

Boeing Frederickson-Parcel 2/Parcel 3

18001 Canyon Road E
Puyallup, Pierce County, Washington

PHASE II LIMITED SUBSURFACE INVESTIGATION

AUGUST 27, 2021

PREPARED FOR:

CH REALTY IX-JV I FRED310 INDUSTRIAL, L.P.

c/o Panattoni Development Company, Inc.

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VERTEX PROJECT NO: 71555



August 27, 2021

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Associate Risk Manager
CH REALTY IX-JV I FRED310 INDUSTRIAL, L.P. c/o
Panattoni Development Company, Inc.
7887 E. Belleview Avenue, Suite 475
Denver, CO 80111

Re: **Phase II Limited Site Assessment**
Boeing Frederickson – Parcel 2 and Parcel 3
18001 Canyon Road East
Arlington, Washington
VERTEX Project Number: 71555

Dear Mr. McKune:

The VERTEX Companies, Inc. (VERTEX) is pleased to submit this Phase II Limited Site Assessment (LSI) report for the above referenced property (the Site). The purpose of this Phase II LSI was to assess the Site for potential impacts from environmental conditions identified in VERTEX's Draft Phase I Environmental Site Assessment (ESA), dated July 27, 2021.

The following report details the procedures of the Phase II LSI and summarizes the sampling results. The investigation was performed in general accordance with VERTEX proposal P.3156.21, dated June 21, 2021 and executed by Panattoni Development Company, Inc. on July 7, 2021.

Please do not hesitate to contact us at your convenience should you have any questions or comments regarding this report or our recommendations. It has been a pleasure working with you on this project.

Sincerely,

The VERTEX Companies, Inc.

Jason Cass, PG
Project Manager

Steve Long
Regional Vice President

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1.0 INTRODUCTION

1.1 General Site Information

The “Site” or “Subject Property” for this Phase II Limited Site Investigation (LSI) is located adjacent to the Boeing Frederickson Fabrication Division (BFFD) aircraft manufacturing plant at 18001 Canyon Road East, Puyallup, Pierce County, Washington, and consists of an approximate 312.1-acre vacant wooded property. The Site location is shown on **Figure 1**. A Site Plan is provided as **Figure 2**. According to the Pierce County Assessor and Treasurers Office, the Site consists of two tracts of undeveloped land, totaling approximately 312-acres, occupying all, or parts of the following assessor’s parcel numbers (APN):

Parcel	APN	Listed Address	Acres
2	0418061016	18001 Canyon Road East	127.97
3	0419311021	6402 180 th Street East	184.13
Total			312.10

The Site is located within an area referred to as the Frederickson Industrial Park, which is located adjacent to the north, east, and south of the BFFD aircraft manufacturing plant. There are no current buildings on the Site and the parcels are not actively serviced by utilities.

1.2 Summary of Site History

The Site and surrounding properties historically operated as an explosives and propellants plant that manufactured trinitrotoluene (TNT), royal demolition explosive (RDX), and nitrocellulose-based propellants for small arms and artillery between 1936 and 1976 when the plant was closed. From about 1976 to 1986, the property operated as a sawmill. In 1987, Centrum Properties purchased the property for development of an industrial park. Centrum sold the property to Boeing in 1990 and Boeing subsequently developed the adjacent BFFD aircraft manufacturing

plant on the adjacent property at that time. Boeing has not conducted any industrial operations on the Subject Property.

An approximately 60 feet tall mound of fill material that was reportedly generated on-site, known as Mount Frederickson, is present in the northern portion of Parcel 2. Material placement at Mount Frederickson reportedly commenced prior to 1980 and Boeing added material to the mound between 1990 and approximately 1998. Two former munitions bunkers were historically located in the vicinity of the current Mt. Frederickson and reportedly may have been used to store solvents, acids, ammonia, glycerin, and other propellants.

A gravel pit was excavated in the southeastern portion of Parcel 3 sometime in the 1980's, which was apparently subsequently filled in by Centrum, and later by Boeing. Boeing personnel reported that the pit was approximately 40 feet deep at the time they purchased the property, and Boeing has backfilled the pit with excess soils from the BFFD plant development. The former gravel pit is currently backfilled to grade.

A full summary of the Site and surrounding property history can be found in the VERTEX Phase I Environmental Site Assessment (ESA) Report, dated August 24, 2021.

1.3 Purpose

The purpose of this Phase II LSI was to assess the Site for potential subsurface impacts associated with the environmental concerns identified in a Draft Phase I Environmental Site Assessment (ESA) prepared by VERTEX, dated July 27, 2021, which identified the following Recognized Environmental Conditions (RECs) and environmental concerns associated with the Site:

- A CT groundwater plume has been identified that encroaches upon Parcel 3 of the Subject Property. Although the current CT levels are quite low, Ecology has not granted closure for this REC and continued monitoring by Olin/Mallinckrodt will be required until the concentrations are below the MTCA cleanup levels. Because CT is a volatile organic compound and may migrate into the soil gas from underlying contaminated groundwater,

this REC also is considered a vapor encroachment concern (VEC). To address the VEC risks, Boeing has required a vapor barrier beneath any buildings constructed in this area of the Subject Property.

- The historical presence of buildings/structures associated with the explosives/propellant plant was identified on Parcel 2 (centered around the current location of Mt. Frederickson), and hazardous substances use was likely associated with the explosives manufacturing process in these areas. While testing was performed previously in this area, VERTEX considered the characterization to be incomplete.
- The presence of fill materials was identified in the Mt. Frederickson area on Parcel 2 and the gravel pit on Parcel 3 and the origin of these materials could not be determined with certainty. While some sampling has occurred in this area, VERTEX considered this characterization of fill materials to be incomplete.
- The historical presence of a dump area known as the “barrels found area” was identified on Parcel 2, which is shown on Figure 2. While remediation efforts were undertaken to remove the waste from this area and some confirmatory soil samples were collected, VERTEX concluded this area was not adequately characterized.

There is a potential for surficial contamination on the Subject Property from airborne emissions of explosive residues from stacks and other sources associated with a former explosives manufacturing plant that operated on the Subject Site from 1936 to 1976. In addition, the documented presence of benzene in the soil gas samples at concentrations exceeding the MTCA soil gas screening levels is considered a VEC.

1.4 Summary of Previous Phase II ESA

VERTEX relied upon review of a number of previous investigation reports to prepare the Draft Phase I ESA for this site and to develop a Phase II LSI sampling workplan for the investigation work described herein. The VERTEX Phase I ESA report (August, 2021) provides a detailed summary of all of the previous environmental documents, however, we have provided a summary below of the recent Phase II ESA that was conducted by Landau Associates, Inc. (LAI)



on behalf of Boeing in April 2021. This document, which represents the most recent sampling conducted at the site, was utilized by VERTEX to identify data gaps that needed to be filled by the current Phase II LSI and helps to eliminate areas of concern.

Phase II Environmental Site Assessment, Boeing Frederickson Fabrication Division Property, Puyallup, Washington, prepared by LAI, dated April 7, 2021.

This report documents an investigation of areas of potential concerns identified in Phase I reports prepared by LAI for the Subject Property. This Phase II focused on the Subject Property with the exception of the collection of a groundwater sample from groundwater monitoring wells located immediately adjacent to the disposition area boundary on Boeing-retained property. LAI which conducted this assessment between October 2020 and March 2021, involved three mobilizations and included the collection of soil, groundwater, soil gas, and ambient air samples. The LAI Phase II ESA soil, soil gas, and groundwater sampling locations are shown on **Figure 3**.

As part of this assessment, LAI advanced twenty-nine (29) direct-push and/or rotosonic boring locations and collected 84 subsurface soil samples at various depths. Areas investigated included the Mt. Frederickson fill pile, the gravel pit, the “barrels found” area, a stormwater swale and soil stockpile on the southwest corner of the Site, a cobble-filled depression on the southeast corner of the Site, a CT plume area, and areas where structures associated with the explosives plant were historically located on the Site. Soils were generally analyzed for the following during the initial mobilization: VOCs, SVOCs including pentachlorophenol (PCP) and carcinogenic polycyclic aromatic hydrocarbons (cPAHs), gasoline-range, diesel-range, and oil range total petroleum hydrocarbons (TPH-G, TPH-D, and TPH-O, respectively), and/or Resource Conservation and Recovery Act (RCRA) 8 metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver). Selected samples analyzed for copper, hexavalent chromium, polychlorinated biphenyls (PCBs), perchlorate, and/or nitroaromatic explosives.

LAI remobilized to the Subject Site twice to collect additional samples based on initial results. The follow-up phases of investigation focused on a more targeted analysis based on the initial results. Additionally, LAI collected surface soils samples in 24 locations, at the Subject Site and collected

repeat samples at five locations, for a total of 29 surface soil samples. Surface soil samples were analyzed for RCRA 8 metals, copper, hexavalent chromium, TPH-G, TPH-D, TPH-O, and/or SVOCs (also PCP and cPAHs depending on the sample locations).

LAI collected groundwater samples from 12 temporary wells and three existing monitoring wells (BMW-4, BMW-6, and BMW-7). Groundwater was generally encountered between 50 feet below ground surface (bgs) (southern portion) and 110 feet bgs (northern portion). Samples were analyzed for VOCs, SVOCs including PCP, cPAHs, TPH-G, TPH-D, and TPH-O, nitroaromatic explosives, perchlorate, and dissolved RCRA 8 metals plus copper, and/or PCBs.

Finally, LAI collected soil gas samples utilizing permanently installed vapor implants at 23 locations for a total of 42 samples. Nested soil gas points were installed at most locations, with vapor implants set at 5 feet bgs and 15 feet bgs. Additionally, LAI collected deep soil gas samples at depths ranging from 35 to 88 feet bgs in a few locations in the area of the gravel pit and Mt. Frederickson as well as ambient air samples (total of seven samples) during each primary soil gas sampling event.

A summary of the Phase II results is provided below:

Soil Sampling

- No target analytes were detected in any of the subsurface soil samples at concentrations exceeding MTCA soil cleanup levels, with the exception of arsenic, which was detected in all soil samples at concentrations exceeding the MTCA Method B soil cleanup level (0.67 mg/kg) but below the Method A cleanup level of 20 mg/kg. The detected arsenic concentrations, which ranged from 2.18 mg/kg to 7.68 mg/kg, are in the range of naturally occurring background.
- No target analytes were detected in any of the surface soil samples at concentrations exceeding the MTCA soil cleanup levels, with the exception of arsenic, which exceeded Method A cleanup levels but not Method B Cleanup Levels, and 2,4-dinitrotoluene, which

was detected in one sample collected in the barrels found area at a concentration exceeding the Method B soil cleanup level for protection of groundwater, however, it was below the MTCA Method B cleanup level for direct contact. The 2,4-dinitrotoluene concentration was not detected in groundwater in this area. No significant debris or foreign materials were encountered in the explored areas including the man-made features such as Mount Frederickson and gravel pit.

Groundwater Sampling

- Dissolved arsenic was detected in all groundwater samples at concentrations ranging from 0.1 micrograms per liter ($\mu\text{g/L}$) to 0.452 $\mu\text{g/L}$. The detected dissolved arsenic concentrations in all locations exceed the MTCA Method B groundwater cleanup level of 0.058 $\mu\text{g/L}$, but are below the Method A groundwater cleanup level of 5 $\mu\text{g/L}$. Moreover, the dissolved arsenic concentrations in groundwater are within the range of naturally occurring background.
- Benzene was detected in one well (LAI-17), located in proximity to Mt. Frederickson, at a concentration of 19 $\mu\text{g/L}$, which exceeds the MTCA Method A and B groundwater cleanup levels of 0.8 $\mu\text{g/L}$ and 5 $\mu\text{g/L}$, respectively. In response to this detection, LAI collected a repeat sample from LAI-17 during its February 2021 remobilization. Benzene was detected in that sample at 0.17 $\mu\text{g/L}$, which is below the MTCA A and B cleanup levels. LAI also installed and sampled four additional temporary wells in proximity to LAI-17 during the February 2021 remobilization. Benzene was not detected above the MTCA groundwater cleanup levels in any of these wells.
- No other target analytes were detected in groundwater at concentrations exceeding the MTCA groundwater cleanup levels.

Soil Gas Sampling

- Benzene was detected in the soil gas samples at 13 locations at concentrations exceeding the Method B unrestricted screening level of 11 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). LAI calculated a modified screening level for commercial use for benzene of $36 \mu\text{g}/\text{m}^3$, and, applying that screening level, five of the 13 samples also exceeded the commercial criteria.
 - The highest benzene concentrations were detected in proximity to the natural gas pipeline easement on Parcel 3, where benzene concentrations of $400 \mu\text{g}/\text{m}^3$ and $880 \mu\text{g}/\text{m}^3$ were detected. LAI concluded and VERTEX concurs that the detections in this area likely were associated with the pipeline.
 - Benzene was detected at a concentration of $300 \mu\text{g}/\text{m}^3$ in one soil gas sample (LAI-13 15 ft. bgs) in the gravel pit area in October 2020; however, LAI resampled this soil gas point in December 2020 and February 2021, and on both occasions, benzene concentrations were below the laboratory method detection limits. Benzene was detected at other locations within the gravel pit area at depths of 5 feet bgs and 40 feet bgs, but the detected concentrations were not significantly above the calculated Method B soil gas modified screening level for commercial use of $36 \mu\text{g}/\text{m}^3$.
 - Chloroform, CT and petroleum hydrocarbons, including 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and xylenes, were detected in soil gas samples from the gravel pit at concentrations exceeding the Method B screening level for unrestricted use, but below the calculated Method B screening levels for commercial use.

Based on the investigation results, LAI concluded that no additional investigation was warranted based on the current level of development and use of the Subject Property; however, based on our review of the LAI Phase II ESA, VERTEX identified data gaps set forth in section 1.3 and were the focus of the current Phase II LSI.

1.5 Summary of Scope of Work

The Phase II LSI scope of work completed by VERTEX included three general investigation tasks:

- Task 1 Test Pit Monitoring and Shallow Composite Soil Sampling
- Task 2 Soil Borings
- Task 3 Soil Gas Investigation

Task 1 Shallow Composite Soil Sampling/Test Pit Monitoring

VERTEX conducted monitoring of the geotechnical test pits in order to observe for the presence of undocumented fill materials and/or buried debris at the site. Shallow composite soil samples were also collected from the surface at each of the test pits to evaluate whether airborne emissions of explosives from the former explosives plant had impacted the surface soil.

- VERTEX performed observation and field screening of soils with a photoionization detector (PID) for the presence of volatile organics during the advancement of eighty-one (81) geotechnical test pits that were being installed by Panattoni's geotechnical consultant, TERRA Associates (TERRA).
- TERRA installed 81 test pits throughout the property with a trackhoe. The test pit locations are shown on **Figure 4**. Test pit depths generally ranged between 8 and 20 feet bgs. VERTEX collected soil samples for screening at each test pit from the surface, mid-depth, and the termination depth of the test pits for field screening.
- If evidence of impacts (e.g., elevated PID readings, odors, etc.) or buried debris was noted, VERTEX collected discrete soil samples for analysis. VERTEX did not note any debris; however, VERTEX observed elevated PID results and petroleum odors in a few test pits in the Mt. Frederickson area and collected four soil samples from these test pits for laboratory analysis for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and total petroleum hydrocarbons (TPH).

- In order to evaluate the potential for surficial nitroaromatic explosives, perchlorates, or nitroglycerin, VERTEX collected 10 shallow surface composite samples from across the site (one composite soil sample from each proposed building area, except two composite soil samples were collected from proposed Building I, the largest planned building). Composite samples were collected by subdividing the site into 10 areas, each representing a building area and collecting aliquots or sub-samples from each of the geotechnical test pits within the composite sample boundary. The composite sample aliquots were collected from the surface (0-6 inches bgs); equal aliquots or sub-samples were collected from each of the geotechnical test pits installed within the building footprint composite area by TERRA. The number of aliquots comprising each composite sample varied between the composite locations, depending on the number of test pits installed by TERRA in each building area. Each sub-sample was thoroughly homogenized and an equal volume from each sub-sample was placed in a stainless-steel mixing bowl. Once all sub-samples were collected, the sample was thoroughly mixed to create a single sample representing the building area. These composite samples were analyzed for Nitroaromatics, Nitramines, Nitrate Esters, and Nitroglycerin by EPA Method 8330B and perchlorate and perchlorate salts by EPA Method 314.0.
- TERRA also installed six shallow geotechnical test pits in the “barrels found” area to verify that all debris had been removed from this area; these test pits were labeled by VERTEX as TP-125A through TP-125F. Note TERRA re-assigned test pit numbers after completion of the field work, so this location is shown on Figure 4 as TP-56. VERTEX collected soil samples for analysis from this area. VERTEX collected 12 soil samples (2 per test pit) for laboratory analysis. One sample was collected from the surface (0 to 6 inches) and one sample was collected from 8 to 10 feet bgs from each area.
- The 12 discrete soil samples collected from the barrels found area were analyzed for nitroaromatics, nitramines, and nitroglycerin by EPA Method 8330, and perchlorates by EPA method 314M.

Task 2 Soil Borings

VERTEX conducted a series of soil borings in the gravel pit and Mt. Frederickson areas to further characterize the fill materials in these areas. The following scope of work was completed:

- VERTEX installed six deep soil borings to 60 feet bgs, or to refusal within the Mt. Frederickson and gravel pit areas of the site (3 borings per area) using a hollow stem auger rig. Boring locations were selected based upon the previous LAI Phase II ESA investigation results. Soil samples were collected at 5 foot intervals in each boring using a split spoon sampler. Each soil sample was logged for lithology, examined for evidence of chemical impacts (e.g., staining, odors) and screened for the presence of volatile organic compounds using a PID. The PID readings, soil lithology, and field observations were recorded in the field and included on the soil boring logs.
- VERTEX collected three samples per boring for laboratory analysis. One soil sample was collected from the surface interval and two deeper samples were collected from each boring based on field evidence of impacts. In the absence of field impacts, VERTEX collected samples from 15 feet bgs and 30 feet bgs. VERTEX submitted these samples for analysis of VOCs by EPA Method 8260, SVOCs by EPA Method 8270, and priority pollutant metals by EPA Methods 6010/7471.
- Soil cuttings were containerized in 55-gallon drums and stored at the gravel pit. These soils are pending off-site disposal as non-hazardous waste.

Task 3 –Soil Gas Investigation

VERTEX conducted the soil gas investigation to evaluate the presence of VOCs in the site soil gas beneath the site that was documented in the LAI Phase II ESA and to determine soil gas concentrations beneath the proposed building locations on the site.

- VERTEX installed 40 temporary soil gas monitoring probes to a depth of approximately 5.5 feet bgs across the site. Soil gas probes were installed beneath all of the proposed building locations with the exception of Building C. Wetlands were identified in the Building C area, which prevented installing soil gas probes in this area. In addition, VERTEX installed one deep soil gas monitoring probe to a depth of 12.5 feet bgs within the gravel pit area. This probe was installed to evaluate a previous anomalous soil gas result for benzene that LAI initially detected by LAI in this area, but which was not confirmed by two subsequent sampling events.
- Soil gas samples were obtained from the soil gas monitoring probes for analysis of VOCs by EPA Method TO-15.
- Ambient air samples were collected for the same analyses from up-wind of the sampling locations at a rate of one ambient air sample per day. The ambient air samples were collected to document background ambient air conditions in the event that contaminants were detected in the soil gas samples.

2.0 FIELD ACTIVITIES

2.1 Utility Locate/Geophysical Survey

Prior to drilling at the Site, VERTEX contacted the Washington Call Before You Dig utility notification center for public utility location services at the Site, and retained Ground Penetrating Radar Systems, Inc. (GPRS) of Seattle, Washington, was contracted to provide private utility location services for the Site.

VERTEX oversaw a geophysical survey conducted by GPRS, which utilized ground-penetrating radar (GPR) and electromagnetic (EM) equipment to identify and delineate subsurface utilities in proximity to the proposed drilling locations. Each location was cleared of utilities and no other subsurface anomalies were identified at the Site during the geophysical survey.

2.2 Shallow Composite Soil Sampling/Test Pit Monitoring

VERTEX observed the excavation of 81 soil test pits (TP-1 through TP-81) by the geotechnical consultant TERRA across a broad portion of the site between June 14 and June 18, 2021. The test pit locations are shown on **Figure 4**. TERRA originally planned to install 154 soil test pits; however, time constraints led to a final total of 81.

TERRA initially numbered the test pits as 1-154 and this numbering system VERTEX and TERRA utilized during field activities; however, TERRA later renumbered the test pits from 1-81 in the final geotechnical report. In order to avoid confusion, VERTEX has provided both the original test pit number and the revised test pit number for locations where VERTEX collected soil samples for laboratory analysis and labeled the samples in accordance with the original sampling numbering scheme. The sample designations are presented with the final test pit number followed by the original test pit number, e.g. TP-41/TP-103. As a cross reference, Table 1 presents the original and final test pit numbers.

TERRA excavated the soil test pits for geotechnical purposes, but VERTEX observed the soil from the test pits for evidence of potential debris or contamination resulting from past site uses.

VERTEX also screened soil samples from each test pit with a photoionization detector (PID) for the presence of organic vapors. VERTEX annotated the TERRA test pit logs to include our PID readings, sample collection locations for laboratory analysis, and other field notes. The soil test pit logs are included in **Appendix A**.

TERRA described the site soil as being divided into two sections with the northern portion consisting of topsoil overlying loose to very dense silty sand and sandy silt with gravel. For the southern portion, the soil was described as consisting of organic topsoil overlying various layers of loose to very dense sand with silt and gravel, gravel with silt and sand, sand with gravel, gravel with sand, and gravel with clay to the maximum exploration depths. In addition to the described native soil, TERRA also noted a large stockpile of fill material in and around the area of test pits TP-34, TP-35, TP-37, TP-39, and TP-40 (Figure 4). This large fill stockpile has been referred to as “Mount Fredrickson.” Another fill area, described as the “gravel pit”, is located in the area of test pit TP-21.

2.2.1 Shallow Composite Soil Sampling

Of the 81 test pits, VERTEX collected a shallow soil sample from 0-6 inches bgs for compositing. Composite sample boundaries are shown on **Figure 5**. VERTEX collected 81 sub-samples that were composited into nine samples; one sample was collected from each building area, with the exception of Building C, which is located within a wetland area that prevented the installation of the test pits, and Building J, the largest building on the south end of the property, where VERTEX collected two composite samples. VERTEX subdivided the site into 10 areas and collected samples from nine areas (as discussed above, one of the areas was ultimately not sampled due to the presence of wetlands). Surface aliquots from all of the test pits within that building area were composited to form a single sample representing that area of the site. The composite samples were collected by placing an equal aliquot from each test pit in a stainless-steel bowl and thoroughly mixing the sample with a stainless steel trowel. The samples were placed in an iced cooler and shipped to Pace National Laboratories, Inc. for analysis of Nitroaromatics, Nitramines,

Nitrate Esters, and Nitroglycerin by EPA Method 8330B and perchlorate and perchlorate salts by EPA Method 314.0.

2.2.2 Discrete Test Pit Sampling

VERTEX observed evidence of potential soil contamination in the form of petroleum-like odors and/or elevated PID readings at test pits TP-34/TP-94 and TP-41/TP-103 (Figure 4). Test pit TP-34/TP-94 was noted to have strong petroleum-like odors and a PID reading of 2.0 parts per million (ppm) at eight feet bgs. Soil from test pit TP-41/TP-103 had PID readings ranging from 17.8 ppm at 12 feet bgs to 602 ppm at one-foot bgs. VERTEX collected discrete soil samples from both of these locations for laboratory analysis. Specifically, VERTEX collected soil sample from a depth of 7 feet bgs in TP-34/TP-94. Two soil samples were collected from TP-41/TP-103 at depths of 0-6 inches and at 3.5 feet bgs. All of the samples were analyzed for VOCs by EPA Method 8260. Due to the petroleum odor in TP-34/TP-94, the sample from this location was also analyzed for PAHs by EPA Method 8270, TPH-GRO by the TPHNW-Gx method and TPH-DRO/TPH-ORO by the TPHNW-Dx Method.

2.2.3 Discrete Test Pit Sampling in “Barrels Found” Area

TERRA also excavated six test pits in the “barrels found area” at the direction of VERTEX. Previous environmental reports indicated that waste barrels associated with the former explosives plant had been identified in this area after which the area was remediated. Previous investigations in this area did not test for explosives or perchlorate. The purpose of these test pits was to observe whether any remaining wastes were present in this area and to collect soil samples for laboratory analysis for explosives and perchlorate.

VERTEX labeled the six test pits in this area as TP-125A through TP-125F, since the test pits were installed surrounding TERRA Test Pit TP-56/TP-125. Sample locations are shown on **Figure 4**. During the excavation of the test pits VERTEX performed field observations for any debris or other indications of impact and screened soils at regular intervals with a PID. VERTEX collected two soil samples for laboratory analysis from each test pit location. Because no field evidence of impacts

was noted, one sample was collected from the surface (0 to 6 inches bgs) and one sample was collected from a depth of 5 to 6 feet bgs at each location.

2.3 Soil Borings

VERTEX completed a series of six hollow-stem auger (HSA) soil borings to evaluate Mount Frederickson and the gravel pit, which were classified as RECs due to the unknown fill material. The soil borings were drilled in these areas from July 12 to July 16, 2021. Soil borings were labeled as VSB-1 through VSB-6; the boring locations are shown on **Figure 6**. The borings were completed to depths ranging from approximately 32 feet to 57 feet bgs. The purpose of the borings was to evaluate the environmental quality of the fill material.

Soil borings VSB-1 through VSB-3 were drilled through and next to the Mount Fredrickson fill pile located on the south-central portion of the site. Soil boring VSB-2 was drilled at the test pit location TP-34 where VERTEX observed strong petroleum odors and soil borings VSB-1 and VSB-3 were installed on the gravel roadway near the top of Mt. Frederickson. Soil borings VSB-4 through VSB-6 were drilled in the area of fill material referred to as the “gravel pit” located on the east-central portion of the site.

VERTEX also constructed temporary soil gas probe (VSG-145) to approximately 12 feet bgs at boring location VSB-4. The purpose of the soil gas probe was to facilitate sampling of deeper soil gas in the gravel pit fill area where LAI previously had reported an exceedance of benzene in a deep soil gas sample.

During drilling, the soil from each boring was screened with a PID and logged and classified using the United Soil Classification System. Soil samples were screened in the field utilizing a PID equipped with a 10.6 electron volt (eV) lamp for the presence of total ionizable organic volatiles (TOVs). The PID was calibrated to 100 parts per million by volume (ppmv) of isobutylene. PID readings are not considered actual TOV concentrations in the soil samples but are useful indicators of relative TOV concentrations between locations.

Soil at the Mount Fredrickson fill site generally consisted of varying amounts of sand with coarse gravel and cobbles. Soil at the gravel pit area generally consisted of silty, sandy, gravel, and cobble fill overlying native layered sand and silt with deeper silty gravel and cobbles. Elevated PID readings were recorded at soil borings VSB-1 and VSB-2 in the Mt. Frederickson area and VSB-4, and VSB-6 in the gravel pit area. Detailed descriptions of the lithology are presented on the soil boring logs included in **Appendix B**.

Soil samples were selected for laboratory analysis based on the proposed scope of work, field observations, and field screening results. The physical characteristics of the soil samples and the PID field screening results are reported on the boring logs included in **Appendix B**. VERTEX collected three soil samples at various depths from each boring for chemical analysis. The soil samples were analyzed by Pace Analytical, Inc. using the following laboratory methods:

- SVOCs by EPA Test Method 8270E
- VOCs by EPA Test Method 8260B
- Priority Pollutant Metals by EPA Test Method 6020

2.4 Soil Gas Investigation

2.4.1 Soil Gas Probe Location and Clearing

Prior to mobilizing the drill rig, VERTEX utilized a bulldozer to clear a pathway to allow for a track mounted Geoprobe drill rig to reach each of the proposed sampling points. Routes to each soil gas probe location were coordinated with Boeing to avoid wetland areas and protected tree species. VERTEX subcontracted GPRS, Inc. to conduct a geophysical utility scan of each proposed drilling area using a ground- penetrating radar/electromagnetic receiver in order to ensure that the boring locations were clear of utilities.

2.4.2 Soil Gas Probe Installation

VERTEX installed 40 temporary shallow soil gas monitoring probes at the locations shown on the attached **Figure 7**. Soil gas probes were numbered VSG-101 through VSG-144; note that proposed soil gas probes VSG-135 through VSG-138 were not installed due to the presence

of wetlands in the area. The soil gas probes were installed to a depth of approximately 5.5 feet bgs using a truck-mounted direct push drill rig. The soil gas probes consisted of a 1" dia. x 6" long stainless-steel screen, attached to ¼" ID Teflon tubing extending to the surface. The borehole annulus surrounding the screen was backfilled with silica sand, followed by a six-inch thick layer of bentonite, then cement grout to the surface. The tubing was extended above the surface and capped with a ball valve to prevent ambient air intrusion into the soil gas probes. VERTEX installed one deeper soil gas monitoring probe using a hollow stem drill rig to a depth of 12.5 feet bgs in the center of the gravel pit area using similar construction methods to those described above. This soil gas probe is labeled as VSG-145.

