane	U		0.374	5.00	1	11/01/2023 16:16	WG2162318
1,1-Dichloroethane	U		0.100	1.00	1	11/01/2023 16:16	WG2162318
1,2-Dichloroethane	U		0.0819	1.00	1	11/01/2023 16:16	WG2162318
1,1-Dichloroethene	U		0.188	1.00	1	11/01/2023 16:16	WG2162318
cis-1,2-Dichloroethene	U		0.126	1.00	1	11/01/2023 16:16	WG2162318
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/01/2023 16:16	WG2162318
1,2-Dichloropropane	U		0.149	1.00	1	11/01/2023 16:16	WG2162318
1,1-Dichloropropene	U		0.142	1.00	1	11/01/2023 16:16	WG2162318
1,3-Dichloropropane	U		0.110	1.00	1	11/01/2023 16:16	WG2162318
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/01/2023 16:16	WG2162318
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/01/2023 16:16	WG2162318
2,2-Dichloropropane	U		0.161	1.00	1	11/01/2023 16:16	WG2162318
Di-isopropyl ether	U		0.105	1.00	1	11/01/2023 16:16	WG2162318
Ethylbenzene	U		0.137	1.00	1	11/01/2023 16:16	WG2162318
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/01/2023 16:16	WG2162318
Isopropylbenzene	U		0.105	1.00	1	11/01/2023 16:16	WG2162318
p-Isopropyltoluene	U		0.120	1.00	1	11/01/2023 16:16	WG2162318
2-Butanone (MEK)	U		1.19	10.0	1	11/01/2023 16:16	WG2162318
Methylene Chloride	U		0.430	5.00	1	11/01/2023 16:16	WG2162318
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/01/2023 16:16	WG2162318
Methyl tert-butyl ether	U		0.101	1.00	1	11/01/2023 16:16	WG2162318
n-Propylbenzene	U		0.0993	1.00	1	11/01/2023 16:16	WG2162318
Styrene	U		0.118	1.00	1	11/01/2023 16:16	WG2162318

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	11/01/2023 16:16	WG2162318
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/01/2023 16:16	WG2162318
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/01/2023 16:16	WG2162318
Tetrachloroethene	829		6.00	20.0	20	11/02/2023 15:54	WG2163373
Toluene	U		0.278	1.00	1	11/01/2023 16:16	WG2162318
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/01/2023 16:16	WG2162318
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/01/2023 16:16	WG2162318
1,1,1-Trichloroethane	U		0.149	1.00	1	11/01/2023 16:16	WG2162318
1,1,2-Trichloroethane	4.71		0.158	1.00	1	11/01/2023 16:16	WG2162318
Trichloroethene	1.50		0.190	1.00	1	11/01/2023 16:16	WG2162318
Trichlorofluoromethane	U		0.160	5.00	1	11/01/2023 16:16	WG2162318
1,2,3-Trichloropropane	U		0.237	2.50	1	11/01/2023 16:16	WG2162318
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/01/2023 16:16	WG2162318
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/01/2023 16:16	WG2162318
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/01/2023 16:16	WG2162318
Vinyl chloride	U		0.234	1.00	1	11/01/2023 16:16	WG2162318
Xylenes, Total	U		0.174	3.00	1	11/01/2023 16:16	WG2162318
(S) Toluene-d8	105			80.0-120		11/01/2023 16:16	WG2162318
(S) Toluene-d8	106			80.0-120		11/02/2023 15:54	WG2163373
(S) 4-Bromofluorobenzene	99.4			77.0-126		11/01/2023 16:16	WG2162318
(S) 4-Bromofluorobenzene	89.0			77.0-126		11/02/2023 15:54	WG2163373
(S) 1,2-Dichloroethane-d4	106			70.0-130		11/01/2023 16:16	WG2162318
(S) 1,2-Dichloroethane-d4	108			70.0-130		11/02/2023 15:54	WG2163373

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		66.7	200	1	11/02/2023 02:47	WG2162307
Residual Range Organics (RRO)	249	J	83.3	250	1	11/02/2023 02:47	WG2162307
(S) o-Terphenyl	106			52.0-156		11/02/2023 02:47	WG2162307

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

WG2162403

Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY

[L1672416-01,02,03,04,05,07,09](#)

Method Blank (MB)

(MB) R3994333-1 11/01/23 14:54

Analyte	MB Result %	<u>MB Qualifier</u>	MB MDL %	MB RDL %
Total Solids	0.00200			

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

L1672416-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1672416-09 11/01/23 14:54 • (DUP) R3994333-3 11/01/23 14:54

Analyte	Original Result %	DUP Result %	Dilution %	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Total Solids	94.6	95.3	1	0.782		10

Laboratory Control Sample (LCS)

(LCS) R3994333-2 11/01/23 14:54

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

⁹Sc

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Volatile Organic Compounds (GC) by Method NWTPHGX

QUALITY CONTROL SUMMARY

[L1672416-11,12,13](#)

Method Blank (MB)

(MB) R3994359-3 11/01/23 14:44

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		31.6	100
(S) <i>a,a,a-Trifluorotoluene(FID)</i>	92.6			78.0-120

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

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

(LCS) R3994359-1 11/01/23 13:30 • (LCSD) R3994359-2 11/01/23 13:55

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Gasoline Range Organics-NWTPH	5500	4820	4880	87.6	88.7	70.0-124			1.24	20
(S) <i>a,a,a-Trifluorotoluene(FID)</i>				97.8	97.8	78.0-120				

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Volatile Organic Compounds (GC) by Method NWTPHGX

