

PHASE II SUBSURFACE INVESTIGATION REPORT

6428 California Avenue Southwest

Seattle, Washington 98136

Report Date

October 24, 2023

Partner Project No.

23-423301.1

Client Project No.

23-002952-02-01

Prepared for:

WaFd Bank

425 Pike Street

Seattle, Washington 98101

c/o

Outsourced Risk Management Solutions LLC



Building
Science



Environmental
Consulting



Construction &
Development



Energy &
Sustainability



October 31, 2023

WaFd Bank
425 Pike Street
Seattle, Washington 98101
c/o
Allison Freeman
Outsourced Risk Management Solutions LLC

Subject: Phase II Subsurface Investigation Report
6428 California Avenue Southwest
Seattle, Washington 98136
Partner Project No. 23-423301.1
Client Project Number: 23-002952-02-01

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 Stancliff at 801-783-2734.

Sincerely,

Partner Engineering and Science, Inc.

Hunter White
Senior Project Manager

Martin Acaster, RG
Senior Geologist

Marshall Stancliff
National Client Manager



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1.0 INTRODUCTION

1.1 Purpose

The purpose of the investigation was to evaluate the potential impact of petroleum hydrocarbons, volatile organic compounds (VOCs), and/or polychlorinated biphenyls (PCBs) to soil, groundwater, and/or soil gas as a consequence of a release or releases from the former gasoline service station and automotive repair operations. WaFd bank c/o ORMS provided project authorization of Partner Proposal Number P23-423301.1.

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 ORMS (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 0.25 acre located on the east side of California Avenue Southwest within a mixed residential and commercial area of Seattle, King County, Washington. The subject property is currently developed with a single-story building 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 a residential property to the north, commercial properties to the east, Fauntleroy Way Southwest followed by commercial properties to the south, and California Avenue South followed by commercial properties to the west. Refer to Figure 1 for a site vicinity map showing site features and surrounding properties.

2.2 Site History

Partner was provided with a Green Environmental Management (GEM) *Phase I Environmental Site Assessment Report* (Phase I) for the subject property, dated September 12, 2023, on behalf of WaFd Bank. According to GEM, "the subject property consisted of two dwellings on the northern portion of the subject property in 1917. A service station was then developed on the southern half of the site in 1920. The service station was demolished and replaced by a second service station in 1941. All structures were demolished in 1956, and a third service station was developed on the property. The service station remained until it was demolished in 1976. The existing building was then developed in 1977 and operated as a bank through at least 2020. At the time of the site reconnaissance, the building was vacant."

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

- "Three service stations operated on the subject property between 1920 and 1976. The first service station was developed in 1920 and reportedly had two 550-gallon tanks present. Based on a Sanborn fire insurance map, these tanks were likely just west of the small office and canopy structure. A second auto service structure was present in the southeast corner of the property. The second service station was developed in 1941 and reportedly utilized one 1,000-gallon tank, one 550-gallon tank, and one hydraulic hoist. Based on a drawing, the hoist was located at the east end of the service building. The location of the tanks in relation to the building was not identified. The third service station was developed on the subject property in 1956/57. At least one 2,000-gallon tank, one 1,000-gallon tank, one 4,000-gallon tank, and potentially a 285-gallon tank were present in addition to two hydraulic hoists. Based on the drawing, a hoist appeared centrally located in the service building. Permitting information indicates tanks were removed during demolition of the third service station in 1976. Additionally, a fire department permit indicates a 500-gallon diesel UST [underground storage tank] was removed in 2007. No information was identified indicating if the earlier USTs were removed. No additional documentation was identified concerning the removal of the USTs, including confirmation subsurface sampling. Seven groundwater monitoring wells were observed during the site reconnaissance. However, no prior environmental assessments were identified or provided for review. Furthermore, the subject property was not identified on a regulatory database indicating storage tanks, a release, or cleanup activities. Based on the length of time service stations have operated on-

site, the various generations of USTs and hydraulic hoists listed, information noting removal of some USTs, and lack of documentation noting UST removal and/or subsurface confirmation sampling, the former service station operations represent a REC.”

2.3 Geology and Hydrogeology

Review of the United States Geological Survey (USGS) *Duwamish Head, Washington* Quadrangle topographic map indicates the subject property is situated approximately 230 feet above mean sea level, and the local topography is sloping gently to the west. Refer to Figure 2 for a topographic map of the site vicinity.

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

Based on borings advanced during this investigation, the underlying subsurface consists predominantly of silty sand (SM) and sand (SP) from the ground surface to approximately 10 feet below ground surface (bgs). Groundwater was encountered during this investigation between 4 and 5.5 feet bgs. Refer to Appendix A for boring logs from this investigation.

3.0 FIELD ACTIVITIES

The Phase II Subsurface Investigation scope included a geophysical survey, the advancement of five borings (B1 through B5) to collect representative soil, groundwater, and/or soil gas samples, and the collection of groundwater from one monitoring well (MW-1). 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 the 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 23392626 for the project.

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 Geophysical Survey

On October 18, 2023, Blood Hound Underground (BHU) a geophysical survey under the supervision of Partner. The purpose of the geophysical survey was to identify USTs remaining in place and/or backfilled tankholds and clear boring locations of utilities. The geophysical survey was conducted with a Geonics EM-61 and a Fischer M-Scope electromagnetic induction (EM) equipment, a Schonstedt GA-52 magnetic gradiometer, a Sensors and Software Noggin ground penetrating radar (GPR) unit, and a Metrotech 9890 utility locator with line-tracing capabilities.

BHU systematically free-traversed the subject property with the aforementioned equipment. The equipment data were interpreted in real time and compiled as necessary in order to identify subsurface anomalies consistent with USTs, disturbed soil resembling backfilled tankholds, piping trenches, utility lines, and/or other subsurface conduits/features.

The geophysical survey identified one metallic anomaly consistent with the shape and size of a UST to the northeast of the subject property building at approximately 3 feet bgs. No associated fuel lines were identified in the USTs vicinity. No other anomalies were detected on the subject property.

In addition, BHU systematically free-traversed each proposed boring location with the aforementioned equipment and the equipment data were 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.

Refer to Figure 3 for a map of the anomalies detected during the geophysical survey.

3.3 Drilling Equipment

On October 18, 2023, Partner subcontracted with Holocene Drilling to provide and operate drilling equipment. Holocene, under the direction of Partner, advanced borings B1 through B5 with a track -

mounted Geoprobe Model 6011DT direct push rig. Sampling equipment was decontaminated between sample intervals and boring locations to prevent cross-contamination.

3.4 Sample Locations

Boring B1 was advanced southwest and northwest of the northern and southern former automotive repair buildings, respectively. Boring B2 was advanced in the vicinity of suspect former inground lifts. Borings B3 through B5 were advanced to the north, southeast, and west of the suspect UST, respectively.

Monitoring well MW-1 is located near the eastern subject property boundary.

Refer to Figure 3 for a map indicating sample locations.

3.5 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 through B5 were advanced to a terminal depth of 10 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 rigs 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.

Soil samples were collected from borings B1 and B2 at 5 feet bgs, from boring B3 at 2 and 5 feet bgs, from boring B4 at 4 feet bgs, and from boring B5 at 3.5 feet bgs.

3.6 Groundwater Sampling

After soil sampling to the terminal depth, groundwater samples were collected by withdrawing the drill rods from the subsurface and installing ¾-inch diameter temporary monitoring wells within the open boreholes. Each monitoring well consisted of a 5-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 3/8-inch diameter polyethylene tubing fed through a peristaltic pump and conveyed into nine 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.

Additionally, one groundwater sample was collected from a monitoring well located in the east portion of the site. The well was purged and sampled with a peristaltic pump.

Groundwater samples were collected from temporary well points at borings B1 through B6 screened from 5 to 10 feet bgs.

3.7 Soil Gas Sampling

Soil Gas Probe Construction

Soil gas probes were constructed within the boreholes upon completion of soil sampling. Boreholes were backfilled with dry, granular bentonite to approximately 6 inches below the desired sampling depth. A new section of 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 polypropylene filter, at which time the PVC piping was withdrawn. Approximately 1 foot of dry, granular bentonite was placed atop the sand pack and the remainder of the borehole was backfilled with hydrated bentonite to the ground surface to form a seal. The sampling end of the tubing was fitted with a valve and the probe was labeled for identification.

Soil Gas Sampling Methodology

Soil gas samples were collected in general accordance with Ecology's April 2018 *Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action* and the 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 [Environmental Laboratory Accreditation Program (ELAP) certificate number C847] in Mount Juliet, Tennessee, which subjected each canister to a rigorous cleaning process using a combination of dilution, heat, and high vacuum. After cleaning, the canisters were batch certified to be free of target contaminants to a specified reporting limit via gas chromatography/mass spectroscopy prior to delivery.

Partner received the SUMMA canisters evacuated to approximately minus 28 to 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 30 minutes 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 (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 2 inches of mercury, with pertinent data (e.g., time, canister vacuum) recorded at the start and end of sampling.

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

Soil gas samples were collected from borings B1 through B4 at 5, 4.5, 4.5, and 4 feet bgs, respectively. A soil gas sample was not collected from boring B5 due to SUMMA canister malfunction.

3.8 Post-Sampling Activities

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

Generated soil cuttings and decontamination water were containerized in a properly labeled and sealed 55-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 six soil samples, six groundwater samples, and four soil gas samples on October 18, 2023, 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, each soil sample (five soil samples total) and each groundwater sample (six groundwater samples total) was analyzed for gasoline-range organics (GRO) via Method NWTPH-Gx, for diesel- and residual-range organics (DRO and RRO, respectively) via Method NWTPH-Dx/DxExtended, for VOCs via EPA Method 8260D. One soil sample was additionally analyzed for PCBs via EPA Method 8082A. Each soil gas sample (four soil gas samples total) was analyzed for VOCs via EPA Method TO-15.

Laboratory analytical results are included in Appendix C 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 (CULs) for soil for unrestricted land use and Method B for establishing CULs for commercial sites. Method B consists of a Cancer CUL (soil and groundwater) or Soil Gas Screening Level (SGSL, soil gas) and Noncancer CUL or SL. MTCA B Cancer establishes the concentration threshold for analytes at which the human health risk is cancer. MTCA B Noncancer establishes concentration thresholds for analytes at which the human health risk is a noncancer effect. In cases where MTCA Method B is used, data is compared to the most conservative CUL/SGSL. Per MTCA guidelines, soil gas samples collected at a depth shallower than 15 feet bgs were compared to sub-slab SGSLs. Based on the current use and presumed future use of the subject property, results were compared to MTCA Method A and/or B Cleanup Levels and SGSLs.

4.3 Soil Sample Data Analysis

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

The detected concentrations of GRO in soil samples B1-5, B2-5, and B3-2 were 485, 1,150, and 1,950 milligrams per kilograms (mg/kg), which exceed the MTCA Method A CUL of 30 mg/kg. The detected concentration of RRO in soil sample B3-2 was 11,000 mg/kg, which exceeds the MTCA Method A CUL of 2,000 mg/kg. None of the remaining detected concentrations of GRO, DRO, or RRO exceeded applicable CULs.

Benzene; n-butylbenzene; sec-butylbenzene; tert-butylbenzene; 1,2-dichlorobenzene; 1,4-dichlorobenzene; ethylbenzene; isopropylbenzene; p-isopropyltoluene; 4-methyl-2-pentanone; naphthalene; n-propylbenzene; toluene; 1,2,4-trimethylbenzene; 1,2,3-trimethylbenzene; 1,3,5-trimethylbenzene; and

total xylenes were detected in one or more of the analyzed soil samples at concentrations above laboratory RDLs/MDLs. No other VOCs were detected in soil samples above laboratory RDLs/MDLs and laboratory RDLs/MDLs were below applicable CULs.

The detected concentration of benzene in soil sample B2-5 was 0.0488 mg/kg, which exceeds the MTCA Method A CUL of 0.03 mg/kg. None of the remaining detected concentrations of VOCs exceed applicable CULs.

PCBs were not detected in soil sample B2-5.

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 was detected in four of the analyzed groundwater samples at concentrations above laboratory RDLs and/or MDLs. None of the detected concentrations of GRO in groundwater exceed applicable CULs. DRO and RRO were not detected above laboratory RDLs/MDLs and the RDLs/MDLs were below applicable CULs.

sec-Butylbenzene; ethylbenzene; isopropylbenzene; n-propylbenzene; 1,2,4-trimethylbenzene; 1,2,3-trimethylbenzene; 1,3,5-trimethylbenzene; and total xylenes were detected in one or more of the groundwater samples at concentrations above laboratory RDLs and/or MDLs. None of the detected concentrations of VOCs in groundwater exceed applicable CULs. No other VOCs were detected above laboratory RDLs/MDLs and the RDLs/MDLs were below applicable CULs.

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

4.5 Soil Gas Sample Data Analysis

Acetone; benzene; carbon disulfide; chloromethane; cyclohexane; trans-1,2-dichloroethene; ethanol; ethylbenzene; 4-ethyltoluene; trichlorofluoromethane; dichlorofluoromethane; heptane; n-hexane; isopropylbenzene; methylene chloride; 2-butanone; naphthalene; 2-propanol; propene; toluene; 1,2,4-trimethylbenzene; 1,3,5-trimethylbenzene; 2,2,4-trimethylpentane; m&p-xylene; and o-xylene were detected in one or more of the soil gas samples at concentrations above laboratory RDLs. No other VOCs were detected in soil gas samples at concentrations above laboratory RDLs.

The detected concentration of benzene in soil gas samples B1-SG through B4-SG were 63.9, 498, 92.3, and 100 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), respectively, which exceed the MTCA Method B Cancer SGSL of 11 $\mu\text{g}/\text{m}^3$. The detected concentration of n-hexane in soil gas samples B1-SG and B2-SG were 28,900 and 22,700 $\mu\text{g}/\text{m}^3$, respectively, which exceed the MTCA Method B Noncancer SGSL of 11,000 $\mu\text{g}/\text{m}^3$. The detected concentration of naphthalene in soil gas samples B1-SG was 6.23 $\mu\text{g}/\text{m}^3$, which exceeds the MTCA Method B Cancer SGSL of 2.5 $\mu\text{g}/\text{m}^3$. The detected concentration of 1,2,4-trimethylbenzene in soil gas samples B1-SG through B3-SG were 1,370, 4,270, and 1,420 $\mu\text{g}/\text{m}^3$, respectively, which exceed the MTCA Method B Noncancer SGSL of 910 $\mu\text{g}/\text{m}^3$. The detected concentration of 1,3,5-trimethylbenzene in soil gas samples B2-SG was 1,840 $\mu\text{g}/\text{m}^3$, which exceeds the MTCA Method B Noncancer SGSL of 910 $\mu\text{g}/\text{m}^3$. The detected concentration of m&p-xylene in soil gas samples B2-SG was 4,380 $\mu\text{g}/\text{m}^3$, which exceeds the MTCA

Method B Noncancer SGSL of 1,500 $\mu\text{g}/\text{m}^3$. None of the remaining detected concentrations of VOCs exceeded applicable SGSLs.

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

4.6 Discussion

GRO, DRO, and benzene were detected in soil sample B3-2 and GRO was detected in soil samples B1-5, B2-5, and B5-3,5 at concentration above CULs. However, the soil sample collected from the same borings at 5 feet bgs did not of elevated concentrations or petroleum hydrocarbons or VOCs. As such, the impacts are shallow in nature but appear to be laterally extensive across the site. The GRO impacts in soil have not been delineated laterally or vertically.

None of the detected concentrations of petroleum hydrocarbons or VOCs in groundwater exceeded applicable CULs.

Benzene; n-hexane; naphthalene; 1,2,4-trimethylbenzene; 1,3,5-trimethylbenzene, and m&p-xylene were detected in one or more of the soil gas samples at concentrations above applicable SGSLs, which is a considered a risk to human health and vapor intrusion concern.

Based on the analytical data the subsurface has been impacted by the former automotive repair and gasoline service station operations.

5.0 SUMMARY AND CONCLUSIONS

Partner conducted a Phase II Subsurface Investigation at the subject property to evaluate the potential impact of petroleum hydrocarbons, VOCs, and/or PCBs to soil, groundwater, and/or soil gas as a consequence of a release or releases from the former gasoline service station and automotive repair operations. The scope of the Phase II Subsurface Investigation included a geophysical survey, the collection of one groundwater sample from a monitoring well, and five soil, groundwater, and/or soil gas borings. Six soil samples were analyzed for GRO, DRO, RRO and VOCs, one soil sample was analyzed for PCBs, and four soil gas samples were analyzed for VOCs.

The geophysical survey identified one metallic anomaly consistent with the shape and size of a UST to the northeast of the subject property building at approximately 3 feet bgs. No associated fuel lines were identified in the USTs vicinity. No other anomalies were detected on the subject property.

The underlying subsurface consists predominantly of silty sand (SM) and sand (SP) from the ground surface to approximately 10 feet bgs. Groundwater was encountered during this investigation between 4 and 5.5 feet bgs.

GRO, DRO, and benzene were detected in soil sample B3-2 and GRO was detected in soil samples B1-5, B2-5, and B5-3,5 at concentration above CULs. However, the soil sample collected from the same borings at 5 feet bgs did not of elevated concentrations or petroleum hydrocarbons or VOCs. As such, the impacts are shallow in nature but appear to be laterally extensive across the site. The GRO impacts in soil have not been delineated laterally or vertically.

None of the detected concentrations of petroleum hydrocarbons or VOCs in groundwater exceeded applicable CULs.

Benzene; n-hexane; naphthalene; 1,2,4-trimethylbenzene; 1,3,5-trimethylbenzene, and m&p-xylene were detected in one or more of the soil gas samples at concentrations above applicable SGSLs, which is a considered a risk to human health and vapor intrusion concern.

Based on the analytical data the subsurface has been impacted by the former automotive repair and gasoline service station operations.

Partner recommends additional investigation with respect to the soil and soil gas impacts at the subject property. The release should be reported to the Washington Department of Ecology in accordance with MTCA regulations.

FIGURES



PARTNER

2154 Torrance Boulevard, Suite 200
Torrance, California 90501

Project Number: 23-423301.1



Legend

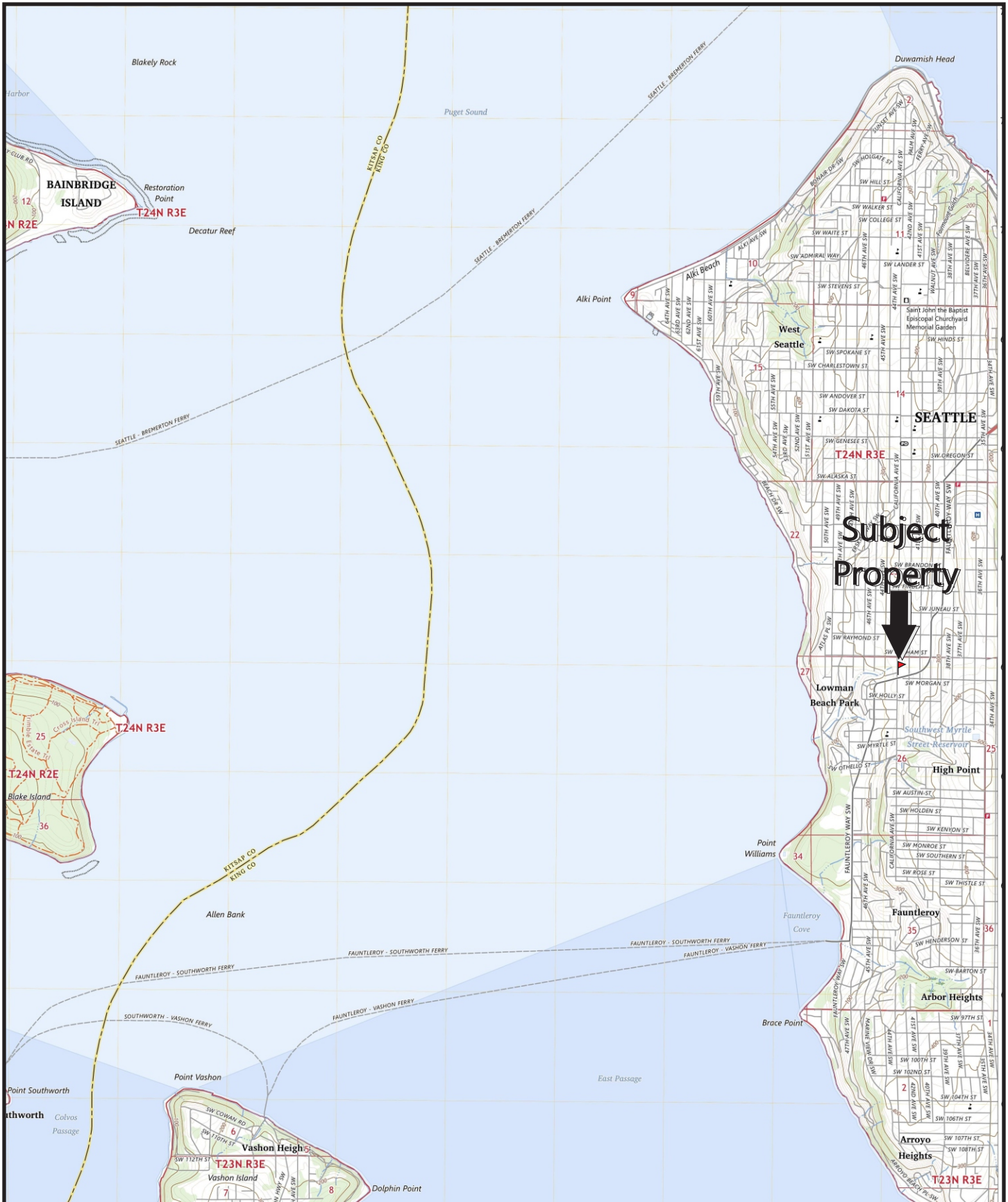
Subject Property



Site Vicinity Map

Figure	Prepared By	Date
1	S. Fujita	October 2023

6428 California Avenue Southwest
Seattle, Washington 98136



PARTNER

2154 Torrance Boulevard, Suite 200
Torrance, California 90501

Project Number: 23-423301.1



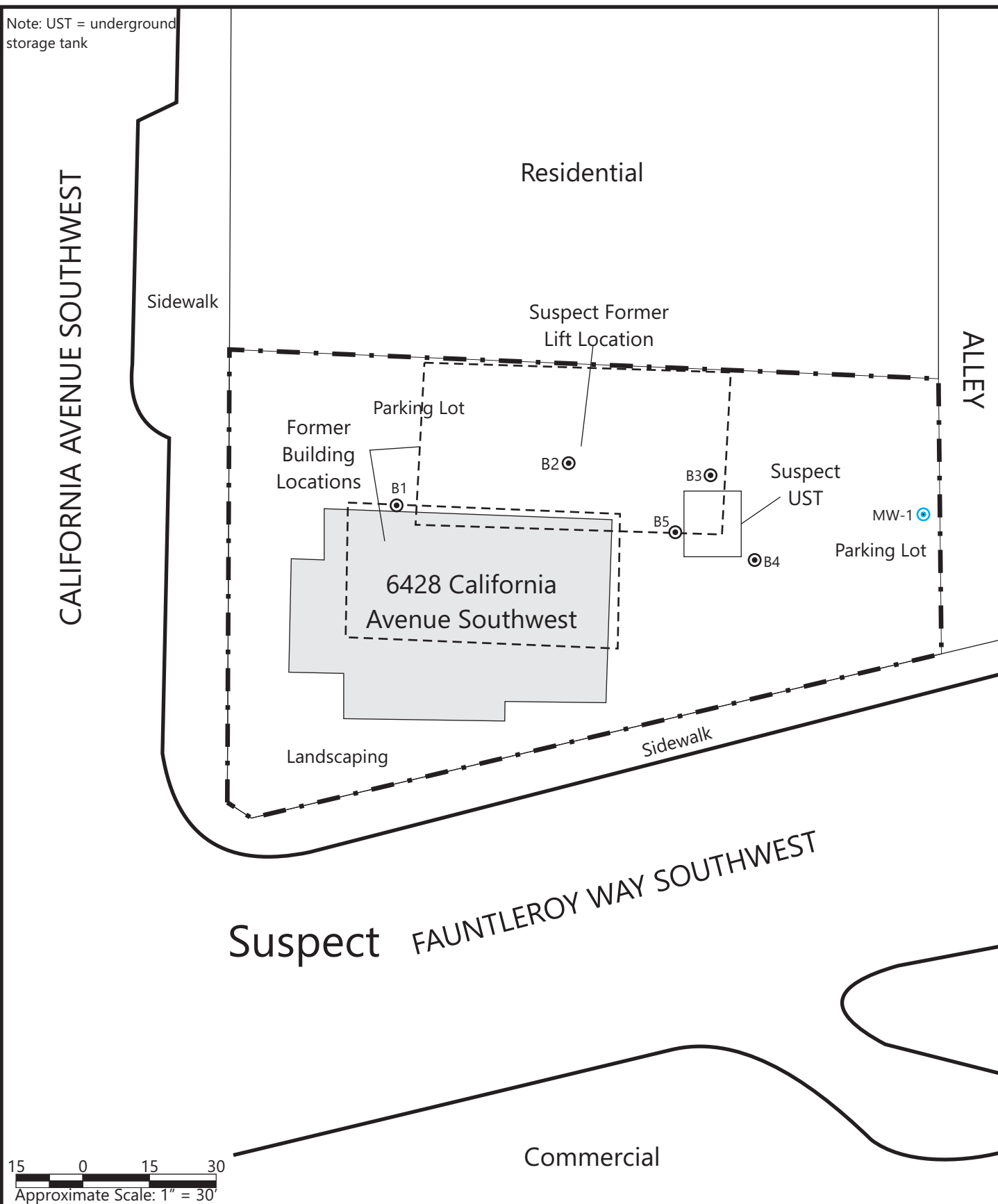
USGS Duwamish Head, Washington
Quadrangle
Version: 2023

Topographic Map

Figure	Prepared By	Date
2	S. Fujita	October 2023

6428 California Avenue Southwest
Seattle, Washington 98136

Note: UST = underground storage tank



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

PARTNER
2154 Torrance Boulevard, Suite 200
Torrance, California 90501
Project Number: 23-423301.1



Legend

- Subject Property
- Boring Location
- Sampled Monitoring Well

Sample Location Map

Figure	Prepared By	Date
3	S. Fujita	October 2023
6428 California Avenue Southwest Seattle, Washington 98136		

TABLES

Table 1: Summary of Investigation Scope
6428 California Avenue Southwest
Seattle, WA 98136
Partner Project Number 23-423301.1
October 18, 2023

Boring Identification	REC/Issue	Location	Terminal Depth (feet bgs)	Matrix Sampled	Sampling Depths* (feet bgs)	Target Analytes
B1	Former automotive repair and fuel service station operations	Southwest and northwest of the northern and southern former automotive repair buildings, respectively	10	Soil Gas	<u>5</u>	VOCs
				Soil	<u>5</u>	GRO/DRO/RRO, VOCs
				Groundwater	<u>10</u>	GRO/DRO/RRO, VOCs
B2		In the vicinity of suspect former inground lifts	10	Soil Gas	<u>4.5</u>	VOCs
				Soil	<u>5</u>	GRO/DRO/RRO, VOCs, PCBs
				Groundwater	<u>10</u>	GRO/DRO/RRO, VOCs
B3		North of suspect UST	10	Soil Gas	<u>4.5</u>	
				Soil	<u>2, 5</u>	GRO/DRO/RRO, VOCs
				Groundwater	<u>10</u>	GRO/DRO/RRO, VOCs
B4		Southeast of suspect UST	10	Soil Gas	<u>4</u>	
				Soil	<u>4</u>	GRO/DRO/RRO, VOCs
				Groundwater	<u>10</u>	GRO/DRO/RRO, VOCs
B5		West of suspect UST	10	Soil	<u>3.5</u>	GRO/DRO/RRO, VOCs
				Groundwater	<u>10</u>	GRO/DRO/RRO, VOCs
MW-1		In vicinity of the eastern subject property boundary	NA	Groundwater	<u>10</u>	GRO/DRO/RRO, VOCs

Notes:

*Depths in **bold** analyzed for gasoline-range organics (GRO) via Method NWTPH-Gx and for diesel-range organics (DRO) and residual-range organics (RRO) via Method NWTPH-Dx/DxExtended. Depths in underlined analyzed for volatile organic compounds (VOCs) via United States Environmental Protection Agency (EPA) Method 8260D (soil and groundwater) or TO-15 (soil gas). *Italicized* depths analyzed polychlorinated biphenyls via EPA Method 8082A.