Based on VERTEX's review of the LAI Phase II ESA report, the soil gas probe construction methods described above are consistent with the methodology used by LAI during its previous LAI Phase II ESA except VERTEX's soil gas probes were temporary so no surface completion well boxes or manholes were installed.

2.4.3 Soil Gas Probe Sampling

VERTEX collected soil gas samples from 39 of the 40 temporary shallow soil gas probes and from the deep soil gas probe in the gravel pit. Perched water was encountered in one shallow soil gas probe (VSG-111) with water entrained in the sample tubing during sampling, so this probe was not sampled.

VERTEX collected soil gas samples using 1-liter stainless steel vacuum canisters that were batch certified by the laboratory. Prior to sampling each probe, VERTEX performed a shut-in test and a leak check test to ensure the integrity of the sampling train and soil gas probe seal to ensure that ambient air is not being introduced into the sample. VERTEX placed a shroud over the wellhead and introduced helium into the shroud. Soil gas was extracted from the soil gas probe at a controlled rate and a hand-held helium detector was utilized to monitor for helium in the extracted gas. No leaks were detected in any of the well seals. VERTEX also performed shut-in test to verify the integrity of the equipment tubing connections by applying a vacuum to the sample train and monitoring any change in the vacuum level over

a 5-minute period. Leaks detected were repaired, and the shut-in test was re-performed until there was an absence of any leaks.

The soil gas probes were purged of approximately 800 cc prior to sampling. A 1-liter vacuum canister was attached to the soil gas point and samples were collected at a flow rate of 100 to 200 mL/min. Canister vacuum was recorded before and after sampling.

Ambient air samples were collected from up-wind of the sampling locations at a rate of one ambient air sample per day. The ambient air samples were collected in 6-liter stainless steel vacuum canisters equipped with a flow controller to allow the canister to fill over an eight-hour period. The soil gas and ambient air samples were analyzed by Pace National Laboratories in Mt. Juliet, Tennessee for Target Compound List (full scan) volatile organic compounds by EPA Method TO-15.

2.5 Site Geology and Hydrogeology

Soils on the northern portion consisted of topsoil overlying loose to very dense silty sand and sandy silt with gravel. Soils on the southern portion of the site generally consisted of topsoil overlying various layers of loose to very dense sand with silt and gravel, gravel with silt and sand, sand with gravel, gravel with sand, and gravel with clay and significant boulders to the maximum exploration depths.

VERTEX observed fill soils in the Mt. Frederickson and gravel pit areas, which consisted of a mixture of the above soil types. These fill soils reportedly originated from the BFFD property. The fill materials in the Mt. Frederickson area extend to a reported height of about 60 feet above the surrounding land surface, but VERTEX also observed below grade fill soils immediately adjacent to Mt. Frederickson. The fill soils in the gravel pit appear to extend to a depth of about 27 feet bgs and are underlain by native silts and sands with gravel.

3.0 LABORATORY ANALYTICAL RESULTS

3.1 Applicable Regulatory Standards

Soil, groundwater, and soil gas analytical results were compared to the State of Washington Department of Ecology (ECOLOGY) Cleanup Levels and Risk Calculation (CLARC) Model Toxics Control Act (MCTA) Cleanup Levels (January 2020). The MTCA establishes cleanup levels suitable for unrestricted use and for industrial use for a limited number of chemicals under Method A. Method B cleanup levels are suitable for unrestricted use and represent a wider range of chemicals. Method C cleanup levels are appropriate for site-specific cleanup level development once a full site investigation and risk assessment has been completed.

3.1.1 Soil Cleanup Levels

ECOLOGY has established variable cleanup levels under Method A, B, and C for both cancer and non-cancer health impacts for most chemicals of concern. The Method A and B cleanup levels are presented on the attached data tables. Some chemicals are known to produce both cancer and non-cancer health impacts. Where the chemical may produce both cancer and non-cancer health effects, the more stringent of the cancer or non-cancer endpoint is applied. Both the cancer and non-cancer health criteria are based on human health exposure through ingestion, dermal contact and inhalation of soil particles.

Additionally, ECOLOGY has set MTCA cleanup levels for soil that are intended to protect groundwater. These levels were set at concentrations above which contaminants might leach from the soil into the groundwater, thereby creating a groundwater issue. ECOLOGY typically does not apply the Soil: Protection of Groundwater Soil Cleanup Levels where the groundwater has been tested and does not contain the chemical of concern detected in the soil.

While the future use of the site is industrial, VERTEX first compared the data to the Method A and/or Method B unrestricted standards as a conservative approach. Method A/Method B unrestricted standards may apply if any of the soil is proposed to be transported off-site for re-

use. VERTEX also compared the soil data to the Soil: Protective of Groundwater Cleanup Levels. Any exceedances of these cleanup levels is discussed in Section 3.2.

3.1.2 Soil Gas Screening Levels

Ecology has developed both sub-slab and deep soil gas screening levels under MTCA Method B for unrestricted use. These standards are provided on Table 5. Screening levels have been developed for both cancer and non-cancer health endpoints. The sub-slab screening levels are more stringent than the deep soil gas screening levels and are intended to represent acceptable soil gas levels immediately beneath a building. VERTEX utilized the sub-slab soil gas screening levels for an initial comparison of the soil gas data, as these criteria are the most stringent.

Washington has not provided soil gas screening levels for methane; however, VERTEX believes that a screening level of 5% of the lower explosive limit (LEL) for methane is an appropriate conservative screening level for evaluating whether additional screening or sampling is warranted.

3.2 **Soil Analytical Results**

3.2.1 Composite Soil Results

VERTEX analyzed nine surficial composite soil samples from across the site that were labeled as COMP-1 through COMP-10 (no sample was collected from COMP-3 due to wetlands present). The surficial composite samples were analyzed for Nitroaromatics, Nitramines, Nitrate Esters, and Nitroglycerin by EPA Method 8330B and perchlorate and perchlorate salts by EPA Method 314.0. The soil analytical results for the composite samples are summarized in **Table 2**. A complete copy of the laboratory report is provided in **Appendix C**.

No target analytes were detected in any of the composite soil samples at concentrations exceeding the laboratory method detection limits (LMDLs). For some Method 8330 analytes, the LMDLs are greater than the MTCA Soil: Protection of Groundwater cleanup levels, but were

below the Method B unrestricted cleanup levels; however, these LMDLs appear consistent with those provided by most commercial laboratories.

3.2.2 Discrete Test Pit Soil Sample Results

During the test pit observation, VERTEX collected discrete soil samples from test pits TP-34/TP-94 and TP-41/TP-103 for laboratory analysis based on the presence of petroleum odors and elevated PID readings, respectively. The laboratory results are summarized in **Table 3** and a complete copy of the laboratory report is provided in **Appendix C**.

Soil samples were collected from TP-41/TP-103 at the surface and at a depth of 3.5 feet bgs for analysis of VOCs. No target analytes were detected at concentrations exceeding the MTCA soil cleanup levels in the samples collected from TP-41/TP-103.

A soil sample was collected from a depth of 7 feet bgs in TP-34/TP-94 due to observation of a petroleum odor at this depth. The soil sample was analyzed for VOCs, SVOCs, TPH-GRO, TPH-DRO, and TPH-ORO. 1-methylnaphthalene was detected in this sample at a concentration of 0.095 mg/kg, which exceeds its MTCA Soil: Protection of Groundwater cleanup level of 0.082 mg/kg, but is well below the MTCA Method B Unrestricted-Cancer Endpoint cleanup level of 34 mg/kg. Ecology normally does not enforce the Protection of Groundwater cleanup levels where the constituent was not identified in the groundwater, as is the case here. TPH-DRO and TPH-ORO detected in the sample at a combined concentration of 1,681 mg/kg. Ecology has developed a combined TPH-DRO/TPH-ORO Method A cleanup level of 2,000 mg/kg, which means the level detected is below Ecology's combined concentrations.

3.2.3 Barrels Found Area Soil Sample Results

VERTEX collected 12 soil samples from the "barrels found" area, which were labeled as TP-125A through TP-125F. Samples were collected from the surface (0 to 1 foot bgs) and at depths of 5-6 feet bgs at each location and were analyzed for Nitroaromatics, Nitramines, Nitrate Esters, and Nitroglycerin by EPA Method 8330B and perchlorate and perchlorate salts by EPA Method 314.0.

No target analytes were detected above the LMDLs in any of the collected samples. As previously discussed for the composite samples, the LMDLs for some 8330 analytes exceed the Soil: Protection of Groundwater Cleanup Levels, but were below the Method B cleanup levels and represent reasonable LMDLs based on a comparison with other commercial laboratories.

3.2.4 Deep Soil Boring Soil Sample Results

VERTEX advanced six soil deep soil borings on the site to investigate the fill materials within the Mt. Frederickson and gravel pit areas. Borings VSB-1 through VSB-3 were installed within/adjacent to Mt. Frederickson and borings VSB-4 through VSB-6 were installed in the gravel pit area. Three discrete samples were collected at various depth intervals from each boring and analyzed by the laboratory analysis of VOCs, SVOCs, and priority pollutant metals. The analytical results are summarized in **Table 4** and a complete copy of the laboratory report is included in **Appendix C**.

No VOCs or SVOCs were detected in any of the collected soil samples at concentrations exceeding the most stringent MTCA soil cleanup levels.

Arsenic was detected in a number of samples at concentrations exceeding the Method B-cancer endpoint soil cleanup level of 0.67 mg/kg, but all concentrations were below the Method A unrestricted cleanup level of 20 mg/kg. The Method A cleanup level is based on natural background arsenic concentrations in Washington, which exceed the Method B cleanup level. The detected arsenic concentrations were all within the range of naturally occurring background, with a maximum detected concentration of 4.17 mg/kg.

Cobalt was detected in all but one of the analyzed soil samples at concentrations exceeding the Soil: Protective of Groundwater cleanup level of 4.3 mg/kg, but below the Method B non-cancer cleanup level of 24 mg/kg. Cobalt was detected at a maximum concentration of 8.78 mg/kg. The detected cobalt concentrations appear to be representative of naturally occurring background conditions in the area. (Source: Background Concentrations of Metals in Soils from Selected Regions in the State of Washington, USGS Publication No. 95-4018, dated 1995).

Iron was detected in most of the collected soil samples at concentrations exceeding the Soil: Protective of Groundwater cleanup level of 5,600 mg/kg, but below the Method B non-cancer cleanup level of 56,000 mg/kg (Source: Background Concentrations of Metals in Soils from Selected Regions in the State of Washington, USGS Publication No. 95-4018, dated 1995).

3.3 Soil Gas Analytical Results

VERTEX collected soil gas samples from 39 shallow soil gas points installed at a depth of approximately 5.5 feet below the ground surface across the site, which were labeled as VSG-101 through VSG-144. The proposed soil gas points VSG-135 through VSG-138 were not installed due to the presence of wetlands in the area. VERTEX also collected a soil gas sample from one deep soil gas point VSG-145 at 12 feet installed in the center of the gravel pit area. All of the soil gas samples were analyzed for VOCs by EPA Method TO-15. Soil gas sample points VSG-141 through VSG-144 analyzed for methane via EPA Method 8015M, because LAI had previously detected methane in this general area of the site.

Based on the laboratory analytical results, no compounds were identified at concentrations exceeding MTCA Method B soil gas screening levels. Methane was not detected above the LMDL in those samples analyzed (VSG-141 through VSG-144). A summary of soil gas analytical results is presented on **Table 5**, and a copy of the laboratory analytical report is included in **Appendix C**.

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

VERTEX developed the following conclusions based on the Phase II LSI field and laboratory data:

- No subsurface debris was encountered in any of the test pits or soil borings installed across the site.
- No shallow soil impacts due to the historical operation of the explosives plant on the site and adjacent site were identified in any of the surface composite soil samples collected across the site.
- No contaminants of concern were detected in the soil samples collected from the deep soil borings installed in the Mt. Frederickson and gravel pit areas at concentrations exceeding the applicable MTCA soil cleanup levels, with the exception of arsenic, cobalt, and iron and those detected concentrations appear to be consistent with naturally occurring background in Washington State.
- The test pits installed in the “barrels found area” did not identify any buried subsurface debris or other evidence of impacted soils in this area. No explosives or perchlorate were identified in any of the surface or sub-surface soil samples collected from this area.
- Shallow soil gas samples collected from the proposed building footprints (with the exception of Building C, which was not investigated due to wetlands) did not identify any VOCs at concentrations above the MTCA Method B soil gas screening levels; however, as part of the proposed purchased Boeing is requiring a vapor barrier beneath proposed Building A due to the presence of an underlying low-level dissolved CT plume. VERTEX does not believe that vapor mitigation systems are warranted beneath the buildings. Once permits are obtained to disturb wetlands, a soil gas study will need to be completed prior to construction of Building C, which will be located in this area.

- VERTEX identified petroleum odors in one test pit installed in the vicinity of Mt. Frederickson in an area that previously was remediated to remove petroleum impacted soils; however, no significant contamination was encountered. The soil sample collected from this area contained 1-methylnaphthalene at a concentration exceeding the MTCA Soil: Protection of Groundwater cleanup level, but below the MTCA Method B soil cleanup level for unrestricted use, suggesting that minor residual impacts may have been left in place in this area upon completion of the previous remediation effort. VERTEX has recommended removal of these soils prior to development (see Section 4.2 below).
- Elevated PID readings (>50 ppmv) were detected in a few locations across the site, including adjacent to Mt. Frederickson and within the gravel pit area; however, no volatile contaminants were detected above MTCA soil cleanup levels in any of the soil samples collected from the locations/depths where the elevated PID readings were encountered. Since MTCA does not have any specific standards for PID readings and the confirmatory soil samples at these locations did not identify any impacts, no further action is recommended associated with the elevated PID readings.
- VERTEX did not collect groundwater samples during this Phase II LSI because sufficient groundwater sampling data exists from previous investigations to determine whether groundwater impacts are present on the site. LAI collected 16 groundwater samples across the site during its April 2021 Phase II ESA, which along with previous investigations performed on the Subject Site, indicated the presence of a low-level CT plume, originating offsite but crossing the northwest portion of the site (Proposed Building A) and flowing to the north. No other analytes previously were detected in the groundwater at concentrations of concern. Based on the previous groundwater sampling and the current soil and soil gas concentrations detected in this Phase II LSI, VERTEX does not believe that additional investigation of groundwater is warranted.
- The investigation included collection of representative samples from each of the areas that were identified in the VERTEX Phase I ESA as RECs. Based on the findings of this

Phase II LSI, no evidence of a release associated with the current or historic use of the site was identified.

4.2 Recommendations

Based on the conclusions outlined above, VERTEX has provided the following recommendations:

Contaminant Related Recommendations

- The residual petroleum impacted soil identified in test pit TP-34/TP-9 containing 1-methylnaphthalene at a concentration exceeding the MTCA Soil: Protection of Groundwater cleanup level should be removed prior to mass grading activities.

Purchase and Sale Agreement Requirements

- Pursuant to the terms of proposed purchase agreement a vapor mitigation system should be designed and installed beneath proposed Building A (northwest property corner). Also, once a permit is obtained to disturb the wetlands soil gas sampling should be conducted in the area of Building C to determine if a VMS is required for this building.
- A Soil Management Plan (SMP) must be prepared to address handling and disposal of soils from the project in accordance with the purchase and sale agreement. The SMP should cover the entirety of the project site.
- Because the purchase and sale agreement will require over-excavation to a depth of 3 feet beneath all of the proposed buildings at the site, extending 15 feet from the building footprints, an environmental professional should be retained to observe and screen the excavated soil.

Other Development Related Recommendations

- A potable water well reportedly is present at a former residence (caretaker's residence) on the northwest portion of the site; however, neither VERTEX nor LAI were able to locate this well during Phase I and Phase II activities. If present, the well should be properly

abandoned prior to development. A septic system may have also been present at the former caretaker's residence. If a septic system is identified during redevelopment it should be properly abandoned in accordance with Pierce County Health Department requirements.

- Multiple monitoring wells are present on the site associated with previous environmental investigations. It is VERTEX's understanding that Boeing will be abandoning the monitoring wells in the near future.

5.0 QUALIFICATIONS

5.1 Limitations and Exceptions

Our professional services have been performed, our findings obtained, and our recommendations prepared in accordance with customary principles and practices in the fields of environmental science and engineering. VERTEX is not responsible for the independent conclusions, opinions or recommendations made by others based on the field exploration and laboratory test data presented in this report.

It must be recognized that environmental investigations are inherently limited in the sense that conclusions are drawn, and recommendations developed from information obtained from limited research and site investigation. All subsurface conditions at the site were not field investigated as part of this study and may differ from the conditions implied by the LSI. Additionally, the passage of time may result in a change in the environmental characteristics at this site and surrounding properties. VERTEX does not warrant that there are no toxic or hazardous materials or contamination on the site, nor does VERTEX accept any liability if such are found at some future time, or could have been found if additional studies, beyond the scope of this LSI, were conducted. VERTEX does not warrant against future operations or conditions, nor does VERTEX warrant against operations or conditions present of a type or at a location not investigated.

5.2 Special Terms and Conditions

The findings of this LSI are limited and based on the completeness and accuracy of the data and conditions of the site as of the date of the onsite investigation.

5.3 User Reliance

This report is for the exclusive use of Panattoni Development Company, Inc. CH REALTY IX-JV I FRED310 INDUSTRIAL, L.P. and affiliates, successors and assigns, and any and all holders of a note or notes secured by a mortgage, deed of trust, or deed to secure debt encumbering the Site;



and their respective affiliates, designates, successors and assignees, rating agencies, prospective bond holders, and bond holders. No other party shall have the right to rely on any service provided by VERTEX without prior written consent. Use of this report by any other party shall be at such party's sole risk.

FIGURES

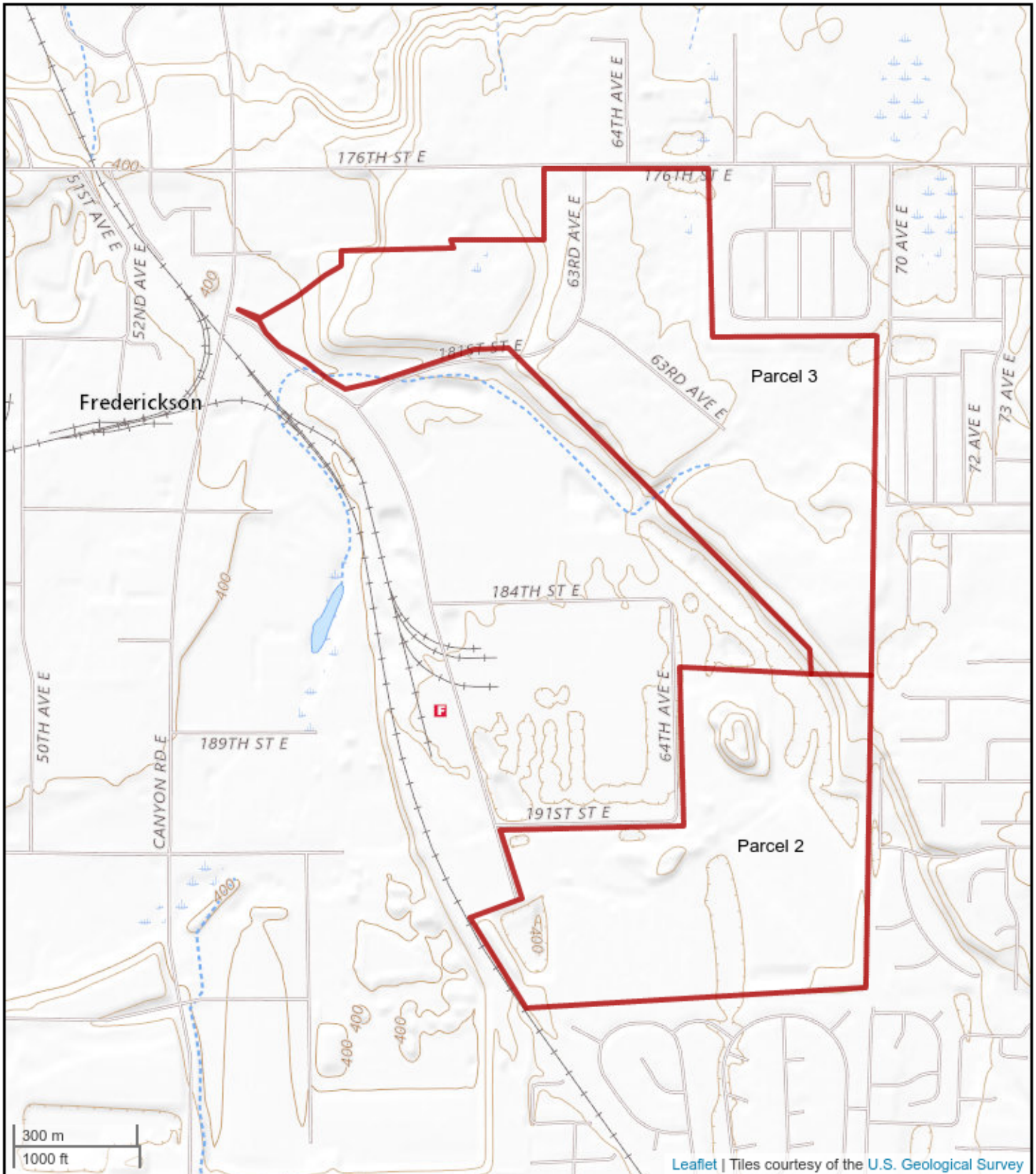


Figure 1: Site Locus Map

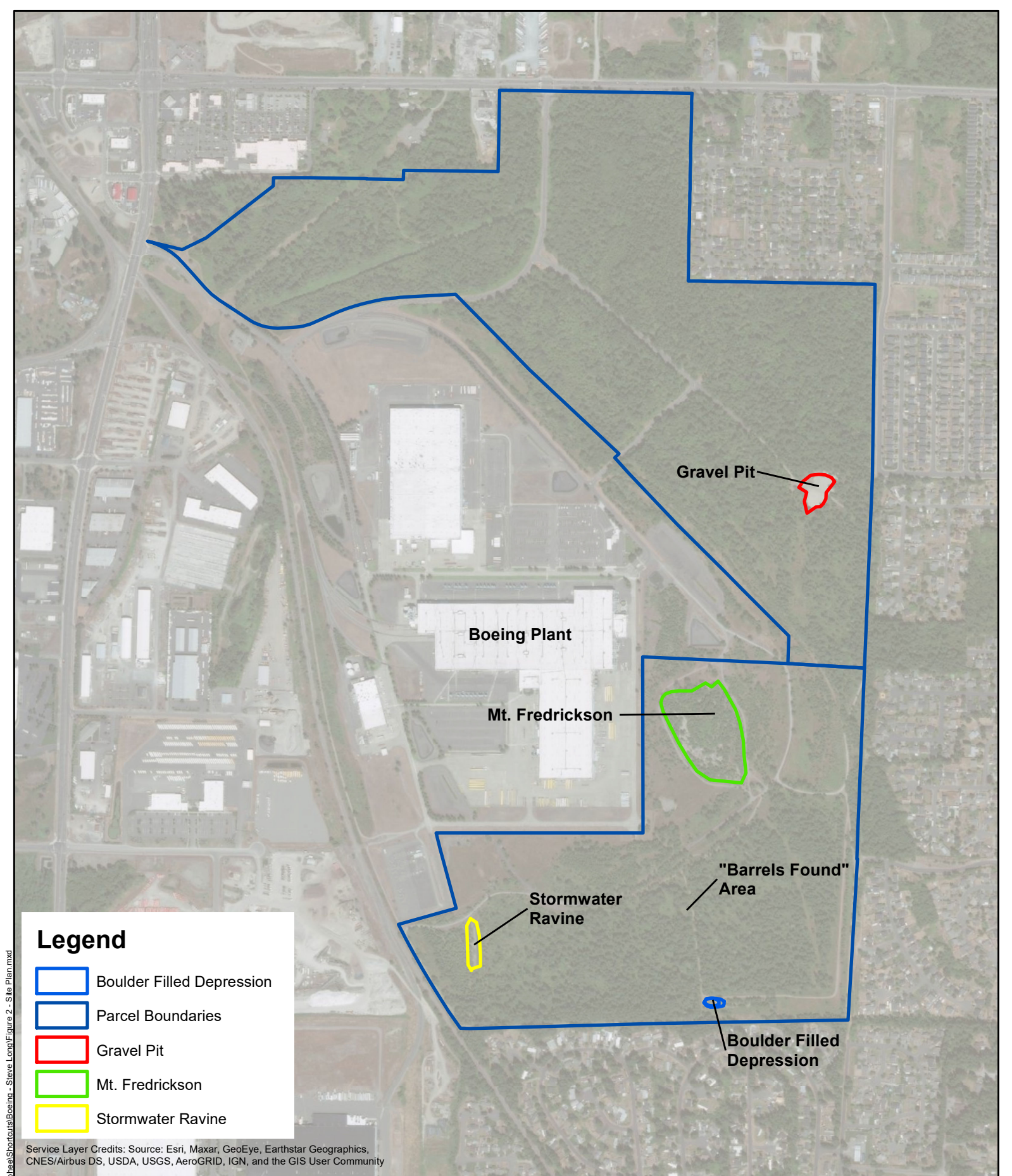
Boeing Frederickson Property
 18001 Canyon Road East
 Puyallup, Washington

Leaflet | Tiles courtesy of the U.S. Geological Survey

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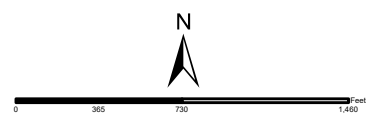
Legend

- Boulder Filled Depression
- Parcel Boundaries
- Gravel Pit
- Mt. Fredrickson
- Stormwater Ravine

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Figure
2

Site Plan
Boeing Fabrication Plant
18001 Canyon Road East,
Puyallup, WA 98375

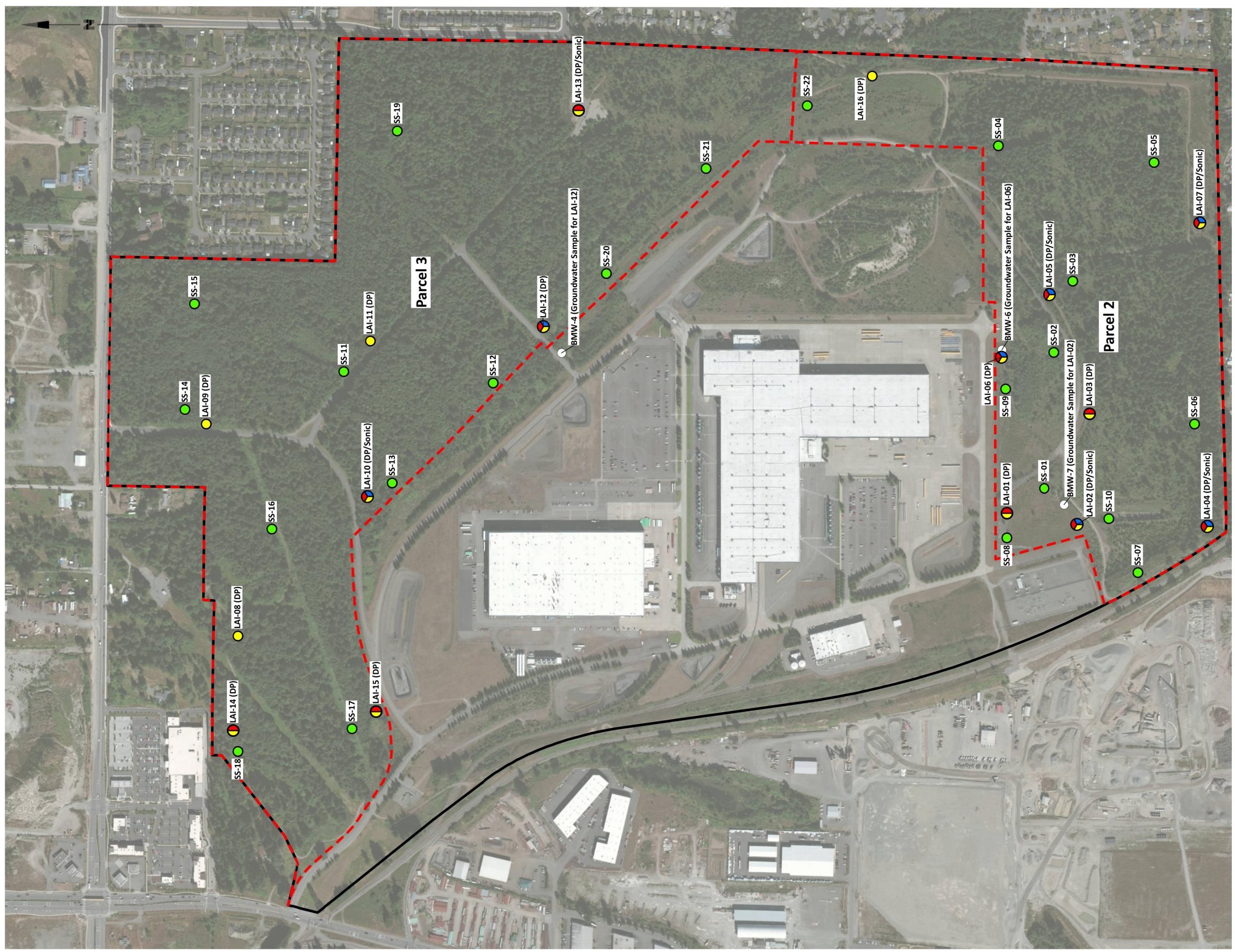


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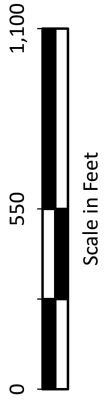
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Legend

- Soil Gas Sample
- Surface Soil Sample
- Soil Gas and Groundwater Sample
- Subsurface Soil and Soil Gas Sample
- Subsurface Soil, Soil Gas, and Groundwater Sample

- Monitoring Well
- Study Area
- Property Boundary



PREVIOUS LAI SAMPLING LOCATIONS

SITE: BOEING-FREDERICKSON PROPERTY
 18001 CANYON ROAD EAST
 PUYALLUP, WA

DATE: 08/13/21

DRAWN BY: M.M.