QUALITY CONTROL SUMMARY

[L1672416-01,02,03,04,05,07,09](#)

Method Blank (MB)

(MB) R3994590-2 11/01/23 21:33

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg	¹ Cp
Gasoline Range Organics-NWTPH	U		0.848	2.50	² Tc
(S) <i>a,a,a-Trifluorotoluene(FID)</i>	97.2			77.0-120	³ Ss

Laboratory Control Sample (LCS)

(LCS) R3994590-1 11/01/23 20:35

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	⁴ Cn
Gasoline Range Organics-NWTPH	5.50	4.76	86.5	71.0-124		⁵ Sr
(S) <i>a,a,a-Trifluorotoluene(FID)</i>		100		77.0-120		⁶ Qc

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

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

QUALITY CONTROL SUMMARY

[L1672416-11,12,13](#)

Method Blank (MB)

(MB) R3994560-4 11/01/23 12:20

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l	
Acetone	U		11.3	50.0	¹ Cp
Acrolein	U		2.54	50.0	² Tc
Acrylonitrile	U		0.671	10.0	³ Ss
Benzene	U		0.0941	1.00	⁴ Cn
Bromobenzene	U		0.118	1.00	⁵ Sr
Bromodichloromethane	U		0.136	1.00	⁶ Qc
Bromoform	U		0.129	1.00	⁷ Gl
Bromomethane	U		0.605	5.00	⁸ Al
n-Butylbenzene	U		0.157	1.00	⁹ Sc
sec-Butylbenzene	U		0.125	1.00	
tert-Butylbenzene	U		0.127	1.00	
Carbon tetrachloride	U		0.128	1.00	
Chlorobenzene	U		0.116	1.00	
Chlorodibromomethane	U		0.140	1.00	
Chloroethane	U		0.192	5.00	
Chloroform	U		0.111	5.00	
Chloromethane	U		0.960	2.50	
2-Chlorotoluene	U		0.106	1.00	
4-Chlorotoluene	U		0.114	1.00	
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	
1,2-Dibromoethane	U		0.126	1.00	
Dibromomethane	U		0.122	1.00	
1,2-Dichlorobenzene	U		0.107	1.00	
1,3-Dichlorobenzene	U		0.110	1.00	
1,4-Dichlorobenzene	U		0.120	1.00	
Dichlorodifluoromethane	U		0.374	5.00	
1,1-Dichloroethane	U		0.100	1.00	
1,2-Dichloroethane	U		0.0819	1.00	
1,1-Dichloroethene	U		0.188	1.00	
cis-1,2-Dichloroethene	U		0.126	1.00	
trans-1,2-Dichloroethene	U		0.149	1.00	
1,2-Dichloropropane	U		0.149	1.00	
1,1-Dichloropropene	U		0.142	1.00	
1,3-Dichloropropane	U		0.110	1.00	
cis-1,3-Dichloropropene	U		0.111	1.00	
trans-1,3-Dichloropropene	U		0.118	1.00	
2,2-Dichloropropane	U		0.161	1.00	
Di-isopropyl ether	U		0.105	1.00	
Ethylbenzene	U		0.137	1.00	
Hexachloro-1,3-butadiene	U		0.337	1.00	

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

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[L1672416-11,12,13](#)

Method Blank (MB)

(MB) R3994560-4 11/01/23 12:20

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l								
Isopropylbenzene	U		0.105	1.00								
p-Isopropyltoluene	U		0.120	1.00								
2-Butanone (MEK)	U		1.19	10.0								
Methylene Chloride	U		0.430	5.00								
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0								
Methyl tert-butyl ether	U		0.101	1.00								
n-Propylbenzene	U		0.0993	1.00								
Styrene	U		0.118	1.00								
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	106			80.0-120								
(S) 4-Bromofluorobenzene	94.6			77.0-126								
(S) 1,2-Dichloroethane-d4	103			70.0-130								

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

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

(LCS) R3994560-1 11/01/23 10:32 • (LCSD) R3994560-2 11/01/23 10:54

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Acetone	25.0	22.3	24.8	89.2	99.2	19.0-160			10.6	27
Acrolein	25.0	20.1	19.8	80.4	79.2	10.0-160			1.50	26
Acrylonitrile	25.0	23.1	22.6	92.4	90.4	55.0-149			2.19	20
Benzene	5.00	5.35	5.25	107	105	70.0-123			1.89	20
Bromobenzene	5.00	5.47	5.28	109	106	73.0-121			3.53	20