REC = recognized environmental condition

bgs = below ground surface

UST = underground storage tank

Table 2: Soil Sample GRO, DRO, and RRO Laboratory Results
6428 California Avenue Southwest
Seattle, WA 98136
Partner Project Number 23-423301.1
October 18, 2023

EPA Method	GRO/DRO/RRO via NWTPH-Gx/Dx/Extended						
Units	(mg/kg)						
Analyte	MTCA Method A	B1-5	B2-5	B3-2	B3-5	B4-4	B5-3.5
GRO	30/100*	485	1,150	1,950	1.45 JB	3.33 B	73.1
DRO	2,000	23.5	560	1,920	<4.60	1.46 J	120
RRO	2,000	39.5	517	11,000	<11.5	<10.9	659

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 A

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

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

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

B = detected in method blank

Values in **bold** exceed laboratory RDLs

Highlighted values exceed one or more regulatory guideline

Table 3: Soil Sample VOCs Laboratory Results
6428 California Avenue Southwest
Seattle, WA 98136
Partner Project Number 23-423301.1
October 18, 2023

EPA Method	VOCs via 8260D								
Units	(mg/kg)								
Analyte	MTCA Method A ULU	MTCA Method B Noncancer	MTCA Method B Cancer	B1-5	B2-5	B3-2	B3-5	B4-4	B5-3.5
Benzene	0.03	320	18	0.00683	0.0488	<0.00129	<0.00134	<0.00120	0.00287
n-Butylbenzene	NE	4,000	NE	0.518	0.896	0.729	<0.0168	0.00974 J	0.0704
sec-Butylbenzene	NE	8,000	NE	0.361	1.32	1.57	<0.0168	0.00689 J	0.0834
tert-Butylbenzene	NE	8,000	NE	<0.00678	0.0652	0.177	<0.00672	<0.00598	<0.00612
1,2-Dichlorobenzene	NE	7,200	NE	<0.00678	0.0135	<0.00643	<0.00672	<0.00598	0.0018 J
1,4-Dichlorobenzene	NE	5,600	190	<0.00678	0.0259	<0.00643	<0.00672	<0.00598	<0.00612
Ethylbenzene	6.0	8,000	NE	0.317	0.0496	0.0621	<0.00336	<0.00299	0.00976
Isopropylbenzene	NE	8,000	NE	0.254	0.261	0.244	<0.00336	0.00392	0.0338
p-Isopropyltoluene	NE	NE	NE	0.274	0.668	0.758	<0.00672	0.0104	0.0951
4-Methyl-2-Pentanone	NE	6,400	NE	2.07	0.601	<0.0322	0.00409 J	<0.0299	<0.0306
Naphthalene	5.0	1,600	NE	0.3	0.0113 J	0.032	<0.0168	0.0894	0.103
n-Propylbenzene	NE	8,000	NE	1.03	1.36	1.46	<0.00672	0.0121 J	0.165
Toluene	7.0	6,400	NE	0.0183	0.00185 J	0.00312 J	<0.00672	0.00179 J	<0.00612
1,2,4-Trimethylbenzene	NE	800	NE	6.64	3.64	11.4	0.00212 J	0.059	1.68
1,2,3-Trimethylbenzene	NE	800	NE	1.82	4.03	2.64	<0.00672	0.0272	0.56
1,3,5-Treimethylbenzene	NE	800	NE	0.554	<0.00661	4.09	<0.00672	<0.00598	0.0366
Total Xylenes	9.0	16,000	NE	0.179	0.28	0.226	0.00202 J	0.0112	0.104
Other VOCs	Varies	Varies	Varies	ND	ND	ND	ND	ND	ND

Notes:

VOCs = volatile organic compounds

EPA = United States Environmental Protection Agency

mg/kg = milligrams per kilogram

MTCA Method A = Soil cleanup levels for unrestricted land use (ULU) (Washington State Department of Ecology [Ecology], Model Toxics Control Act [MTCA], January 2023)

MTCA Method B = Soil cleanup levels for direct contact (Ecology, MTCA, January 2023)

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

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

ND = not detected above laboratory MDLs

NE = not established

Highlighted values exceed one or more regulatory guideline

Table 4: Groundwater Sample GRO, DRO, RRO Laboratory Results
6428 California Avenue Southwest
Seattle, WA 98136
Partner Project Number 23-423301.1
October 18, 2023

EPA Method	GRO/DRO/RRO via NWTPH-Gx/NWTPH-Dx/DxExtended						
Units	(µg/L)						
Analyte	MTCA Method A	B1-GW	B2-GW	B3-GW	B4-GW	B5-GW	MW-1
GRO	800/1,000	54.7 J	125	52.4 J	<100	37.3 J	<100
DRO	500	<200	<200	<200	<200	<200	<200
RRO	500	<250	<250	<250	<250	<250	<250

Notes:

GRO = gasoline-range organics (Gx)

DRO = diesel-range organics (Dx)

RRO = residual-range organics (Extended)

NWTPH = Northwest Total Petroleum Hydrocarbons

µg/L = micrograms per liter

MTCA Method A = groundwater cleanup levels for unrestricted land use (ULU) (Washington State Department of Ecology [Ecology], Model Toxics Control Act [MTCA], January 2023)

* MTCA Method A Cleanup Level for groundwater is 1,000 µg/L if benzene is present in the sample and 800 µg/L if benzene is not present in the sample

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

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

Values in **bold** exceed laboratory RDLs

Table 5: Groundwater Sample VOCs Laboratory Results
6428 California Avenue Southwest
Seattle, WA 98136
Partner Project Number 23-423301.1
October 18, 2023

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	MW-1
sec-Butylbenzene	NE	800	NE	<1.00	0.64 J	<1.00	<1.00	<1.00	<1.00
Ethylbenzene	700	800	NE	<1.00	0.185 J	<1.00	<1.00	<1.00	<1.00
Isopropylbenzene	NE	800	NE	<1.00	0.27 J	<1.00	<1.00	<1.00	<1.00
n-Propylbenzene	NE	800	NE	<1.00	0.772 J	<1.00	<1.00	<1.00	<1.00
1,2,4-Trimethylbenzene	NE	80	NE	0.355 J	2.25	1.45	<1.00	1.03	<1.00
1,2,3-Trimethylbenzene	NE	80	NE	0.222 J	2.76	0.717 J	0.104 J	0.449 J	<1.00
1,3,5-Trimethylbenzene	NE	80	NE	<1.00	<1.00	0.586 J	<1.00	<1.00	<1.00
Total Xylenes	1,000	1,600	NE	<3.00	0.705 J	<3.00	<3.00	<3.00	<3.00
Other VOCs	Varies	Varies	Varies	ND	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], January 2023)

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

NE = not established

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

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

ND = not detected above laboratory RDLs and MDLs



Table 6: Soil Gas Sample VOCs Laboratory Results
6428 California Avenue Southwest
Seattle, WA 98136
Partner Project Number 23-423301.1
October 18, 2023

EPA Method	VOCs via TO-15					
Units	(µg/m³)					
Analyte	MTCA Method B Noncancer	MTCA Method B Cancer	B1-SG	B2-SG	B3-SG	B4-SG
Acetone	NE	NE	<2.97	1930	<59.4	187
Benzene	460	11	63.9	498	92.3	100
Carbon Disulfide	11,000	NE	12.9	123	15.6	17.3
Chloromethane	1,400	NE	<0.413	<41.3	<8.26	3.08
Cyclohexane	NE	NE	9,710	12,100	83.3	603
trans-1,2-Dichloroethene	NE	NE	<0.793	104	<15.9	<2.67
Ethanol	NE	NE	375	3,940	107	138
Ethylbenzene	15,000	NE	1,510	2,090	229	282
4-Ethyltoluene	NE	NE	215	<98.2	451	181
Trichlorofluoromethane	11,000	NE	1.33	<112	<22.5	<3.79
Dichlorofluoromethane	15,00	NE	39.1	<98.9	<19.8	<3.33
Heptane	NE	NE	23,600	6,500	313	1,280
n-Hexane	11,000	NE	28,900	22,700	147	927
Isopropylbenzene	6,100	NE	107	575	<19.7	125
Methylene Chloride	9,100	8,300	<0.694	225	<13.9	3.43
2-Butanone	76,000	NE	<3.69	<369	<73.7	15
Naphthalene	46	2.5	6.23	<330	<66.0	<11.1
2-Propanol	NE	NE	36.9	4,470	<61.5	<10.3
Propene	NE	NE	814	257	1170	430
Toluene	76,000	NE	1,860	591	697	1,050
1,2,4-Trimethylbenzene	910	NE	1,370	4,270	1,420	707
1,3,5-Trimethylbenzene	910	NE	60.4	1,840	834	158
2,2,4-Trimethypentane	NE	NE	183,000	12,500	528	<3.15
m&p-Xylene	1,500	NE	512	4,380	776	1,170
o-Xylene	1,500	NE	113	146	265	416
Other VOCs	Varies	Varies	ND	ND	ND	ND

Notes:

VOCs = volatile organic compounds

EPA = United States Environmental Protection Agency

µg/m³ = micrograms per cubic meter

MTCA Method B = Soil gas screening levels for commercial land use [Washington State Department of Ecology (Ecology), Model Toxics Control Act (MTCA), January 2023]

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

NE = not established

ND = not detected above laboratory RDLs

Values in **bold** exceed laboratory RDLs

Highlighted values exceed one or more regulatory guideline

APPENDIX A: BORING LOGS

Boring Identification:		B1		Page 1 of 1	
Boring Location:		Southwest and northwest of the northern and southern former automotive repair buildings, respectively		PARTNER	
Site Address:		6428 California Avenue Southwest		2150 North 107th Street, Suite 475	
		Seattle, Washington 98136		Seattle, Washington 98133	
Project Number:		23-423301.1		Date Started:	10/18/2023
Drill Rig Type:		Geoprobe Model 6011DT		Date Completed:	10/18/2023
Sampling Equipment:		5' Macrocore, VOAs, acetate liner		Depth to Groundwater (feet bgs):	5.5
Borehole Diameter:		2.25"		Field Technician:	H. White
Depth	Sample	PID	USCS	Description	Notes
1	B1-5	20.5	SP	0.0-6.0' Brown to dark gray medium-fine SAND, little Silt; Medium dense; Wet at 5.5' bgs 6.0'-10.0' Dark gray medium-coarse SAND, little Silt; Wet.	Asphalt surface cover
2					
3					
4					
5					Temporary soil gas probe installed at 5' bgs
6					
7					Temporary monitoring well screened from 5-10' bgs
8					
9					
10					5.2
11					Borehole terminated at 10 feet below ground surface (bgs). Borehole abandoned with chipped bentonite and capped with asphalt.
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

Boring Identification:		B2			Page 1 of 1	
Boring Location:		In the vicinity of suspect former inground lifts			PARTNER	
Site Address:		6428 California Avenue Southwest			2150 North 107th Street, Suite 475	
		Seattle, Washington 98136			Seattle, Washington 98133	
Project Number:		23-423301.1			Date Started:	10/18/2023
Drill Rig Type:		Geoprobe Model 6011DT			Date Completed:	10/18/2023
Sampling Equipment:		5' Macrocore, VOAs, acetate liner			Depth to Groundwater (feet bgs):	5.25
Borehole Diameter:		2.25"			Field Technician:	H. White
Depth	Sample	PID	USCS	Description	Notes	
1	B2-5	398	SP	0.0'-5.0' Gray medium-fine SAND, little Silt, woodchips; Medium dense; Moist. 5.0'-10.0' Gray coarse-medium SAND, little Silt; Wet at 5.25' bgs	Asphalt surface cover	
2						
3						
4						
5					Temporary soil gas probe installed at 4.5' bgs	
6						
7					Temporary monitoring well screened from 5-10' bgs	
8						
9					2.8	
10						
11					Borehole terminated at 10 feet below ground surface (bgs). Borehole abandoned with chipped bentonite and capped with asphalt.	
12						
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24						
25						

Boring Identification:		B3			Page 1 of 1	
Boring Location:		North of suspect UST			PARTNER	
Site Address:		6428 California Avenue Southwest			2150 North 107th Street, Suite 475	
		Seattle, Washington 98136			Seattle, Washington 98133	
Project Number:		23-423301.1			Date Started:	10/18/2023
Drill Rig Type:		Geoprobe Model 6011DT			Date Completed:	10/18/2023
Sampling Equipment:		5' Macrocore, VOAs, acetate liner			Depth to Groundwater (feet bgs):	5.5
Borehole Diameter:		2.25"			Field Technician:	H. White
Depth	Sample	PID	USCS	Description	Notes	
1	B3-2	208	SM	0.0'-5.0' Gray Silty SAND; Medium dense; Moist.	Asphalt surface cover	
2						
3						
4						
5	B3-5	1.8	SP	5.0'-10.0' Gray coarse-medium SAND, little Silt; Wet at 5.5' bgs	Temporary soil gas probe installed at 4.5' bgs	
6						
7						
8						
9						
10						
11					Borehole terminated at 10 feet below ground surface (bgs). Borehole abandoned with chipped bentonite and capped with asphalt.	
12						
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25						

Boring Identification:		B4			Page 1 of 1	
Boring Location:		Southeast of suspect UST			PARTNER	
Site Address:		6428 California Avenue Southwest			2150 North 107th Street, Suite 475	
		Seattle, Washington 98136			Seattle, Washington 98133	
Project Number:		23-423301.1			Date Started:	10/18/2023
Drill Rig Type:		Geoprobe Model 6011DT			Date Completed:	10/18/2023
Sampling Equipment:		5' Macrocore, VOAs, acetate liner			Depth to Groundwater (feet bgs):	4.5
Borehole Diameter:		2.25"			Field Technician:	H. White
Depth	Sample	PID	USCS	Description	Notes	
1	B4-4	29.2	SM	0.0'-5.0' Gray Silty SAND; Wet at 4.5' bgs.	Asphalt surface cover	
2						
3						
4						
5					Temporary soil gas probe installed at 4' bgs	
6						
7					Temporary monitopring well screened from 5-10' bgs	
8					5.0'-10.0' Gray coarse-medium SAND, little Silt; Wet.	
9					0.0	
10						
11					Borehole terminated at 10 feet below ground surface (bgs). Borehole abandoned with chipped bentonite and capped with asphalt.	
12						
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25						

Boring Identification:		B5			Page 1 of 1	
Boring Location:		West of suspect UST			PARTNER	
Site Address:		6428 California Avenue Southwest			2150 North 107th Street, Suite 475	
		Seattle, Washington 98136			Seattle, Washington 98133	
Project Number:		23-423301.1			Date Started:	10/18/2023
Drill Rig Type:		Geoprobe Model 6011DT			Date Completed:	10/18/2023
Sampling Equipment:		5' Macrocore, VOAs, acetate liner			Depth to Groundwater (feet bgs):	4.0
Borehole Diameter:		2.25"			Field Technician:	H. White
Depth	Sample	PID	USCS	Description	Notes	
1	B5-3.5	336	SM	0.0'-5.0' Gray Silty SAND; Wet at 4.5' bgs.	Asphalt surface cover	
2						
3						
4						
5						
6						
7						
8						
9						
10						
11					Borehole terminated at 10 feet below ground surface (bgs). Borehole abandoned with chipped bentonite and capped with asphalt.	
12						
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APPENDIX B: LABORATORY ANALYTICAL REPORTS

October 25, 2023

1
Cp2
Tc3
Ss4
Cn5
Sr6
Qc7
Gl8
Al9
Sc**Partner Engineering & Science - WA**

Sample Delivery Group: L1668587
Samples Received: 10/20/2023
Project Number: 23-423301.1
Description: 6428 California Ave SW

Report To: Hunter White
2150 North 107th Street
Suite 475
Seattle, WA 98133

Entire Report Reviewed By:



Marty Edwards III
Project Manager

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

Pace Analytical National12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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

SAMPLE SUMMARY

B1-5 L1668587-01 Solid

Collected by
Hunter White

Collected date/time
10/18/23 09:45

Received date/time
10/20/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2155481	1	10/21/23 10:54	10/21/23 11:10	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2156808	200	10/18/23 09:45	10/24/23 13:36	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2155450	1	10/18/23 09:45	10/21/23 01:30	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2156859	10	10/18/23 09:45	10/24/23 11:47	KSD	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2155472	1	10/21/23 07:33	10/21/23 11:10	JAS	Mt. Juliet, TN

B2-5 L1668587-02 Solid

Collected by
Hunter White

Collected date/time
10/18/23 11:00

Received date/time
10/20/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2155481	1	10/21/23 10:54	10/21/23 11:10	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2156808	250	10/18/23 11:00	10/24/23 14:24	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2155450	1	10/18/23 11:00	10/21/23 01:49	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2156859	10	10/18/23 11:00	10/24/23 12:06	KSD	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2155472	25	10/21/23 07:33	10/21/23 12:24	JAS	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082 A	WG2155749	1	10/23/23 15:35	10/24/23 02:07	RDH	Mt. Juliet, TN

B3-2 L1668587-03 Solid

Collected by
Hunter White

Collected date/time
10/18/23 11:40

Received date/time
10/20/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2155481	1	10/21/23 10:54	10/21/23 11:10	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2156808	520	10/18/23 11:40	10/24/23 14:47	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2155450	1.04	10/18/23 11:40	10/21/23 02:08	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2156859	10.4	10/18/23 11:40	10/24/23 12:25	KSD	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2155472	25	10/21/23 07:33	10/21/23 12:25	JAS	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2155472	250	10/21/23 07:33	10/21/23 12:51	JAS	Mt. Juliet, TN

B3-5 L1668587-04 Solid

Collected by
Hunter White

Collected date/time
10/18/23 11:50

Received date/time
10/20/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2155481	1	10/21/23 10:54	10/21/23 11:10	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2156808	25	10/18/23 11:50	10/24/23 12:50	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2155450	1	10/18/23 11:50	10/21/23 02:27	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2156859	1	10/18/23 11:50	10/24/23 11:28	KSD	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2155472	1	10/21/23 07:33	10/21/23 10:45	JAS	Mt. Juliet, TN

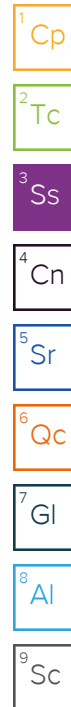
B4-4 L1668587-05 Solid

Collected by
Hunter White

Collected date/time
10/18/23 13:45

Received date/time
10/20/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2155481	1	10/21/23 10:54	10/21/23 11:10	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2156808	25	10/18/23 13:45	10/24/23 13:13	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2155450	1	10/18/23 13:45	10/21/23 02:46	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2155472	1	10/21/23 07:33	10/21/23 10:57	JAS	Mt. Juliet, TN



SAMPLE SUMMARY

B5-3.5 L1668587-06 Solid

				Collected by Hunter White	Collected date/time 10/18/23 13:50	Received date/time 10/20/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG2155481	1	10/21/23 10:54	10/21/23 11:10	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2155385	25	10/18/23 13:50	10/21/23 04:52	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2155450	1	10/18/23 13:50	10/21/23 03:05	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2155743	1	10/22/23 06:58	10/22/23 21:23	JSS	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT	WG2155743	5	10/22/23 06:58	10/23/23 07:09	KAP	Mt. Juliet, TN

B1-GW L1668587-07 GW

				Collected by Hunter White	Collected date/time 10/18/23 10:00	Received date/time 10/20/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2155559	1	10/21/23 16:52	10/21/23 16:52	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2155716	1	10/21/23 23:52	10/21/23 23:52	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG2155745	1	10/22/23 23:27	10/23/23 14:13	MAA	Mt. Juliet, TN

B2-GW L1668587-08 GW

				Collected by Hunter White	Collected date/time 10/18/23 11:00	Received date/time 10/20/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2155559	1	10/21/23 17:17	10/21/23 17:17	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2155716	1	10/22/23 00:15	10/22/23 00:15	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG2155745	1	10/22/23 23:27	10/23/23 14:33	MAA	Mt. Juliet, TN

B3-GW L1668587-09 GW

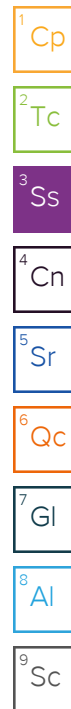
				Collected by Hunter White	Collected date/time 10/18/23 12:00	Received date/time 10/20/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2155559	1	10/21/23 17:41	10/21/23 17:41	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2155716	1	10/22/23 00:39	10/22/23 00:39	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG2155745	1	10/22/23 23:27	10/23/23 14:54	MAA	Mt. Juliet, TN

B4-GW L1668587-10 GW

				Collected by Hunter White	Collected date/time 10/18/23 14:00	Received date/time 10/20/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2155559	1	10/21/23 18:06	10/21/23 18:06	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2155716	1	10/22/23 01:02	10/22/23 01:02	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG2155745	1	10/22/23 23:27	10/23/23 15:14	MAA	Mt. Juliet, TN

B5-GW L1668587-11 GW

				Collected by Hunter White	Collected date/time 10/18/23 14:20	Received date/time 10/20/23 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2155559	1	10/21/23 18:30	10/21/23 18:30	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2155716	1	10/22/23 01:25	10/22/23 01:25	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG2155745	1	10/22/23 23:27	10/23/23 15:34	MAA	Mt. Juliet, TN



SAMPLE SUMMARY

MW-1 L1668587-12 GW

Collected by
Hunter White

Collected date/time
10/18/23 13:30

Received date/time
10/20/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG2155559	1	10/21/23 18:55	10/21/23 18:55	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2155716	1	10/22/23 01:48	10/22/23 01:48	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG2155745	1	10/22/23 23:27	10/23/23 15:54	MAA	Mt. Juliet, TN

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

ACCOUNT:

Partner Engineering & Science - WA

PROJECT:

23-423301.1

SDG:

L1668587

DATE/TIME:

10/25/23 14:24

PAGE:

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CASE NARRATIVE

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



Marty Edwards III
Project Manager

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Total Solids by Method 2540 G-2011

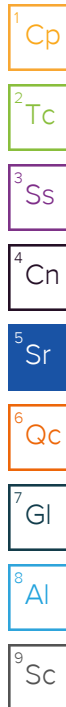
	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	86.3		1	10/21/2023 11:10	WG2155481

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	485		9.19	27.1	200	10/24/2023 13:36	WG2156808
(S) a,a,a-Trifluorotoluene(FID)	90.6			77.0-120		10/24/2023 13:36	WG2156808

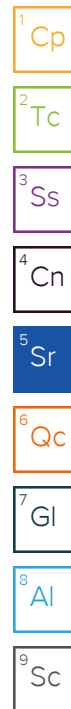
Volatile Organic Compounds (GC/MS) by Method 8260D