CHECKED BY: S.L.

VERTEX PROJ NO.: 71555

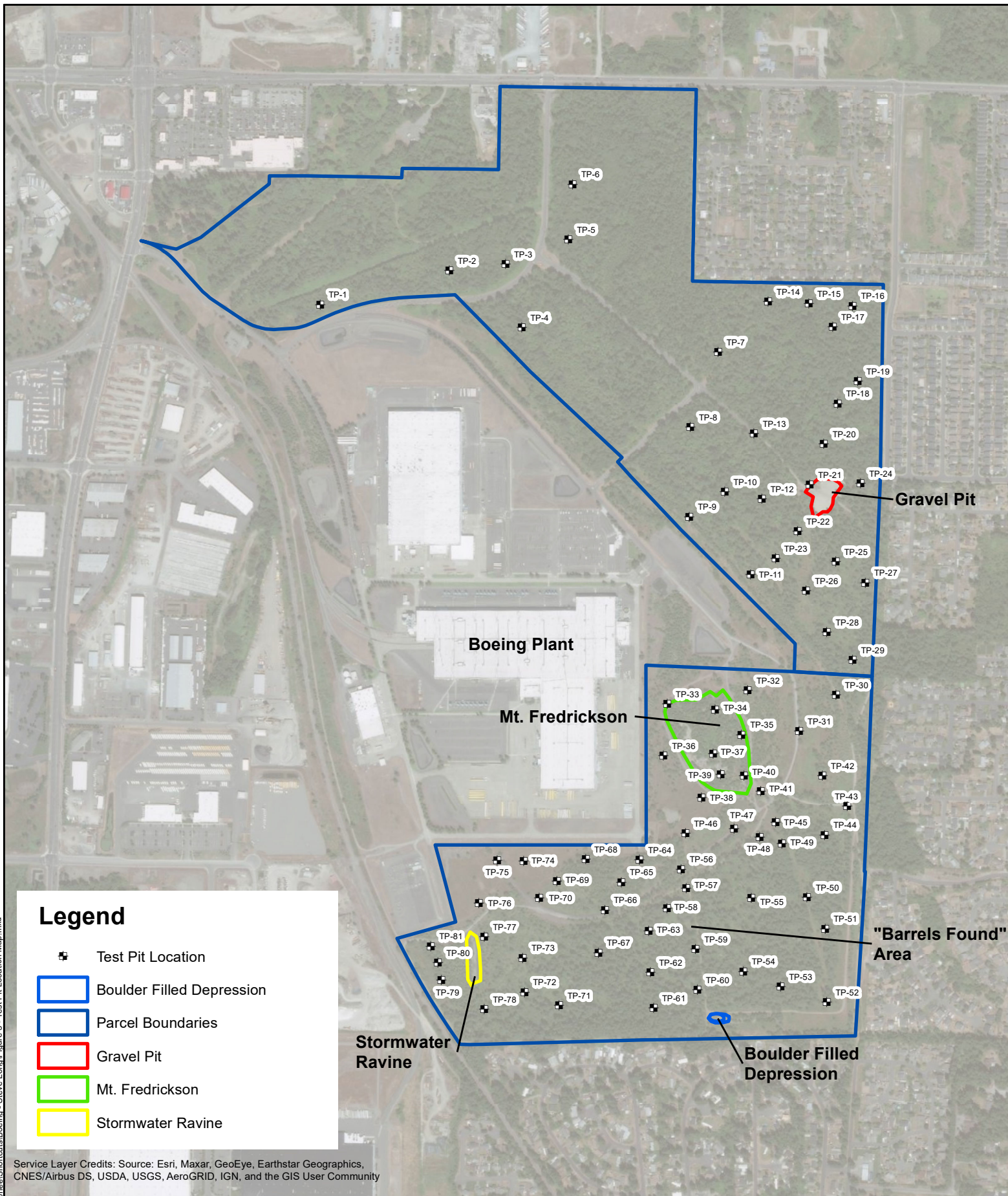
FIGURE

3



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Legend

- Test Pit Location
- Boulder Filled Depression
- Parcel Boundaries
- Gravel Pit
- Mt. Fredrickson
- Stormwater Ravine

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Figure
4
Test Pit Location Map
Boeing Fabrication Plant
18001 Canyon Road East,
Puyallup, WA 98375



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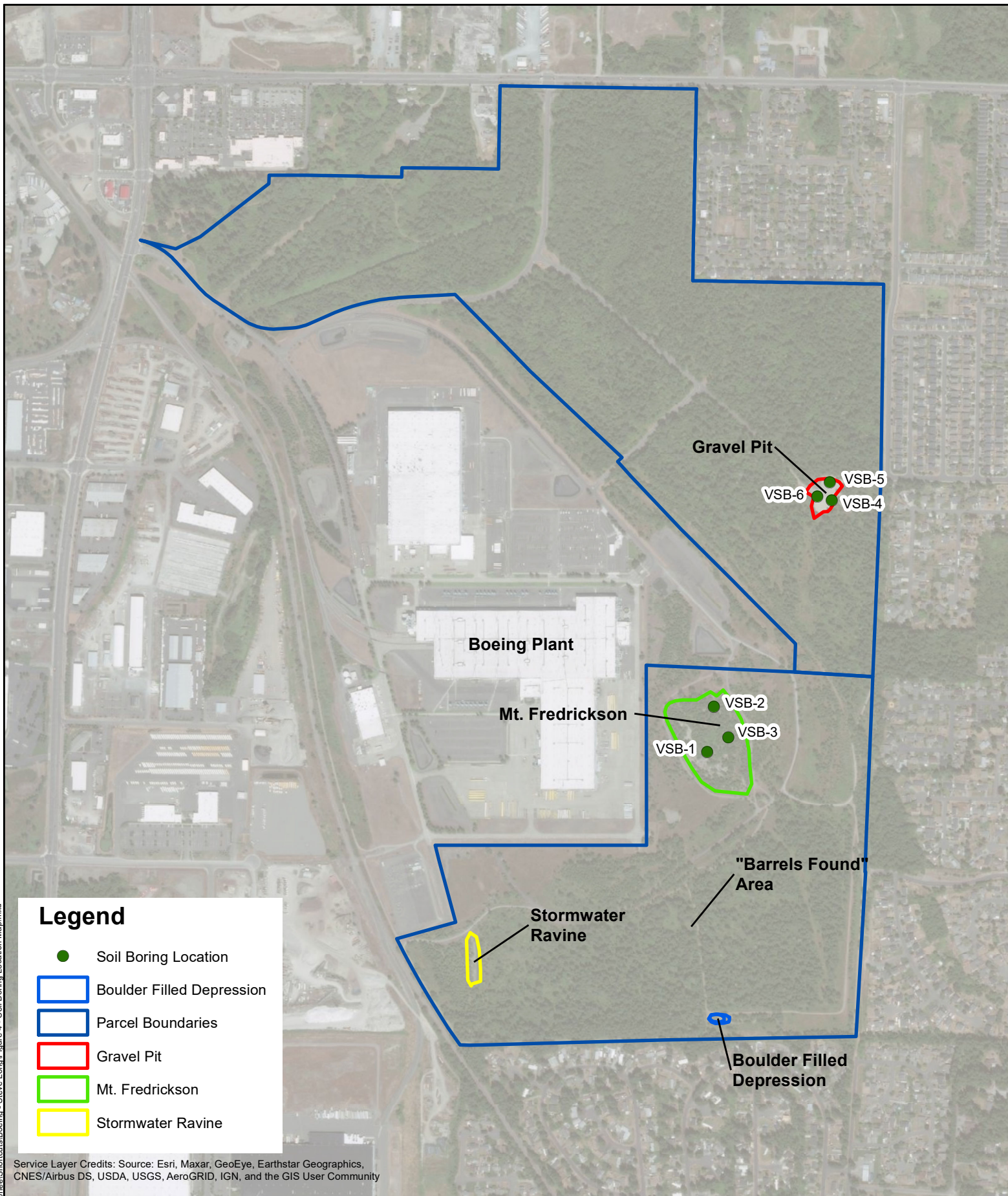


Figure 5: Shallow Composite Soil Sample Locations

Boeing Fredrickson Disposition Property
 18001 Canyon Rd E
 Puyallup, Washington 98375

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Legend

- Soil Boring Location
- Boulder Filled Depression
- Parcel Boundaries
- Gravel Pit
- Mt. Fredrickson
- Stormwater Ravine

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Figure

6

**Soil Boring Location Map
Boeing Fabrication Plant
18001 Canyon Road East,
Puyallup, WA 98375**



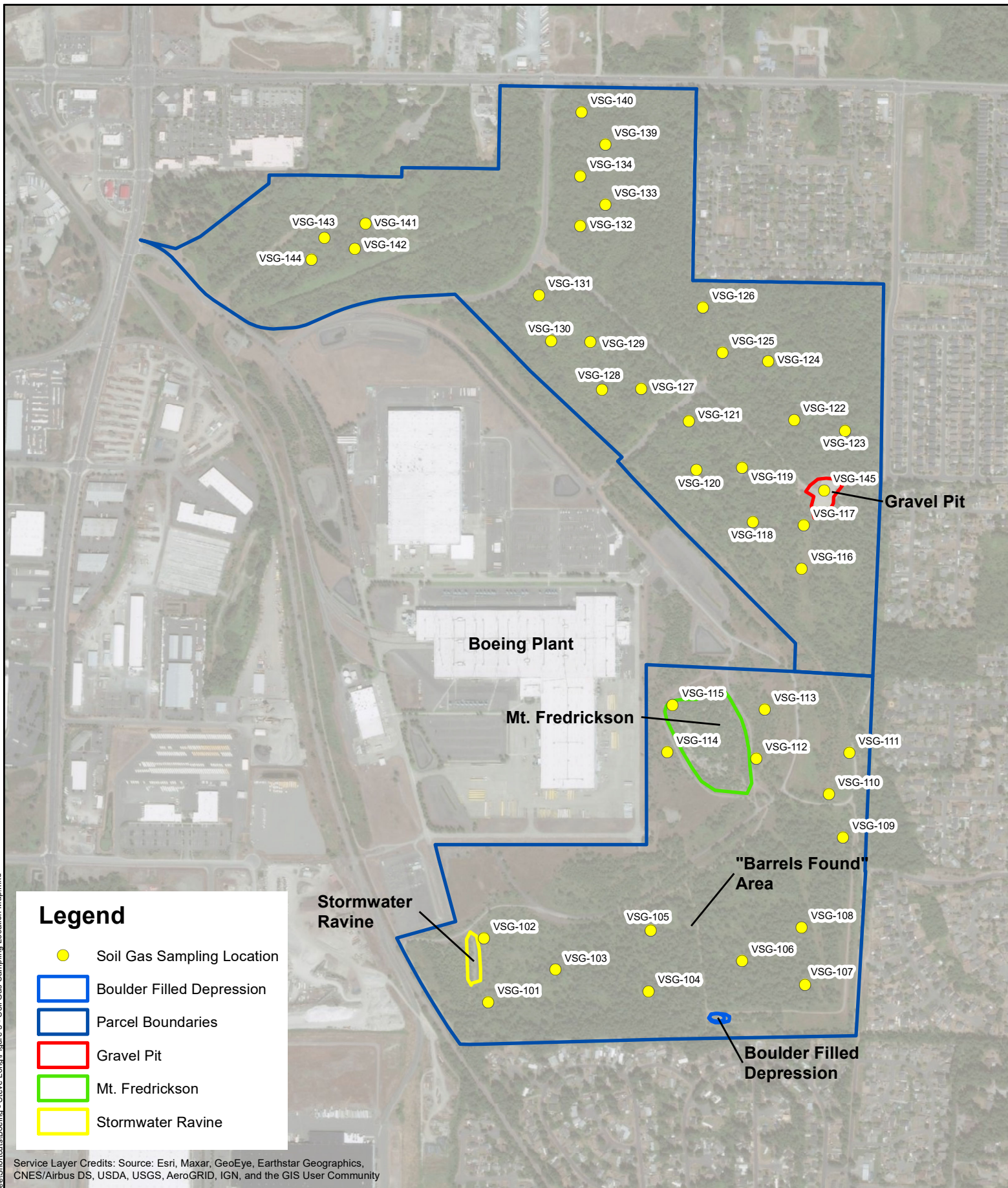
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Document Path: Z:\Private\mapcache\Shortcuts\Boeing - Steve Long\Figure 5 - Soil Gas Sampling Location Map.mxd

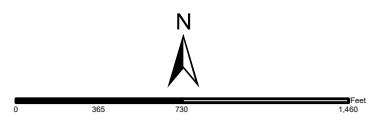


Legend

- Soil Gas Sampling Location
- Boulder Filled Depression
- Parcel Boundaries
- Gravel Pit
- Mt. Fredrickson
- Stormwater Ravine

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Figure
7
Soil Gas Sampling Location Map
Boeing Fabrication Plant
18001 Canyon Road East,
Puyallup, WA 98375



Date: 08-03-2021	
Drawn: RNM	
133 N. Jefferson Street, 3rd Floor Chicago, IL 60661 PHONE 312.428.3658	

TABLES

Table 1
Test Pit Number Cross Reference
Boeing- Frederickson Property
18001 Canyon Road East
Puyallup, WA
Vertex Project No. 71555

Final Test Pit Number	Original Test Pit Number
1	3
2	9
3	10
4	11
5	14
6	15
7	39
8	40
9	47
10	49
11	51
12	52
13	53
14	57
15	58
16	62
17	63
18	65
19	67
20	69
21	71
22	72
23	74
24	76
25	78
26	79
27	81
28	83
29	84
30	86
31	89
32	91
33	93
34	94
35	95
36	97
37	98
38	99
39	100
40	101

Table 1
Test Pit Number Cross Reference
Boeing- Frederickson Property
18001 Canyon Road East
Puyallup, WA
Vertex Project No. 71555

Final Test Pit Number	Original Test Pit Number
41	103
42	104
43	105
44	106
45	108
46	109
47	110
48	111
49	112
50	114
51	115
52	117
53	119
54	121
55	123
56	125
57	126
58	127
59	128
60	129
61	130
62	131
63	132
64	133
65	134
66	135
67	136
68	138
69	139
70	140
71	143
72	144
73	145
74	146
75	147
76	148
77	149
78	151
79	152
80	153
81	154

Table 2
Summary of Composite Soil Sample Analytical Data
 Boeing- Frederickson Property
 18001 Canyon Road East
 Puyallup, WA
 Vertex Project No. 71555

CHEMICAL NAME	Method A Industrial Properties	Method A Unrestricted Land Use	Method B Cancer	Method B Noncancer	Soil: Protective of Groundwater	Sample ID	COMP-1	COMP-2	COMP-4	COMP-5	COMP-6	COMP-7	COMP-8	COMP-9	COM-10	
						Sample Date	6/18/2021	6/18/2021	6/18/2021	6/18/2021	6/18/2021	6/18/2021	6/16/2021	6/16/2021	6/15/2021	
						Lab ID	L1369345-01	L1369345-02	L1368595-20	L1369345-03	L1368595-19	L1368595-21	L1368595-10	L1368595-04	L1368595-01	
Units																
Semivolatile Organic Compounds (SVOCs), Explosives																
2,4,6-Trinitrotoluene (TNT)	NSE	NSE	33	40	0.18	mg/kg	ND(0.500)	ND(0.505)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)
2,4-Dinitrotoluene	NSE	NSE	3.2	160	0.0017	mg/kg	ND(0.500)	ND(0.505)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)
2,6-Dinitrotoluene	NSE	NSE	0.67	24	0.00031	mg/kg	ND(0.500)	ND(0.505)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)
2-Amino-4,6-Dinitrotoluene	NSE	NSE	NSE	8	NSE	mg/kg	ND(0.500)	ND(0.505)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)
3-Nitrotoluene	NSE	NSE	NSE	8	0.009	mg/kg	ND(0.500)	ND(0.505)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)
4-Amino-2,6-Dinitrotoluene	NSE	NSE	NSE	8	NSE	mg/kg	ND(0.500)	ND(0.505)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)
Cyclonite (RDX)	NSE	NSE	13	320	NSE	mg/kg	ND(0.500)	ND(0.505)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)
HMX	NSE	NSE	NSE	4000	NSE	mg/kg	ND(0.500)	ND(0.505)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)
m-Dinitrobenzene	NSE	NSE	NSE	8	0.018	mg/kg	ND(0.500)	ND(0.505)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)
Nitrobenzene	NSE	NSE	NSE	160	0.1	mg/kg	ND(0.500)	ND(0.505)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)
Nitroglycerine	NSE	NSE	59	8	0.01	mg/kg	ND(2.00)	ND(2.02)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)
o-Nitrotoluene	NSE	NSE	4.5	72	0.0023	mg/kg	ND(0.500)	ND(0.505)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)
Pentaerythritol Tetranitrate (Petn)	NSE	NSE	NSE	NSE	NSE	mg/kg	ND(2.00)	ND(2.02)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)
p-Nitrotoluene	NSE	NSE	63	320	0.031	mg/kg	ND(0.500)	ND(0.505)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)
Tetryl	NSE	NSE	NSE	160	NSE	mg/kg	ND(0.500)	ND(0.505)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)
Trinitrobenzene	NSE	NSE	NSE	2400	18	mg/kg	ND(0.500)	ND(0.505)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)
Perchlorate And Perchlorate Salts																
Perchlorate And Perchlorate Salts	NSE	NSE	NSE	56	NSE	mg/kg	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)

- Notes:
- mg/kg=milligram per kilogram
 - ND = Not Detected above laboratory reporting limits shown in parenthesis
 - -- = Not Analyzed
 - NSE = No Standard Exists
 - SNC = Standard Not Calculated
 - Highlighted values exceeds the applicable Cleanup Criteria
 - Full analytical results, including QA/QC information and data flags, are detailed in the laboratory analytical report

Table 3
Summary of Test Pit Analytical Data
Boeing- Frederickson Property
18001 Canyon Road East
Puyallup, WA
Vertex Project No. 71555

CHEMICAL NAME	Method A Industrial Properties	Method A Unrestricted Land Use	Method B Cancer	Method B Noncancer	Soil: Protective of Groundwater	Units	Original Test Pit Sample ID		TP-103	TP-103	TP-125A	TP-125A	TP-125B	TP-125B	TP-125C	TP-125C	TP-125D
							TP-94 7	TP-94 7	TP-103	TP-103	TP-125A	TP-125A	TP-125B	TP-125B	TP-125C	TP-125C	TP-125D
							Revised Test Pit Sample ID	TP-34-7	TP-34-7	TP-41	TP-41	TP-56	TP-56	TP-56	TP-56	TP-56	TP-56
							Sample Date	6/16/2021	6/16/2021	6/16/2021	6/16/2021	6/17/2021	6/17/2021	6/17/2021	6/17/2021	6/17/2021	6/17/2021
Volatile Organic Compounds (VOCs)																	
1,1,1,2-Tetrachloroethane	NSE	NSE	38	2400	0.0098	mg/kg		ND(0.00250)	ND(0.00250)	ND(0.00250)	ND(0.00250)	--	--	--	--	--	--
1,1,1-Trichloroethane (1,1,1-TCA)	2	2	NSE	160000	1.5	mg/kg		ND(0.00250)	ND(0.00250)	ND(0.00250)	ND(0.00250)	--	--	--	--	--	--
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon-113)	NSE	NSE	NSE	2400000	7600	mg/kg		ND(0.00250)	ND(0.00250)	ND(0.00250)	ND(0.00250)	--	--	--	--	--	--
1,1,2-Trichloroethane	NSE	NSE	18	320	0.017	mg/kg		ND(0.00250)	ND(0.00250)	ND(0.00250)	ND(0.00250)	--	--	--	--	--	--
1,1-Dichloroethane (1,1-DCA)	NSE	NSE	180	16000	0.041	mg/kg		ND(0.00250)	ND(0.00250)	ND(0.00250)	ND(0.00250)	--	--	--	--	--	--
1,1-Dichloroethene (1,1-DCE)	NSE	NSE	NSE	4000	0.046	mg/kg		ND(0.00250)	ND(0.00250)	ND(0.00250)	ND(0.00250)	--	--	--	--	--	--
1,1-Dichloropropene	NSE	NSE	NSE	NSE	NSE	mg/kg		ND(0.00250)	ND(0.00250)	ND(0.00250)	ND(0.00250)	--	--	--	--	--	--
1,2,3-Trichlorobenzene	NSE	NSE	NSE	64	0.2	mg/kg		ND(0.0125)	ND(0.0125)	ND(0.0125)	ND(0.0125)	--	--	--	--	--	--
1,2,3-Trichloropropane	NSE	NSE	0.0063	320	0.0000024	mg/kg		ND(0.0125)	ND(0.0125)	ND(0.0125)	ND(0.0125)	--	--	--	--	--	--
1,2,3-Trimethylbenzene	NSE	NSE	NSE	800	1.3	mg/kg		0.0130	0.0130	ND(0.00500)	ND(0.00500)	--	--	--	--	--	--
1,2,4-Trichlorobenzene	NSE	NSE	34	800	0.56	mg/kg		ND(0.0125)	ND(0.0125)	ND(0.0125)	ND(0.0125)	--	--	--	--	--	--
1,2,4-Trimethylbenzene	NSE	NSE	NSE	800	1.3	mg/kg		0.0172	0.0172	ND(0.00500)	ND(0.00500)	--	--	--	--	--	--
1,2-Dibromo-3-Chloropropane	NSE	NSE	1.3	16	0.0013	mg/kg		ND(0.0250)	ND(0.0250)	ND(0.0250)	ND(0.0250)	--	--	--	--	--	--
1,2-Dibromoethane	0.005	0.005	0.5	720	0.00027	mg/kg		ND(0.00250)	ND(0.00250)	ND(0.00250)	ND(0.00250)	--	--	--	--	--	--
1,2-Dichlorobenzene	NSE	NSE	NSE	7200	7	mg/kg		ND(0.00500)	ND(0.00500)	ND(0.00500)	ND(0.00500)	--	--	--	--	--	--
1,2-Dichloroethane (1,2-DCA)	NSE	NSE	11	480	0.023	mg/kg		ND(0.00250)	ND(0.00250)	ND(0.00250)	ND(0.00250)	--	--	--	--	--	--
1,2-Dichloroethylene, cis (1,2-DCE, cis)	NSE	NSE	NSE	160	0.078	mg/kg		ND(0.00250)	ND(0.00250)	ND(0.00250)	ND(0.00250)	--	--	--	--	--	--
1,2-Dichloroethylene, trans (1,2-DCE, trans)	NSE	NSE	NSE	1600	0.52	mg/kg		ND(0.00500)	ND(0.00500)	ND(0.00500)	ND(0.00500)	--	--	--	--	--	--
1,2-Dichloropropane	NSE	NSE	27	3200	0.025	mg/kg		ND(0.00500)	ND(0.00500)	ND(0.00500)	ND(0.00500)	--	--	--	--	--	--
1,3,5-Trimethylbenzene	NSE	NSE	NSE	800	1.3	mg/kg		0.00928	0.00928	ND(0.00500)	ND(0.00500)	--	--	--	--	--	--
1,3-Dichlorobenzene (1,3-DCB)	NSE	NSE	NSE	NSE	NSE	mg/kg		ND(0.00500)	ND(0.00500)	ND(0.00500)	ND(0.00500)	--	--	--	--	--	--
1,3-Dichloropropane	NSE	NSE	NSE	1600	0.88	mg/kg		ND(0.00500)	ND(0.00500)	ND(0.00500)	ND(0.00500)	--	--	--	--	--	--
1,3-Dichloropropene, cis	NSE	NSE	NSE	NSE	NSE	mg/kg		ND(0.00250)	ND(0.00250)	ND(0.00250)	ND(0.00250)	--	--	--	--	--	--
1,3-Dichloropropene, trans	NSE	NSE	NSE	NSE	NSE	mg/kg		ND(0.00500)	ND(0.00500)	ND(0.00500)	ND(0.00500)	--	--	--	--	--	--
1,4-Dichlorobenzene	NSE	NSE	190	5600	1.2	mg/kg		ND(0.00500)	0.00990	ND(0.00500)	ND(0.00500)	--	--	--	--	--	--
2,2-Dichloropropane	NSE	NSE	NSE	NSE	NSE	mg/kg		ND(0.00250)	ND(0.00250)	ND(0.00250)	ND(0.00250)	--	--	--	--	--	--
Acetone	NSE	NSE	NSE	72000	29	mg/kg		ND(0.0500)	ND(0.0500)	ND(0.0500)	ND(0.0500)	--	--	--	--	--	--
Acrylonitrile	NSE	NSE	1.9	3200	0.00034	mg/kg		ND(0.0125)	ND(0.0125)	ND(0.0125)	ND(0.0125)	--	--	--	--	--	--
Benzene	0.03	0.03	18	320	0.027	mg/kg		ND(0.00100)	ND(0.00100)	ND(0.00100)	ND(0.00100)	--	--	--	--	--	--
Bromobenzene	NSE	NSE	NSE	640	0.56	mg/kg		ND(0.0125)	ND(0.0125)	ND(0.0125)	ND(0.0125)	--	--	--	--	--	--
Bromodichloromethane	NSE	NSE	16	1600	0.036	mg/kg		ND(0.00250)	ND(0.00250)	ND(0.00250)	ND(0.00250)	--	--	--	--	--	--
Bromoform	NSE	NSE	130	1600	0.36	mg/kg		ND(0.0250)	ND(0.0250)	ND(0.0250)	ND(0.0250)	--	--	--	--	--	--
Bromomethane	NSE	NSE	NSE	110	0.05	mg/kg		ND(0.0125)	ND(0.0125)	ND(0.0125)	ND(0.0125)	--	--	--	--	--	--
Carbon Tetrachloride	NSE	NSE	14	320	0.042	mg/kg		ND(0.00500)	ND(0.00500)	ND(0.00500)	ND(0.00500)	--	--	--	--	--	--
Chlorobenzene	NSE	NSE	NSE	1600	0.86	mg/kg		ND(0.00250)	ND(0.00250)	ND(0.00250)	ND(0.00250)	--	--	--	--	--	--
Chloroethane	NSE	NSE	NSE	NSE	NSE	mg/kg		ND(0.00500)	ND(0.00500)	ND(0.00500)	ND(0.00500)	--	--	--	--	--	--
Chloroform	NSE	NSE	32	800	0.074	mg/kg		ND(0.00250)	ND(0.00250)	ND(0.00250)	ND(0.00250)	--	--	--	--	--	--
Chloromethane	NSE	NSE	NSE	NSE	NSE	mg/kg		ND(0.0125)	ND(0.0125)	ND(0.0125)	ND(0.0125)	--	--	--	--	--	--
Dibromochloromethane	NSE	NSE	12	1600	0.028	mg/kg		ND(0.00250)	ND(0.00250)	ND(0.00250)	ND(0.00250)	--	--	--	--	--	--
Dibromomethane	NSE	NSE	NSE	800	0.36	mg/kg		ND(0.00500)	ND(0.00500)	ND(0.00500)	ND(0.00500)	--	--	--	--	--	--
Dichlorodifluoromethane	NSE	NSE	NSE	16000	38	mg/kg		ND(0.00250)	ND(0.00250)	ND(0.00250)	ND(0.00250)	--	--	--	--	--	--
Ethylbenzene	6	6	NSE	8000	5.9	mg/kg		0.00340	ND(0.00250)	ND(0.00250)	ND(0.00250)	--	--	--	--	--	--
Hexachlorobutadiene	NSE	NSE	13	80	0.6	mg/kg		ND(0.0250)	ND(0.0250)	ND(0.0250)	ND(0.0250)	--	--	--	--	--	--
Isopropyl Benzene	NSE	NSE	NSE	8000	15	mg/kg		ND(0.00250)	ND(0.00250)	ND(0.00250)	ND(0.00250)	--	--	--	--	--	--
Isopropyl Ether	NSE	NSE	NSE	NSE	NSE	mg/kg		ND(0.00100)	ND(0.00100)	ND(0.00100)	ND(0.00100)	--	--	--	--	--	--
Methyl Ethyl Ketone (MEK)	NSE	NSE	NSE	48000	20	mg/kg		0.143	0.104	ND(0.100)	ND(0.100)	--	--	--	--	--	--
Methyl Isobutyl Ketone (MIBK)	NSE	NSE	NSE	6400	2.7	mg/kg		ND(0.0250)	ND(0.0250)	ND(0.0250)	ND(0.0250)	--	--	--	--	--	--
Methyl Tert-Butyl Ether	0.1	0.1	560	NSE	0.1	mg/kg		ND(0.00100)	ND(0.00100)	ND(0.00100)	ND(0.00100)	--	--	--	--	--	--
Methylene Chloride	0.02	0.02	94	480	0.021	mg/kg		ND(0.0250)	ND(0.0250)	ND(0.0250)	ND(0.0250)	--	--	--	--	--	--