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

(LCS) R3994560-1 11/01/23 10:32 • (LCSD) R3994560-2 11/01/23 10:54

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Bromodichloromethane	5.00	5.48	5.50	110	110	75.0-120			0.364	20
Bromoform	5.00	4.66	4.61	93.2	92.2	68.0-132			1.08	20
Bromomethane	5.00	3.31	3.38	66.2	67.6	10.0-160			2.09	25
n-Butylbenzene	5.00	4.84	4.79	96.8	95.8	73.0-125			1.04	20
sec-Butylbenzene	5.00	5.15	5.06	103	101	75.0-125			1.76	20
tert-Butylbenzene	5.00	5.14	5.01	103	100	76.0-124			2.56	20
Carbon tetrachloride	5.00	5.42	5.43	108	109	68.0-126			0.184	20
Chlorobenzene	5.00	5.18	5.06	104	101	80.0-121			2.34	20
Chlorodibromomethane	5.00	5.69	5.41	114	108	77.0-125			5.05	20
Chloroethane	5.00	6.23	5.99	125	120	47.0-150			3.93	20
Chloroform	5.00	5.43	5.28	109	106	73.0-120			2.80	20
Chloromethane	5.00	6.61	6.30	132	126	41.0-142			4.80	20
2-Chlorotoluene	5.00	5.39	5.35	108	107	76.0-123			0.745	20
4-Chlorotoluene	5.00	5.27	5.40	105	108	75.0-122			2.44	20
1,2-Dibromo-3-Chloropropane	5.00	4.50	4.27	90.0	85.4	58.0-134			5.25	20
1,2-Dibromoethane	5.00	4.99	4.86	99.8	97.2	80.0-122			2.64	20
Dibromomethane	5.00	5.59	5.43	112	109	80.0-120			2.90	20
1,2-Dichlorobenzene	5.00	5.29	5.11	106	102	79.0-121			3.46	20
1,3-Dichlorobenzene	5.00	5.35	5.20	107	104	79.0-120			2.84	20
1,4-Dichlorobenzene	5.00	5.50	5.41	110	108	79.0-120			1.65	20
Dichlorodifluoromethane	5.00	7.11	6.76	142	135	51.0-149			5.05	20
1,1-Dichloroethane	5.00	5.14	4.88	103	97.6	70.0-126			5.19	20
1,2-Dichloroethane	5.00	5.25	5.23	105	105	70.0-128			0.382	20
1,1-Dichloroethene	5.00	5.32	5.60	106	112	71.0-124			5.13	20
cis-1,2-Dichloroethene	5.00	5.26	5.17	105	103	73.0-120			1.73	20
trans-1,2-Dichloroethene	5.00	5.58	5.48	112	110	73.0-120			1.81	20
1,2-Dichloropropane	5.00	5.11	4.97	102	99.4	77.0-125			2.78	20
1,1-Dichloropropene	5.00	5.63	5.39	113	108	74.0-126			4.36	20
1,3-Dichloropropane	5.00	5.34	5.25	107	105	80.0-120			1.70	20
cis-1,3-Dichloropropene	5.00	5.41	5.28	108	106	80.0-123			2.43	20
trans-1,3-Dichloropropene	5.00	5.18	5.11	104	102	78.0-124			1.36	20
2,2-Dichloropropane	5.00	4.77	4.53	95.4	90.6	58.0-130			5.16	20
Di-isopropyl ether	5.00	4.48	4.40	89.6	88.0	58.0-138			1.80	20
Ethylbenzene	5.00	5.01	4.77	100	95.4	79.0-123			4.91	20
Hexachloro-1,3-butadiene	5.00	4.14	4.72	82.8	94.4	54.0-138			13.1	20
Isopropylbenzene	5.00	4.92	4.76	98.4	95.2	76.0-127			3.31	20
p-Isopropyltoluene	5.00	5.06	5.12	101	102	76.0-125			1.18	20
2-Butanone (MEK)	25.0	22.1	22.7	88.4	90.8	44.0-160			2.68	20
Methylene Chloride	5.00	5.46	5.14	109	103	67.0-120			6.04	20
4-Methyl-2-pentanone (MIBK)	25.0	21.9	21.3	87.6	85.2	68.0-142			2.78	20

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¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

QUALITY CONTROL SUMMARY

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

(LCS) R3994560-1 11/01/23 10:32 • (LCSD) R3994560-2 11/01/23 10:54

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Methyl tert-butyl ether	5.00	5.06	4.99	101	99.8	68.0-125			1.39	20
n-Propylbenzene	5.00	5.49	5.40	110	108	77.0-124			1.65	20
Styrene	5.00	4.58	4.52	91.6	90.4	73.0-130			1.32	20
1,1,1,2-Tetrachloroethane	5.00	5.13	4.84	103	96.8	75.0-125			5.82	20
1,1,2,2-Tetrachloroethane	5.00	5.29	5.16	106	103	65.0-130			2.49	20
1,1,2-Trichlorotrifluoroethane	5.00	5.04	5.13	101	103	69.0-132			1.77	20
Tetrachloroethene	5.00	5.20	5.17	104	103	72.0-132			0.579	20
Toluene	5.00	5.45	5.23	109	105	79.0-120			4.12	20
1,2,3-Trichlorobenzene	5.00	4.60	5.02	92.0	100	50.0-138			8.73	20
1,2,4-Trichlorobenzene	5.00	4.39	4.57	87.8	91.4	57.0-137			4.02	20
1,1,1-Trichloroethane	5.00	5.89	5.50	118	110	73.0-124			6.85	20
1,1,2-Trichloroethane	5.00	5.51	5.26	110	105	80.0-120			4.64	20
Trichloroethene	5.00	5.50	5.53	110	111	78.0-124			0.544	20
Trichlorofluoromethane	5.00	5.53	5.13	111	103	59.0-147			7.50	20
1,2,3-Trichloropropane	5.00	5.32	5.22	106	104	73.0-130			1.90	20
1,2,4-Trimethylbenzene	5.00	5.00	5.00	100	100	76.0-121			0.000	20
1,2,3-Trimethylbenzene	5.00	5.18	5.11	104	102	77.0-120			1.36	20
1,3,5-Trimethylbenzene	5.00	5.26	5.15	105	103	76.0-122			2.11	20
Vinyl chloride	5.00	5.26	5.00	105	100	67.0-131			5.07	20
Xylenes, Total	15.0	14.6	14.3	97.3	95.3	79.0-123			2.08	20
(S) Toluene-d8				105	103	80.0-120				
(S) 4-Bromofluorobenzene				93.5	94.4	77.0-126				
(S) 1,2-Dichloroethane-d4				104	103	70.0-130				

