

PARTNER

PHASE II SUBSURFACE INVESTIGATION REPORT

Maninder Singh - Expansion

8701 Greenwood Avenue North
Seattle, Washington 98103

March 9, 2021

Partner Project Number: 20-293062.2

Prepared for:

8701 Greenwood LLC

12620 NE 85th Street, Suite 112
Kirkland, Washington 98033



Engineers who understand your business

PARTNER

March 9, 2021

Maninder Singh
8701 Greenwood LLC
12620 NE 85th Street, Suite 112
Kirkland, Washington 98033

Subject: Phase II Subsurface Investigation Report
Maninder Singh - Expansion
8701 Greenwood Avenue North
Seattle, Washington 98103
Partner Project Number: 20-293062.2

Dear Mr. Singh:

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 Marshall Stanclift at 801-783-2734.

Sincerely,

Partner Engineering and Science, Inc.


Brian T. Godbois
Project Manager


Marshall Stanclift
National Client Manager

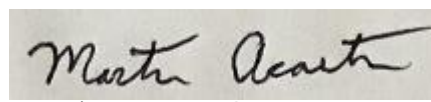

Martin Acaster, L.G.
Senior Geologist



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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 former dry cleaning facility, former gasoline service station, and documented north-adjacent release. 8701 Greenwood LLC provided project authorization of Partner Proposal Number P20-293062.2.

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 8701 Greenwood LLC (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 one parcel of land comprising 0.75 acre located on the northwest corner of the Greenwood Avenue North and North 87th Street intersection within a mixed commercial and residential area of Seattle, King County, Washington. The subject property is currently developed with one 14,707-square foot building, which was constructed in 1997 and is currently vacant. In addition to the structure, the subject property is improved with asphalt-paved parking areas and associated landscaping.

The subject property is bound by residential properties to the north, commercial properties to the east across Greenwood Avenue North, residential properties to the south across North 87th Street, and residential properties to the west across the Alley. Refer to Figure 1 for a site vicinity map showing site features and surrounding properties.

2.2 Site History

Partner completed a *Phase I Environmental Site Assessment Report* (Phase I) for the subject property, dated September 29, 2020, on behalf of Live Oak Bank and The U.S. Small Business Administration. According to the reviewed historical sources, the subject property was formerly undeveloped as early as 1894; developed with commercial and residential buildings between 1917 and circa 1994 including various gasoline stations on the southern portion of the property between 1940 and 1994; and developed with the current structure in 1997. Tenants on the subject property include residential occupants (1917-1967); Olmstead Realty (1920-1935); Owl Drug Co (1925-1930); medical and dental building, electric repair shop, laundry (1930); Texaco (1951-1994); Vanity Cleaners (1951-1955); Tea Garden, Slate Insulating Co (1951); Greenwood Cycle (1955-1960); Kellogg R E Co (1955); Forty Fifth Democratic Headquarters, Allied Crafts furniture manufacturers (1960); Bys All Beef Burgers restaurant (1964-1970); Greenwood Electric Motors (1964-1994); Short Stop Drive Inn (1975); Greenwood Burger Co (1980-1994); and Walgreens (1996-2009).

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

- The subject property was previously several individual lots which included 8715 Greenwood Avenue. Vanity Cleaners occupied this property as a cleaners and dyers between 1951 and 1955. Dry cleaning operations typically use chlorinated solvents, particularly tetrachloroethylene (PCE), during the dry-cleaning process. These solvents, even when properly stored and disposed of, can be released from these facilities in small, frequent releases through floor drains, cracked concrete, and sewer systems. Chlorinated solvents are highly mobile chemicals that can easily accumulate in the soil and migrate to the groundwater beneath a facility. Based on the lack of previous subsurface investigations in this area, and the nature of dry-cleaning chemicals, the former presence of the dry-cleaning business on the subject property is considered a REC.
- The adjacent property identified as SMI Inc. Trust at 8733 North Greenwood Avenue, is located adjacent to the north of the subject property and hydrologically cross- to up-gradient. According to Environmental Data Resources (EDR), this property is listed on several databases including the Hazardous Site List (HSL) and Confirmed and Suspected Contaminated Sites List (CSCSL). This property has a confirmed release of conventional contaminants, organics and metals which have impacted soil. In addition, it is suspected that halogenated organics and petroleum products have also impacted the property. The site status is currently awaiting cleanup. In addition, two

documented spills of petroleum products occurred in 1999 and 2011. Based on the close proximity to the subject property, active release file, and inferred groundwater flow direction, this site is expected to represent a REC.

The following controlled recognized environmental condition (CREC) was identified in the Phase I:

- The southern portion of the subject property was previously occupied by a gasoline and service station from at least 1940 to 1994. According to previous reports reviewed, the initial gasoline station was equipped with one 4,000-gallon; one 3,500-gallon; and one 2,000-gallon fuel storage tanks; and one 550-gallon waste oil underground storage tanks (USTs). These USTs were located on the eastern portion of the property. In 1967, Texaco purchased the property and constructed a new service station. The new service station included a two-bay garage/sales office building and two pump islands and two 10,000-gallon gasoline USTs; one 550-gallon waste oil UST; and one 1,000-gallon fuel oil UST. A 4,000-gallon gasoline UST was added in 1971. All USTs were single-walled carbon steel. The entire underground system was updated in 1986 and the steel tanks were removed and replaced with four 10,000-gallon single-walled fiberglass tanks including a diesel UST. The product lines, waste oil, and fuel oil USTs were replaced with fiberglass lines and tanks. The new tanks and lines were placed in approximately the same locations as the previous tanks and piping.

An initial site investigation was conducted in 1991 and consisted of a total of seven borings being drilled on site with five of them converted to monitoring wells. Borings were located around the USTs, pump islands, waste oil UST, and fuel oil UST. Borings were advanced to depths between 11 and 21 feet below ground surface (bgs). Groundwater was encountered between 2 and 5 feet bgs. A total of 11 soil samples were analyzed for hydrocarbons (gasoline, diesel, and oil), benzene, toluene, ethylbenzene, and xylenes (BTEX), metals, and/or halogenated volatiles. Total petroleum hydrocarbon (TPH) concentrations ranged from non-detect to 979 parts per million (ppm) with the greatest concentrations around the waste oil and fuel oil USTs. Detections of BTEX in soil samples were noted near a pump island and south of the existing UST basin. Three of the five monitoring wells had elevated concentrations of BTEX above the Model Toxics Control Act (MTCA) Method A Cleanup Levels for groundwater.

In 1994, all USTs and associated product lines were removed from the subject property. The UST decommissioning included the discovery of two 1,250-gallon concrete sumps/separators during the over excavation of petroleum hydrocarbon impacted soil south of the service station building. Approximately 600 cubic yards of petroleum impacted soils were excavated from the tank basins and dispenser islands and stockpiled for offsite disposal. Soil samples were collected and analyzed for TPH and BTEX. Soil samples collected from the gasoline, diesel, and heating oil USTs, pump island, and hoist areas following over excavation contained analyte concentrations below MTCA Method A Cleanup Levels. However, soil samples collected from the excavation sidewalls and from the peat layer of the waste oil/sump area contained analyte concentrations above the MTCA Method A Cleanup Levels. Groundwater samples were also analyzed for TPH and BTEX. Three groundwater samples had elevated concentrations of TPH-gasoline (G), benzene, and total xylenes above the MTCA Method A Cleanup Levels.

A combined air sparge/vapor extraction system was installed on the property in the area of the former gasoline and diesel UST excavation between March and December 1994. The groundwater treatment system operated between December 1994 and June 1995 recovering approximately 45.5 pounds of volatile hydrocarbons. The groundwater recovery system removed and discharged approximately 649,600 gallons of groundwater during this period. Groundwater sampling was conducted three times in 1995 and laboratory results indicated a general decline in dissolved concentrations from earlier levels. Laboratory results from the most recent groundwater sampling event indicated that

the concentrations were below the MTCA Method A Cleanup Levels. Based upon the sampling data, Washington Department of Ecology (Ecology) issued a closure letter for the subject property in July 1996. The closure was contingent on the recording of a restrictive covenant with the property deed. The restrictive covenant documents some residual impacted soil remains on the property. It also includes additional requirements for groundwater monitoring and for handling additional impacted soil if discovered during subsequent redevelopment of the property. Based on regulatory oversight and closure, removal of USTs, remedial activities, analytical results, and the property use restrictions currently in-place, the former gasoline station and USTs are considered a CREC.

2.3 Geology and Hydrogeology

Review of the United States Geological Survey (USGS) *Seattle North, Washington* Quadrangle topographic map, indicates the subject property is situated approximately 260 feet above mean sea level. Refer to Figure 2 for a topographic map of the site vicinity.

According to the State of Washington Department of Natural Resources (WDNR), the subject property is situated within the Puget Lowland physiographic province of the State of Washington. The Puget Lowland physiographic province consists of a broad, low-lying region that is situated between the Cascade Range to the east, and the Olympic Mountains and Willapa Hills to the west. The Puget Lowland physiographic province owes its present-day geomorphic features to the last continental glacier that covered the region.

Based on borings advanced during this investigation, the underlying subsurface consists predominantly of sandy silt with gravel (ML), silt (ML), organic peat (P), and silty sand (SM) from the ground surface to approximately 15 feet below ground surface (bgs). Groundwater was encountered during this investigation between 6 and 11 feet bgs; however, the groundwater rose to 2 to 3 feet bgs upon boring completion. 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 installation of three sub-slab soil gas probes (SS1 through SS3) to collect representative soil, groundwater, soil gas, and/or sub slab 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 notified Washington Utility Notification Center (WUNC) to clear public utility lines as required by law at least two business days prior to drilling activities. WUNC issued ticket number 21046508 for the project.

In addition, Partner subcontracted with Ground Penetrating Radar Systems (GPRS) on February 18, 2021, to clear boring locations of utilities. GPRS 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 February 18, 2021, Partner subcontracted with Environmental Services Network Northwest (ESN-NW) to provide and operate drilling equipment. ESN-NW, under the direction of Partner, advanced borings B1 through B5 with a truck-mounted AMS PowerProbe 9500 PTO 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 portions of proposed play areas 3 and 2, respectively. Boring B3 was advanced in the central portion of the former dry-cleaning facility. Boring B4 was advanced in the central portion of the north property boundary. Boring B5 was advanced in the central area of the exterior area of suspected impacted soil.

Sub-slab probe SS1 was advanced in the south portion of the interior area of suspected impacted soil. Sub-slab probes SS2 and SS3 were advanced in the central and northeast interior areas of the subject property building, respectively.

Refer to Figure 3 for a map indicating sample locations.

3.4 Soil Sampling

Borings B1 through B5 were overlain by asphalt, which was penetrated using a punch bit attachment advanced by the direct-push drill rig. Borings B1, B4, and B5 were advanced to a terminal depth of 10 feet bgs; borings B2 and B3 were advanced to a terminal depth of 15 feet bgs.

Soil samples were collected using a 5-foot long by 2.25-inch diameter MacroCore sampler with a 5-foot long acetate liner, which was advanced by the direct-push drill rig using 5-foot long by 1.5-inch diameter drill rods. The sampler was driven into the subsurface to allow undisturbed soil to enter the open MacroCore barrel and retrieved in 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 a laboratory-supplied, four-ounce, wide-mouth, unpreserved glass jar, which was sealed with a threaded, Teflon-lined lid. 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. None of the samples exhibited discoloration or an odor and none of the PID readings suggested the presence of elevated volatile organics concentrations.

Soil samples were collected from each boring at 2 and 5 feet bgs; from borings B1 at 7.5 feet bgs; and from borings B1, B2, B3, and B5 at 10 feet bgs.

3.5 Groundwater Sampling

After soil sampling to the terminal depth, groundwater samples were collected by withdrawing the drill rods from the subsurface and installing $\frac{3}{4}$ -inch diameter temporary monitoring wells within the open boreholes. Each monitoring well consisted of a 10-foot long, 0.010-inch factory-slotted polyvinyl chloride (PVC) screen at the terminal end and blank PVC risers from the top of the screen interval to the ground surface.

Groundwater samples were retrieved from each monitoring well using a new section of $\frac{3}{8}$ -inch diameter polyethylene tubing fed through a peristaltic pump and conveyed into eight hydrochloric acid-preserved VOA vials. Each vial was filled with no observable headspace or air bubbles to minimize the potential for volatilization, labeled for identification, and stored in an iced cooler.

New screens and tubing were used for each monitoring well. The risers were decontaminated between boreholes to prevent cross-contamination.

Groundwater samples were collected from temporary well points at borings B1 through B5 screened from 0 to 10 feet bgs.

3.6 Soil Gas Sampling

Soil Gas Probe Construction

Soil gas probes within borings B2 through B5 were screened at 1 to 3 feet bgs were constructed within the boreholes upon completion of soil and groundwater sampling. Boreholes were backfilled with dry, granular bentonite to approximately 6 inches below the desired sampling depth. A new section of ¼-inch diameter polyethylene tubing with a new ¼-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 stainless-steel 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 the April 2018 Ecology "Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action" and California Environmental Protection Agency (CalEPA) April 2015 "Advisory for 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 (Ecology Environmental Laboratory Accreditation Program certificate number C1915) 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 2 hours after installation prior to sampling. After equilibration, the sample tubing and sampler screen were purged 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.

The SUMMA canisters were labeled for identification and stored away from direct sunlight prior to analysis.

Soil gas samples were collected from borings B2 through B5 at 1, 2, 1, and 2 feet bgs.

3.7 Sub-Slab Soil Gas Sampling

Sub-slab soil gas probes SS1 through SS3 were advanced through the concrete slab of the subject property building. Each sub-slab soil gas probe, consisting of a prefabricated stainless steel Vapor Pin™ equipped with a silicone sleeve, was manually inserted into a 5/8-inch diameter hole drilled through the concrete slab of the subject property building using a rotary hammer drill. After each Vapor Pin™ was inserted into the concrete slab, a protective cap was placed over the barbed sampling end of the Vapor Pin™ and the Vapor

Pin™ was left in place for at least 2 hours in order to allow the sub-slab soil gas to reach equilibrium. Partner connected the barbed sampling end of the probe to a piece of new Tygon tubing which was used to create a bridge to the laboratory supplied new polyethylene tubing which was connect to a laboratory-supplied one-liter Summa Canister.

Soil gas samples were collected in general accordance with the April 2018 Ecology "Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action" and CalEPA April 2015 "Advisory for Active Soil Gas Investigations."

Sub-slab soil gas samples were collected using one-liter, stainless-steel, spherical Summa canisters provided by Pace. Each canister was subjected 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 30 inches of mercury. The Summa canisters were fitted with stainless-steel flow controllers, which Pace calibrated to maintain constant flow (approximately 0.2 liter per minute) for approximately five minutes of sampling time. Each probe was allowed to equilibrate for a minimum of 2 hours after installation prior to sampling. After equilibration, the sample tubing and sampler screen were purged of ambient air using a plastic syringe. Tracer gas, 1,1-DFA, was placed around each probe at the ground surface while sampling to detect potential ambient air intrusion. After purging, the sampling end of the tubing was fitted to the canister and the valve was opened, allowing air to enter the sample container due to the pressure differential. Partner closed the valves after the canister was evacuated to approximately one to two inches of mercury, canisters were labeled for identification, and stored away from direct sunlight prior to shipping and analysis.

Sub-slab soil gas samples were collected from probes SS1 through SS3 at approximately 0.5 feet bgs.

The SUMMA canisters were labeled for identification and stored away from direct sunlight prior to analysis.

3.8 Post-Sampling Activities

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

Generated soil cuttings and decontamination water were containerized in a properly labeled and sealed 10-gallon drum and stored on site. The derived waste will be profiled and transported under proper waste manifest to an appropriate licensed off-site facility for recycling and/or disposal pending the necessary laboratory analysis results for waste profiling.

4.0 DATA ANALYSIS

4.1 Laboratory Analysis

Partner collected 15 soil samples, five groundwater samples, four soil gas samples, and three sub-slab soil gas samples on February 18, 2021, which were transported in an iced cooler (soil and groundwater samples) or at ambient temperature (soil gas samples) under chain-of-custody protocol to Pace for analysis. Based on field-screening results, visual observations, and/or olfactory observations, one soil sample per boring and each groundwater sample (five soil and five groundwater samples total) were analyzed for gasoline-range organics (GRO) via Ecology Method NWTPH-Gx, for diesel- and residual-range organics (DRO and RRO, respectively) via Ecology Method NWTPH-Dx/Dx Extended, and for VOCs via United States Environmental Protection Agency (EPA) Method 8260D. Each of the seven soil gas samples 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 Model Toxics Control Act (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 for sites that do not have a Method A cleanup level. Method B consists of a Cancer Cleanup Level (soil and groundwater) or Screening Level (soil gas) and Noncancer Cleanup Level or Screening Level. 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 Cleanup or Screening Level. 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 Cleanup Levels and SGSLs.

4.3 Soil Sample Data Analysis

GRO, DRO, and RRO were detected in each of the analyzed soil samples at concentrations above the laboratory reporting detection limits (RDLs), and/or at trace concentrations below laboratory RDLs, but above laboratory method detection limits (MDLs).

GRO was detected in soil sample B4-5 at a concentration exceeding the cleanup level. None of the remaining detections of GRO, DRO, and RRO exceeded applicable cleanup levels.

Various VOCs were detected in the analyzed soil samples at concentrations above the laboratory RDLs, and/or at trace concentrations. None of the detected concentrations exceeded applicable cleanup levels.

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 each of the analyzed groundwater samples at concentrations above the laboratory RDLs, and/or at trace concentrations below laboratory RDLs, but above laboratory MDLs. GRO was detected in groundwater sample B2-GW at a concentration exceeding the cleanup level. DRO and RRO were detected in groundwater sample B4-GW at concentrations exceeding the cleanup levels. RRO was detected in groundwater sample B5-GW at a concentration exceeding the cleanup level. None of the remaining detections of GRO, DRO, or RRO exceeded the applicable cleanup levels.

Various VOCs were detected in the analyzed groundwater samples at concentrations above the laboratory RDLs, and/or at trace concentrations. Benzene was detected in each of the five analyzed groundwater samples at concentrations exceeding applicable cleanup levels. Vinyl chloride was detected in one of the five analyzed groundwater samples (B2-GW) at a concentration exceeding applicable cleanup levels. None of the remaining detected VOC concentrations exceeded applicable cleanup levels.

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 and Sub-Slab Soil Gas Sample Data Analysis

Various VOCs were detected in the analyzed soil gas and sub-slab soil gas samples at concentrations above the laboratory RDLs. Benzene was detected in six of the seven analyzed soil gas samples (B2-SG through B5-SG, SS1 and SS2) at concentrations exceeding applicable screening levels. m&p-Xylene was detected in two of the seven analyzed soil gas samples (B2-SG and B3-SG) at concentrations exceeding applicable cleanup levels. None of the remaining detected VOC concentrations exceeded applicable cleanup levels.

The tracer gas 1,1-DFA was detected in five of the seven analyzed soil gas samples (B2-SG, B3-SG, B5-SG, SS1, and SS3) which may be indicative of a potential breach in the sampling train. Ecology does not provide guidance for the determination of the significance of potential breaches in the sampling train. Alternatively, Partner utilized the California Department of Toxic Substances Control (DTSC) methods for quantification of a significant breach. According to the DTSC, detection of tracer compounds at concentrations of less than 10 times the laboratory RDL of the target analyte are considered insignificant. For the purposes of this investigation, the detected 1,1-DFA concentration was compared to 10 times the lowest laboratory RDL [0.413 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) for chloromethane]. Three of the detected tracer compound concentrations exceeded the significance threshold (B2-SG, B3-SG, and B5-SG), 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 B2-SG, that the detected tracer compound concentrations are less than an order of magnitude above the significance threshold; therefore, potential breaches are expected to be relatively minimal. Based on the above, 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

4.6.1 Soil

GRO was detected in soil sample B4-5 at a concentration exceeding the cleanup level. It appears that the north adjacent release may have impacted soil on the northern subject property boundary.

4.6.2 Groundwater

GRO was detected in groundwater sample B2-GW at a concentration exceeding the cleanup level. DRO and RRO were detected in groundwater sample B4-GW at concentrations exceeding the cleanup levels. RRO was detected in groundwater sample B5-GW at a concentration exceeding the cleanup level.

Benzene was detected in each of the five analyzed groundwater samples at concentrations exceeding applicable cleanup levels. Vinyl chloride was detected in one of the five analyzed groundwater samples (B2-GW) at a concentration exceeding applicable cleanup levels.

GRO, DRO, and RRO impacts are spread throughout the subject property; however, the proposed play area 2 appears to have the greatest concentrations of GRO in groundwater resulting from the former gasoline service station. Additionally, it appears that groundwater in the vicinity of the northern property boundary has the greatest concentrations of DRO and RRO, presumably from the north-adjacent release.

The detected concentration of vinyl chloride appears to be laterally limited to B2-GW and does not appear to be impacting the rest of the subject property.

4.6.3 Soil Gas and Sub-Slab Soil Gas

Benzene was detected in six of the seven analyzed soil gas samples (B2-SG through B5-SG, SS1 and SS2) at concentrations exceeding applicable screening levels. m&p-Xylene was detected in two of the seven analyzed soil gas samples (B2-SG and B3-SG) at concentrations exceeding applicable cleanup levels.

Benzene and m&p-xylene impacts to soil gas are widespread throughout the subject property with the greatest concentrations observed in the vicinity of proposed play areas 2 and 3. Sub-slab soil gas concentrations of benzene and xylenes are significantly lower than the soil gas concentrations.

4.6.4 Overall Site Impacts

GRO, DRO, RRO, benzene, m&p-xylene, and vinyl chloride concentrations observed in soil, soil gas, and groundwater continue to negatively impact the subject property at concentrations exceeding applicable screening levels. It appears that impacts from the former gasoline service station and north adjacent release case are commingled and spread throughout the subject property. Impacts from the former gasoline service station appear to be attenuating since the last investigation with overall decreasing concentrations. It does not appear that the former dry-cleaning facility has impacted the subject property.

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 former dry cleaning facility, former gasoline service station, and documented north-adjacent release. The scope of the Phase II Subsurface Investigation included five soil borings and three sub-slab soil gas probes. Five soil samples and five groundwater samples were analyzed for GRO/DRO/RRO and VOCs, and seven soil gas and sub-slab soil gas samples were analyzed for VOCs.

GRO was detected in soil sample B4-5 at a concentration exceeding the cleanup level. None of the remaining detections of GRO, DRO, and RRO exceeded applicable cleanup levels.

GRO was detected in groundwater sample B2-GW at a concentration exceeding the cleanup level. DRO and RRO were detected in groundwater sample B4-GW at concentrations exceeding the cleanup levels. RRO was detected in groundwater sample B5-GW at a concentration exceeding the cleanup level. None of the remaining detections of GRO, DRO, or RRO exceeded the applicable cleanup levels.

Benzene was detected in each of the five analyzed groundwater samples at concentrations exceeding applicable cleanup levels. Vinyl chloride was detected in one of the five analyzed groundwater samples (B2-GW) at a concentration exceeding applicable cleanup levels. None of the remaining detected VOC concentrations exceeded applicable cleanup levels.

Benzene was detected in six of the seven analyzed soil gas samples (B2-SG through B5-SG, SS1 and SS2) at concentrations exceeding applicable screening levels. m&p-Xylene was detected in two of the seven analyzed soil gas samples (B2-SG and B3-SG) at a concentration exceeding applicable cleanup levels. None of the remaining detected VOC concentrations exceeded applicable cleanup levels.

GRO, DRO, RRO, benzene, m&p-xylene, and vinyl chloride concentrations observed in soil, soil gas, and groundwater continue to negatively impact the subject property at concentrations exceeding applicable screening levels. It appears that impacts from the former gasoline service station and north adjacent release case are commingled and spread throughout the subject property. Impacts from the former gasoline service station appear to be attenuating since the last investigation with overall decreasing concentrations. It does not appear that the former dry-cleaning facility has impacted the subject property.

Based on the Subsurface Investigation, there is evidence of continued impacts of GRO, DRO, RRO, benzene, m&p-xylene, and vinyl chloride to the subsurface of the subject property and Partner recommends further investigation and/or remediation with respect to the former gasoline service station and documented north-adjacent release at this time. Partner recommends no further investigation with respect to the former dry-cleaning facility at this time.