Table 3
Summary of Test Pit Analytical Data
Boeing- Frederickson Property
18001 Canyon Road East
Puyallup, WA
Vertex Project No. 71555

CHEMICAL NAME	Method A Industrial Properties	Method A Unrestricted Land Use	Method B Cancer	Method B Noncancer	Soil: Protective of Groundwater	Units	Original Test Pit Sample ID		TP-103	TP-103	TP-125A	TP-125A	TP-125B	TP-125B	TP-125C	TP-125C	TP-125D
							TP-94 7	TP-94 7	TP-103	TP-103	TP-125A	TP-125A	TP-125B	TP-125B	TP-125C	TP-125C	TP-125D
							Revised Test Pit Sample ID	Revised Test Pit Sample ID	(0-6 in)	(3.5 ft)	(0-1 ft)	(5 ft)	(0-1 ft)	(6 ft)	(0-1 ft)	(5 ft)	TP-56
							TP-34-7	TP-34-7	TP-41	TP-41	TP-56	TP-56	TP-56	TP-56	TP-56	TP-56	TP-56
							Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date
							6/16/2021	6/16/2021	6/16/2021	6/16/2021	6/17/2021	6/17/2021	6/17/2021	6/17/2021	6/17/2021	6/17/2021	6/17/2021
Naphthalene	5	5	NSE	1600	4.5	mg/kg	0.0184	0.0245	ND(0.0125)	ND(0.0125)	--	--	--	--	--	--	--
n-Butylbenzene	NSE	NSE	NSE	4000	14	mg/kg	ND(0.0125)	ND(0.0125)	ND(0.0125)	ND(0.0125)	--	--	--	--	--	--	--
o-Chlorotoluene	NSE	NSE	NSE	1600	1.9	mg/kg	ND(0.00250)	ND(0.00250)	ND(0.00250)	ND(0.00250)	--	--	--	--	--	--	--
p-Chlorotoluene (4-Chlorotoluene)	NSE	NSE	NSE	NSE	NSE	mg/kg	ND(0.00500)	ND(0.00500)	ND(0.00500)	ND(0.00500)	--	--	--	--	--	--	--
p-Cymene	NSE	NSE	NSE	NSE	NSE	mg/kg	0.510	0.338	ND(0.00500)	ND(0.00500)	--	--	--	--	--	--	--
Propylbenzene	NSE	NSE	NSE	8000	16	mg/kg	ND(0.00500)	ND(0.00500)	ND(0.00500)	ND(0.00500)	--	--	--	--	--	--	--
Sec-Butylbenzene	NSE	NSE	NSE	8000	25	mg/kg	ND(0.0125)	ND(0.0125)	ND(0.0125)	ND(0.0125)	--	--	--	--	--	--	--
Styrene	NSE	NSE	NSE	16000	2.2	mg/kg	ND(0.0125)	ND(0.0125)	ND(0.0125)	ND(0.0125)	--	--	--	--	--	--	--
Tert-Butylbenzene	NSE	NSE	NSE	8000	20	mg/kg	ND(0.00500)	ND(0.00500)	ND(0.00500)	ND(0.00500)	--	--	--	--	--	--	--
Tetrachloroethane	NSE	NSE	5	1600	0.0012	mg/kg	ND(0.00250)	ND(0.00250)	ND(0.00250)	ND(0.00250)	--	--	--	--	--	--	--
Tetrachloroethylene (PCE)	0.05	0.05	480	480	0.05	mg/kg	ND(0.00250)	ND(0.00250)	ND(0.00250)	ND(0.00250)	--	--	--	--	--	--	--
Toluene	7	7	NSE	6400	4.5	mg/kg	0.0824	0.00858	ND(0.00500)	ND(0.00500)	--	--	--	--	--	--	--
Trichloroethylene (TCE)	0.03	0.03	12	40	0.025	mg/kg	ND(0.00100)	ND(0.00100)	ND(0.00100)	ND(0.00100)	--	--	--	--	--	--	--
Trichlorofluoromethane	NSE	NSE	NSE	24000	23	mg/kg	ND(0.00250)	ND(0.00250)	ND(0.00250)	ND(0.00250)	--	--	--	--	--	--	--
Vinyl Chloride	NSE	NSE	0.67	240	0.0017	mg/kg	ND(0.00250)	ND(0.00250)	ND(0.00250)	ND(0.00250)	--	--	--	--	--	--	--
Xylenes (Mixed Isomers)	9	9	NSE	16000	14	mg/kg	0.0170	0.00828	ND(0.00650)	ND(0.00650)	--	--	--	--	--	--	--
Semivolatile Organic Compounds (SVOCs)																	
1-Methylnaphthalene	NSE	NSE	34	5600	0.082	mg/kg	--	0.0950	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	NSE	NSE	NSE	6400	34	mg/kg	--	ND(0.0932)	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	NSE	NSE	NSE	320	1.7	mg/kg	--	ND(0.0932)	--	--	--	--	--	--	--	--	--
Acenaphthene	NSE	NSE	NSE	4800	98	mg/kg	--	ND(0.0280)	--	--	--	--	--	--	--	--	--
Acenaphthylene	NSE	NSE	NSE	NSE	NSE	mg/kg	--	ND(0.0280)	--	--	--	--	--	--	--	--	--
Anthracene	NSE	NSE	NSE	24000	2300	mg/kg	--	ND(0.0280)	--	--	--	--	--	--	--	--	--
Benzo(a)Anthracene	NSE	NSE	NSE	NSE	NSE	mg/kg	--	ND(0.0280)	--	--	--	--	--	--	--	--	--
Benzo(a)Pyrene	2	0.1	0.19	24	3.9	mg/kg	--	ND(0.0280)	--	--	--	--	--	--	--	--	--
Benzo(b)Fluoranthene	NSE	NSE	NSE	NSE	NSE	mg/kg	--	ND(0.0280)	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)Perylene	NSE	NSE	NSE	NSE	NSE	mg/kg	--	ND(0.0280)	--	--	--	--	--	--	--	--	--
Benzo(k)Fluoranthene	NSE	NSE	NSE	NSE	NSE	mg/kg	--	ND(0.0280)	--	--	--	--	--	--	--	--	--
Chrysene	NSE	NSE	NSE	NSE	NSE	mg/kg	--	ND(0.0280)	--	--	--	--	--	--	--	--	--
Dibenzo(a,h)Anthracene	NSE	NSE	NSE	NSE	NSE	mg/kg	--	ND(0.0280)	--	--	--	--	--	--	--	--	--
Fluoranthene	NSE	NSE	NSE	3200	630	mg/kg	--	ND(0.0280)	--	--	--	--	--	--	--	--	--
Fluorene	NSE	NSE	NSE	3200	100	mg/kg	--	ND(0.0280)	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)Pyrene	NSE	NSE	NSE	NSE	NSE	mg/kg	--	ND(0.0280)	--	--	--	--	--	--	--	--	--
Naphthalene	5	5	NSE	1600	4.5	mg/kg	--	ND(0.0932)	--	--	--	--	--	--	--	--	--
Phenanthrene	NSE	NSE	NSE	NSE	NSE	mg/kg	--	ND(0.0280)	--	--	--	--	--	--	--	--	--
Pyrene	NSE	NSE	NSE	2400	650	mg/kg	--	ND(0.0280)	--	--	--	--	--	--	--	--	--
Semivolatile Organic Compounds (SVOCs), Explosives																	
2,4,6-Trinitrotoluene (TNT)	NSE	NSE	33	40	0.18	mg/kg	--	--	--	--	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)
2,4-Dinitrotoluene	NSE	NSE	3.2	160	0.0017	mg/kg	--	--	--	--	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)
2,6-Dinitrotoluene	NSE	NSE	0.67	24	0.00031	mg/kg	--	--	--	--	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)
2-Amino-4,6-Dinitrotoluene	NSE	NSE	NSE	8	NSE	mg/kg	--	--	--	--	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)
3-Nitrotoluene	NSE	NSE	NSE	8	0.009	mg/kg	--	--	--	--	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)
4-Amino-2,6-Dinitrotoluene	NSE	NSE	NSE	8	NSE	mg/kg	--	--	--	--	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)
Cyclonite (RDX)	NSE	NSE	13	320	NSE	mg/kg	--	--	--	--	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)
HMX	NSE	NSE	NSE	4000	NSE	mg/kg	--	--	--	--	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)
m-Dinitrobenzene	NSE	NSE	NSE	8	0.018	mg/kg	--	--	--	--	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)
Nitrobenzene	NSE	NSE	NSE	160	0.1	mg/kg	--	--	--	--	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)
Nitroglycerine	NSE	NSE	59	8	0.01	mg/kg	--	--	--	--	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)

Table 3
Summary of Test Pit Analytical Data
 Boeing- Frederickson Property
 18001 Canyon Road East
 Puyallup, WA
 Vertex Project No. 71555

CHEMICAL NAME	Method A Industrial Properties	Method A Unrestricted Land Use	Method B Cancer	Method B Noncancer	Soil: Protective of Groundwater	Units	Original Test Pit Sample ID	TP-94 7	TP-94 7	TP-103 (0-6 in)	TP-103 (3.5 ft)	TP-125A (0-1 ft)	TP-125A (5 ft)	TP-125B (0-1 ft)	TP-125B (6 ft)	TP-125C (0-1 ft)	TP-125C (5 ft)	TP-125D	
							Revised Test Pit Sample ID	TP-34-7	TP-34-7	TP-41	TP-41	TP-56	TP-56	TP-56	TP-56	TP-56	TP-56	TP-56	TP-56
							Sample Date	6/16/2021	6/16/2021	6/16/2021	6/16/2021	6/17/2021	6/17/2021	6/17/2021	6/17/2021	6/17/2021	6/17/2021	6/17/2021	6/17/2021
o-Nitrotoluene	NSE	NSE	4.5	72	0.0023	mg/kg	--	--	--	--	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	
Pentaerythritol Tetranitrate (Petn)	NSE	NSE	NSE	NSE	NSE	mg/kg	--	--	--	--	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	
p-Nitrotoluene	NSE	NSE	63	320	0.031	mg/kg	--	--	--	--	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	
Tetryl	NSE	NSE	NSE	160	NSE	mg/kg	--	--	--	--	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	
Trinitrobenzene	NSE	NSE	NSE	2400	18	mg/kg	--	--	--	--	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	
General Chemistry																			
Solids, Total	NSE	NSE	NSE	NSE	NSE	percent	--	--	--	--	--	--	--	--	--	--	--	--	

Table 3
Summary of Test Pit Analytical Data
 Boeing- Frederickson Property
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 Puyallup, WA
 Vertex Project No. 71555

CHEMICAL NAME	Method A Industrial Properties	Method A Unrestricted Land Use	Method B Cancer	Method B Noncancer	Soil: Protective of Groundwater	Units	Original Test Pit Sample ID	TP-94 7	TP-94 7	TP-103 (0-6 in)	TP-103 (3.5 ft)	TP-125A (0-1 ft)	TP-125A (5 ft)	TP-125B (0-1 ft)	TP-125B (6 ft)	TP-125C (0-1 ft)	TP-125C (5 ft)	TP-125D	
							Revised Test Pit Sample ID	TP-34-7	TP-34-7	TP-41	TP-41	TP-56	TP-56	TP-56	TP-56	TP-56	TP-56	TP-56	TP-56
							Sample Date	6/16/2021	6/16/2021	6/16/2021	6/16/2021	6/17/2021	6/17/2021	6/17/2021	6/17/2021	6/17/2021	6/17/2021	6/17/2021	6/17/2021
NW TPH-Gasoline Range																			
TPHG C6 - C12	100	100	NSE	NSE	NSE	mg/kg	--	9.73	--	--	--	--	--	--	--	--	--	--	--
NW TPH-Diesel/Gasoline Range																			
RESIDUAL RANGE ORGANICS	2000	2000	NSE	NSE	NSE	mg/kg	--	1220	--	--	--	--	--	--	--	--	--	--	--
TPH Diesel Range Organics	2000	2000	NSE	NSE	NSE	mg/kg	--	461	--	--	--	--	--	--	--	--	--	--	--
Perchlorate And Perchlorate Salts																			
Perchlorate And Perchlorate Salts	NSE	NSE	NSE	56	NSE	mg/kg	--	--	--	--	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)	

- Notes:
- mg/kg=milligram per kilogram
 - ND = Not Detected above laboratory reporting limits shown in parenthesis
 - -- = Not Analyzed
 - NSE = No Standard Exists
 - SNC = Standard Not Calculated
 - Highlighted values exceeds the applicable Cleanup Criteria
 - Full analytical results, including QA/QC information and data flags, are detailed in the laboratory analytical report

Table 3
Summary of Test Pit Analytical Data
Boeing- Frederickson Property
18001 Canyon Road East
Puyallup, WA
Vertex Project No. 71555

CHEMICAL NAME	Method A Industrial Properties	Method A Unrestricted Land Use	Method B Cancer	Method B Noncancer	Soil: Protective of Groundwater	Units	Original Test Pit Sample ID	TP-125D (0-1 ft)	TP-125E	TP-125E (0-1 ft)	TP-125F	TP-125F (0-1 ft)
							Revised Test Pit Sample ID	TP-56	TP-56	TP-56	TP-56	
							Sample Date	6/17/2021	6/17/2021	6/17/2021	6/17/2021	
Volatile Organic Compounds (VOCs)												
1,1,1,2-Tetrachloroethane	NSE	NSE	38	2400	0.0098	mg/kg		--	--	--	--	--
1,1,1-Trichloroethane (1,1,1-TCA)	2	2	NSE	160000	1.5	mg/kg		--	--	--	--	--
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon-113)	NSE	NSE	NSE	2400000	7600	mg/kg		--	--	--	--	--
1,1,2-Trichloroethane	NSE	NSE	18	320	0.017	mg/kg		--	--	--	--	--
1,1-Dichloroethane (1,1-DCA)	NSE	NSE	180	16000	0.041	mg/kg		--	--	--	--	--
1,1-Dichloroethene (1,1-DCE)	NSE	NSE	NSE	4000	0.046	mg/kg		--	--	--	--	--
1,1-Dichloropropene	NSE	NSE	NSE	NSE	NSE	mg/kg		--	--	--	--	--
1,2,3-Trichlorobenzene	NSE	NSE	NSE	64	0.2	mg/kg		--	--	--	--	--
1,2,3-Trichloropropane	NSE	NSE	0.0063	320	0.0000024	mg/kg		--	--	--	--	--
1,2,3-Trimethylbenzene	NSE	NSE	NSE	800	1.3	mg/kg		--	--	--	--	--
1,2,4-Trichlorobenzene	NSE	NSE	34	800	0.56	mg/kg		--	--	--	--	--
1,2,4-Trimethylbenzene	NSE	NSE	NSE	800	1.3	mg/kg		--	--	--	--	--
1,2-Dibromo-3-Chloropropane	NSE	NSE	1.3	16	0.0013	mg/kg		--	--	--	--	--
1,2-Dibromoethane	0.005	0.005	0.5	720	0.00027	mg/kg		--	--	--	--	--
1,2-Dichlorobenzene	NSE	NSE	NSE	7200	7	mg/kg		--	--	--	--	--
1,2-Dichloroethane (1,2-DCA)	NSE	NSE	11	480	0.023	mg/kg		--	--	--	--	--
1,2-Dichloroethylene, cis (1,2-DCE, cis)	NSE	NSE	NSE	160	0.078	mg/kg		--	--	--	--	--
1,2-Dichloroethylene, trans (1,2-DCE, trans)	NSE	NSE	NSE	1600	0.52	mg/kg		--	--	--	--	--
1,2-Dichloropropane	NSE	NSE	27	3200	0.025	mg/kg		--	--	--	--	--
1,3,5-Trimethylbenzene	NSE	NSE	NSE	800	1.3	mg/kg		--	--	--	--	--
1,3-Dichlorobenzene (1,3-DCB)	NSE	NSE	NSE	NSE	NSE	mg/kg		--	--	--	--	--
1,3-Dichloropropane	NSE	NSE	NSE	1600	0.88	mg/kg		--	--	--	--	--
1,3-Dichloropropene, cis	NSE	NSE	NSE	NSE	NSE	mg/kg		--	--	--	--	--
1,3-Dichloropropene, trans	NSE	NSE	NSE	NSE	NSE	mg/kg		--	--	--	--	--
1,4-Dichlorobenzene	NSE	NSE	190	5600	1.2	mg/kg		--	--	--	--	--
2,2-Dichloropropane	NSE	NSE	NSE	NSE	NSE	mg/kg		--	--	--	--	--
Acetone	NSE	NSE	NSE	72000	29	mg/kg		--	--	--	--	--
Acrylonitrile	NSE	NSE	1.9	3200	0.00034	mg/kg		--	--	--	--	--
Benzene	0.03	0.03	18	320	0.027	mg/kg		--	--	--	--	--
Bromobenzene	NSE	NSE	NSE	640	0.56	mg/kg		--	--	--	--	--
Bromodichloromethane	NSE	NSE	16	1600	0.036	mg/kg		--	--	--	--	--
Bromoform	NSE	NSE	130	1600	0.36	mg/kg		--	--	--	--	--
Bromomethane	NSE	NSE	NSE	110	0.05	mg/kg		--	--	--	--	--
Carbon Tetrachloride	NSE	NSE	14	320	0.042	mg/kg		--	--	--	--	--
Chlorobenzene	NSE	NSE	NSE	1600	0.86	mg/kg		--	--	--	--	--
Chloroethane	NSE	NSE	NSE	NSE	NSE	mg/kg		--	--	--	--	--
Chloroform	NSE	NSE	32	800	0.074	mg/kg		--	--	--	--	--
Chloromethane	NSE	NSE	NSE	NSE	NSE	mg/kg		--	--	--	--	--
Dibromochloromethane	NSE	NSE	12	1600	0.028	mg/kg		--	--	--	--	--
Dibromomethane	NSE	NSE	NSE	800	0.36	mg/kg		--	--	--	--	--
Dichlorodifluoromethane	NSE	NSE	NSE	16000	38	mg/kg		--	--	--	--	--
Ethylbenzene	6	6	NSE	8000	5.9	mg/kg		--	--	--	--	--
Hexachlorobutadiene	NSE	NSE	13	80	0.6	mg/kg		--	--	--	--	--
Isopropyl Benzene	NSE	NSE	NSE	8000	15	mg/kg		--	--	--	--	--
Isopropyl Ether	NSE	NSE	NSE	NSE	NSE	mg/kg		--	--	--	--	--
Methyl Ethyl Ketone (MEK)	NSE	NSE	NSE	48000	20	mg/kg		--	--	--	--	--
Methyl Isobutyl Ketone (MIBK)	NSE	NSE	NSE	6400	2.7	mg/kg		--	--	--	--	--
Methyl Tert-Butyl Ether	0.1	0.1	560	NSE	0.1	mg/kg		--	--	--	--	--
Methylene Chloride	0.02	0.02	94	480	0.021	mg/kg		--	--	--	--	--

Table 3
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Boeing- Frederickson Property
18001 Canyon Road East
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Vertex Project No. 71555

CHEMICAL NAME	Method A Industrial Properties	Method A Unrestricted Land Use	Method B Cancer	Method B Noncancer	Soil: Protective of Groundwater	Units	Original Test Pit Sample ID	TP-125D (0-1 ft)	TP-125E	TP-125E (0-1 ft)	TP-125F	TP-125F (0-1 ft)
							Revised Test Pit Sample ID	TP-56	TP-56	TP-56	TP-56	
							Sample Date	6/17/2021	6/17/2021	6/17/2021	6/17/2021	
Naphthalene	5	5	NSE	1600	4.5	mg/kg		--	--	--	--	--
n-Butylbenzene	NSE	NSE	NSE	4000	14	mg/kg		--	--	--	--	--
o-Chlorotoluene	NSE	NSE	NSE	1600	1.9	mg/kg		--	--	--	--	--
p-Chlorotoluene (4-Chlorotoluene)	NSE	NSE	NSE	NSE	NSE	mg/kg		--	--	--	--	--
p-Cymene	NSE	NSE	NSE	NSE	NSE	mg/kg		--	--	--	--	--
Propylbenzene	NSE	NSE	NSE	8000	16	mg/kg		--	--	--	--	--
Sec-Butylbenzene	NSE	NSE	NSE	8000	25	mg/kg		--	--	--	--	--
Styrene	NSE	NSE	NSE	16000	2.2	mg/kg		--	--	--	--	--
Tert-Butylbenzene	NSE	NSE	NSE	8000	20	mg/kg		--	--	--	--	--
Tetrachloroethane	NSE	NSE	5	1600	0.0012	mg/kg		--	--	--	--	--
Tetrachloroethylene (PCE)	0.05	0.05	480	480	0.05	mg/kg		--	--	--	--	--
Toluene	7	7	NSE	6400	4.5	mg/kg		--	--	--	--	--
Trichloroethylene (TCE)	0.03	0.03	12	40	0.025	mg/kg		--	--	--	--	--
Trichlorofluoromethane	NSE	NSE	NSE	24000	23	mg/kg		--	--	--	--	--
Vinyl Chloride	NSE	NSE	0.67	240	0.0017	mg/kg		--	--	--	--	--
Xylenes (Mixed Isomers)	9	9	NSE	16000	14	mg/kg		--	--	--	--	--
Semivolatile Organic Compounds (SVOCs)												
1-Methylnaphthalene	NSE	NSE	34	5600	0.082	mg/kg		--	--	--	--	--
2-Chloronaphthalene	NSE	NSE	NSE	6400	34	mg/kg		--	--	--	--	--
2-Methylnaphthalene	NSE	NSE	NSE	320	1.7	mg/kg		--	--	--	--	--
Acenaphthene	NSE	NSE	NSE	4800	98	mg/kg		--	--	--	--	--
Acenaphthylene	NSE	NSE	NSE	NSE	NSE	mg/kg		--	--	--	--	--
Anthracene	NSE	NSE	NSE	24000	2300	mg/kg		--	--	--	--	--
Benzo(a)Anthracene	NSE	NSE	NSE	NSE	NSE	mg/kg		--	--	--	--	--
Benzo(a)Pyrene	2	0.1	0.19	24	3.9	mg/kg		--	--	--	--	--
Benzo(b)Fluoranthene	NSE	NSE	NSE	NSE	NSE	mg/kg		--	--	--	--	--
Benzo(g,h,i)Perylene	NSE	NSE	NSE	NSE	NSE	mg/kg		--	--	--	--	--
Benzo(k)Fluoranthene	NSE	NSE	NSE	NSE	NSE	mg/kg		--	--	--	--	--
Chrysene	NSE	NSE	NSE	NSE	NSE	mg/kg		--	--	--	--	--
Dibenzo(a,h)Anthracene	NSE	NSE	NSE	NSE	NSE	mg/kg		--	--	--	--	--
Fluoranthene	NSE	NSE	NSE	3200	630	mg/kg		--	--	--	--	--
Fluorene	NSE	NSE	NSE	3200	100	mg/kg		--	--	--	--	--
Indeno(1,2,3-cd)Pyrene	NSE	NSE	NSE	NSE	NSE	mg/kg		--	--	--	--	--
Naphthalene	5	5	NSE	1600	4.5	mg/kg		--	--	--	--	--
Phenanthrene	NSE	NSE	NSE	NSE	NSE	mg/kg		--	--	--	--	--
Pyrene	NSE	NSE	NSE	2400	650	mg/kg		--	--	--	--	--
Semivolatile Organic Compounds (SVOCs), Explosives												
2,4,6-Trinitrotoluene (TNT)	NSE	NSE	33	40	0.18	mg/kg		ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.505)
2,4-Dinitrotoluene	NSE	NSE	3.2	160	0.0017	mg/kg		ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.505)
2,6-Dinitrotoluene	NSE	NSE	0.67	24	0.00031	mg/kg		ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.505)
2-Amino-4,6-Dinitrotoluene	NSE	NSE	NSE	8	NSE	mg/kg		ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.505)
3-Nitrotoluene	NSE	NSE	NSE	8	0.009	mg/kg		ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.505)
4-Amino-2,6-Dinitrotoluene	NSE	NSE	NSE	8	NSE	mg/kg		ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.505)
Cyclonite (RDX)	NSE	NSE	13	320	NSE	mg/kg		ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.505)
HMX	NSE	NSE	NSE	4000	NSE	mg/kg		ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.505)
m-Dinitrobenzene	NSE	NSE	NSE	8	0.018	mg/kg		ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.505)
Nitrobenzene	NSE	NSE	NSE	160	0.1	mg/kg		ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.505)
Nitroglycerine	NSE	NSE	59	8	0.01	mg/kg		ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.02)

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							Revised Test Pit Sample ID	TP-56	TP-56	TP-56	TP-56	
							Sample Date	6/17/2021	6/17/2021	6/17/2021	6/17/2021	
o-Nitrotoluene	NSE	NSE	4.5	72	0.0023	mg/kg		ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.505)
Pentaerythritol Tetranitrate (Petn)	NSE	NSE	NSE	NSE	NSE	mg/kg		ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.02)
p-Nitrotoluene	NSE	NSE	63	320	0.031	mg/kg		ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.505)
Tetryl	NSE	NSE	NSE	160	NSE	mg/kg		ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.505)
Trinitrobenzene	NSE	NSE	NSE	2400	18	mg/kg		ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.505)
General Chemistry												
Solids, Total	NSE	NSE	NSE	NSE	NSE	percent		--	--	--	94.8	--

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CHEMICAL NAME	Method A Industrial Properties	Method A Unrestricted Land Use	Method B Cancer	Method B Noncancer	Soil: Protective of Groundwater	Units	Original Test Pit Sample ID	TP-125D (0-1 ft)	TP-125E (0-1 ft)	TP-125E (0-1 ft)	TP-125F (0-1 ft)	TP-125F (0-1 ft)
							Revised Test Pit Sample ID	TP-56	TP-56	TP-56	TP-56	TP-56
							Sample Date	6/17/2021	6/17/2021	6/17/2021	6/17/2021	6/17/2021
NW TPH-Gasoline Range												
TPHG C6 - C12	100	100	NSE	NSE	NSE	mg/kg	--	--	--	--	--	--
NW TPH-Diesel/Gasoline Range												
RESIDUAL RANGE ORGANICS	2000	2000	NSE	NSE	NSE	mg/kg	--	--	--	--	--	--
TPH Diesel Range Organics	2000	2000	NSE	NSE	NSE	mg/kg	--	--	--	--	--	--
Perchlorate And Perchlorate Salts												
Perchlorate And Perchlorate Salts	NSE	NSE	NSE	56	NSE	mg/kg	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)

- Notes:
- mg/kg=milligram per kilogram
 - ND = Not Detected above laboratory reporting limits shown in parenthesis
 - -- = Not Analyzed
 - NSE = No Standard Exists
 - SNC = Standard Not Calculated
 - Highlighted values exceeds the applicable Cleanup Criteria
 - Full analytical results, including QA/QC information and data flags, are detailed in the laboratory analytical report

Table 3
Summary of Deep Soil Boring Analytical Data
Boeing- Frederickson Property
18001 Canyon Road East
Puyallup, WA
Vertex Project No. 71555