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

L1670747-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1670747-02 11/01/23 14:48 • (MS) R3994560-5 11/01/23 21:24 • (MSD) R3994560-6 11/01/23 21:46

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Acetone	25.0	U	23.1	26.3	92.4	105	1	10.0-160		13.0	35
Acrolein	25.0	U	24.2	33.5	96.8	134	1	10.0-160		32.2	39
Acrylonitrile	25.0	U	18.5	24.4	74.0	97.6	1	21.0-160		27.5	32
Benzene	5.00	0.314	2.66	6.00	46.9	114	1	17.0-158	J3	77.1	27
Bromobenzene	5.00	U	2.10	5.25	42.0	105	1	30.0-149	J3	85.7	28
Bromodichloromethane	5.00	U	2.74	5.71	54.8	114	1	31.0-150	J3	70.3	27
Bromoform	5.00	U	2.47	4.82	49.4	96.4	1	29.0-150	J3	64.5	29
Bromomethane	5.00	U	4.22	7.16	84.4	143	1	10.0-160	J3	51.7	38
n-Butylbenzene	5.00	U	1.87	4.83	37.4	96.6	1	31.0-150	J3	88.4	30
sec-Butylbenzene	5.00	U	2.03	5.23	40.6	105	1	33.0-155	J3	88.2	29

QUALITY CONTROL SUMMARY

L1672416-11,12,13

L1670747-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1670747-02 11/01/23 14:48 • (MS) R3994560-5 11/01/23 21:24 • (MSD) R3994560-6 11/01/23 21:46

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD	RPD Limits
tert-Butylbenzene	5.00	U	1.95	5.21	39.0	104	1	34.0-153	J3	J3	91.1	28
Carbon tetrachloride	5.00	U	2.82	6.35	56.4	127	1	23.0-159	J3	J3	77.0	28
Chlorobenzene	5.00	U	2.09	5.28	41.8	106	1	33.0-152	J3	J3	86.6	27
Chlorodibromomethane	5.00	U	2.58	5.69	51.6	114	1	37.0-149	J3	J3	75.2	27
Chloroethane	5.00	U	3.39	6.54	67.8	131	1	10.0-160	J3	J3	63.4	30
Chloroform	5.00	0.139	3.13	6.25	59.8	122	1	29.0-154	J3	J3	66.5	28
Chloromethane	5.00	U	2.49	4.61	49.8	92.2	1	10.0-160	J3	J3	59.7	29
2-Chlorotoluene	5.00	U	2.03	5.63	40.6	113	1	32.0-153	J3	J3	94.0	28
4-Chlorotoluene	5.00	U	2.00	5.31	40.0	106	1	32.0-150	J3	J3	90.6	28
1,2-Dibromo-3-Chloropropane	5.00	U	2.11	4.32	42.2	86.4	1	22.0-151	J3	J3	68.7	34
1,2-Dibromoethane	5.00	U	2.36	4.71	47.2	94.2	1	34.0-147	J3	J3	66.5	27
Dibromomethane	5.00	U	2.92	5.62	58.4	112	1	30.0-151	J3	J3	63.2	27
1,2-Dichlorobenzene	5.00	U	2.11	5.28	42.2	106	1	34.0-149	J3	J3	85.8	28
1,3-Dichlorobenzene	5.00	U	2.10	5.39	42.0	108	1	36.0-146	J3	J3	87.9	27
1,4-Dichlorobenzene	5.00	U	2.14	5.43	42.8	109	1	35.0-142	J3	J3	86.9	27
Dichlorodifluoromethane	5.00	4.14	5.13	10.4	19.8	125	1	10.0-160	J3	J3	67.9	29
1,1-Dichloroethane	5.00	1.68	3.69	7.31	40.2	113	1	25.0-158	J3	J3	65.8	27
1,2-Dichloroethane	5.00	U	3.04	5.40	60.8	108	1	29.0-151	J3	J3	55.9	27
1,1-Dichloroethene	5.00	U	2.79	6.30	55.8	126	1	11.0-160	J3	J3	77.2	29
cis-1,2-Dichloroethene	5.00	U	2.78	5.81	55.6	116	1	10.0-160	J3	J3	70.5	27
trans-1,2-Dichloroethene	5.00	U	2.62	6.00	52.4	120	1	17.0-153	J3	J3	78.4	27
1,2-Dichloropropane	5.00	U	2.44	5.01	48.8	100	1	30.0-156	J3	J3	69.0	27
1,1-Dichloropropene	5.00	U	2.37	5.96	47.4	119	1	25.0-158	J3	J3	86.2	27
1,3-Dichloropropane	5.00	U	2.50	5.02	50.0	100	1	38.0-147	J3	J3	67.0	27
cis-1,3-Dichloropropene	5.00	U	2.11	4.88	42.2	97.6	1	34.0-149	J3	J3	79.3	28
trans-1,3-Dichloropropene	5.00	U	2.22	4.84	44.4	96.8	1	32.0-149	J3	J3	74.2	28
2,2-Dichloropropane	5.00	U	2.88	6.28	57.6	126	1	24.0-152	J3	J3	74.2	29
Di-isopropyl ether	5.00	U	2.78	4.91	55.6	98.2	1	21.0-160	J3	J3	55.4	28
Ethylbenzene	5.00	U	1.98	5.22	39.6	104	1	30.0-155	J3	J3	90.0	27
Hexachloro-1,3-butadiene	5.00	U	1.70	4.35	34.0	87.0	1	20.0-154	J3	J3	87.6	34
Isopropylbenzene	5.00	U	1.92	5.23	38.4	105	1	28.0-157	J3	J3	92.6	27
p-Isopropyltoluene	5.00	U	1.92	5.18	38.4	104	1	30.0-154	J3	J3	91.8	29
2-Butanone (MEK)	25.0	U	16.7	21.9	66.8	87.6	1	10.0-160			26.9	32
Methylene Chloride	5.00	U	4.18	6.21	83.6	124	1	23.0-144	J3	J3	39.1	28
4-Methyl-2-pentanone (MIBK)	25.0	U	14.4	22.8	57.6	91.2	1	29.0-160	J3	J3	45.2	29
Methyl tert-butyl ether	5.00	U	3.59	5.55	71.8	111	1	28.0-150	J3	J3	42.9	29
n-Propylbenzene	5.00	U	2.11	5.56	42.2	111	1	31.0-154	J3	J3	90.0	28
Styrene	5.00	U	1.72	4.80	34.4	96.0	1	33.0-155	J3	J3	94.5	28
1,1,2-Tetrachloroethane	5.00	U	2.34	5.31	46.8	106	1	36.0-151	J3	J3	77.6	29
1,1,2,2-Tetrachloroethane	5.00	U	2.86	5.68	57.2	114	1	33.0-150	J3	J3	66.0	28