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0495	0.0678	1	10/21/2023 01:30	WG2155450
Acrylonitrile	U		0.00489	0.0169	1	10/21/2023 01:30	WG2155450
Benzene	0.00683		0.000633	0.00136	1	10/21/2023 01:30	WG2155450
Bromobenzene	U		0.00122	0.0169	1	10/21/2023 01:30	WG2155450
Bromodichloromethane	U		0.000983	0.00339	1	10/21/2023 01:30	WG2155450
Bromoform	U		0.00159	0.0339	1	10/21/2023 01:30	WG2155450
Bromomethane	U		0.00267	0.0169	1	10/21/2023 01:30	WG2155450
n-Butylbenzene	0.518		0.00712	0.0169	1	10/21/2023 01:30	WG2155450
sec-Butylbenzene	0.361		0.00390	0.0169	1	10/21/2023 01:30	WG2155450
tert-Butylbenzene	U		0.00264	0.00678	1	10/21/2023 01:30	WG2155450
Carbon tetrachloride	U		0.00122	0.00678	1	10/21/2023 01:30	WG2155450
Chlorobenzene	U		0.000285	0.00339	1	10/21/2023 01:30	WG2155450
Chlorodibromomethane	U		0.000830	0.00339	1	10/21/2023 01:30	WG2155450
Chloroethane	U		0.00230	0.00678	1	10/21/2023 01:30	WG2155450
Chloroform	U		0.00140	0.00339	1	10/21/2023 01:30	WG2155450
Chloromethane	U		0.00590	0.0169	1	10/21/2023 01:30	WG2155450
2-Chlorotoluene	U		0.00117	0.00339	1	10/21/2023 01:30	WG2155450
4-Chlorotoluene	U		0.000610	0.00678	1	10/21/2023 01:30	WG2155450
1,2-Dibromo-3-Chloropropane	U		0.00529	0.0339	1	10/21/2023 01:30	WG2155450
1,2-Dibromoethane	U		0.000878	0.00339	1	10/21/2023 01:30	WG2155450
Dibromomethane	U		0.00102	0.00678	1	10/21/2023 01:30	WG2155450
1,2-Dichlorobenzene	U		0.000576	0.00678	1	10/21/2023 01:30	WG2155450
1,3-Dichlorobenzene	U		0.000813	0.00678	1	10/21/2023 01:30	WG2155450
1,4-Dichlorobenzene	U		0.000949	0.00678	1	10/21/2023 01:30	WG2155450
Dichlorodifluoromethane	U		0.00218	0.00339	1	10/21/2023 01:30	WG2155450
1,1-Dichloroethane	U		0.000666	0.00339	1	10/21/2023 01:30	WG2155450
1,2-Dichloroethane	U		0.000880	0.00339	1	10/21/2023 01:30	WG2155450
1,1-Dichloroethene	U		0.000822	0.00339	1	10/21/2023 01:30	WG2155450
cis-1,2-Dichloroethene	U		0.000995	0.00339	1	10/21/2023 01:30	WG2155450
trans-1,2-Dichloroethene	U		0.00141	0.00678	1	10/21/2023 01:30	WG2155450
1,2-Dichloropropane	U		0.00193	0.00678	1	10/21/2023 01:30	WG2155450
1,1-Dichloropropene	U		0.00110	0.00339	1	10/21/2023 01:30	WG2155450
1,3-Dichloropropane	U		0.000679	0.00678	1	10/21/2023 01:30	WG2155450
cis-1,3-Dichloropropene	U		0.00103	0.00339	1	10/21/2023 01:30	WG2155450
trans-1,3-Dichloropropene	U		0.00155	0.00678	1	10/21/2023 01:30	WG2155450
2,2-Dichloropropane	U		0.00187	0.00339	1	10/21/2023 01:30	WG2155450
Di-isopropyl ether	U		0.000556	0.00136	1	10/21/2023 01:30	WG2155450
Ethylbenzene	0.317		0.000999	0.00339	1	10/21/2023 01:30	WG2155450
Hexachloro-1,3-butadiene	U		0.00813	0.0339	1	10/21/2023 01:30	WG2155450
Isopropylbenzene	0.254		0.000576	0.00339	1	10/21/2023 01:30	WG2155450
p-Isopropyltoluene	0.274		0.00346	0.00678	1	10/21/2023 01:30	WG2155450
2-Butanone (MEK)	U		0.0861	0.136	1	10/21/2023 01:30	WG2155450
Methylene Chloride	U		0.00900	0.0339	1	10/21/2023 01:30	WG2155450
4-Methyl-2-pentanone (MIBK)	2.07		0.00309	0.0339	1	10/21/2023 01:30	WG2155450



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		0.000474	0.00136	1	10/21/2023 01:30	WG2155450
Naphthalene	0.300	C3	0.00662	0.0169	1	10/21/2023 01:30	WG2155450
n-Propylbenzene	1.03		0.00129	0.00678	1	10/21/2023 01:30	WG2155450
Styrene	U		0.000310	0.0169	1	10/21/2023 01:30	WG2155450
1,1,1,2-Tetrachloroethane	U		0.00129	0.00339	1	10/21/2023 01:30	WG2155450
1,1,2,2-Tetrachloroethane	U		0.000942	0.00339	1	10/21/2023 01:30	WG2155450
1,1,2-Trichlorotrifluoroethane	U		0.00102	0.00339	1	10/21/2023 01:30	WG2155450
Tetrachloroethene	U		0.00121	0.00339	1	10/21/2023 01:30	WG2155450
Toluene	0.0183		0.00176	0.00678	1	10/21/2023 01:30	WG2155450
1,2,3-Trichlorobenzene	U	C3 J4	0.00994	0.0169	1	10/21/2023 01:30	WG2155450
1,2,4-Trichlorobenzene	U	C3	0.00596	0.0169	1	10/21/2023 01:30	WG2155450
1,1,1-Trichloroethane	U		0.00125	0.00339	1	10/21/2023 01:30	WG2155450
1,1,2-Trichloroethane	U		0.000809	0.00339	1	10/21/2023 01:30	WG2155450
Trichloroethene	U		0.000792	0.00136	1	10/21/2023 01:30	WG2155450
Trichlorofluoromethane	U		0.00112	0.00339	1	10/21/2023 01:30	WG2155450
1,2,3-Trichloropropane	U		0.00220	0.0169	1	10/21/2023 01:30	WG2155450
1,2,4-Trimethylbenzene	6.64		0.0214	0.0678	10	10/24/2023 11:47	WG2156859
1,2,3-Trimethylbenzene	1.82		0.00214	0.00678	1	10/21/2023 01:30	WG2155450
1,3,5-Trimethylbenzene	0.554		0.00271	0.00678	1	10/21/2023 01:30	WG2155450
Vinyl chloride	U		0.00157	0.00339	1	10/21/2023 01:30	WG2155450
Xylenes, Total	0.179		0.00119	0.00881	1	10/21/2023 01:30	WG2155450
(S) Toluene-d8	99.9			75.0-131		10/21/2023 01:30	WG2155450
(S) Toluene-d8	98.9			75.0-131		10/24/2023 11:47	WG2156859
(S) 4-Bromofluorobenzene	119			67.0-138		10/21/2023 01:30	WG2155450
(S) 4-Bromofluorobenzene	97.8			67.0-138		10/24/2023 11:47	WG2156859
(S) 1,2-Dichloroethane-d4	112			70.0-130		10/21/2023 01:30	WG2155450
(S) 1,2-Dichloroethane-d4	94.1			70.0-130		10/24/2023 11:47	WG2156859



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)	23.5		1.54	4.63	1	10/21/2023 11:10	WG2155472
Residual Range Organics (RRO)	39.5		3.86	11.6	1	10/21/2023 11:10	WG2155472
(S) o-Terphenyl	25.6			18.0-148		10/21/2023 11:10	WG2155472

Sample Narrative:

L1668587-01 WG2155472: Sample resembles laboratory standard for Hydraulic Oil and Mineral Spirits.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.0		1	10/21/2023 11:10	WG2155481

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	1150		11.2	33.1	250	10/24/2023 14:24	WG2156808
(S) a,a,a-Trifluorotoluene(FID)	92.3			77.0-120		10/24/2023 14:24	WG2156808

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		0.0483	0.0661	1	10/21/2023 01:49	WG2155450
Acrylonitrile	U		0.00478	0.0165	1	10/21/2023 01:49	WG2155450
Benzene	0.0488		0.000618	0.00132	1	10/21/2023 01:49	WG2155450
Bromobenzene	U		0.00119	0.0165	1	10/21/2023 01:49	WG2155450
Bromodichloromethane	U		0.000959	0.00331	1	10/21/2023 01:49	WG2155450
Bromoform	U		0.00155	0.0331	1	10/21/2023 01:49	WG2155450
Bromomethane	U		0.00261	0.0165	1	10/21/2023 01:49	WG2155450
n-Butylbenzene	0.896		0.00694	0.0165	1	10/21/2023 01:49	WG2155450
sec-Butylbenzene	1.32		0.00381	0.0165	1	10/21/2023 01:49	WG2155450
tert-Butylbenzene	0.0652		0.00258	0.00661	1	10/21/2023 01:49	WG2155450
Carbon tetrachloride	U		0.00119	0.00661	1	10/21/2023 01:49	WG2155450
Chlorobenzene	U		0.000278	0.00331	1	10/21/2023 01:49	WG2155450
Chlorodibromomethane	U		0.000810	0.00331	1	10/21/2023 01:49	WG2155450
Chloroethane	U		0.00225	0.00661	1	10/21/2023 01:49	WG2155450
Chloroform	U		0.00136	0.00331	1	10/21/2023 01:49	WG2155450
Chloromethane	U		0.00575	0.0165	1	10/21/2023 01:49	WG2155450
2-Chlorotoluene	U		0.00114	0.00331	1	10/21/2023 01:49	WG2155450
4-Chlorotoluene	U		0.000595	0.00661	1	10/21/2023 01:49	WG2155450
1,2-Dibromo-3-Chloropropane	U		0.00516	0.0331	1	10/21/2023 01:49	WG2155450
1,2-Dibromoethane	U		0.000857	0.00331	1	10/21/2023 01:49	WG2155450
Dibromomethane	U		0.000992	0.00661	1	10/21/2023 01:49	WG2155450
1,2-Dichlorobenzene	0.0135		0.000562	0.00661	1	10/21/2023 01:49	WG2155450
1,3-Dichlorobenzene	U		0.000794	0.00661	1	10/21/2023 01:49	WG2155450
1,4-Dichlorobenzene	0.0259		0.000926	0.00661	1	10/21/2023 01:49	WG2155450
Dichlorodifluoromethane	U		0.00213	0.00331	1	10/21/2023 01:49	WG2155450
1,1-Dichloroethane	U		0.000650	0.00331	1	10/21/2023 01:49	WG2155450
1,2-Dichloroethane	U		0.000859	0.00331	1	10/21/2023 01:49	WG2155450
1,1-Dichloroethene	U		0.000802	0.00331	1	10/21/2023 01:49	WG2155450
cis-1,2-Dichloroethene	U		0.000971	0.00331	1	10/21/2023 01:49	WG2155450
trans-1,2-Dichloroethene	U		0.00138	0.00661	1	10/21/2023 01:49	WG2155450
1,2-Dichloropropane	U		0.00188	0.00661	1	10/21/2023 01:49	WG2155450
1,1-Dichloropropene	U		0.00107	0.00331	1	10/21/2023 01:49	WG2155450
1,3-Dichloropropane	U		0.000663	0.00661	1	10/21/2023 01:49	WG2155450
cis-1,3-Dichloropropene	U		0.00100	0.00331	1	10/21/2023 01:49	WG2155450
trans-1,3-Dichloropropene	U		0.00151	0.00661	1	10/21/2023 01:49	WG2155450
2,2-Dichloropropane	U		0.00183	0.00331	1	10/21/2023 01:49	WG2155450
Di-isopropyl ether	U		0.000542	0.00132	1	10/21/2023 01:49	WG2155450
Ethylbenzene	0.0496		0.000975	0.00331	1	10/21/2023 01:49	WG2155450
Hexachloro-1,3-butadiene	U		0.00794	0.0331	1	10/21/2023 01:49	WG2155450
Isopropylbenzene	0.261		0.000562	0.00331	1	10/21/2023 01:49	WG2155450
p-Isopropyltoluene	0.668		0.00337	0.00661	1	10/21/2023 01:49	WG2155450
2-Butanone (MEK)	U		0.0840	0.132	1	10/21/2023 01:49	WG2155450
Methylene Chloride	U		0.00878	0.0331	1	10/21/2023 01:49	WG2155450
4-Methyl-2-pentanone (MIBK)	0.601		0.00302	0.0331	1	10/21/2023 01:49	WG2155450

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000463	0.00132	1	10/21/2023 01:49	WG2155450
Naphthalene	0.0113	C3 J	0.00646	0.0165	1	10/21/2023 01:49	WG2155450
n-Propylbenzene	1.36		0.00126	0.00661	1	10/21/2023 01:49	WG2155450
Styrene	U		0.000303	0.0165	1	10/21/2023 01:49	WG2155450
1,1,1,2-Tetrachloroethane	U		0.00125	0.00331	1	10/21/2023 01:49	WG2155450
1,1,2,2-Tetrachloroethane	U		0.000919	0.00331	1	10/21/2023 01:49	WG2155450
1,1,2-Trichlorotrifluoroethane	U		0.000997	0.00331	1	10/21/2023 01:49	WG2155450
Tetrachloroethene	U		0.00119	0.00331	1	10/21/2023 01:49	WG2155450
Toluene	0.00185	J	0.00172	0.00661	1	10/21/2023 01:49	WG2155450
1,2,3-Trichlorobenzene	U	C3 J4	0.00970	0.0165	1	10/21/2023 01:49	WG2155450
1,2,4-Trichlorobenzene	U	C3	0.00582	0.0165	1	10/21/2023 01:49	WG2155450
1,1,1-Trichloroethane	U		0.00122	0.00331	1	10/21/2023 01:49	WG2155450
1,1,2-Trichloroethane	U		0.000790	0.00331	1	10/21/2023 01:49	WG2155450
Trichloroethene	U		0.000773	0.00132	1	10/21/2023 01:49	WG2155450
Trichlorofluoromethane	U		0.00109	0.00331	1	10/21/2023 01:49	WG2155450
1,2,3-Trichloropropane	U		0.00214	0.0165	1	10/21/2023 01:49	WG2155450
1,2,4-Trimethylbenzene	3.64		0.0209	0.0661	10	10/24/2023 12:06	WG2156859
1,2,3-Trimethylbenzene	4.03		0.0209	0.0661	10	10/24/2023 12:06	WG2156859
1,3,5-Trimethylbenzene	U		0.00265	0.00661	1	10/21/2023 01:49	WG2155450
Vinyl chloride	U		0.00153	0.00331	1	10/21/2023 01:49	WG2155450
Xylenes, Total	0.280		0.00116	0.00860	1	10/21/2023 01:49	WG2155450
(S) Toluene-d8	72.9	J2		75.0-131		10/21/2023 01:49	WG2155450
(S) Toluene-d8	107			75.0-131		10/24/2023 12:06	WG2156859
(S) 4-Bromofluorobenzene	386	J1		67.0-138		10/21/2023 01:49	WG2155450
(S) 4-Bromofluorobenzene	153	J1		67.0-138		10/24/2023 12:06	WG2156859
(S) 1,2-Dichloroethane-d4	110			70.0-130		10/21/2023 01:49	WG2155450
(S) 1,2-Dichloroethane-d4	89.5			70.0-130		10/24/2023 12:06	WG2156859

Sample Narrative:

L1668587-02 WG2156859: Surrogate failure due to matrix interference.

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)	560		38.3	115	25	10/21/2023 12:24	WG2155472
Residual Range Organics (RRO)	517		95.8	287	25	10/21/2023 12:24	WG2155472
(S) o-Terphenyl	0.000	J7		18.0-148		10/21/2023 12:24	WG2155472

Sample Narrative:

L1668587-02 WG2155472: Sample resembles laboratory standard for Hydraulic Oil and Mineral Spirits.

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
PCB 1016	U		0.0136	0.0391	1	10/24/2023 02:07	WG2155749
PCB 1221	U		0.0136	0.0391	1	10/24/2023 02:07	WG2155749
PCB 1232	U		0.0136	0.0391	1	10/24/2023 02:07	WG2155749
PCB 1242	U		0.0136	0.0391	1	10/24/2023 02:07	WG2155749
PCB 1248	U		0.00848	0.0195	1	10/24/2023 02:07	WG2155749
PCB 1254	U		0.00848	0.0195	1	10/24/2023 02:07	WG2155749
PCB 1260	U		0.00848	0.0195	1	10/24/2023 02:07	WG2155749
(S) Decachlorobiphenyl	70.4			10.0-135		10/24/2023 02:07	WG2155749
(S) Tetrachloro-m-xylene	67.6			10.0-139		10/24/2023 02:07	WG2155749

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	%			date / time	
Total Solids	89.2		1	10/21/2023 11:10	WG2155481

Volatile Organic Compounds (GC) by Method NWTPHGX

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Gasoline Range Organics-NWTPH	1950		21.8	64.3	520	10/24/2023 14:47	WG2156808
(S) a,a,a-Trifluorotoluene(FID)	91.1			77.0-120		10/24/2023 14:47	WG2156808

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

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0470	0.0643	1.04	10/21/2023 02:08	WG2155450
Acrylonitrile	U		0.00464	0.0161	1.04	10/21/2023 02:08	WG2155450
Benzene	U		0.000601	0.00129	1.04	10/21/2023 02:08	WG2155450
Bromobenzene	U		0.00116	0.0161	1.04	10/21/2023 02:08	WG2155450
Bromodichloromethane	U		0.000933	0.00322	1.04	10/21/2023 02:08	WG2155450
Bromoform	U		0.00151	0.0322	1.04	10/21/2023 02:08	WG2155450
Bromomethane	U		0.00254	0.0161	1.04	10/21/2023 02:08	WG2155450
n-Butylbenzene	0.729		0.00675	0.0161	1.04	10/21/2023 02:08	WG2155450
sec-Butylbenzene	1.57		0.00371	0.0161	1.04	10/21/2023 02:08	WG2155450
tert-Butylbenzene	0.177		0.00251	0.00643	1.04	10/21/2023 02:08	WG2155450
Carbon tetrachloride	U		0.00116	0.00643	1.04	10/21/2023 02:08	WG2155450
Chlorobenzene	U		0.000270	0.00322	1.04	10/21/2023 02:08	WG2155450
Chlorodibromomethane	U		0.000787	0.00322	1.04	10/21/2023 02:08	WG2155450
Chloroethane	U		0.00219	0.00643	1.04	10/21/2023 02:08	WG2155450
Chloroform	U		0.00132	0.00322	1.04	10/21/2023 02:08	WG2155450
Chloromethane	U		0.00559	0.0161	1.04	10/21/2023 02:08	WG2155450
2-Chlorotoluene	U		0.00111	0.00322	1.04	10/21/2023 02:08	WG2155450
4-Chlorotoluene	U		0.000579	0.00643	1.04	10/21/2023 02:08	WG2155450
1,2-Dibromo-3-Chloropropane	U		0.00502	0.0322	1.04	10/21/2023 02:08	WG2155450
1,2-Dibromoethane	U		0.000834	0.00322	1.04	10/21/2023 02:08	WG2155450
Dibromomethane	U		0.000965	0.00643	1.04	10/21/2023 02:08	WG2155450
1,2-Dichlorobenzene	U		0.000547	0.00643	1.04	10/21/2023 02:08	WG2155450
1,3-Dichlorobenzene	U		0.000772	0.00643	1.04	10/21/2023 02:08	WG2155450
1,4-Dichlorobenzene	U		0.000901	0.00643	1.04	10/21/2023 02:08	WG2155450
Dichlorodifluoromethane	U		0.00207	0.00322	1.04	10/21/2023 02:08	WG2155450
1,1-Dichloroethane	U		0.000632	0.00322	1.04	10/21/2023 02:08	WG2155450
1,2-Dichloroethane	U		0.000835	0.00322	1.04	10/21/2023 02:08	WG2155450
1,1-Dichloroethene	U		0.000779	0.00322	1.04	10/21/2023 02:08	WG2155450
cis-1,2-Dichloroethene	U		0.000944	0.00322	1.04	10/21/2023 02:08	WG2155450
trans-1,2-Dichloroethene	U		0.00134	0.00643	1.04	10/21/2023 02:08	WG2155450
1,2-Dichloropropane	U		0.00183	0.00643	1.04	10/21/2023 02:08	WG2155450
1,1-Dichloropropene	U		0.00104	0.00322	1.04	10/21/2023 02:08	WG2155450
1,3-Dichloropropane	U		0.000645	0.00643	1.04	10/21/2023 02:08	WG2155450
cis-1,3-Dichloropropene	U		0.000974	0.00322	1.04	10/21/2023 02:08	WG2155450
trans-1,3-Dichloropropene	U		0.00147	0.00643	1.04	10/21/2023 02:08	WG2155450
2,2-Dichloropropane	U		0.00178	0.00322	1.04	10/21/2023 02:08	WG2155450
Di-isopropyl ether	U		0.000527	0.00129	1.04	10/21/2023 02:08	WG2155450
Ethylbenzene	0.0621		0.000948	0.00322	1.04	10/21/2023 02:08	WG2155450
Hexachloro-1,3-butadiene	U		0.00772	0.0322	1.04	10/21/2023 02:08	WG2155450
Isopropylbenzene	0.244		0.000547	0.00322	1.04	10/21/2023 02:08	WG2155450
p-Isopropyltoluene	0.758		0.00328	0.00643	1.04	10/21/2023 02:08	WG2155450
2-Butanone (MEK)	U		0.0816	0.129	1.04	10/21/2023 02:08	WG2155450
Methylene Chloride	U		0.00855	0.0322	1.04	10/21/2023 02:08	WG2155450
4-Methyl-2-pentanone (MIBK)	U		0.00293	0.0322	1.04	10/21/2023 02:08	WG2155450

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000450	0.00129	1.04	10/21/2023 02:08	WG2155450
Naphthalene	0.0320	C3	0.00628	0.0161	1.04	10/21/2023 02:08	WG2155450
n-Propylbenzene	1.46		0.00122	0.00643	1.04	10/21/2023 02:08	WG2155450
Styrene	U		0.000294	0.0161	1.04	10/21/2023 02:08	WG2155450
1,1,1,2-Tetrachloroethane	U		0.00122	0.00322	1.04	10/21/2023 02:08	WG2155450
1,1,2,2-Tetrachloroethane	U		0.000894	0.00322	1.04	10/21/2023 02:08	WG2155450
1,1,2-Trichlorotrifluoroethane	U		0.000970	0.00322	1.04	10/21/2023 02:08	WG2155450
Tetrachloroethene	U		0.00115	0.00322	1.04	10/21/2023 02:08	WG2155450
Toluene	0.00312	J	0.00167	0.00643	1.04	10/21/2023 02:08	WG2155450
1,2,3-Trichlorobenzene	U	C3 J4	0.00943	0.0161	1.04	10/21/2023 02:08	WG2155450
1,2,4-Trichlorobenzene	U	C3	0.00567	0.0161	1.04	10/21/2023 02:08	WG2155450
1,1,1-Trichloroethane	U		0.00119	0.00322	1.04	10/21/2023 02:08	WG2155450
1,1,2-Trichloroethane	U		0.000768	0.00322	1.04	10/21/2023 02:08	WG2155450
Trichloroethene	U		0.000751	0.00129	1.04	10/21/2023 02:08	WG2155450
Trichlorofluoromethane	U		0.00106	0.00322	1.04	10/21/2023 02:08	WG2155450
1,2,3-Trichloropropane	U		0.00208	0.0161	1.04	10/21/2023 02:08	WG2155450
1,2,4-Trimethylbenzene	11.4		0.0203	0.0643	10.4	10/24/2023 12:25	WG2156859
1,2,3-Trimethylbenzene	2.64		0.00203	0.00643	1.04	10/21/2023 02:08	WG2155450
1,3,5-Trimethylbenzene	4.09		0.0257	0.0643	10.4	10/24/2023 12:25	WG2156859
Vinyl chloride	U		0.00150	0.00322	1.04	10/21/2023 02:08	WG2155450
Xylenes, Total	0.226		0.00113	0.00836	1.04	10/21/2023 02:08	WG2155450
(S) Toluene-d8	64.1	J2		75.0-131		10/21/2023 02:08	WG2155450
(S) Toluene-d8	113			75.0-131		10/24/2023 12:25	WG2156859
(S) 4-Bromofluorobenzene	584	J1		67.0-138		10/21/2023 02:08	WG2155450
(S) 4-Bromofluorobenzene	201	J1		67.0-138		10/24/2023 12:25	WG2156859
(S) 1,2-Dichloroethane-d4	110			70.0-130		10/21/2023 02:08	WG2155450
(S) 1,2-Dichloroethane-d4	88.7			70.0-130		10/24/2023 12:25	WG2156859

Sample Narrative:

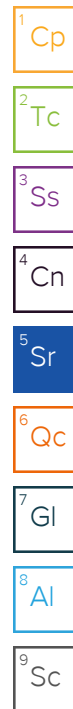
L1668587-03 WG2156859: Surrogate failure due to matrix interference.

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)	1920		37.3	112	25	10/21/2023 12:25	WG2155472
Residual Range Organics (RRO)	11000		934	2800	250	10/21/2023 12:51	WG2155472
(S) o-Terphenyl	0.000	J7		18.0-148		10/21/2023 12:25	WG2155472
(S) o-Terphenyl	0.000	J7		18.0-148		10/21/2023 12:51	WG2155472

Sample Narrative:

L1668587-03 WG2155472: Sample resembles laboratory standard for Hydraulic Oil and Mineral Spirits.