TABLES

Table 1: Summary of Investigation Scope
8701 Greenwood Avenue North
Seattle, Washington 98103
Partner Project Number 20-293062.2
February 18, 2021

Boring Identification	Location	Terminal Depth (feet bgs)	Matrix Sampled	Sampling Depths* (feet bgs)	Target Analytes
B1	Central Portion of Proposed Play Area 3	10	Soil	<u>2</u> , 5, 7.5, 10	GRO/DRO/RRO, VOCs
			Groundwater	0-10	GRO/DRO/RRO, VOCs
B2	Central Portion of Proposed Play Area 2	15	Soil	<u>2</u> , 5, 10	GRO/DRO/RRO, VOCs
			Soil Gas	<u>1</u>	VOCs
			Groundwater	5-10	GRO/DRO/RRO, VOCs
B3	Central Portion of Former Dry Cleaning Facility	15	Soil	2, <u>5</u> , 10	GRO/DRO/RRO, VOCs
			Soil Gas	<u>2</u>	VOCs
			Groundwater	0-10	GRO/DRO/RRO, VOCs
B4	Central Portion of North Property Boundary	10	Soil	2, <u>5</u>	GRO/DRO/RRO, VOCs
			Soil Gas	<u>1</u>	VOCs
			Groundwater	0-10	GRO/DRO/RRO, VOCs
B5	Central Portion of Exterior Area of Suspected Impacted Soil	10	Soil	2, <u>5</u> , 10	GRO/DRO/RRO, VOCs
			Soil Gas	<u>2</u>	VOCs
			Groundwater	0-10	GRO/DRO/RRO, VOCs
SS1	South Portion of Interior Area of Suspected Impacted Soil	0.5	Sub-Slab Soil Gas	<u>0.5</u>	VOCs
SS2	Central Interior Area of Subject Property Building	0.5	Sub-Slab Soil Gas	<u>0.5</u>	VOCs
SS3	Northeast Interior Area of Subject Property Building	0.5	Sub-Slab Soil Gas	<u>0.5</u>	VOCs

Notes:

*Depths in **bold** analyzed for gasoline range organics (GRO) in accordance with Washington Department of Ecology (Ecology) Method NWTPH-Gx, for diesel-range organics (DRO) and residual-range organics (RRO) in accordance with Ecology Method NWTPH-Dx/Extended. Underlined depths analyzed for volatile organic compounds (VOCs) in accordance with Environmental Protection Agency (EPA) Method 8260D (soil and groundwater) or TO-15 (soil gas).

bgs = below ground surface

Table 2: Soil Sample GRO/DRO/RRO Laboratory Results
 8701 Greenwood Avenue North
 Seattle, Washington 98103
 Partner Project Number 20-293062.2
 February 18, 2021

Method	GRO/DRO/RRO via NWTPH-Gx/Dx/Extended					
Units	(mg/kg)					
Analyte	MTCA Method A ULU	B1-2	B2-2	B3-5	B4-5	B5-5
GRO	30	4.33	1.92 J	1.94 J	551	2.53 J
DRO	2,000	5.32	5.72	6.38	1,160	17.8
RRO	2,000	6.54 J	26.2	19.3	579	87.2

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], 2020)

Values in **bold** exceed laboratory Reporting Detection Limits (RDLs)

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

Yellow highlighted values exceed applicable cleanup level

Table 3: Soil Sample VOCs Laboratory Results
8701 Greenwood Avenue North
Seattle, Washington 98103
Partner Project Number 20-293062.2
February 18, 2021

EPA Method	VOCs via 8260D							
Units	(mg/kg)							
Analyte	MTCA Method A ULU	MTCA Method B Noncancer	MTCA Method B Cancer	B1-2	B2-2	B3-5	B4-5	B5-5
Benzene	0.03	320	18	<0.00163	<0.00158	<0.00196	<0.0250	0.00143 J
Ethylbenzene	6.0	8,000	NCL	0.00216 J	0.00213 J	0.00387 J	0.0318 J	0.0024 J
Isopropylbenzene	NCL	8,000	NCL	<0.00407	<0.00394	<0.00490	0.02 J	<0.00421
2-Butanone (MEK)	NCL	48,000	NCL	<0.163	<0.158	0.126 J	<2.50	<0.168
Naphthalene	5.0	1,600	NCL	0.0138 J	<0.0197	<0.0246	0.212 J	<0.0211
n-Propylbenzene	NCL	8,000	NCL	<0.00813	<0.00788	<0.00980	0.0262 J	<0.00841
Toluene	7.0	6,400	NCL	0.00374 J	0.00603 J	0.00798 J	0.104 J	0.00606 J
1,2,4-TMB	NCL	800	NCL	0.00635 J	0.00587 J	0.00657 J	0.112 J	0.00606 J
1,2,3-TMB	NCL	800	NCL	0.00365 J	<0.00788	<0.00980	<0.125	<0.00841
Total Xylenes	9.0	16,000	NCL	0.0101 J	0.0133	0.0135	0.218	0.0118
Other VOCs	Varies	Varies	Varies	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], 2020)

MTCA Method B = Soil cleanup levels when a Method A cleanup level does not exist (Ecology, MTCA, 2020)

TMB = trimethylbenzene

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

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

ND = not detected above laboratory MDLs

NCL = no cleanup level

Values in **bold** exceed laboratory RLs

Table 4: Groundwater Sample GRO/DRO/RRO Laboratory Results
 8701 Greenwood Avenue North
 Seattle, Washington 98103
 Partner Project Number 20-293062.2
 February 18, 2021

Method	GRO/DRO/RRO via NWTPH-Gx/Dx/Extended					
Units	(µg/L)					
Analyte	MTCA Method A ULU	B1-GW	B2-GW	B3-GW	B4-GW	B5-GW
GRO	800	290 B	1,630	454 B	444 B	226 B
DRO	500	334	265	159 J	1650 J	155 J
RRO	500	380	329	150 J	7,180	929

Notes:

GRO = gasoline-range organics (Gx)

DRO = diesel-range organics (Dx)

RRO = residual-range organics (Extended)

NWTPH = Northwest Total Petroleum Hydrocarbon

µg/L = micrograms per liter

ULU = unrestricted land use

MTCA Method A = groundwater cleanup levels for ULU (Washington State Department of Ecology [Ecology], Model Toxics Control Act [MTCA], 2020)

B = the same analyte is found in the associated blank

Values in **bold** exceed laboratory Reporting Detection Limit (RDL)

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

Yellow highlighted values exceed applicable cleanup level

Table 5: Groundwater Sample VOCs Laboratory Results
8701 Greenwood Avenue North
Seattle, Washington 98103
Partner Project Number 20-293062.2
February 18, 2021

EPA Method	VOCs via 8260D							
Units	(µg/L)							
Analyte	MTCA Method A ULU	MTCA Method B Noncancer	MTCA Method B Cancer	B1-GW	B2-GW	B3-GW	B4-GW	B5-GW
Acetone	NCL	7,200	NCL	6.95	16.7	9.21	4.54	4.16
Benzene	5.0	32	0.8	0.891	8.99	2.03	1.56	0.914
Chlorobenzene	NCL	160	NCL	0.054 J	<0.100	<0.100	<0.100	<0.100
1,4-Dichlorobenzene	NCL	560	8.1	0.101 J	<0.200	<0.200	<0.200	<0.200
cis-1,2-Dichlorobenzene	NCL	16	NCL	<0.100	0.25 J	<0.100	<0.100	<0.100
Ethylbenzene	700	800	NCL	8.61	60	16.5	13.9	9.49
Isopropylbenzene	NCL	800	NCL	0.203	1.25	0.335	0.343	0.211
2-Butanone (MEK)	NCL	4,800	NCL	<1.00	2.57 B	1.11 B	<1.00	<1.00
Methyl Tert-Butyl Ether	20	NCL	24	<0.0400	<0.0400	<0.0400	<0.0400	0.061
Naphthalene	160	160	NCL	0.313 J	2.39	0.839	46.5	3.69
n-Propylbenzene	NCL	800	NCL	1.31	7.61	2.12	1.98	1.48
Styrene	NCL	1,600	NCL	<0.500	<0.500	<0.500	0.253 J	<0.500
Toluene	1,000	640	NCL	20.9	66.8	43.6	34	22.6
1,2,4-TMB	NCL	80	NCL	9.12	55.5	15.5	14.3	6.57
1,2,3-TMB	NCL	80	NCL	1.46	10.1	2.59	2.38	1.12
Vinyl Chloride	0.2	24	0.029	<0.100	0.33 J	<0.100	<0.100	<0.100
1,3,5-TMB	NCL	80	NCL	2.47	13.8	3.7	3.69	1.33
Total Xylenes	1,000	1,600	NCL	60.6	194	113	93.7	56.7
Carbon Disulfide	NCL	800	NCL	<0.500	<0.500	0.189 J	<0.500	<0.500
n-Hexane	NCL	480	NCL	0.09 J	0.18 J	0.116 J	<0.200	0.137 J
Other VOCs	Varies	Varies	Varies	ND	ND	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],

MTCA Method B = Soil cleanup levels when a Method A cleanup level does not exist (Ecology, MTCA, 2020)

PCE = tetrachloroethene

TMB = trimethylbenzene

NCL = no cleanup level

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

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

B = the same analyte is found in the associated blank

ND = not detected above laboratory RDLs

Values in **bold** exceed laboratory RDLs

Yellow highlighted values exceed MTCA Method B Cancer screening levels

Orange highlighted values exceed MTCA Method B Cancer and Noncancer screening levels, and Method A screening levels

Table 6: Soil Gas Sample VOCs Laboratory Results
8701 Greenwood Avenue North
Seattle, Washington 98103
Partner Project Number 20-293062.2
February 18, 2021

EPA Method Units	VOCs via TO-15 (µg/m ³)								
	MTCA Method B Noncancer	MTCA Method B Cancer	B2-SG	B3-SG	B4-SG	B5-SG	SS1	SS2	SS3
Acetone	NSL	NSL	29	32.6	18.3	27.1	471	190	182
Benzene	460	11	425	770	164	98.1	22	12.7	5.69
Bromodichloromethane	NSL	2.3	2.95	<1.34	4.7	<1.34	<1.34	<1.34	<1.34
Carbon Disulfide	11,000	NSL	4.51	<0.622	<0.622	13.3	0.697	<0.622	1.15
Chloromethane	1,400	NSL	1.9	3.37	98.9	2.11	0.485	<0.413	0.448
Cyclohexane	NSL	NSL	50.3	228	185	83.7	6.65	11	3.24
Chlorodibromomethane	NSL	NSL	<1.70	2.95	2.81	<1.70	<1.70	<1.70	<1.70
1,4-Dioxane	NSL	NSL	<0.721	<0.721	<0.721	<0.721	0.843	<0.721	1.35
Ethanol	NSL	NSL	58.1	129	25.1	20.7	215	354	243
Ethylbenzene	15,000	NSL	902	949	219	114	1.24	4.68	1.41
4-Ethyltoluene	NSL	NSL	358	246	77.1	46.8	1.56	1.09	<0.982
Trichlorofluoromethane	11,000	NSL	1.56	1.55	1.43	1.48	3.37	5.84	2.69
Dichlorodifluoromethane	1,500	NSL	2.09	2.57	2.2	2.46	2.65	2.73	2.73
Heptane	NSL	NSL	285	822	328	84.3	8.34	10.6	2.74
N-Hexane	11,000	NSL	225	532	740	252	17.9	22.1	5.92
Isopropylbenzene	6,100	NSL	22.2	38.8	<0.983	<0.983	<0.983	<0.983	<0.983
Methylene Chloride	9,100	NSL	1.85	<0.694	<0.694	<0.694	<0.694	<0.694	<0.694
2-Butanone (MEK)	76,000	NSL	7.49	6.4	<3.69	7.96	4.9	6.05	8.11
2-Propanol	NSL	NSL	<3.07	9.73	4.35	4.03	59.2	38.1	41.3
Toluene	76,000	NSL	4,970	8,700	1,520	742	12.2	11.5	7.91
1,2,4-TMB	910	NSL	239	71.2	39.7	32.1	1.93	5.74	1.63
1,3,5-TMB	NSL	NSL	130	44.5	24.9	15.6	<0.982	1.72	<0.982
2,2,4-Trimethylpentane	NSL	NSL	124	738	417	176	<0.934	1.13	1.21
m&p-Xylene	1,500	NSL	4,250	3,260	789	486	5.72	16.2	6.07
o-Xylene	1,500	NSL	941	720	202	125	1.91	4.42	2.15
1,1-DFA (tracer gas)	NSL	NSL	5,380	174	<2.70	5.94	2.84	<2.70	3
Other VOCs	Varies	Varies	ND	ND	ND	ND	ND	ND	ND

Notes:

VOCs = volatile organic compounds

EPA = United States Environmental Protection Agency

MTCA Method B = Soil gas screening levels for cancer and noncancer risk (Washington State Department of Ecology [Ecology], Model Toxics Control Act [MTCA], 2020)

NSL = no screening level

Values in **bold** exceed laboratory reporting detection limit (RDL)

< = not detected above indicated RDL

TMB = trimethylbenzene

DFA = difluoroethane

ND = not detected above laboratory RDLs

Yellow highlighted values exceed MTCA Method B Cancer screening levels

Orange highlighted values exceed MTCA Method B Cancer and Noncancer screening levels

FIGURES


PARTNER



PARTNER
 3607 1st Avenue NW
 Seattle, Washington 98107
 Project Number: 20-293062.2

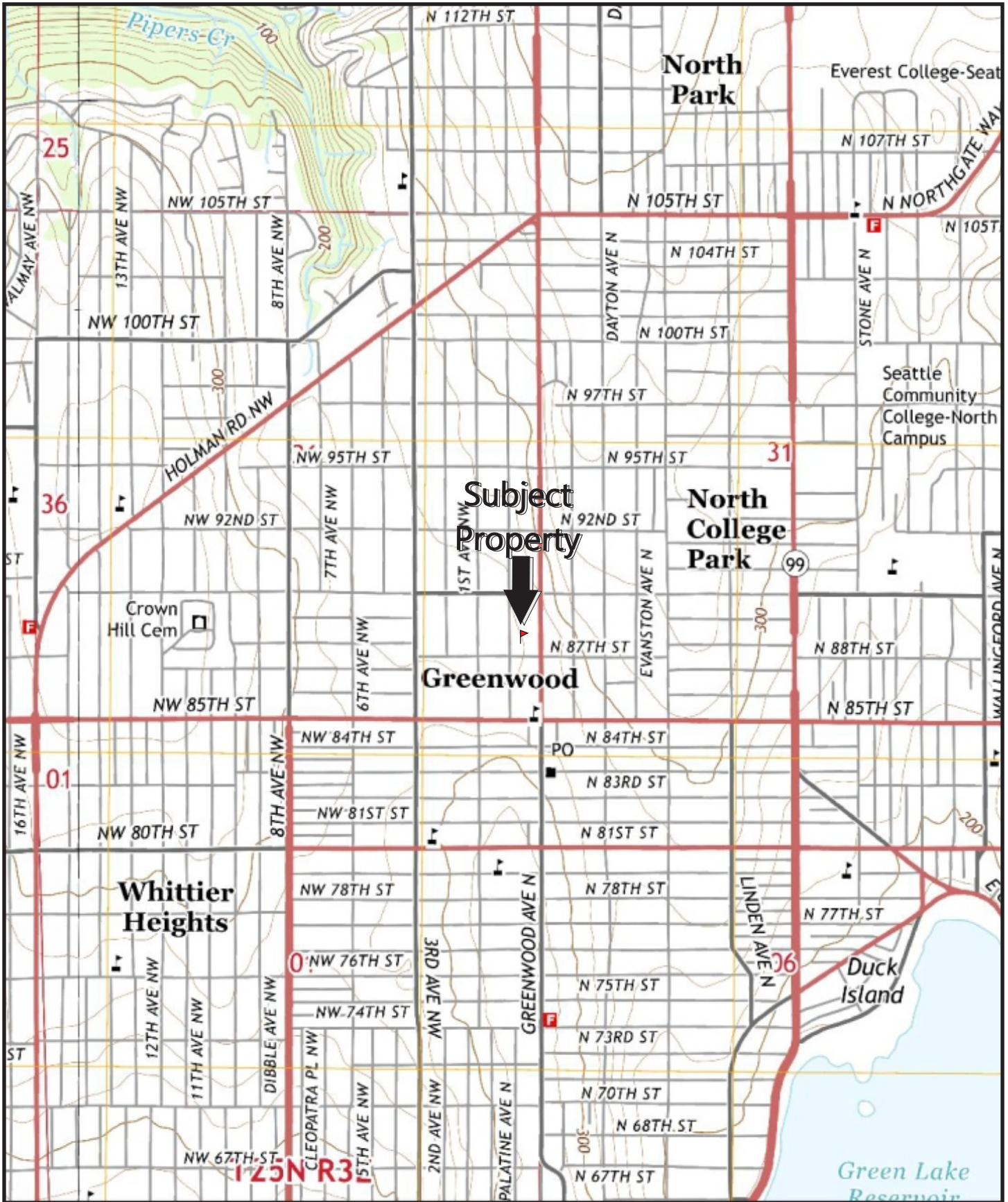


Legend

Subject Property 

Site Vicinity Map

Figure	Prepared By	Date
1	B. Godbois	March 2021
8701 Greenwood Avenue North Seattle, Washington 98103		



PARTNER

3607 1st Avenue NW
Seattle, Washington 98107

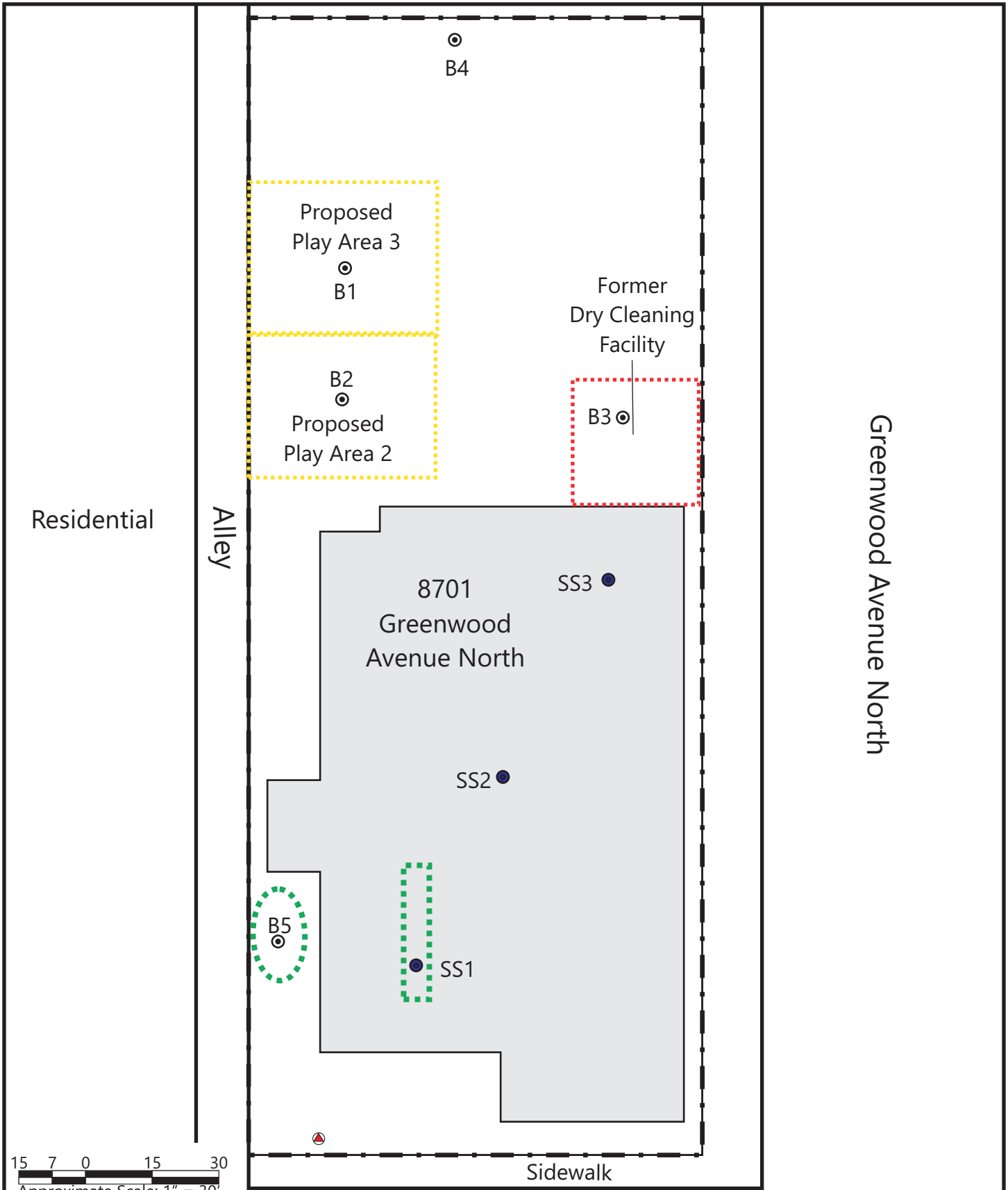
Project Number: 20-293062.2



USGS Seattle North, Washington
Quadrangle Version: 2014

Topographic Map

Figure	Prepared By	Date
2	B. Godbois	March 2021
8701 Greenwood Avenue North Seattle, Washington 98103		



15 7 0 15 30
 Approximate Scale: 1" = 30'

PARTNER

3607 1st Avenue NW
 Seattle, Washington 98107

Project Number: 20-293062.2



- Subject Property
- Boring Location
- Monitoring Well

Legend

- Sub-Slab Soil Gas Probe Location
- Areas of Suspected Impacted Soil

Sample Location Map

Figure	Prepared By	Date
3	B. Godbois	March 2021

8701 Greenwood Avenue North
 Seattle, Washington 98103

APPENDIX A: BORING LOGS

Boring Identification:		B1				
Boring Location:		Central Portion of Proposed Play Area 3			Date Started:	2/18/2021
Site Address:		8701 Greenwood Avenue North			Date Completed:	2/18/2021
		Seattle, Washington 98103			Depth to Groundwater (feet bgs):	3'
Project Number:		20-293062.2			Field Technician:	B. Godbois
Drill Rig Type:		Truck-mounted AMS PowerProbe 9500 PTO direct push rig			PARTNER	
Sampling Equipment:		Acetate liners, plastic syringes, VOAs, glass jars			3607 1st Avenue NW	
Borehole Diameter:		2.25"			Seattle, Washington 98107	
Depth	Sample	PID	USCS	Description	Notes	
1	B1-2	0.0	ML	Sandy Silt with Gravel: brown, moist	3" Asphalt at surface, 3" base gravel under asphalt	
2		0.0				
3		0.0				
4		0.0				
5	B1-5	0.0	ML	Silt: black, moist, soft		
6		0.0	ML	Sandy Silt: gray, saturated, soft		
7	B1-7.5	0.0	ML	Silt: black, saturated, soft	Water initially at 7' then rose to 3' in temp well	
8	B1-10	0.0	P	Peat: brown, soft, saturated		
9		0.0				
10		0.0				
11					Boring terminated, backfilled with hydrated bentonite, and capped with asphalt upon completion of sampling	
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						

Boring Identification:		B2				
Boring Location:		Central Portion of Proposed Play Area 2			Date Started:	2/18/2021
Site Address:		8701 Greenwood Avenue North			Date Completed:	2/18/2021
		Seattle, Washington 98103			Depth to Groundwater (feet bgs):	2'
Project Number:		20-293062.2			Field Technician:	B. Godbois
Drill Rig Type:		Truck-mounted AMS PowerProbe 9500 PTO direct push rig			PARTNER	
Sampling Equipment:		Acetate liners, plastic syringes, VOAs, glass jars			3607 1st Avenue NW	
Borehole Diameter:		2.25"			Seattle, Washington 98107	
Depth	Sample	PID	USCS	Description	Notes	
1	B2-2	0.0	ML	Sandy Silt with Gravel: brown, moist	3" Asphalt at surface, 3" base gravel under asphalt. Soil gas probe installed at 1'	
2		0.0				
3		0.0				
4		0.0				
5	B2-5	0.0	ML	Silt: black, moist, soft		
6		0.0	ML	Sandy Silt: gray, saturated, soft		
7		0.0	ML	Silt: black, saturated, soft		
8		0.0	P	Peat: brown, soft, moist		
9		0.0				
10	B2-10	0.0	ML	Silt: light gray/yellow, chalky, medium-dense		
11		0.0	SM	Silty Sand: gray, saturated, medium-dense	Water initially at 11' then rose to 2' in temp well	
12		0.0				
13		0.0				
14		0.0				
15		0.0				
16					Boring terminated, backfilled with hydrated bentonite, and capped with asphalt upon completion of sampling	
17						
18						
19						
20						
21						
22						
23						
24						
25						

Boring Identification:		B3				
Boring Location:		Central Portion of Former Dry Cleaning Facility		Date Started:	2/18/2021	
Site Address:		8701 Greenwood Avenue North		Date Completed:	2/18/2021	
		Seattle, Washington 98103		Depth to Groundwater (feet bgs):	3'	
Project Number:		20-293062.2		Field Technician:	B. Godbois	
Drill Rig Type:		Truck-mounted AMS PowerProbe 9500 PTO direct push rig			PARTNER	
Sampling Equipment:		Acetate liners, plastic syringes, VOAs, glass jars				
Borehole Diameter:		2.25"			3607 1st Avenue NW Seattle, Washington 98107	
Depth	Sample	PID	USCS	Description	Notes	
1		0.0	SM	Silty Sand: gray, moist	3" Asphalt at surface, 3" base gravel under asphalt.	
2	B3-2	0.0	ML	Sandy Silt: gray, moist, soft	Soil gas probe installed at 2'	
3		0.0				
4		0.0				
5	B3-5	0.0	ML	Silt: black, moist, soft		
6		0.0	ML	Sandy Silt: gray, saturated, soft		
7		0.0	ML	Silt: black, saturated, soft		
8		0.0	P	Peat: brown, soft, moist		
9		0.0				
10	B3-10	0.0	ML	Sandy Silt: gray, saturated, soft	Water initially at 10' then rose to 3' in temp well	
11		0.0				
12		0.0	P	Peat: brown, soft, moist		
13		0.0				
14		0.0	ML	Silt: light gray/yellow, chalky, medium-dense		
15		0.0	SM	Silty Sand: gray, saturated, medium-dense		
16					Boring terminated, backfilled with hydrated bentonite, and capped with asphalt upon completion of sampling	
17						
18						
19						
20						
21						
22						
23						
24						
25						

Boring Identification:		B4				
Boring Location:		Central Portion of North Property Boundary		Date Started:	2/18/2021	
Site Address:		8701 Greenwood Avenue North		Date Completed:	2/18/2021	
		Seattle, Washington 98103		Depth to Groundwater (feet bgs):	2'	
Project Number:		20-293062.2		Field Technician:	B. Godbois	
Drill Rig Type:		Truck-mounted AMS PowerProbe 9500 PTO direct push rig			PARTNER	
Sampling Equipment:		Acetate liners, plastic syringes, VOAs, glass jars			3607 1st Avenue NW	
Borehole Diameter:		2.25"			Seattle, Washington 98107	
Depth	Sample	PID	USCS	Description	Notes	
1	B4-2	0.0	ML	Sandy Silt: gray, moist, soft	3" Asphalt at surface, 3" base gravel under asphalt. Soil gas probe installed at 1'	
2		0.0				
3		0.0				
4	B4-5	0.0	P	Peat: brown, soft, moist	Water initially at 6' then rose to 2' in temp well.	
5		0.0				
6		0.0	P	Peat: brown, soft, saturated		
7		0.0				
8		0.0				
9		0.0				
10		0.0				
11					Boring terminated, backfilled with hydrated bentonite, and capped with asphalt upon completion of sampling	
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						

Boring Identification:		B5				
Boring Location:		Central Portion of Exterior Area of Suspected Impacted Soil			Date Started:	2/18/2021
Site Address:		8701 Greenwood Avenue North			Date Completed:	2/18/2021
		Seattle, Washington 98103			Depth to Groundwater (feet bgs):	3'
Project Number:		20-293062.2			Field Technician:	B. Godbois
Drill Rig Type:		Truck-mounted AMS PowerProbe 9500 PTO direct push rig			PARTNER	
Sampling Equipment:		Acetate liners, plastic syringes, VOAs, glass jars			3607 1st Avenue NW	
Borehole Diameter:		2.25"			Seattle, Washington 98107	
Depth	Sample	PID	USCS	Description	Notes	
1	B5-2	0.0	SM	Silty Sand with gravel: gray, moist	3" Asphalt at surface, 3" base gravel under asphalt.	
2		0.0			Soil gas probe installed at 2'	
3		0.0				
4	B5-5	0.0	P	Peat: brown, soft, moist		
5		0.0				
6		0.0	GM	Gravel with Silt and Sand: brown, saturated		
7	B5-10	0.0	P	Peat: brown, soft, saturated	Water initially at 7.5' then rose to 3' in temp well	
8		0.0				
9		0.0				
10		0.0				
11					Boring terminated, backfilled with hydrated bentonite, and capped with asphalt upon completion of sampling	
12						
13						
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24						
25						

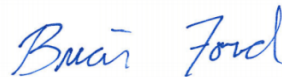
APPENDIX B: LABORATORY ANALYTICAL REPORTS