ACCOUNT:

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¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2162318

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

QUALITY CONTROL SUMMARY

[L1672416-11,12,13](#)

L1670747-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1670747-02 11/01/23 14:48 • (MS) R3994560-5 11/01/23 21:24 • (MSD) R3994560-6 11/01/23 21:46

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD	RPD Limits
1,1,2-Trichlorotrifluoroethane	5.00	U	2.77	6.20	55.4	124	1	23.0-160	J3	J6	76.5	30
Tetrachloroethene	5.00	3.27	3.74	8.72	9.40	109	1	10.0-160	J6	J3	79.9	27
Toluene	5.00	U	2.32	5.42	46.4	108	1	26.0-154	J3	J3	80.1	28
1,2,3-Trichlorobenzene	5.00	U	1.63	4.29	32.6	85.8	1	17.0-150	J3	J3	89.9	36
1,2,4-Trichlorobenzene	5.00	U	1.69	4.12	33.8	82.4	1	24.0-150	J3	J3	83.6	33
1,1,1-Trichloroethane	5.00	U	2.88	6.65	57.6	133	1	23.0-160	J3	J3	79.1	28
1,1,2-Trichloroethane	5.00	U	2.62	5.30	52.4	106	1	35.0-147	J3	J3	67.7	27
Trichloroethene	5.00	2.06	3.00	7.34	18.8	106	1	10.0-160	J3	J3	83.9	25
Trichlorofluoromethane	5.00	0.545	3.11	7.26	51.3	134	1	17.0-160	J3	J3	80.0	31
1,2,3-Trichloropropane	5.00	U	2.77	5.40	55.4	108	1	34.0-151	J3	J3	64.4	29
1,2,4-Trimethylbenzene	5.00	U	1.94	5.10	38.8	102	1	26.0-154	J3	J3	89.8	27
1,2,3-Trimethylbenzene	5.00	U	2.05	5.12	41.0	102	1	32.0-149	J3	J3	85.6	28
1,3,5-Trimethylbenzene	5.00	U	1.97	5.23	39.4	105	1	28.0-153	J3	J3	90.6	27
Vinyl chloride	5.00	U	2.86	5.94	57.2	119	1	10.0-160	J3	J3	70.0	27
Xylenes, Total	15.0	U	5.97	15.3	39.8	102	1	29.0-154	J3	J3	87.7	28
(S) Toluene-d8				102	99.1			80.0-120				
(S) 4-Bromofluorobenzene				95.3	95.9			77.0-126				
(S) 1,2-Dichloroethane-d4				107	105			70.0-130				

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

ACCOUNT:

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

QUALITY CONTROL SUMMARY

[L1672416-12,13](#)

Method Blank (MB)

(MB) R3994695-3 11/02/23 13:06

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
Tetrachloroethene	U		0.300	1.00
(S) Toluene-d8	106			80.0-120
(S) 4-Bromofluorobenzene	91.0			77.0-126
(S) 1,2-Dichloroethane-d4	108			70.0-130

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

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

(LCS) R3994695-1 11/02/23 12:08 • (LCSD) R3994695-2 11/02/23 12:27

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Tetrachloroethene	5.00	5.96	5.84	119	117	72.0-132			2.03	20
(S) Toluene-d8				109	108	80.0-120				
(S) 4-Bromofluorobenzene				91.9	96.2	77.0-126				
(S) 1,2-Dichloroethane-d4				103	99.2	70.0-130				

WG2162557

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

QUALITY CONTROL SUMMARY

[L1672416-01,02,03,04,05,07,09](#)

Method Blank (MB)