Total Solids by Method 2540 G-2011

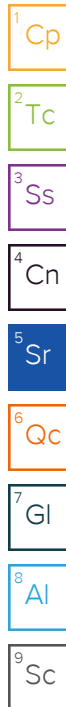
Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.0		1	10/21/2023 11:10	WG2155481

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	1.45	B J	1.14	3.36	25	10/24/2023 12:50	WG2156808
(S) a,a,a-Trifluorotoluene(FID)	92.2			77.0-120		10/24/2023 12:50	WG2156808

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		0.0491	0.0672	1	10/21/2023 02:27	WG2155450
Acrylonitrile	U		0.00486	0.0168	1	10/21/2023 02:27	WG2155450
Benzene	U		0.000628	0.00134	1	10/21/2023 02:27	WG2155450
Bromobenzene	U		0.00121	0.0168	1	10/21/2023 02:27	WG2155450
Bromodichloromethane	U		0.000975	0.00336	1	10/21/2023 02:27	WG2155450
Bromoform	U		0.00157	0.0336	1	10/21/2023 02:27	WG2155450
Bromomethane	U		0.00265	0.0168	1	10/21/2023 02:27	WG2155450
n-Butylbenzene	U		0.00706	0.0168	1	10/24/2023 11:28	WG2156859
sec-Butylbenzene	U		0.00387	0.0168	1	10/24/2023 11:28	WG2156859
tert-Butylbenzene	U		0.00262	0.00672	1	10/21/2023 02:27	WG2155450
Carbon tetrachloride	U		0.00121	0.00672	1	10/21/2023 02:27	WG2155450
Chlorobenzene	U		0.000282	0.00336	1	10/21/2023 02:27	WG2155450
Chlorodibromomethane	U		0.000823	0.00336	1	10/21/2023 02:27	WG2155450
Chloroethane	U		0.00229	0.00672	1	10/21/2023 02:27	WG2155450
Chloroform	U		0.00139	0.00336	1	10/21/2023 02:27	WG2155450
Chloromethane	U		0.00585	0.0168	1	10/21/2023 02:27	WG2155450
2-Chlorotoluene	U		0.00116	0.00336	1	10/21/2023 02:27	WG2155450
4-Chlorotoluene	U		0.000605	0.00672	1	10/21/2023 02:27	WG2155450
1,2-Dibromo-3-Chloropropane	U		0.00525	0.0336	1	10/21/2023 02:27	WG2155450
1,2-Dibromoethane	U		0.000872	0.00336	1	10/21/2023 02:27	WG2155450
Dibromomethane	U		0.00101	0.00672	1	10/21/2023 02:27	WG2155450
1,2-Dichlorobenzene	U		0.000572	0.00672	1	10/21/2023 02:27	WG2155450
1,3-Dichlorobenzene	U		0.000807	0.00672	1	10/21/2023 02:27	WG2155450
1,4-Dichlorobenzene	U		0.000941	0.00672	1	10/21/2023 02:27	WG2155450
Dichlorodifluoromethane	U		0.00217	0.00336	1	10/21/2023 02:27	WG2155450
1,1-Dichloroethane	U		0.000660	0.00336	1	10/21/2023 02:27	WG2155450
1,2-Dichloroethane	U		0.000873	0.00336	1	10/21/2023 02:27	WG2155450
1,1-Dichloroethene	U		0.000815	0.00336	1	10/21/2023 02:27	WG2155450
cis-1,2-Dichloroethene	U		0.000987	0.00336	1	10/21/2023 02:27	WG2155450
trans-1,2-Dichloroethene	U		0.00140	0.00672	1	10/21/2023 02:27	WG2155450
1,2-Dichloropropane	U		0.00191	0.00672	1	10/21/2023 02:27	WG2155450
1,1-Dichloropropene	U		0.00109	0.00336	1	10/21/2023 02:27	WG2155450
1,3-Dichloropropane	U		0.000674	0.00672	1	10/21/2023 02:27	WG2155450
cis-1,3-Dichloropropene	U		0.00102	0.00336	1	10/21/2023 02:27	WG2155450
trans-1,3-Dichloropropene	U		0.00153	0.00672	1	10/21/2023 02:27	WG2155450
2,2-Dichloropropane	U		0.00186	0.00336	1	10/21/2023 02:27	WG2155450
Di-isopropyl ether	U		0.000551	0.00134	1	10/21/2023 02:27	WG2155450
Ethylbenzene	U		0.000991	0.00336	1	10/21/2023 02:27	WG2155450
Hexachloro-1,3-butadiene	U		0.00807	0.0336	1	10/21/2023 02:27	WG2155450
Isopropylbenzene	U		0.000572	0.00336	1	10/21/2023 02:27	WG2155450
p-Isopropyltoluene	U		0.00343	0.00672	1	10/24/2023 11:28	WG2156859
2-Butanone (MEK)	U		0.0854	0.134	1	10/21/2023 02:27	WG2155450
Methylene Chloride	U		0.00893	0.0336	1	10/21/2023 02:27	WG2155450
4-Methyl-2-pentanone (MIBK)	0.00409	J	0.00307	0.0336	1	10/21/2023 02:27	WG2155450



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		0.000471	0.00134	1	10/21/2023 02:27	WG2155450
Naphthalene	U	C3	0.00656	0.0168	1	10/21/2023 02:27	WG2155450
n-Propylbenzene	U		0.00128	0.00672	1	10/24/2023 11:28	WG2156859
Styrene	U		0.000308	0.0168	1	10/21/2023 02:27	WG2155450
1,1,1,2-Tetrachloroethane	U		0.00127	0.00336	1	10/21/2023 02:27	WG2155450
1,1,2,2-Tetrachloroethane	U		0.000935	0.00336	1	10/21/2023 02:27	WG2155450
1,1,2-Trichlorotrifluoroethane	U		0.00101	0.00336	1	10/21/2023 02:27	WG2155450
Tetrachloroethene	U		0.00121	0.00336	1	10/21/2023 02:27	WG2155450
Toluene	U		0.00175	0.00672	1	10/21/2023 02:27	WG2155450
1,2,3-Trichlorobenzene	U	C3 J4	0.00986	0.0168	1	10/21/2023 02:27	WG2155450
1,2,4-Trichlorobenzene	U	C3	0.00592	0.0168	1	10/21/2023 02:27	WG2155450
1,1,1-Trichloroethane	U		0.00124	0.00336	1	10/21/2023 02:27	WG2155450
1,1,2-Trichloroethane	U		0.000803	0.00336	1	10/21/2023 02:27	WG2155450
Trichloroethene	U		0.000785	0.00134	1	10/21/2023 02:27	WG2155450
Trichlorofluoromethane	U		0.00111	0.00336	1	10/21/2023 02:27	WG2155450
1,2,3-Trichloropropane	U		0.00218	0.0168	1	10/21/2023 02:27	WG2155450
1,2,4-Trimethylbenzene	0.00212	J	0.00212	0.00672	1	10/24/2023 11:28	WG2156859
1,2,3-Trimethylbenzene	U		0.00212	0.00672	1	10/21/2023 02:27	WG2155450
1,3,5-Trimethylbenzene	U		0.00269	0.00672	1	10/24/2023 11:28	WG2156859
Vinyl chloride	U		0.00156	0.00336	1	10/21/2023 02:27	WG2155450
Xylenes, Total	0.00202	J	0.00118	0.00874	1	10/24/2023 11:28	WG2156859
(S) Toluene-d8	106			75.0-131		10/21/2023 02:27	WG2155450
(S) Toluene-d8	102			75.0-131		10/24/2023 11:28	WG2156859
(S) 4-Bromofluorobenzene	104			67.0-138		10/21/2023 02:27	WG2155450
(S) 4-Bromofluorobenzene	91.0			67.0-138		10/24/2023 11:28	WG2156859
(S) 1,2-Dichloroethane-d4	105			70.0-130		10/21/2023 02:27	WG2155450
(S) 1,2-Dichloroethane-d4	93.4			70.0-130		10/24/2023 11:28	WG2156859

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)	U		1.53	4.60	1	10/21/2023 10:45	WG2155472
Residual Range Organics (RRO)	U		3.83	11.5	1	10/21/2023 10:45	WG2155472
(S) o-Terphenyl	63.1			18.0-148		10/21/2023 10:45	WG2155472

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.0		1	10/21/2023 11:10	WG2155481

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	3.33	B	1.01	2.99	25	10/24/2023 13:13	WG2156808
(S) a,a,a-Trifluorotoluene(FID)	92.5			77.0-120		10/24/2023 13:13	WG2156808

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		0.0437	0.0598	1	10/21/2023 02:46	WG2155450
Acrylonitrile	U		0.00432	0.0150	1	10/21/2023 02:46	WG2155450
Benzene	U		0.000559	0.00120	1	10/21/2023 02:46	WG2155450
Bromobenzene	U		0.00108	0.0150	1	10/21/2023 02:46	WG2155450
Bromodichloromethane	U		0.000867	0.00299	1	10/21/2023 02:46	WG2155450
Bromoform	U		0.00140	0.0299	1	10/21/2023 02:46	WG2155450
Bromomethane	U		0.00236	0.0150	1	10/21/2023 02:46	WG2155450
n-Butylbenzene	0.00974	I	0.00628	0.0150	1	10/21/2023 02:46	WG2155450
sec-Butylbenzene	0.00689	I	0.00345	0.0150	1	10/21/2023 02:46	WG2155450
tert-Butylbenzene	U		0.00233	0.00598	1	10/21/2023 02:46	WG2155450
Carbon tetrachloride	U		0.00107	0.00598	1	10/21/2023 02:46	WG2155450
Chlorobenzene	U		0.000251	0.00299	1	10/21/2023 02:46	WG2155450
Chlorodibromomethane	U		0.000732	0.00299	1	10/21/2023 02:46	WG2155450
Chloroethane	U		0.00203	0.00598	1	10/21/2023 02:46	WG2155450
Chloroform	U		0.00123	0.00299	1	10/21/2023 02:46	WG2155450
Chloromethane	U		0.00520	0.0150	1	10/21/2023 02:46	WG2155450
2-Chlorotoluene	U		0.00103	0.00299	1	10/21/2023 02:46	WG2155450
4-Chlorotoluene	U		0.000538	0.00598	1	10/21/2023 02:46	WG2155450
1,2-Dibromo-3-Chloropropane	U		0.00467	0.0299	1	10/21/2023 02:46	WG2155450
1,2-Dibromoethane	U		0.000775	0.00299	1	10/21/2023 02:46	WG2155450
Dibromomethane	U		0.000897	0.00598	1	10/21/2023 02:46	WG2155450
1,2-Dichlorobenzene	U		0.000508	0.00598	1	10/21/2023 02:46	WG2155450
1,3-Dichlorobenzene	U		0.000718	0.00598	1	10/21/2023 02:46	WG2155450
1,4-Dichlorobenzene	U		0.000838	0.00598	1	10/21/2023 02:46	WG2155450
Dichlorodifluoromethane	U		0.00193	0.00299	1	10/21/2023 02:46	WG2155450
1,1-Dichloroethane	U		0.000587	0.00299	1	10/21/2023 02:46	WG2155450
1,2-Dichloroethane	U		0.000776	0.00299	1	10/21/2023 02:46	WG2155450
1,1-Dichloroethene	U		0.000725	0.00299	1	10/21/2023 02:46	WG2155450
cis-1,2-Dichloroethene	U		0.000878	0.00299	1	10/21/2023 02:46	WG2155450
trans-1,2-Dichloroethene	U		0.00124	0.00598	1	10/21/2023 02:46	WG2155450
1,2-Dichloropropane	U		0.00170	0.00598	1	10/21/2023 02:46	WG2155450
1,1-Dichloropropene	U		0.000968	0.00299	1	10/21/2023 02:46	WG2155450
1,3-Dichloropropane	U		0.000599	0.00598	1	10/21/2023 02:46	WG2155450
cis-1,3-Dichloropropene	U		0.000906	0.00299	1	10/21/2023 02:46	WG2155450
trans-1,3-Dichloropropene	U		0.00136	0.00598	1	10/21/2023 02:46	WG2155450
2,2-Dichloropropane	U		0.00165	0.00299	1	10/21/2023 02:46	WG2155450
Di-isopropyl ether	U		0.000491	0.00120	1	10/21/2023 02:46	WG2155450
Ethylbenzene	U		0.000882	0.00299	1	10/21/2023 02:46	WG2155450
Hexachloro-1,3-butadiene	U		0.00718	0.0299	1	10/21/2023 02:46	WG2155450
Isopropylbenzene	0.00392		0.000508	0.00299	1	10/21/2023 02:46	WG2155450
p-Isopropyltoluene	0.0104		0.00305	0.00598	1	10/21/2023 02:46	WG2155450
2-Butanone (MEK)	U		0.0760	0.120	1	10/21/2023 02:46	WG2155450
Methylene Chloride	U		0.00794	0.0299	1	10/21/2023 02:46	WG2155450
4-Methyl-2-pentanone (MIBK)	U		0.00273	0.0299	1	10/21/2023 02:46	WG2155450

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000419	0.00120	1	10/21/2023 02:46	WG2155450
Naphthalene	0.0894	C3	0.00584	0.0150	1	10/21/2023 02:46	WG2155450
n-Propylbenzene	0.0121		0.00114	0.00598	1	10/21/2023 02:46	WG2155450
Styrene	U		0.000274	0.0150	1	10/21/2023 02:46	WG2155450
1,1,1,2-Tetrachloroethane	U		0.00113	0.00299	1	10/21/2023 02:46	WG2155450
1,1,2,2-Tetrachloroethane	U		0.000832	0.00299	1	10/21/2023 02:46	WG2155450
1,1,2-Trichlorotrifluoroethane	U		0.000902	0.00299	1	10/21/2023 02:46	WG2155450
Tetrachloroethene	U		0.00107	0.00299	1	10/21/2023 02:46	WG2155450
Toluene	0.00179	J	0.00156	0.00598	1	10/21/2023 02:46	WG2155450
1,2,3-Trichlorobenzene	U	C3 J4	0.00877	0.0150	1	10/21/2023 02:46	WG2155450
1,2,4-Trichlorobenzene	U	C3	0.00526	0.0150	1	10/21/2023 02:46	WG2155450
1,1,1-Trichloroethane	U		0.00110	0.00299	1	10/21/2023 02:46	WG2155450
1,1,2-Trichloroethane	U		0.000714	0.00299	1	10/21/2023 02:46	WG2155450
Trichloroethene	U		0.000699	0.00120	1	10/21/2023 02:46	WG2155450
Trichlorofluoromethane	U		0.000989	0.00299	1	10/21/2023 02:46	WG2155450
1,2,3-Trichloropropane	U		0.00194	0.0150	1	10/21/2023 02:46	WG2155450
1,2,4-Trimethylbenzene	0.0590		0.00189	0.00598	1	10/21/2023 02:46	WG2155450
1,2,3-Trimethylbenzene	0.0272		0.00189	0.00598	1	10/21/2023 02:46	WG2155450
1,3,5-Trimethylbenzene	U		0.00239	0.00598	1	10/21/2023 02:46	WG2155450
Vinyl chloride	U		0.00139	0.00299	1	10/21/2023 02:46	WG2155450
Xylenes, Total	0.0112		0.00105	0.00778	1	10/21/2023 02:46	WG2155450
(S) Toluene-d8	105			75.0-131		10/21/2023 02:46	WG2155450
(S) 4-Bromofluorobenzene	96.3			67.0-138		10/21/2023 02:46	WG2155450
(S) 1,2-Dichloroethane-d4	107			70.0-130		10/21/2023 02:46	WG2155450

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)	1.46	J	1.45	4.35	1	10/21/2023 10:57	WG2155472
Residual Range Organics (RRO)	U		3.62	10.9	1	10/21/2023 10:57	WG2155472
(S) o-Terphenyl	61.3			18.0-148		10/21/2023 10:57	WG2155472

Total Solids by Method 2540 G-2011

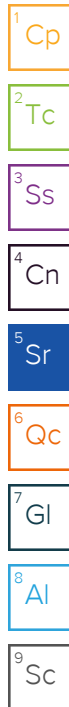
Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.7		1	10/21/2023 11:10	WG2155481

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	73.1		1.04	3.06	25	10/21/2023 04:52	WG2155385
(S) a,a,a-Trifluorotoluene(FID)	96.8			77.0-120		10/21/2023 04:52	WG2155385

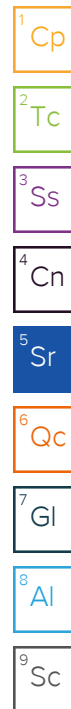
Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0447	0.0612	1	10/21/2023 03:05	WG2155450
Acrylonitrile	U		0.00442	0.0153	1	10/21/2023 03:05	WG2155450
Benzene	0.00287		0.000572	0.00122	1	10/21/2023 03:05	WG2155450
Bromobenzene	U		0.00110	0.0153	1	10/21/2023 03:05	WG2155450
Bromodichloromethane	U		0.000888	0.00306	1	10/21/2023 03:05	WG2155450
Bromoform	U		0.00143	0.0306	1	10/21/2023 03:05	WG2155450
Bromomethane	U		0.00241	0.0153	1	10/21/2023 03:05	WG2155450
n-Butylbenzene	0.0704		0.00643	0.0153	1	10/21/2023 03:05	WG2155450
sec-Butylbenzene	0.0834		0.00353	0.0153	1	10/21/2023 03:05	WG2155450
tert-Butylbenzene	U		0.00239	0.00612	1	10/21/2023 03:05	WG2155450
Carbon tetrachloride	U		0.00110	0.00612	1	10/21/2023 03:05	WG2155450
Chlorobenzene	U		0.000257	0.00306	1	10/21/2023 03:05	WG2155450
Chlorodibromomethane	U		0.000750	0.00306	1	10/21/2023 03:05	WG2155450
Chloroethane	U		0.00208	0.00612	1	10/21/2023 03:05	WG2155450
Chloroform	U		0.00126	0.00306	1	10/21/2023 03:05	WG2155450
Chloromethane	U		0.00533	0.0153	1	10/21/2023 03:05	WG2155450
2-Chlorotoluene	U		0.00106	0.00306	1	10/21/2023 03:05	WG2155450
4-Chlorotoluene	U		0.000551	0.00612	1	10/21/2023 03:05	WG2155450
1,2-Dibromo-3-Chloropropane	U		0.00478	0.0306	1	10/21/2023 03:05	WG2155450
1,2-Dibromoethane	U		0.000794	0.00306	1	10/21/2023 03:05	WG2155450
Dibromomethane	U		0.000919	0.00612	1	10/21/2023 03:05	WG2155450
1,2-Dichlorobenzene	0.00180	U	0.000521	0.00612	1	10/21/2023 03:05	WG2155450
1,3-Dichlorobenzene	U		0.000735	0.00612	1	10/21/2023 03:05	WG2155450
1,4-Dichlorobenzene	U		0.000857	0.00612	1	10/21/2023 03:05	WG2155450
Dichlorodifluoromethane	U		0.00197	0.00306	1	10/21/2023 03:05	WG2155450
1,1-Dichloroethane	U		0.000601	0.00306	1	10/21/2023 03:05	WG2155450
1,2-Dichloroethane	U		0.000795	0.00306	1	10/21/2023 03:05	WG2155450
1,1-Dichloroethene	U		0.000742	0.00306	1	10/21/2023 03:05	WG2155450
cis-1,2-Dichloroethene	U		0.000899	0.00306	1	10/21/2023 03:05	WG2155450
trans-1,2-Dichloroethene	U		0.00127	0.00612	1	10/21/2023 03:05	WG2155450
1,2-Dichloropropane	U		0.00174	0.00612	1	10/21/2023 03:05	WG2155450
1,1-Dichloropropene	U		0.000991	0.00306	1	10/21/2023 03:05	WG2155450
1,3-Dichloropropane	U		0.000614	0.00612	1	10/21/2023 03:05	WG2155450
cis-1,3-Dichloropropene	U		0.000927	0.00306	1	10/21/2023 03:05	WG2155450
trans-1,3-Dichloropropene	U		0.00140	0.00612	1	10/21/2023 03:05	WG2155450
2,2-Dichloropropane	U		0.00169	0.00306	1	10/21/2023 03:05	WG2155450
Di-isopropyl ether	U		0.000502	0.00122	1	10/21/2023 03:05	WG2155450
Ethylbenzene	0.00976		0.000903	0.00306	1	10/21/2023 03:05	WG2155450
Hexachloro-1,3-butadiene	U		0.00735	0.0306	1	10/21/2023 03:05	WG2155450
Isopropylbenzene	0.0338		0.000521	0.00306	1	10/21/2023 03:05	WG2155450
p-Isopropyltoluene	0.0951		0.00312	0.00612	1	10/21/2023 03:05	WG2155450
2-Butanone (MEK)	U		0.0778	0.122	1	10/21/2023 03:05	WG2155450
Methylene Chloride	U		0.00813	0.0306	1	10/21/2023 03:05	WG2155450
4-Methyl-2-pentanone (MIBK)	U		0.00279	0.0306	1	10/21/2023 03:05	WG2155450



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		0.000429	0.00122	1	10/21/2023 03:05	WG2155450
Naphthalene	0.103	C3	0.00598	0.0153	1	10/21/2023 03:05	WG2155450
n-Propylbenzene	0.165		0.00116	0.00612	1	10/21/2023 03:05	WG2155450
Styrene	U		0.000280	0.0153	1	10/21/2023 03:05	WG2155450
1,1,1,2-Tetrachloroethane	U		0.00116	0.00306	1	10/21/2023 03:05	WG2155450
1,1,2,2-Tetrachloroethane	U		0.000851	0.00306	1	10/21/2023 03:05	WG2155450
1,1,2-Trichlorotrifluoroethane	U		0.000924	0.00306	1	10/21/2023 03:05	WG2155450
Tetrachloroethene	U		0.00110	0.00306	1	10/21/2023 03:05	WG2155450
Toluene	U		0.00159	0.00612	1	10/21/2023 03:05	WG2155450
1,2,3-Trichlorobenzene	U	C3 J4	0.00898	0.0153	1	10/21/2023 03:05	WG2155450
1,2,4-Trichlorobenzene	U	C3	0.00539	0.0153	1	10/21/2023 03:05	WG2155450
1,1,1-Trichloroethane	U		0.00113	0.00306	1	10/21/2023 03:05	WG2155450
1,1,2-Trichloroethane	U		0.000731	0.00306	1	10/21/2023 03:05	WG2155450
Trichloroethene	U		0.000715	0.00122	1	10/21/2023 03:05	WG2155450
Trichlorofluoromethane	U		0.00101	0.00306	1	10/21/2023 03:05	WG2155450
1,2,3-Trichloropropane	U		0.00198	0.0153	1	10/21/2023 03:05	WG2155450
1,2,4-Trimethylbenzene	1.68		0.00194	0.00612	1	10/21/2023 03:05	WG2155450
1,2,3-Trimethylbenzene	0.560		0.00194	0.00612	1	10/21/2023 03:05	WG2155450
1,3,5-Trimethylbenzene	0.0366		0.00245	0.00612	1	10/21/2023 03:05	WG2155450
Vinyl chloride	U		0.00142	0.00306	1	10/21/2023 03:05	WG2155450
Xylenes, Total	0.104		0.00108	0.00796	1	10/21/2023 03:05	WG2155450
(S) Toluene-d8	103			75.0-131		10/21/2023 03:05	WG2155450
(S) 4-Bromofluorobenzene	132			67.0-138		10/21/2023 03:05	WG2155450
(S) 1,2-Dichloroethane-d4	108			70.0-130		10/21/2023 03:05	WG2155450



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)	120		1.47	4.41	1	10/22/2023 21:23	WG2155743
Residual Range Organics (RRO)	659		18.3	55.1	5	10/23/2023 07:09	WG2155743
(S) o-Terphenyl	42.7			18.0-148		10/23/2023 07:09	WG2155743
(S) o-Terphenyl	54.6			18.0-148		10/22/2023 21:23	WG2155743

Sample Narrative:

L1668587-06 WG2155743: Sample resembles laboratory standard for Hydraulic Oil.