CHEMICAL NAME	Method A Industrial Properties	Method A Unrestricted Land Use	Method B Cancer	Method B Noncancer	Soil: Protective of Groundwater	Units	Sample ID	VS B1-2	VS B1-17	VS B1-32	VS B1-57	VS B2-2	VS B2-17	VS B2-32	VS B3-2	VS B3-17	VS B3-32	VS B4-7	VS B4-17	VS B4-32	VS B5-22	VS B5-32	VS B5-7	VS B6-7	VS B6-27	VS B6-37	
							Sample Depth (ft bgs)	2	17	32	57	2	17	32	2	17	32	7	17	32	22	32	7	7	27	37	
							Sample Date	7/12/2021	7/12/2021	7/12/2021	7/12/2021	7/13/2021	7/13/2021	7/13/2021	7/13/2021	7/13/2021	7/13/2021	7/13/2021	7/13/2021	7/13/2021	7/13/2021	7/14/2021	7/14/2021	7/14/2021	7/14/2021	7/14/2021	7/14/2021
Phenanthrene	NSE	NSE	NSE	NSE	NSE	mg/kg	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)
Phenol	NSE	NSE	NSE	24000	11	mg/kg	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)
p-Nitrophenol	NSE	NSE	NSE	NSE	NSE	mg/kg	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)	ND(0.333)
Pyrene	NSE	NSE	NSE	2400	650	mg/kg	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)	ND(0.0333)
Metals																											
Aluminum	NSE	NSE	NSE	80000	480000	mg/kg	16700	11500	14100	16300	15500	12500	8880	17400	15000	14400	15700	12500	10400	13000	12800	17000	14600	12000	13400		
Antimony	NSE	NSE	NSE	32	5.4	mg/kg	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	
Arsenic	20	20	0.67	24	2.9	mg/kg	2.52	ND(2.00)	ND(2.00)	2.32	ND(2.00)	3.15	3.30	2.86	ND(2.00)	3.47	ND(2.00)	2.11	2.37	ND(2.00)	3.71	ND(2.00)	4.17	ND(2.00)	2.86		
Barium	NSE	NSE	NSE	16000	1600	mg/kg	118	53.0	60.3	80.6	71.0	44.0	31.9	71.4	66.1	59.8	55.7	48.2	61.8	66.2	72.5	138	61.8	77.1			
Beryllium	NSE	NSE	NSE	160	63	mg/kg	ND(0.200)	ND(0.200)	ND(0.200)	ND(0.200)	ND(0.200)	ND(0.200)	ND(0.200)	ND(0.200)	ND(0.200)	ND(0.200)	ND(0.200)	ND(0.200)	ND(0.200)	0.232	ND(0.200)	ND(0.200)	ND(0.200)	ND(0.200)	ND(0.200)		
Cadmium	NSE	2	NSE	NSE	NSE	mg/kg	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)		
Calcium	NSE	NSE	NSE	NSE	NSE	mg/kg	4480	3610	5730	6750	4170	3730	2390	5430	5860	3590	6760	3700	5550	5160	4070	6210	7270	4820	6320		
Chromium	NSE	2000/19 ¹	NSE	12,000/240 ²	NSE	mg/kg	17.0	12.7	21.4	67.7	24.0	14.0	9.23	19.1	10.6	12.4	16.5	21.0	68.9	45.1	23.1	18.2	15.2	324	16.4		
Cobalt	NSE	NSE	NSE	24	4.3	mg/kg	8.78	7.20	6.55	8.02	8.17	4.72	4.17	6.95	5.78	6.08	6.78	7.11	7.13	6.29	7.92	7.95	6.56	6.88	7.12		
Copper	NSE	NSE	NSE	3200	280	mg/kg	29.0	16.2	21.3	37.7	29.4	12.6	21.0	23.2	19.5	58.3	16.0	35.1	24.2	20.3	23.9	25.4	23.2	20.4			
Iron	NSE	NSE	NSE	56000	5600	mg/kg	23200	13800	19600	25500	25100	13800	15600	20800	17600	22400	19400	16500	29100	22000	17700	23700	17200	36400	18700		
Lead	1000	250	NSE	NSE	3000	mg/kg	2.97	2.42	2.40	2.49	3.19	1.78	4.18	2.77	1.86	5.09	1.77	1.89	1.38	3.14	2.35	2.90	2.22	1.31	2.80		
Magnesium	NSE	NSE	NSE	NSE	NSE	mg/kg	4760	3870	3940	5170	5300	3540	2450	4420	4890	4050	3870	4580	3590	3570	4000	5350	4070	3920	4520		
Manganese	NSE	NSE	NSE	NSE	NSE	mg/kg	306	261	267	313	249	198	191	276	247	288	256	282	266	282	255	322	254	318	239		
Mercury	2	2	NSE	NSE	2.1	mg/kg	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)	0.0459	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)		
Nickel	NSE	NSE	NSE	1600	130	mg/kg	20.9	16.6	16.9	23.5	20.2	17.1	10.7	18.0	14.9	14.2	20.4	33.7	17.7	16.7	34.8	17.5	16.6	33.7	19.5		
Potassium	NSE	NSE	NSE	NSE	NSE	mg/kg	1090	537	1000	1190	1530	1300	652	1120	1410	947	823	826	643	855	749	930	787	799	1230		
Selenium	NSE	NSE	NSE	400	5.2	mg/kg	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	2.73	ND(2.00)		
Silver	NSE	NSE	NSE	400	14	mg/kg	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)		
Sodium	NSE	NSE	NSE	NSE	NSE	mg/kg	533	344	910	917	560	466	359	824	940	435	935	261	838	625	273	825	707	513	925		
Thallium	NSE	NSE	NSE	0.8	0.23	mg/kg	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)		
Vanadium	NSE	NSE	NSE	400	1600	mg/kg	54.9	27.6	46.0	50.3	50.3	28.5	28.3	43.0	33.1	39.7	41.7	36.7	80.4	33.4	44.8	53.5	39.6	35.5	42.6		
Zinc	NSE	NSE	NSE	24000	6000	mg/kg	39.0	27.4	32.3	36.1	42.1	26.0	29.2	35.1	38.7	36.6	53.7	31.6	34.3	30.8	34.0	38.4	31.1	27.6	33.1		

- Notes:
- mg/kg=milligram per kilogram
 - ND = Not Detected above laboratory reporting limits shown in parenthesis
 - -- = Not Analyzed
 - NSE = No Standard Exists
 - SNC = Standard Not Calculated
 - Highlighted values exceeds the applicable Cleanup Criteria
 - Full analytical results, including QA/QC information and data flags, are detailed in the laboratory analytical report
 - ¹2,000 mg/kg Method A cleanup level for chromium III and 19 mg/kg Method A cleanup level for chromium VI.
 - ²12,000 mg/kg Method B non-cancer cleanup level for chromium III and 240 mg/kg Method B cleanup level for chromium VI.

Table 5
 Summary of Soil Gas Analytical Data
 Boeing- Frederickson Property
 18001 Canyon Road East
 Puyallup, WA
 Vertex Project No. 71555

CHEMICAL NAME	Sub-Slab Soil Gas Screening Level Method B Noncancer	Sub-Slab Soil Gas Screening Level Method B Cancer	Units	Sample ID	AMBIENT 1	AMBIENT 2	AMBIENT 3	AMBIENT 4	VSG 101	VSG 102	VSG 103	VSG 104	VSG 105	VSG 106	VSG 107	VSG 108	VSG 114	VSG 115	VSG 116	VSG 117	VSG 118	VSG 119	VSG109	VSG110	VSG112	VSG113
				Sample Date	7/6/2021	7/7/2021	7/8/2021	7/9/2021	7/7/2021	7/7/2021	7/7/2021	7/6/2021	7/6/2021	7/6/2021	7/6/2021	7/6/2021	7/6/2021	7/6/2021	7/6/2021	7/6/2021	7/6/2021	7/6/2021	7/6/2021	7/6/2021	7/6/2021	7/6/2021
			Lab ID	L1376242-04	L1376242-05	L1377074-01	L1377074-15	L1376242-06	L1376242-07	L1376242-08	L1376242-09	L1376242-10	L1376242-11	L1376242-12	L1376242-13	L1376242-14	L1376242-15	L1376242-16	L1376242-17	L1376242-18	L1376242-19	L1376242-01	L1376242-02	L1376242-03	L1377074-14	
Methyl Methacrylate	11000	NSE	µg/m ³	ND(0.819)	ND(0.819)	ND(0.819)	ND(0.819)	ND(0.819)	ND(0.819)	ND(0.819)	ND(0.819)	ND(0.819)	ND(0.819)	ND(0.819)	ND(0.819)	ND(0.819)	ND(0.819)	ND(0.819)	ND(0.819)	ND(0.819)	0.901	ND(0.819)	ND(0.819)	ND(0.819)	ND(0.819)	
Methyl Tert-Butyl Ether	46000	320	µg/m ³	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	
Methylene Chloride	9100	2200	µg/m ³	ND(0.694)	ND(0.694)	ND(0.694)	1.74	ND(0.694)	ND(0.694)	ND(0.694)	ND(0.694)	ND(0.694)	ND(0.694)	ND(0.694)	ND(0.694)	ND(0.694)	ND(0.694)	ND(0.694)	ND(0.694)	ND(0.694)	ND(0.694)	0.917	ND(0.694)	ND(0.694)	1.10	
Naphthalene	46	2.5	µg/m ³	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	
o-Chlorotoluene	NSE	NSE	µg/m ³	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	
o-Xylene	NSE	NSE	µg/m ³	ND(0.867)	ND(0.867)	ND(0.867)	0.945	ND(0.867)	ND(0.867)	ND(0.867)	ND(0.867)	ND(0.867)	ND(0.867)	ND(0.867)	ND(0.867)	ND(0.867)	ND(0.867)	ND(0.867)	ND(0.867)	ND(0.867)	ND(0.867)	4.08	2.01	ND(0.867)	ND(0.867)	
p/m-Xylene	NSE	NSE	µg/m ³	ND(1.73)	ND(1.73)	ND(1.73)	2.13	ND(1.73)	ND(1.73)	ND(1.73)	ND(1.73)	ND(1.73)	ND(1.73)	ND(1.73)	ND(1.73)	ND(1.73)	ND(1.73)	ND(1.73)	ND(1.73)	ND(1.73)	ND(1.73)	6.68	3.48	ND(1.73)	ND(1.73)	
Styrene	15000	NSE	µg/m ³	ND(0.851)	ND(0.851)	ND(0.851)	ND(0.851)	ND(0.851)	ND(0.851)	ND(0.851)	ND(0.851)	ND(0.851)	ND(0.851)	ND(0.851)	ND(0.851)	ND(0.851)	0.898	ND(0.851)	ND(0.851)	ND(0.851)	ND(0.851)	1.04	ND(0.851)	ND(0.851)	ND(0.851)	
Tetrachloroethane	NSE	1.4	µg/m ³	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	
Tetrachloroethylene (PCE)	610	320	µg/m ³	ND(1.36)	ND(1.36)	ND(1.36)	9.51	ND(1.36)	ND(1.36)	ND(1.36)	ND(1.36)	ND(1.36)	ND(1.36)	ND(1.36)	ND(1.36)	ND(1.36)	ND(1.36)	ND(1.36)	ND(1.36)	ND(1.36)	ND(1.36)	2.45	ND(1.36)	ND(1.36)	51.3	
Tetrahydrofuran	30000	NSE	µg/m ³	ND(0.590)	ND(0.590)	ND(0.590)	ND(0.590)	1.45	7.70	4.13	0.663	3.39	ND(0.590)	1.37	0.643	3.10	2.39	ND(0.590)	0.885	ND(0.590)	1.96	6.37	2.83	3.77	ND(0.590)	
Toluene	76000	NSE	µg/m ³	ND(1.88)	ND(1.88)	2.62	4.14	ND(1.88)	3.40	ND(1.88)	ND(1.88)	ND(1.88)	ND(1.88)	ND(1.88)	ND(1.88)	ND(1.88)	ND(1.88)	ND(1.88)	ND(1.88)	ND(1.88)	7.87	ND(1.88)	5.27	5.35	ND(1.88)	2.99
TPH Gasoline Range Organics	NSE	NSE	µg/m ³	ND(826)	ND(826)	ND(826)	ND(826)	ND(826)	ND(826)	ND(826)	ND(826)	ND(826)	ND(826)	ND(826)	ND(826)	ND(826)	917	ND(826)	ND(826)	ND(826)	ND(826)	ND(826)	1090	ND(826)	ND(826)	
Trichloroethylene (TCE)	30	11	µg/m ³	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	
Trichlorofluoromethane	11000	NSE	µg/m ³	ND(1.12)	ND(1.12)	1.41	1.36	ND(1.12)	ND(1.12)	ND(1.12)	ND(1.12)	ND(1.12)	ND(1.12)	ND(1.12)	ND(1.12)	ND(1.12)	1.12	1.26	ND(1.12)	ND(1.12)	ND(1.12)	1.19	ND(1.12)	ND(1.12)	1.83	
Vinyl Bromide	46	5.6	µg/m ³	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	
Vinyl Acetate	3000	NSE	µg/m ³	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	
Vinyl Chloride	1500	9.5	µg/m ³	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	
Total Petroleum Hydrocarbons (TPH)																										
Ethane	NSE	NSE	µg/m ³	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Ethylene	NSE	NSE	µg/m ³	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Methane	NSE	NSE	µg/m ³	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

- Notes:
- µg/m³ = microgram per cubic meter
 - ND = Not Detected above laboratory reporting limits shown in parenthesis
 - -- = Not Analyzed
 - NSE = No Standard Exists
 - SNC = Standard Not Calculated
 - Highlighted values exceeds the applicable Cleanup Criteria
 - Full analytical results, including QA/QC information and data flags, are detailed in the laboratory analytical report

Table 5
 Summary of Soil Gas Analytical Data
 Boeing- Frederickson Property
 18001 Canyon Road East
 Puyallup, WA
 Vertex Project No. 71555

CHEMICAL NAME	Sub-Slab Soil Gas Screening Level Method B Noncancer	Sub-Slab Soil Gas Screening Level Method B Cancer	Units	Sample ID	VSG120	VSG121	VSG122	VSG123	VSG124	VSG125	VSG126	VSG127	VSG128	VSG129	VSG130	VSG131	VSG132	VSG133	VSG134	VSG139	VSG140	VSG141	VSG142	VSG143	VSG144	VSG145	
				Sample Date	7/8/2021	7/8/2021	7/8/2021	7/8/2021	7/8/2021	7/8/2021	7/8/2021	7/8/2021	7/8/2021	7/8/2021	7/8/2021	7/8/2021	7/8/2021	7/8/2021	7/8/2021	7/9/2021	7/9/2021	7/9/2021	7/9/2021	7/9/2021	7/9/2021	7/9/2021	7/9/2021
			Lab ID	L1377074-02	L1377074-03	L1377074-04	L1377074-05	L1377074-06	L1377074-07	L1377074-08	L1377074-09	L1377074-10	L1377074-11	L1377074-12	L1377074-13	L1377074-16	L1377074-17	L1377074-18	L1377074-19	L1377074-20	L1377074-21	L1377074-22	L1377074-23	L1377074-24	107309-01		
Methyl Methacrylate	11000	NSE	µg/m ³	ND(0.819)	ND(0.819)	ND(0.819)	ND(0.819)	ND(0.819)	ND(0.819)	ND(0.819)	ND(0.819)	ND(0.819)	0.925	ND(0.819)	ND(0.819)	ND(0.819)	ND(0.819)	ND(0.819)	0.889	2.04	1.11	ND(0.819)	1.94	2.29	ND(0.819)	ND(23)	
Methyl Tert-Butyl Ether	46000	320	µg/m ³	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(0.721)	ND(10)	
Methylene Chloride	9100	2200	µg/m ³	ND(0.694)	ND(0.694)	ND(0.694)	ND(0.694)	ND(0.694)	ND(0.694)	ND(0.694)	ND(0.694)	ND(0.694)	ND(0.694)	ND(0.694)	ND(0.694)	ND(0.694)	ND(0.694)	ND(0.694)	ND(0.694)	ND(0.694)	ND(0.694)	ND(0.694)	ND(0.694)	ND(0.694)	ND(0.694)	ND(200)	
Naphthalene	46	2.5	µg/m ³	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(3.30)	ND(1.5)	
o-Chlorotoluene	NSE	NSE	µg/m ³	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	ND(1.03)	NA	
o-Xylene	NSE	NSE	µg/m ³	0.988	ND(0.867)	ND(0.867)	ND(0.867)	ND(0.867)	ND(0.867)	ND(0.867)	ND(0.867)	1.12	ND(0.867)	0.967	ND(0.867)	0.919	ND(0.867)	ND(0.867)	ND(0.867)	0.928	ND(0.867)	ND(0.867)	ND(0.867)	1.05	1.09	ND(2.5)	
p/m-Xylene	NSE	NSE	µg/m ³	2.09	ND(1.73)	ND(1.73)	ND(1.73)	ND(1.73)	ND(1.73)	ND(1.73)	ND(1.73)	ND(1.73)	ND(1.73)	ND(1.73)	ND(1.73)	1.76	ND(1.73)	2.15	ND(1.73)	2.05	ND(1.73)	ND(1.73)	ND(1.73)	2.27	2.34	ND(5)	
Styrene	15000	NSE	µg/m ³	ND(0.851)	ND(0.851)	ND(0.851)	ND(0.851)	ND(0.851)	ND(0.851)	ND(0.851)	ND(0.851)	ND(0.851)	ND(0.851)	ND(0.851)	ND(0.851)	ND(0.851)	ND(0.851)	ND(0.851)	ND(0.851)	ND(0.851)	ND(0.851)	ND(0.851)	0.863	1.52	ND(0.851)	ND(4.9)	
Tetrachloroethane	NSE	1.4	µg/m ³	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	ND(1.37)	NA	
Tetrachloroethylene (PCE)	610	320	µg/m ³	ND(1.36)	ND(1.36)	ND(1.36)	ND(1.36)	ND(1.36)	ND(1.36)	ND(1.36)	ND(1.36)	1.53	ND(1.36)	7.67	ND(1.36)	10.7	ND(1.36)	45.5	ND(1.36)	ND(1.36)	ND(1.36)	ND(1.36)	ND(1.36)	ND(1.36)	4.32	ND(1.36)	ND(39)
Tetrahydrofuran	30000	NSE	µg/m ³	ND(0.590)	ND(0.590)	ND(0.590)	ND(0.590)	ND(0.590)	ND(0.590)	ND(0.590)	ND(0.590)	ND(0.590)	ND(0.590)	ND(0.590)	ND(0.590)	ND(0.590)	ND(0.590)	ND(0.590)	ND(0.590)	ND(0.590)	ND(0.590)	3.24	ND(0.590)	ND(0.590)	ND(0.590)	3.6	
Toluene	76000	NSE	µg/m ³	4.82	ND(1.88)	2.67	ND(1.88)	3.53	2.58	1.98	2.46	3.21	3.41	2.66	3.70	ND(1.88)	3.30	ND(1.88)	2.63	ND(1.88)	ND(1.88)	2.24	4.22	2.75	ND(110)		
TPH Gasoline Range Organics	NSE	NSE	µg/m ³	ND(826)	1200	ND(826)	ND(826)	ND(826)	ND(826)	ND(826)	ND(826)	ND(826)	1460	ND(826)	ND(826)	ND(826)	ND(826)	ND(826)	ND(826)	ND(826)	ND(826)	ND(826)	ND(826)	ND(826)	ND(826)	NA	
Trichloroethylene (TCE)	30	11	µg/m ³	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(1.07)	ND(0.61)	
Trichlorofluoromethane	11000	NSE	µg/m ³	ND(1.12)	1.46	1.39	1.49	1.64	1.69	1.31	ND(1.12)	1.91	ND(1.12)	1.52	ND(1.12)	1.69	1.66	1.82	1.98	2.18	1.89	1.88	1.92	ND(1.12)	ND(13)		
Vinyl Bromide	46	5.6	µg/m ³	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(0.875)	ND(2.5)		
Vinyl Acetate	3000	NSE	µg/m ³	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(0.704)	ND(40)		
Vinyl Chloride	1500	9.5	µg/m ³	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(0.511)	ND(1.5)		
Total Petroleum Hydrocarbons (TPH)																											
Ethane	NSE	NSE	µg/m ³	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(12300)	ND(12300)	ND(12300)	ND(12300)	NA	
Ethylene	NSE	NSE	µg/m ³	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(11500)	ND(11500)	ND(11500)	ND(11500)	NA	
Methane	NSE	NSE	µg/m ³	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	ND(6540)	ND(6540)	ND(6540)	ND(6540)	NA	

- Notes:
- µg/m³ = microgram per cubic meter
 - ND = Not Detected above laboratory reporting limits shown in parenthesis
 - -- = Not Analyzed
 - NSE = No Standard Exists
 - SNC = Standard Not Calculated
 - Highlighted values exceeds the applicable Cleanup Criteria
 - Full analytical results, including QA/QC information and data flags, are detailed in the lab

APPENDIX A:

Test Pit Logs

LOG OF TEST PIT NO. TP-1

FIGURE A-2

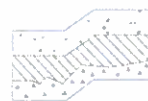
PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 18, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	W (%) P (%)
0		(4 inches TOPSOIL)		0.0
1		Yellow-brown silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (SM)		
2			Medium Dense	
3				
4				
5		Olive-gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, mottled, abundant cobbles and some boulders. (SM) (Weathered Glacial Till)		0.0
6			Dense	
7				
8		Test Pit terminated at approximately 8 feet. No groundwater seepage observed.		0.0
9				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-2

FIGURE A-3

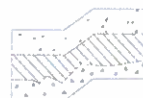
PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 18, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	Wp% PLD
0		(3 inches TOPSOIL) Brown silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (SM)	Medium Dense	0.0
1				
2		Olive-gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, mottled. (SM) (Weathered Glacial Till)		
3		*Boulder.	Dense to Very Dense	0.0
4				
5		Test Pit terminated at approximately 4.5 feet. No groundwater seepage observed.		0.0
6				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-3

FIGURE A-4

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

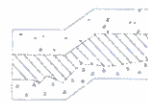
LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 18, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		(6 inches TOPSOIL)		
1		Yellow-brown silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SM)	Medium Dense	0.0
2		Olive-gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, mottled. (SM) (Weathered Glacial Till)		0.0
3			Dense to Very Dense	0.0
4		Test Pit terminated at approximately 4 feet. No groundwater seepage observed.		
5				

WPI

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-4

FIGURE A-5

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 18, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	Wt(%) 0.0
0		(8 inches TOPSOIL)		
1		Brown silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SM)	Medium Dense	0.0
2		Yellow-brown to olive-gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, mottled. (SM) (Weathered Glacial Till)		
3				
4			Medium Dense to Dense	0.0
5				
6		Test Pit terminated at approximately 6 feet. No groundwater seepage observed.		0.0
7				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-5

FIGURE A-6

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

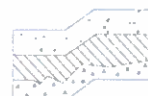
LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 18, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		(6 inches TOPSOIL)		
1		Yellow-brown silty SAND, fine to medium sand, moist. (SM)	Medium Dense	2.7
3		Olive-gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, mottled. (SM) (Weathered Glacial Till)		0.6
5			Dense to Very Dense	
7		Test Pit terminated at approximately 6.5 feet. No groundwater seepage observed.		0.0
8				

W.P. 10
P. 12

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-6

FIGURE A-7

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

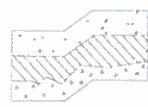
LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 18, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		Dark brown silty SAND, fine to medium sand, moist, abundant organics. (SM) (TOPSOIL)	Loose	0.0
1		Yellow-brown silty SAND, fine to medium sand, moist. (SM)	Medium Dense	
2				0.0
3		Olive-gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, mottled. (SM) (Weathered Glacial Till)		0.0
4				0.0
5			Dense to Very Dense	
6				
7		Test Pit terminated at approximately 7 feet. No groundwater seepage observed.		
8				

WATER
PIE

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-7

FIGURE A-8

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 18, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	W (%)
0		(4 inches TOPSOIL)		
1		Yellow-brown silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (SM)	Medium Dense	
2		Olive-gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, mottled. (SM) (Weathered Glacial Till)		
3			Dense to Very Dense	
4				
5		Test Pit terminated at approximately 5 feet. No groundwater seepage observed.		
6				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-8

FIGURE A-9

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 18, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		Dark brown silty SAND, fine to medium sand, moist, abundant organics. (SM) (TOPSOIL)	Loose	1.3
1		Yellow-brown silty SAND, fine to medium sand, moist. (SM)		
2				4.1
3			Medium Dense	
4				
5				3.8
6		Olive-gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, mottled. (SM) (Weathered Glacial Till)	Dense	
7				
8		Test Pit terminated at approximately 8 feet. No groundwater seepage observed.		
9				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-9

FIGURE A-10

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

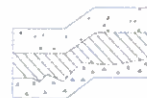
LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 16, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		(6 inches TOPSOIL)		
1		Yellow-brown to olive-gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SM) (Weathered Glacial Till)		0.0
2				
3			Medium Dense to Dense	0.0
4				
5				
6				0.0
7		Test Pit terminated at approximately 7 feet. No groundwater seepage observed.		
8				

WSP
P12

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-10

FIGURE A-11

PROJECT NAME: Frederickson 300 **PROJ. NO:** T-8574 **LOGGED BY:** ZN

LOCATION: Frederickson, Washington **SURFACE CONDITIONS:** Trees and shrubs **APPROX. ELEV:** NA

DATE LOGGED: June 16, 2021 **DEPTH TO GROUNDWATER:** NA **DEPTH TO CAVING:** NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	W _p (%) P.L.R
0		(6 inches TOPSOIL)		
1		Yellow-brown to olive-gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, mottled. (SM) (Weathered Glacial Till)	Medium Dense to Dense	0.0
2				
3				
4				0.0
5		Olive-gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (SM) (Glacial Till)	Dense to Very Dense	
6				
7				
8		Test Pit terminated at approximately 8 feet. No groundwater seepage observed.		
9				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-11

FIGURE A-12

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 16, 2021 DEPTH TO GROUNDWATER: 3 feet DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	W _p (%) PTD
0		(6 inches TOPSOIL)		
1		Olive-gray SAND with silt and gravel, fine to medium sand, fine to coarse gravel, moist to wet, abundant cobbles. (SP-SM)		0.6
2				0.0
3			Medium Dense	
4				
5				
6		*Becomes olive-brown.		
7			Dense to Very Dense	
8				0.0
9		Test Pit terminated at approximately 9 feet. Minor groundwater seepage observed at approximately 3 feet.		
10				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-12

FIGURE A-13

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 17, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		(6 inches TOPSOIL)		
1		Olive-brown silty SAND, fine to medium sand, moist. (SM)		0.0
2			Medium Dense	
3				
4		Olive-gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, mottled. (SM) (Weathered Glacial Till)		0.0
5			Dense to Very Dense	
6				
7		Test Pit terminated at approximately 7 feet. No groundwater seepage observed.		
8				

WPT(%)
P-12

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-13

FIGURE A-14

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

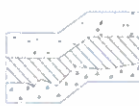
LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 16, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		Dark brown silty SAND, fine to medium sand, moist, abundant organics. (SM) (TOPSOIL)	Loose	0.0
1		Yellow brown to olive-gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (SM)		
2			Medium Dense	0.0
3				
4				
5		*Becomes olive-gray.		
6				
7			Dense	
8				0.0
9		Test Pit terminated at approximately 9 feet. No groundwater seepage observed.		
10				

WPP
PIT

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-14

FIGURE A-15

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 18, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	WPT# P/E
0		(6 inches TOPSOIL)		
1		Olive-brown SAND with silt and gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SP-SM)		
2				
3				
4			Medium Dense	
5				
6				
7				
8				
9			Dense	
10				
		Test Pit terminated at approximately 10 feet. No groundwater seepage observed.		
11				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-15

FIGURE A-16

PROJECT NAME: Frederickson 300 **PROJ. NO:** T-8574 **LOGGED BY:** ZN

LOCATION: Frederickson, Washington **SURFACE CONDITIONS:** Trees and shrubs **APPROX. ELEV:** NA

DATE LOGGED: June 18, 2021 **DEPTH TO GROUNDWATER:** NA **DEPTH TO CAVING:** NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	W (%)
0		(4 inches TOPSOIL)		
1		Olive-gray sandy SILT, moist, some cobbles. (ML)		
2				
3				
4				
5			Medium Stiff to Stiff	
6				
7				
8				
9				
10		Test Pit terminated at approximately 10 feet. No groundwater seepage observed.		
11				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-16

FIGURE A-17

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 17, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	WR (%) PT (%)
0		(8 inches TOPSOIL)		
1		Yellow-brown to olive-brown silty SAND, fine to medium sand, moist, mottled, cemented. (SM)		0.0
2			Medium Dense	0.0
3				
4				
5		Olive-gray sandy SILT, moist, mottled, cemented. (ML)		
6				
7			Medium Stiff to Stiff	
8				
9				
10		Test Pit terminated at approximately 10 feet. No groundwater seepage observed.		
11				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-17

FIGURE A-18

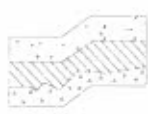
PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 17, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	W _p (%) P _L (%)
0		(6 inches TOPSOIL)		
1		Olive-gray silty SAND, fine to medium sand, moist, mottled. (SM)		0.0
2			Medium Dense	
3				0.0
4				
5		Olive-gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, mottled. (SM) (Weathered Glacial Till)		
6				
7			Dense to Very Dense	
8				
9		Test Pit terminated at approximately 9 feet. No groundwater seepage observed.		
10				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-18

FIGURE A-19

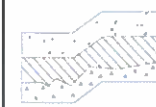
PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 17, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	Wt% PTD
0		(6 inches TOPSOIL)		
1		Olive-gray silty SAND, fine to medium sand, moist. (SM)		0.0
2				
3			Medium Dense	0.0
4		Olive-brown SAND with silt, fine to medium sand, moist. (SP-SM)		
5				
6		Olive-gray sandy SILT, moist to wet, mottled. (ML)		
7			Medium Stiff to Stiff	
8				0.0
9		Olive-gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (SM) (Glacial Till)		
10			Dense to Very Dense	
11		Test Pit terminated at approximately 10 feet. No groundwater seepage observed.		