(MB) R3994327-3 11/01/23 16:13

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg	
Acetone	U		0.0365	0.0500	¹ Cp
Acrylonitrile	U		0.00361	0.0125	² Tc
Benzene	U		0.000467	0.00100	³ Ss
Bromobenzene	U		0.000900	0.0125	⁴ Cn
Bromodichloromethane	U		0.000725	0.00250	⁵ Sr
Bromoform	U		0.00117	0.0250	⁶ Qc
Bromomethane	U		0.00197	0.0125	⁷ Gl
n-Butylbenzene	U		0.00525	0.0125	⁸ Al
sec-Butylbenzene	U		0.00288	0.0125	⁹ Sc
tert-Butylbenzene	U		0.00195	0.00500	
Carbon tetrachloride	U		0.000898	0.00500	
Chlorobenzene	U		0.000210	0.00250	
Chlorodibromomethane	U		0.000612	0.00250	
Chloroethane	U		0.00170	0.00500	
Chloroform	U		0.00103	0.00250	
Chloromethane	U		0.00435	0.0125	
2-Chlorotoluene	U		0.000865	0.00250	
4-Chlorotoluene	U		0.000450	0.00500	
1,2-Dibromo-3-Chloropropane	U		0.00390	0.0250	
1,2-Dibromoethane	U		0.000648	0.00250	
Dibromomethane	U		0.000750	0.00500	
1,2-Dichlorobenzene	U		0.000425	0.00500	
1,3-Dichlorobenzene	U		0.000600	0.00500	
1,4-Dichlorobenzene	U		0.000700	0.00500	
Dichlorodifluoromethane	U		0.00161	0.00500	
1,1-Dichloroethane	U		0.000491	0.00250	
1,2-Dichloroethane	U		0.000649	0.00250	
1,1-Dichloroethene	U		0.000606	0.00250	
cis-1,2-Dichloroethene	U		0.000734	0.00250	
trans-1,2-Dichloroethene	U		0.00104	0.00500	
1,2-Dichloropropane	U		0.00142	0.00500	
1,1-Dichloropropene	U		0.000809	0.00250	
1,3-Dichloropropane	U		0.000501	0.00500	
cis-1,3-Dichloropropene	U		0.000757	0.00250	
trans-1,3-Dichloropropene	U		0.00114	0.00500	
2,2-Dichloropropane	U		0.00138	0.00250	
Di-isopropyl ether	U		0.000410	0.00100	
Ethylbenzene	U		0.000737	0.00250	
Hexachloro-1,3-butadiene	U		0.00600	0.0250	
Isopropylbenzene	U		0.000425	0.00250	

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QUALITY CONTROL SUMMARY

[L1672416-01,02,03,04,05,07,09](#)

Method Blank (MB)

(MB) R3994327-3 11/01/23 16:13

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg	1 Cp
p-Isopropyltoluene	U		0.00255	0.00500	
2-Butanone (MEK)	U		0.0635	0.100	
Methylene Chloride	U		0.00664	0.0250	
4-Methyl-2-pentanone (MIBK)	U		0.00228	0.0250	
Methyl tert-butyl ether	U		0.000350	0.00100	
Naphthalene	U		0.00488	0.0125	
n-Propylbenzene	U		0.000950	0.00500	
Styrene	U		0.000229	0.0125	
1,1,2-Tetrachloroethane	U		0.000948	0.00250	
1,1,2,2-Tetrachloroethane	U		0.000695	0.00250	
1,1,2-Trichlorotrifluoroethane	U		0.000754	0.00250	
Tetrachloroethene	U		0.000896	0.00250	
Toluene	U		0.00130	0.00500	
1,2,3-Trichlorobenzene	U		0.00733	0.0125	
1,2,4-Trichlorobenzene	U		0.00440	0.0125	
1,1,1-Trichloroethane	U		0.000923	0.00250	
1,1,2-Trichloroethane	U		0.000597	0.00250	
Trichloroethene	U		0.000584	0.00100	
Trichlorofluoromethane	U		0.000827	0.00250	
1,2,3-Trichloropropane	U		0.00162	0.0125	
1,2,4-Trimethylbenzene	U		0.00158	0.00500	
1,2,3-Trimethylbenzene	U		0.00158	0.00500	
1,3,5-Trimethylbenzene	U		0.00200	0.00500	
Vinyl chloride	U		0.00116	0.00250	
Xylenes, Total	U		0.000880	0.00650	
(S) Toluene-d8	105		75.0-131		
(S) 4-Bromofluorobenzene	101		67.0-138		
(S) 1,2-Dichloroethane-d4	98.9		70.0-130		

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

(LCS) R3994327-1 11/01/23 14:37 • (LCSD) R3994327-2 11/01/23 14:56

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Acetone	0.625	0.423	0.489	67.7	78.2	10.0-160			14.5	31
Acrylonitrile	0.625	0.653	0.684	104	109	45.0-153			4.64	22
Benzene	0.125	0.127	0.128	102	102	70.0-123			0.784	20
Bromobenzene	0.125	0.144	0.137	115	110	73.0-121			4.98	20
Bromodichloromethane	0.125	0.135	0.129	108	103	73.0-121			4.55	20

QUALITY CONTROL SUMMARY

[L1672416-01,02,03,04,05,07,09](#)