PARTNER

Partner Engineering & Science - WA

Sample Delivery Group: L1318609
Samples Received: 02/23/2021
Project Number: 20-293062.2
Description:
Site: 8701 GREENWOOD AVE N SEATTLE
Report To: Brian Godbois
3607 1st Avenue NW
Seattle, WA 98107










Entire Report Reviewed By:



Brian Ford
Project Manager

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



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SAMPLE SUMMARY



B1-2 L1318609-01 Solid

Collected by
Brian Godbois
Collected date/time
02/18/21 09:50
Received date/time
02/23/21 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1624645	1	02/24/21 12:06	02/24/21 12:15	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1624490	31.3	02/23/21 18:48	02/24/21 03:12	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1624549	1.25	02/23/21 18:48	02/23/21 23:12	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1623857	1	02/23/21 17:20	02/24/21 05:27	JN	Mt. Juliet, TN

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Cp

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Tc

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Sr

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Qc

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Gl

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Al

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B2-2 L1318609-02 Solid

Collected by
Brian Godbois
Collected date/time
02/18/21 10:20
Received date/time
02/23/21 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1624645	1	02/24/21 12:06	02/24/21 12:15	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1624490	32	02/23/21 18:48	02/24/21 03:34	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1624549	1.28	02/23/21 18:48	02/23/21 23:31	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1623857	1	02/23/21 17:20	02/24/21 05:40	JN	Mt. Juliet, TN

B3-5 L1318609-03 Solid

Collected by
Brian Godbois
Collected date/time
02/18/21 11:15
Received date/time
02/23/21 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1624645	1	02/24/21 12:06	02/24/21 12:15	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1624490	40.5	02/23/21 18:48	02/24/21 04:00	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1624549	1.62	02/23/21 18:48	02/23/21 23:50	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1623857	1	02/23/21 17:20	02/24/21 05:13	JN	Mt. Juliet, TN

B4-5 L1318609-04 Solid

Collected by
Brian Godbois
Collected date/time
02/18/21 12:15
Received date/time
02/23/21 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1624645	1	02/24/21 12:06	02/24/21 12:15	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1624490	61	02/23/21 18:48	02/24/21 04:22	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1624549	2.44	02/23/21 18:48	02/24/21 00:09	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1623857	1	02/23/21 17:20	02/24/21 05:54	JN	Mt. Juliet, TN

B5-5 L1318609-05 Solid

Collected by
Brian Godbois
Collected date/time
02/18/21 12:45
Received date/time
02/23/21 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1624645	1	02/24/21 12:06	02/24/21 12:15	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1624490	36.5	02/23/21 18:48	02/24/21 04:44	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1624549	1.46	02/23/21 18:48	02/24/21 00:28	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1623857	1	02/23/21 17:20	02/24/21 06:07	JN	Mt. Juliet, TN

B1-GW L1318609-06 GW

Collected by
Brian Godbois
Collected date/time
02/18/21 10:10
Received date/time
02/23/21 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1624677	1	02/24/21 20:08	02/24/21 20:08	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1624535	1	02/24/21 00:08	02/24/21 00:08	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1625020	1	02/24/21 20:12	02/24/21 20:12	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1624236	1	02/23/21 23:36	02/24/21 10:23	DMG	Mt. Juliet, TN

SAMPLE SUMMARY



B2-GW L1318609-07 GW

Collected by
Brian Godbois

Collected date/time
02/18/21 10:55

Received date/time
02/23/21 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1624677	1	02/24/21 20:34	02/24/21 20:34	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1624535	1	02/24/21 00:27	02/24/21 00:27	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1625020	5	02/25/21 01:15	02/25/21 01:15	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1624236	1	02/23/21 23:36	02/24/21 10:43	DMG	Mt. Juliet, TN

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B3-GW L1318609-08 GW

Collected by
Brian Godbois

Collected date/time
02/18/21 11:30

Received date/time
02/23/21 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1624677	1	02/24/21 20:57	02/24/21 20:57	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1624535	1	02/24/21 00:46	02/24/21 00:46	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1625020	1	02/24/21 20:30	02/24/21 20:30	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1624236	1	02/23/21 23:36	02/24/21 11:03	DMG	Mt. Juliet, TN

B4-GW L1318609-09 GW

Collected by
Brian Godbois

Collected date/time
02/18/21 12:20

Received date/time
02/23/21 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1624677	1	02/24/21 21:20	02/24/21 21:20	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1624535	1	02/24/21 01:05	02/24/21 01:05	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1625020	1	02/24/21 20:50	02/24/21 20:50	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1624236	10	02/23/21 23:36	02/25/21 07:10	AEG	Mt. Juliet, TN

B5-GW L1318609-10 GW

Collected by
Brian Godbois

Collected date/time
02/18/21 13:05

Received date/time
02/23/21 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1624677	1	02/24/21 21:43	02/24/21 21:43	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1624535	1	02/24/21 01:24	02/24/21 01:24	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1625020	1	02/24/21 21:09	02/24/21 21:09	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG1624236	1	02/23/21 23:36	02/25/21 06:50	DMG	Mt. Juliet, TN



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

Brian Ford
Project Manager

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



Collected date/time: 02/18/21 09:50

L1318609

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	85.7		1	02/24/2021 12:15	WG1624645

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	4.33		1.38	4.07	31.3	02/24/2021 03:12	WG1624490
(S) a,a,a-Trifluorotoluene(FID)	114			77.0-120		02/24/2021 03:12	WG1624490

3 Ss

4 Cn

5 Sr

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0593	0.0813	1.25	02/23/2021 23:12	WG1624549
Acrylonitrile	U		0.00586	0.0203	1.25	02/23/2021 23:12	WG1624549
Benzene	U		0.000759	0.00163	1.25	02/23/2021 23:12	WG1624549
Bromobenzene	U		0.00147	0.0203	1.25	02/23/2021 23:12	WG1624549
Bromodichloromethane	U		0.00118	0.00407	1.25	02/23/2021 23:12	WG1624549
Bromoform	U		0.00190	0.0407	1.25	02/23/2021 23:12	WG1624549
Bromomethane	U		0.00320	0.0203	1.25	02/23/2021 23:12	WG1624549
n-Butylbenzene	U		0.00853	0.0203	1.25	02/23/2021 23:12	WG1624549
sec-Butylbenzene	U		0.00468	0.0203	1.25	02/23/2021 23:12	WG1624549
tert-Butylbenzene	U		0.00317	0.00813	1.25	02/23/2021 23:12	WG1624549
Carbon tetrachloride	U		0.00146	0.00813	1.25	02/23/2021 23:12	WG1624549
Chlorobenzene	U		0.000342	0.00407	1.25	02/23/2021 23:12	WG1624549
Chlorodibromomethane	U		0.000995	0.00407	1.25	02/23/2021 23:12	WG1624549
Chloroethane	U		0.00276	0.00813	1.25	02/23/2021 23:12	WG1624549
Chloroform	U		0.00168	0.00407	1.25	02/23/2021 23:12	WG1624549
Chloromethane	U		0.00707	0.0203	1.25	02/23/2021 23:12	WG1624549
2-Chlorotoluene	U		0.00140	0.00407	1.25	02/23/2021 23:12	WG1624549
4-Chlorotoluene	U		0.000732	0.00813	1.25	02/23/2021 23:12	WG1624549
1,2-Dibromo-3-Chloropropane	U		0.00635	0.0407	1.25	02/23/2021 23:12	WG1624549
1,2-Dibromoethane	U		0.00105	0.00407	1.25	02/23/2021 23:12	WG1624549
Dibromomethane	U		0.00122	0.00813	1.25	02/23/2021 23:12	WG1624549
1,2-Dichlorobenzene	U		0.000690	0.00813	1.25	02/23/2021 23:12	WG1624549
1,3-Dichlorobenzene	U		0.000975	0.00813	1.25	02/23/2021 23:12	WG1624549
1,4-Dichlorobenzene	U		0.00114	0.00813	1.25	02/23/2021 23:12	WG1624549
Dichlorodifluoromethane	U		0.00261	0.00407	1.25	02/23/2021 23:12	WG1624549
1,1-Dichloroethane	U		0.000798	0.00407	1.25	02/23/2021 23:12	WG1624549
1,2-Dichloroethane	U		0.00105	0.00407	1.25	02/23/2021 23:12	WG1624549
1,1-Dichloroethene	U		0.000984	0.00407	1.25	02/23/2021 23:12	WG1624549
cis-1,2-Dichloroethene	U		0.00119	0.00407	1.25	02/23/2021 23:12	WG1624549
trans-1,2-Dichloroethene	U		0.00169	0.00813	1.25	02/23/2021 23:12	WG1624549
1,2-Dichloropropane	U		0.00231	0.00813	1.25	02/23/2021 23:12	WG1624549
1,1-Dichloropropene	U		0.00131	0.00407	1.25	02/23/2021 23:12	WG1624549
1,3-Dichloropropane	U		0.000814	0.00813	1.25	02/23/2021 23:12	WG1624549
cis-1,3-Dichloropropene	U		0.00123	0.00407	1.25	02/23/2021 23:12	WG1624549
trans-1,3-Dichloropropene	U		0.00186	0.00813	1.25	02/23/2021 23:12	WG1624549
2,2-Dichloropropane	U		0.00225	0.00407	1.25	02/23/2021 23:12	WG1624549
Di-isopropyl ether	U		0.000667	0.00163	1.25	02/23/2021 23:12	WG1624549
Ethylbenzene	0.00216	J	0.00120	0.00407	1.25	02/23/2021 23:12	WG1624549
Hexachloro-1,3-butadiene	U		0.00975	0.0407	1.25	02/23/2021 23:12	WG1624549
Isopropylbenzene	U		0.000690	0.00407	1.25	02/23/2021 23:12	WG1624549
p-Isopropyltoluene	U		0.00415	0.00813	1.25	02/23/2021 23:12	WG1624549
2-Butanone (MEK)	U		0.103	0.163	1.25	02/23/2021 23:12	WG1624549
Methylene Chloride	U		0.0108	0.0407	1.25	02/23/2021 23:12	WG1624549
4-Methyl-2-pentanone (MIBK)	U		0.00371	0.0407	1.25	02/23/2021 23:12	WG1624549

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 02/18/21 09:50

L1318609

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000570	0.00163	1.25	02/23/2021 23:12	WG1624549
Naphthalene	0.0138	U	0.00793	0.0203	1.25	02/23/2021 23:12	WG1624549
n-Propylbenzene	U		0.00155	0.00813	1.25	02/23/2021 23:12	WG1624549
Styrene	U		0.000372	0.0203	1.25	02/23/2021 23:12	WG1624549
1,1,1,2-Tetrachloroethane	U		0.00155	0.00407	1.25	02/23/2021 23:12	WG1624549
1,1,2,2-Tetrachloroethane	U		0.00113	0.00407	1.25	02/23/2021 23:12	WG1624549
1,1,2-Trichlorotrifluoroethane	U		0.00123	0.00407	1.25	02/23/2021 23:12	WG1624549
Tetrachloroethene	U		0.00146	0.00407	1.25	02/23/2021 23:12	WG1624549
Toluene	0.00374	U	0.00212	0.00813	1.25	02/23/2021 23:12	WG1624549
1,2,3-Trichlorobenzene	U		0.0119	0.0203	1.25	02/23/2021 23:12	WG1624549
1,2,4-Trichlorobenzene	U		0.00715	0.0203	1.25	02/23/2021 23:12	WG1624549
1,1,1-Trichloroethane	U		0.00150	0.00407	1.25	02/23/2021 23:12	WG1624549
1,1,2-Trichloroethane	U		0.000970	0.00407	1.25	02/23/2021 23:12	WG1624549
Trichloroethene	U		0.000949	0.00163	1.25	02/23/2021 23:12	WG1624549
Trichlorofluoromethane	U		0.00134	0.00407	1.25	02/23/2021 23:12	WG1624549
1,2,3-Trichloropropane	U		0.00263	0.0203	1.25	02/23/2021 23:12	WG1624549
1,2,4-Trimethylbenzene	0.00635	U	0.00257	0.00813	1.25	02/23/2021 23:12	WG1624549
1,2,3-Trimethylbenzene	0.00365	U	0.00257	0.00813	1.25	02/23/2021 23:12	WG1624549
Vinyl chloride	U		0.00189	0.00407	1.25	02/23/2021 23:12	WG1624549
1,3,5-Trimethylbenzene	U		0.00325	0.00813	1.25	02/23/2021 23:12	WG1624549
Xylenes, Total	0.0101	U	0.00143	0.0106	1.25	02/23/2021 23:12	WG1624549
(S) Toluene-d8	102			75.0-131		02/23/2021 23:12	WG1624549
(S) 4-Bromofluorobenzene	99.3			67.0-138		02/23/2021 23:12	WG1624549
(S) 1,2-Dichloroethane-d4	105			70.0-130		02/23/2021 23:12	WG1624549

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

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	5.32		1.55	4.67	1	02/24/2021 05:27	WG1623857
Residual Range Organics (RRO)	6.54	U	3.89	11.7	1	02/24/2021 05:27	WG1623857
(S) o-Terphenyl	70.7			18.0-148		02/24/2021 05:27	WG1623857



Collected date/time: 02/18/21 10:20

L1318609

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.5		1	02/24/2021 12:15	WG1624645

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	1.92	J	1.33	3.94	32	02/24/2021 03:34	WG1624490
(S) a,a,a-Trifluorotoluene(FID)	114			77.0-120		02/24/2021 03:34	WG1624490

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0575	0.0788	1.28	02/23/2021 23:31	WG1624549
Acrylonitrile	U		0.00569	0.0197	1.28	02/23/2021 23:31	WG1624549
Benzene	U		0.000736	0.00158	1.28	02/23/2021 23:31	WG1624549
Bromobenzene	U		0.00142	0.0197	1.28	02/23/2021 23:31	WG1624549
Bromodichloromethane	U		0.00114	0.00394	1.28	02/23/2021 23:31	WG1624549
Bromoform	U		0.00185	0.0394	1.28	02/23/2021 23:31	WG1624549
Bromomethane	U		0.00310	0.0197	1.28	02/23/2021 23:31	WG1624549
n-Butylbenzene	U		0.00827	0.0197	1.28	02/23/2021 23:31	WG1624549
sec-Butylbenzene	U		0.00454	0.0197	1.28	02/23/2021 23:31	WG1624549
tert-Butylbenzene	U		0.00308	0.00788	1.28	02/23/2021 23:31	WG1624549
Carbon tetrachloride	U		0.00142	0.00788	1.28	02/23/2021 23:31	WG1624549
Chlorobenzene	U		0.000331	0.00394	1.28	02/23/2021 23:31	WG1624549
Chlorodibromomethane	U		0.000964	0.00394	1.28	02/23/2021 23:31	WG1624549
Chloroethane	U		0.00268	0.00788	1.28	02/23/2021 23:31	WG1624549
Chloroform	U		0.00162	0.00394	1.28	02/23/2021 23:31	WG1624549
Chloromethane	U		0.00685	0.0197	1.28	02/23/2021 23:31	WG1624549
2-Chlorotoluene	U		0.00137	0.00394	1.28	02/23/2021 23:31	WG1624549
4-Chlorotoluene	U		0.000709	0.00788	1.28	02/23/2021 23:31	WG1624549
1,2-Dibromo-3-Chloropropane	U		0.00614	0.0394	1.28	02/23/2021 23:31	WG1624549
1,2-Dibromoethane	U		0.00102	0.00394	1.28	02/23/2021 23:31	WG1624549
Dibromomethane	U		0.00118	0.00788	1.28	02/23/2021 23:31	WG1624549
1,2-Dichlorobenzene	U		0.000669	0.00788	1.28	02/23/2021 23:31	WG1624549
1,3-Dichlorobenzene	U		0.000945	0.00788	1.28	02/23/2021 23:31	WG1624549
1,4-Dichlorobenzene	U		0.00110	0.00788	1.28	02/23/2021 23:31	WG1624549
Dichlorodifluoromethane	U		0.00254	0.00394	1.28	02/23/2021 23:31	WG1624549
1,1-Dichloroethane	U		0.000773	0.00394	1.28	02/23/2021 23:31	WG1624549
1,2-Dichloroethane	U		0.00102	0.00394	1.28	02/23/2021 23:31	WG1624549
1,1-Dichloroethene	U		0.000955	0.00394	1.28	02/23/2021 23:31	WG1624549
cis-1,2-Dichloroethene	U		0.00116	0.00394	1.28	02/23/2021 23:31	WG1624549
trans-1,2-Dichloroethene	U		0.00164	0.00788	1.28	02/23/2021 23:31	WG1624549
1,2-Dichloropropane	U		0.00224	0.00788	1.28	02/23/2021 23:31	WG1624549
1,1-Dichloropropene	U		0.00128	0.00394	1.28	02/23/2021 23:31	WG1624549
1,3-Dichloropropane	U		0.000789	0.00788	1.28	02/23/2021 23:31	WG1624549
cis-1,3-Dichloropropene	U		0.00119	0.00394	1.28	02/23/2021 23:31	WG1624549
trans-1,3-Dichloropropene	U		0.00180	0.00788	1.28	02/23/2021 23:31	WG1624549
2,2-Dichloropropane	U		0.00218	0.00394	1.28	02/23/2021 23:31	WG1624549
Di-isopropyl ether	U		0.000646	0.00158	1.28	02/23/2021 23:31	WG1624549
Ethylbenzene	0.00213	J	0.00116	0.00394	1.28	02/23/2021 23:31	WG1624549
Hexachloro-1,3-butadiene	U		0.00945	0.0394	1.28	02/23/2021 23:31	WG1624549
Isopropylbenzene	U		0.000669	0.00394	1.28	02/23/2021 23:31	WG1624549
p-Isopropyltoluene	U		0.00401	0.00788	1.28	02/23/2021 23:31	WG1624549
2-Butanone (MEK)	U		0.100	0.158	1.28	02/23/2021 23:31	WG1624549
Methylene Chloride	U		0.0105	0.0394	1.28	02/23/2021 23:31	WG1624549
4-Methyl-2-pentanone (MIBK)	U		0.00359	0.0394	1.28	02/23/2021 23:31	WG1624549

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 02/18/21 10:20

L1318609

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000551	0.00158	1.28	02/23/2021 23:31	WG1624549
Naphthalene	U		0.00769	0.0197	1.28	02/23/2021 23:31	WG1624549
n-Propylbenzene	U		0.00150	0.00788	1.28	02/23/2021 23:31	WG1624549
Styrene	U		0.000361	0.0197	1.28	02/23/2021 23:31	WG1624549
1,1,1,2-Tetrachloroethane	U		0.00149	0.00394	1.28	02/23/2021 23:31	WG1624549
1,1,2,2-Tetrachloroethane	U		0.00110	0.00394	1.28	02/23/2021 23:31	WG1624549
1,1,2-Trichlorotrifluoroethane	U		0.00119	0.00394	1.28	02/23/2021 23:31	WG1624549
Tetrachloroethene	U		0.00142	0.00394	1.28	02/23/2021 23:31	WG1624549
Toluene	0.00603	J	0.00204	0.00788	1.28	02/23/2021 23:31	WG1624549
1,2,3-Trichlorobenzene	U		0.0115	0.0197	1.28	02/23/2021 23:31	WG1624549
1,2,4-Trichlorobenzene	U		0.00693	0.0197	1.28	02/23/2021 23:31	WG1624549
1,1,1-Trichloroethane	U		0.00145	0.00394	1.28	02/23/2021 23:31	WG1624549
1,1,2-Trichloroethane	U		0.000940	0.00394	1.28	02/23/2021 23:31	WG1624549
Trichloroethene	U		0.000921	0.00158	1.28	02/23/2021 23:31	WG1624549
Trichlorofluoromethane	U		0.00130	0.00394	1.28	02/23/2021 23:31	WG1624549
1,2,3-Trichloropropane	U		0.00255	0.0197	1.28	02/23/2021 23:31	WG1624549
1,2,4-Trimethylbenzene	0.00587	J	0.00249	0.00788	1.28	02/23/2021 23:31	WG1624549
1,2,3-Trimethylbenzene	U		0.00249	0.00788	1.28	02/23/2021 23:31	WG1624549
Vinyl chloride	U		0.00182	0.00394	1.28	02/23/2021 23:31	WG1624549
1,3,5-Trimethylbenzene	U		0.00315	0.00788	1.28	02/23/2021 23:31	WG1624549
Xylenes, Total	0.0133		0.00139	0.0102	1.28	02/23/2021 23:31	WG1624549
(S) Toluene-d8	100			75.0-131		02/23/2021 23:31	WG1624549
(S) 4-Bromofluorobenzene	95.8			67.0-138		02/23/2021 23:31	WG1624549
(S) 1,2-Dichloroethane-d4	101			70.0-130		02/23/2021 23:31	WG1624549

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

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	5.72		1.50	4.52	1	02/24/2021 05:40	WG1623857
Residual Range Organics (RRO)	26.2		3.76	11.3	1	02/24/2021 05:40	WG1623857
(S) o-Terphenyl	63.8			18.0-148		02/24/2021 05:40	WG1623857



Collected date/time: 02/18/21 11:15

L1318609

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.5		1	02/24/2021 12:15	WG1624645

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	1.94	J	1.66	4.90	40.5	02/24/2021 04:00	WG1624490
(S) a,a,a-Trifluorotoluene(FID)	114			77.0-120		02/24/2021 04:00	WG1624490

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0715	0.0980	1.62	02/23/2021 23:50	WG1624549
Acrylonitrile	U		0.00708	0.0246	1.62	02/23/2021 23:50	WG1624549
Benzene	U		0.000916	0.00196	1.62	02/23/2021 23:50	WG1624549
Bromobenzene	U		0.00177	0.0246	1.62	02/23/2021 23:50	WG1624549
Bromodichloromethane	U		0.00142	0.00490	1.62	02/23/2021 23:50	WG1624549
Bromoform	U		0.00230	0.0490	1.62	02/23/2021 23:50	WG1624549
Bromomethane	U		0.00386	0.0246	1.62	02/23/2021 23:50	WG1624549
n-Butylbenzene	U		0.0103	0.0246	1.62	02/23/2021 23:50	WG1624549
sec-Butylbenzene	U		0.00565	0.0246	1.62	02/23/2021 23:50	WG1624549
tert-Butylbenzene	U		0.00382	0.00980	1.62	02/23/2021 23:50	WG1624549
Carbon tetrachloride	U		0.00175	0.00980	1.62	02/23/2021 23:50	WG1624549
Chlorobenzene	U		0.000411	0.00490	1.62	02/23/2021 23:50	WG1624549
Chlorodibromomethane	U		0.00120	0.00490	1.62	02/23/2021 23:50	WG1624549
Chloroethane	U		0.00333	0.00980	1.62	02/23/2021 23:50	WG1624549
Chloroform	U		0.00202	0.00490	1.62	02/23/2021 23:50	WG1624549
Chloromethane	U		0.00853	0.0246	1.62	02/23/2021 23:50	WG1624549
2-Chlorotoluene	U		0.00169	0.00490	1.62	02/23/2021 23:50	WG1624549
4-Chlorotoluene	U		0.000882	0.00980	1.62	02/23/2021 23:50	WG1624549
1,2-Dibromo-3-Chloropropane	U		0.00765	0.0490	1.62	02/23/2021 23:50	WG1624549
1,2-Dibromoethane	U		0.00127	0.00490	1.62	02/23/2021 23:50	WG1624549
Dibromomethane	U		0.00148	0.00980	1.62	02/23/2021 23:50	WG1624549
1,2-Dichlorobenzene	U		0.000832	0.00980	1.62	02/23/2021 23:50	WG1624549
1,3-Dichlorobenzene	U		0.00118	0.00980	1.62	02/23/2021 23:50	WG1624549
1,4-Dichlorobenzene	U		0.00137	0.00980	1.62	02/23/2021 23:50	WG1624549
Dichlorodifluoromethane	U		0.00316	0.00490	1.62	02/23/2021 23:50	WG1624549
1,1-Dichloroethane	U		0.000962	0.00490	1.62	02/23/2021 23:50	WG1624549
1,2-Dichloroethane	U		0.00127	0.00490	1.62	02/23/2021 23:50	WG1624549
1,1-Dichloroethene	U		0.00119	0.00490	1.62	02/23/2021 23:50	WG1624549
cis-1,2-Dichloroethene	U		0.00144	0.00490	1.62	02/23/2021 23:50	WG1624549
trans-1,2-Dichloroethene	U		0.00203	0.00980	1.62	02/23/2021 23:50	WG1624549
1,2-Dichloropropane	U		0.00278	0.00980	1.62	02/23/2021 23:50	WG1624549
1,1-Dichloropropene	U		0.00158	0.00490	1.62	02/23/2021 23:50	WG1624549
1,3-Dichloropropane	U		0.000982	0.00980	1.62	02/23/2021 23:50	WG1624549
cis-1,3-Dichloropropene	U		0.00149	0.00490	1.62	02/23/2021 23:50	WG1624549
trans-1,3-Dichloropropene	U		0.00224	0.00980	1.62	02/23/2021 23:50	WG1624549
2,2-Dichloropropane	U		0.00271	0.00490	1.62	02/23/2021 23:50	WG1624549
Di-isopropyl ether	U		0.000803	0.00196	1.62	02/23/2021 23:50	WG1624549
Ethylbenzene	0.00387	J	0.00144	0.00490	1.62	02/23/2021 23:50	WG1624549
Hexachloro-1,3-butadiene	U		0.0118	0.0490	1.62	02/23/2021 23:50	WG1624549
Isopropylbenzene	U		0.000832	0.00490	1.62	02/23/2021 23:50	WG1624549
p-Isopropyltoluene	U		0.00500	0.00980	1.62	02/23/2021 23:50	WG1624549
2-Butanone (MEK)	0.126	J	0.125	0.196	1.62	02/23/2021 23:50	WG1624549
Methylene Chloride	U		0.0131	0.0490	1.62	02/23/2021 23:50	WG1624549
4-Methyl-2-pentanone (MIBK)	U		0.00446	0.0490	1.62	02/23/2021 23:50	WG1624549