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	54.7	J	31.6	100	1	10/21/2023 16:52	WG2155559
(S) a,a,a-Trifluorotoluene(FID)	92.3			78.0-120		10/21/2023 16:52	WG2155559

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	50.0	1	10/21/2023 23:52	WG2155716
Acrolein	U		2.54	50.0	1	10/21/2023 23:52	WG2155716
Acrylonitrile	U		0.671	10.0	1	10/21/2023 23:52	WG2155716
Benzene	U		0.0941	1.00	1	10/21/2023 23:52	WG2155716
Bromobenzene	U		0.118	1.00	1	10/21/2023 23:52	WG2155716
Bromodichloromethane	U		0.136	1.00	1	10/21/2023 23:52	WG2155716
Bromoform	U		0.129	1.00	1	10/21/2023 23:52	WG2155716
Bromomethane	U	C3	0.605	5.00	1	10/21/2023 23:52	WG2155716
n-Butylbenzene	U	C3	0.157	1.00	1	10/21/2023 23:52	WG2155716
sec-Butylbenzene	U		0.125	1.00	1	10/21/2023 23:52	WG2155716
tert-Butylbenzene	U	C3	0.127	1.00	1	10/21/2023 23:52	WG2155716
Carbon tetrachloride	U		0.128	1.00	1	10/21/2023 23:52	WG2155716
Chlorobenzene	U		0.116	1.00	1	10/21/2023 23:52	WG2155716
Chlorodibromomethane	U		0.140	1.00	1	10/21/2023 23:52	WG2155716
Chloroethane	U		0.192	5.00	1	10/21/2023 23:52	WG2155716
Chloroform	U		0.111	5.00	1	10/21/2023 23:52	WG2155716
Chloromethane	U		0.960	2.50	1	10/21/2023 23:52	WG2155716
2-Chlorotoluene	U		0.106	1.00	1	10/21/2023 23:52	WG2155716
4-Chlorotoluene	U		0.114	1.00	1	10/21/2023 23:52	WG2155716
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	10/21/2023 23:52	WG2155716
1,2-Dibromoethane	U		0.126	1.00	1	10/21/2023 23:52	WG2155716
Dibromomethane	U		0.122	1.00	1	10/21/2023 23:52	WG2155716
1,2-Dichlorobenzene	U		0.107	1.00	1	10/21/2023 23:52	WG2155716
1,3-Dichlorobenzene	U		0.110	1.00	1	10/21/2023 23:52	WG2155716
1,4-Dichlorobenzene	U		0.120	1.00	1	10/21/2023 23:52	WG2155716
Dichlorodifluoromethane	U		0.374	5.00	1	10/21/2023 23:52	WG2155716
1,1-Dichloroethane	U		0.100	1.00	1	10/21/2023 23:52	WG2155716
1,2-Dichloroethane	U		0.0819	1.00	1	10/21/2023 23:52	WG2155716
1,1-Dichloroethene	U		0.188	1.00	1	10/21/2023 23:52	WG2155716
cis-1,2-Dichloroethene	U		0.126	1.00	1	10/21/2023 23:52	WG2155716
trans-1,2-Dichloroethene	U		0.149	1.00	1	10/21/2023 23:52	WG2155716
1,2-Dichloropropane	U		0.149	1.00	1	10/21/2023 23:52	WG2155716
1,1-Dichloropropene	U		0.142	1.00	1	10/21/2023 23:52	WG2155716
1,3-Dichloropropane	U		0.110	1.00	1	10/21/2023 23:52	WG2155716
cis-1,3-Dichloropropene	U		0.111	1.00	1	10/21/2023 23:52	WG2155716
trans-1,3-Dichloropropene	U		0.118	1.00	1	10/21/2023 23:52	WG2155716
2,2-Dichloropropane	U		0.161	1.00	1	10/21/2023 23:52	WG2155716
Di-isopropyl ether	U		0.105	1.00	1	10/21/2023 23:52	WG2155716
Ethylbenzene	U		0.137	1.00	1	10/21/2023 23:52	WG2155716
Hexachloro-1,3-butadiene	U		0.337	1.00	1	10/21/2023 23:52	WG2155716
Isopropylbenzene	U		0.105	1.00	1	10/21/2023 23:52	WG2155716
p-Isopropyltoluene	U	C3	0.120	1.00	1	10/21/2023 23:52	WG2155716
2-Butanone (MEK)	U		1.19	10.0	1	10/21/2023 23:52	WG2155716
Methylene Chloride	U		0.430	5.00	1	10/21/2023 23:52	WG2155716
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	10/21/2023 23:52	WG2155716
Methyl tert-butyl ether	U		0.101	1.00	1	10/21/2023 23:52	WG2155716
n-Propylbenzene	U		0.0993	1.00	1	10/21/2023 23:52	WG2155716
Styrene	U		0.118	1.00	1	10/21/2023 23:52	WG2155716

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

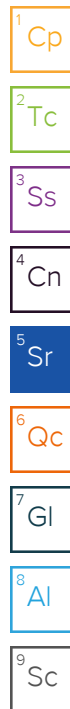
7 Gl

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
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	10/21/2023 23:52	WG2155716
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	10/21/2023 23:52	WG2155716
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	10/21/2023 23:52	WG2155716
Tetrachloroethene	U		0.300	1.00	1	10/21/2023 23:52	WG2155716
Toluene	U		0.278	1.00	1	10/21/2023 23:52	WG2155716
1,2,3-Trichlorobenzene	U	C3	0.230	1.00	1	10/21/2023 23:52	WG2155716
1,2,4-Trichlorobenzene	U	C3	0.481	1.00	1	10/21/2023 23:52	WG2155716
1,1,1-Trichloroethane	U		0.149	1.00	1	10/21/2023 23:52	WG2155716
1,1,2-Trichloroethane	U		0.158	1.00	1	10/21/2023 23:52	WG2155716
Trichloroethene	U		0.190	1.00	1	10/21/2023 23:52	WG2155716
Trichlorofluoromethane	U		0.160	5.00	1	10/21/2023 23:52	WG2155716
1,2,3-Trichloropropane	U		0.237	2.50	1	10/21/2023 23:52	WG2155716
1,2,4-Trimethylbenzene	0.355	U	0.322	1.00	1	10/21/2023 23:52	WG2155716
1,2,3-Trimethylbenzene	0.222	U	0.104	1.00	1	10/21/2023 23:52	WG2155716
1,3,5-Trimethylbenzene	U		0.104	1.00	1	10/21/2023 23:52	WG2155716
Vinyl chloride	U		0.234	1.00	1	10/21/2023 23:52	WG2155716
Xylenes, Total	U		0.174	3.00	1	10/21/2023 23:52	WG2155716
(S) Toluene-d8	103			80.0-120		10/21/2023 23:52	WG2155716
(S) 4-Bromofluorobenzene	102			77.0-126		10/21/2023 23:52	WG2155716
(S) 1,2-Dichloroethane-d4	104			70.0-130		10/21/2023 23:52	WG2155716



Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		66.7	200	1	10/23/2023 14:13	WG2155745
Residual Range Organics (RRO)	U		83.3	250	1	10/23/2023 14:13	WG2155745
(S) o-Terphenyl	68.5			52.0-156		10/23/2023 14:13	WG2155745

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	125		31.6	100	1	10/21/2023 17:17	WG2155559
(S) a,a,a-Trifluorotoluene(FID)	93.1			78.0-120		10/21/2023 17:17	WG2155559

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	50.0	1	10/22/2023 00:15	WG2155716
Acrolein	U		2.54	50.0	1	10/22/2023 00:15	WG2155716
Acrylonitrile	U		0.671	10.0	1	10/22/2023 00:15	WG2155716
Benzene	U		0.0941	1.00	1	10/22/2023 00:15	WG2155716
Bromobenzene	U		0.118	1.00	1	10/22/2023 00:15	WG2155716
Bromodichloromethane	U		0.136	1.00	1	10/22/2023 00:15	WG2155716
Bromoform	U		0.129	1.00	1	10/22/2023 00:15	WG2155716
Bromomethane	U	C3	0.605	5.00	1	10/22/2023 00:15	WG2155716
n-Butylbenzene	U	C3	0.157	1.00	1	10/22/2023 00:15	WG2155716
sec-Butylbenzene	0.640	J	0.125	1.00	1	10/22/2023 00:15	WG2155716
tert-Butylbenzene	U	C3	0.127	1.00	1	10/22/2023 00:15	WG2155716
Carbon tetrachloride	U		0.128	1.00	1	10/22/2023 00:15	WG2155716
Chlorobenzene	U		0.116	1.00	1	10/22/2023 00:15	WG2155716
Chlorodibromomethane	U		0.140	1.00	1	10/22/2023 00:15	WG2155716
Chloroethane	U		0.192	5.00	1	10/22/2023 00:15	WG2155716
Chloroform	U		0.111	5.00	1	10/22/2023 00:15	WG2155716
Chloromethane	U		0.960	2.50	1	10/22/2023 00:15	WG2155716
2-Chlorotoluene	U		0.106	1.00	1	10/22/2023 00:15	WG2155716
4-Chlorotoluene	U		0.114	1.00	1	10/22/2023 00:15	WG2155716
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	10/22/2023 00:15	WG2155716
1,2-Dibromoethane	U		0.126	1.00	1	10/22/2023 00:15	WG2155716
Dibromomethane	U		0.122	1.00	1	10/22/2023 00:15	WG2155716
1,2-Dichlorobenzene	U		0.107	1.00	1	10/22/2023 00:15	WG2155716
1,3-Dichlorobenzene	U		0.110	1.00	1	10/22/2023 00:15	WG2155716
1,4-Dichlorobenzene	U		0.120	1.00	1	10/22/2023 00:15	WG2155716
Dichlorodifluoromethane	U		0.374	5.00	1	10/22/2023 00:15	WG2155716
1,1-Dichloroethane	U		0.100	1.00	1	10/22/2023 00:15	WG2155716
1,2-Dichloroethane	U		0.0819	1.00	1	10/22/2023 00:15	WG2155716
1,1-Dichloroethene	U		0.188	1.00	1	10/22/2023 00:15	WG2155716
cis-1,2-Dichloroethene	U		0.126	1.00	1	10/22/2023 00:15	WG2155716
trans-1,2-Dichloroethene	U		0.149	1.00	1	10/22/2023 00:15	WG2155716
1,2-Dichloropropane	U		0.149	1.00	1	10/22/2023 00:15	WG2155716
1,1-Dichloropropene	U		0.142	1.00	1	10/22/2023 00:15	WG2155716
1,3-Dichloropropane	U		0.110	1.00	1	10/22/2023 00:15	WG2155716
cis-1,3-Dichloropropene	U		0.111	1.00	1	10/22/2023 00:15	WG2155716
trans-1,3-Dichloropropene	U		0.118	1.00	1	10/22/2023 00:15	WG2155716
2,2-Dichloropropane	U		0.161	1.00	1	10/22/2023 00:15	WG2155716
Di-isopropyl ether	U		0.105	1.00	1	10/22/2023 00:15	WG2155716
Ethylbenzene	0.185	J	0.137	1.00	1	10/22/2023 00:15	WG2155716
Hexachloro-1,3-butadiene	U		0.337	1.00	1	10/22/2023 00:15	WG2155716
Isopropylbenzene	0.270	J	0.105	1.00	1	10/22/2023 00:15	WG2155716
p-Isopropyltoluene	U	C3	0.120	1.00	1	10/22/2023 00:15	WG2155716
2-Butanone (MEK)	U		1.19	10.0	1	10/22/2023 00:15	WG2155716
Methylene Chloride	U		0.430	5.00	1	10/22/2023 00:15	WG2155716
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	10/22/2023 00:15	WG2155716
Methyl tert-butyl ether	U		0.101	1.00	1	10/22/2023 00:15	WG2155716
n-Propylbenzene	0.772	J	0.0993	1.00	1	10/22/2023 00:15	WG2155716
Styrene	U		0.118	1.00	1	10/22/2023 00:15	WG2155716

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
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	10/22/2023 00:15	WG2155716
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	10/22/2023 00:15	WG2155716
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	10/22/2023 00:15	WG2155716
Tetrachloroethene	U		0.300	1.00	1	10/22/2023 00:15	WG2155716
Toluene	U		0.278	1.00	1	10/22/2023 00:15	WG2155716
1,2,3-Trichlorobenzene	U	C3	0.230	1.00	1	10/22/2023 00:15	WG2155716
1,2,4-Trichlorobenzene	U	C3	0.481	1.00	1	10/22/2023 00:15	WG2155716
1,1,1-Trichloroethane	U		0.149	1.00	1	10/22/2023 00:15	WG2155716
1,1,2-Trichloroethane	U		0.158	1.00	1	10/22/2023 00:15	WG2155716
Trichloroethene	U		0.190	1.00	1	10/22/2023 00:15	WG2155716
Trichlorofluoromethane	U		0.160	5.00	1	10/22/2023 00:15	WG2155716
1,2,3-Trichloropropane	U		0.237	2.50	1	10/22/2023 00:15	WG2155716
1,2,4-Trimethylbenzene	2.25		0.322	1.00	1	10/22/2023 00:15	WG2155716
1,2,3-Trimethylbenzene	2.76		0.104	1.00	1	10/22/2023 00:15	WG2155716
1,3,5-Trimethylbenzene	U		0.104	1.00	1	10/22/2023 00:15	WG2155716
Vinyl chloride	U		0.234	1.00	1	10/22/2023 00:15	WG2155716
Xylenes, Total	0.705	J	0.174	3.00	1	10/22/2023 00:15	WG2155716
(S) Toluene-d8	101			80.0-120		10/22/2023 00:15	WG2155716
(S) 4-Bromofluorobenzene	115			77.0-126		10/22/2023 00:15	WG2155716
(S) 1,2-Dichloroethane-d4	101			70.0-130		10/22/2023 00:15	WG2155716

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		66.7	200	1	10/23/2023 14:33	WG2155745
Residual Range Organics (RRO)	U		83.3	250	1	10/23/2023 14:33	WG2155745
(S) o-Terphenyl	92.0			52.0-156		10/23/2023 14:33	WG2155745

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	52.4	J	31.6	100	1	10/21/2023 17:41	WG2155559
(S) a,a,a-Trifluorotoluene(FID)	92.5			78.0-120		10/21/2023 17:41	WG2155559

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	50.0	1	10/22/2023 00:39	WG2155716
Acrolein	U		2.54	50.0	1	10/22/2023 00:39	WG2155716
Acrylonitrile	U		0.671	10.0	1	10/22/2023 00:39	WG2155716
Benzene	U		0.0941	1.00	1	10/22/2023 00:39	WG2155716
Bromobenzene	U		0.118	1.00	1	10/22/2023 00:39	WG2155716
Bromodichloromethane	U		0.136	1.00	1	10/22/2023 00:39	WG2155716
Bromoform	U		0.129	1.00	1	10/22/2023 00:39	WG2155716
Bromomethane	U	C3	0.605	5.00	1	10/22/2023 00:39	WG2155716
n-Butylbenzene	U	C3	0.157	1.00	1	10/22/2023 00:39	WG2155716
sec-Butylbenzene	U		0.125	1.00	1	10/22/2023 00:39	WG2155716
tert-Butylbenzene	U	C3	0.127	1.00	1	10/22/2023 00:39	WG2155716
Carbon tetrachloride	U		0.128	1.00	1	10/22/2023 00:39	WG2155716
Chlorobenzene	U		0.116	1.00	1	10/22/2023 00:39	WG2155716
Chlorodibromomethane	U		0.140	1.00	1	10/22/2023 00:39	WG2155716
Chloroethane	U		0.192	5.00	1	10/22/2023 00:39	WG2155716
Chloroform	U		0.111	5.00	1	10/22/2023 00:39	WG2155716
Chloromethane	U		0.960	2.50	1	10/22/2023 00:39	WG2155716
2-Chlorotoluene	U		0.106	1.00	1	10/22/2023 00:39	WG2155716
4-Chlorotoluene	U		0.114	1.00	1	10/22/2023 00:39	WG2155716
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	10/22/2023 00:39	WG2155716
1,2-Dibromoethane	U		0.126	1.00	1	10/22/2023 00:39	WG2155716
Dibromomethane	U		0.122	1.00	1	10/22/2023 00:39	WG2155716
1,2-Dichlorobenzene	U		0.107	1.00	1	10/22/2023 00:39	WG2155716
1,3-Dichlorobenzene	U		0.110	1.00	1	10/22/2023 00:39	WG2155716
1,4-Dichlorobenzene	U		0.120	1.00	1	10/22/2023 00:39	WG2155716
Dichlorodifluoromethane	U		0.374	5.00	1	10/22/2023 00:39	WG2155716
1,1-Dichloroethane	U		0.100	1.00	1	10/22/2023 00:39	WG2155716
1,2-Dichloroethane	U		0.0819	1.00	1	10/22/2023 00:39	WG2155716
1,1-Dichloroethene	U		0.188	1.00	1	10/22/2023 00:39	WG2155716
cis-1,2-Dichloroethene	U		0.126	1.00	1	10/22/2023 00:39	WG2155716
trans-1,2-Dichloroethene	U		0.149	1.00	1	10/22/2023 00:39	WG2155716
1,2-Dichloropropane	U		0.149	1.00	1	10/22/2023 00:39	WG2155716
1,1-Dichloropropene	U		0.142	1.00	1	10/22/2023 00:39	WG2155716
1,3-Dichloropropane	U		0.110	1.00	1	10/22/2023 00:39	WG2155716
cis-1,3-Dichloropropene	U		0.111	1.00	1	10/22/2023 00:39	WG2155716
trans-1,3-Dichloropropene	U		0.118	1.00	1	10/22/2023 00:39	WG2155716
2,2-Dichloropropane	U		0.161	1.00	1	10/22/2023 00:39	WG2155716
Di-isopropyl ether	U		0.105	1.00	1	10/22/2023 00:39	WG2155716
Ethylbenzene	U		0.137	1.00	1	10/22/2023 00:39	WG2155716
Hexachloro-1,3-butadiene	U		0.337	1.00	1	10/22/2023 00:39	WG2155716
Isopropylbenzene	U		0.105	1.00	1	10/22/2023 00:39	WG2155716
p-Isopropyltoluene	U	C3	0.120	1.00	1	10/22/2023 00:39	WG2155716
2-Butanone (MEK)	U		1.19	10.0	1	10/22/2023 00:39	WG2155716
Methylene Chloride	U		0.430	5.00	1	10/22/2023 00:39	WG2155716
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	10/22/2023 00:39	WG2155716
Methyl tert-butyl ether	U		0.101	1.00	1	10/22/2023 00:39	WG2155716
n-Propylbenzene	U		0.0993	1.00	1	10/22/2023 00:39	WG2155716
Styrene	U		0.118	1.00	1	10/22/2023 00:39	WG2155716

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
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	10/22/2023 00:39	WG2155716
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	10/22/2023 00:39	WG2155716
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	10/22/2023 00:39	WG2155716
Tetrachloroethene	U		0.300	1.00	1	10/22/2023 00:39	WG2155716
Toluene	U		0.278	1.00	1	10/22/2023 00:39	WG2155716
1,2,3-Trichlorobenzene	U	C3	0.230	1.00	1	10/22/2023 00:39	WG2155716
1,2,4-Trichlorobenzene	U	C3	0.481	1.00	1	10/22/2023 00:39	WG2155716
1,1,1-Trichloroethane	U		0.149	1.00	1	10/22/2023 00:39	WG2155716
1,1,2-Trichloroethane	U		0.158	1.00	1	10/22/2023 00:39	WG2155716
Trichloroethene	U		0.190	1.00	1	10/22/2023 00:39	WG2155716
Trichlorofluoromethane	U		0.160	5.00	1	10/22/2023 00:39	WG2155716
1,2,3-Trichloropropane	U		0.237	2.50	1	10/22/2023 00:39	WG2155716
1,2,4-Trimethylbenzene	1.45		0.322	1.00	1	10/22/2023 00:39	WG2155716
1,2,3-Trimethylbenzene	0.717	U	0.104	1.00	1	10/22/2023 00:39	WG2155716
1,3,5-Trimethylbenzene	0.586	U	0.104	1.00	1	10/22/2023 00:39	WG2155716
Vinyl chloride	U		0.234	1.00	1	10/22/2023 00:39	WG2155716
Xylenes, Total	U		0.174	3.00	1	10/22/2023 00:39	WG2155716
(S) Toluene-d8	101			80.0-120		10/22/2023 00:39	WG2155716
(S) 4-Bromofluorobenzene	110			77.0-126		10/22/2023 00:39	WG2155716
(S) 1,2-Dichloroethane-d4	102			70.0-130		10/22/2023 00:39	WG2155716

1
Cp2
Tc3
Ss4
Cn5
Sr6
Qc7
Gl8
Al9
Sc

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		66.7	200	1	10/23/2023 14:54	WG2155745
Residual Range Organics (RRO)	U		83.3	250	1	10/23/2023 14:54	WG2155745
(S) o-Terphenyl	94.5			52.0-156		10/23/2023 14:54	WG2155745

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	10/21/2023 18:06	WG2155559
(S) a,a,a-Trifluorotoluene(FID)	91.5			78.0-120		10/21/2023 18:06	WG2155559

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	50.0	1	10/22/2023 01:02	WG2155716
Acrolein	U		2.54	50.0	1	10/22/2023 01:02	WG2155716
Acrylonitrile	U		0.671	10.0	1	10/22/2023 01:02	WG2155716
Benzene	U		0.0941	1.00	1	10/22/2023 01:02	WG2155716
Bromobenzene	U		0.118	1.00	1	10/22/2023 01:02	WG2155716
Bromodichloromethane	U		0.136	1.00	1	10/22/2023 01:02	WG2155716
Bromoform	U		0.129	1.00	1	10/22/2023 01:02	WG2155716
Bromomethane	U	C3	0.605	5.00	1	10/22/2023 01:02	WG2155716
n-Butylbenzene	U	C3	0.157	1.00	1	10/22/2023 01:02	WG2155716
sec-Butylbenzene	U		0.125	1.00	1	10/22/2023 01:02	WG2155716
tert-Butylbenzene	U	C3	0.127	1.00	1	10/22/2023 01:02	WG2155716
Carbon tetrachloride	U		0.128	1.00	1	10/22/2023 01:02	WG2155716
Chlorobenzene	U		0.116	1.00	1	10/22/2023 01:02	WG2155716
Chlorodibromomethane	U		0.140	1.00	1	10/22/2023 01:02	WG2155716
Chloroethane	U		0.192	5.00	1	10/22/2023 01:02	WG2155716
Chloroform	U		0.111	5.00	1	10/22/2023 01:02	WG2155716
Chloromethane	U		0.960	2.50	1	10/22/2023 01:02	WG2155716
2-Chlorotoluene	U		0.106	1.00	1	10/22/2023 01:02	WG2155716
4-Chlorotoluene	U		0.114	1.00	1	10/22/2023 01:02	WG2155716
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	10/22/2023 01:02	WG2155716
1,2-Dibromoethane	U		0.126	1.00	1	10/22/2023 01:02	WG2155716
Dibromomethane	U		0.122	1.00	1	10/22/2023 01:02	WG2155716
1,2-Dichlorobenzene	U		0.107	1.00	1	10/22/2023 01:02	WG2155716
1,3-Dichlorobenzene	U		0.110	1.00	1	10/22/2023 01:02	WG2155716
1,4-Dichlorobenzene	U		0.120	1.00	1	10/22/2023 01:02	WG2155716
Dichlorodifluoromethane	U		0.374	5.00	1	10/22/2023 01:02	WG2155716
1,1-Dichloroethane	U		0.100	1.00	1	10/22/2023 01:02	WG2155716
1,2-Dichloroethane	U		0.0819	1.00	1	10/22/2023 01:02	WG2155716
1,1-Dichloroethene	U		0.188	1.00	1	10/22/2023 01:02	WG2155716
cis-1,2-Dichloroethene	U		0.126	1.00	1	10/22/2023 01:02	WG2155716
trans-1,2-Dichloroethene	U		0.149	1.00	1	10/22/2023 01:02	WG2155716
1,2-Dichloropropane	U		0.149	1.00	1	10/22/2023 01:02	WG2155716
1,1-Dichloropropene	U		0.142	1.00	1	10/22/2023 01:02	WG2155716
1,3-Dichloropropane	U		0.110	1.00	1	10/22/2023 01:02	WG2155716
cis-1,3-Dichloropropene	U		0.111	1.00	1	10/22/2023 01:02	WG2155716
trans-1,3-Dichloropropene	U		0.118	1.00	1	10/22/2023 01:02	WG2155716
2,2-Dichloropropane	U		0.161	1.00	1	10/22/2023 01:02	WG2155716
Di-isopropyl ether	U		0.105	1.00	1	10/22/2023 01:02	WG2155716
Ethylbenzene	U		0.137	1.00	1	10/22/2023 01:02	WG2155716
Hexachloro-1,3-butadiene	U		0.337	1.00	1	10/22/2023 01:02	WG2155716
Isopropylbenzene	U		0.105	1.00	1	10/22/2023 01:02	WG2155716
p-Isopropyltoluene	U	C3	0.120	1.00	1	10/22/2023 01:02	WG2155716
2-Butanone (MEK)	U		1.19	10.0	1	10/22/2023 01:02	WG2155716
Methylene Chloride	U		0.430	5.00	1	10/22/2023 01:02	WG2155716
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	10/22/2023 01:02	WG2155716
Methyl tert-butyl ether	U		0.101	1.00	1	10/22/2023 01:02	WG2155716
n-Propylbenzene	U		0.0993	1.00	1	10/22/2023 01:02	WG2155716
Styrene	U		0.118	1.00	1	10/22/2023 01:02	WG2155716

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
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	10/22/2023 01:02	WG2155716
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	10/22/2023 01:02	WG2155716
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	10/22/2023 01:02	WG2155716
Tetrachloroethene	U		0.300	1.00	1	10/22/2023 01:02	WG2155716
Toluene	U		0.278	1.00	1	10/22/2023 01:02	WG2155716
1,2,3-Trichlorobenzene	U	C3	0.230	1.00	1	10/22/2023 01:02	WG2155716
1,2,4-Trichlorobenzene	U	C3	0.481	1.00	1	10/22/2023 01:02	WG2155716
1,1,1-Trichloroethane	U		0.149	1.00	1	10/22/2023 01:02	WG2155716
1,1,2-Trichloroethane	U		0.158	1.00	1	10/22/2023 01:02	WG2155716
Trichloroethene	U		0.190	1.00	1	10/22/2023 01:02	WG2155716
Trichlorofluoromethane	U		0.160	5.00	1	10/22/2023 01:02	WG2155716
1,2,3-Trichloropropane	U		0.237	2.50	1	10/22/2023 01:02	WG2155716
1,2,4-Trimethylbenzene	U		0.322	1.00	1	10/22/2023 01:02	WG2155716
1,2,3-Trimethylbenzene	0.104	J	0.104	1.00	1	10/22/2023 01:02	WG2155716
1,3,5-Trimethylbenzene	U		0.104	1.00	1	10/22/2023 01:02	WG2155716
Vinyl chloride	U		0.234	1.00	1	10/22/2023 01:02	WG2155716
Xylenes, Total	U		0.174	3.00	1	10/22/2023 01:02	WG2155716
(S) Toluene-d8	103			80.0-120		10/22/2023 01:02	WG2155716
(S) 4-Bromofluorobenzene	104			77.0-126		10/22/2023 01:02	WG2155716
(S) 1,2-Dichloroethane-d4	104			70.0-130		10/22/2023 01:02	WG2155716

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		66.7	200	1	10/23/2023 15:14	WG2155745
Residual Range Organics (RRO)	U		83.3	250	1	10/23/2023 15:14	WG2155745
(S) o-Terphenyl	81.5			52.0-156		10/23/2023 15:14	WG2155745

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	37.3	J	31.6	100	1	10/21/2023 18:30	WG2155559
(S) a,a,a-Trifluorotoluene(FID)	92.5			78.0-120		10/21/2023 18:30	WG2155559