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

(LCS) R3994327-1 11/01/23 14:37 • (LCSD) R3994327-2 11/01/23 14:56

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Bromoform	0.125	0.145	0.137	116	110	64.0-132			5.67	20
Bromomethane	0.125	0.104	0.104	83.2	83.2	56.0-147			0.000	20
n-Butylbenzene	0.125	0.124	0.121	99.2	96.8	68.0-135			2.45	20
sec-Butylbenzene	0.125	0.123	0.125	98.4	100	74.0-130			1.61	20
tert-Butylbenzene	0.125	0.128	0.130	102	104	75.0-127			1.55	20
Carbon tetrachloride	0.125	0.146	0.145	117	116	66.0-128			0.687	20
Chlorobenzene	0.125	0.145	0.147	116	118	76.0-128			1.37	20
Chlorodibromomethane	0.125	0.149	0.152	119	122	74.0-127			1.99	20
Chloroethane	0.125	0.0908	0.0930	72.6	74.4	61.0-134			2.39	20
Chloroform	0.125	0.124	0.125	99.2	100	72.0-123			0.803	20
Chloromethane	0.125	0.126	0.118	101	94.4	51.0-138			6.56	20
2-Chlorotoluene	0.125	0.134	0.137	107	110	75.0-124			2.21	20
4-Chlorotoluene	0.125	0.128	0.126	102	101	75.0-124			1.57	20
1,2-Dibromo-3-Chloropropane	0.125	0.117	0.104	93.6	83.2	59.0-130			11.8	20
1,2-Dibromoethane	0.125	0.153	0.143	122	114	74.0-128			6.76	20
Dibromomethane	0.125	0.130	0.122	104	97.6	75.0-122			6.35	20
1,2-Dichlorobenzene	0.125	0.144	0.141	115	113	76.0-124			2.11	20
1,3-Dichlorobenzene	0.125	0.138	0.138	110	110	76.0-125			0.000	20
1,4-Dichlorobenzene	0.125	0.132	0.135	106	108	77.0-121			2.25	20
Dichlorodifluoromethane	0.125	0.151	0.143	121	114	43.0-156			5.44	20
1,1-Dichloroethane	0.125	0.131	0.129	105	103	70.0-127			1.54	20
1,2-Dichloroethane	0.125	0.126	0.127	101	102	65.0-131			0.791	20
1,1-Dichloroethene	0.125	0.130	0.124	104	99.2	65.0-131			4.72	20
cis-1,2-Dichloroethene	0.125	0.126	0.123	101	98.4	73.0-125			2.41	20
trans-1,2-Dichloroethene	0.125	0.116	0.122	92.8	97.6	71.0-125			5.04	20
1,2-Dichloropropane	0.125	0.129	0.133	103	106	74.0-125			3.05	20
1,1-Dichloropropene	0.125	0.123	0.122	98.4	97.6	73.0-125			0.816	20
1,3-Dichloropropane	0.125	0.134	0.132	107	106	80.0-125			1.50	20
cis-1,3-Dichloropropene	0.125	0.131	0.131	105	105	76.0-127			0.000	20
trans-1,3-Dichloropropene	0.125	0.134	0.135	107	108	73.0-127			0.743	20
2,2-Dichloropropane	0.125	0.118	0.111	94.4	88.8	59.0-135			6.11	20
Di-isopropyl ether	0.125	0.151	0.149	121	119	60.0-136			1.33	20
Ethylbenzene	0.125	0.147	0.142	118	114	74.0-126			3.46	20
Hexachloro-1,3-butadiene	0.125	0.120	0.114	96.0	91.2	57.0-150			5.13	20
Isopropylbenzene	0.125	0.145	0.140	116	112	72.0-127			3.51	20
p-Isopropyltoluene	0.125	0.122	0.128	97.6	102	72.0-133			4.80	20
2-Butanone (MEK)	0.625	0.805	0.693	129	111	30.0-160			15.0	24
Methylene Chloride	0.125	0.107	0.102	85.6	81.6	68.0-123			4.78	20
4-Methyl-2-pentanone (MIBK)	0.625	0.821	0.777	131	124	56.0-143			5.51	20
Methyl tert-butyl ether	0.125	0.124	0.121	99.2	96.8	66.0-132			2.45	20

ACCOUNT:

Partner Engineering & Science - WA

PROJECT:

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L1672416

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QUALITY CONTROL SUMMARY

[L1672416-01,02,03,04,05,07,09](#)

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

(LCS) R3994327-1 11/01/23 14:37 • (LCSD) R3994327-2 11/01/23 14:56

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Naphthalene	0.125	0.0765	0.0762	61.2	61.0	59.0-130			0.393	20
n-Propylbenzene	0.125	0.123	0.126	98.4	101	74.0-126			2.41	20
Styrene	0.125	0.137	0.127	110	102	72.0-127			7.58	20
1,1,1,2-Tetrachloroethane	0.125	0.156	0.151	125	121	74.0-129			3.26	20
1,1,2,2-Tetrachloroethane	0.125	0.122	0.122	97.6	97.6	68.0-128			0.000	20
1,1,2-Trichlorotrifluoroethane	0.125	0.119	0.119	95.2	95.2	61.0-139			0.000	20
Tetrachloroethene	0.125	0.154	0.151	123	121	70.0-136			1.97	20
Toluene	0.125	0.135	0.140	108	112	75.0-121			3.64	20
1,2,3-Trichlorobenzene	0.125	0.0700	0.0732	56.0	58.6	59.0-139	J4	J4	4.47	20
1,2,4-Trichlorobenzene	0.125	0.101	0.106	80.8	84.8	62.0-137			4.83	20
1,1,1-Trichloroethane	0.125	0.136	0.133	109	106	69.0-126			2.23	20
1,1,2-Trichloroethane	0.125	0.145	0.138	116	110	78.0-123			4.95	20
Trichloroethene	0.125	0.146	0.142	117	114	76.0-126			2.78	20
Trichlorofluoromethane	0.125	0.139	0.139	111	111	61.0-142			0.000	20
1,2,3-Trichloropropane	0.125	0.131	0.134	105	107	67.0-129			2.26	20
1,2,4-Trimethylbenzene	0.125	0.128	0.125	102	100	70.0-126			2.37	20
1,2,3-Trimethylbenzene	0.125	0.127	0.123	102	98.4	74.0-124			3.20	20
1,3,5-Trimethylbenzene	0.125	0.129	0.126	103	101	73.0-127			2.35	20
Vinyl chloride	0.125	0.112	0.114	89.6	91.2	63.0-134			1.77	20
Xylenes, Total	0.375	0.456	0.411	122	110	72.0-127			10.4	20
(S) Toluene-d8				105	107	75.0-131				
(S) 4-Bromofluorobenzene				103	99.8	67.0-138				
(S) 1,2-Dichloroethane-d4				101	101	70.0-130				