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 02/18/21 11:15

L1318609

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000686	0.00196	1.62	02/23/2021 23:50	WG1624549
Naphthalene	U		0.00957	0.0246	1.62	02/23/2021 23:50	WG1624549
n-Propylbenzene	U		0.00186	0.00980	1.62	02/23/2021 23:50	WG1624549
Styrene	U		0.000449	0.0246	1.62	02/23/2021 23:50	WG1624549
1,1,1,2-Tetrachloroethane	U		0.00186	0.00490	1.62	02/23/2021 23:50	WG1624549
1,1,2,2-Tetrachloroethane	U		0.00137	0.00490	1.62	02/23/2021 23:50	WG1624549
1,1,2-Trichlorotrifluoroethane	U		0.00148	0.00490	1.62	02/23/2021 23:50	WG1624549
Tetrachloroethene	U		0.00175	0.00490	1.62	02/23/2021 23:50	WG1624549
Toluene	0.00798	J	0.00255	0.00980	1.62	02/23/2021 23:50	WG1624549
1,2,3-Trichlorobenzene	U		0.0144	0.0246	1.62	02/23/2021 23:50	WG1624549
1,2,4-Trichlorobenzene	U		0.00863	0.0246	1.62	02/23/2021 23:50	WG1624549
1,1,1-Trichloroethane	U		0.00181	0.00490	1.62	02/23/2021 23:50	WG1624549
1,1,2-Trichloroethane	U		0.00117	0.00490	1.62	02/23/2021 23:50	WG1624549
Trichloroethene	U		0.00114	0.00196	1.62	02/23/2021 23:50	WG1624549
Trichlorofluoromethane	U		0.00162	0.00490	1.62	02/23/2021 23:50	WG1624549
1,2,3-Trichloropropane	U		0.00317	0.0246	1.62	02/23/2021 23:50	WG1624549
1,2,4-Trimethylbenzene	0.00657	J	0.00310	0.00980	1.62	02/23/2021 23:50	WG1624549
1,2,3-Trimethylbenzene	U		0.00310	0.00980	1.62	02/23/2021 23:50	WG1624549
Vinyl chloride	U		0.00227	0.00490	1.62	02/23/2021 23:50	WG1624549
1,3,5-Trimethylbenzene	U		0.00392	0.00980	1.62	02/23/2021 23:50	WG1624549
Xylenes, Total	0.0135		0.00173	0.0127	1.62	02/23/2021 23:50	WG1624549
(S) Toluene-d8	102			75.0-131		02/23/2021 23:50	WG1624549
(S) 4-Bromofluorobenzene	97.9			67.0-138		02/23/2021 23:50	WG1624549
(S) 1,2-Dichloroethane-d4	103			70.0-130		02/23/2021 23:50	WG1624549

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	6.38		1.50	4.52	1	02/24/2021 05:13	WG1623857
Residual Range Organics (RRO)	19.3		3.76	11.3	1	02/24/2021 05:13	WG1623857
(S) o-Terphenyl	58.9			18.0-148		02/24/2021 05:13	WG1623857



Collected date/time: 02/18/21 12:15

L1318609

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	13.2		1	02/24/2021 12:15	WG1624645

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	551		21.2	62.4	61	02/24/2021 04:22	WG1624490
(S) a,a,a-Trifluorotoluene(FID)	113			77.0-120		02/24/2021 04:22	WG1624490

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.912	1.25	2.44	02/24/2021 00:09	WG1624549
Acrylonitrile	U		0.0902	0.312	2.44	02/24/2021 00:09	WG1624549
Benzene	U		0.0117	0.0250	2.44	02/24/2021 00:09	WG1624549
Bromobenzene	U		0.0225	0.312	2.44	02/24/2021 00:09	WG1624549
Bromodichloromethane	U		0.0181	0.0624	2.44	02/24/2021 00:09	WG1624549
Bromoform	U		0.0292	0.624	2.44	02/24/2021 00:09	WG1624549
Bromomethane	U		0.0492	0.312	2.44	02/24/2021 00:09	WG1624549
n-Butylbenzene	U		0.131	0.312	2.44	02/24/2021 00:09	WG1624549
sec-Butylbenzene	U		0.0719	0.312	2.44	02/24/2021 00:09	WG1624549
tert-Butylbenzene	U		0.0487	0.125	2.44	02/24/2021 00:09	WG1624549
Carbon tetrachloride	U		0.0224	0.125	2.44	02/24/2021 00:09	WG1624549
Chlorobenzene	U		0.00524	0.0624	2.44	02/24/2021 00:09	WG1624549
Chlorodibromomethane	U		0.0152	0.0624	2.44	02/24/2021 00:09	WG1624549
Chloroethane	U		0.0425	0.125	2.44	02/24/2021 00:09	WG1624549
Chloroform	U		0.0257	0.0624	2.44	02/24/2021 00:09	WG1624549
Chloromethane	U		0.108	0.312	2.44	02/24/2021 00:09	WG1624549
2-Chlorotoluene	U		0.0216	0.0624	2.44	02/24/2021 00:09	WG1624549
4-Chlorotoluene	U		0.0113	0.125	2.44	02/24/2021 00:09	WG1624549
1,2-Dibromo-3-Chloropropane	U		0.0974	0.624	2.44	02/24/2021 00:09	WG1624549
1,2-Dibromoethane	U		0.0162	0.0624	2.44	02/24/2021 00:09	WG1624549
Dibromomethane	U		0.0187	0.125	2.44	02/24/2021 00:09	WG1624549
1,2-Dichlorobenzene	U		0.0106	0.125	2.44	02/24/2021 00:09	WG1624549
1,3-Dichlorobenzene	U		0.0149	0.125	2.44	02/24/2021 00:09	WG1624549
1,4-Dichlorobenzene	U		0.0175	0.125	2.44	02/24/2021 00:09	WG1624549
Dichlorodifluoromethane	U		0.0402	0.0624	2.44	02/24/2021 00:09	WG1624549
1,1-Dichloroethane	U		0.0123	0.0624	2.44	02/24/2021 00:09	WG1624549
1,2-Dichloroethane	U		0.0162	0.0624	2.44	02/24/2021 00:09	WG1624549
1,1-Dichloroethene	U		0.0151	0.0624	2.44	02/24/2021 00:09	WG1624549
cis-1,2-Dichloroethene	U		0.0183	0.0624	2.44	02/24/2021 00:09	WG1624549
trans-1,2-Dichloroethene	U		0.0260	0.125	2.44	02/24/2021 00:09	WG1624549
1,2-Dichloropropane	U		0.0354	0.125	2.44	02/24/2021 00:09	WG1624549
1,1-Dichloropropene	U		0.0202	0.0624	2.44	02/24/2021 00:09	WG1624549
1,3-Dichloropropane	U		0.0125	0.125	2.44	02/24/2021 00:09	WG1624549
cis-1,3-Dichloropropene	U		0.0189	0.0624	2.44	02/24/2021 00:09	WG1624549
trans-1,3-Dichloropropene	U		0.0284	0.125	2.44	02/24/2021 00:09	WG1624549
2,2-Dichloropropane	U		0.0345	0.0624	2.44	02/24/2021 00:09	WG1624549
Di-isopropyl ether	U		0.0102	0.0250	2.44	02/24/2021 00:09	WG1624549
Ethylbenzene	0.0318	J	0.0184	0.0624	2.44	02/24/2021 00:09	WG1624549
Hexachloro-1,3-butadiene	U		0.149	0.624	2.44	02/24/2021 00:09	WG1624549
Isopropylbenzene	0.0200	J	0.0106	0.0624	2.44	02/24/2021 00:09	WG1624549
p-Isopropyltoluene	U		0.0637	0.125	2.44	02/24/2021 00:09	WG1624549
2-Butanone (MEK)	U		1.59	2.50	2.44	02/24/2021 00:09	WG1624549
Methylene Chloride	U		0.166	0.624	2.44	02/24/2021 00:09	WG1624549
4-Methyl-2-pentanone (MIBK)	U		0.0569	0.624	2.44	02/24/2021 00:09	WG1624549

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 02/18/21 12:15

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.00874	0.0250	2.44	02/24/2021 00:09	WG1624549
Naphthalene	0.212	U	0.122	0.312	2.44	02/24/2021 00:09	WG1624549
n-Propylbenzene	0.0262	U	0.0237	0.125	2.44	02/24/2021 00:09	WG1624549
Styrene	U		0.00572	0.312	2.44	02/24/2021 00:09	WG1624549
1,1,1,2-Tetrachloroethane	U		0.0236	0.0624	2.44	02/24/2021 00:09	WG1624549
1,1,2,2-Tetrachloroethane	U		0.0174	0.0624	2.44	02/24/2021 00:09	WG1624549
1,1,2-Trichlorotrifluoroethane	U		0.0188	0.0624	2.44	02/24/2021 00:09	WG1624549
Tetrachloroethene	U		0.0224	0.0624	2.44	02/24/2021 00:09	WG1624549
Toluene	0.104	U	0.0324	0.125	2.44	02/24/2021 00:09	WG1624549
1,2,3-Trichlorobenzene	U		0.183	0.312	2.44	02/24/2021 00:09	WG1624549
1,2,4-Trichlorobenzene	U		0.110	0.312	2.44	02/24/2021 00:09	WG1624549
1,1,1-Trichloroethane	U		0.0230	0.0624	2.44	02/24/2021 00:09	WG1624549
1,1,2-Trichloroethane	U		0.0149	0.0624	2.44	02/24/2021 00:09	WG1624549
Trichloroethene	U		0.0145	0.0250	2.44	02/24/2021 00:09	WG1624549
Trichlorofluoromethane	U		0.0207	0.0624	2.44	02/24/2021 00:09	WG1624549
1,2,3-Trichloropropane	U		0.0404	0.312	2.44	02/24/2021 00:09	WG1624549
1,2,4-Trimethylbenzene	0.112	U	0.0395	0.125	2.44	02/24/2021 00:09	WG1624549
1,2,3-Trimethylbenzene	U		0.0395	0.125	2.44	02/24/2021 00:09	WG1624549
Vinyl chloride	U		0.0290	0.0624	2.44	02/24/2021 00:09	WG1624549
1,3,5-Trimethylbenzene	U		0.0499	0.125	2.44	02/24/2021 00:09	WG1624549
Xylenes, Total	0.218		0.0220	0.163	2.44	02/24/2021 00:09	WG1624549
(S) Toluene-d8	102			75.0-131		02/24/2021 00:09	WG1624549
(S) 4-Bromofluorobenzene	107			67.0-138		02/24/2021 00:09	WG1624549
(S) 1,2-Dichloroethane-d4	100			70.0-130		02/24/2021 00:09	WG1624549

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	1160		10.0	30.2	1	02/24/2021 05:54	WG1623857
Residual Range Organics (RRO)	579		25.1	75.5	1	02/24/2021 05:54	WG1623857
(S) o-Terphenyl	36.3			18.0-148		02/24/2021 05:54	WG1623857



Collected date/time: 02/18/21 12:45

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Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.7		1	02/24/2021 12:15	WG1624645

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	2.53	J	1.43	4.21	36.5	02/24/2021 04:44	WG1624490
(S) a,a,a-Trifluorotoluene(FID)	113			77.0-120		02/24/2021 04:44	WG1624490

3 Ss

4 Cn

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0614	0.0841	1.46	02/24/2021 00:28	WG1624549
Acrylonitrile	U		0.00607	0.0211	1.46	02/24/2021 00:28	WG1624549
Benzene	0.00143	J	0.000786	0.00168	1.46	02/24/2021 00:28	WG1624549
Bromobenzene	U		0.00151	0.0211	1.46	02/24/2021 00:28	WG1624549
Bromodichloromethane	U		0.00122	0.00421	1.46	02/24/2021 00:28	WG1624549
Bromoform	U		0.00197	0.0421	1.46	02/24/2021 00:28	WG1624549
Bromomethane	U		0.00332	0.0211	1.46	02/24/2021 00:28	WG1624549
n-Butylbenzene	U		0.00882	0.0211	1.46	02/24/2021 00:28	WG1624549
sec-Butylbenzene	U		0.00484	0.0211	1.46	02/24/2021 00:28	WG1624549
tert-Butylbenzene	U		0.00328	0.00841	1.46	02/24/2021 00:28	WG1624549
Carbon tetrachloride	U		0.00151	0.00841	1.46	02/24/2021 00:28	WG1624549
Chlorobenzene	U		0.000354	0.00421	1.46	02/24/2021 00:28	WG1624549
Chlorodibromomethane	U		0.00103	0.00421	1.46	02/24/2021 00:28	WG1624549
Chloroethane	U		0.00286	0.00841	1.46	02/24/2021 00:28	WG1624549
Chloroform	U		0.00173	0.00421	1.46	02/24/2021 00:28	WG1624549
Chloromethane	U		0.00732	0.0211	1.46	02/24/2021 00:28	WG1624549
2-Chlorotoluene	U		0.00145	0.00421	1.46	02/24/2021 00:28	WG1624549
4-Chlorotoluene	U		0.000757	0.00841	1.46	02/24/2021 00:28	WG1624549
1,2-Dibromo-3-Chloropropane	U		0.00656	0.0421	1.46	02/24/2021 00:28	WG1624549
1,2-Dibromoethane	U		0.00109	0.00421	1.46	02/24/2021 00:28	WG1624549
Dibromomethane	U		0.00127	0.00841	1.46	02/24/2021 00:28	WG1624549
1,2-Dichlorobenzene	U		0.000714	0.00841	1.46	02/24/2021 00:28	WG1624549
1,3-Dichlorobenzene	U		0.00101	0.00841	1.46	02/24/2021 00:28	WG1624549
1,4-Dichlorobenzene	U		0.00118	0.00841	1.46	02/24/2021 00:28	WG1624549
Dichlorodifluoromethane	U		0.00271	0.00421	1.46	02/24/2021 00:28	WG1624549
1,1-Dichloroethane	U		0.000826	0.00421	1.46	02/24/2021 00:28	WG1624549
1,2-Dichloroethane	U		0.00109	0.00421	1.46	02/24/2021 00:28	WG1624549
1,1-Dichloroethene	U		0.00102	0.00421	1.46	02/24/2021 00:28	WG1624549
cis-1,2-Dichloroethene	U		0.00123	0.00421	1.46	02/24/2021 00:28	WG1624549
trans-1,2-Dichloroethene	U		0.00175	0.00841	1.46	02/24/2021 00:28	WG1624549
1,2-Dichloropropane	U		0.00238	0.00841	1.46	02/24/2021 00:28	WG1624549
1,1-Dichloropropene	U		0.00136	0.00421	1.46	02/24/2021 00:28	WG1624549
1,3-Dichloropropane	U		0.000842	0.00841	1.46	02/24/2021 00:28	WG1624549
cis-1,3-Dichloropropene	U		0.00128	0.00421	1.46	02/24/2021 00:28	WG1624549
trans-1,3-Dichloropropene	U		0.00191	0.00841	1.46	02/24/2021 00:28	WG1624549
2,2-Dichloropropane	U		0.00232	0.00421	1.46	02/24/2021 00:28	WG1624549
Di-isopropyl ether	U		0.000690	0.00168	1.46	02/24/2021 00:28	WG1624549
Ethylbenzene	0.00240	J	0.00124	0.00421	1.46	02/24/2021 00:28	WG1624549
Hexachloro-1,3-butadiene	U		0.0101	0.0421	1.46	02/24/2021 00:28	WG1624549
Isopropylbenzene	U		0.000714	0.00421	1.46	02/24/2021 00:28	WG1624549
p-Isopropyltoluene	U		0.00429	0.00841	1.46	02/24/2021 00:28	WG1624549
2-Butanone (MEK)	U		0.107	0.168	1.46	02/24/2021 00:28	WG1624549
Methylene Chloride	U		0.0112	0.0421	1.46	02/24/2021 00:28	WG1624549
4-Methyl-2-pentanone (MIBK)	U		0.00384	0.0421	1.46	02/24/2021 00:28	WG1624549

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 02/18/21 12:45

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000589	0.00168	1.46	02/24/2021 00:28	WG1624549
Naphthalene	U		0.00820	0.0211	1.46	02/24/2021 00:28	WG1624549
n-Propylbenzene	U		0.00160	0.00841	1.46	02/24/2021 00:28	WG1624549
Styrene	U		0.000385	0.0211	1.46	02/24/2021 00:28	WG1624549
1,1,1,2-Tetrachloroethane	U		0.00159	0.00421	1.46	02/24/2021 00:28	WG1624549
1,1,2,2-Tetrachloroethane	U		0.00116	0.00421	1.46	02/24/2021 00:28	WG1624549
1,1,2-Trichlorotrifluoroethane	U		0.00127	0.00421	1.46	02/24/2021 00:28	WG1624549
Tetrachloroethene	U		0.00151	0.00421	1.46	02/24/2021 00:28	WG1624549
Toluene	0.00606	J	0.00219	0.00841	1.46	02/24/2021 00:28	WG1624549
1,2,3-Trichlorobenzene	U		0.0123	0.0211	1.46	02/24/2021 00:28	WG1624549
1,2,4-Trichlorobenzene	U		0.00740	0.0211	1.46	02/24/2021 00:28	WG1624549
1,1,1-Trichloroethane	U		0.00156	0.00421	1.46	02/24/2021 00:28	WG1624549
1,1,2-Trichloroethane	U		0.00100	0.00421	1.46	02/24/2021 00:28	WG1624549
Trichloroethene	U		0.000983	0.00168	1.46	02/24/2021 00:28	WG1624549
Trichlorofluoromethane	U		0.00139	0.00421	1.46	02/24/2021 00:28	WG1624549
1,2,3-Trichloropropane	U		0.00273	0.0211	1.46	02/24/2021 00:28	WG1624549
1,2,4-Trimethylbenzene	0.00606	J	0.00266	0.00841	1.46	02/24/2021 00:28	WG1624549
1,2,3-Trimethylbenzene	U		0.00266	0.00841	1.46	02/24/2021 00:28	WG1624549
Vinyl chloride	U		0.00195	0.00421	1.46	02/24/2021 00:28	WG1624549
1,3,5-Trimethylbenzene	U		0.00336	0.00841	1.46	02/24/2021 00:28	WG1624549
Xylenes, Total	0.0118		0.00147	0.0109	1.46	02/24/2021 00:28	WG1624549
(S) Toluene-d8	102			75.0-131		02/24/2021 00:28	WG1624549
(S) 4-Bromofluorobenzene	99.3			67.0-138		02/24/2021 00:28	WG1624549
(S) 1,2-Dichloroethane-d4	97.2			70.0-130		02/24/2021 00:28	WG1624549

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	17.8		1.45	4.36	1	02/24/2021 06:07	WG1623857
Residual Range Organics (RRO)	87.2		3.63	10.9	1	02/24/2021 06:07	WG1623857
(S) o-Terphenyl	64.8			18.0-148		02/24/2021 06:07	WG1623857



Collected date/time: 02/18/21 10:10

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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	290	<u>B</u>	31.6	100	1	02/24/2021 20:08	WG1624677
(S) a,a,a-Trifluorotoluene(FID)	97.5			78.0-120		02/24/2021 20:08	WG1624677

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	6.95		0.548	1.00	1	02/24/2021 00:08	WG1624535
Acrylonitrile	U		0.0760	0.500	1	02/24/2021 00:08	WG1624535
Benzene	0.891		0.0160	0.0400	1	02/24/2021 00:08	WG1624535
Bromobenzene	U		0.0420	0.500	1	02/24/2021 00:08	WG1624535
Bromochloromethane	U		0.0452	0.200	1	02/24/2021 00:08	WG1624535
Bromodichloromethane	U		0.0315	0.100	1	02/24/2021 00:08	WG1624535
Bromoform	U		0.239	1.00	1	02/24/2021 00:08	WG1624535
Bromomethane	U		0.148	0.500	1	02/24/2021 00:08	WG1624535
n-Butylbenzene	U		0.153	0.500	1	02/24/2021 00:08	WG1624535
sec-Butylbenzene	U		0.101	0.500	1	02/24/2021 00:08	WG1624535
tert-Butylbenzene	U		0.0620	0.200	1	02/24/2021 00:08	WG1624535
Carbon disulfide	U		0.162	0.500	1	02/24/2021 00:08	WG1624535
Carbon tetrachloride	U		0.0432	0.200	1	02/24/2021 00:08	WG1624535
Chlorobenzene	0.0540	<u>J</u>	0.0229	0.100	1	02/24/2021 00:08	WG1624535
Chlorodibromomethane	U		0.0180	0.100	1	02/24/2021 00:08	WG1624535
Chloroethane	U		0.0432	0.200	1	02/24/2021 00:08	WG1624535
Chloroform	U		0.0166	0.100	1	02/24/2021 00:08	WG1624535
Chloromethane	U		0.0556	0.500	1	02/24/2021 00:08	WG1624535
2-Chlorotoluene	U		0.0368	0.100	1	02/24/2021 00:08	WG1624535
4-Chlorotoluene	U		0.0452	0.200	1	02/24/2021 00:08	WG1624535
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	02/24/2021 00:08	WG1624535
1,2-Dibromoethane	U		0.0210	0.100	1	02/24/2021 00:08	WG1624535
Dibromomethane	U		0.0400	0.200	1	02/24/2021 00:08	WG1624535
1,2-Dichlorobenzene	U		0.0580	0.200	1	02/24/2021 00:08	WG1624535
1,3-Dichlorobenzene	U		0.0680	0.200	1	02/24/2021 00:08	WG1624535
1,4-Dichlorobenzene	0.101	<u>J</u>	0.0788	0.200	1	02/24/2021 00:08	WG1624535
trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	02/24/2021 00:08	WG1624535
Dichlorodifluoromethane	U		0.0327	0.100	1	02/24/2021 00:08	WG1624535
1,1-Dichloroethane	U		0.0230	0.100	1	02/24/2021 00:08	WG1624535
1,2-Dichloroethane	U		0.0190	0.100	1	02/24/2021 00:08	WG1624535
1,1-Dichloroethene	U		0.0200	0.100	1	02/24/2021 00:08	WG1624535
cis-1,2-Dichloroethene	U		0.0276	0.100	1	02/24/2021 20:12	WG1625020
trans-1,2-Dichloroethene	U		0.0572	0.200	1	02/24/2021 00:08	WG1624535
1,2-Dichloropropane	U		0.0508	0.200	1	02/24/2021 00:08	WG1624535
1,1-Dichloropropene	U		0.0280	0.100	1	02/24/2021 00:08	WG1624535
1,3-Dichloropropane	U		0.0700	0.200	1	02/24/2021 00:08	WG1624535
cis-1,3-Dichloropropene	U		0.0271	0.100	1	02/24/2021 00:08	WG1624535
trans-1,3-Dichloropropene	U		0.0612	0.200	1	02/24/2021 00:08	WG1624535
2,2-Dichloropropane	U		0.0317	0.100	1	02/24/2021 00:08	WG1624535
Di-isopropyl ether	U		0.0140	0.0400	1	02/24/2021 00:08	WG1624535
Ethylbenzene	8.61		0.0212	0.100	1	02/24/2021 00:08	WG1624535
Hexachloro-1,3-butadiene	U		0.508	1.00	1	02/24/2021 00:08	WG1624535
2-Hexanone	U		0.400	1.00	1	02/24/2021 00:08	WG1624535
n-Hexane	0.0900	<u>J</u>	0.0424	0.200	1	02/24/2021 00:08	WG1624535
Iodomethane	U		0.242	0.500	1	02/24/2021 00:08	WG1624535
Isopropylbenzene	0.203		0.0345	0.100	1	02/24/2021 00:08	WG1624535
p-Isopropyltoluene	U		0.0932	0.200	1	02/24/2021 00:08	WG1624535
2-Butanone (MEK)	U		0.500	1.00	1	02/24/2021 00:08	WG1624535



Collected date/time: 02/18/21 10:10

L1318609

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		0.265	1.00	1	02/24/2021 00:08	WG1624535
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	02/24/2021 00:08	WG1624535
Methyl tert-butyl ether	U		0.0118	0.0400	1	02/24/2021 00:08	WG1624535
Naphthalene	0.313	J	0.124	0.500	1	02/24/2021 00:08	WG1624535
n-Propylbenzene	1.31		0.0472	0.200	1	02/24/2021 00:08	WG1624535
Styrene	U		0.109	0.500	1	02/24/2021 00:08	WG1624535
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	02/24/2021 00:08	WG1624535
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	02/24/2021 00:08	WG1624535
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	02/24/2021 00:08	WG1624535
Tetrachloroethene	U		0.0280	0.100	1	02/24/2021 00:08	WG1624535
Toluene	20.9		0.0500	0.200	1	02/24/2021 00:08	WG1624535
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	02/24/2021 00:08	WG1624535
1,2,4-Trichlorobenzene	U		0.193	0.500	1	02/24/2021 00:08	WG1624535
1,1,1-Trichloroethane	U		0.0110	0.100	1	02/24/2021 00:08	WG1624535
1,1,2-Trichloroethane	U		0.0353	0.100	1	02/24/2021 00:08	WG1624535
Trichloroethene	U		0.0160	0.0400	1	02/24/2021 00:08	WG1624535
Trichlorofluoromethane	U		0.0200	0.100	1	02/24/2021 00:08	WG1624535
1,2,3-Trichloropropane	U		0.204	0.500	1	02/24/2021 00:08	WG1624535
1,2,4-Trimethylbenzene	9.12		0.0464	0.200	1	02/24/2021 00:08	WG1624535
1,2,3-Trimethylbenzene	1.46	C5	0.0460	0.200	1	02/24/2021 00:08	WG1624535
1,3,5-Trimethylbenzene	2.47		0.0432	0.200	1	02/24/2021 00:08	WG1624535
Vinyl acetate	U		0.141	0.500	1	02/24/2021 00:08	WG1624535
Vinyl chloride	U		0.0273	0.100	1	02/24/2021 20:12	WG1625020
Xylenes, Total	60.6		0.191	0.260	1	02/24/2021 00:08	WG1624535
(S) Toluene-d8	93.3			75.0-131		02/24/2021 00:08	WG1624535
(S) Toluene-d8	98.1			75.0-131		02/24/2021 20:12	WG1625020
(S) 4-Bromofluorobenzene	103			67.0-138		02/24/2021 00:08	WG1624535
(S) 4-Bromofluorobenzene	96.9			67.0-138		02/24/2021 20:12	WG1625020
(S) 1,2-Dichloroethane-d4	107			70.0-130		02/24/2021 00:08	WG1624535
(S) 1,2-Dichloroethane-d4	103			70.0-130		02/24/2021 20:12	WG1625020

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 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)	334		66.7	200	1	02/24/2021 10:23	WG1624236
Residual Range Organics (RRO)	380		83.3	250	1	02/24/2021 10:23	WG1624236
(S) o-Terphenyl	73.5			52.0-156		02/24/2021 10:23	WG1624236



Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	1630		31.6	100	1	02/24/2021 20:34	WG1624677
(S) a,a,a-Trifluorotoluene(FID)	99.6			78.0-120		02/24/2021 20:34	WG1624677