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	50.0	1	10/22/2023 01:25	WG2155716
Acrolein	U		2.54	50.0	1	10/22/2023 01:25	WG2155716
Acrylonitrile	U		0.671	10.0	1	10/22/2023 01:25	WG2155716
Benzene	U		0.0941	1.00	1	10/22/2023 01:25	WG2155716
Bromobenzene	U		0.118	1.00	1	10/22/2023 01:25	WG2155716
Bromodichloromethane	U		0.136	1.00	1	10/22/2023 01:25	WG2155716
Bromoform	U		0.129	1.00	1	10/22/2023 01:25	WG2155716
Bromomethane	U	C3	0.605	5.00	1	10/22/2023 01:25	WG2155716
n-Butylbenzene	U	C3	0.157	1.00	1	10/22/2023 01:25	WG2155716
sec-Butylbenzene	U		0.125	1.00	1	10/22/2023 01:25	WG2155716
tert-Butylbenzene	U	C3	0.127	1.00	1	10/22/2023 01:25	WG2155716
Carbon tetrachloride	U		0.128	1.00	1	10/22/2023 01:25	WG2155716
Chlorobenzene	U		0.116	1.00	1	10/22/2023 01:25	WG2155716
Chlorodibromomethane	U		0.140	1.00	1	10/22/2023 01:25	WG2155716
Chloroethane	U		0.192	5.00	1	10/22/2023 01:25	WG2155716
Chloroform	U		0.111	5.00	1	10/22/2023 01:25	WG2155716
Chloromethane	U		0.960	2.50	1	10/22/2023 01:25	WG2155716
2-Chlorotoluene	U		0.106	1.00	1	10/22/2023 01:25	WG2155716
4-Chlorotoluene	U		0.114	1.00	1	10/22/2023 01:25	WG2155716
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	10/22/2023 01:25	WG2155716
1,2-Dibromoethane	U		0.126	1.00	1	10/22/2023 01:25	WG2155716
Dibromomethane	U		0.122	1.00	1	10/22/2023 01:25	WG2155716
1,2-Dichlorobenzene	U		0.107	1.00	1	10/22/2023 01:25	WG2155716
1,3-Dichlorobenzene	U		0.110	1.00	1	10/22/2023 01:25	WG2155716
1,4-Dichlorobenzene	U		0.120	1.00	1	10/22/2023 01:25	WG2155716
Dichlorodifluoromethane	U		0.374	5.00	1	10/22/2023 01:25	WG2155716
1,1-Dichloroethane	U		0.100	1.00	1	10/22/2023 01:25	WG2155716
1,2-Dichloroethane	U		0.0819	1.00	1	10/22/2023 01:25	WG2155716
1,1-Dichloroethene	U		0.188	1.00	1	10/22/2023 01:25	WG2155716
cis-1,2-Dichloroethene	U		0.126	1.00	1	10/22/2023 01:25	WG2155716
trans-1,2-Dichloroethene	U		0.149	1.00	1	10/22/2023 01:25	WG2155716
1,2-Dichloropropane	U		0.149	1.00	1	10/22/2023 01:25	WG2155716
1,1-Dichloropropene	U		0.142	1.00	1	10/22/2023 01:25	WG2155716
1,3-Dichloropropane	U		0.110	1.00	1	10/22/2023 01:25	WG2155716
cis-1,3-Dichloropropene	U		0.111	1.00	1	10/22/2023 01:25	WG2155716
trans-1,3-Dichloropropene	U		0.118	1.00	1	10/22/2023 01:25	WG2155716
2,2-Dichloropropane	U		0.161	1.00	1	10/22/2023 01:25	WG2155716
Di-isopropyl ether	U		0.105	1.00	1	10/22/2023 01:25	WG2155716
Ethylbenzene	U		0.137	1.00	1	10/22/2023 01:25	WG2155716
Hexachloro-1,3-butadiene	U		0.337	1.00	1	10/22/2023 01:25	WG2155716
Isopropylbenzene	U		0.105	1.00	1	10/22/2023 01:25	WG2155716
p-Isopropyltoluene	U	C3	0.120	1.00	1	10/22/2023 01:25	WG2155716
2-Butanone (MEK)	U		1.19	10.0	1	10/22/2023 01:25	WG2155716
Methylene Chloride	U		0.430	5.00	1	10/22/2023 01:25	WG2155716
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	10/22/2023 01:25	WG2155716
Methyl tert-butyl ether	U		0.101	1.00	1	10/22/2023 01:25	WG2155716
n-Propylbenzene	U		0.0993	1.00	1	10/22/2023 01:25	WG2155716
Styrene	U		0.118	1.00	1	10/22/2023 01:25	WG2155716

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
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	10/22/2023 01:25	WG2155716
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	10/22/2023 01:25	WG2155716
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	10/22/2023 01:25	WG2155716
Tetrachloroethene	U		0.300	1.00	1	10/22/2023 01:25	WG2155716
Toluene	U		0.278	1.00	1	10/22/2023 01:25	WG2155716
1,2,3-Trichlorobenzene	U	C3	0.230	1.00	1	10/22/2023 01:25	WG2155716
1,2,4-Trichlorobenzene	U	C3	0.481	1.00	1	10/22/2023 01:25	WG2155716
1,1,1-Trichloroethane	U		0.149	1.00	1	10/22/2023 01:25	WG2155716
1,1,2-Trichloroethane	U		0.158	1.00	1	10/22/2023 01:25	WG2155716
Trichloroethene	U		0.190	1.00	1	10/22/2023 01:25	WG2155716
Trichlorofluoromethane	U		0.160	5.00	1	10/22/2023 01:25	WG2155716
1,2,3-Trichloropropane	U		0.237	2.50	1	10/22/2023 01:25	WG2155716
1,2,4-Trimethylbenzene	1.03		0.322	1.00	1	10/22/2023 01:25	WG2155716
1,2,3-Trimethylbenzene	0.449	J	0.104	1.00	1	10/22/2023 01:25	WG2155716
1,3,5-Trimethylbenzene	U		0.104	1.00	1	10/22/2023 01:25	WG2155716
Vinyl chloride	U		0.234	1.00	1	10/22/2023 01:25	WG2155716
Xylenes, Total	U		0.174	3.00	1	10/22/2023 01:25	WG2155716
(S) Toluene-d8	102			80.0-120		10/22/2023 01:25	WG2155716
(S) 4-Bromofluorobenzene	110			77.0-126		10/22/2023 01:25	WG2155716
(S) 1,2-Dichloroethane-d4	102			70.0-130		10/22/2023 01:25	WG2155716

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		66.7	200	1	10/23/2023 15:34	WG2155745
Residual Range Organics (RRO)	U		83.3	250	1	10/23/2023 15:34	WG2155745
(S) o-Terphenyl	64.5			52.0-156		10/23/2023 15:34	WG2155745

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	10/21/2023 18:55	WG2155559
(S) a,a,a-Trifluorotoluene(FID)	92.0			78.0-120		10/21/2023 18:55	WG2155559

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	50.0	1	10/22/2023 01:48	WG2155716
Acrolein	U		2.54	50.0	1	10/22/2023 01:48	WG2155716
Acrylonitrile	U		0.671	10.0	1	10/22/2023 01:48	WG2155716
Benzene	U		0.0941	1.00	1	10/22/2023 01:48	WG2155716
Bromobenzene	U		0.118	1.00	1	10/22/2023 01:48	WG2155716
Bromodichloromethane	U		0.136	1.00	1	10/22/2023 01:48	WG2155716
Bromoform	U		0.129	1.00	1	10/22/2023 01:48	WG2155716
Bromomethane	U	C3	0.605	5.00	1	10/22/2023 01:48	WG2155716
n-Butylbenzene	U	C3	0.157	1.00	1	10/22/2023 01:48	WG2155716
sec-Butylbenzene	U		0.125	1.00	1	10/22/2023 01:48	WG2155716
tert-Butylbenzene	U	C3	0.127	1.00	1	10/22/2023 01:48	WG2155716
Carbon tetrachloride	U		0.128	1.00	1	10/22/2023 01:48	WG2155716
Chlorobenzene	U		0.116	1.00	1	10/22/2023 01:48	WG2155716
Chlorodibromomethane	U		0.140	1.00	1	10/22/2023 01:48	WG2155716
Chloroethane	U		0.192	5.00	1	10/22/2023 01:48	WG2155716
Chloroform	U		0.111	5.00	1	10/22/2023 01:48	WG2155716
Chloromethane	U		0.960	2.50	1	10/22/2023 01:48	WG2155716
2-Chlorotoluene	U		0.106	1.00	1	10/22/2023 01:48	WG2155716
4-Chlorotoluene	U		0.114	1.00	1	10/22/2023 01:48	WG2155716
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	10/22/2023 01:48	WG2155716
1,2-Dibromoethane	U		0.126	1.00	1	10/22/2023 01:48	WG2155716
Dibromomethane	U		0.122	1.00	1	10/22/2023 01:48	WG2155716
1,2-Dichlorobenzene	U		0.107	1.00	1	10/22/2023 01:48	WG2155716
1,3-Dichlorobenzene	U		0.110	1.00	1	10/22/2023 01:48	WG2155716
1,4-Dichlorobenzene	U		0.120	1.00	1	10/22/2023 01:48	WG2155716
Dichlorodifluoromethane	U		0.374	5.00	1	10/22/2023 01:48	WG2155716
1,1-Dichloroethane	U		0.100	1.00	1	10/22/2023 01:48	WG2155716
1,2-Dichloroethane	U		0.0819	1.00	1	10/22/2023 01:48	WG2155716
1,1-Dichloroethene	U		0.188	1.00	1	10/22/2023 01:48	WG2155716
cis-1,2-Dichloroethene	U		0.126	1.00	1	10/22/2023 01:48	WG2155716
trans-1,2-Dichloroethene	U		0.149	1.00	1	10/22/2023 01:48	WG2155716
1,2-Dichloropropane	U		0.149	1.00	1	10/22/2023 01:48	WG2155716
1,1-Dichloropropene	U		0.142	1.00	1	10/22/2023 01:48	WG2155716
1,3-Dichloropropane	U		0.110	1.00	1	10/22/2023 01:48	WG2155716
cis-1,3-Dichloropropene	U		0.111	1.00	1	10/22/2023 01:48	WG2155716
trans-1,3-Dichloropropene	U		0.118	1.00	1	10/22/2023 01:48	WG2155716
2,2-Dichloropropane	U		0.161	1.00	1	10/22/2023 01:48	WG2155716
Di-isopropyl ether	U		0.105	1.00	1	10/22/2023 01:48	WG2155716
Ethylbenzene	U		0.137	1.00	1	10/22/2023 01:48	WG2155716
Hexachloro-1,3-butadiene	U		0.337	1.00	1	10/22/2023 01:48	WG2155716
Isopropylbenzene	U		0.105	1.00	1	10/22/2023 01:48	WG2155716
p-Isopropyltoluene	U	C3	0.120	1.00	1	10/22/2023 01:48	WG2155716
2-Butanone (MEK)	U		1.19	10.0	1	10/22/2023 01:48	WG2155716
Methylene Chloride	U		0.430	5.00	1	10/22/2023 01:48	WG2155716
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	10/22/2023 01:48	WG2155716
Methyl tert-butyl ether	U		0.101	1.00	1	10/22/2023 01:48	WG2155716
n-Propylbenzene	U		0.0993	1.00	1	10/22/2023 01:48	WG2155716
Styrene	U		0.118	1.00	1	10/22/2023 01:48	WG2155716

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
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	10/22/2023 01:48	WG2155716
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	10/22/2023 01:48	WG2155716
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	10/22/2023 01:48	WG2155716
Tetrachloroethene	U		0.300	1.00	1	10/22/2023 01:48	WG2155716
Toluene	U		0.278	1.00	1	10/22/2023 01:48	WG2155716
1,2,3-Trichlorobenzene	U	C3	0.230	1.00	1	10/22/2023 01:48	WG2155716
1,2,4-Trichlorobenzene	U	C3	0.481	1.00	1	10/22/2023 01:48	WG2155716
1,1,1-Trichloroethane	U		0.149	1.00	1	10/22/2023 01:48	WG2155716
1,1,2-Trichloroethane	U		0.158	1.00	1	10/22/2023 01:48	WG2155716
Trichloroethene	U		0.190	1.00	1	10/22/2023 01:48	WG2155716
Trichlorofluoromethane	U		0.160	5.00	1	10/22/2023 01:48	WG2155716
1,2,3-Trichloropropane	U		0.237	2.50	1	10/22/2023 01:48	WG2155716
1,2,4-Trimethylbenzene	U		0.322	1.00	1	10/22/2023 01:48	WG2155716
1,2,3-Trimethylbenzene	U		0.104	1.00	1	10/22/2023 01:48	WG2155716
1,3,5-Trimethylbenzene	U		0.104	1.00	1	10/22/2023 01:48	WG2155716
Vinyl chloride	U		0.234	1.00	1	10/22/2023 01:48	WG2155716
Xylenes, Total	U		0.174	3.00	1	10/22/2023 01:48	WG2155716
(S) Toluene-d8	105			80.0-120		10/22/2023 01:48	WG2155716
(S) 4-Bromofluorobenzene	105			77.0-126		10/22/2023 01:48	WG2155716
(S) 1,2-Dichloroethane-d4	103			70.0-130		10/22/2023 01:48	WG2155716

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	U		66.7	200	1	10/23/2023 15:54	WG2155745
Residual Range Organics (RRO)	U		83.3	250	1	10/23/2023 15:54	WG2155745
(S) o-Terphenyl	85.0			52.0-156		10/23/2023 15:54	WG2155745

Method Blank (MB)

(MB) R3989637-1 10/21/23 11:10

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	%		%	%
Total Solids	0.00100			

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

L1668587-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1668587-06 10/21/23 11:10 • (DUP) R3989637-3 10/21/23 11:10

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	90.7	91.2	1	0.525		10

Laboratory Control Sample (LCS)

(LCS) R3989637-2 10/21/23 11:10

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

Method Blank (MB)

(MB) R3990107-2 10/21/23 02:33

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Gasoline Range Organics-NWTPH	0.974	J	0.848	2.50
(S) a,a,a-Trifluorotoluene(FID)	100			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3990107-1 10/21/23 01:14

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)			107	77.0-120	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3990570-2 10/24/23 12:08

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Gasoline Range Organics-NWTPH	1.44	J	0.848	2.50
(S) a,a,a-Trifluorotoluene(FID)	91.8			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3990570-1 10/24/23 09:54

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5.50	5.34	97.1	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			93.9	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) R3990235-2 10/21/23 12:51

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		31.6	100
(S) a,a,a-Trifluorotoluene(FID)	93.2			78.0-120

Laboratory Control Sample (LCS)

(LCS) R3990235-1 10/21/23 12:02

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	5830	106	70.0-124	
(S) a,a,a-Trifluorotoluene(FID)			101	78.0-120	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3989495-2 10/21/23 01:11

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

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3989495-2 10/21/23 01:11

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00255	0.00500
2-Butanone (MEK)	U		0.0635	0.100
Methylene Chloride	U		0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.00228	0.0250
Methyl tert-butyl ether	U		0.000350	0.00100
Naphthalene	U		0.00488	0.0125
n-Propylbenzene	U		0.000950	0.00500
Styrene	U		0.000229	0.0125
1,1,1,2-Tetrachloroethane	U		0.000948	0.00250
1,1,2,2-Tetrachloroethane	U		0.000695	0.00250
1,1,2-Trichlorotrifluoroethane	U		0.000754	0.00250
Tetrachloroethene	U		0.000896	0.00250
Toluene	U		0.00130	0.00500
1,2,3-Trichlorobenzene	U		0.00733	0.0125
1,2,4-Trichlorobenzene	U		0.00440	0.0125
1,1,1-Trichloroethane	U		0.000923	0.00250
1,1,2-Trichloroethane	U		0.000597	0.00250
Trichloroethene	U		0.000584	0.00100
Trichlorofluoromethane	U		0.000827	0.00250
1,2,3-Trichloropropane	U		0.00162	0.0125
1,2,4-Trimethylbenzene	U		0.00158	0.00500
1,2,3-Trimethylbenzene	U		0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
Vinyl chloride	U		0.00116	0.00250
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	105			75.0-131
(S) 4-Bromofluorobenzene	90.4			67.0-138
(S) 1,2-Dichloroethane-d4	112			70.0-130

Laboratory Control Sample (LCS)

(LCS) R3989495-1 10/20/23 23:55

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	0.519	83.0	10.0-160	
Acrylonitrile	0.625	0.640	102	45.0-153	
Benzene	0.125	0.119	95.2	70.0-123	
Bromobenzene	0.125	0.128	102	73.0-121	
Bromodichloromethane	0.125	0.124	99.2	73.0-121	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3989495-1 10/20/23 23:55

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Bromoform	0.125	0.104	83.2	64.0-132	
Bromomethane	0.125	0.122	97.6	56.0-147	
n-Butylbenzene	0.125	0.121	96.8	68.0-135	
sec-Butylbenzene	0.125	0.129	103	74.0-130	
tert-Butylbenzene	0.125	0.130	104	75.0-127	
Carbon tetrachloride	0.125	0.121	96.8	66.0-128	
Chlorobenzene	0.125	0.118	94.4	76.0-128	
Chlorodibromomethane	0.125	0.111	88.8	74.0-127	
Chloroethane	0.125	0.140	112	61.0-134	
Chloroform	0.125	0.119	95.2	72.0-123	
Chloromethane	0.125	0.152	122	51.0-138	
2-Chlorotoluene	0.125	0.128	102	75.0-124	
4-Chlorotoluene	0.125	0.140	112	75.0-124	
1,2-Dibromo-3-Chloropropane	0.125	0.102	81.6	59.0-130	
1,2-Dibromoethane	0.125	0.126	101	74.0-128	
Dibromomethane	0.125	0.122	97.6	75.0-122	
1,2-Dichlorobenzene	0.125	0.121	96.8	76.0-124	
1,3-Dichlorobenzene	0.125	0.123	98.4	76.0-125	
1,4-Dichlorobenzene	0.125	0.124	99.2	77.0-121	
Dichlorodifluoromethane	0.125	0.127	102	43.0-156	
1,1-Dichloroethane	0.125	0.139	111	70.0-127	
1,2-Dichloroethane	0.125	0.136	109	65.0-131	
1,1-Dichloroethene	0.125	0.148	118	65.0-131	
cis-1,2-Dichloroethene	0.125	0.119	95.2	73.0-125	
trans-1,2-Dichloroethene	0.125	0.120	96.0	71.0-125	
1,2-Dichloropropane	0.125	0.134	107	74.0-125	
1,1-Dichloropropene	0.125	0.129	103	73.0-125	
1,3-Dichloropropane	0.125	0.132	106	80.0-125	
cis-1,3-Dichloropropene	0.125	0.133	106	76.0-127	
trans-1,3-Dichloropropene	0.125	0.129	103	73.0-127	
2,2-Dichloropropane	0.125	0.103	82.4	59.0-135	
Di-isopropyl ether	0.125	0.129	103	60.0-136	
Ethylbenzene	0.125	0.117	93.6	74.0-126	
Hexachloro-1,3-butadiene	0.125	0.0998	79.8	57.0-150	
Isopropylbenzene	0.125	0.115	92.0	72.0-127	
p-Isopropyltoluene	0.125	0.128	102	72.0-133	
2-Butanone (MEK)	0.625	0.700	112	30.0-160	
Methylene Chloride	0.125	0.119	95.2	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.625	0.706	113	56.0-143	
Methyl tert-butyl ether	0.125	0.101	80.8	66.0-132	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3989495-1 10/20/23 23:55

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Naphthalene	0.125	0.0766	61.3	59.0-130	
n-Propylbenzene	0.125	0.143	114	74.0-126	
Styrene	0.125	0.104	83.2	72.0-127	
1,1,1,2-Tetrachloroethane	0.125	0.107	85.6	74.0-129	
1,1,2,2-Tetrachloroethane	0.125	0.135	108	68.0-128	
1,1,2-Trichlorotrifluoroethane	0.125	0.121	96.8	61.0-139	
Tetrachloroethene	0.125	0.113	90.4	70.0-136	
Toluene	0.125	0.120	96.0	75.0-121	
1,2,3-Trichlorobenzene	0.125	0.0566	45.3	59.0-139	J4
1,2,4-Trichlorobenzene	0.125	0.0839	67.1	62.0-137	
1,1,1-Trichloroethane	0.125	0.129	103	69.0-126	
1,1,2-Trichloroethane	0.125	0.132	106	78.0-123	
Trichloroethene	0.125	0.124	99.2	76.0-126	
Trichlorofluoromethane	0.125	0.128	102	61.0-142	
1,2,3-Trichloropropane	0.125	0.143	114	67.0-129	
1,2,4-Trimethylbenzene	0.125	0.135	108	70.0-126	
1,2,3-Trimethylbenzene	0.125	0.127	102	74.0-124	
1,3,5-Trimethylbenzene	0.125	0.133	106	73.0-127	
Vinyl chloride	0.125	0.137	110	63.0-134	
Xylenes, Total	0.375	0.351	93.6	72.0-127	
(S) Toluene-d8			100	75.0-131	
(S) 4-Bromofluorobenzene			92.1	67.0-138	
(S) 1,2-Dichloroethane-d4			113	70.0-130	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3990397-3 10/24/23 10:19

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
n-Butylbenzene	U		0.00525	0.0125
sec-Butylbenzene	U		0.00288	0.0125
p-Isopropyltoluene	U		0.00255	0.00500
n-Propylbenzene	U		0.000950	0.00500
1,2,4-Trimethylbenzene	U		0.00158	0.00500
1,2,3-Trimethylbenzene	U		0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	101			75.0-131
(S) 4-Bromofluorobenzene	92.8			67.0-138
(S) 1,2-Dichloroethane-d4	97.4			70.0-130

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

(LCS) R3990397-1 10/24/23 08:43 • (LCSD) R3990397-2 10/24/23 09:02

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 %
n-Butylbenzene	0.125	0.115	0.112	92.0	89.6	68.0-135			2.64	20
sec-Butylbenzene	0.125	0.122	0.124	97.6	99.2	74.0-130			1.63	20
p-Isopropyltoluene	0.125	0.117	0.122	93.6	97.6	72.0-133			4.18	20
n-Propylbenzene	0.125	0.127	0.139	102	111	74.0-126			9.02	20
1,2,4-Trimethylbenzene	0.125	0.123	0.125	98.4	100	70.0-126			1.61	20
1,2,3-Trimethylbenzene	0.125	0.117	0.122	93.6	97.6	74.0-124			4.18	20
1,3,5-Trimethylbenzene	0.125	0.120	0.126	96.0	101	73.0-127			4.88	20
Xylenes, Total	0.375	0.333	0.325	88.8	86.7	72.0-127			2.43	20
(S) Toluene-d8				97.4	103	75.0-131				
(S) 4-Bromofluorobenzene				89.9	90.8	67.0-138				
(S) 1,2-Dichloroethane-d4				95.9	95.5	70.0-130				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3989531-3 10/21/23 20:19

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

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

Method Blank (MB)

(MB) R3989531-3 10/21/23 20:19

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Isopropylbenzene	U		0.105	1.00
p-Isopropyltoluene	U		0.120	1.00
2-Butanone (MEK)	U		1.19	10.0
Methylene Chloride	U		0.430	5.00
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0
Methyl tert-butyl ether	U		0.101	1.00
n-Propylbenzene	U		0.0993	1.00
Styrene	U		0.118	1.00
1,1,1,2-Tetrachloroethane	U		0.147	1.00
1,1,2,2-Tetrachloroethane	U		0.133	1.00
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00
Tetrachloroethene	U		0.300	1.00
Toluene	U		0.278	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.481	1.00
1,1,1-Trichloroethane	U		0.149	1.00
1,1,2-Trichloroethane	U		0.158	1.00
Trichloroethene	U		0.190	1.00
Trichlorofluoromethane	U		0.160	5.00
1,2,3-Trichloropropane	U		0.237	2.50
1,2,4-Trimethylbenzene	U		0.322	1.00
1,2,3-Trimethylbenzene	U		0.104	1.00
1,3,5-Trimethylbenzene	U		0.104	1.00
Vinyl chloride	U		0.234	1.00
Xylenes, Total	U		0.174	3.00
(S) Toluene-d8	101			80.0-120
(S) 4-Bromofluorobenzene	97.7			77.0-126
(S) 1,2-Dichloroethane-d4	103			70.0-130

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) R3989531-1 10/21/23 19:09 • (LCSD) R3989531-2 10/21/23 19:32

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	29.2	31.9	117	128	19.0-160			8.84	27
Acrolein	25.0	25.3	29.2	101	117	10.0-160			14.3	26
Acrylonitrile	25.0	30.0	30.6	120	122	55.0-149			1.98	20
Benzene	5.00	5.49	6.01	110	120	70.0-123			9.04	20
Bromobenzene	5.00	4.41	5.07	88.2	101	73.0-121			13.9	20

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

(LCS) R3989531-1 10/21/23 19:09 • (LCSD) R3989531-2 10/21/23 19:32

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 %
Bromodichloromethane	5.00	5.38	5.73	108	115	75.0-120			6.30	20
Bromoform	5.00	4.91	5.02	98.2	100	68.0-132			2.22	20
Bromomethane	5.00	1.19	1.35	23.8	27.0	10.0-160			12.6	25
n-Butylbenzene	5.00	3.82	3.89	76.4	77.8	73.0-125			1.82	20
sec-Butylbenzene	5.00	4.22	4.41	84.4	88.2	75.0-125			4.40	20
tert-Butylbenzene	5.00	3.96	4.28	79.2	85.6	76.0-124			7.77	20
Carbon tetrachloride	5.00	5.61	5.87	112	117	68.0-126			4.53	20
Chlorobenzene	5.00	4.96	5.04	99.2	101	80.0-121			1.60	20
Chlorodibromomethane	5.00	4.63	4.76	92.6	95.2	77.0-125			2.77	20
Chloroethane	5.00	4.56	4.61	91.2	92.2	47.0-150			1.09	20
Chloroform	5.00	5.56	5.86	111	117	73.0-120			5.25	20
Chloromethane	5.00	4.31	5.02	86.2	100	41.0-142			15.2	20
2-Chlorotoluene	5.00	4.45	4.55	89.0	91.0	76.0-123			2.22	20
4-Chlorotoluene	5.00	4.23	4.58	84.6	91.6	75.0-122			7.95	20
1,2-Dibromo-3-Chloropropane	5.00	4.02	4.08	80.4	81.6	58.0-134			1.48	20
1,2-Dibromoethane	5.00	4.95	4.92	99.0	98.4	80.0-122			0.608	20
Dibromomethane	5.00	5.45	5.72	109	114	80.0-120			4.83	20
1,2-Dichlorobenzene	5.00	4.32	4.54	86.4	90.8	79.0-121			4.97	20
1,3-Dichlorobenzene	5.00	4.27	4.64	85.4	92.8	79.0-120			8.31	20
1,4-Dichlorobenzene	5.00	4.27	4.69	85.4	93.8	79.0-120			9.37	20
Dichlorodifluoromethane	5.00	5.55	5.29	111	106	51.0-149			4.80	20
1,1-Dichloroethane	5.00	5.55	5.81	111	116	70.0-126			4.58	20
1,2-Dichloroethane	5.00	5.95	5.95	119	119	70.0-128			0.000	20
1,1-Dichloroethene	5.00	5.18	5.18	104	104	71.0-124			0.000	20
cis-1,2-Dichloroethene	5.00	5.27	5.57	105	111	73.0-120			5.54	20
trans-1,2-Dichloroethene	5.00	5.36	5.65	107	113	73.0-120			5.27	20
1,2-Dichloropropane	5.00	5.32	5.36	106	107	77.0-125			0.749	20
1,1-Dichloropropene	5.00	5.20	5.56	104	111	74.0-126			6.69	20
1,3-Dichloropropane	5.00	4.67	4.83	93.4	96.6	80.0-120			3.37	20
cis-1,3-Dichloropropene	5.00	5.07	5.42	101	108	80.0-123			6.67	20
trans-1,3-Dichloropropene	5.00	4.84	4.84	96.8	96.8	78.0-124			0.000	20
2,2-Dichloropropane	5.00	5.47	5.38	109	108	58.0-130			1.66	20
Di-isopropyl ether	5.00	5.10	5.54	102	111	58.0-138			8.27	20
Ethylbenzene	5.00	4.62	5.04	92.4	101	79.0-123			8.70	20
Hexachloro-1,3-butadiene	5.00	4.21	4.39	84.2	87.8	54.0-138			4.19	20
Isopropylbenzene	5.00	4.36	4.66	87.2	93.2	76.0-127			6.65	20
p-Isopropyltoluene	5.00	3.90	4.28	78.0	85.6	76.0-125			9.29	20
2-Butanone (MEK)	25.0	35.0	36.1	140	144	44.0-160			3.09	20
Methylene Chloride	5.00	5.21	5.40	104	108	67.0-120			3.58	20
4-Methyl-2-pentanone (MIBK)	25.0	25.9	26.0	104	104	68.0-142			0.385	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3989531-1 10/21/23 19:09 • (LCSD) R3989531-2 10/21/23 19:32