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2162307

QUALITY CONTROL SUMMARY

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

[L1672416-11,12,13](#)

Method Blank (MB)

(MB) R3994370-1 11/02/23 01:09

Analyte	MB Result ug/l	<u>MB Qualifier</u>	MB MDL ug/l	MB RDL ug/l
Diesel Range Organics (DRO)	U		66.7	200
Residual Range Organics (RRO)	U		83.3	250
(S) o-Terphenyl	91.5			52.0-156

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

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

(LCS) R3994370-2 11/02/23 01:28 • (LCSD) R3994370-3 11/02/23 01:48

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Diesel Range Organics (DRO)	1500	1490	1530	99.3	102	50.0-150			2.65	20
(S) o-Terphenyl			81.5	84.0		52.0-156				

ACCOUNT:

Partner Engineering & Science - WA

PROJECT:

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QUALITY CONTROL SUMMARY

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

[L1672416-01,02,03,04,05,07,09](#)

Method Blank (MB)

(MB) R3994522-1 11/02/23 07:37

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
Diesel Range Organics (DRO)	U		1.33	4.00
Residual Range Organics (RRO)	U		3.33	10.0
(S) o-Terphenyl	55.9			18.0-148

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3994522-2 11/02/23 07:50

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Diesel Range Organics (DRO)	50.0	35.7	71.4	50.0-150	
(S) o-Terphenyl		68.9		18.0-148	

L1670762-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1670762-01 11/02/23 11:31 • (MS) R3994522-3 11/02/23 11:18 • (MSD) R3994522-4 11/02/23 11:44

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Diesel Range Organics (DRO)	49.2	396	630	609	476	433	50	50.0-150	V	V	3.39
(S) o-Terphenyl				0.000	0.000		18.0-148	J7	J7		20

ACCOUNT:

Partner Engineering & Science - WA

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GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].	1 Cp
MDL	Method Detection Limit.	2 Tc
MDL (dry)	Method Detection Limit.	3 Ss
RDL	Reported Detection Limit.	4 Cn
RDL (dry)	Reported Detection Limit.	5 Sr
Rec.	Recovery.	6 Qc
RPD	Relative Percent Difference.	7 GI
SDG	Sample Delivery Group.	8 AI
(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.	9 Sc
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.
C5	The reported concentration is an estimate. The continuing calibration standard associated with this data responded high. Data is likely to show a high bias concerning the result.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.

GLOSSARY OF TERMS

Qualifier	Description	
V	The sample concentration is too high to evaluate accurate spike recoveries.	¹ Cp
		² Tc
		³ Ss
		⁴ Cn
		⁵ Sr
		⁶ Qc
		⁷ Gl
		⁸ Al
		⁹ Sc

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Company Name/Address:

Partner Engineering & Science - WA2708 James Street
Bellingham, WA 98225

Billing Information:

Accounts Payable
2154 Torrance Blvd.
Torrance, CA 90501Pres
Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Report to:
Brian GodboisEmail To:
BGodbois@partneresi.com; **[REDACTED]**

Project Description:

Bellevue, WACity/State
Collected: **Bellevue, WA** **O** Please Circle:
PT MT CT ETPhone: **206-518-4274**

Client Project #

23-416301.2

Lab Project #

PAREN GSWA **23-416301**

Collected by (print):

Brian Godbois

Collected by (signature):

BDImmediately
Packed on Ice N **X** Y **X**

Rush? (Lab MUST Be Notified)

- Same Day Five Day
 Next Day 5 Day (Rad Only)
 Two Day 10 Day (Rad Only)
 Three Day

Quote #

Date Results Needed

24-Hour

MRCRA8 4ozClr-NoPres

NWTPHDXNOSGT 4ozClr-NoPres

NWTPHGX 40mlAmb/MeOH10ml/Syr

V8260 40mlAmb/MeOH10ml/Syr

No.
of
Cntrs

B1-2
B1-6
B2-2
B2-9
B3-16
B3-22
B4-20
D4-25
B5-15
B5-25

grab**SS****10-29-23 1100****a****X****X****Y****X****1105****X****Y****X****Y****1220****Y****X****X****Y****1225****Y****X****Y****X****1435****Y****X****X****X****1440****Y****X****Y****10-30-23 1405****X****X****X****Y****1420****Y****X****Y****1500****X****X****X****Y****1545****Y****X****Y**

* Matrix:

SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay

WW - WasteWater

DW - Drinking Water

OT - Other _____

Remarks:

Samples returned via:
UPS FedEx Courier _____Tracking # **6295 1089 6671**

pH _____ Temp _____

Flow _____ Other _____

Sample Receipt Checklist

COC Seal Present/Intact: NP Y NCOC Signed/Accurate: Y NBottles arrive intact: Y NCorrect bottles used: Y NSufficient volume sent: Y N

If Applicable

VOA Zero Headspace: A NPreservation Correct/Checked: Y NRAD Screen <0.5 mR/hr: Y N

Relinquished by : (Signature)

Date: **10-31-23** Time: **1200**

Received by: (Signature)

Trip Blank Received: Yes No HCL / MeOH
TBR

Relinquished by : (Signature)

Date: _____ Time: _____

Received by: (Signature)

Temp: **DP18 °C** Bottles Received: **42****5.6+0=5.6**

If preservation required by Login: Date/Time

Relinquished by : (Signature)

Date: _____ Time: _____

Received for lab by: (Signature)

Date: **11/1/23** Time: **0900**Hold: _____ Condition: **NCF / OK**