1 Cp

2 Tc

3 Ss

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	16.7		0.548	1.00	1	02/24/2021 00:27	WG1624535
Acrylonitrile	U		0.0760	0.500	1	02/24/2021 00:27	WG1624535
Benzene	8.99		0.0160	0.0400	1	02/24/2021 00:27	WG1624535
Bromobenzene	U		0.0420	0.500	1	02/24/2021 00:27	WG1624535
Bromochloromethane	U		0.0452	0.200	1	02/24/2021 00:27	WG1624535
Bromodichloromethane	U		0.0315	0.100	1	02/24/2021 00:27	WG1624535
Bromoform	U		0.239	1.00	1	02/24/2021 00:27	WG1624535
Bromomethane	U		0.148	0.500	1	02/24/2021 00:27	WG1624535
n-Butylbenzene	U		0.153	0.500	1	02/24/2021 00:27	WG1624535
sec-Butylbenzene	U		0.101	0.500	1	02/24/2021 00:27	WG1624535
tert-Butylbenzene	U		0.0620	0.200	1	02/24/2021 00:27	WG1624535
Carbon disulfide	U		0.162	0.500	1	02/24/2021 00:27	WG1624535
Carbon tetrachloride	U		0.0432	0.200	1	02/24/2021 00:27	WG1624535
Chlorobenzene	U		0.0229	0.100	1	02/24/2021 00:27	WG1624535
Chlorodibromomethane	U		0.0180	0.100	1	02/24/2021 00:27	WG1624535
Chloroethane	U		0.0432	0.200	1	02/24/2021 00:27	WG1624535
Chloroform	U		0.0166	0.100	1	02/24/2021 00:27	WG1624535
Chloromethane	U		0.0556	0.500	1	02/24/2021 00:27	WG1624535
2-Chlorotoluene	U		0.0368	0.100	1	02/24/2021 00:27	WG1624535
4-Chlorotoluene	U		0.0452	0.200	1	02/24/2021 00:27	WG1624535
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	02/24/2021 00:27	WG1624535
1,2-Dibromoethane	U		0.0210	0.100	1	02/24/2021 00:27	WG1624535
Dibromomethane	U		0.0400	0.200	1	02/24/2021 00:27	WG1624535
1,2-Dichlorobenzene	U		0.0580	0.200	1	02/24/2021 00:27	WG1624535
1,3-Dichlorobenzene	U		0.0680	0.200	1	02/24/2021 00:27	WG1624535
1,4-Dichlorobenzene	U		0.0788	0.200	1	02/24/2021 00:27	WG1624535
trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	02/24/2021 00:27	WG1624535
Dichlorodifluoromethane	U		0.0327	0.100	1	02/24/2021 00:27	WG1624535
1,1-Dichloroethane	U		0.0230	0.100	1	02/24/2021 00:27	WG1624535
1,2-Dichloroethane	U		0.0190	0.100	1	02/24/2021 00:27	WG1624535
1,1-Dichloroethene	U		0.0200	0.100	1	02/24/2021 00:27	WG1624535
cis-1,2-Dichloroethene	0.250	J	0.138	0.500	5	02/25/2021 01:15	WG1625020
trans-1,2-Dichloroethene	U		0.0572	0.200	1	02/24/2021 00:27	WG1624535
1,2-Dichloropropane	U		0.0508	0.200	1	02/24/2021 00:27	WG1624535
1,1-Dichloropropene	U		0.0280	0.100	1	02/24/2021 00:27	WG1624535
1,3-Dichloropropane	U		0.0700	0.200	1	02/24/2021 00:27	WG1624535
cis-1,3-Dichloropropene	U		0.0271	0.100	1	02/24/2021 00:27	WG1624535
trans-1,3-Dichloropropene	U		0.0612	0.200	1	02/24/2021 00:27	WG1624535
2,2-Dichloropropane	U		0.0317	0.100	1	02/24/2021 00:27	WG1624535
Di-isopropyl ether	U		0.0140	0.0400	1	02/24/2021 00:27	WG1624535
Ethylbenzene	60.0		0.0212	0.100	1	02/24/2021 00:27	WG1624535
Hexachloro-1,3-butadiene	U		0.508	1.00	1	02/24/2021 00:27	WG1624535
2-Hexanone	U		0.400	1.00	1	02/24/2021 00:27	WG1624535
n-Hexane	0.180	J	0.0424	0.200	1	02/24/2021 00:27	WG1624535
Iodomethane	U		0.242	0.500	1	02/24/2021 00:27	WG1624535
Isopropylbenzene	1.25		0.0345	0.100	1	02/24/2021 00:27	WG1624535
p-Isopropyltoluene	U		0.0932	0.200	1	02/24/2021 00:27	WG1624535
2-Butanone (MEK)	2.57	B	0.500	1.00	1	02/24/2021 00:27	WG1624535

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 02/18/21 10:55

L1318609

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		0.265	1.00	1	02/24/2021 00:27	WG1624535
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	02/24/2021 00:27	WG1624535
Methyl tert-butyl ether	U		0.0118	0.0400	1	02/24/2021 00:27	WG1624535
Naphthalene	2.39		0.124	0.500	1	02/24/2021 00:27	WG1624535
n-Propylbenzene	7.61		0.0472	0.200	1	02/24/2021 00:27	WG1624535
Styrene	U		0.109	0.500	1	02/24/2021 00:27	WG1624535
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	02/24/2021 00:27	WG1624535
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	02/24/2021 00:27	WG1624535
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	02/24/2021 00:27	WG1624535
Tetrachloroethene	U		0.0280	0.100	1	02/24/2021 00:27	WG1624535
Toluene	66.8		0.250	1.00	5	02/25/2021 01:15	WG1625020
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	02/24/2021 00:27	WG1624535
1,2,4-Trichlorobenzene	U		0.193	0.500	1	02/24/2021 00:27	WG1624535
1,1,1-Trichloroethane	U		0.0110	0.100	1	02/24/2021 00:27	WG1624535
1,1,2-Trichloroethane	U		0.0353	0.100	1	02/24/2021 00:27	WG1624535
Trichloroethene	U		0.0160	0.0400	1	02/24/2021 00:27	WG1624535
Trichlorofluoromethane	U		0.0200	0.100	1	02/24/2021 00:27	WG1624535
1,2,3-Trichloropropane	U		0.204	0.500	1	02/24/2021 00:27	WG1624535
1,2,4-Trimethylbenzene	55.5		0.0464	0.200	1	02/24/2021 00:27	WG1624535
1,2,3-Trimethylbenzene	10.1	C5	0.0460	0.200	1	02/24/2021 00:27	WG1624535
1,3,5-Trimethylbenzene	13.8		0.0432	0.200	1	02/24/2021 00:27	WG1624535
Vinyl acetate	U		0.141	0.500	1	02/24/2021 00:27	WG1624535
Vinyl chloride	0.330	J	0.137	0.500	5	02/25/2021 01:15	WG1625020
Xylenes, Total	194		0.955	1.30	5	02/25/2021 01:15	WG1625020
(S) Toluene-d8	94.3			75.0-131		02/24/2021 00:27	WG1624535
(S) Toluene-d8	92.6			75.0-131		02/25/2021 01:15	WG1625020
(S) 4-Bromofluorobenzene	103			67.0-138		02/24/2021 00:27	WG1624535
(S) 4-Bromofluorobenzene	107			67.0-138		02/25/2021 01:15	WG1625020
(S) 1,2-Dichloroethane-d4	105			70.0-130		02/24/2021 00:27	WG1624535
(S) 1,2-Dichloroethane-d4	107			70.0-130		02/25/2021 01:15	WG1625020

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 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)	265		66.7	200	1	02/24/2021 10:43	WG1624236
Residual Range Organics (RRO)	329		83.3	250	1	02/24/2021 10:43	WG1624236
(S) o-Terphenyl	65.0			52.0-156		02/24/2021 10:43	WG1624236



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	454	<u>B</u>	31.6	100	1	02/24/2021 20:57	WG1624677
(S) a,a,a-Trifluorotoluene(FID)	96.8			78.0-120		02/24/2021 20:57	WG1624677

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	9.21		0.548	1.00	1	02/24/2021 00:46	WG1624535
Acrylonitrile	U		0.0760	0.500	1	02/24/2021 00:46	WG1624535
Benzene	2.03		0.0160	0.0400	1	02/24/2021 00:46	WG1624535
Bromobenzene	U		0.0420	0.500	1	02/24/2021 00:46	WG1624535
Bromochloromethane	U		0.0452	0.200	1	02/24/2021 00:46	WG1624535
Bromodichloromethane	U		0.0315	0.100	1	02/24/2021 00:46	WG1624535
Bromoform	U		0.239	1.00	1	02/24/2021 00:46	WG1624535
Bromomethane	U		0.148	0.500	1	02/24/2021 00:46	WG1624535
n-Butylbenzene	U		0.153	0.500	1	02/24/2021 00:46	WG1624535
sec-Butylbenzene	U		0.101	0.500	1	02/24/2021 00:46	WG1624535
tert-Butylbenzene	U		0.0620	0.200	1	02/24/2021 00:46	WG1624535
Carbon disulfide	0.189	<u>J</u>	0.162	0.500	1	02/24/2021 00:46	WG1624535
Carbon tetrachloride	U		0.0432	0.200	1	02/24/2021 00:46	WG1624535
Chlorobenzene	U		0.0229	0.100	1	02/24/2021 00:46	WG1624535
Chlorodibromomethane	U		0.0180	0.100	1	02/24/2021 00:46	WG1624535
Chloroethane	U		0.0432	0.200	1	02/24/2021 00:46	WG1624535
Chloroform	U		0.0166	0.100	1	02/24/2021 00:46	WG1624535
Chloromethane	U		0.0556	0.500	1	02/24/2021 00:46	WG1624535
2-Chlorotoluene	U		0.0368	0.100	1	02/24/2021 00:46	WG1624535
4-Chlorotoluene	U		0.0452	0.200	1	02/24/2021 00:46	WG1624535
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	02/24/2021 00:46	WG1624535
1,2-Dibromoethane	U		0.0210	0.100	1	02/24/2021 00:46	WG1624535
Dibromomethane	U		0.0400	0.200	1	02/24/2021 00:46	WG1624535
1,2-Dichlorobenzene	U		0.0580	0.200	1	02/24/2021 00:46	WG1624535
1,3-Dichlorobenzene	U		0.0680	0.200	1	02/24/2021 00:46	WG1624535
1,4-Dichlorobenzene	U		0.0788	0.200	1	02/24/2021 00:46	WG1624535
trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	02/24/2021 00:46	WG1624535
Dichlorodifluoromethane	U		0.0327	0.100	1	02/24/2021 00:46	WG1624535
1,1-Dichloroethane	U		0.0230	0.100	1	02/24/2021 00:46	WG1624535
1,2-Dichloroethane	U		0.0190	0.100	1	02/24/2021 00:46	WG1624535
1,1-Dichloroethene	U		0.0200	0.100	1	02/24/2021 00:46	WG1624535
cis-1,2-Dichloroethene	U		0.0276	0.100	1	02/24/2021 20:30	WG1625020
trans-1,2-Dichloroethene	U		0.0572	0.200	1	02/24/2021 00:46	WG1624535
1,2-Dichloropropane	U		0.0508	0.200	1	02/24/2021 00:46	WG1624535
1,1-Dichloropropene	U		0.0280	0.100	1	02/24/2021 00:46	WG1624535
1,3-Dichloropropane	U		0.0700	0.200	1	02/24/2021 00:46	WG1624535
cis-1,3-Dichloropropene	U		0.0271	0.100	1	02/24/2021 00:46	WG1624535
trans-1,3-Dichloropropene	U		0.0612	0.200	1	02/24/2021 00:46	WG1624535
2,2-Dichloropropane	U		0.0317	0.100	1	02/24/2021 00:46	WG1624535
Di-isopropyl ether	U		0.0140	0.0400	1	02/24/2021 00:46	WG1624535
Ethylbenzene	16.5		0.0212	0.100	1	02/24/2021 00:46	WG1624535
Hexachloro-1,3-butadiene	U		0.508	1.00	1	02/24/2021 00:46	WG1624535
2-Hexanone	U		0.400	1.00	1	02/24/2021 00:46	WG1624535
n-Hexane	0.116	<u>J</u>	0.0424	0.200	1	02/24/2021 00:46	WG1624535
Iodomethane	U		0.242	0.500	1	02/24/2021 00:46	WG1624535
Isopropylbenzene	0.335		0.0345	0.100	1	02/24/2021 00:46	WG1624535
p-Isopropyltoluene	U		0.0932	0.200	1	02/24/2021 00:46	WG1624535
2-Butanone (MEK)	1.11	<u>B</u>	0.500	1.00	1	02/24/2021 00:46	WG1624535



Collected date/time: 02/18/21 11:30

L1318609

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		0.265	1.00	1	02/24/2021 00:46	WG1624535
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	02/24/2021 00:46	WG1624535
Methyl tert-butyl ether	U		0.0118	0.0400	1	02/24/2021 00:46	WG1624535
Naphthalene	0.839		0.124	0.500	1	02/24/2021 00:46	WG1624535
n-Propylbenzene	2.12		0.0472	0.200	1	02/24/2021 00:46	WG1624535
Styrene	U		0.109	0.500	1	02/24/2021 00:46	WG1624535
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	02/24/2021 00:46	WG1624535
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	02/24/2021 00:46	WG1624535
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	02/24/2021 00:46	WG1624535
Tetrachloroethene	U		0.0280	0.100	1	02/24/2021 00:46	WG1624535
Toluene	43.6		0.0500	0.200	1	02/24/2021 00:46	WG1624535
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	02/24/2021 00:46	WG1624535
1,2,4-Trichlorobenzene	U		0.193	0.500	1	02/24/2021 00:46	WG1624535
1,1,1-Trichloroethane	U		0.0110	0.100	1	02/24/2021 00:46	WG1624535
1,1,2-Trichloroethane	U		0.0353	0.100	1	02/24/2021 00:46	WG1624535
Trichloroethene	U		0.0160	0.0400	1	02/24/2021 00:46	WG1624535
Trichlorofluoromethane	U		0.0200	0.100	1	02/24/2021 00:46	WG1624535
1,2,3-Trichloropropane	U		0.204	0.500	1	02/24/2021 00:46	WG1624535
1,2,4-Trimethylbenzene	15.5		0.0464	0.200	1	02/24/2021 00:46	WG1624535
1,2,3-Trimethylbenzene	2.59	<u>C5</u>	0.0460	0.200	1	02/24/2021 00:46	WG1624535
1,3,5-Trimethylbenzene	3.70		0.0432	0.200	1	02/24/2021 00:46	WG1624535
Vinyl acetate	U		0.141	0.500	1	02/24/2021 00:46	WG1624535
Vinyl chloride	U		0.0273	0.100	1	02/24/2021 00:46	WG1624535
Xylenes, Total	113		0.191	0.260	1	02/24/2021 00:46	WG1624535
(S) Toluene-d8	92.8			75.0-131		02/24/2021 00:46	WG1624535
(S) Toluene-d8	92.9			75.0-131		02/24/2021 20:30	WG1625020
(S) 4-Bromofluorobenzene	108			67.0-138		02/24/2021 00:46	WG1624535
(S) 4-Bromofluorobenzene	104			67.0-138		02/24/2021 20:30	WG1625020
(S) 1,2-Dichloroethane-d4	108			70.0-130		02/24/2021 00:46	WG1624535
(S) 1,2-Dichloroethane-d4	108			70.0-130		02/24/2021 20:30	WG1625020

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

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)	159	<u>U</u>	66.7	200	1	02/24/2021 11:03	WG1624236
Residual Range Organics (RRO)	150	<u>U</u>	83.3	250	1	02/24/2021 11:03	WG1624236
(S) o-Terphenyl	66.0			52.0-156		02/24/2021 11:03	WG1624236



Collected date/time: 02/18/21 12:20

L1318609

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	444	B	31.6	100	1	02/24/2021 21:20	WG1624677
(S) a,a,a-Trifluorotoluene(FID)	96.5			78.0-120		02/24/2021 21:20	WG1624677

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	4.54		0.548	1.00	1	02/24/2021 01:05	WG1624535
Acrylonitrile	U		0.0760	0.500	1	02/24/2021 01:05	WG1624535
Benzene	1.56		0.0160	0.0400	1	02/24/2021 01:05	WG1624535
Bromobenzene	U		0.0420	0.500	1	02/24/2021 01:05	WG1624535
Bromochloromethane	U		0.0452	0.200	1	02/24/2021 01:05	WG1624535
Bromodichloromethane	U		0.0315	0.100	1	02/24/2021 01:05	WG1624535
Bromoform	U		0.239	1.00	1	02/24/2021 01:05	WG1624535
Bromomethane	U		0.148	0.500	1	02/24/2021 01:05	WG1624535
n-Butylbenzene	U		0.153	0.500	1	02/24/2021 01:05	WG1624535
sec-Butylbenzene	U		0.101	0.500	1	02/24/2021 01:05	WG1624535
tert-Butylbenzene	U		0.0620	0.200	1	02/24/2021 01:05	WG1624535
Carbon disulfide	U		0.162	0.500	1	02/24/2021 01:05	WG1624535
Carbon tetrachloride	U		0.0432	0.200	1	02/24/2021 01:05	WG1624535
Chlorobenzene	U		0.0229	0.100	1	02/24/2021 01:05	WG1624535
Chlorodibromomethane	U		0.0180	0.100	1	02/24/2021 01:05	WG1624535
Chloroethane	U		0.0432	0.200	1	02/24/2021 01:05	WG1624535
Chloroform	U		0.0166	0.100	1	02/24/2021 01:05	WG1624535
Chloromethane	U		0.0556	0.500	1	02/24/2021 01:05	WG1624535
2-Chlorotoluene	U		0.0368	0.100	1	02/24/2021 01:05	WG1624535
4-Chlorotoluene	U		0.0452	0.200	1	02/24/2021 01:05	WG1624535
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	02/24/2021 01:05	WG1624535
1,2-Dibromoethane	U		0.0210	0.100	1	02/24/2021 01:05	WG1624535
Dibromomethane	U		0.0400	0.200	1	02/24/2021 01:05	WG1624535
1,2-Dichlorobenzene	U		0.0580	0.200	1	02/24/2021 01:05	WG1624535
1,3-Dichlorobenzene	U		0.0680	0.200	1	02/24/2021 01:05	WG1624535
1,4-Dichlorobenzene	U		0.0788	0.200	1	02/24/2021 01:05	WG1624535
trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	02/24/2021 01:05	WG1624535
Dichlorodifluoromethane	U		0.0327	0.100	1	02/24/2021 01:05	WG1624535
1,1-Dichloroethane	U		0.0230	0.100	1	02/24/2021 01:05	WG1624535
1,2-Dichloroethane	U		0.0190	0.100	1	02/24/2021 01:05	WG1624535
1,1-Dichloroethene	U		0.0200	0.100	1	02/24/2021 01:05	WG1624535
cis-1,2-Dichloroethene	U		0.0276	0.100	1	02/24/2021 20:50	WG1625020
trans-1,2-Dichloroethene	U		0.0572	0.200	1	02/24/2021 01:05	WG1624535
1,2-Dichloropropane	U		0.0508	0.200	1	02/24/2021 01:05	WG1624535
1,1-Dichloropropene	U		0.0280	0.100	1	02/24/2021 01:05	WG1624535
1,3-Dichloropropane	U		0.0700	0.200	1	02/24/2021 01:05	WG1624535
cis-1,3-Dichloropropene	U		0.0271	0.100	1	02/24/2021 01:05	WG1624535
trans-1,3-Dichloropropene	U		0.0612	0.200	1	02/24/2021 01:05	WG1624535
2,2-Dichloropropane	U		0.0317	0.100	1	02/24/2021 01:05	WG1624535
Di-isopropyl ether	U		0.0140	0.0400	1	02/24/2021 01:05	WG1624535
Ethylbenzene	13.9		0.0212	0.100	1	02/24/2021 01:05	WG1624535
Hexachloro-1,3-butadiene	U		0.508	1.00	1	02/24/2021 01:05	WG1624535
2-Hexanone	U		0.400	1.00	1	02/24/2021 01:05	WG1624535
n-Hexane	U		0.0424	0.200	1	02/24/2021 01:05	WG1624535
Iodomethane	U		0.242	0.500	1	02/24/2021 01:05	WG1624535
Isopropylbenzene	0.343		0.0345	0.100	1	02/24/2021 01:05	WG1624535
p-Isopropyltoluene	U		0.0932	0.200	1	02/24/2021 01:05	WG1624535
2-Butanone (MEK)	U		0.500	1.00	1	02/24/2021 01:05	WG1624535



Collected date/time: 02/18/21 12:20

L1318609

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		0.265	1.00	1	02/24/2021 01:05	WG1624535
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	02/24/2021 01:05	WG1624535
Methyl tert-butyl ether	U		0.0118	0.0400	1	02/24/2021 01:05	WG1624535
Naphthalene	46.5		0.124	0.500	1	02/24/2021 01:05	WG1624535
n-Propylbenzene	1.98		0.0472	0.200	1	02/24/2021 01:05	WG1624535
Styrene	0.253	J	0.109	0.500	1	02/24/2021 01:05	WG1624535
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	02/24/2021 01:05	WG1624535
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	02/24/2021 01:05	WG1624535
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	02/24/2021 01:05	WG1624535
Tetrachloroethene	U		0.0280	0.100	1	02/24/2021 01:05	WG1624535
Toluene	34.0		0.0500	0.200	1	02/24/2021 01:05	WG1624535
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	02/24/2021 01:05	WG1624535
1,2,4-Trichlorobenzene	U		0.193	0.500	1	02/24/2021 01:05	WG1624535
1,1,1-Trichloroethane	U		0.0110	0.100	1	02/24/2021 01:05	WG1624535
1,1,2-Trichloroethane	U		0.0353	0.100	1	02/24/2021 01:05	WG1624535
Trichloroethene	U		0.0160	0.0400	1	02/24/2021 01:05	WG1624535
Trichlorofluoromethane	U		0.0200	0.100	1	02/24/2021 01:05	WG1624535
1,2,3-Trichloropropane	U		0.204	0.500	1	02/24/2021 01:05	WG1624535
1,2,4-Trimethylbenzene	14.3		0.0464	0.200	1	02/24/2021 01:05	WG1624535
1,2,3-Trimethylbenzene	2.38	C5	0.0460	0.200	1	02/24/2021 01:05	WG1624535
1,3,5-Trimethylbenzene	3.69		0.0432	0.200	1	02/24/2021 01:05	WG1624535
Vinyl acetate	U		0.141	0.500	1	02/24/2021 01:05	WG1624535
Vinyl chloride	U		0.0273	0.100	1	02/24/2021 01:05	WG1624535
Xylenes, Total	93.7		0.191	0.260	1	02/24/2021 01:05	WG1624535
(S) Toluene-d8	95.5			75.0-131		02/24/2021 01:05	WG1624535
(S) Toluene-d8	93.4			75.0-131		02/24/2021 20:50	WG1625020
(S) 4-Bromofluorobenzene	102			67.0-138		02/24/2021 01:05	WG1624535
(S) 4-Bromofluorobenzene	110			67.0-138		02/24/2021 20:50	WG1625020
(S) 1,2-Dichloroethane-d4	107			70.0-130		02/24/2021 01:05	WG1624535
(S) 1,2-Dichloroethane-d4	108			70.0-130		02/24/2021 20:50	WG1625020

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

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)	1650	J	667	2000	10	02/25/2021 07:10	WG1624236
Residual Range Organics (RRO)	7180		833	2500	10	02/25/2021 07:10	WG1624236
(S) o-Terphenyl	64.5			52.0-156		02/25/2021 07:10	WG1624236



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	226	B	31.6	100	1	02/24/2021 21:43	WG1624677
(S) a,a,a-Trifluorotoluene(FID)	98.2			78.0-120		02/24/2021 21:43	WG1624677

1 Cp

2 Tc

3 Ss

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	4.16		0.548	1.00	1	02/24/2021 01:24	WG1624535
Acrylonitrile	U		0.0760	0.500	1	02/24/2021 01:24	WG1624535
Benzene	0.914		0.0160	0.0400	1	02/24/2021 01:24	WG1624535
Bromobenzene	U		0.0420	0.500	1	02/24/2021 01:24	WG1624535
Bromochloromethane	U		0.0452	0.200	1	02/24/2021 01:24	WG1624535
Bromodichloromethane	U		0.0315	0.100	1	02/24/2021 01:24	WG1624535
Bromoform	U		0.239	1.00	1	02/24/2021 01:24	WG1624535
Bromomethane	U		0.148	0.500	1	02/24/2021 01:24	WG1624535
n-Butylbenzene	U		0.153	0.500	1	02/24/2021 01:24	WG1624535
sec-Butylbenzene	U		0.101	0.500	1	02/24/2021 01:24	WG1624535
tert-Butylbenzene	U		0.0620	0.200	1	02/24/2021 01:24	WG1624535
Carbon disulfide	U		0.162	0.500	1	02/24/2021 01:24	WG1624535
Carbon tetrachloride	U		0.0432	0.200	1	02/24/2021 01:24	WG1624535
Chlorobenzene	U		0.0229	0.100	1	02/24/2021 01:24	WG1624535
Chlorodibromomethane	U		0.0180	0.100	1	02/24/2021 01:24	WG1624535
Chloroethane	U		0.0432	0.200	1	02/24/2021 01:24	WG1624535
Chloroform	U		0.0166	0.100	1	02/24/2021 01:24	WG1624535
Chloromethane	U		0.0556	0.500	1	02/24/2021 01:24	WG1624535
2-Chlorotoluene	U		0.0368	0.100	1	02/24/2021 01:24	WG1624535
4-Chlorotoluene	U		0.0452	0.200	1	02/24/2021 01:24	WG1624535
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	02/24/2021 01:24	WG1624535
1,2-Dibromoethane	U		0.0210	0.100	1	02/24/2021 01:24	WG1624535
Dibromomethane	U		0.0400	0.200	1	02/24/2021 01:24	WG1624535
1,2-Dichlorobenzene	U		0.0580	0.200	1	02/24/2021 01:24	WG1624535
1,3-Dichlorobenzene	U		0.0680	0.200	1	02/24/2021 01:24	WG1624535
1,4-Dichlorobenzene	U		0.0788	0.200	1	02/24/2021 01:24	WG1624535
trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	02/24/2021 01:24	WG1624535
Dichlorodifluoromethane	U		0.0327	0.100	1	02/24/2021 01:24	WG1624535
1,1-Dichloroethane	U		0.0230	0.100	1	02/24/2021 01:24	WG1624535
1,2-Dichloroethane	U		0.0190	0.100	1	02/24/2021 01:24	WG1624535
1,1-Dichloroethene	U		0.0200	0.100	1	02/24/2021 01:24	WG1624535
cis-1,2-Dichloroethene	U		0.0276	0.100	1	02/24/2021 21:09	WG1625020
trans-1,2-Dichloroethene	U		0.0572	0.200	1	02/24/2021 01:24	WG1624535
1,2-Dichloropropane	U		0.0508	0.200	1	02/24/2021 01:24	WG1624535
1,1-Dichloropropene	U		0.0280	0.100	1	02/24/2021 01:24	WG1624535
1,3-Dichloropropane	U		0.0700	0.200	1	02/24/2021 01:24	WG1624535
cis-1,3-Dichloropropene	U		0.0271	0.100	1	02/24/2021 01:24	WG1624535
trans-1,3-Dichloropropene	U		0.0612	0.200	1	02/24/2021 01:24	WG1624535
2,2-Dichloropropane	U		0.0317	0.100	1	02/24/2021 01:24	WG1624535
Di-isopropyl ether	U		0.0140	0.0400	1	02/24/2021 01:24	WG1624535
Ethylbenzene	9.49		0.0212	0.100	1	02/24/2021 01:24	WG1624535
Hexachloro-1,3-butadiene	U		0.508	1.00	1	02/24/2021 01:24	WG1624535
2-Hexanone	U		0.400	1.00	1	02/24/2021 01:24	WG1624535
n-Hexane	0.137	J	0.0424	0.200	1	02/24/2021 01:24	WG1624535
Iodomethane	U		0.242	0.500	1	02/24/2021 01:24	WG1624535
Isopropylbenzene	0.211		0.0345	0.100	1	02/24/2021 01:24	WG1624535
p-Isopropyltoluene	U		0.0932	0.200	1	02/24/2021 01:24	WG1624535
2-Butanone (MEK)	U		0.500	1.00	1	02/24/2021 01:24	WG1624535