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-19

FIGURE A-20

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

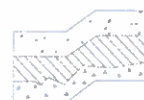
LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 17, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		(6 inches TOPSOIL)		
1		Yellow-brown to olive-gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, some cobbles. (SM) (Weathered Glacial Till)		0.0
2			Medium Dense	0.0
3				0.0
4				0.0
5		Olive-gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (SM) (Glacial Till)		
6			Dense to Very Dense	
7		Test Pit terminated at approximately 6.5 feet. No groundwater seepage observed.		
8				

WPT (S)
PZ

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-20

FIGURE A-21

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

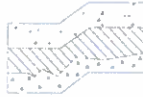
LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 16, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		(6 inches TOPSOIL)		
1		Olive-brown silty SAND, fine to medium sand, moist, cemented. (SM)		0.0
2				
3			Medium Dense	
4				0.0
5				
6		*Becomes uncemented.		
7				
8			Dense	
9		Test Pit terminated at approximately 9 feet. No groundwater seepage observed.		0.0
10				

WATER
PIT

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-21

FIGURE A-22


PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Shrubs APPROX. ELEV: NA

DATE LOGGED: June 16, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	Wt(%)
0		(4 inches TOPSOIL)		
1		Olive-brown SAND with gravel, fine to medium sand, fine to coarse gravel, moist to wet. (SP) (Recessional Outwash)		0.0
2				0.0
3			Medium Dense	
4				
5				
6				
7		Olive-gray SILT, moist to wet, non-plastic. (ML)		
8			Medium Stiff to Stiff	0.0
9				
10		Test Pit terminated at approximately 10 feet. No groundwater seepage observed.		
11				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-22

FIGURE A-23

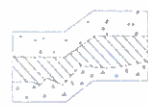
PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 17, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: Surface

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	Wt% PTD
0		(4 inches TOPSOIL)		0.0
1		Olive-brown SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SP)		
2				
3				
4			Medium Dense	0.0
5				
6				
7				
8				0.0
9		Test Pit terminated at approximately 8.5 feet. No groundwater seepage observed. Heavy caving.		
10				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-23

FIGURE A-24

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 17, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: Surface

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		Dark brown silty SAND, fine to medium sand, moist, abundant organics. (SM) (TOPSOIL)	Loose	0.0
1		Olive-brown SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (SP) (Recessional Outwash)	Medium Dense	0.0
2				
3				
4				0.0
5				
6				
7				
8		Test Pit terminated at approximately 8 feet. No groundwater seepage observed. Minor caving.		0.0
9				
10				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-24

FIGURE A-25

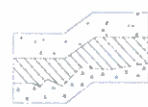
PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 16, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		(6 inches TOPSOIL)		
1		Yellow-brown to olive-gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SM) (Recessional Outwash)		0.1
2			Medium Dense	
3				0.0
4				
5				
6			Dense to Very Dense	
7				
8		Test Pit terminated at approximately 8 feet. No groundwater seepage observed.		0.0
9				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-25

FIGURE A-26

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Shrubs APPROX. ELEV: NA

DATE LOGGED: June 17, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: Surface

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	<i>Wt(%) PI</i>
0		(4 inches TOPSOIL)		
1		Yellow-brown to olive-gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SM) (Recessional Outwash)		0.0
2				
3				0.0
4		Olive-gray GRAVEL with silt and sand, fine to medium sand, fine to coarse gravel, moist. (GP-GM) (Recessional Outwash)	Medium Dense	
5				
6				
7				
8		Test Pit terminated at approximately 8 feet. No groundwater seepage observed. Heavy caving.		
9				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-26

FIGURE A-27

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

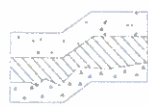
LOCATION: Frederickson, Washington SURFACE CONDITIONS: Shrubs APPROX. ELEV: NA

DATE LOGGED: June 17, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: 2 feet

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		Dark brown silty SAND, fine to medium sand, moist, abundant organics. (SM) (TOPSOIL)	Loose	0.0
1		Olive-brown SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SP) (Recessional Outwash)		
2				0.0
3				
4			Medium Dense	
5				
6				
7				
8		Test Pit terminated at approximately 8 feet. No groundwater seepage observed. Heavy caving below 2 feet.		0.0
9				
10				

Wt%
PI

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-27

FIGURE A-28

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 16, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: Surface

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		Dark brown silty SAND, fine to medium sand, moist, abundant organics. (SM) (TOPSOIL)	Loose	0.0
1		Olive-gray GRAVEL with sand, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SM) (Recessional Outwash)		
2				
3				
4			Medium Dense	
5				
6				
7				3.1
8		Test Pit terminated at approximately 8 feet. No groundwater seepage observed. Heavy caving.		0.0
9				
10				

WWS (%)
PID

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-28

FIGURE A-29

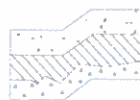
PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 17, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	Wt% PER
0		(6 inches TOPSOIL)		
1		Yellow-brown silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SM)		0.0
2			Medium Dense	
3				
4				0.0
5		Olive-brown SAND with silt and gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SP-SM) (Recessional Outwash)		
6				
7				
8			Medium Dense to Dense	0.0
9				
10				
11				
12		Test Pit terminated at approximately 11.5 feet. No groundwater seepage observed.		
13				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-29

FIGURE A-30

PROJECT NAME: Frederickson 300 **PROJ. NO:** T-8574 **LOGGED BY:** ZN

LOCATION: Frederickson, Washington **SURFACE CONDITIONS:** Trees and shrubs **APPROX. ELEV:** NA

DATE LOGGED: June 17, 2021 **DEPTH TO GROUNDWATER:** NA **DEPTH TO CAVING:** 2 feet

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		(6 inches TOPSOIL)		
1		Yellow-brown to olive-gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SM)		0.0
2				
3				
4			Medium Dense	0.0
5				
6				
7				
8				0.0
9		Test Pit terminated at approximately 8.5 feet. No groundwater seepage observed. Minor to moderate caving below 2 feet.		
10				

W.P. 29

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-30

FIGURE A-31

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Shrubs APPROX. ELEV: NA

DATE LOGGED: June 16, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		(3 inches TOPSOIL)		
1		Dark brown silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SM) (Recessional Outwash)		0.4
2			Medium Dense	
3				
4				
5				
6				
7				0.7
8		*Becomes dark gray.	Dense	
9		Test Pit terminated at approximately 9 feet. No groundwater seepage observed.		0.0
10				

PT-30

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-31

FIGURE A-32

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Shrubs APPROX. ELEV: NA

DATE LOGGED: June 16, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	W (%) P (%)
0		(6 inches TOPSOIL)		
1		Yellow-brown to olive-gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles and boulders. (SM) (Recessional Outwash)		11-1
2			Medium Dense	
3				D.O
4				
5				
6			Dense to Very Dense	
7				
8		Test Pit terminated at approximately 8 feet. No groundwater seepage observed.		
9				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-32

FIGURE A-33

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 16, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		(4 inches TOPSOIL)		
1		Olive-brown silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SM)		0.0
2				
3			Medium Dense to Dense	0.0
4		*Becomes dark brown to red-brown.		
5				
6		Olive-gray SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SP)		
7			Dense to Very Dense	
8				0.0
9		Test Pit terminated at approximately 9 feet. No groundwater seepage observed.		
10				

W-05
P-12

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-33

FIGURE A-34

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Shrubs APPROX. ELEV: NA

DATE LOGGED: June 16, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	Wt(%)
0		(4 inches TOPSOIL)		
1		Olive-brown silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist to wet, abundant cobbles. (SM)		0.0
2			Medium Dense	0.0
3				
4		Olive-gray GRAVEL with silt and sand, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (GP-GM)		
5				
6		Dark brown to red-brown silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SM)	Dense to Very Dense	
7				0.0
8				
9		Test Pit terminated at approximately 8.5 feet. No groundwater seepage observed.		
10				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-34

FIGURE A-35

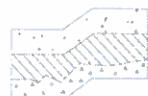
PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 16, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: Surface

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		(4 inches TOPSOIL)		
1		FILL: Olive-gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist to wet, abundant cobbles, strong petroleum product smell. (SM)		0.0
2				
3				
4				
5			Medium Dense	
6		*Becomes dark brown.		
7		<i>Petroleum odor</i>		2.0
8				
9				
10		Olive-brown silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SM) (Recessional Outwash)		
11		Test Pit terminated at approximately 10 feet. No groundwater seepage observed. Heavy caving in upper 5 feet.		
12				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-35

FIGURE A-36

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 16, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: 4 feet

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		(3 inches TOPSOIL)		5.8
1		FILL: Olive-brown silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles, abundant tree roots. (SM)	Medium Dense	
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13		Test Pit terminated at approximately 13 feet. No groundwater seepage observed. Heavy caving below 4 feet.		0.0
14				
15				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.

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LOG OF TEST PIT NO. TP-36

FIGURE A-37

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Shrubs APPROX. ELEV: NA

DATE LOGGED: June 16, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: Surface

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		(3 inches TOPSOIL)		
1		Olive-brown SAND with silt and gravel, fine to medium sand, fine to coarse gravel, moist to wet, abundant cobbles. (SP-SM) (Recessional Outwash)		0.0
2				
3				
4			Medium Dense	0.0
5				
6				
7				
8				
9		Test Pit terminated at approximately 8 feet. No groundwater seepage observed. Heavy caving.		
10				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-37

FIGURE A-38

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Gravel APPROX. ELEV: NA

DATE LOGGED: June 16, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: Surface

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	WPT P-ID
0				
1		FILL: Olive-gray GRAVEL with silt and sand, fine to medium sand, fine to coarse gravel, moist to wet, abundant cobbles and some boulders. (GP-GM) *Becomes dark olive-brown.	Loose	0.7
2				
3				
4			0.0	
5				
6				
7		Medium Dense	0.0	
8				
9				
10				
11		Test Pit terminated at approximately 11 feet. No groundwater seepage observed. Heavy caving in upper 6 feet.		
12				
13				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-38

FIGURE A-39

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Shrubs APPROX. ELEV: NA

DATE LOGGED: June 16, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		(4 inches TOPSOIL)		
1		Olive-brown silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SM) (Recessional Outwash)		1.8
2			Medium Dense	1.4
3				
4		Olive-brown SAND with silt and gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SP-SM) (Recessional Outwash)		
5				
6			Dense to Very Dense	
7				
8				1.6
9		Test Pit terminated at approximately 9 feet. No groundwater seepage observed.		
10				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-39

FIGURE A-40

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Gravel APPROX. ELEV: NA

DATE LOGGED: June 16, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: Surface

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		FILL: Olive-gray GRAVEL with silt and sand, fine to medium sand, fine to coarse gravel, moist to wet, abundant cobbles. (GP-GM)	Loose	0.0
1				
2				
3				
4				
5				
6				
7				
8		Test Pit terminated at approximately 8 feet. No groundwater seepage observed. Heavy caving.		0.0
9				
10				

GP-GM

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.

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LOG OF TEST PIT NO. TP-40

FIGURE A-41

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

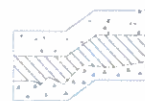
LOCATION: Frederickson, Washington SURFACE CONDITIONS: Gravel APPROX. ELEV: NA

DATE LOGGED: June 17, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: 5 feet

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0				
1		FILL: Olive-brown silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, broken pieces of concrete. (SM)	Loose	0.0
2		Olive-brown SAND with silt and gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SP-SM) (Recessional Outwash)		
3				
4				0.0
5		Olive-brown GRAVEL with silt and sand, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (GP-GM) (Recessional Outwash)		
6			Medium Dense	
7				0.0
8				
9				
10				
11		Test Pit terminated at approximately 11 feet. No groundwater seepage observed. Heavy caving below 5 feet.		
12				
13				

W.P. (%)
P.L.D.

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-41

FIGURE A-42

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 16, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	W (%)
0		(3 inches TOPSOIL)		
1		Olive-gray SAND with silt and gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SP-SM) (Recessional Outwash)		60.2
2				
3			Medium Dense to Dense	21.2
4				
5				
6				
7				
8				
9			Very Dense	
10				
11				
12		Test Pit terminated at approximately 12 feet. No groundwater seepage observed.		17.8
13				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-42

FIGURE A-43

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Shrubs APPROX. ELEV: NA

DATE LOGGED: June 16, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		(6 inches TOPSOIL)		
1		Olive-brown SAND with silt and gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles and boulders. (SP-SM) (Recessional Outwash)		0.0
2			Medium Dense to Dense	
3				0.0
4		Olive-brown silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles and boulders. (SM) (Recessional Outwash)		
5			Very Dense	
6				
7		Test Pit terminated at approximately 7 feet due to refusal. No groundwater seepage observed.		
8				

T-8574
TP-42

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.

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LOG OF TEST PIT NO. TP-43

FIGURE A-44

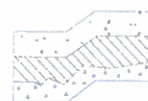
PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 15, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		(4 inches TOPSOIL)		
1		Olive-gray GRAVEL with silt and sand, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (GP-GM) (Recessional Outwash)		0.0
2				
3				
4				0.0
5			Medium Dense to Dense	
6		*Becomes dark brown.		
7		*Some boulders.		
8				
9				0.0
10		Test Pit terminated at approximately 10 feet. No groundwater seepage observed.		
11				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-44

FIGURE A-45

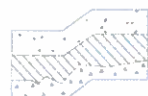
PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 15, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	Wt% PTD
0		(6 inches TOPSOIL)		
1		Yellow-brown to olive-gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles and boulders. (SM) (Recessional Outwash)		0.0
2			Medium Dense to Dense	
3				0.0
4				
5		Olive-brown SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SP) (Recessional Outwash)		
6				
7			Dense to Very Dense	
8				
9		Test Pit terminated at approximately 9 feet. No groundwater seepage observed.		0.0
10				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-45

FIGURE A-46


PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Shrubs APPROX. ELEV: NA

DATE LOGGED: June 15, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		(6 inches TOPSOIL)		
1		Yellow-brown to olive-brown SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SP) (Recessional Outwash)		0.0
2				
3			Medium Dense to Dense	0.0
4				
5				
6		Olive-brown GRAVEL with sand, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (GP) (Recessional Outwash)		
7				
8			Dense to Very Dense	
9				
10		Test Pit terminated at approximately 10 feet. No groundwater seepage observed.		0.0
11				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-46

FIGURE A-47

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Shrubs APPROX. ELEV: NA

DATE LOGGED: June 14, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	W (%)
0		(4 inches TOPSOIL)		
1		Olive-brown to olive-gray SAND with silt and gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SP-SM) (Recessional Outwash)		
2				
3				
4			Medium Dense	
5				
6				
7				
8				
9			Dense to Very Dense	
10				
11		Test Pit terminated at approximately 10.5 feet. No groundwater seepage observed.		
12				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.

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LOG OF TEST PIT NO. TP-47

FIGURE A-48

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Shrubs APPROX. ELEV: NA

DATE LOGGED: June 15, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0				
1		Dark brown silty SAND, fine to medium sand, moist, abundant organics. (SM) (TOPSOIL)	Loose	0.5
2		Yellow-brown to olive-brown SAND with silt and gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SP-SM) (Recessional Outwash)		0.0
3				
4				
5			Medium Dense	
6				
7				
8				
9		Test Pit terminated at approximately 9 feet. No groundwater seepage observed.		0.0
10				

Solid
PIT

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-48

FIGURE A-49


PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 15, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: Surface

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	Wp(%) PI D
0		(6 inches TOPSOIL)		0.2
1		Olive-brown SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SP) (Recessional Outwash)		
2			Medium Dense	
3				0.0
4		Olive-brown GRAVEL with sand, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (GP) (Recessional Outwash)		
5				
6				
7			Dense	
8				0.0
9				
10				
11		Test Pit terminated at approximately 10 feet. No groundwater seepage observed. Heavy caving.		
12				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-49

FIGURE A-50

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Shrubs APPROX. ELEV: NA

DATE LOGGED: June 15, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		Dark brown silty SAND, fine to medium sand, moist, abundant organics. (SM) (TOPSOIL)	Loose	0.0
1		Red-brown silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SM)	Medium Dense to Dense	0.0
2				
3			Dense to Very Dense	0.0
4		Olive-gray GRAVEL with sand, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (GP)		
5				
6			Dense to Very Dense	0.0
7				
8				
9		Test Pit terminated at approximately 9 feet. No groundwater seepage observed.		
10				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-50

FIGURE A-51

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Shrubs APPROX. ELEV: NA

DATE LOGGED: June 15, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	W (%)
0		(6 inches TOPSOIL)		
1		Yellow-brown to olive-brown SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SP) (Recessional Outwash)		
2				
3			Medium Dense to Dense	
4				
5				
6		Olive-gray GRAVEL with sand, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (GP)		
7			Dense to Very Dense	
8				
9		Test Pit terminated at approximately 9 feet. No groundwater seepage observed.		
10				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-51

FIGURE A-52

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Shrubs APPROX. ELEV: NA

DATE LOGGED: June 15, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		(6 inches TOPSOIL)		
1		Olive-brown GRAVEL with silt and sand, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (GP-GM) (Recessional Outwash)		0.0
2				
3			Medium Dense to Dense	0.0
4				
5				
6				
7				
8			Very Dense	0.0
9				
10		Test Pit terminated at approximately 10 feet. No groundwater seepage observed.		
11				

WPT
PIT

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.

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LOG OF TEST PIT NO. TP-52

FIGURE A-53


PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Shrubs APPROX. ELEV: NA

DATE LOGGED: June 15, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	SPT (%) P.F.
0		(4 inches TOPSOIL)		
1		Olive-gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SM) (Recessional Outwash)		0.0
2			Medium Dense to Dense	
3				6.0
4		Olive-gray SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SP) (Recessional Outwash)		
5				
6				
7			Dense to Very Dense	
8				0.0
9				
10		Test Pit terminated at approximately 10 feet. No groundwater seepage observed.		
11				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-53

FIGURE A-54

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 15, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	W (%)
0		Dark brown silty SAND, fine to medium sand, moist, abundant organics. (SM) (TOPSOIL)	Loose	
1		Olive-gray GRAVEL with silt and sand, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (GP-GM) (Recessional Outwash)	Medium Dense	
2				
3				
4				
5				
6				
7		Olive-brown SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SP) (Recessional Outwash)	Dense to Very Dense	
8				
9		Test Pit terminated at approximately 9 feet. No groundwater seepage observed.		
10				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-54

FIGURE A-55

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 15, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		Dark brown silty SAND, fine to medium sand, moist, abundant organics. (SM) (TOPSOIL)	Loose	D.D
1				
2		Olive-gray SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SP) (Recessional Outwash)		
3			Medium Dense to Dense	
4				
5				
6				
7			Very Dense	
8				
9		Test Pit terminated at approximately 9 feet. No groundwater seepage observed.		
10				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-55

FIGURE A-56

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 16, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		(6 inches TOPSOIL)		
1		Yellow-brown to olive-gray SAND with silt and gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SP-SM) (Recessional Outwash)		1.1
2				
3				
4			Medium Dense to Dense	7.9
5				
6				
7				
8		*Becomes olive-gray.	Very Dense	
9				4.2
10		Test Pit terminated at approximately 9 feet. No groundwater seepage observed.		

W.P. 5
P.I. 2

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.

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LOG OF TEST PIT NO. TP-56

FIGURE A-57

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 14, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	<i>WPT (%)</i> <i>PTD</i>
0		(3 inches TOPSOIL)		
1		Olive-brown SAND with silt and gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SP-SM) (Recessional Outwash)		0.0
2				
3				
4		*Some boulders.		
5			Medium Dense to Dense	
6		*Becomes yellow-brown to olive-gray.		
7				
8				
9				
10		Test Pit terminated at approximately 10 feet. No groundwater seepage observed.		
11				
12				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-57

FIGURE A-58

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

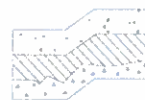
LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 15, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		(6 inches TOPSOIL)		
1		Yellow-brown to olive-brown SAND with silt and gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles and boulders. (SP-SM) (Recessional Outwash)		0.0
2				
3			Medium Dense to Dense	
4				0.0
5				
6				
7				
8			Very Dense	
9				0.0
9		Test Pit terminated at approximately 9 feet. No groundwater seepage observed.		
10				

WATER
PIT

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-58

FIGURE A-59

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Shrubs APPROX. ELEV: NA

DATE LOGGED: June 15, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		(6 inches TOPSOIL)		
1		Olive-gray SAND with silt and gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles and boulders. (SP-SM) (Recessional Outwash)		0.9
2				
3				0.0
4			Medium Dense to Dense	
5				
6				
7				
8		Olive-gray GRAVEL with clay, fine to coarse gravel, moist. (GP-GC)		
9			Dense to Very Dense	
10				
11		Test Pit terminated at approximately 11 feet. No groundwater seepage observed.		0.0
12				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-59

FIGURE A-60

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 14, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		Dark brown silty SAND, fine to medium sand, moist, abundant organics. (SM) (TOPSOIL)	Loose	0.0
1		Yellow-brown to olive-gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles and boulders. (SM) (Recessional Outwash)		
2				
3				
4			Medium Dense to Dense	
5				
6				
7		*Becomes olive-brown.		
8		Test Pit terminated at approximately 8 feet. No groundwater seepage observed.		
9				

(0.0)
PIT

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.

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LOG OF TEST PIT NO. TP-60

FIGURE A-61

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 14, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	ATTN PI 2
0		Dark brown silty SAND, fine to medium sand, moist, abundant organics. (SM) (TOPSOIL)	Loose	D,D
1		Yellow-brown to olive-gray SAND with silt and gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles and boulders. (SP-SM) (Recessional Outwash)		
2				
3				
4			Medium Dense to Dense	
5				
6				
7				
8			Very Dense	
9		Test Pit terminated at approximately 8 feet. No groundwater seepage observed.		

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.

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LOG OF TEST PIT NO. TP-61

FIGURE A-62

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 14, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		(6 inches TOPSOIL)		D.D
1		Yellow-brown to olive-gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, dry to moist, abundant cobbles and boulders. (SM) (Recessional Outwash)	Medium Dense	
2				
3				
4				
5		Olive-brown SAND with silt and gravel, fine to medium sand, fine to coarse gravel, moist. (SP-SM) (Recessional Outwash)		
6				
7			Dense to Very Dense	
8				
9				
10		Test Pit terminated at approximately 10 feet. No groundwater seepage observed.		
11				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.

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LOG OF TEST PIT NO. TP-62

FIGURE A-63

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 14, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		Dark brown silty SAND, fine to medium sand, moist, abundant organics. (SM) (TOPSOIL)	Loose	0.0 <i>WFO PID</i>
1		Yellow-brown to brown silty SAND with gravel, fine to medium sand, fine to coarse gravel, dry to moist, abundant cobbles and boulders. (SM) (Recessional Outwash)		
2				
3			Medium Dense to Dense	
4				
5		Olive-gray SAND with silt and gravel, fine to medium sand, fine to coarse gravel, moist. (SP-SM) (Recessional Outwash)		
6				
7				
8			Dense to Very Dense	
9				
10				
11		Test Pit terminated at approximately 10.5 feet. No groundwater seepage observed.		
12				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-63

FIGURE A-64

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 14, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		Dark brown silty SAND, fine to medium sand, moist, abundant organics. (SM) (TOPSOIL)	Loose	0.0
1		Olive-gray SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SP) (Recessional Outwash)		
2			Medium Dense to Dense	
3				
4				
5				
6				
7				
8		Olive-gray GRAVEL with silt and sand, fine to medium sand, fine to coarse gravel, moist. (GP-GM) (Recessional Outwash)	Dense to Very Dense	
9				
10		Test Pit terminated at approximately 9.5 feet. No groundwater seepage observed.		
11				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-64

FIGURE A-65

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 14, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	WATER PIED
0		(6 inches TOPSOIL)		
1		Yellow-brown to olive-brown silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SM) (Recessional Outwash)		0.0
2				
3				
4			Medium Dense	
5		*Abundant tree roots.		
6				
7				
8		Olive-gray SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (SP) (Recessional Outwash)		
9				
10			Dense to Very Dense	
11		Test Pit terminated at approximately 11 feet. No groundwater seepage observed.		
12				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-65

FIGURE A-66

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 14, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		(6 inches TOPSOIL)		
1		Dark brown silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (SM) (Recessional Outwash)		0-0
2			Medium Dense	
3				
4				
5		*Becomes olive-gray.		
6		*Becomes dark brown.		
7			Dense to Very Dense	
8				
9				
10		Test Pit terminated at approximately 9.5 feet. No groundwater seepage observed.		
11				

WPT (6)
P12

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-66

FIGURE A-67

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 14, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: 6 feet

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		Dark brown silty SAND, fine to medium sand, moist, abundant organics. (SM) (TOPSOIL)	Loose	0-0
1		Yellow-brown to olive-brown SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SP) (Recessional Outwash)		
2				
3				
4				
5				
6			Medium Dense	
7				
8				
9				
10				
11		Test Pit terminated at approximately 11 feet. No groundwater seepage observed. Heavy caving below 6 feet.		
12				
13				

WPT (%)
PFD

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-67

FIGURE A-68

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 15, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	WPT (%) PID
0		Dark brown silty SAND, fine to medium sand, moist, abundant organics. (SM) (TOPSOIL)	Loose	
1				
2		Olive-gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles and boulders. (SM) (Recessional Outwash)		
3				
4			Medium Dense to Dense	0.0
5				
6				
7		Olive-brown SAND with silt and gravel, fine to medium sand, fine to coarse gravel, moist. (SP-SM) (Recessional Outwash)		
8			Very Dense	
9				
10		Test Pit terminated at approximately 10 feet. No groundwater seepage observed.		0.0
11				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-68

FIGURE A-69

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 14, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	W (%) P (%)
0		(4 inches TOPSOIL)		
1		Olive-brown silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (SM) (Recessional Outwash)		0.0
2				
3				
4				
5			Medium Dense	
6		*Decomposing wood and abundant tree roots.		
7				
8				
9				
10				
11		Test Pit terminated at approximately 11 feet. No groundwater seepage observed.		
12				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-69

FIGURE A-70

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Shrubs APPROX. ELEV: NA

DATE LOGGED: June 14, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	WATER PIED
0		Dark brown silty SAND, fine to medium sand, moist, abundant organics. (SM) (TOPSOIL)	Loose	0.0
1				
2		Yellow-brown to olive-gray SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (SP) (Recessional Outwash)		
3				
4		*Becomes olive-gray.		
5			Medium Dense	
6				
7				
8				
9				
10			Dense to Very Dense	
11		Test Pit terminated at approximately 11 feet. No groundwater seepage observed.		
12				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-70

FIGURE A-71

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Shrubs APPROX. ELEV: NA

DATE LOGGED: June 14, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	W (%)
0		(6 inches TOPSOIL)		
1		Olive-brown SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (SP) (Recessional Outwash)		
2				
3				
4			Medium Dense	
5				
6				
7				
8				
9				
10			Dense to Very Dense	
11				
12		Test Pit terminated at approximately 11.5 feet. No groundwater seepage observed.		
13				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-71

FIGURE A-72

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 15, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	WPT# PID
0		Dark brown silty SAND, fine to medium sand, moist, abundant organics. (SM) (TOPSOIL)	Loose	0.0
1				
2		Olive-gray SAND with silt and gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles and boulders. (SP-SM) (Recessional Outwash)		
3				
4				
5			Medium Dense to Dense	
6				
7				
8		*Becomes olive-brown.		
9			Very Dense	0.0
10		Test Pit terminated at approximately 10 feet. No groundwater seepage observed.		
11				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-72

FIGURE A-73

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

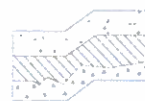
LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 15, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		Dark brown silty SAND, fine to medium sand, moist, abundant organics. (SM) (TOPSOIL)	Loose	0.0
1				
2		Olive-gray SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles and boulders. (SP) (Recessional Outwash)		0.0
3				
4			Medium Dense	
5				
6				
7		Olive-gray SAND with silt and gravel, fine to medium sand, fine to coarse gravel, moist. (SP-SM) (Recessional Outwash)		0.0
8			Dense to Very Dense	
9				
10		Test Pit terminated at approximately 10 feet. No groundwater seepage observed.		
11				

WPT
PIT

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-73

FIGURE A-74

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Shrubs APPROX. ELEV: NA

DATE LOGGED: June 15, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	WPT (%) PIR
0		Dark brown silty SAND, fine to medium sand, moist, abundant organics. (SM) (TOPSOIL)	Loose	0.0
1		Dark brown silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles and boulders. (SM) (Recessional Outwash)		
2				
3		*Becomes yellow-brown to olive-gray.		
4			Medium Dense	0.0
5				
6				
7				
8		Olive-gray SAND with silt and gravel, fine to medium sand, fine to coarse gravel, moist. (SP-SM) (Recessional Outwash)		0.0
9			Dense to Very Dense	
10		Test Pit terminated at approximately 10 feet. No groundwater seepage observed.		
11				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-74

FIGURE A-75

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Shrubs APPROX. ELEV: NA

DATE LOGGED: June 14, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		Dark brown silty SAND, fine to medium sand, moist, abundant organics. (SM) (TOPSOIL)	Loose	0.0
1		Olive-gray SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SP) (Recessional Outwash)		
2				
3				
4		*Boulder.		
5			Medium Dense	
6				
7				
8				
9				
10		Test Pit terminated at approximately 10 feet. No groundwater seepage observed.		
11				
12				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.