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 %
Methyl tert-butyl ether	5.00	5.36	5.59	107	112	68.0-125			4.20	20
n-Propylbenzene	5.00	4.10	4.49	82.0	89.8	77.0-124			9.08	20
Styrene	5.00	4.10	4.31	82.0	86.2	73.0-130			4.99	20
1,1,1,2-Tetrachloroethane	5.00	5.15	5.12	103	102	75.0-125			0.584	20
1,1,2,2-Tetrachloroethane	5.00	4.86	4.93	97.2	98.6	65.0-130			1.43	20
1,1,2-Trichlorotrifluoroethane	5.00	5.52	5.24	110	105	69.0-132			5.20	20
Tetrachloroethene	5.00	5.36	5.52	107	110	72.0-132			2.94	20
Toluene	5.00	4.88	5.17	97.6	103	79.0-120			5.77	20
1,2,3-Trichlorobenzene	5.00	2.80	3.35	56.0	67.0	50.0-138			17.9	20
1,2,4-Trichlorobenzene	5.00	2.89	3.15	57.8	63.0	57.0-137			8.61	20
1,1,1-Trichloroethane	5.00	5.84	6.04	117	121	73.0-124			3.37	20
1,1,2-Trichloroethane	5.00	4.83	5.14	96.6	103	80.0-120			6.22	20
Trichloroethene	5.00	5.20	5.54	104	111	78.0-124			6.33	20
Trichlorofluoromethane	5.00	5.95	5.53	119	111	59.0-147			7.32	20
1,2,3-Trichloropropane	5.00	5.26	5.47	105	109	73.0-130			3.91	20
1,2,4-Trimethylbenzene	5.00	4.01	4.42	80.2	88.4	76.0-121			9.73	20
1,2,3-Trimethylbenzene	5.00	4.06	4.42	81.2	88.4	77.0-120			8.49	20
1,3,5-Trimethylbenzene	5.00	4.22	4.55	84.4	91.0	76.0-122			7.53	20
Vinyl chloride	5.00	5.45	5.69	109	114	67.0-131			4.31	20
Xylenes, Total	15.0	13.7	14.5	91.3	96.7	79.0-123			5.67	20
(S) Toluene-d8				97.9	98.8	80.0-120				
(S) 4-Bromofluorobenzene				110	109	77.0-126				
(S) 1,2-Dichloroethane-d4				98.1	99.2	70.0-130				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3989290-1 10/21/23 10:45

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
(S) o-Terphenyl	65.2			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3989290-2 10/21/23 10:57

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	38.2	76.4	50.0-150	
(S) o-Terphenyl			61.6	18.0-148	

L1668429-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1668429-01 10/21/23 11:32 • (MS) R3989297-1 10/21/23 11:45 • (MSD) R3989297-2 10/21/23 11:58

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 %
Diesel Range Organics (DRO)	49.2	U	U	U	0.000	0.000	200	50.0-150	J6	J6	0.000	20
(S) o-Terphenyl					63.1	72.7		18.0-148	J7	J7		

Sample Narrative:

OS: Cannot run at lower dilution due to viscosity of extract

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3989559-1 10/22/23 16:35

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
(S) o-Terphenyl	54.7			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3989559-2 10/22/23 16:48

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	37.3	74.6	50.0-150	
(S) o-Terphenyl			70.0	18.0-148	

L1666838-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1666838-03 10/22/23 18:46 • (MS) R3989559-3 10/22/23 18:59 • (MSD) R3989559-4 10/22/23 19:12

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 %
Diesel Range Organics (DRO)	61.7	U	41.4	41.7	67.0	67.6	1	50.0-150			0.913	20
(S) o-Terphenyl					62.5	59.4		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) R3990025-1 10/23/23 08:49

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
(S) o-Terphenyl	90.0			52.0-156

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

(LCS) R3990025-2 10/23/23 09:09 • (LCSD) R3990025-3 10/23/23 09:31

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	1020	992	68.0	66.1	50.0-150			2.78	20
(S) o-Terphenyl				96.5	98.0	52.0-156				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3990284-1 10/23/23 23:27

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
PCB 1016	U		0.0118	0.0340
PCB 1221	U		0.0118	0.0340
PCB 1232	U		0.0118	0.0340
PCB 1242	U		0.0118	0.0340
PCB 1248	U		0.00738	0.0170
PCB 1254	U		0.00738	0.0170
PCB 1260	U		0.00738	0.0170
(S) Decachlorobiphenyl	104			10.0-135
(S) Tetrachloro-m-xylene	105			10.0-139

Laboratory Control Sample (LCS)

(LCS) R3990284-2 10/23/23 23:37

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
PCB 1016	0.167	0.144	86.2	36.0-141	
PCB 1260	0.167	0.164	98.2	37.0-145	
(S) Decachlorobiphenyl			96.1	10.0-135	
(S) Tetrachloro-m-xylene			98.6	10.0-139	

L1668587-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1668587-02 10/24/23 02:07 • (MS) R3990284-3 10/24/23 02:17 • (MSD) R3990284-4 10/24/23 02:27

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 %
PCB 1016	0.192	U	0.0948	0.0914	49.4	47.6	1	10.0-160			3.70	37
PCB 1260	0.192	U	0.0848	0.0973	44.2	50.7	1	10.0-160			13.6	38
(S) Decachlorobiphenyl					49.1	58.0		10.0-135				
(S) Tetrachloro-m-xylene					51.1	58.6		10.0-139				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

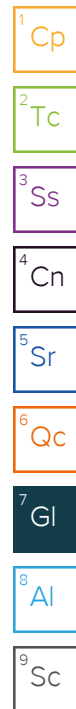
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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

Abbreviations and Definitions

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

Qualifier	Description
B	The same analyte is found in the associated blank.
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.



ACCREDITATIONS & LOCATIONS

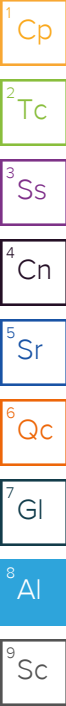
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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



Company Name/Address: Partner Engineering & Science - WA						Billing Information: Accounts Payable 2154 Torrance Blvd. Torrance, CA 90501						Chain of Custody Page 1 of 1					
2150 North 107th Street Suite 475 Seattle, WA 98133						Email To: HWhite@partneresi.com											
Report to: Hunter White						Please Circle: PT MT CT ET											
Project Description: 6428 California Ave SW						City/State Collected:											
Phone: 206-947-8875						Client Project # 23-423301.1						Lab Project # PARENGSWA-234233011					
Collected by (print): Hunter White						Site/Facility ID #						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) [X] Three Day						Quote #					
Immediately Packed on Ice N Y [X]						Date Results Needed						No. of Cntrs					
Sample ID						Comp/Grab Matrix * Depth Date Time											
B1-5						grab SS 5 10-10-23 0945						NWTPHDX 4ozClr-NoPres X X X					
B2-5						SS 5 1100						NWTPHGX 40mlAmb/MeOH10ml/Syr X X X					
B3-2						SS 2 1140						SV8082 PCBs 4ozClr-NoPres X X X					
B3-5						SS 5 1150						V8260 40mlAmb/MeOH10ml/Syr X X X					
B4-4						SS 4 1345											
B5-3.5						SS 3.5 1350											
B1-GW						GWSS 10 1000											
B2-GW						GWSS 10 1100											
B3-GW						GWSS 10 1200											
B4-GW						GWSS 10 1400											
* 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: NF XY 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: XY N					
Samples returned via: UPS FedEx Courier						Tracking # 672719036655											
Relinquished by : (Signature)						Date: 10-19-23 Time: 1330						Received by: (Signature)					
Relinquished by : (Signature)						Date: Time:						Trip Blank Received: Yes/No HCL/MeOH TBR					
Relinquished by : (Signature)						Date: Time:						Temp/Cls °C Bottles Received: 48					
Relinquished by : (Signature)						Date: Time:						Hold: Condition: NCF / OK					

[illegible]

Partner Engineering & Science - WA

Sample Delivery Group: L1668651
Samples Received: 10/20/2023
Project Number: 23-423301.1
Description: 6428 California Ave SW

Report To: Hunter White
2150 North 107th Street
Suite 475
Seattle, WA 98133

Entire Report Reviewed By:



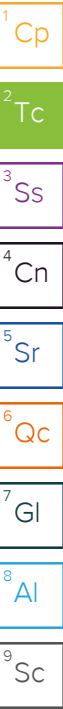
Marty Edwards III
Project Manager

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

Pace Analytical National12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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SAMPLE SUMMARY

B1-SG L1668651-01 Air

Collected by
H. White

Collected date/time
10/18/23 11:54

Received date/time
10/20/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2156338	1	10/23/23 17:08	10/23/23 17:08	SDS	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG2158430	100	10/26/23 20:50	10/26/23 20:50	MNP	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG2159835	400	10/28/23 18:24	10/28/23 18:24	SDS	Mt. Juliet, TN

B2-SG L1668651-02 Air

Collected by
H. White

Collected date/time
10/18/23 14:50

Received date/time
10/20/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2158462	100	10/26/23 21:25	10/26/23 21:25	MNP	Mt. Juliet, TN

B3-SG L1668651-03 Air

Collected by
H. White

Collected date/time
10/18/23 15:18

Received date/time
10/20/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2158462	20	10/26/23 20:48	10/26/23 20:48	MNP	Mt. Juliet, TN

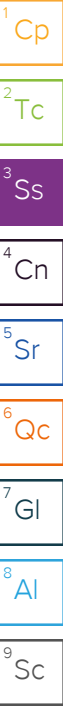
B4-SG L1668651-04 Air

Collected by
H. White

Collected date/time
10/18/23 15:30

Received date/time
10/20/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2156338	3.37	10/23/23 18:33	10/23/23 18:33	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG2158430	33.7	10/26/23 16:30	10/26/23 16:30	MNP	Mt. Juliet, TN



CASE NARRATIVE

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



Marty Edwards III
Project Manager

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	ND	ND		1	WG2156338
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2156338
Benzene	71-43-2	78.10	0.200	0.639	20.0	63.9		1	WG2156338
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2156338
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2156338
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2156338
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2156338
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2156338
Carbon disulfide	75-15-0	76.10	0.200	0.622	4.15	12.9		1	WG2156338
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2156338
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2156338
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2156338
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2156338
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG2156338
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2156338
Cyclohexane	110-82-7	84.20	20.0	68.9	2820	9710		100	WG2158430
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2156338
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2156338
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2156338
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2156338
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2156338
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2156338
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2156338
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2156338
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2156338
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2156338
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2156338
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2156338
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2156338
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2156338
Ethanol	64-17-5	46.10	2.50	4.71	199	375	E	1	WG2156338
Ethylbenzene	100-41-4	106	20.0	86.7	349	1510		100	WG2158430
4-Ethyltoluene	622-96-8	120	0.200	0.982	43.8	215		1	WG2156338
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.236	1.33		1	WG2156338
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	7.90	39.1		1	WG2156338
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2156338
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2156338
Heptane	142-82-5	100	20.0	81.8	5780	23600		100	WG2158430
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2156338
n-Hexane	110-54-3	86.20	63.0	222	8200	28900		100	WG2158430
Isopropylbenzene	98-82-8	120.20	0.200	0.983	21.7	107		1	WG2156338
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG2156338
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2156338
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2156338
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2156338
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2156338
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2156338
Naphthalene	91-20-3	128	0.630	3.30	1.19	6.23		1	WG2156338
2-Propanol	67-63-0	60.10	1.25	3.07	15.0	36.9		1	WG2156338
Propene	115-07-1	42.10	125	215	473	814		100	WG2158430
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2156338
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2156338
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG2156338
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2156338
Toluene	108-88-3	92.10	50.0	188	493	1860		100	WG2158430
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2156338

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2156338
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2156338
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2156338
1,2,4-Trimethylbenzene	95-63-6	120	20.0	98.2	279	1370		100	WG2158430
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	12.3	60.4		1	WG2156338
2,2,4-Trimethylpentane	540-84-1	114.22	80.0	374	39200	183000		400	WG2159835
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2156338
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2156338
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2156338
m&p-Xylene	1330-20-7	106	0.400	1.73	118	512		1	WG2156338
o-Xylene	95-47-6	106	0.200	0.867	26.1	113		1	WG2156338
1,1-Difluoroethane	75-37-6	66.05	500	1350	ND	ND		100	WG2158430
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		228		J1		WG2156338
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.2				WG2158430
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.7				WG2159835

Sample Narrative:

L1668651-01 WG2156338: Surrogate failure due to matrix interference

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

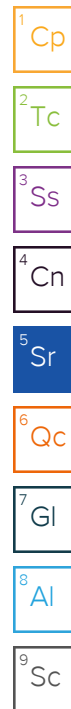
7Gl

8Al

9Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	125	297	812	1930		100	WG2158462
Allyl chloride	107-05-1	76.53	20.0	62.6	ND	ND		100	WG2158462
Benzene	71-43-2	78.10	20.0	63.9	156	498		100	WG2158462
Benzyl Chloride	100-44-7	127	20.0	104	ND	ND		100	WG2158462
Bromodichloromethane	75-27-4	164	20.0	134	ND	ND		100	WG2158462
Bromoform	75-25-2	253	60.0	621	ND	ND		100	WG2158462
Bromomethane	74-83-9	94.90	20.0	77.6	ND	ND		100	WG2158462
1,3-Butadiene	106-99-0	54.10	200	443	ND	ND		100	WG2158462
Carbon disulfide	75-15-0	76.10	20.0	62.2	39.6	123		100	WG2158462
Carbon tetrachloride	56-23-5	154	20.0	126	ND	ND		100	WG2158462
Chlorobenzene	108-90-7	113	20.0	92.4	ND	ND		100	WG2158462
Chloroethane	75-00-3	64.50	20.0	52.8	ND	ND		100	WG2158462
Chloroform	67-66-3	119	20.0	97.3	ND	ND		100	WG2158462
Chloromethane	74-87-3	50.50	20.0	41.3	ND	ND		100	WG2158462
2-Chlorotoluene	95-49-8	126	20.0	103	ND	ND		100	WG2158462
Cyclohexane	110-82-7	84.20	20.0	68.9	3510	12100		100	WG2158462
Dibromochloromethane	124-48-1	208	20.0	170	ND	ND		100	WG2158462
1,2-Dibromoethane	106-93-4	188	20.0	154	ND	ND		100	WG2158462
1,2-Dichlorobenzene	95-50-1	147	20.0	120	ND	ND		100	WG2158462
1,3-Dichlorobenzene	541-73-1	147	20.0	120	ND	ND		100	WG2158462
1,4-Dichlorobenzene	106-46-7	147	20.0	120	ND	ND		100	WG2158462
1,2-Dichloroethane	107-06-2	99	20.0	81.0	ND	ND		100	WG2158462
1,1-Dichloroethane	75-34-3	98	20.0	80.2	ND	ND		100	WG2158462
1,1-Dichloroethene	75-35-4	96.90	20.0	79.3	ND	ND		100	WG2158462
cis-1,2-Dichloroethene	156-59-2	96.90	20.0	79.3	ND	ND		100	WG2158462
trans-1,2-Dichloroethene	156-60-5	96.90	20.0	79.3	26.2	104		100	WG2158462
1,2-Dichloropropane	78-87-5	113	20.0	92.4	ND	ND		100	WG2158462
cis-1,3-Dichloropropene	10061-01-5	111	20.0	90.8	ND	ND		100	WG2158462
trans-1,3-Dichloropropene	10061-02-6	111	20.0	90.8	ND	ND		100	WG2158462
1,4-Dioxane	123-91-1	88.10	63.0	227	ND	ND		100	WG2158462
Ethanol	64-17-5	46.10	250	471	2090	3940		100	WG2158462
Ethylbenzene	100-41-4	106	20.0	86.7	482	2090		100	WG2158462
4-Ethyltoluene	622-96-8	120	20.0	98.2	ND	ND		100	WG2158462
Trichlorofluoromethane	75-69-4	137.40	20.0	112	ND	ND		100	WG2158462
Dichlorodifluoromethane	75-71-8	120.92	20.0	98.9	ND	ND		100	WG2158462
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	20.0	153	ND	ND		100	WG2158462
1,2-Dichlorotetrafluoroethane	76-14-2	171	20.0	140	ND	ND		100	WG2158462
Heptane	142-82-5	100	20.0	81.8	1590	6500		100	WG2158462
Hexachloro-1,3-butadiene	87-68-3	261	63.0	673	ND	ND		100	WG2158462
n-Hexane	110-54-3	86.20	63.0	222	6450	22700		100	WG2158462
Isopropylbenzene	98-82-8	120.20	20.0	98.3	117	575		100	WG2158462
Methylene Chloride	75-09-2	84.90	20.0	69.4	64.7	225		100	WG2158462
Methyl Butyl Ketone	591-78-6	100	125	511	ND	ND		100	WG2158462
2-Butanone (MEK)	78-93-3	72.10	125	369	ND	ND		100	WG2158462
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	125	512	ND	ND		100	WG2158462
Methyl methacrylate	80-62-6	100.12	20.0	81.9	ND	ND		100	WG2158462
MTBE	1634-04-4	88.10	20.0	72.1	ND	ND		100	WG2158462
Naphthalene	91-20-3	128	63.0	330	ND	ND		100	WG2158462
2-Propanol	67-63-0	60.10	125	307	1820	4470		100	WG2158462
Propene	115-07-1	42.10	125	215	149	257		100	WG2158462
Styrene	100-42-5	104	20.0	85.1	ND	ND		100	WG2158462
1,1,2,2-Tetrachloroethane	79-34-5	168	20.0	137	ND	ND		100	WG2158462
Tetrachloroethylene	127-18-4	166	20.0	136	ND	ND		100	WG2158462
Tetrahydrofuran	109-99-9	72.10	20.0	59.0	ND	ND		100	WG2158462
Toluene	108-88-3	92.10	50.0	188	157	591		100	WG2158462
1,2,4-Trichlorobenzene	120-82-1	181	63.0	466	ND	ND		100	WG2158462



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	20.0	109	ND	ND		100	WG2158462
1,1,2-Trichloroethane	79-00-5	133	20.0	109	ND	ND		100	WG2158462
Trichloroethylene	79-01-6	131	20.0	107	ND	ND		100	WG2158462
1,2,4-Trimethylbenzene	95-63-6	120	20.0	98.2	870	4270		100	WG2158462
1,3,5-Trimethylbenzene	108-67-8	120	20.0	98.2	375	1840		100	WG2158462
2,2,4-Trimethylpentane	540-84-1	114.22	20.0	93.4	2670	12500		100	WG2158462
Vinyl chloride	75-01-4	62.50	20.0	51.1	ND	ND		100	WG2158462
Vinyl Bromide	593-60-2	106.95	20.0	87.5	ND	ND		100	WG2158462
Vinyl acetate	108-05-4	86.10	63.0	222	ND	ND		100	WG2158462
m&p-Xylene	1330-20-7	106	40.0	173	1010	4380		100	WG2158462
o-Xylene	95-47-6	106	20.0	86.7	33.7	146		100	WG2158462
1,1-Difluoroethane	75-37-6	66.05	500	1350	ND	ND		100	WG2158462
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		108				WG2158462

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	25.0	59.4	ND	ND		20	WG2158462
Allyl chloride	107-05-1	76.53	4.00	12.5	ND	ND		20	WG2158462
Benzene	71-43-2	78.10	4.00	12.8	28.9	92.3		20	WG2158462
Benzyl Chloride	100-44-7	127	4.00	20.8	ND	ND		20	WG2158462
Bromodichloromethane	75-27-4	164	4.00	26.8	ND	ND		20	WG2158462
Bromoform	75-25-2	253	12.0	124	ND	ND		20	WG2158462
Bromomethane	74-83-9	94.90	4.00	15.5	ND	ND		20	WG2158462
1,3-Butadiene	106-99-0	54.10	40.0	88.5	ND	ND		20	WG2158462
Carbon disulfide	75-15-0	76.10	4.00	12.4	5.01	15.6		20	WG2158462
Carbon tetrachloride	56-23-5	154	4.00	25.2	ND	ND		20	WG2158462
Chlorobenzene	108-90-7	113	4.00	18.5	ND	ND		20	WG2158462
Chloroethane	75-00-3	64.50	4.00	10.6	ND	ND		20	WG2158462
Chloroform	67-66-3	119	4.00	19.5	ND	ND		20	WG2158462
Chloromethane	74-87-3	50.50	4.00	8.26	ND	ND		20	WG2158462
2-Chlorotoluene	95-49-8	126	4.00	20.6	ND	ND		20	WG2158462
Cyclohexane	110-82-7	84.20	4.00	13.8	24.2	83.3		20	WG2158462
Dibromochloromethane	124-48-1	208	4.00	34.0	ND	ND		20	WG2158462
1,2-Dibromoethane	106-93-4	188	4.00	30.8	ND	ND		20	WG2158462
1,2-Dichlorobenzene	95-50-1	147	4.00	24.0	ND	ND		20	WG2158462
1,3-Dichlorobenzene	541-73-1	147	4.00	24.0	ND	ND		20	WG2158462
1,4-Dichlorobenzene	106-46-7	147	4.00	24.0	ND	ND		20	WG2158462
1,2-Dichloroethane	107-06-2	99	4.00	16.2	ND	ND		20	WG2158462
1,1-Dichloroethane	75-34-3	98	4.00	16.0	ND	ND		20	WG2158462
1,1-Dichloroethene	75-35-4	96.90	4.00	15.9	ND	ND		20	WG2158462
cis-1,2-Dichloroethene	156-59-2	96.90	4.00	15.9	ND	ND		20	WG2158462
trans-1,2-Dichloroethene	156-60-5	96.90	4.00	15.9	ND	ND		20	WG2158462
1,2-Dichloropropane	78-87-5	113	4.00	18.5	ND	ND		20	WG2158462
cis-1,3-Dichloropropene	10061-01-5	111	4.00	18.2	ND	ND		20	WG2158462
trans-1,3-Dichloropropene	10061-02-6	111	4.00	18.2	ND	ND		20	WG2158462
1,4-Dioxane	123-91-1	88.10	12.6	45.4	ND	ND		20	WG2158462
Ethanol	64-17-5	46.10	50.0	94.3	56.8	107	B	20	WG2158462
Ethylbenzene	100-41-4	106	4.00	17.3	52.8	229		20	WG2158462
4-Ethyltoluene	622-96-8	120	4.00	19.6	91.8	451		20	WG2158462
Trichlorofluoromethane	75-69-4	137.40	4.00	22.5	ND	ND		20	WG2158462
Dichlorodifluoromethane	75-71-8	120.92	4.00	19.8	ND	ND		20	WG2158462
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	4.00	30.7	ND	ND		20	WG2158462
1,2-Dichlorotetrafluoroethane	76-14-2	171	4.00	28.0	ND	ND		20	WG2158462
Heptane	142-82-5	100	4.00	16.4	76.6	313		20	WG2158462
Hexachloro-1,3-butadiene	87-68-3	261	12.6	135	ND	ND		20	WG2158462
n-Hexane	110-54-3	86.20	12.6	44.4	41.7	147		20	WG2158462
Isopropylbenzene	98-82-8	120.20	4.00	19.7	ND	ND		20	WG2158462
Methylene Chloride	75-09-2	84.90	4.00	13.9	ND	ND		20	WG2158462
Methyl Butyl Ketone	591-78-6	100	25.0	102	ND	ND		20	WG2158462
2-Butanone (MEK)	78-93-3	72.10	25.0	73.7	ND	ND		20	WG2158462
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	25.0	102	ND	ND		20	WG2158462
Methyl methacrylate	80-62-6	100.12	4.00	16.4	ND	ND		20	WG2158462
MTBE	1634-04-4	88.10	4.00	14.4	ND	ND		20	WG2158462
Naphthalene	91-20-3	128	12.6	66.0	ND	ND		20	WG2158462
2-Propanol	67-63-0	60.10	25.0	61.5	ND	ND		20	WG2158462
Propene	115-07-1	42.10	25.0	43.0	682	1170		20	WG2158462
Styrene	100-42-5	104	4.00	17.0	ND	ND		20	WG2158462
1,1,2,2-Tetrachloroethane	79-34-5	168	4.00	27.5	ND	ND		20	WG2158462
Tetrachloroethylene	127-18-4	166	4.00	27.2	ND	ND		20	WG2158462
Tetrahydrofuran	109-99-9	72.10	4.00	11.8	ND	ND		20	WG2158462
Toluene	108-88-3	92.10	10.0	37.7	185	697		20	WG2158462
1,2,4-Trichlorobenzene	120-82-1	181	12.6	93.3	ND	ND		20	WG2158462