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 02/18/21 13:05

L1318609

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		0.265	1.00	1	02/24/2021 01:24	WG1624535
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	02/24/2021 01:24	WG1624535
Methyl tert-butyl ether	0.0610		0.0118	0.0400	1	02/24/2021 01:24	WG1624535
Naphthalene	3.69		0.124	0.500	1	02/24/2021 01:24	WG1624535
n-Propylbenzene	1.48		0.0472	0.200	1	02/24/2021 01:24	WG1624535
Styrene	U		0.109	0.500	1	02/24/2021 01:24	WG1624535
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	02/24/2021 01:24	WG1624535
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	02/24/2021 01:24	WG1624535
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	02/24/2021 01:24	WG1624535
Tetrachloroethene	U		0.0280	0.100	1	02/24/2021 01:24	WG1624535
Toluene	22.6		0.0500	0.200	1	02/24/2021 01:24	WG1624535
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	02/24/2021 01:24	WG1624535
1,2,4-Trichlorobenzene	U		0.193	0.500	1	02/24/2021 01:24	WG1624535
1,1,1-Trichloroethane	U		0.0110	0.100	1	02/24/2021 01:24	WG1624535
1,1,2-Trichloroethane	U		0.0353	0.100	1	02/24/2021 01:24	WG1624535
Trichloroethene	U		0.0160	0.0400	1	02/24/2021 01:24	WG1624535
Trichlorofluoromethane	U		0.0200	0.100	1	02/24/2021 01:24	WG1624535
1,2,3-Trichloropropane	U		0.204	0.500	1	02/24/2021 01:24	WG1624535
1,2,4-Trimethylbenzene	6.57		0.0464	0.200	1	02/24/2021 01:24	WG1624535
1,2,3-Trimethylbenzene	1.12	<u>C5</u>	0.0460	0.200	1	02/24/2021 01:24	WG1624535
1,3,5-Trimethylbenzene	1.33		0.0432	0.200	1	02/24/2021 01:24	WG1624535
Vinyl acetate	U		0.141	0.500	1	02/24/2021 01:24	WG1624535
Vinyl chloride	U		0.0273	0.100	1	02/24/2021 01:24	WG1624535
Xylenes, Total	56.7		0.191	0.260	1	02/24/2021 01:24	WG1624535
(S) Toluene-d8	95.8			75.0-131		02/24/2021 01:24	WG1624535
(S) Toluene-d8	94.4			75.0-131		02/24/2021 21:09	WG1625020
(S) 4-Bromofluorobenzene	99.6			67.0-138		02/24/2021 01:24	WG1624535
(S) 4-Bromofluorobenzene	101			67.0-138		02/24/2021 21:09	WG1625020
(S) 1,2-Dichloroethane-d4	105			70.0-130		02/24/2021 01:24	WG1624535
(S) 1,2-Dichloroethane-d4	109			70.0-130		02/24/2021 21:09	WG1625020

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 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)	155	<u>J</u>	66.7	200	1	02/25/2021 06:50	WG1624236
Residual Range Organics (RRO)	929		83.3	250	1	02/25/2021 06:50	WG1624236
(S) o-Terphenyl	55.5			52.0-156		02/25/2021 06:50	WG1624236



Method Blank (MB)

(MB) R3625117-1 02/24/21 12:15

Analyte	MB Result %	<u>MB Qualifier</u>	MB MDL %	MB RDL %
Total Solids	0.00100			

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

L1318609-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1318609-02 02/24/21 12:15 • (DUP) R3625117-3 02/24/21 12:15

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits
Total Solids	88.5	88.3	1	0.289		10

⁷ Gl

⁸ Al

Laboratory Control Sample (LCS)

(LCS) R3625117-2 02/24/21 12:15

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

⁹ Sc



Method Blank (MB)

(MB) R3624561-3 02/23/21 17:03

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Gasoline Range Organics-NWTPH	U		0.0339	0.100
(S) a,a,a-Trifluorotoluene(FID)	114			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3624561-2 02/23/21 16:19

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5.50	6.15	112	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			111	77.0-120	

L1318609-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1318609-02 02/24/21 03:34 • (MS) R3624561-4 02/24/21 07:41 • (MSD) R3624561-5 02/24/21 08:03

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Gasoline Range Organics-NWTPH	217	1.92	126	111	57.1	50.3	32	10.0-149			12.5	27
(S) a,a,a-Trifluorotoluene(FID)					105	105		77.0-120				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3625015-2 02/24/21 16:43

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	71.8	J	31.6	100
(S) a,a,a-Trifluorotoluene(FID)	98.7			78.0-120

1 Cp

2 Tc

3 Ss

4 Cn

Laboratory Control Sample (LCS)

(LCS) R3625015-1 02/24/21 15:37

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	5940	108	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)			104	78.0-120	

5 Sr

6 Qc

7 Gl

L1318969-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1318969-01 02/25/21 00:13 • (MS) R3625015-3 02/25/21 01:53 • (MSD) R3625015-4 02/25/21 02:19

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 %
Gasoline Range Organics-NWTPH	5500	41.1	5260	4630	94.9	83.4	1	10.0-155			12.7	21
(S) a,a,a-Trifluorotoluene(FID)					99.3	99.6		78.0-120				

8 Al

9 Sc



Method Blank (MB)

(MB) R3624681-2 02/23/21 22:06

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
Acrylonitrile	U		0.0760	0.500
Benzene	U		0.0160	0.0400
Bromobenzene	U		0.0420	0.500
Bromodichloromethane	U		0.0315	0.100
Bromochloromethane	U		0.0452	0.200
Bromoform	U		0.239	1.00
Bromomethane	U		0.148	0.500
n-Butylbenzene	U		0.153	0.500
sec-Butylbenzene	U		0.101	0.500
tert-Butylbenzene	U		0.0620	0.200
Carbon disulfide	U		0.162	0.500
Carbon tetrachloride	U		0.0432	0.200
Chlorobenzene	U		0.0229	0.100
Chlorodibromomethane	U		0.0180	0.100
Chloroethane	U		0.0432	0.200
Chloroform	U		0.0166	0.100
Chloromethane	U		0.0556	0.500
2-Chlorotoluene	U		0.0368	0.100
4-Chlorotoluene	U		0.0452	0.200
1,2-Dibromo-3-Chloropropane	U		0.204	1.00
1,2-Dibromoethane	U		0.0210	0.100
Dibromomethane	U		0.0400	0.200
1,2-Dichlorobenzene	U		0.0580	0.200
1,3-Dichlorobenzene	U		0.0680	0.200
1,4-Dichlorobenzene	U		0.0788	0.200
trans-1,4-Dichloro-2-butene	U		0.0560	0.200
Dichlorodifluoromethane	U		0.0327	0.100
1,1-Dichloroethane	U		0.0230	0.100
1,2-Dichloroethane	U		0.0190	0.100
1,1-Dichloroethene	U		0.0200	0.100
trans-1,2-Dichloroethene	U		0.0572	0.200
1,2-Dichloropropane	U		0.0508	0.200
1,1-Dichloropropene	U		0.0280	0.100
1,3-Dichloropropane	U		0.0700	0.200
cis-1,3-Dichloropropene	U		0.0271	0.100
trans-1,3-Dichloropropene	U		0.0612	0.200
2,2-Dichloropropane	U		0.0317	0.100
Di-isopropyl ether	U		0.0140	0.0400
Ethylbenzene	U		0.0212	0.100

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3624681-2 02/23/21 22:06

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Hexachloro-1,3-butadiene	U		0.508	1.00
n-Hexane	U		0.0424	0.200
2-Hexanone	U		0.400	1.00
Iodomethane	U		0.242	0.500
Isopropylbenzene	U		0.0345	0.100
p-Isopropyltoluene	U		0.0932	0.200
2-Butanone (MEK)	2.06		0.500	1.00
Methylene Chloride	U		0.265	1.00
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00
Methyl tert-butyl ether	U		0.0118	0.0400
Naphthalene	U		0.124	0.500
n-Propylbenzene	U		0.0472	0.200
Styrene	U		0.109	0.500
1,1,1,2-Tetrachloroethane	U		0.0200	0.100
1,1,2,2-Tetrachloroethane	U		0.0156	0.100
Tetrachloroethene	U		0.0280	0.100
Toluene	U		0.0500	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100
1,2,3-Trichlorobenzene	U		0.0250	0.500
1,2,4-Trichlorobenzene	U		0.193	0.500
1,1,1-Trichloroethane	U		0.0110	0.100
1,1,2-Trichloroethane	U		0.0353	0.100
Trichloroethene	U		0.0160	0.0400
Trichlorofluoromethane	U		0.0200	0.100
1,2,3-Trichloropropane	U		0.204	0.500
1,2,3-Trimethylbenzene	U		0.0460	0.200
1,2,4-Trimethylbenzene	U		0.0464	0.200
1,3,5-Trimethylbenzene	U		0.0432	0.200
Vinyl acetate	U		0.141	0.500
Vinyl chloride	U		0.0273	0.100
Xylenes, Total	U		0.191	0.260
(S) Toluene-d8	101			75.0-131
(S) 4-Bromofluorobenzene	94.4			67.0-138
(S) 1,2-Dichloroethane-d4	96.3			70.0-130

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Laboratory Control Sample (LCS)

(LCS) R3624681-1 02/23/21 21:09

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Acetone	25.0	27.5	110	10.0-160	
Acrylonitrile	25.0	24.3	97.2	45.0-153	
Benzene	5.00	4.59	91.8	70.0-123	
Bromobenzene	5.00	4.92	98.4	73.0-121	
Bromodichloromethane	5.00	4.71	94.2	73.0-121	
Bromochloromethane	5.00	4.86	97.2	77.0-128	
Bromoform	5.00	4.51	90.2	64.0-132	
Bromomethane	5.00	5.18	104	56.0-147	
n-Butylbenzene	5.00	4.73	94.6	68.0-135	
sec-Butylbenzene	5.00	5.37	107	74.0-130	
tert-Butylbenzene	5.00	5.27	105	75.0-127	
Carbon disulfide	5.00	4.34	86.8	56.0-133	
Carbon tetrachloride	5.00	4.97	99.4	66.0-128	
Chlorobenzene	5.00	4.58	91.6	76.0-128	
Chlorodibromomethane	5.00	5.07	101	74.0-127	
Chloroethane	5.00	5.27	105	61.0-134	
Chloroform	5.00	5.19	104	72.0-123	
Chloromethane	5.00	4.72	94.4	51.0-138	
2-Chlorotoluene	5.00	5.16	103	75.0-124	
4-Chlorotoluene	5.00	4.97	99.4	75.0-124	
1,2-Dibromo-3-Chloropropane	5.00	4.57	91.4	59.0-130	
1,2-Dibromoethane	5.00	4.76	95.2	74.0-128	
Dibromomethane	5.00	4.57	91.4	75.0-122	
1,2-Dichlorobenzene	5.00	4.80	96.0	76.0-124	
1,3-Dichlorobenzene	5.00	4.73	94.6	76.0-125	
1,4-Dichlorobenzene	5.00	4.66	93.2	77.0-121	
trans-1,4-Dichloro-2-butene	5.00	6.40	128	45.0-143	
Dichlorodifluoromethane	5.00	6.23	125	43.0-156	
1,1-Dichloroethane	5.00	4.89	97.8	70.0-127	
1,2-Dichloroethane	5.00	4.55	91.0	65.0-131	
1,1-Dichloroethene	5.00	5.18	104	65.0-131	
trans-1,2-Dichloroethene	5.00	5.09	102	71.0-125	
1,2-Dichloropropane	5.00	5.06	101	74.0-125	
1,1-Dichloropropene	5.00	4.88	97.6	73.0-125	
1,3-Dichloropropane	5.00	4.69	93.8	80.0-125	
cis-1,3-Dichloropropene	5.00	4.99	99.8	76.0-127	
trans-1,3-Dichloropropene	5.00	4.94	98.8	73.0-127	
2,2-Dichloropropane	5.00	5.77	115	59.0-135	
Di-isopropyl ether	5.00	5.23	105	60.0-136	
Ethylbenzene	5.00	4.59	91.8	74.0-126	

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Laboratory Control Sample (LCS)

(LCS) R3624681-1 02/23/21 21:09

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Hexachloro-1,3-butadiene	5.00	5.17	103	57.0-150	
n-Hexane	5.00	4.26	85.2	55.0-137	
2-Hexanone	25.0	25.5	102	54.0-147	
Iodomethane	25.0	25.1	100	74.0-134	
Isopropylbenzene	5.00	4.72	94.4	72.0-127	
p-Isopropyltoluene	5.00	4.97	99.4	72.0-133	
2-Butanone (MEK)	25.0	28.0	112	30.0-160	
Methylene Chloride	5.00	4.89	97.8	68.0-123	
4-Methyl-2-pentanone (MIBK)	25.0	27.8	111	56.0-143	
Methyl tert-butyl ether	5.00	5.19	104	66.0-132	
Naphthalene	5.00	4.12	82.4	59.0-130	
n-Propylbenzene	5.00	5.03	101	74.0-126	
Styrene	5.00	4.50	90.0	72.0-127	
1,1,1,2-Tetrachloroethane	5.00	4.56	91.2	74.0-129	
1,1,2,2-Tetrachloroethane	5.00	5.32	106	68.0-128	
Tetrachloroethene	5.00	4.44	88.8	70.0-136	
Toluene	5.00	4.46	89.2	75.0-121	
1,1,2-Trichlorotrifluoroethane	5.00	4.96	99.2	61.0-139	
1,2,3-Trichlorobenzene	5.00	4.66	93.2	59.0-139	
1,2,4-Trichlorobenzene	5.00	4.41	88.2	62.0-137	
1,1,1-Trichloroethane	5.00	5.30	106	69.0-126	
1,1,2-Trichloroethane	5.00	5.25	105	78.0-123	
Trichloroethene	5.00	4.84	96.8	76.0-126	
Trichlorofluoromethane	5.00	5.28	106	61.0-142	
1,2,3-Trichloropropane	5.00	5.70	114	67.0-129	
1,2,3-Trimethylbenzene	5.00	6.04	121	74.0-124	
1,2,4-Trimethylbenzene	5.00	4.95	99.0	70.0-126	
1,3,5-Trimethylbenzene	5.00	5.10	102	73.0-127	
Vinyl acetate	25.0	28.3	113	43.0-159	
Vinyl chloride	5.00	4.73	94.6	63.0-134	
Xylenes, Total	15.0	13.6	90.7	72.0-127	
(S) Toluene-d8			99.0	75.0-131	
(S) 4-Bromofluorobenzene			96.0	67.0-138	
(S) 1,2-Dichloroethane-d4			103	70.0-130	

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3624929-2 02/24/21 19:30

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
cis-1,2-Dichloroethene	U		0.0276	0.100
Toluene	U		0.0500	0.200
Vinyl chloride	U		0.0273	0.100
Xylenes, Total	U		0.191	0.260
<i>(S) Toluene-d8</i>	95.8			75.0-131
<i>(S) 4-Bromofluorobenzene</i>	101			67.0-138
<i>(S) 1,2-Dichloroethane-d4</i>	106			70.0-130

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

Laboratory Control Sample (LCS)

(LCS) R3624929-1 02/24/21 18:52

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
cis-1,2-Dichloroethene	5.00	5.96	119	73.0-125	
Toluene	5.00	4.98	99.6	75.0-121	
Vinyl chloride	5.00	5.96	119	63.0-134	
Xylenes, Total	15.0	16.5	110	72.0-127	
<i>(S) Toluene-d8</i>			94.3	75.0-131	
<i>(S) 4-Bromofluorobenzene</i>			104	67.0-138	
<i>(S) 1,2-Dichloroethane-d4</i>			109	70.0-130	

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3624673-3 02/23/21 22:32

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

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3624673-3 02/23/21 22:32

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00255	0.00500
2-Butanone (MEK)	U		0.0635	0.100
Methylene Chloride	U		0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.00228	0.0250
Methyl tert-butyl ether	U		0.000350	0.00100
Naphthalene	U		0.00488	0.0125
n-Propylbenzene	U		0.000950	0.00500
Styrene	U		0.000229	0.0125
1,1,1,2-Tetrachloroethane	U		0.000948	0.00250
1,1,2,2-Tetrachloroethane	U		0.000695	0.00250
Tetrachloroethene	U		0.000896	0.00250
Toluene	U		0.00130	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000754	0.00250
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
1,2,3-Trimethylbenzene	U		0.00158	0.00500
1,2,4-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	101			75.0-131
(S) 4-Bromofluorobenzene	96.6			67.0-138
(S) 1,2-Dichloroethane-d4	103			70.0-130

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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

(LCS) R3624673-1 02/23/21 21:16 • (LCSD) R3624673-2 02/23/21 21:35

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	0.863	0.863	138	138	10.0-160			0.000	31
Acrylonitrile	0.625	0.662	0.659	106	105	45.0-153			0.454	22
Benzene	0.125	0.117	0.117	93.6	93.6	70.0-123			0.000	20
Bromobenzene	0.125	0.115	0.112	92.0	89.6	73.0-121			2.64	20
Bromodichloromethane	0.125	0.125	0.123	100	98.4	73.0-121			1.61	20



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

(LCS) R3624673-1 02/23/21 21:16 • (LCSD) R3624673-2 02/23/21 21:35

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromoform	0.125	0.119	0.122	95.2	97.6	64.0-132			2.49	20
Bromomethane	0.125	0.112	0.122	89.6	97.6	56.0-147			8.55	20
n-Butylbenzene	0.125	0.121	0.125	96.8	100	68.0-135			3.25	20
sec-Butylbenzene	0.125	0.132	0.132	106	106	74.0-130			0.000	20
tert-Butylbenzene	0.125	0.125	0.122	100	97.6	75.0-127			2.43	20
Carbon tetrachloride	0.125	0.127	0.125	102	100	66.0-128			1.59	20
Chlorobenzene	0.125	0.116	0.113	92.8	90.4	76.0-128			2.62	20
Chlorodibromomethane	0.125	0.119	0.120	95.2	96.0	74.0-127			0.837	20
Chloroethane	0.125	0.111	0.119	88.8	95.2	61.0-134			6.96	20
Chloroform	0.125	0.123	0.118	98.4	94.4	72.0-123			4.15	20
Chloromethane	0.125	0.120	0.116	96.0	92.8	51.0-138			3.39	20
2-Chlorotoluene	0.125	0.123	0.118	98.4	94.4	75.0-124			4.15	20
4-Chlorotoluene	0.125	0.125	0.122	100	97.6	75.0-124			2.43	20
1,2-Dibromo-3-Chloropropane	0.125	0.120	0.120	96.0	96.0	59.0-130			0.000	20
1,2-Dibromoethane	0.125	0.119	0.116	95.2	92.8	74.0-128			2.55	20
Dibromomethane	0.125	0.118	0.119	94.4	95.2	75.0-122			0.844	20
1,2-Dichlorobenzene	0.125	0.122	0.119	97.6	95.2	76.0-124			2.49	20
1,3-Dichlorobenzene	0.125	0.123	0.121	98.4	96.8	76.0-125			1.64	20
1,4-Dichlorobenzene	0.125	0.117	0.118	93.6	94.4	77.0-121			0.851	20
Dichlorodifluoromethane	0.125	0.145	0.144	116	115	43.0-156			0.692	20
1,1-Dichloroethane	0.125	0.121	0.119	96.8	95.2	70.0-127			1.67	20
1,2-Dichloroethane	0.125	0.121	0.118	96.8	94.4	65.0-131			2.51	20
1,1-Dichloroethene	0.125	0.121	0.121	96.8	96.8	65.0-131			0.000	20
cis-1,2-Dichloroethene	0.125	0.113	0.111	90.4	88.8	73.0-125			1.79	20
trans-1,2-Dichloroethene	0.125	0.117	0.116	93.6	92.8	71.0-125			0.858	20
1,2-Dichloropropane	0.125	0.130	0.127	104	102	74.0-125			2.33	20
1,1-Dichloropropene	0.125	0.125	0.119	100	95.2	73.0-125			4.92	20
1,3-Dichloropropane	0.125	0.117	0.112	93.6	89.6	80.0-125			4.37	20
cis-1,3-Dichloropropene	0.125	0.122	0.116	97.6	92.8	76.0-127			5.04	20
trans-1,3-Dichloropropene	0.125	0.123	0.117	98.4	93.6	73.0-127			5.00	20
2,2-Dichloropropane	0.125	0.136	0.133	109	106	59.0-135			2.23	20
Di-isopropyl ether	0.125	0.123	0.122	98.4	97.6	60.0-136			0.816	20
Ethylbenzene	0.125	0.115	0.116	92.0	92.8	74.0-126			0.866	20
Hexachloro-1,3-butadiene	0.125	0.121	0.130	96.8	104	57.0-150			7.17	20
Isopropylbenzene	0.125	0.119	0.118	95.2	94.4	72.0-127			0.844	20
p-Isopropyltoluene	0.125	0.125	0.123	100	98.4	72.0-133			1.61	20
2-Butanone (MEK)	0.625	0.766	0.714	123	114	30.0-160			7.03	24
Methylene Chloride	0.125	0.101	0.102	80.8	81.6	68.0-123			0.985	20
4-Methyl-2-pentanone (MIBK)	0.625	0.675	0.666	108	107	56.0-143			1.34	20
Methyl tert-butyl ether	0.125	0.109	0.113	87.2	90.4	66.0-132			3.60	20

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



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

(LCS) R3624673-1 02/23/21 21:16 • (LCSD) R3624673-2 02/23/21 21:35

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Naphthalene	0.125	0.113	0.121	90.4	96.8	59.0-130			6.84	20
n-Propylbenzene	0.125	0.129	0.125	103	100	74.0-126			3.15	20
Styrene	0.125	0.115	0.113	92.0	90.4	72.0-127			1.75	20
1,1,1,2-Tetrachloroethane	0.125	0.111	0.107	88.8	85.6	74.0-129			3.67	20
1,1,2,2-Tetrachloroethane	0.125	0.125	0.123	100	98.4	68.0-128			1.61	20
Tetrachloroethene	0.125	0.121	0.117	96.8	93.6	70.0-136			3.36	20
Toluene	0.125	0.117	0.115	93.6	92.0	75.0-121			1.72	20
1,1,2-Trichlorotrifluoroethane	0.125	0.136	0.132	109	106	61.0-139			2.99	20
1,2,3-Trichlorobenzene	0.125	0.108	0.121	86.4	96.8	59.0-139			11.4	20
1,2,4-Trichlorobenzene	0.125	0.108	0.118	86.4	94.4	62.0-137			8.85	20
1,1,1-Trichloroethane	0.125	0.116	0.115	92.8	92.0	69.0-126			0.866	20
1,1,2-Trichloroethane	0.125	0.117	0.114	93.6	91.2	78.0-123			2.60	20
Trichloroethene	0.125	0.119	0.118	95.2	94.4	76.0-126			0.844	20
Trichlorofluoromethane	0.125	0.120	0.122	96.0	97.6	61.0-142			1.65	20
1,2,3-Trichloropropane	0.125	0.128	0.119	102	95.2	67.0-129			7.29	20
1,2,3-Trimethylbenzene	0.125	0.119	0.119	95.2	95.2	74.0-124			0.000	20
1,2,4-Trimethylbenzene	0.125	0.122	0.119	97.6	95.2	70.0-126			2.49	20
1,3,5-Trimethylbenzene	0.125	0.125	0.122	100	97.6	73.0-127			2.43	20
Vinyl chloride	0.125	0.123	0.116	98.4	92.8	63.0-134			5.86	20
Xylenes, Total	0.375	0.351	0.345	93.6	92.0	72.0-127			1.72	20
(S) Toluene-d8				101	99.8	75.0-131				
(S) 4-Bromofluorobenzene				99.4	99.1	67.0-138				
(S) 1,2-Dichloroethane-d4				109	106	70.0-130				

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

L1318803-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1318803-03 02/24/21 01:44 • (MS) R3624673-4 02/24/21 05:33 • (MSD) R3624673-5 02/24/21 05:52

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acrylonitrile	0.538	U	0.441	0.511	82.0	95.0	1	10.0-160			14.7	40
Bromobenzene	0.108	U	0.0972	0.101	90.0	93.5	1	10.0-156			3.83	38
Acetone	0.538	U	0.542	0.680	101	126	1	10.0-160			22.6	40
n-Butylbenzene	0.108	U	0.107	0.109	99.1	101	1	10.0-160			1.85	40
Benzene	0.108	U	0.0972	0.0989	90.0	91.6	1	10.0-149			1.73	37
sec-Butylbenzene	0.108	U	0.114	0.120	106	111	1	10.0-159			5.13	39
tert-Butylbenzene	0.108	U	0.108	0.110	100	102	1	10.0-156			1.83	39
Bromodichloromethane	0.108	U	0.102	0.101	94.4	93.5	1	10.0-143			0.985	37
Bromoform	0.108	U	0.0944	0.0944	87.4	87.4	1	10.0-146			0.000	36
Bromomethane	0.108	U	0.0641	0.0616	59.4	57.0	1	10.0-149			3.98	38



L1318803-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1318803-03 02/24/21 01:44 • (MS) R3624673-4 02/24/21 05:33 • (MSD) R3624673-5 02/24/21 05:52