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LOG OF TEST PIT NO. TP-75

FIGURE A-76

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Shrubs APPROX. ELEV: NA

DATE LOGGED: June 14, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		Dark brown silty SAND, fine to medium sand, moist, abundant organics. (SM) (TOPSOIL)	Loose	0.0
1		Olive-gray GRAVEL with sand, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (GP) (Recessional Outwash)		
2				
3				
4				0.0
5		Olive-gray SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (SP) (Recessional Outwash)	Medium Dense	
6				
7				
8				
9				
10		Test Pit terminated at approximately 10 feet. No groundwater seepage observed.		
11				
12				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.

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LOG OF TEST PIT NO. TP-76

FIGURE A-77

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Shrubs APPROX. ELEV: NA

DATE LOGGED: June 14, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: 4 feet

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		(8 inches TOPSOIL)		
1		Olive-gray GRAVEL with sand, fine to medium sand, fine to coarse gravel, moist. (GP) (Recessional Outwash)		0.0
2				
3				
4		Olive-gray SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (SP) (Recessional Outwash)	Medium Dense	
5				
6				
7				
8		Test Pit terminated at approximately 8 feet. No groundwater seepage observed. Heavy caving below 4 feet.		
9				
10				

WPT (P) PIZ

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-77

FIGURE A-78

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 15, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		(3 inches TOPSOIL)		0.0
1		Yellow-brown to olive-gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SM) (Recessional Outwash)		
2			Medium Dense	0.0
3				
4				
5				
6				
7			Dense to Very Dense	
8		*Becomes dark gray-brown.		0.0
9				
10		Test Pit terminated at approximately 10 feet. No groundwater seepage observed.		
11				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-78

FIGURE A-79

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 14, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		(3 inches TOPSOIL)		0.0 PT 78
1		Olive-brown silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SM) (Recessional Outwash)		
2				
3				
4			Medium Dense	
5				
6				
7		Olive-gray SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (SP) (Recessional Outwash)		
8			Dense to Very Dense	
9				
10		Test Pit terminated at approximately 10 feet. No groundwater seepage observed.		
11				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-79

FIGURE A-80

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 14, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	W (%) P (%)
0		(4 inches TOPSOIL)		
1		Olive-brown silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SM) (Recessional Outwash)		0.0
2				
3				
4				
5			Medium Dense	
6				
7				
8				
9				
10		*Decomposing wood and abundant tree roots.		
11			Dense to Very Dense	
12		Test Pit terminated at approximately 11 feet. No groundwater seepage observed.		

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-80

FIGURE A-81

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 14, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	
0		(6 inches TOPSOIL)		0.0 <i>PIE</i>
1		Yellow-brown to olive-gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (SM) (Recessional Outwash)		
2				
3				
4			Medium Dense	
5				
6		*Some boulders.		
7		*Decomposing wood and abundant tree roots.		
8				
9				
10			Dense to Very Dense	
11				
12		Test Pit terminated at approximately 12 feet. No groundwater seepage observed.		
13				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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LOG OF TEST PIT NO. TP-81

FIGURE A-82

PROJECT NAME: Frederickson 300 PROJ. NO: T-8574 LOGGED BY: ZN

LOCATION: Frederickson, Washington SURFACE CONDITIONS: Trees and shrubs APPROX. ELEV: NA

DATE LOGGED: June 14, 2021 DEPTH TO GROUNDWATER: NA DEPTH TO CAVING: NA

Depth (ft)	Sample No.	Description	Consistency/ Relative Density	W (%)
0		(6 inches TOPSOIL)		
1		Yellow-brown to brown silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, abundant cobbles. (SM) (Recessional Outwash)		
2				
3			Medium Dense	
4				
5				
6		*Becomes olive-gray.		
7				
8			Dense	
9				
10		Test Pit terminated at approximately 10 feet. No groundwater seepage observed.		
11				
12				

NOTE: This subsurface information pertains only to this test pit location and should not be interpreted as being indicative of other locations at the site.



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APPENDIX B:
Soil Boring Logs

SOIL BORING/MONITORING WELL CONSTRUCTION LOG						DESIGNATION	VSB-1			
VERTEX®		PROJECT:	Panattoni Fredrickson			PROJECT NO.:	71555			
		LOCATION:	18001 Canyon Road East, Puyallup, WA			DRILLER:	Holt Services			
		INSTALLATION DATES	7/12/2021			INSPECTOR:	J. Cass			
				PAGE	1 of 2					
SAMPLER		CASING		CORE		GROUNDWATER DEPTH MEASUREMENTS				
TYPE	HSA	TYPE	N/A	BARREL TYPE	N/A	ELEVATION INFORMATION		DATE:	N/A	
SIZE (ID)	2"	MATERIAL	N/A	SIZE (ID)	N/A	DATUM:		TIME:	N/A	
HAMMER (LB.)	140	DIAMETER	N/A	DIAMETER	N/A	TOC:	N/A	DEPTH (Ft):	N/A	
FALL (IN.)	18"	LENGTH	N/A			GS:		ELEVATION (Ft):	N/A	
SAMPLE INFORMATION						SOIL DESCRIPTION			WELL CONST	PID (PPM)
DEPTH ELEVATION	INTERVAL	PEN / REC	BLOWS / 6"	Sample	USCS				Background/ Actual	
					Surface	Gravel and cobbles				
1					GM	Silty, Sandy, GRAVEL - Gray, dry, medium-grained. 5% recovery. Fill			1.0	
2	0.5 -2.0		10, 25, 22	VSB1-2						
3										
4										
5					GP	No Recovery.				
6										
7	5.5 -7.0		32, 23, 8							
8										
9										
10										
11										
12	10.5-12.0		9, 7, 7							
13					GM	Coarse GRAVEL - Gray, poorly graded, dry. <0.5% recovery. Fill.			4.6	
14										
15										
16										
17	15.5-17.0		20, 17, 25	VSB1-17						
18										
19					RK	No Recovery.				
20										
21										
22	20.5-22.0		50(4)							
23										
24										
25										
26										
27	25.5-27		11, 38, 50(3)							
28										
29					Rock fragements. <0.5% recovery.			1.3		
MODIFIER	SAND AND GRAVEL		SILT AND CLAY		LOCATION:	MONITORING WELL CONSTRUCTION DATA			WELL CONSTRUCTION	
1 - 10%	Trace	Density	Blows (N)	Consistency	Blows (N)	DEPTH:		DEPTH/TYPE PACK:		Screen
10 - 20%	Little	Very loose	0 - 4	Very soft	<2	DIAMETER (inches):		DEPTH/TYPE SEAL:		Riser
20 - 35%	Some	Loose	4 - 10	Soft	2 - 4	MATERIAL:		BACKFILL MATERIAL:		Concrete
35 - 50%	And	Medium Dense	10 - 30	Medium Stiff	4 - 8	SLOT SIZE (inches):		SURFACE SEAL:		Bentonite
		Dense	30 - 50	Stiff	8 - 15	SCREEN INTERVAL:		ROADBOX DESC.:		Native
		Very Dense	>50	Very Stiff	15 - 30	LENGTH OF RISER:				Sand
				Hard	>30					Grout
NOTES:										
1. Soil are visually classified in general accordance with the United Soil Classification System.										

SOIL BORING/MONITORING WELL CONSTRUCTION LOG							DESIGNATION	VSB-1			
VERTEX®		PROJECT:	Panattoni Fredrickson				PROJECT NO.:	71555			
		LOCATION:	18001 Canyon Road East, Puyallup, WA				DRILLER:	Holt Services			
		INSTALLATION DATES	7/12/2021				INSPECTOR:	J. Cass			
						PAGE	2		of 2		
SAMPLER		CASING		CORE		GROUNDWATER DEPTH MEASUREMENTS					
TYPE	HSA 140 18	TYPE		BARREL TYPE	Split-spoon	ELEVATION INFORMATION		DATE:			
SIZE (ID)		MATERIAL		SIZE (ID)	2"	DATUM:		TIME:			
HAMMER (LB.)		DIAMETER		DIAMETER	N/A	TOC:		DEPTH (Ft):			
FALL (IN.)		LENGTH				GS:		ELEVATION (Ft):			
SAMPLE INFORMATION						SOIL DESCRIPTION			WELL CONST	PID (PPM)	
DEPTH ELEVATION	INTERVAL	PEN / REC	BLOWS / 6"	Sample	USCS				Background/	Actual	
32					SM	Silty medium SAND with rock fragments - Gray, dry. <1% recovery. Outwash.					
32	30.5-32.0		6, 30, 10	VSB1-32						1.4	
33											
34					GM	Silty medium to coarse GRAVEL - gray, wet. <0.5% recovery. Outwash.					
35											
36											
37	35.5-37.0		7, 13, 20				<1.0				
38					GM	Silty coarse GRAVEL - gray and brown, very moist. 1% recovery. Outwash.					
39											
40											
41					SM	Silty fine SAND with minor rock fragments - Dark brown, moist. <1% recovery. Outwash.					
42	40.5-42.0		50, 20, 21								
43											
44					SM	No Recovery.					
45											
46											
47	45.5-47.0		30, 17, 21				<1.0				
48					SM	No Recovery.					
49											
50											
51					SM	No Recovery.					
52	50.5-52.0		28, 19, 11								
53											
54					SM	No Recovery.					
55											
56											
57	55.5-57.0		19, 50(5)	VSB1-57 (From cuttings)			1,210 Cuttings				
58					SM	No Recovery.					
59											
MODIFIER		SAND AND GRAVEL		SILT AND CLAY		MONITORING WELL CONSTRUCTION DATA				WELL CONSTRUCTION	
1 - 10%	Trace	Density	Blows (N)	Consistency	Blows (N)	DEPTH:	60'	DEPTH/TYPE PACK:	Pre-Pack PVC		Screen
10 - 20%	Little	Very loose	0 - 4	Very soft	<2	DIAMETER (inches):	2"	DEPTH/TYPE SEAL:	Bentonite 5-52		Riser
20 - 35%	Some	Loose	4 - 10	Soft	2 - 4	MATERIAL:	PVC	BACKFILL MATERIAL:	Bentonite		Concrete
35 - 50%	And	Medium Dense	10 - 30	Medium Stiff	4 - 8	SLOT SIZE (inches):	0.01"	SURFACE SEAL:	Concrete		Bentonite
		Dense	30 - 50	Stiff	8 - 15	SCREEN INTERVAL:	55-60	ROADBOX DESC.:	BMR883		Native
		Very Dense	>50	Very Stiff	15 - 30	LENGTH OF RISER:	55				Sand
				Hard	>30						Grout
NOTES:											

SOIL BORING/MONITORING WELL CONSTRUCTION LOG							DESIGNATION	VSB-2		
VERTEX[®]	PROJECT:		Panattoni Fredrickson				PROJECT NO.:	71555		
	LOCATION:		18001 Canyon Road East, Puyallup, WA				DRILLER:	Holt Services		
	INSTALLATION DATES:		7/13/2021				INSPECTOR:	J. Cass		
							PAGE:	1 of 2		
SAMPLER		CASING		CORE		GROUNDWATER DEPTH MEASUREMENTS				
TYPE	HSA	TYPE	N/A	BARREL TYPE	N/A	ELEVATION INFORMATION		DATE:	N/A	
SIZE (ID)	2"	MATERIAL	N/A	SIZE (ID)	N/A	DATUM:		TIME:	N/A	
HAMMER (LB.)	140	DIAMETER	N/A	DIAMETER	N/A	TOC:	N/A	DEPTH (Ft):	N/A	
FALL (IN.)	18"	LENGTH	N/A			GS:		ELEVATION (Ft):	N/A	
SAMPLE INFORMATION						SOIL DESCRIPTION	WELL CONST	PID (PPM)		
DEPTH ELEVATION	INTERVAL	PEN / REC	BLOWS / 6"	Sample	STRATA CHANGE (Fu/EL)			Background/	Actual	
					Surface	Grass and gravel				
1					GM	Silty coarse GRAVEL) - Gray, dry, medium-grained. 5% recovery. Fill.			3.3	
2	0.5 -2.0		27, 50(5)	VSB2-2						
3										
4					GP	ROCK fragments and fine SAND - Gray, dry. <1% recovery. Fill.			2.9	
5										
6										
7	5.5 -7.0		19, 23, 18		GM	Silty, Sandy, coarse GRAVEL - Gray, dry. 15% recovery. Outwash.			20.2	
8										
9										
10					GM	Silty, sandy, coarse GRAVEL - Gray, moist. 60% recovery. Outwash.			226.5	
11										
12	10.5-12.0		10, 20, 28							
13					GM	Silty, sandy, coarse GRAVEL. Brown-gray, very moist. 50% recovery. Outwash.			6.2	
14										
15										
16					ML	SILT and rock fragments, brown, very moist. <1% recovery. Outwash.			6.4	
17	15.5-17.0		12, 48, 38	VSB2-17						
18										
19					ML	SILT and rock fragments, brown, very moist. <1% recovery. Outwash.			6.4	
20										
21										
22	20.5-22.0		31, 50(5)		ML	SILT and rock fragments, brown, very moist. <1% recovery. Outwash.			6.4	
23										
24										
25					ML	SILT and rock fragments, brown, very moist. <1% recovery. Outwash.			6.4	
26										
27	25.5-27.0		20, 44, 50(2)							
28					ML	SILT and rock fragments, brown, very moist. <1% recovery. Outwash.			6.4	
29										
30										
MODIFIER	SAND AND GRAVEL		SILT AND CLAY		LOCATION:	MONITORING WELL CONSTRUCTION DATA				WELL CONSTRUCTION
1 - 10%	Trace	Density	Blows (N)	Consistency	Blows (N)	DEPTH:	DEPTH/TYPE PACK:			Screen
10 - 20%	Little	Very loose	0 - 4	Very soft	<2	DIAMETER (inches):	DEPTH/TYPE SEAL:			Riser
20 - 35%	Some	Loose	4 - 10	Soft	2 - 4	MATERIAL:	BACKFILL MATERIAL:			Concrete
35 - 50%	And	Medium Dense	10 - 30	Medium Stiff	4 - 8	SLOT SIZE (inches):	SURFACE SEAL:			Bentonite
		Dense	30 - 50	Stiff	8 - 15	SCREEN INTERVAL:	ROADBOX DESC.:			Native
		Very Dense	>50	Very Stiff	15 - 30	LENGTH OF RISER:				Sand
				Hard	>30					Grout
NOTES:										
1. Soil are visually classified in general accordance with the United Soil Classification System.										

SOIL BORING/MONITORING WELL CONSTRUCTION LOG							DESIGNATION	VSB-2		
VERTEX[®]	PROJECT:		Panattoni Fredrickson				PROJECT NO.:	71555		
	LOCATION:		18001 Canyon Road East, Puyallup, WA				DRILLER:	Holt Services		
	INSTALLATION DATES		7/13/2021				INSPECTOR:	J. Cass		
SAMPLER		CASING		CORE		GROUNDWATER DEPTH MEASUREMENTS				
TYPE	HSA	TYPE		BARREL TYPE	Split-spoon	ELEVATION INFORMATION		DATE:		
SIZE (ID)		MATERIAL		SIZE (ID)	2"	DATUM:		TIME:		
HAMMER (LB.)		DIAMETER		DIAMETER	N/A	TOC:		DEPTH (Ft):		
FALL (IN.)		LENGTH				GS:		ELEVATION (Ft):		
SAMPLE INFORMATION						SOIL DESCRIPTION	WELL CONST	PID (PPM)		
DEPTH ELEVATION	INTERVAL	PEN / REC	BLOWS / 6"	Sample	STRATA CHANGE (Ft/EL)			Background/	Actual	
32						Fine SAND and coarse GRAVEL - Gray, moist. 20% recovery. Outwash. End of boring at 32 feet bgs.				
32	30.5-32.0		11, 50(3)	VSB2-32	SP/GP				3.1	
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										
46										
47										
48										
49										
50										
51										
52										
53										
54										
55										
56										
57										
58										
59										
MODIFIER	SAND AND GRAVEL		SILT AND CLAY		LOCATION:	MONITORING WELL CONSTRUCTION DATA				WELL CONSTRUCTION
1 - 10%	Trace	Density	Blows (N)	Consistency	Blows (N)	DEPTH:	60'	DEPTH/TYPE PACK:	Pre-Pack PVC	Screen
10 - 20%	Little	Very loose	0 - 4	Very soft	<2	DIAMETER (inches):	2"	DEPTH/TYPE SEAL:	Bentonite 5-52	Riser
20 - 35%	Some	Loose	4 - 10	Soft	2 - 4	MATERIAL:	PVC	BACKFILL MATERIAL:	Bentonite	Concrete
35 - 50%	And	Medium Dense	10 - 30	Medium Stiff	4 - 8	SLOT SIZE (inches):	0.01"	SURFACE SEAL:	Concrete	Bentonite
		Dense	30 - 50	Stiff	8 - 15	SCREEN INTERVAL:	55-60	ROADBOX DESC.:	BMR883	Native
		Very Dense	>50	Very Stiff	15 - 30	LENGTH OF RISER:	55			Sand
				Hard	>30					Grout

NOTES:
1. Soil are visually classified in general accordance with the Modified Burmister Soil Classification System.


SOIL BORING/MONITORING WELL CONSTRUCTION LOG						DESIGNATION	VSB-3			
VERTEX®	PROJECT: Panattoni Fredrickson					PROJECT NO.:	71555			
	LOCATION: 18001 Canyon Road East, Puyallup					DRILLER:	Holt Services			
	INSTALLATION DATES: 7/13/2021					INSPECTOR:	J. Cass			
SAMPLER		CASING		CORE		GROUNDWATER DEPTH MEASUREMENTS				
TYPE	HSA	TYPE	N/A	BARREL TYPE	N/A	ELEVATION INFORMATION		DATE:	N/A	
SIZE (ID)	2"	MATERIAL	N/A	SIZE (ID)	N/A	DATUM:		TIME:	N/A	
HAMMER (LB.)	140	DIAMETER	N/A	DIAMETER	N/A	TOC:	N/A	DEPTH (Ft):	N/A	
FALL (IN.)	18"	LENGTH	N/A			GS:		ELEVATION (Ft):	N/A	
SAMPLE INFORMATION						SOIL DESCRIPTION			WELL CONST	PID (PPM)
DEPTH ELEVATION	INTERVAL	PEN / REC	BLOWS / 6"	Sample	STRATA CHANGE (Ft/EL)				Background/ Actual	
					Surface	Grave;				
1					GM	Silty, sandy, GRAVEL (GM) - Light gray, dry. 5% recovery. Fill.			3.6	
2	0.5 -2.0		11, 15, 23	VSB3-2						
3										
4										
5					GP	Silty GRAVEL - Gray, dry. 10% recovery. Fill.			<1.0	
6										
7	5.5 -7.0		10, 19, 24							
8										
9					SM	Silty SAND with rock fragments - Gray, dry. 10% recovery. Fill.			<1.0	
10										
11										
12	10.5-12.0		34, 35, 50(8)							
13					SM	Silty SAND with minor coarse gravel - Dark gray, dry. 80% recovery. Outwash.			<1.0	
14										
15										
16										
17	15.5-17.0		28, 35, 33	VSB3-17						
18					SP	No recovery			<1.0	
19										
20										
21										
22	20.5-22.0		5, 4, 4							
23					SP	Fine SAND with minor medium gravel - Light gray, moist. 5% recovery. Outwash.			<1.0	
24										
25										
26										
27	25.5-27.0		12, 17, 24							
28										
29										
MODIFIER		SAND AND GRAVEL		SILT AND CLAY		LOCATION:			WELL CONSTRUCTION	
1 - 10%	Trace	Density	Blows (N)	Consistency	Blows (N)	MONITORING WELL CONSTRUCTION DATA				
10 - 20%	Little	Very loose	0 - 4	Very soft	<2	DEPTH:		DEPTH/TYPE PACK:		Screen
20 - 35%	Some	Loose	4 - 10	Soft	2 - 4	DIAMETER (inches):		DEPTH/TYPE SEAL:		Riser
35 - 50%	And	Medium Dense	10 - 30	Medium Stiff	4 - 8	MATERIAL:		BACKFILL MATERIAL:		Concrete
		Dense	30 - 50	Stiff	8 - 15	SLOT SIZE (inches):		SURFACE SEAL:		Bentonite
		Very Dense	>50	Very Stiff	15 - 30	SCREEN INTERVAL:		ROADBOX DESC.:		Native Sand
				Hard	>30	LENGTH OF RISER:				Grout
NOTES:										
1. Soil are visually classified in general accordance with the United Soil Classification System.										

SOIL BORING/MONITORING WELL CONSTRUCTION LOG							DESIGNATION	VSB-3			
VERTEX[®]		PROJECT:	Panattoni Fredrickson				PROJECT NO.:	71555			
		LOCATION:	18001 Canyon Road East, Puyallup				DRILLER:	Holt Services			
		INSTALLATION DATES	7/13/2021				INSPECTOR:	J. Cass			
						PAGE	2		of 2		
SAMPLER		CASING		CORE		GROUNDWATER DEPTH MEASUREMENTS					
TYPE	HSA 140 18	TYPE		BARREL TYPE	Split-spoon	ELEVATION INFORMATION		DATE:			
SIZE (ID)		MATERIAL		SIZE (ID)	2"	DATUM:		TIME:			
HAMMER (LB.)		DIAMETER		DIAMETER	N/A	TOC:		DEPTH (Ft):			
FALL (IN.)		LENGTH				GS:		ELEVATION (Ft):			
SAMPLE INFORMATION						SOIL DESCRIPTION			WELL CONST	PID (PPM)	
DEPTH ELEVATION	INTERVAL	PEN / REC	BLOWS / 6"	Sample	USCS				Background/	Actual	
32						Fine SAND and coarse GRAVEL - Dark gray, dry. 20% recovery. Outwash.					
32	30.5-32.0		17, 29, 30	VSB3-32	SP/GP					0.3	
33											
34											
35											
36						Coarse SAND and GRAVEL - Brown, wet. 2% recovery. Outwash.					
37	35.5-37.0		14, 8, 11		SP/GP					0.3	
38											
39											
40											
41						GM					
42	40.5-42.0		20, 33, 22							<1.0	
43											
44											
45											
46						GM					
47	45.5-47.0		46, 50(4)							<1.0	
48											
49											
50											
51						SM/GP					
52	50.5-52.0		34, 24, 24							<1.0	
53											
54											
55											
56						SM/GP					
57	55.5-57.0		41, 43, 50(3)							<1.0	
58											
59											
MODIFIER		SAND AND GRAVEL		SILT AND CLAY		LOCATION:				WELL CONSTRUCTION	
1 - 10%	Trace	Density	Blows (N)	Consistency	Blows (N)	MONITORING WELL CONSTRUCTION DATA					Screen
10 - 20%	Little	Very loose	0 - 4	Very soft	<2	DEPTH:	60'	DEPTH/TYPE PACK:	Pre-Pack PVC		Riser
20 - 35%	Some	Loose	4 - 10	Soft	2 - 4	DIAMETER (inches):	2"	DEPTH/TYPE SEAL:	Bentonite 5-52		Concrete
35 - 50%	And	Medium Dense	10 - 30	Medium Stiff	4 - 8	MATERIAL:	PVC	BACKFILL MATERIAL:	Bentonite		Bentonite
		Dense	30 - 50	Stiff	8 - 15	SLOT SIZE (inches):	0.01"	SURFACE SEAL:	Concrete		Native
		Very Dense	>50	Very Stiff	15 - 30	SCREEN INTERVAL:	55-60	ROADBOX DESC.:	BMR883		Sand
				Hard	>30	LENGTH OF RISER:	55				Grout
NOTES:											
1. Soil are visually classified in general accordance with the Modified Burmister Soil Classification System.											

SOIL BORING/MONITORING WELL CONSTRUCTION LOG							DESIGNATION	VSB-4			
VERTEX®	PROJECT:		Panattoni Fredrickson				PROJECT NO.:	71555			
	LOCATION:		18001 Canyon Road, Puyallup, WA				DRILLER:	Holt Services			
	INSTALLATION DATES		7/14/2021				INSPECTOR:	J. Cass			
SAMPLER		CASING		CORE		GROUNDWATER DEPTH MEASUREMENTS					
TYPE	HSA	TYPE	PVC	BARREL TYPE	Split-spoon	ELEVATION INFORMATION		DATE:			
SIZE (ID)		MATERIAL	PVC	SIZE (ID)	2"	DATUM:	WA State Plane NAD	TIME:			
HAMMER (LB.)		DIAMETER	0.25"	DIAMETER	N/A	TOC:		DEPTH (Ft):			
FALL (IN.)		LENGTH	12'			GS:		ELEVATION (Ft):			
SAMPLE INFORMATION						SOIL DESCRIPTION				WELL CONST	PID (PPM)
DEPTH ELEVATION	INTERVAL	PEN / REC	BLOWS / 6"	Sample	USCS					Background/ Actual	
						Gravel and cobbles					
1					RK	ROCK fragments and fine SAND - Gray, dry. <0.5% recovery. Fill.				9.5	
2	1.0-2.0		25, 14, 10								
3											
4											
5											
6					GM	Silty, sandy, medium GRAVEL - Brown, moist. 5% recovery. Fill.				22.0	
7	5.5-7.0		14, 2, 7	VSB4-7							
8											
9											
10											
11					GM	Silty, sandy, GRAVEL - Gray and brown, moist. 1% recovery. Fill.				80.2	
12	10.5-12.0		20, 30 50(6)								
13											
14											
15											
16					SP	Fine SAND - Brown, very moist. 60% recovery. Outwash.				5.5	
17	15.5-17.0		4, 8, 6	VSB4-17							
18											
19											
20											
21					ML	SILT - Brown to olive, very moist. 80% recovery. Outwash.				1.5	
22	20.5-22.0		2, 3, 5								
23											
24											
25											
26					SP/GP	Fine SAND and coarse GRAVEL - Olive, wet. 40% recovery. Outwash.				0.5	
27	25.5-27.0		5, 12, 43								
28											
29											
MODIFIER		SAND AND GRAVEL		SILT AND CLAY		LOCATION: N254275.03 / E1264334.77				WELL CONSTRUCTION	
1 - 10%	Trace	Density	Blows (N)	Consistency	Blows (N)	MONITORING WELL CONSTRUCTION DATA					Screen
10 - 20%	Little	Very loose	0 - 4	Very soft	<2	DEPTH:	60'	DEPTH/TYPE PACK:	Pre-Pack PVC		Riser
20 - 35%	Some	Loose	4 - 10	Soft	2 - 4	DIAMETER (inches):	2"	DEPTH/TYPE SEAL:	Bentonite 5-52		Concrete
35 - 50%	And	Medium Dense	10 - 30	Medium Stiff	4 - 8	MATERIAL:	PVC	BACKFILL MATERIAL:	Bentonite		Bentonite
		Dense	30 - 50	Stiff	8 - 15	SLOT SIZE (inches):	0.01"	SURFACE SEAL:	Concrete		Native
		Very Dense	>50	Very Stiff	15 - 30	SCREEN INTERVAL:	55-60	ROADBOX DESC.:	BMR883		Sand
				Hard	>30	LENGTH OF RISER:	55				Grout
NOTES:											
1. Soil are visually classified in general accordance with the Modified Burmister Soil Classification System.											

SOIL BORING/MONITORING WELL CONSTRUCTION LOG							DESIGNATION	VSB-4				
VERTEX[®]		PROJECT:	Panattoni Fredrickson				PROJECT NO.:	71555				
		LOCATION:	18001 Canyon Road East, Puyallup				DRILLER:	Holt Services				
		INSTALLATION DATES	7/14/2021				INSPECTOR:	J. Cass				
						PAGE	2		of 2			
SAMPLER		CASING		CORE		GROUNDWATER DEPTH MEASUREMENTS						
TYPE	HSA	TYPE		BARREL TYPE	Split-spoon	ELEVATION INFORMATION		DATE:				
SIZE (ID)		MATERIAL		SIZE (ID)	2"	DATUM:		TIME:				
HAMMER (LB.)		140	DIAMETER		DIAMETER	N/A	TOC:		DEPTH (Ft):			
FALL (IN.)		18	LENGTH				GS:		ELEVATION (Ft):			
SAMPLE INFORMATION						SOIL DESCRIPTION			WELL CONST	PID (PPM)		
DEPTH ELEVATION	INTERVAL	PEN / REC	BLOWS / 6"	Sample	STRATA CHANGE (Ft/EL)				Background/	Actual		
32						SP	Medium to coarse SAND and rock fragments - Gray, dry. 10% recovery. Outwash.					
32	30.5-32.0		18, 50(5)	VSB4-32								143.3
33												
34												
35						RK	Rock fragments - <1% recovery					
36												
37	35.5-37.0		50(4)				End of boring at 37 feet bgs due to drill refusal.				389.2	
38												
39												
40												
41												
42												
43												
44												
45												
46												
47												
48												
49												
50												
51												
52												
53												
54												
55												
56												
57												
58												
59												
MODIFIER		SAND AND GRAVEL		SILT AND CLAY		LOCATION:	MONITORING WELL CONSTRUCTION DATA			WELL CONSTRUCTION		
1 - 10%	Trace	Density	Blows (N)	Consistency	Blows (N)	DEPTH:	60'	DEPTH/TYPE PACK:	Pre-Pack PVC		Screen	
10 - 20%	Little	Very loose	0 - 4	Very soft	<2	DIAMETER (inches):	2"	DEPTH/TYPE SEAL:	Bentonite 5-52		Riser	
20 - 35%	Some	Loose	4 - 10	Soft	2 - 4	MATERIAL:	PVC	BACKFILL MATERIAL:	Bentonite		Concrete	
35 - 50%	And	Medium Dense	10 - 30	Medium Stiff	4 - 8	SLOT SIZE (inches):	0.01"	SURFACE SEAL:	Concrete		Bentonite	
		Dense	30 - 50	Stiff	8 - 15	SCREEN INTERVAL:	55-60	ROADBOX DESC.:	BMR883		Native	
		Very Dense	>50	Very Stiff	15 - 30	LENGTH OF RISER:	55				Sand	
				Hard	>30						Grout	
NOTES:												
1. Soil are visually classified in general accordance with the Modified Burmister Soil Classification System.												