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	4.00	21.8	ND	ND		20	WG2158462
1,1,2-Trichloroethane	79-00-5	133	4.00	21.8	ND	ND		20	WG2158462
Trichloroethylene	79-01-6	131	4.00	21.4	ND	ND		20	WG2158462
1,2,4-Trimethylbenzene	95-63-6	120	4.00	19.6	289	1420		20	WG2158462
1,3,5-Trimethylbenzene	108-67-8	120	4.00	19.6	170	834		20	WG2158462
2,2,4-Trimethylpentane	540-84-1	114.22	4.00	18.7	113	528		20	WG2158462
Vinyl chloride	75-01-4	62.50	4.00	10.2	ND	ND		20	WG2158462
Vinyl Bromide	593-60-2	106.95	4.00	17.5	ND	ND		20	WG2158462
Vinyl acetate	108-05-4	86.10	12.6	44.4	ND	ND		20	WG2158462
m&p-Xylene	1330-20-7	106	8.00	34.7	179	776		20	WG2158462
o-Xylene	95-47-6	106	4.00	17.3	61.1	265		20	WG2158462
1,1-Difluoroethane	75-37-6	66.05	100	270	ND	ND		20	WG2158462
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		192		J1		WG2158462

Sample Narrative:

L1668651-03 WG2158462: Surrogate failure due to matrix interference

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	4.21	10.0	78.9	187		3.37	WG2156338
Allyl chloride	107-05-1	76.53	0.674	2.11	ND	ND		3.37	WG2156338
Benzene	71-43-2	78.10	0.674	2.15	31.3	100		3.37	WG2156338
Benzyl Chloride	100-44-7	127	0.674	3.50	ND	ND		3.37	WG2156338
Bromodichloromethane	75-27-4	164	0.674	4.52	ND	ND		3.37	WG2156338
Bromoform	75-25-2	253	2.02	20.9	ND	ND		3.37	WG2156338
Bromomethane	74-83-9	94.90	0.674	2.62	ND	ND		3.37	WG2156338
1,3-Butadiene	106-99-0	54.10	6.74	14.9	ND	ND		3.37	WG2156338
Carbon disulfide	75-15-0	76.10	0.674	2.10	5.55	17.3		3.37	WG2156338
Carbon tetrachloride	56-23-5	154	0.674	4.25	ND	ND		3.37	WG2156338
Chlorobenzene	108-90-7	113	0.674	3.12	ND	ND		3.37	WG2156338
Chloroethane	75-00-3	64.50	0.674	1.78	ND	ND		3.37	WG2156338
Chloroform	67-66-3	119	0.674	3.28	ND	ND		3.37	WG2156338
Chloromethane	74-87-3	50.50	0.674	1.39	1.49	3.08		3.37	WG2156338
2-Chlorotoluene	95-49-8	126	0.674	3.47	ND	ND		3.37	WG2156338
Cyclohexane	110-82-7	84.20	6.74	23.2	175	603		33.7	WG2158430
Dibromochloromethane	124-48-1	208	0.674	5.73	ND	ND		3.37	WG2156338
1,2-Dibromoethane	106-93-4	188	0.674	5.18	ND	ND		3.37	WG2156338
1,2-Dichlorobenzene	95-50-1	147	0.674	4.05	ND	ND		3.37	WG2156338
1,3-Dichlorobenzene	541-73-1	147	0.674	4.05	ND	ND		3.37	WG2156338
1,4-Dichlorobenzene	106-46-7	147	0.674	4.05	ND	ND		3.37	WG2156338
1,2-Dichloroethane	107-06-2	99	0.674	2.73	ND	ND		3.37	WG2156338
1,1-Dichloroethane	75-34-3	98	0.674	2.70	ND	ND		3.37	WG2156338
1,1-Dichloroethene	75-35-4	96.90	0.674	2.67	ND	ND		3.37	WG2156338
cis-1,2-Dichloroethene	156-59-2	96.90	0.674	2.67	ND	ND		3.37	WG2156338
trans-1,2-Dichloroethene	156-60-5	96.90	0.674	2.67	ND	ND		3.37	WG2156338
1,2-Dichloropropane	78-87-5	113	0.674	3.12	ND	ND		3.37	WG2156338
cis-1,3-Dichloropropene	10061-01-5	111	0.674	3.06	ND	ND		3.37	WG2156338
trans-1,3-Dichloropropene	10061-02-6	111	0.674	3.06	ND	ND		3.37	WG2156338
1,4-Dioxane	123-91-1	88.10	2.12	7.64	ND	ND		3.37	WG2156338
Ethanol	64-17-5	46.10	8.43	15.9	73.1	138		3.37	WG2156338
Ethylbenzene	100-41-4	106	0.674	2.92	65.0	282		3.37	WG2156338
4-Ethyltoluene	622-96-8	120	0.674	3.31	36.8	181		3.37	WG2156338
Trichlorofluoromethane	75-69-4	137.40	0.674	3.79	ND	ND		3.37	WG2156338
Dichlorodifluoromethane	75-71-8	120.92	0.674	3.33	ND	ND		3.37	WG2156338
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.674	5.17	ND	ND		3.37	WG2156338
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.674	4.71	ND	ND		3.37	WG2156338
Heptane	142-82-5	100	0.674	2.76	314	1280		3.37	WG2156338
Hexachloro-1,3-butadiene	87-68-3	261	2.12	22.6	ND	ND		3.37	WG2156338
n-Hexane	110-54-3	86.20	21.2	74.7	263	927		33.7	WG2158430
Isopropylbenzene	98-82-8	120.20	0.674	3.31	25.5	125		3.37	WG2156338
Methylene Chloride	75-09-2	84.90	0.674	2.34	0.989	3.43		3.37	WG2156338
Methyl Butyl Ketone	591-78-6	100	4.21	17.2	ND	ND		3.37	WG2156338
2-Butanone (MEK)	78-93-3	72.10	4.21	12.4	5.07	15.0		3.37	WG2156338
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	4.21	17.2	ND	ND		3.37	WG2156338
Methyl methacrylate	80-62-6	100.12	0.674	2.76	ND	ND		3.37	WG2156338
MTBE	1634-04-4	88.10	0.674	2.43	ND	ND		3.37	WG2156338
Naphthalene	91-20-3	128	2.12	11.1	ND	ND		3.37	WG2156338
2-Propanol	67-63-0	60.10	4.21	10.3	ND	ND		3.37	WG2156338
Propene	115-07-1	42.10	4.21	7.25	250	430		3.37	WG2156338
Styrene	100-42-5	104	0.674	2.87	ND	ND		3.37	WG2156338
1,1,2,2-Tetrachloroethane	79-34-5	168	0.674	4.63	ND	ND		3.37	WG2156338
Tetrachloroethylene	127-18-4	166	0.674	4.58	ND	ND		3.37	WG2156338
Tetrahydrofuran	109-99-9	72.10	0.674	1.99	ND	ND		3.37	WG2156338
Toluene	108-88-3	92.10	1.69	6.37	280	1050		3.37	WG2156338
1,2,4-Trichlorobenzene	120-82-1	181	2.12	15.7	ND	ND		3.37	WG2156338

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.674	3.67	ND	ND		3.37	WG2156338
1,1,2-Trichloroethane	79-00-5	133	0.674	3.67	ND	ND		3.37	WG2156338
Trichloroethylene	79-01-6	131	0.674	3.61	ND	ND		3.37	WG2156338
1,2,4-Trimethylbenzene	95-63-6	120	0.674	3.31	144	707		3.37	WG2156338
1,3,5-Trimethylbenzene	108-67-8	120	0.674	3.31	32.1	158		3.37	WG2156338
2,2,4-Trimethylpentane	540-84-1	114.22	0.674	3.15	ND	ND		3.37	WG2156338
Vinyl chloride	75-01-4	62.50	0.674	1.72	ND	ND		3.37	WG2156338
Vinyl Bromide	593-60-2	106.95	0.674	2.95	ND	ND		3.37	WG2156338
Vinyl acetate	108-05-4	86.10	2.12	7.47	ND	ND		3.37	WG2156338
m&p-Xylene	1330-20-7	106	1.35	5.85	271	1170		3.37	WG2156338
o-Xylene	95-47-6	106	0.674	2.92	95.9	416		3.37	WG2156338
1,1-Difluoroethane	75-37-6	66.05	16.9	45.7	ND	ND		3.37	WG2156338
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		167		J1		WG2156338
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		102				WG2158430

Sample Narrative:

L1668651-04 WG2156338: Surrogate failure due to matrix interference

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3991088-2 10/23/23 10:21

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.630
Ethanol	U		0.265	2.50
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Heptane	U		0.104	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	U		0.0979	0.200

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3991088-2 10/23/23 10:21

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	U		0.0932	1.25
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.630
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
1,1-Difluoroethane	U		0.129	5.00
(S) 1,4-Bromofluorobenzene	98.3			60.0-140

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) R3991088-1 10/23/23 09:53 • (LCSD) R3991088-3 10/23/23 12:09

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	3.75	3.54	3.42	94.4	91.2	70.0-130			3.45	25
Allyl chloride	3.75	3.56	3.80	94.9	101	70.0-130			6.52	25
Benzene	3.75	4.02	4.07	107	109	70.0-130			1.24	25
Benzyl Chloride	3.75	3.02	3.12	80.5	83.2	70.0-152			3.26	25
Bromodichloromethane	3.75	3.61	3.65	96.3	97.3	70.0-130			1.10	25
Bromoform	3.75	3.22	3.30	85.9	88.0	70.0-130			2.45	25

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

(LCS) R3991088-1 10/23/23 09:53 • (LCSD) R3991088-3 10/23/23 12:09

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromomethane	3.75	4.22	3.79	113	101	70.0-130			10.7	25
1,3-Butadiene	3.75	4.45	3.89	119	104	70.0-130			13.4	25
Carbon disulfide	3.75	3.70	3.63	98.7	96.8	70.0-130			1.91	25
Carbon tetrachloride	3.75	3.32	3.41	88.5	90.9	70.0-130			2.67	25
Chlorobenzene	3.75	3.88	3.86	103	103	70.0-130			0.517	25
Chloroethane	3.75	4.35	3.82	116	102	70.0-130			13.0	25
Chloroform	3.75	3.71	3.72	98.9	99.2	70.0-130			0.269	25
Chloromethane	3.75	4.57	4.50	122	120	70.0-130			1.54	25
2-Chlorotoluene	3.75	3.78	3.87	101	103	70.0-130			2.35	25
Dibromochloromethane	3.75	3.49	3.53	93.1	94.1	70.0-130			1.14	25
1,2-Dibromoethane	3.75	3.80	3.86	101	103	70.0-130			1.57	25
1,2-Dichlorobenzene	3.75	3.77	3.87	101	103	70.0-130			2.62	25
1,3-Dichlorobenzene	3.75	3.81	3.90	102	104	70.0-130			2.33	25
1,4-Dichlorobenzene	3.75	3.90	3.97	104	106	70.0-130			1.78	25
1,2-Dichloroethane	3.75	3.56	3.61	94.9	96.3	70.0-130			1.39	25
1,1-Dichloroethane	3.75	4.02	4.02	107	107	70.0-130			0.000	25
1,1-Dichloroethene	3.75	3.61	3.61	96.3	96.3	70.0-130			0.000	25
cis-1,2-Dichloroethene	3.75	4.00	3.95	107	105	70.0-130			1.26	25
trans-1,2-Dichloroethene	3.75	4.01	3.97	107	106	70.0-130			1.00	25
1,2-Dichloropropane	3.75	3.93	4.00	105	107	70.0-130			1.77	25
cis-1,3-Dichloropropene	3.75	3.57	3.80	95.2	101	70.0-130			6.24	25
trans-1,3-Dichloropropene	3.75	3.53	3.56	94.1	94.9	70.0-130			0.846	25
1,4-Dioxane	3.75	4.53	4.44	121	118	70.0-140			2.01	25
Ethanol	3.75	4.41	3.73	118	99.5	55.0-148			16.7	25
Ethylbenzene	3.75	3.81	3.83	102	102	70.0-130			0.524	25
4-Ethyltoluene	3.75	4.00	4.11	107	110	70.0-130			2.71	25
Trichlorofluoromethane	3.75	3.16	3.36	84.3	89.6	70.0-130			6.13	25
Dichlorodifluoromethane	3.75	3.85	3.88	103	103	64.0-139			0.776	25
1,1,2-Trichlorotrifluoroethane	3.75	3.66	3.59	97.6	95.7	70.0-130			1.93	25
1,2-Dichlorotetrafluoroethane	3.75	4.09	4.09	109	109	70.0-130			0.000	25
Heptane	3.75	4.33	4.33	115	115	70.0-130			0.000	25
Hexachloro-1,3-butadiene	3.75	3.45	3.53	92.0	94.1	70.0-151			2.29	25
Isopropylbenzene	3.75	3.77	3.84	101	102	70.0-130			1.84	25
Methylene Chloride	3.75	3.71	3.44	98.9	91.7	70.0-130			7.55	25
Methyl Butyl Ketone	3.75	4.10	4.45	109	119	70.0-149			8.19	25
2-Butanone (MEK)	3.75	4.13	4.16	110	111	70.0-130			0.724	25
4-Methyl-2-pentanone (MIBK)	3.75	4.36	4.37	116	117	70.0-139			0.229	25
Methyl methacrylate	3.75	3.94	4.02	105	107	70.0-130			2.01	25
MTBE	3.75	3.70	3.77	98.7	101	70.0-130			1.87	25
Naphthalene	3.75	3.80	3.87	101	103	70.0-159			1.83	25

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3991088-1 10/23/23 09:53 • (LCSD) R3991088-3 10/23/23 12:09

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 %
2-Propanol	3.75	3.22	3.42	85.9	91.2	70.0-139			6.02	25
Propene	3.75	4.07	3.98	109	106	64.0-144			2.24	25
Styrene	3.75	3.95	3.97	105	106	70.0-130			0.505	25
1,1,2,2-Tetrachloroethane	3.75	4.02	4.08	107	109	70.0-130			1.48	25
Tetrachloroethylene	3.75	3.76	3.67	100	97.9	70.0-130			2.42	25
Tetrahydrofuran	3.75	4.24	4.25	113	113	70.0-137			0.236	25
Toluene	3.75	3.90	3.98	104	106	70.0-130			2.03	25
1,2,4-Trichlorobenzene	3.75	3.57	3.73	95.2	99.5	70.0-160			4.38	25
1,1,1-Trichloroethane	3.75	3.50	3.52	93.3	93.9	70.0-130			0.570	25
1,1,2-Trichloroethane	3.75	3.89	4.00	104	107	70.0-130			2.79	25
Trichloroethylene	3.75	3.81	3.79	102	101	70.0-130			0.526	25
1,2,4-Trimethylbenzene	3.75	3.99	4.09	106	109	70.0-130			2.48	25
1,3,5-Trimethylbenzene	3.75	4.02	3.96	107	106	70.0-130			1.50	25
2,2,4-Trimethylpentane	3.75	4.19	4.18	112	111	70.0-130			0.239	25
Vinyl chloride	3.75	4.45	4.51	119	120	70.0-130			1.34	25
Vinyl Bromide	3.75	3.64	3.69	97.1	98.4	70.0-130			1.36	25
Vinyl acetate	3.75	2.63	2.96	70.1	78.9	70.0-130			11.8	25
m&p-Xylene	7.50	7.85	7.93	105	106	70.0-130			1.01	25
o-Xylene	3.75	3.92	4.01	105	107	70.0-130			2.27	25
1,1-Difluoroethane	3.75	3.83	3.90	102	104	70.0-130			1.81	25
(S) 1,4-Bromofluorobenzene				101	104	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3991577-3 10/26/23 10:22

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Cyclohexane	U		0.0753	0.200
Ethylbenzene	U		0.0835	0.200
Heptane	U		0.104	0.200
n-Hexane	U		0.206	0.630
Propene	U		0.0932	1.25
Toluene	U		0.0870	0.500
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,1-Difluoroethane	0.240	U	0.129	5.00
(S) 1,4-Bromofluorobenzene	97.9			60.0-140

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

(LCS) R3991577-1 10/26/23 09:05 • (LCSD) R3991577-2 10/26/23 09:44

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Cyclohexane	3.75	3.93	3.96	105	106	70.0-130			0.760	25
Ethylbenzene	3.75	4.13	4.18	110	111	70.0-130			1.20	25
Heptane	3.75	3.91	3.84	104	102	70.0-130			1.81	25
n-Hexane	3.75	3.90	3.93	104	105	70.0-130			0.766	25
Propene	3.75	3.56	3.72	94.9	99.2	64.0-144			4.40	25
Toluene	3.75	4.06	4.06	108	108	70.0-130			0.000	25
1,2,4-Trimethylbenzene	3.75	4.19	4.46	112	119	70.0-130			6.24	25
1,1-Difluoroethane	3.75	3.48	3.62	92.8	96.5	70.0-130			3.94	25
(S) 1,4-Bromofluorobenzene				95.0	97.1	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3991627-3 10/26/23 11:03

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.630
Ethanol	0.635	U	0.265	2.50
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Heptane	U		0.104	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
n-Hexane	U		0.206	0.630

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3991627-3 10/26/23 11:03

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	U		0.0932	1.25
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.630
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
1,1-Difluoroethane	0.224	U	0.129	5.00
(S) 1,4-Bromofluorobenzene	101			60.0-140

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(LCS) R3991627-1 10/26/23 09:32 • (LCSD) R3991627-2 10/26/23 10:19

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	3.75	3.04	2.97	81.1	79.2	70.0-130			2.33	25
Allyl chloride	3.75	2.66	3.40	70.9	90.7	70.0-130			24.4	25
Benzene	3.75	3.09	3.14	82.4	83.7	70.0-130			1.61	25
Benzyl Chloride	3.75	3.22	3.05	85.9	81.3	70.0-152			5.42	25

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

(LCS) R3991627-1 10/26/23 09:32 • (LCSD) R3991627-2 10/26/23 10:19

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromodichloromethane	3.75	3.26	3.30	86.9	88.0	70.0-130			1.22	25
Bromoform	3.75	3.31	3.23	88.3	86.1	70.0-130			2.45	25
Bromomethane	3.75	3.34	3.39	89.1	90.4	70.0-130			1.49	25
1,3-Butadiene	3.75	2.99	2.85	79.7	76.0	70.0-130			4.79	25
Carbon disulfide	3.75	3.27	3.16	87.2	84.3	70.0-130			3.42	25
Carbon tetrachloride	3.75	3.16	3.25	84.3	86.7	70.0-130			2.81	25
Chlorobenzene	3.75	3.27	3.27	87.2	87.2	70.0-130			0.000	25
Chloroethane	3.75	3.33	3.37	88.8	89.9	70.0-130			1.19	25
Chloroform	3.75	3.27	3.08	87.2	82.1	70.0-130			5.98	25
Chloromethane	3.75	3.11	3.06	82.9	81.6	70.0-130			1.62	25
2-Chlorotoluene	3.75	3.14	3.16	83.7	84.3	70.0-130			0.635	25
Cyclohexane	3.75	3.31	3.30	88.3	88.0	70.0-130			0.303	25
Dibromochloromethane	3.75	3.27	3.11	87.2	82.9	70.0-130			5.02	25
1,2-Dibromoethane	3.75	3.20	3.26	85.3	86.9	70.0-130			1.86	25
1,2-Dichlorobenzene	3.75	3.22	3.23	85.9	86.1	70.0-130			0.310	25
1,3-Dichlorobenzene	3.75	3.33	3.23	88.8	86.1	70.0-130			3.05	25
1,4-Dichlorobenzene	3.75	3.33	3.18	88.8	84.8	70.0-130			4.61	25
1,2-Dichloroethane	3.75	3.09	3.19	82.4	85.1	70.0-130			3.18	25
1,1-Dichloroethane	3.75	3.27	3.12	87.2	83.2	70.0-130			4.69	25
1,1-Dichloroethene	3.75	3.08	3.12	82.1	83.2	70.0-130			1.29	25
cis-1,2-Dichloroethene	3.75	3.22	3.20	85.9	85.3	70.0-130			0.623	25
trans-1,2-Dichloroethene	3.75	3.17	3.03	84.5	80.8	70.0-130			4.52	25
1,2-Dichloropropane	3.75	3.16	3.14	84.3	83.7	70.0-130			0.635	25
cis-1,3-Dichloropropene	3.75	3.18	3.18	84.8	84.8	70.0-130			0.000	25
trans-1,3-Dichloropropene	3.75	3.09	3.15	82.4	84.0	70.0-130			1.92	25
1,4-Dioxane	3.75	2.94	2.87	78.4	76.5	70.0-140			2.41	25
Ethanol	3.75	3.18	3.27	84.8	87.2	55.0-148			2.79	25
Ethylbenzene	3.75	3.17	3.15	84.5	84.0	70.0-130			0.633	25
4-Ethyltoluene	3.75	3.24	3.16	86.4	84.3	70.0-130			2.50	25
Trichlorofluoromethane	3.75	3.24	3.22	86.4	85.9	70.0-130			0.619	25
Dichlorodifluoromethane	3.75	3.45	3.39	92.0	90.4	64.0-139			1.75	25
1,1,2-Trichlorotrifluoroethane	3.75	3.21	3.19	85.6	85.1	70.0-130			0.625	25
1,2-Dichlorotetrafluoroethane	3.75	3.21	3.19	85.6	85.1	70.0-130			0.625	25
Heptane	3.75	3.11	3.02	82.9	80.5	70.0-130			2.94	25
Hexachloro-1,3-butadiene	3.75	3.21	3.24	85.6	86.4	70.0-151			0.930	25
n-Hexane	3.75	3.09	3.03	82.4	80.8	70.0-130			1.96	25
Isopropylbenzene	3.75	3.18	3.14	84.8	83.7	70.0-130			1.27	25
Methylene Chloride	3.75	3.02	3.01	80.5	80.3	70.0-130			0.332	25
Methyl Butyl Ketone	3.75	3.04	3.08	81.1	82.1	70.0-149			1.31	25
2-Butanone (MEK)	3.75	3.20	2.97	85.3	79.2	70.0-130			7.46	25

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3991627-1 10/26/23 09:32 • (LCSD) R3991627-2 10/26/23 10:19

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
4-Methyl-2-pentanone (MIBK)	3.75	3.02	3.06	80.5	81.6	70.0-139			1.32	25
Methyl methacrylate	3.75	2.80	2.68	74.7	71.5	70.0-130			4.38	25
MTBE	3.75	2.99	3.04	79.7	81.1	70.0-130			1.66	25
Naphthalene	3.75	3.30	3.28	88.0	87.5	70.0-159			0.608	25
2-Propanol	3.75	2.99	3.13	79.7	83.5	70.0-139			4.58	25
Propene	3.75	3.03	3.04	80.8	81.1	64.0-144			0.329	25
Styrene	3.75	3.22	3.15	85.9	84.0	70.0-130			2.20	25
1,1,2,2-Tetrachloroethane	3.75	3.20	3.13	85.3	83.5	70.0-130			2.21	25
Tetrachloroethylene	3.75	3.44	3.51	91.7	93.6	70.0-130			2.01	25
Tetrahydrofuran	3.75	3.15	3.08	84.0	82.1	70.0-137			2.25	25
Toluene	3.75	3.12	3.05	83.2	81.3	70.0-130			2.27	25
1,2,4-Trichlorobenzene	3.75	3.11	3.10	82.9	82.7	70.0-160			0.322	25
1,1,1-Trichloroethane	3.75	3.14	3.19	83.7	85.1	70.0-130			1.58	25
1,1,2-Trichloroethane	3.75	3.12	3.19	83.2	85.1	70.0-130			2.22	25
Trichloroethylene	3.75	2.98	3.04	79.5	81.1	70.0-130			1.99	25
1,2,4-Trimethylbenzene	3.75	3.17	3.20	84.5	85.3	70.0-130			0.942	25
1,3,5-Trimethylbenzene	3.75	3.97	3.87	106	103	70.0-130			2.55	25
2,2,4-Trimethylpentane	3.75	3.08	3.14	82.1	83.7	70.0-130			1.93	25
Vinyl chloride	3.75	3.05	3.11	81.3	82.9	70.0-130			1.95	25
Vinyl Bromide	3.75	3.22	3.16	85.9	84.3	70.0-130			1.88	25
Vinyl acetate	3.75	2.91	2.90	77.6	77.3	70.0-130			0.344	25
m&p-Xylene	7.50	6.32	6.23	84.3	83.1	70.0-130			1.43	25
o-Xylene	3.75	3.07	3.05	81.9	81.3	70.0-130			0.654	25
1,1-Difluoroethane	3.75	3.15	3.18	84.0	84.8	70.0-130			0.948	25
(S) 1,4-Bromofluorobenzene				102	101	60.0-140				

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3993138-3 10/28/23 08:52

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
2,2,4-Trimethylpentane	U		0.133	0.200
(S) 1,4-Bromofluorobenzene	94.4			60.0-140

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

(LCS) R3993138-1 10/28/23 07:55 • (LCSD) R3993138-2 10/28/23 08:24

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
2,2,4-Trimethylpentane	3.75	4.01	4.02	107	107	70.0-130			0.249	25
(S) 1,4-Bromofluorobenzene				99.6	100	60.0-140				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

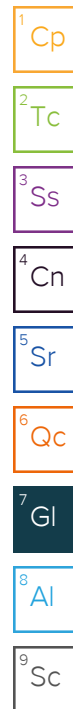
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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

Abbreviations and Definitions

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

Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.



ACCREDITATIONS & LOCATIONS

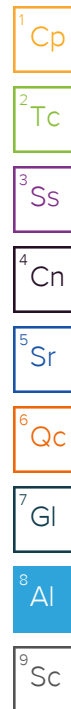
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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



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

LAB USE ONLY- Affix Workorder/Login Label Here

Page: 1 of: 1

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