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
2-Chlorotoluene	0.108	U	0.102	0.105	94.4	97.2	1	10.0-159			2.90	38
4-Chlorotoluene	0.108	U	0.104	0.112	96.3	104	1	10.0-155			7.41	39
Carbon tetrachloride	0.108	U	0.101	0.0995	93.5	92.1	1	10.0-145			1.50	37
Chlorobenzene	0.108	U	0.0969	0.0979	89.7	90.6	1	10.0-152			1.03	39
Chlorodibromomethane	0.108	U	0.0977	0.0971	90.5	89.9	1	10.0-146			0.616	37
Dibromomethane	0.108	U	0.0917	0.0988	84.9	91.5	1	10.0-147			7.45	35
Chloroethane	0.108	U	0.0429	0.0300	39.7	27.8	1	10.0-146			35.4	40
Chloroform	0.108	U	0.0919	0.101	85.1	93.5	1	10.0-146			9.43	37
Chloromethane	0.108	U	0.0968	0.0964	89.6	89.3	1	10.0-159			0.414	37
1,2-Dibromo-3-Chloropropane	0.108	U	0.0872	0.0805	80.7	74.5	1	10.0-151			7.99	39
1,2-Dibromoethane	0.108	U	0.0949	0.0984	87.9	91.1	1	10.0-148			3.62	34
1,2-Dichlorobenzene	0.108	U	0.101	0.102	93.5	94.4	1	10.0-155			0.985	37
1,3-Dichlorobenzene	0.108	U	0.102	0.104	94.4	96.3	1	10.0-153			1.94	38
1,4-Dichlorobenzene	0.108	U	0.0969	0.104	89.7	96.3	1	10.0-151			7.07	38
1,1-Dichloropropene	0.108	U	0.102	0.101	94.4	93.5	1	10.0-153			0.985	35
1,3-Dichloropropane	0.108	U	0.0955	0.0999	88.4	92.5	1	10.0-154			4.50	35
Dichlorodifluoromethane	0.108	U	0.112	0.105	104	97.2	1	10.0-160			6.45	35
1,1-Dichloroethane	0.108	U	0.0922	0.0999	85.4	92.5	1	10.0-147			8.02	37
1,2-Dichloroethane	0.108	U	0.0975	0.0999	90.3	92.5	1	10.0-148			2.43	35
2,2-Dichloropropane	0.108	U	0.0891	0.0729	82.5	67.5	1	10.0-138			20.0	36
1,1-Dichloroethene	0.108	U	0.0983	0.0991	91.0	91.8	1	10.0-155			0.811	37
cis-1,2-Dichloroethene	0.108	U	0.0806	0.0944	74.6	87.4	1	10.0-149			15.8	37
Di-isopropyl ether	0.108	U	0.0932	0.0957	86.3	88.6	1	10.0-147			2.65	36
trans-1,2-Dichloroethene	0.108	U	0.0835	0.0923	77.3	85.5	1	10.0-150			10.0	37
1,2-Dichloropropane	0.108	U	0.105	0.109	97.2	101	1	10.0-148			3.74	37
Hexachloro-1,3-butadiene	0.108	U	0.105	0.0996	97.2	92.2	1	10.0-160			5.28	40
cis-1,3-Dichloropropene	0.108	U	0.0999	0.0989	92.5	91.6	1	10.0-151			1.01	37
trans-1,3-Dichloropropene	0.108	U	0.100	0.0994	92.6	92.0	1	10.0-148			0.602	37
p-Isopropyltoluene	0.108	U	0.108	0.112	100	104	1	10.0-160			3.64	40
Ethylbenzene	0.108	0.00118	0.0959	0.0981	87.7	89.7	1	10.0-160			2.27	38
Naphthalene	0.108	U	0.0876	0.0861	81.1	79.7	1	10.0-160			1.73	36
Isopropylbenzene	0.108	U	0.0983	0.0977	91.0	90.5	1	10.0-155			0.612	38
n-Propylbenzene	0.108	U	0.110	0.115	102	106	1	10.0-158			4.44	38
2-Butanone (MEK)	0.538	U	0.499	0.618	92.8	115	1	10.0-160			21.3	40
1,1,1,2-Tetrachloroethane	0.108	U	0.0882	0.0873	81.7	80.8	1	10.0-149			1.03	39
Methylene Chloride	0.108	U	0.0913	0.0564	84.5	52.2	1	10.0-141		J3	47.3	37
4-Methyl-2-pentanone (MIBK)	0.538	U	0.497	0.499	92.4	92.8	1	10.0-160			0.402	35
Methyl tert-butyl ether	0.108	U	0.0835	0.0880	77.3	81.5	1	11.0-147			5.25	35
Styrene	0.108	U	0.0971	0.0971	89.9	89.9	1	10.0-160			0.000	40
1,1,2,2-Tetrachloroethane	0.108	U	0.0993	0.105	91.9	97.2	1	10.0-160			5.58	35

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



L1318803-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1318803-03 02/24/21 01:44 • (MS) R3624673-4 02/24/21 05:33 • (MSD) R3624673-5 02/24/21 05:52

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,2,3-Trichloropropane	0.108	U	0.0999	0.104	92.5	96.3	1	10.0-156			4.02	35
Tetrachloroethene	0.108	U	0.0979	0.0967	90.6	89.5	1	10.0-156			1.23	39
1,2,3-Trimethylbenzene	0.108	U	0.0984	0.102	91.1	94.4	1	10.0-160			3.59	36
1,2,4-Trimethylbenzene	0.108	0.00299	0.102	0.106	91.7	95.4	1	10.0-160			3.85	36
Toluene	0.108	0.00295	0.0971	0.0996	87.2	89.5	1	10.0-156			2.54	38
1,1,2-Trichlorotrifluoroethane	0.108	U	0.114	0.104	106	96.3	1	10.0-160			9.17	36
1,3,5-Trimethylbenzene	0.108	U	0.104	0.108	96.3	100	1	10.0-160			3.77	38
1,2,3-Trichlorobenzene	0.108	U	0.0938	0.0927	86.9	85.8	1	10.0-160			1.18	40
1,2,4-Trichlorobenzene	0.108	U	0.0938	0.0935	86.9	86.6	1	10.0-160			0.320	40
1,1,1-Trichloroethane	0.108	U	0.0881	0.0945	81.6	87.5	1	10.0-144			7.01	35
1,1,2-Trichloroethane	0.108	U	0.0948	0.0974	87.8	90.2	1	10.0-160			2.71	35
Trichloroethene	0.108	U	0.0954	0.0971	88.3	89.9	1	10.0-156			1.77	38
Trichlorofluoromethane	0.108	U	0.0548	0.0397	50.7	36.8	1	10.0-160			32.0	40
Vinyl chloride	0.108	U	0.101	0.0989	93.5	91.6	1	10.0-160			2.10	37
Xylenes, Total	0.323	0.00703	0.293	0.290	88.5	87.6	1	10.0-160			1.03	38
(S) Toluene-d8					101	99.9		75.0-131				
(S) 4-Bromofluorobenzene					98.2	96.9		67.0-138				
(S) 1,2-Dichloroethane-d4					102	105		70.0-130				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1318843-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1318843-01 02/24/21 04:36 • (MS) R3624673-6 02/24/21 06:11 • (MSD) R3624673-7 02/24/21 06:30

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acrylonitrile	0.532	U	0.507	0.352	95.3	66.2	1	10.0-160			36.1	40
Bromobenzene	0.107	U	0.101	0.100	94.4	93.5	1	10.0-156			0.995	38
Acetone	0.532	U	0.524	0.494	98.5	92.9	1	10.0-160			5.89	40
n-Butylbenzene	0.107	U	0.105	0.107	98.1	100	1	10.0-160			1.89	40
Benzene	0.107	U	0.0964	0.0955	90.1	89.3	1	10.0-149			0.938	37
sec-Butylbenzene	0.107	U	0.116	0.118	108	110	1	10.0-159			1.71	39
tert-Butylbenzene	0.107	U	0.109	0.110	102	103	1	10.0-156			0.913	39
Bromodichloromethane	0.107	U	0.101	0.102	94.4	95.3	1	10.0-143			0.985	37
Bromoform	0.107	U	0.0976	0.0957	91.2	89.4	1	10.0-146			1.97	36
Bromomethane	0.107	U	0.0596	0.0589	55.7	55.0	1	10.0-149			1.18	38
2-Chlorotoluene	0.107	U	0.105	0.102	98.1	95.3	1	10.0-159			2.90	38
4-Chlorotoluene	0.107	U	0.109	0.109	102	102	1	10.0-155			0.000	39
Carbon tetrachloride	0.107	U	0.0952	0.0952	89.0	89.0	1	10.0-145			0.000	37
Chlorobenzene	0.107	U	0.0979	0.0979	91.5	91.5	1	10.0-152			0.000	39
Chlorodibromomethane	0.107	U	0.0972	0.0950	90.8	88.8	1	10.0-146			2.29	37



L1318843-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1318843-01 02/24/21 04:36 • (MS) R3624673-6 02/24/21 06:11 • (MSD) R3624673-7 02/24/21 06:30

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Dibromomethane	0.107	U	0.0957	0.0943	89.4	88.1	1	10.0-147			1.47	35
Chloroethane	0.107	U	0.0347	0.0367	32.4	34.3	1	10.0-146			5.60	40
Chloroform	0.107	U	0.0982	0.0968	91.8	90.5	1	10.0-146			1.44	37
Chloromethane	0.107	U	0.0981	0.0914	91.7	85.4	1	10.0-159			7.07	37
1,2-Dibromo-3-Chloropropane	0.107	U	0.0785	0.0789	73.4	73.7	1	10.0-151			0.508	39
1,2-Dibromoethane	0.107	U	0.0973	0.0933	90.9	87.2	1	10.0-148			4.20	34
1,2-Dichlorobenzene	0.107	U	0.0975	0.0996	91.1	93.1	1	10.0-155			2.13	37
1,3-Dichlorobenzene	0.107	U	0.104	0.105	97.2	98.1	1	10.0-153			0.957	38
1,4-Dichlorobenzene	0.107	U	0.101	0.0989	94.4	92.4	1	10.0-151			2.10	38
1,1-Dichloropropene	0.107	U	0.101	0.101	94.4	94.4	1	10.0-153			0.000	35
1,3-Dichloropropane	0.107	U	0.0988	0.0972	92.3	90.8	1	10.0-154			1.63	35
Dichlorodifluoromethane	0.107	U	0.109	0.106	102	99.1	1	10.0-160			2.79	35
1,1-Dichloroethane	0.107	U	0.0991	0.0969	92.6	90.6	1	10.0-147			2.24	37
1,2-Dichloroethane	0.107	U	0.0959	0.0926	89.6	86.5	1	10.0-148			3.50	35
2,2-Dichloropropane	0.107	U	0.0755	0.0798	70.6	74.6	1	10.0-138			5.54	36
1,1-Dichloroethene	0.107	U	0.0992	0.0956	92.7	89.3	1	10.0-155			3.70	37
cis-1,2-Dichloroethene	0.107	U	0.0938	0.0925	87.7	86.4	1	10.0-149			1.40	37
Di-isopropyl ether	0.107	U	0.0968	0.0939	90.5	87.8	1	10.0-147			3.04	36
trans-1,2-Dichloroethene	0.107	U	0.0920	0.0885	86.0	82.7	1	10.0-150			3.88	37
1,2-Dichloropropane	0.107	U	0.109	0.106	102	99.1	1	10.0-148			2.79	37
Hexachloro-1,3-butadiene	0.107	U	0.103	0.108	96.3	101	1	10.0-160			4.74	40
cis-1,3-Dichloropropene	0.107	U	0.0991	0.0984	92.6	92.0	1	10.0-151			0.709	37
trans-1,3-Dichloropropene	0.107	U	0.100	0.100	93.5	93.5	1	10.0-148			0.000	37
p-Isopropyltoluene	0.107	U	0.109	0.110	102	103	1	10.0-160			0.913	40
Ethylbenzene	0.107	U	0.0975	0.0959	91.1	89.6	1	10.0-160			1.65	38
Naphthalene	0.107	U	0.0788	0.0834	73.6	77.9	1	10.0-160			5.67	36
Isopropylbenzene	0.107	U	0.0968	0.0981	90.5	91.7	1	10.0-155			1.33	38
n-Propylbenzene	0.107	U	0.114	0.114	107	107	1	10.0-158			0.000	38
2-Butanone (MEK)	0.532	U	0.505	0.492	94.9	92.5	1	10.0-160			2.61	40
1,1,1,2-Tetrachloroethane	0.107	U	0.0867	0.0834	81.0	77.9	1	10.0-149			3.88	39
Methylene Chloride	0.107	U	0.0412	0.0421	38.5	39.3	1	10.0-141			2.16	37
4-Methyl-2-pentanone (MIBK)	0.532	U	0.478	0.478	89.8	89.8	1	10.0-160			0.000	35
Methyl tert-butyl ether	0.107	U	0.0821	0.0800	76.7	74.8	1	11.0-147			2.59	35
Styrene	0.107	U	0.0954	0.0945	89.2	88.3	1	10.0-160			0.948	40
1,1,2,2-Tetrachloroethane	0.107	U	0.102	0.0989	95.3	92.4	1	10.0-160			3.09	35
1,2,3-Trichloropropane	0.107	U	0.0972	0.101	90.8	94.4	1	10.0-156			3.83	35
Tetrachloroethene	0.107	U	0.0969	0.0992	90.6	92.7	1	10.0-156			2.35	39
1,2,3-Trimethylbenzene	0.107	U	0.0997	0.0987	93.2	92.2	1	10.0-160			1.01	36
1,2,4-Trimethylbenzene	0.107	U	0.103	0.103	96.3	96.3	1	10.0-160			0.000	36
Toluene	0.107	U	0.0980	0.0986	91.6	92.1	1	10.0-156			0.610	38

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



L1318843-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1318843-01 02/24/21 04:36 • (MS) R3624673-6 02/24/21 06:11 • (MSD) R3624673-7 02/24/21 06:30

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,1,2-Trichlorotrifluoroethane	0.107	U	0.104	0.108	97.2	101	1	10.0-160			3.77	36
1,3,5-Trimethylbenzene	0.107	U	0.106	0.105	99.1	98.1	1	10.0-160			0.948	38
1,2,3-Trichlorobenzene	0.107	U	0.0863	0.0901	80.7	84.2	1	10.0-160			4.31	40
1,2,4-Trichlorobenzene	0.107	U	0.0896	0.0911	83.7	85.1	1	10.0-160			1.66	40
1,1,1-Trichloroethane	0.107	U	0.0899	0.0903	84.0	84.4	1	10.0-144			0.444	35
1,1,2-Trichloroethane	0.107	U	0.0949	0.0950	88.7	88.8	1	10.0-160			0.105	35
Trichloroethene	0.107	U	0.0997	0.0964	93.2	90.1	1	10.0-156			3.37	38
Trichlorofluoromethane	0.107	U	0.0450	0.0505	42.1	47.2	1	10.0-160			11.5	40
Vinyl chloride	0.107	U	0.0990	0.0967	92.5	90.4	1	10.0-160			2.35	37
Xylenes, Total	0.319	0.00191	0.289	0.281	90.0	87.5	1	10.0-160			2.81	38
(S) Toluene-d8					101	102		75.0-131				
(S) 4-Bromofluorobenzene					96.6	97.6		67.0-138				
(S) 1,2-Dichloroethane-d4					103	104		70.0-130				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3624557-1 02/24/21 02:40

Analyte	MB Result mg/kg	MB Qualifier	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
<i>(S) o-Terphenyl</i>	61.1			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3624557-2 02/24/21 02:55

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	37.5	75.0	50.0-150	
<i>(S) o-Terphenyl</i>			89.5	18.0-148	

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3624640-1 02/24/21 08:01

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Diesel Range Organics (DRO)	U		66.7	200
Residual Range Organics (RRO)	U		83.3	250
<i>(S) o-Terphenyl</i>	82.5			52.0-156

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

(LCS) R3624640-2 02/24/21 08:22 • (LCSD) R3624640-3 02/24/21 08:42

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Diesel Range Organics (DRO)	1500	1390	1380	92.7	92.0	50.0-150			0.722	20
<i>(S) o-Terphenyl</i>				94.5	87.5	52.0-156				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

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

Qualifier	Description
B	The same analyte is found in the associated blank.
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.
J3	The associated batch QC was outside the established quality control range for precision.



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* 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 National.

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	LAO00356
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	AZLA
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		

Pace Analytical National 1313 Point Mallard Parkway SE Suite B Decatur, AL, 35601

Alabama	40160
ANSI National Accreditation Board	L2239

Pace Analytical National 660 Bercut Dr. Ste. C Sacramento, CA, 95811

California	2961	Oregon	CA300002
Minnesota	006-999-465	Washington	C926
North Dakota	R-214		

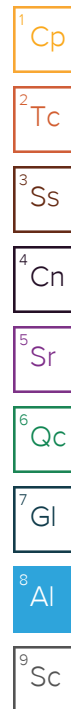
Pace Analytical National 6000 South Eastern Avenue Ste 9A Las Vegas, NV, 89119

Nevada	NV009412021-1
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Pace Analytical National 1606 E. Brazos Street Suite D Victoria, TX, 77901

Texas	T104704328-20-18
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¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable



Company Name/Address:
Partner Engineering & Science - WA
 3607 1st Avenue NW
 Seattle, WA 98107

Billing Information:
 Accounts Payable
 2154 Torrance Blvd.
 Torrance, CA 90501

Pres
 Chk

Analysis / Container / Preservative



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

Report to:
Brian Godbois

Email To: **BGodbois@partneresi.com**

Project Description:

City/State Collected: **Seattle, WA**

Please Circle:
 MT CT ET

Phone: **206-947-8875**

Client Project #
20-293062.2

Lab Project #
PARENGSWA-202930622

Collected by (print):
Brian Godbois

Site/Facility ID #
8701 GREENWOOD AVE N

P.O. #

Collected by (signature):
BG
 Immediately Packed on Ice N Y

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

Quote #
 Date Results Needed
24-hour rush

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	soil NWTPHDX NOSGT 4ozCir-NoPres	soil NWTPHGX 40mlAmb/MeOH10ml/Syr	soil VOCs 8260D 40mlAmb/MeOH10ml/Syr	water NWTPHDX NOSGT 40mlAmb-HCl-BT	water NWTPHGX 40mlAmb HCl	water VOCs 8260D ULL 40mlAmb-HCl
B1-2	grab	SS		950		2	X	X	X			
B1-5		SS		955								
B1-7.5		SS		957								
B1-10		SS		1000								
B2-2		SS		1020			X	X	X			
B2-5		SS		1025								
B2-10		SS		1030								
B3-2		SS		1110								
B3-5		SS		1115			X	X	X			
B3-10		SS		1120		4						

SDG # **L148609**
C024

Acctnum: **PARENGSWA**
 Template: **T181651**
 Prelogin: **P826558**
 PM: **110 - Brian Ford**
 PB: **DW 2/5/21**
 Shipped Via:

Remarks | Sample # (lab only)

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

Remarks: pH _____ Temp _____
 Flow _____ Other _____

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

Samples returned via:
 UPS FedEx Courier

Tracking # **9463 1917 5195/5302**

Relinquished by: (Signature)
BG

Date: **2-18-21**
 Time: **300**

Received by: (Signature)

Trip Blank Received: Yes/No
 Yes No
 BCL / MeOH
 TBR

Relinquished by: (Signature)

Date: _____
 Time: _____

Received by: (Signature)

Temperature: **10 + 12 = 12** °C
 Bottles Received: **70**

If preservation required by Login: Date/Time

Relinquished by: (Signature)

Date: _____
 Time: _____

Received for lab by: (Signature)


Date: **2/23/21**
 Time: **1100**

Hold: _____
 Condition: **NCF / OK**

Company Name/Address:
Partner Engineering & Science - WA
 3607 1st Avenue NW
 Seattle, WA 98107

Billing Information:
 Accounts Payable
 2154 Torrance Blvd.
 Torrance, CA 90501

Pres Chk

Chain of Custody Page **2** of **2**

 Pace Analytical
 National Center for Testing & Innovation

Report to:
Brian Godbois

Email To: **BGodbois@partneresi.com**

Project Description:

City/State Collected: **Seattle, WA** Please Circle: P M T C T E T

Phone: **206-947-8875**


Client Project #
20-293062.2

Lab Project #
PARENGSWA-202930622

Collected by (print):
Brian Godbois

Site/Facility ID #
8701 GREENWOOD AVE N

P.O. #

Collected by (signature):

 Immediately Packed on Ice N Y

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

Quote #
 Date Results Needed
24-hour rsh

Analysis / Container / Preservative	soil NWTPHDX NOSGT 4ozClr-NoPres	soil NWTPHGX 40mlAmb/MeOH10ml/Syr	soil VOCs 8260D 40mlAmb/MeOH10ml/Syr	water NWTPHDX NOSGT 40mlAmb-HCl-BT	water NWTPHGX 40mlAmb HCl	water VOCs 8260D ULL 40mlAmb-HCl
	X	X	X			
	X	X	X			
				X	X	X
				X	X	X
				X	X	X
				X	X	X

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


SDG # **L1318609**
 Table #
 Acctnum: **PARENGSWA**
 Template: **T181651**
 Prelogin: **P826558**
 PM: **110 - Brian Ford**
 PB: **DN 2/5/21**
 Shipped Via:
 Remarks Sample # (lab only)

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs
B4-2	grab	SS		2-18-21	1210	2
B4-5		SS			1215	
B5-2		SS			1240	
B5-5		SS			1245	
B5-10		SS			1250	
B1-aW		GW			1010	8
B2-aW		GW			1055	1
B3-aW		aW			1130	
B4-aW		aW			1220	
B5-aW		aW			105	

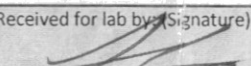
* Matrix:
 SS - Soil AIR - Air F - Filter
 GW - Groundwater B - Bioassay
 WW - WasteWater
 DW - Drinking Water
 OT - Other

Remarks:
 pH _____ Temp _____
 Flow _____ Other _____
 Samples returned via:
 UPS FedEx Courier
 Tracking #

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

Relinquished by: (Signature)


Date: **2-18-21**
 Time: **300**

Received by: (Signature)


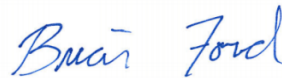
Trip Blank Received: **4** Yes/No
 HCL/MeOH TBR
 Bottles Received: **70**
 Date: **2/23/21** Time: **1140**

If preservation required by Login: Date/Time
 Hold:
 Condition: NCF / OK

Partner Engineering & Science - WA

Sample Delivery Group: L1318274
Samples Received: 02/22/2021
Project Number: 20-293062.2
Description:
Site: 8701 GREENWOOD AVE N SEATTLE
Report To: Brian Godbois
3607 1st Avenue NW
Seattle, WA 98107

Entire Report Reviewed By:



Brian Ford
Project Manager

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Pace Analytical National

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SAMPLE SUMMARY



B2-SG L1318274-01 Air

Collected by
Brian Godbois

Collected date/time
02/18/21 13:14

Received date/time
02/22/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1623639	1	02/22/21 16:29	02/22/21 16:29	CAW	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1624112	20	02/23/21 14:04	02/23/21 14:04	CAW	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

B3-SG L1318274-02 Air

Collected by
Brian Godbois

Collected date/time
02/18/21 13:17

Received date/time
02/22/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1623639	1	02/22/21 17:09	02/22/21 17:09	CAW	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1624112	200	02/23/21 13:26	02/23/21 13:26	CAW	Mt. Juliet, TN

4 Cn

5 Sr

6 Qc

B4-SG L1318274-03 Air

Collected by
Brian Godbois

Collected date/time
02/18/21 13:19

Received date/time
02/22/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1623639	1	02/22/21 17:50	02/22/21 17:50	CAW	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1624112	20	02/23/21 14:42	02/23/21 14:42	CAW	Mt. Juliet, TN

7 Gl

8 Al

9 Sc

B5-SG L1318274-04 Air

Collected by
Brian Godbois

Collected date/time
02/18/21 13:52

Received date/time
02/22/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1623639	1	02/22/21 18:30	02/22/21 18:30	CAW	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1624112	20	02/23/21 12:08	02/23/21 12:08	CAW	Mt. Juliet, TN

SS1 L1318274-05 Air

Collected by
Brian Godbois

Collected date/time
02/18/21 13:34

Received date/time
02/22/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1623639	1	02/22/21 19:11	02/22/21 19:11	CAW	Mt. Juliet, TN

SS2 L1318274-06 Air

Collected by
Brian Godbois

Collected date/time
02/18/21 13:34

Received date/time
02/22/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1623639	1	02/22/21 19:52	02/22/21 19:52	CAW	Mt. Juliet, TN

SS3 L1318274-07 Air

Collected by
Brian Godbois

Collected date/time
02/18/21 13:35

Received date/time
02/22/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1623639	1	02/22/21 20:33	02/22/21 20:33	CAW	Mt. Juliet, TN



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

Brian Ford
Project Manager

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



Collected date/time: 02/18/21 13:14

L1318274

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	12.2	29.0		1	WG1623639
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1623639
Benzene	71-43-2	78.10	4.00	12.8	133	425		20	WG1624112
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1623639
Bromodichloromethane	75-27-4	164	0.200	1.34	0.440	2.95		1	WG1623639
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1623639
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1623639
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1623639
Carbon disulfide	75-15-0	76.10	0.200	0.622	1.45	4.51		1	WG1623639
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1623639
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1623639
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1623639
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1623639
Chloromethane	74-87-3	50.50	0.200	0.413	0.922	1.90		1	WG1623639
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1623639
Cyclohexane	110-82-7	84.20	0.200	0.689	14.6	50.3		1	WG1623639
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1623639
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1623639
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1623639
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1623639
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1623639
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1623639
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1623639
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1623639
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1623639
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1623639
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1623639
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1623639
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1623639
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1623639
Ethanol	64-17-5	46.10	0.630	1.19	30.8	58.1		1	WG1623639
Ethylbenzene	100-41-4	106	4.00	17.3	208	902		20	WG1624112
4-Ethyltoluene	622-96-8	120	0.200	0.982	73.0	358		1	WG1623639
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.278	1.56		1	WG1623639
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.423	2.09		1	WG1623639
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1623639
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1623639
Heptane	142-82-5	100	0.200	0.818	69.6	285		1	WG1623639
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1623639
n-Hexane	110-54-3	86.20	0.630	2.22	63.7	225		1	WG1623639
Isopropylbenzene	98-82-8	120.20	0.200	0.983	4.51	22.2		1	WG1623639
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.533	1.85		1	WG1623639
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1623639
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	2.54	7.49		1	WG1623639
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1623639
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1623639
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1623639
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1623639
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1623639
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1623639
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1623639
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1623639
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1623639
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1623639
Toluene	108-88-3	92.10	10.0	37.7	1320	4970		20	WG1624112
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1623639

1 Cp

2 Tc

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7 Gl

8 Al

9 Sc

ACCOUNT:

Partner Engineering & Science - WA

PROJECT:

20-293062.2

SDG:

L1318274

DATE/TIME:

02/23/21 16:00

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Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1623639
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1623639
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1623639
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	48.7	239		1	WG1623639
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	26.5	130		1	WG1623639
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	26.5	124		1	WG1623639
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1623639
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1623639
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1623639
m&p-Xylene	1330-20-7	106	8.00	34.7	980	4250		20	WG1624112
o-Xylene	95-47-6	106	4.00	17.3	217	941		20	WG1624112
1,1-Difluoroethane	75-37-6	66.05	20.0	54.0	1990	5380		20	WG1624112
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		106				WG1623639
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		101				WG1624112

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Cp
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Collected date/time: 02/18/21 13:17

L1318274

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	13.7	32.6		1	WG1623639
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1623639
Benzene	71-43-2	78.10	40.0	128	241	770		200	WG1624112
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1623639
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1623639
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1623639
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1623639
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1623639
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1623639
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1623639
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1623639
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1623639
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1623639
Chloromethane	74-87-3	50.50	0.200	0.413	1.63	3.37		1	WG1623639
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1623639
Cyclohexane	110-82-7	84.20	0.200	0.689	66.1	228		1	WG1623639
Dibromochloromethane	124-48-1	208	0.200	1.70	0.347	2.95		1	WG1623639
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1623639
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1623639
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1623639
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1623639
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1623639
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1623639
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1623639
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1623639
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1623639
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1623639
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1623639
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1623639
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1623639
Ethanol	64-17-5	46.10	0.630	1.19	68.5	129		1	WG1623639
Ethylbenzene	100-41-4	106	40.0	173	219	949		200	WG1624112
4-Ethyltoluene	622-96-8	120	0.200	0.982	50.2	246		1	WG1623639
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.276	1.55		1	WG1623639
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.519	2.57		1	WG1623639
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1623639
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1623639
Heptane	142-82-5	100	40.0	164	201	822		200	WG1624112
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1623639
n-Hexane	110-54-3	86.20	126	444	151	532		200	WG1624112
Isopropylbenzene	98-82-8	120.20	0.200	0.983	7.89	38.8		1	WG1623639
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1623639
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1623639
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	2.17	6.40		1	WG1623639
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1623639
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1623639
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1623639
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1623639
2-Propanol	67-63-0	60.10	1.25	3.07	3.96	9.73		1	WG1623639
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1623639
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1623639
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1623639
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1623639
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1623639
Toluene	108-88-3	92.10	100	377	2310	8700		200	WG1624112
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1623639

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

ACCOUNT:

Partner Engineering & Science - WA

PROJECT:

20-293062.2

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Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1623639
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1623639
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1623639
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	14.5	71.2		1	WG1623639
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	9.06	44.5		1	WG1623639
2,2,4-Trimethylpentane	540-84-1	114.22	40.0	187	158	738		200	WG1624112
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1623639
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1623639
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1623639
m&p-Xylene	1330-20-7	106	80.0	347	753	3260		200	WG1624112
o-Xylene	95-47-6	106	40.0	173	166	720		200	WG1624112
1,1-Difluoroethane	75-37-6	66.05	1.00	2.70	64.5	174		1	WG1623639
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		109				WG1623639
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		99.9				WG1624112

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



Collected date/time: 02/18/21 13:19

L1318274

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	7.72	18.3		1	WG1623639
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1623639
Benzene	71-43-2	78.10	0.200	0.639	51.4	164		1	WG1623639
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1623639
Bromodichloromethane	75-27-4	164	0.200	1.34	0.700	4.70		1	WG1623639
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1623639
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1623639
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1623639
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1623639
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1623639
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1623639
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1623639
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1623639
Chloromethane	74-87-3	50.50	0.200	0.413	47.9	98.9		1	WG1623639
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1623639
Cyclohexane	110-82-7	84.20	0.200	0.689	53.6	185		1	WG1623639
Dibromochloromethane	124-48-1	208	0.200	1.70	0.330	2.81		1	WG1623639
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1623639
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1623639
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1623639
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1623639
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1623639
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1623639
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1623639
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1623639
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1623639
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1623639
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1623639
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1623639
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1623639
Ethanol	64-17-5	46.10	0.630	1.19	13.3	25.1		1	WG1623639
Ethylbenzene	100-41-4	106	0.200	0.867	50.5	219		1	WG1623639
4-Ethyltoluene	622-96-8	120	0.200	0.982	15.7	77.1		1	WG1623639
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.255	1.43		1	WG1623639
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.445	2.20		1	WG1623639
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1623639
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1623639
Heptane	142-82-5	100	0.200	0.818	80.3	328		1	WG1623639
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1623639
n-Hexane	110-54-3	86.20	12.6	44.4	210	740		20	WG1624112
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1623639
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1623639
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1623639
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1623639
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1623639
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1623639
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1623639
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1623639
2-Propanol	67-63-0	60.10	1.25	3.07	1.77	4.35		1	WG1623639
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1623639
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1623639
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1623639
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1623639
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1623639
Toluene	108-88-3	92.10	10.0	37.7	403	1520		20	WG1624112
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1623639

1 Cp

2 Tc

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6 Qc

7 Gl

8 Al

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ACCOUNT:

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PROJECT:

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Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1623639
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1623639
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1623639
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	8.08	39.7		1	WG1623639
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	5.08	24.9		1	WG1623639
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	89.2	417		1	WG1623639
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1623639
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1623639
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1623639
m&p-Xylene	1330-20-7	106	0.400	1.73	182	789		1	WG1623639
o-Xylene	95-47-6	106	0.200	0.867	46.5	202		1	WG1623639
1,1-Difluoroethane	75-37-6	66.05	1.00	2.70	ND	ND		1	WG1623639
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		103				WG1623639
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		100				WG1624112

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Cp
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Ss
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Cn
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Qc
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Al
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Sc



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Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	11.4	27.1		1	WG1623639
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1623639
Benzene	71-43-2	78.10	0.200	0.639	30.7	98.1		1	WG1623639
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1623639
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1623639
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1623639
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1623639
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1623639
Carbon disulfide	75-15-0	76.10	0.200	0.622	4.28	13.3		1	WG1623639
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1623639
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1623639
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1623639
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1623639
Chloromethane	74-87-3	50.50	0.200	0.413	1.02	2.11		1	WG1623639
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1623639
Cyclohexane	110-82-7	84.20	0.200	0.689	24.3	83.7		1	WG1623639
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1623639
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1623639
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1623639
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1623639
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1623639
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1623639
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1623639
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1623639
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1623639
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1623639
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1623639
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1623639
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1623639
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1623639
Ethanol	64-17-5	46.10	0.630	1.19	11.0	20.7		1	WG1623639
Ethylbenzene	100-41-4	106	0.200	0.867	26.3	114		1	WG1623639
4-Ethyltoluene	622-96-8	120	0.200	0.982	9.54	46.8		1	WG1623639
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.263	1.48		1	WG1623639
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.498	2.46		1	WG1623639
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1623639
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1623639
Heptane	142-82-5	100	0.200	0.818	20.6	84.3		1	WG1623639
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1623639
n-Hexane	110-54-3	86.20	0.630	2.22	71.5	252		1	WG1623639
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1623639
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1623639
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1623639
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	2.70	7.96		1	WG1623639
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1623639
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1623639
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1623639
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1623639
2-Propanol	67-63-0	60.10	1.25	3.07	1.64	4.03		1	WG1623639
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1623639
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1623639
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1623639
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1623639
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1623639
Toluene	108-88-3	92.10	10.0	37.7	197	742		20	WG1624112
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1623639

1 Cp

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ACCOUNT:

Partner Engineering & Science - WA

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Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1623639
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1623639
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1623639
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	6.54	32.1		1	WG1623639
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	3.17	15.6		1	WG1623639
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	37.6	176		1	WG1623639
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1623639
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1623639
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1623639
m&p-Xylene	1330-20-7	106	0.400	1.73	112	486		1	WG1623639
o-Xylene	95-47-6	106	0.200	0.867	28.8	125		1	WG1623639
1,1-Difluoroethane	75-37-6	66.05	1.00	2.70	2.20	5.94		1	WG1623639
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		103				WG1623639
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		100				WG1624112

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Cp
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Sc



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Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	198	471	E	1	WG1623639
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1623639
Benzene	71-43-2	78.10	0.200	0.639	6.89	22.0		1	WG1623639
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1623639
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1623639
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1623639
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1623639
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1623639
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.224	0.697		1	WG1623639
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1623639
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1623639
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1623639
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1623639
Chloromethane	74-87-3	50.50	0.200	0.413	0.235	0.485		1	WG1623639
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1623639
Cyclohexane	110-82-7	84.20	0.200	0.689	1.93	6.65		1	WG1623639
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1623639
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1623639
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1623639
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1623639
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1623639
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1623639
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1623639
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1623639
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1623639
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1623639
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1623639
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1623639
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1623639
1,4-Dioxane	123-91-1	88.10	0.200	0.721	0.234	0.843		1	WG1623639
Ethanol	64-17-5	46.10	0.630	1.19	114	215	E	1	WG1623639
Ethylbenzene	100-41-4	106	0.200	0.867	0.287	1.24		1	WG1623639
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.318	1.56		1	WG1623639
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.599	3.37		1	WG1623639
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.535	2.65		1	WG1623639
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1623639
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1623639
Heptane	142-82-5	100	0.200	0.818	2.04	8.34		1	WG1623639
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1623639
n-Hexane	110-54-3	86.20	0.630	2.22	5.07	17.9		1	WG1623639
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1623639
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1623639
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1623639
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	1.66	4.90		1	WG1623639
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1623639
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1623639
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1623639
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1623639
2-Propanol	67-63-0	60.10	1.25	3.07	24.1	59.2		1	WG1623639
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1623639
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1623639
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1623639
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1623639
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1623639
Toluene	108-88-3	92.10	0.500	1.88	3.25	12.2		1	WG1623639
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1623639

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 02/18/21 13:34

L1318274

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1623639
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1623639
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1623639
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.393	1.93		1	WG1623639
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1623639
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1623639
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1623639
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1623639
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1623639
m&p-Xylene	1330-20-7	106	0.400	1.73	1.32	5.72		1	WG1623639
o-Xylene	95-47-6	106	0.200	0.867	0.441	1.91		1	WG1623639
1,1-Difluoroethane	75-37-6	66.05	1.00	2.70	1.05	2.84		1	WG1623639
<i>(S)</i> 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		101				WG1623639

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 02/18/21 13:34

L1318274

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	79.8	190		1	WG1623639
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1623639
Benzene	71-43-2	78.10	0.200	0.639	3.99	12.7		1	WG1623639
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1623639
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1623639
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1623639
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1623639
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1623639
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1623639
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1623639
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1623639
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1623639
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1623639
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1623639
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1623639
Cyclohexane	110-82-7	84.20	0.200	0.689	3.18	11.0		1	WG1623639
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1623639
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1623639
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1623639
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1623639
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1623639
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1623639
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1623639
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1623639
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1623639
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1623639
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1623639
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1623639
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1623639
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1623639
Ethanol	64-17-5	46.10	0.630	1.19	188	354	E	1	WG1623639
Ethylbenzene	100-41-4	106	0.200	0.867	1.08	4.68		1	WG1623639
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.223	1.09		1	WG1623639
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	1.04	5.84		1	WG1623639
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.553	2.73		1	WG1623639
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1623639
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1623639
Heptane	142-82-5	100	0.200	0.818	2.60	10.6		1	WG1623639
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1623639
n-Hexane	110-54-3	86.20	0.630	2.22	6.26	22.1		1	WG1623639
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1623639
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1623639
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1623639
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	2.05	6.05		1	WG1623639
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1623639
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1623639
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1623639
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1623639
2-Propanol	67-63-0	60.10	1.25	3.07	15.5	38.1		1	WG1623639
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1623639
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1623639
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1623639
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1623639
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1623639
Toluene	108-88-3	92.10	0.500	1.88	3.06	11.5		1	WG1623639
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1623639

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 02/18/21 13:34

L1318274

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1623639
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1623639
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1623639
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	1.17	5.74		1	WG1623639
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.350	1.72		1	WG1623639
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	0.242	1.13		1	WG1623639
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1623639
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1623639
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1623639
m&p-Xylene	1330-20-7	106	0.400	1.73	3.74	16.2		1	WG1623639
o-Xylene	95-47-6	106	0.200	0.867	1.02	4.42		1	WG1623639
1,1-Difluoroethane	75-37-6	66.05	1.00	2.70	ND	ND		1	WG1623639
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		100				WG1623639

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 02/18/21 13:35

L1318274

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	76.4	182		1	WG1623639
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1623639
Benzene	71-43-2	78.10	0.200	0.639	1.78	5.69		1	WG1623639
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1623639
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1623639
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1623639
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1623639
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1623639
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.370	1.15		1	WG1623639
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1623639
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1623639
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1623639
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1623639
Chloromethane	74-87-3	50.50	0.200	0.413	0.217	0.448		1	WG1623639
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1623639
Cyclohexane	110-82-7	84.20	0.200	0.689	0.941	3.24		1	WG1623639
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1623639
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1623639
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1623639
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1623639
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1623639
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1623639
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1623639
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1623639
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1623639
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1623639
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1623639
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1623639
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1623639
1,4-Dioxane	123-91-1	88.10	0.200	0.721	0.374	1.35		1	WG1623639
Ethanol	64-17-5	46.10	0.630	1.19	129	243	E	1	WG1623639
Ethylbenzene	100-41-4	106	0.200	0.867	0.325	1.41		1	WG1623639
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1623639
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.478	2.69		1	WG1623639
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.553	2.73		1	WG1623639
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1623639
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1623639
Heptane	142-82-5	100	0.200	0.818	0.670	2.74		1	WG1623639
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1623639
n-Hexane	110-54-3	86.20	0.630	2.22	1.68	5.92		1	WG1623639
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1623639
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1623639
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1623639
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	2.75	8.11		1	WG1623639
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1623639
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1623639
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1623639
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1623639
2-Propanol	67-63-0	60.10	1.25	3.07	16.8	41.3		1	WG1623639
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1623639
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1623639
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1623639
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1623639
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1623639
Toluene	108-88-3	92.10	0.500	1.88	2.10	7.91		1	WG1623639
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1623639

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

ACCOUNT:

Partner Engineering & Science - WA

PROJECT:

20-293062.2

SDG:

L1318274

DATE/TIME:

02/23/21 16:00

PAGE:

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Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1623639
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1623639
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1623639
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.332	1.63		1	WG1623639
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1623639
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	0.258	1.21		1	WG1623639
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1623639
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1623639
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1623639
m&p-Xylene	1330-20-7	106	0.400	1.73	1.40	6.07		1	WG1623639
o-Xylene	95-47-6	106	0.200	0.867	0.497	2.15		1	WG1623639
1,1-Difluoroethane	75-37-6	66.05	1.00	2.70	1.16	3.13		1	WG1623639
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		101				WG1623639

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



Method Blank (MB)

(MB) R3624207-3 02/22/21 13:49

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
1,1-Difluoroethane	U		0.129	1.00
1,2,4-Trichlorobenzene	U		0.148	0.630
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,2-Dichloropropane	U		0.0760	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
1,3-Butadiene	U		0.104	2.00
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,4-Dioxane	U		0.0833	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
2-Butanone (MEK)	U		0.0814	1.25
2-Chlorotoluene	U		0.0828	0.200
2-Propanol	U		0.264	1.25
4-Ethyltoluene	U		0.0783	0.200
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Dibromochloromethane	U		0.0727	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3624207-3 02/22/21 13:49

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
cis-1,3-Dichloropropene	U		0.0689	0.200
Cyclohexane	U		0.0753	0.200
Dichlorodifluoromethane	U		0.137	0.200
Ethanol	U		0.265	0.630
Ethylbenzene	U		0.0835	0.200
Heptane	U		0.104	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
Isopropylbenzene	U		0.0777	0.200
m&p-Xylene	U		0.135	0.400
Methyl Butyl Ketone	U		0.133	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Methylene Chloride	U		0.0979	0.200
n-Hexane	U		0.206	0.630
Naphthalene	U		0.350	0.630
o-Xylene	U		0.0828	0.200
Propene	U		0.0932	0.400
Styrene	U		0.0788	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
trans-1,2-Dichloroethene	U		0.0673	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
Trichloroethylene	U		0.0680	0.200
Trichlorofluoromethane	U		0.0819	0.200
Vinyl acetate	U		0.116	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl chloride	U		0.0949	0.200
(S) 1,4-Bromofluorobenzene	99.8			60.0-140

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

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

(LCS) R3624207-1 02/22/21 12:30 • (LCSD) R3624207-2 02/22/21 13:10

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
1,1,1-Trichloroethane	3.75	4.33	4.40	115	117	70.0-130			1.60	25
1,1,2,2-Tetrachloroethane	3.75	4.25	4.33	113	115	70.0-130			1.86	25
1,1,2-Trichloroethane	3.75	4.26	4.29	114	114	70.0-130			0.702	25
1,1,2-Trichlorotrifluoroethane	3.75	4.10	4.14	109	110	70.0-130			0.971	25



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

(LCS) R3624207-1 02/22/21 12:30 • (LCSD) R3624207-2 02/22/21 13:10

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 %
1,1-Dichloroethane	3.75	4.24	4.25	113	113	70.0-130			0.236	25
1,1-Dichloroethene	3.75	4.26	4.26	114	114	70.0-130			0.000	25
1,1-Difluoroethane	3.75	4.11	4.15	110	111	70.0-130			0.969	25
1,2,4-Trichlorobenzene	3.75	4.30	4.28	115	114	70.0-160			0.466	25
1,2,4-Trimethylbenzene	3.75	4.41	4.42	118	118	70.0-130			0.227	25
1,2-Dibromoethane	3.75	4.27	4.27	114	114	70.0-130			0.000	25
1,2-Dichlorobenzene	3.75	4.25	4.27	113	114	70.0-130			0.469	25
1,2-Dichloroethane	3.75	4.34	4.38	116	117	70.0-130			0.917	25
1,2-Dichloropropane	3.75	4.24	4.31	113	115	70.0-130			1.64	25
1,2-Dichlorotetrafluoroethane	3.75	4.30	4.34	115	116	70.0-130			0.926	25
1,3,5-Trimethylbenzene	3.75	4.40	4.42	117	118	70.0-130			0.454	25
1,3-Butadiene	3.75	4.39	4.26	117	114	70.0-130			3.01	25
1,3-Dichlorobenzene	3.75	4.27	4.30	114	115	70.0-130			0.700	25
1,4-Dichlorobenzene	3.75	4.31	4.36	115	116	70.0-130			1.15	25
1,4-Dioxane	3.75	4.24	4.32	113	115	70.0-140			1.87	25
2,2,4-Trimethylpentane	3.75	4.25	4.29	113	114	70.0-130			0.937	25
2-Butanone (MEK)	3.75	4.13	4.17	110	111	70.0-130			0.964	25
2-Chlorotoluene	3.75	4.38	4.41	117	118	70.0-130			0.683	25
2-Propanol	3.75	4.23	4.25	113	113	70.0-139			0.472	25
4-Ethyltoluene	3.75	4.33	4.36	115	116	70.0-130			0.690	25
4-Methyl-2-pentanone (MIBK)	3.75	4.26	4.25	114	113	70.0-139			0.235	25
Acetone	3.75	4.16	4.16	111	111	70.0-130			0.000	25
Allyl Chloride	3.75	4.35	4.44	116	118	70.0-130			2.05	25
Benzene	3.75	4.23	4.24	113	113	70.0-130			0.236	25
Benzyl Chloride	3.75	4.47	4.47	119	119	70.0-152			0.000	25
Bromodichloromethane	3.75	4.36	4.39	116	117	70.0-130			0.686	25
Bromoform	3.75	4.23	4.24	113	113	70.0-130			0.236	25
Bromomethane	3.75	4.37	4.34	117	116	70.0-130			0.689	25
Carbon disulfide	3.75	4.28	4.36	114	116	70.0-130			1.85	25
Carbon tetrachloride	3.75	4.45	4.47	119	119	70.0-130			0.448	25
Chlorobenzene	3.75	4.28	4.28	114	114	70.0-130			0.000	25
Dibromochloromethane	3.75	4.41	4.42	118	118	70.0-130			0.227	25
Chloroethane	3.75	4.41	4.33	118	115	70.0-130			1.83	25
Chloroform	3.75	4.24	4.27	113	114	70.0-130			0.705	25
Chloromethane	3.75	4.23	4.29	113	114	70.0-130			1.41	25
cis-1,2-Dichloroethene	3.75	4.24	4.28	113	114	70.0-130			0.939	25
cis-1,3-Dichloropropene	3.75	4.29	4.28	114	114	70.0-130			0.233	25
Cyclohexane	3.75	4.17	4.18	111	111	70.0-130			0.240	25
Dichlorodifluoromethane	3.75	4.41	4.33	118	115	64.0-139			1.83	25
Ethanol	3.75	4.26	4.04	114	108	55.0-148			5.30	25

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



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

(LCS) R3624207-1 02/22/21 12:30 • (LCSD) R3624207-2 02/22/21 13:10

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 %
Ethylbenzene	3.75	4.26	4.31	114	115	70.0-130			1.17	25
Heptane	3.75	4.46	4.48	119	119	70.0-130			0.447	25
Hexachloro-1,3-butadiene	3.75	4.18	4.22	111	113	70.0-151			0.952	25
Isopropylbenzene	3.75	4.36	4.38	116	117	70.0-130			0.458	25
m&p-Xylene	7.50	8.76	8.79	117	117	70.0-130			0.342	25
Methyl Butyl Ketone	3.75	4.25	4.28	113	114	70.0-149			0.703	25
Methyl Methacrylate	3.75	4.22	4.13	113	110	70.0-130			2.16	25
MTBE	3.75	4.24	4.27	113	114	70.0-130			0.705	25
Methylene Chloride	3.75	4.21	4.19	112	112	70.0-130			0.476	25
n-Hexane	3.75	4.21	4.29	112	114	70.0-130			1.88	25
Naphthalene	3.75	4.25	4.34	113	116	70.0-159			2.10	25
o-Xylene	3.75	4.26	4.29	114	114	70.0-130			0.702	25
Propene	3.75	4.13	4.13	110	110	64.0-144			0.000	25
Styrene	3.75	4.35	4.41	116	118	70.0-130			1.37	25
Tetrachloroethylene	3.75	4.21	4.24	112	113	70.0-130			0.710	25
Tetrahydrofuran	3.75	4.22	4.27	113	114	70.0-137			1.18	25
Toluene	3.75	4.25	4.27	113	114	70.0-130			0.469	25
trans-1,2-Dichloroethene	3.75	4.24	4.26	113	114	70.0-130			0.471	25
trans-1,3-Dichloropropene	3.75	4.42	4.45	118	119	70.0-130			0.676	25
Trichloroethylene	3.75	4.14	4.18	110	111	70.0-130			0.962	25
Trichlorofluoromethane	3.75	4.56	4.46	122	119	70.0-130			2.22	25
Vinyl acetate	3.75	4.62	4.60	123	123	70.0-130			0.434	25
Vinyl Bromide	3.75	4.41	4.35	118	116	70.0-130			1.37	25
Vinyl chloride	3.75	4.42	4.37	118	117	70.0-130			1.14	25
(S) 1,4-Bromofluorobenzene				101	101	60.0-140				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3624331-3 02/23/21 09:45

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Benzene	U		0.0715	0.200
Ethylbenzene	U		0.0835	0.200
Heptane	U		0.104	0.200
n-Hexane	U		0.206	0.630
Toluene	U		0.0870	0.500
2,2,4-Trimethylpentane	U		0.133	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
1,1-Difluoroethane	U		0.129	1.00
(S) 1,4-Bromofluorobenzene	100			60.0-140

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

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

(LCS) R3624331-1 02/23/21 08:25 • (LCSD) R3624331-2 02/23/21 09:05

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
n-Hexane	3.75	4.26	4.33	114	115	70.0-130			1.63	25
Benzene	3.75	4.26	4.32	114	115	70.0-130			1.40	25
Heptane	3.75	4.54	4.55	121	121	70.0-130			0.220	25
Toluene	3.75	4.31	4.37	115	117	70.0-130			1.38	25
Ethylbenzene	3.75	4.28	4.33	114	115	70.0-130			1.16	25
m&p-Xylene	7.50	8.80	8.85	117	118	70.0-130			0.567	25
o-Xylene	3.75	4.30	4.29	115	114	70.0-130			0.233	25
2,2,4-Trimethylpentane	3.75	4.27	4.33	114	115	70.0-130			1.40	25
1,1-Difluoroethane	3.75	4.25	4.26	113	114	70.0-130			0.235	25
(S) 1,4-Bromofluorobenzene				100	100	60.0-140				

⁷ Gl

⁸ Al

⁹ Sc



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.

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

Qualifier Description

E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
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Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* 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 National.

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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	LAO00356
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	AZLA
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		

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Alabama	40160
ANSI National Accreditation Board	L2239

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California	2961	Oregon	CA300002
Minnesota	006-999-465	Washington	C926
North Dakota	R-214		

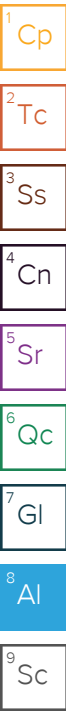
Pace Analytical National 6000 South Eastern Avenue Ste 9A Las Vegas, NV, 89119

Nevada	NV009412021-1
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Pace Analytical National 1606 E. Brazos Street Suite D Victoria, TX, 77901

Texas	T104704328-20-18
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¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable



Company Name/Address: **Partner Engineering & Science - WA**
3607 1st Avenue NW
Seattle, WA 98107

Billing Information:
Accounts Payable
2154 Torrance Blvd.
Torrance, CA 90501

Report to:
Brian Godbois

Email To: **BGodbois@partneresi.com**

Project Description: _____ City/State Collected: **Seattle, WA** Please Circle: PT MT CT ET

Phone: **206-947-8875** Client Project #: **20-293062.2** Lab Project #: **PARENGSWA-202930622**



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

SDG # _____
 Tabl. **D245**
U318274

Acctnum: **PARENGSWA**
 Template: **T181650**
 Prelogin: **P826555**
 PM: **110 - Brian Ford**
 PB: **TA 2/12/21**

Shipped Via: **FedEX Ground**

Remarks _____ Sample # (lab only) _____

Collected by (print): **Brian Godbois** Site/Facility ID #: **8701 GREENWOOD AVE N** P.O. # _____

Collected by (signature): *[Signature]* **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 rush** No. of Cntrs: _____

Immediately Packed on Ice N Y

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	VOCs TO-15 Summa	Analysis / Container / Preservative	Chain of Custody
B2-SG	grab	Air		2-18-2	114	X		
B3-SG		Air			117	X		
B4-SG		Air			119	X		
B5-SG		Air			152	X		
SS1		Air			134	X		
SS2		Air			134	X		
SS3		Air			135	X		

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

Remarks: **1-DFA tracer**

pH _____ Temp _____
 Flow _____ Other _____

Samples returned via: UPS FedEx Courier _____ Tracking # **946319178117 / 986249446612**

Sample Receipt Checklist

COC Seal Present/Intact: NP Y N
 COC Signed/Accurate: Y N
 Bottles arrive intact: Y N
 Correct bottles used: Y N
 Sufficient volume sent: Y N

If Applicable

VOA Zero Headspace: Y N
 Preservation Correct/Checked: Y N
 RAD Screen <0.5 mR/hr: Y N

Relinquished by: (Signature) *[Signature]* Date: **2-18-21** Time: **300** Received by: (Signature) *[Signature]* Trip Blank Received: Yes No
 HCL/MeOH TBR

Relinquished by: (Signature) _____ Date: _____ Time: _____ Received by: (Signature) _____ Temp: **AMB** °C Bottles Received: **7** If preservation required by Login: Date/Time

Relinquished by: (Signature) _____ Date: _____ Time: _____ Received for lab by: (Signature) *[Signature]* Date: **2/22/21** Time: **9:00** Hold: _____ Condition: **NCF / OK**