SOIL BORING/MONITORING WELL CONSTRUCTION LOG						DESIGNATION	VSB-5			
VERTEX[®]		PROJECT:	Panattoni Fredrickson			PROJECT NO.:	71555			
		LOCATION:	18001 Canyon Road East, Puyallup			DRILLER:	Holt Services			
		INSTALLATION DATES	7/14/2021			INSPECTOR:	J. Cass			
						PAGE	1	of	2	
SAMPLER		CASING		CORE		GROUNDWATER DEPTH MEASUREMENTS				
TYPE	HSA	TYPE	N/A	BARREL TYPE	N/A	ELEVATION INFORMATION		DATE:	N/A	
SIZE (ID)	2"	MATERIAL	N/A	SIZE (ID)	N/A	DATUM:		TIME:	N/A	
HAMMER (LB.)	140	DIAMETER	N/A	DIAMETER	N/A	TOC:	N/A	DEPTH (Ft):	N/A	
FALL (IN.)	18"	LENGTH	N/A			GS:		ELEVATION (Ft):	N/A	
SAMPLE INFORMATION						SOIL DESCRIPTION			WELL CONST	PID (PPM)
DEPTH ELEVATION	INTERVAL	PEN / REC	BLOWS / 6"	Sample	STRATA CHANGE (Ft/EL)				Background/ Actual	
					Surface	Cobbles				
1						No recovery				
2	0.5 -2.0		9, 16, 24							
3										
4										
5										
6										
7	5.5 -7.0		7, 13, 15	VSB5-7	SP/GP	Coarse SAND and GRAVEL - Gray, dry. 5% recovery. Fill.			<1.0	
8										
9										
10										
11										
12	10.5-12.0		15, 23, 16		RK	Rock fragments. >1% recovery				
13										
14										
15										
16										
17	15.5-17.0		6, 18, 15		GM	Silty GRAVEL - Olive, dry. <1% recovery. Fill.			<1.0	
18										
19										
20										
21										
22	20.5-22.0		6, 5, 5	VSB5-22		Fine sand and rock fragments - Gray, dry. <5% recovery. Fill.			<1.0	
23										
24										
25										
26										
27	25.5-27.0		4, 7, 5		SW	Silty fine to coarse SAND - Olive, dry. 70% recovery. Outwash.			<1.0	
28										
29										
MODIFIER		SAND AND GRAVEL		SILT AND CLAY		MONITORING WELL CONSTRUCTION DATA				WELL CONSTRUCTION
1 - 10%	Trace	Density	Blows (N)	Consistency	Blows (N)	DEPTH:		DEPTH/TYPE PACK:		Screen
10 - 20%	Little	Very loose	0 - 4	Very soft	<2	DIAMETER (inches):		DEPTH/TYPE SEAL:		Riser
20 - 35%	Some	Loose	4 - 10	Soft	2 - 4	MATERIAL:		BACKFILL MATERIAL:		Concrete
35 - 50%	And	Medium Dense	10 - 30	Medium Stiff	4 - 8	SLOT SIZE (inches):		SURFACE SEAL:		Bentonite
		Dense	30 - 50	Stiff	8 - 15	SCREEN INTERVAL:		ROADBOX DESC.:		Native Sand
		Very Dense	>50	Very Stiff	15 - 30	LENGTH OF RISER:				Grout
				Hard	>30					
NOTES:										
1. Soil are visually classified in general accordance with the United Soil Classification System.										

SOIL BORING/MONITORING WELL CONSTRUCTION LOG							DESIGNATION	VSB-5					
	PROJECT:		Panattoni Fredrickson				PROJECT NO.:	71555					
	LOCATION:		18001 Canyon Road East, Puyallup				DRILLER:	Holt Services					
	INSTALLATION DATES		7/14/2021				INSPECTOR:	J. Cass					
						PAGE	2		of 2				
SAMPLER		CASING		CORE		GROUNDWATER DEPTH MEASUREMENTS							
TYPE	HSA	TYPE		BARREL TYPE	Split-spoon	ELEVATION INFORMATION		DATE:					
SIZE (ID)		MATERIAL		SIZE (ID)	2"	DATUM:		TIME:					
HAMMER (LB.)		140	DIAMETER		DIAMETER	N/A	TOC:		DEPTH (Ft):				
FALL (IN.)		18	LENGTH				GS:		ELEVATION (Ft):				
SAMPLE INFORMATION						SOIL DESCRIPTION			WELL CONST	PID (PPM)			
DEPTH ELEVATION	INTERVAL	PEN / REC	BLOWS / 6"	Sample	STRATA CHANGE (Ft/EL)				Background/	Actual			
32						ML	SILT - Olive, very moist. 90% recovery. Outwash.						
32	30.5-32.0		1, 5, 7	VSB5-32									<1.0
33													
34						SW	Fine to coarse SAND with minor gravel - Olive to gray, dry. 50% recovery. Outwash						
35													
36													
37	35.5-37.0		16, 20, 22			SP	Coarse SAND and rock fragments - Gray, dry. 20% recovery. Outwash.						
38													
39													
40						GM	Silty coarse GRAVEL - Olive, moist. 5% recovery. Till.						
41													
42	40.5-42.0		20, 50(5)										<1.0
43						SM	Silty coarse SAND with minor coarse gravel - Gray to brown, dry. 40% recovery. Till.						
44													
45													
46						SM	Silty coarse SAND with minor coarse gravel - Gray to brown, dry. 40% recovery. Till.						
47	45.5-47.0		50(4)										<1.0
48													
49						SM	Silty coarse SAND with minor coarse gravel - Gray to brown, dry. 40% recovery. Till.						
50													
51													
52	50.5-52.0		32, 50(5)			SM	Silty coarse SAND with minor coarse gravel - Gray to brown, dry. 40% recovery. Till.						
53													
54													
55						SM	Silty coarse SAND with minor coarse gravel - Gray to brown, dry. 40% recovery. Till.						
56													
57													
58						SM	Silty coarse SAND with minor coarse gravel - Gray to brown, dry. 40% recovery. Till.						
59													
MODIFIER		SAND AND GRAVEL		SILT AND CLAY		LOCATION:		WELL CONSTRUCTION					
1 - 10%	Trace	Density	Blows (N)	Consistency	Blows (N)	MONITORING WELL CONSTRUCTION DATA							
10 - 20%	Little	Very loose	0 - 4	Very soft	<2	DEPTH:	60'	DEPTH/TYPE PACK:	Pre-Pack PVC	Screen			
20 - 35%	Some	Loose	4 - 10	Soft	2 - 4	DIAMETER (inches):	2"	DEPTH/TYPE SEAL:	Bentonite 5-52	Riser			
35 - 50%	And	Medium Dense	10 - 30	Medium Stiff	4 - 8	MATERIAL:	PVC	BACKFILL MATERIAL:	Bentonite	Concrete			
		Dense	30 - 50	Stiff	8 - 15	SLOT SIZE (inches):	0.01"	SURFACE SEAL:	Concrete	Bentonite			
		Very Dense	>50	Very Stiff	15 - 30	SCREEN INTERVAL:	55-60	ROADBOX DESC.:	BMR883	Native			
				Hard	>30	LENGTH OF RISER:	55			Sand			
										Grout			

NOTES:
1. Soil are visually classified in general accordance with the Modified Burmister Soil Classification System.

SOIL BORING/MONITORING WELL CONSTRUCTION LOG						DESIGNATION	VSB-6			
VERTEX[®]	PROJECT: Panattoni Fredrickson					PROJECT NO.:	71555			
	LOCATION: 18001 Canyon Road East, Puyallup					DRILLER:	Holt Services			
	INSTALLATION DATES: 7/15/2021					INSPECTOR:	J. Cass			
SAMPLER		CASING		CORE		GROUNDWATER DEPTH MEASUREMENTS				
TYPE	HSA	TYPE	N/A	BARREL TYPE	N/A	ELEVATION INFORMATION		DATE:	N/A	
SIZE (ID)	2"	MATERIAL	N/A	SIZE (ID)	N/A	DATUM:		TIME:	N/A	
HAMMER (LB.)	140	DIAMETER	N/A	DIAMETER	N/A	TOC:	N/A	DEPTH (Ft):	N/A	
FALL (IN.)	18"	LENGTH	N/A			GS:		ELEVATION (Ft):	N/A	
SAMPLE INFORMATION						SOIL DESCRIPTION			WELL CONST	PID (PPM)
DEPTH ELEVATION	INTERVAL	PEN / REC	BLOWS / 6"	Sample	STRATA CHANGE (Ft/EL)				Background/ Actual	
					Surface	Cobbles				
1						No recovery				
2	0.5 -2.0		11, 12, 13							
3										
4										
5										
6										
7	5.5 -7.0		7, 7, 6	VSB6-7	SP/GP	Medium SAND with minor coarse GRAVEL - Gray, dry. 10% recovery. Fill			35.3	
8										
9										
10										
11					GM	Silty rock fragments - Gray, dry. 10% recovery. Fill.				
12	10.5-12.0		22, 15, 14						5.4	
13										
14										
15										
16					RK	Rock fragments - Gray, moist. <1% recovery. Fill.				
17	15.5-17.0		38, 36, 28						14.1	
18										
19										
20										
21										
22	20.5-22.0		38, 27, 11			No recovery				
23										
24										
25										
26										
27	25.5-27.0		18, 44, 50(6)	VSB6-27	GM	Silty, sandy, GRAVEL - Gray, dry. 70% recovery. Outwash.			7.1	
28										
29										
MODIFIER		SAND AND GRAVEL		SILT AND CLAY		LOCATION:			WELL CONSTRUCTION	
1 - 10%	Trace	Density	Blows (N)	Consistency	Blows (N)	MONITORING WELL CONSTRUCTION DATA				
10 - 20%	Little	Very loose	0 - 4	Very soft	<2	DEPTH:		DEPTH/TYPE PACK:		Screen
20 - 35%	Some	Loose	4 - 10	Soft	2 - 4	DIAMETER (inches):		DEPTH/TYPE SEAL:		Riser
35 - 50%	And	Medium Dense	10 - 30	Medium Stiff	4 - 8	MATERIAL:		BACKFILL MATERIAL:		Concrete
		Dense	30 - 50	Stiff	8 - 15	SLOT SIZE (inches):		SURFACE SEAL:		Bentonite
		Very Dense	>50	Very Stiff	15 - 30	SCREEN INTERVAL:		ROADBOX DESC.:		Native Sand
				Hard	>30	LENGTH OF RISER:				Grout
NOTES:										
1. Soil are visually classified in general accordance with the United Soil Classification System.										

SOIL BORING/MONITORING WELL CONSTRUCTION LOG							DESIGNATION	VSB-6			
VERTEX[®]	PROJECT:		Panattoni Fredrickson				PROJECT NO.:	71555			
	LOCATION:		18001 Canyon Road East, Puyallup				DRILLER:	Holt Services			
	INSTALLATION DATES		7/15/2021				INSPECTOR:	J. Cass			
SAMPLER		CASING		CORE		GROUNDWATER DEPTH MEASUREMENTS					
TYPE	HSA	TYPE		BARREL TYPE	Split-spoon	ELEVATION INFORMATION		DATE:			
SIZE (ID)		MATERIAL		SIZE (ID)	2"	DATUM:		TIME:			
HAMMER (LB.)		DIAMETER		DIAMETER	N/A	TOC:		DEPTH (Ft):			
FALL (IN.)		LENGTH				GS:		ELEVATION (Ft):			
SAMPLE INFORMATION						SOIL DESCRIPTION			WELL CONST	PID (PPM)	
DEPTH ELEVATION	INTERVAL	PEN / REC	BLOWS / 6"	Sample	USCS				Background/	Actual	
32					GM	Silty GRAVEL - Gray, dry. 40% recovery. Till.					
32	30.5-32.0		38, 50(1)						1.1		
33											
34					GM	Silty GRAVEL with rock fragments - Olive to gray, moist. 45% recovery. Till.					
35											
36											
37	35.5-37.0		16, 20, 22	VSB6-32					11.2		
38					RK	Rock fragments. <1% recovery					
39											
40											
41					RK	Rock fragments. Gray, very moist. <1% recovery					
42	40.5-42.0		50(4)						<1.0		
43											
44					RK	Rock fragments. Gray, very moist. <1% recovery					
45											
46											
47	45.5-47.0		50(6)			End of boring at 47 feet bgs due to drill refusal.			1.3		
48											
49											
50											
51											
52											
53											
54											
55											
56											
57											
58											
59											
MODIFIER		SAND AND GRAVEL		SILT AND CLAY		MONITORING WELL CONSTRUCTION DATA				WELL CONSTRUCTION	
1 - 10%	Trace	Density	Blows (N)	Consistency	Blows (N)	DEPTH:	60'	DEPTH/TYPE PACK:	Pre-Pack PVC		Screen
10 - 20%	Little	Very loose	0 - 4	Very soft	<2	DIAMETER (inches):	2"	DEPTH/TYPE SEAL:	Bentonite 5-52		Riser
20 - 35%	Some	Loose	4 - 10	Soft	2 - 4	MATERIAL:	PVC	BACKFILL MATERIAL:	Bentonite		Concrete
35 - 50%	And	Medium Dense	10 - 30	Medium Stiff	4 - 8	SLOT SIZE (inches):	0.01"	SURFACE SEAL:	Concrete		Bentonite
		Dense	30 - 50	Stiff	8 - 15	SCREEN INTERVAL:	55-60	ROADBOX DESC.:	BMR883		Native
		Very Dense	>50	Very Stiff	15 - 30	LENGTH OF RISER:	55				Sand
				Hard	>30						Grout
NOTES:											
1. Soil are visually classified in general accordance with the Modified Burmister Soil Classification System.											

APPENDIX C:

Laboratory Analytical Reports

Vertex - CO

Sample Delivery Group: L1368595
Samples Received: 06/19/2021
Project Number: 71555
Description: Boeing Frederickson

Report To: Steve Long
2420 W. 26TH AVE., SUITE 100-D
Denver, CO 80211

Entire Report Reviewed By:

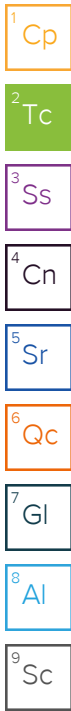


Chris Ward
Project Manager

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

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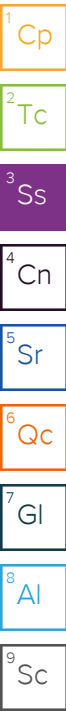


SAMPLE SUMMARY

COM-10 L1368595-01 Solid

Collected by S. Long Collected date/time 06/15/21 16:00 Received date/time 06/19/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1695249	1	06/28/21 14:53	06/28/21 21:55	GB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (HPLC) by Method 8330B	WG1692080	1	06/22/21 16:00	06/23/21 19:35	GKM	Mt. Juliet, TN



TP-103 0-6 L1368595-02 Solid

Collected by S. Long Collected date/time 06/16/21 10:15 Received date/time 06/19/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1692591	1	06/21/21 13:40	06/21/21 22:31	ADM	Mt. Juliet, TN

TP-103 3.5 L1368595-03 Solid

Collected by S. Long Collected date/time 06/16/21 10:15 Received date/time 06/19/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1692591	1	06/21/21 13:40	06/21/21 22:50	ADM	Mt. Juliet, TN

COMP-9 0-6 L1368595-04 Solid

Collected by S. Long Collected date/time 06/16/21 15:45 Received date/time 06/19/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1695249	1	06/28/21 14:53	06/28/21 22:52	GB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (HPLC) by Method 8330B	WG1692080	1	06/22/21 16:00	06/23/21 20:02	GKM	Mt. Juliet, TN

TP-94 7 L1368595-05 Solid

Collected by S. Long Collected date/time 06/16/21 17:45 Received date/time 06/19/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1694524	1	06/21/21 13:40	06/24/21 15:07	ACG	Mt. Juliet, TN

TP-125A 0-1 L1368595-06 Solid

Collected by S. Long Collected date/time 06/17/21 08:20 Received date/time 06/19/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1695249	1	06/28/21 14:53	06/28/21 23:21	GB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (HPLC) by Method 8330B	WG1692080	1	06/22/21 16:00	06/23/21 20:29	GKM	Mt. Juliet, TN

TP-125A 5 L1368595-07 Solid

Collected by S. Long Collected date/time 06/17/21 08:35 Received date/time 06/19/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1695249	1	06/28/21 14:53	06/29/21 01:43	GB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (HPLC) by Method 8330B	WG1692080	1	06/22/21 16:00	06/23/21 20:56	GKM	Mt. Juliet, TN

TP-125B 0-1 L1368595-08 Solid

Collected by S. Long Collected date/time 06/17/21 08:45 Received date/time 06/19/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1695249	1	06/28/21 14:53	06/29/21 02:11	GB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (HPLC) by Method 8330B	WG1692080	1	06/22/21 16:00	06/23/21 21:22	GKM	Mt. Juliet, TN

SAMPLE SUMMARY

TP-125B 6 L1368595-09 Solid

Collected by S. Long Collected date/time 06/17/21 09:05 Received date/time 06/19/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1695249	1	06/28/21 14:53	06/29/21 02:40	GB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (HPLC) by Method 8330B	WG1692080	1	06/22/21 16:00	06/23/21 21:49	GKM	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

COMP-8 L1368595-10 Solid

Collected by S. Long Collected date/time 06/16/21 16:30 Received date/time 06/19/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1695249	1	06/28/21 14:53	06/29/21 03:08	GB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (HPLC) by Method 8330B	WG1692080	1	06/22/21 16:00	06/23/21 22:16	GKM	Mt. Juliet, TN

4 Cn

5 Sr

6 Qc

TP-125C 0-1 L1368595-11 Solid

Collected by S. Long Collected date/time 06/17/21 08:30 Received date/time 06/19/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1695249	1	06/28/21 14:53	06/29/21 03:36	GB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (HPLC) by Method 8330B	WG1692080	1	06/22/21 16:00	06/23/21 23:10	GKM	Mt. Juliet, TN

7 Gl

8 Al

9 Sc

TP-125C 5 L1368595-12 Solid

Collected by S. Long Collected date/time 06/17/21 09:35 Received date/time 06/19/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1695249	1	06/28/21 14:53	06/29/21 04:05	GB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (HPLC) by Method 8330B	WG1692080	1	06/22/21 16:00	06/23/21 23:37	GKM	Mt. Juliet, TN

TP-125D 0-1 L1368595-13 Solid

Collected by S. Long Collected date/time 06/17/21 09:40 Received date/time 06/19/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1695249	1	06/28/21 14:53	06/29/21 04:33	GB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (HPLC) by Method 8330B	WG1692080	1	06/22/21 16:00	06/24/21 00:04	GKM	Mt. Juliet, TN

TP-125D L1368595-14 Solid

Collected by S. Long Collected date/time 06/17/21 09:45 Received date/time 06/19/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1695249	1	06/28/21 14:53	06/29/21 05:02	GB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (HPLC) by Method 8330B	WG1692080	1	06/22/21 16:00	06/24/21 00:31	GKM	Mt. Juliet, TN

TP-125E 0-1 L1368595-15 Solid

Collected by S. Long Collected date/time 06/17/21 09:50 Received date/time 06/19/21 09:00

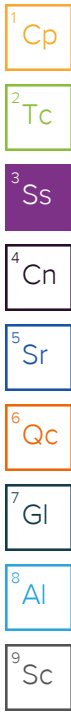
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1695249	1	06/28/21 14:53	06/29/21 05:30	GB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (HPLC) by Method 8330B	WG1692080	1	06/22/21 16:00	06/24/21 00:58	GKM	Mt. Juliet, TN

SAMPLE SUMMARY

TP-125E L1368595-16 Solid

Collected by S. Long Collected date/time 06/17/21 09:55 Received date/time 06/19/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1695249	1	06/28/21 14:53	06/29/21 05:58	GB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (HPLC) by Method 8330B	WG1692080	1	06/22/21 16:00	06/24/21 01:25	GKM	Mt. Juliet, TN



TP-125F 0-1 L1368595-17 Solid

Collected by S. Long Collected date/time 06/17/21 10:00 Received date/time 06/19/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1695249	1	06/28/21 14:53	06/29/21 07:24	GB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (HPLC) by Method 8330B	WG1693311	1.01	06/23/21 15:45	06/24/21 11:14	GKM	Mt. Juliet, TN

TP-125F L1368595-18 Solid

Collected by S. Long Collected date/time 06/17/21 10:05 Received date/time 06/19/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1693076	1	06/23/21 10:17	06/23/21 10:23	KDW	Mt. Juliet, TN
Wet Chemistry by Method 314.0 Mod	WG1695249	1	06/28/21 14:53	06/29/21 07:52	GB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (HPLC) by Method 8330B	WG1693311	1	06/23/21 15:45	06/24/21 11:42	GKM	Mt. Juliet, TN

COMP-6 L1368595-19 Solid

Collected by S. Long Collected date/time 06/18/21 11:00 Received date/time 06/19/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1695249	1	06/28/21 14:53	06/29/21 08:20	GB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (HPLC) by Method 8330B	WG1693311	1	06/23/21 15:45	06/24/21 12:10	GKM	Mt. Juliet, TN

COMP-4 L1368595-20 Solid

Collected by S. Long Collected date/time 06/18/21 11:30 Received date/time 06/19/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1695249	1	06/28/21 14:53	06/29/21 08:49	GB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (HPLC) by Method 8330B	WG1693311	1	06/23/21 15:45	06/24/21 12:38	GKM	Mt. Juliet, TN

COMP-7 L1368595-21 Solid

Collected by S. Long Collected date/time 06/18/21 18:45 Received date/time 06/19/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1695249	1	06/28/21 14:53	06/29/21 09:17	GB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (HPLC) by Method 8330B	WG1693311	1	06/23/21 15:45	06/24/21 13:06	GKM	Mt. Juliet, TN

TP-97 L1368595-22 Solid

Collected by S. Long Collected date/time 06/18/21 18:45 Received date/time 06/19/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1694326	25	06/22/21 22:44	06/24/21 15:39	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1693305	1	06/22/21 22:44	06/23/21 03:08	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-SGT	WG1694224	10	06/24/21 07:54	06/26/21 04:06	TJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1694205	4.66	06/24/21 10:46	06/24/21 15:40	LEA	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.



Chris Ward
Project Manager

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Perchlorate	ND		0.0400	1	06/28/2021 21:55	WG1695249

Semi-Volatile Organic Compounds (HPLC) by Method 8330B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Tetryl	ND		0.500	1	06/23/2021 19:35	WG1692080
2,4-Dinitrotoluene	ND		0.500	1	06/23/2021 19:35	WG1692080
4-Nitrotoluene (4-NT)	ND		0.500	1	06/23/2021 19:35	WG1692080
RDX	ND		0.500	1	06/23/2021 19:35	WG1692080
Nitrobenzene	ND		0.500	1	06/23/2021 19:35	WG1692080
2,6-Dinitrotoluene	ND		0.500	1	06/23/2021 19:35	WG1692080
2-Nitrotoluene	ND		0.500	1	06/23/2021 19:35	WG1692080
3-Nitrotoluene	ND		0.500	1	06/23/2021 19:35	WG1692080
1,3,5-Trinitrobenzene	ND		0.500	1	06/23/2021 19:35	WG1692080
1,3-Dinitrobenzene	ND		0.500	1	06/23/2021 19:35	WG1692080
2,4,6-Trinitrotoluene	ND		0.500	1	06/23/2021 19:35	WG1692080
4-Amino-2,6-Dinitrotoluene	ND		0.500	1	06/23/2021 19:35	WG1692080
2-Amino-4,6-Dinitrotoluene	ND		0.500	1	06/23/2021 19:35	WG1692080
HMX	ND		0.500	1	06/23/2021 19:35	WG1692080
PETN	ND		2.00	1	06/23/2021 19:35	WG1692080
Nitroglycerine	ND		2.00	1	06/23/2021 19:35	WG1692080
(S) 1,3-Dimethyl-2-NB	111		80.0-128		06/23/2021 19:35	WG1692080

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 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND		0.0500	1	06/21/2021 22:31	WG1692591
Acrylonitrile	ND		0.0125	1	06/21/2021 22:31	WG1692591
Benzene	ND		0.00100	1	06/21/2021 22:31	WG1692591
Bromobenzene	ND		0.0125	1	06/21/2021 22:31	WG1692591
Bromodichloromethane	ND		0.00250	1	06/21/2021 22:31	WG1692591
Bromoform	ND		0.0250	1	06/21/2021 22:31	WG1692591
Bromomethane	ND		0.0125	1	06/21/2021 22:31	WG1692591
n-Butylbenzene	ND		0.0125	1	06/21/2021 22:31	WG1692591
sec-Butylbenzene	ND		0.0125	1	06/21/2021 22:31	WG1692591
tert-Butylbenzene	ND		0.00500	1	06/21/2021 22:31	WG1692591
Carbon tetrachloride	ND		0.00500	1	06/21/2021 22:31	WG1692591
Chlorobenzene	ND		0.00250	1	06/21/2021 22:31	WG1692591
Chlorodibromomethane	ND		0.00250	1	06/21/2021 22:31	WG1692591
Chloroethane	ND		0.00500	1	06/21/2021 22:31	WG1692591
Chloroform	ND		0.00250	1	06/21/2021 22:31	WG1692591
Chloromethane	ND		0.0125	1	06/21/2021 22:31	WG1692591
2-Chlorotoluene	ND		0.00250	1	06/21/2021 22:31	WG1692591
4-Chlorotoluene	ND		0.00500	1	06/21/2021 22:31	WG1692591
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	06/21/2021 22:31	WG1692591
1,2-Dibromoethane	ND		0.00250	1	06/21/2021 22:31	WG1692591
Dibromomethane	ND		0.00500	1	06/21/2021 22:31	WG1692591
1,2-Dichlorobenzene	ND		0.00500	1	06/21/2021 22:31	WG1692591
1,3-Dichlorobenzene	ND		0.00500	1	06/21/2021 22:31	WG1692591
1,4-Dichlorobenzene	ND		0.00500	1	06/21/2021 22:31	WG1692591
Dichlorodifluoromethane	ND		0.00250	1	06/21/2021 22:31	WG1692591
1,1-Dichloroethane	ND		0.00250	1	06/21/2021 22:31	WG1692591
1,2-Dichloroethane	ND		0.00250	1	06/21/2021 22:31	WG1692591
1,1-Dichloroethene	ND		0.00250	1	06/21/2021 22:31	WG1692591
cis-1,2-Dichloroethene	ND		0.00250	1	06/21/2021 22:31	WG1692591
trans-1,2-Dichloroethene	ND		0.00500	1	06/21/2021 22:31	WG1692591
1,2-Dichloropropane	ND		0.00500	1	06/21/2021 22:31	WG1692591
1,1-Dichloropropene	ND		0.00250	1	06/21/2021 22:31	WG1692591
1,3-Dichloropropane	ND		0.00500	1	06/21/2021 22:31	WG1692591
cis-1,3-Dichloropropene	ND		0.00250	1	06/21/2021 22:31	WG1692591
trans-1,3-Dichloropropene	ND		0.00500	1	06/21/2021 22:31	WG1692591
2,2-Dichloropropane	ND		0.00250	1	06/21/2021 22:31	WG1692591
Di-isopropyl ether	ND		0.00100	1	06/21/2021 22:31	WG1692591
Ethylbenzene	ND		0.00250	1	06/21/2021 22:31	WG1692591
Hexachloro-1,3-butadiene	ND		0.0250	1	06/21/2021 22:31	WG1692591
Isopropylbenzene	ND		0.00250	1	06/21/2021 22:31	WG1692591
p-Isopropyltoluene	ND		0.00500	1	06/21/2021 22:31	WG1692591
2-Butanone (MEK)	ND		0.100	1	06/21/2021 22:31	WG1692591
Methylene Chloride	ND		0.0250	1	06/21/2021 22:31	WG1692591
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	06/21/2021 22:31	WG1692591
Methyl tert-butyl ether	ND		0.00100	1	06/21/2021 22:31	WG1692591
Naphthalene	ND		0.0125	1	06/21/2021 22:31	WG1692591
n-Propylbenzene	ND		0.00500	1	06/21/2021 22:31	WG1692591
Styrene	ND		0.0125	1	06/21/2021 22:31	WG1692591
1,1,1,2-Tetrachloroethane	ND		0.00250	1	06/21/2021 22:31	WG1692591
1,1,2,2-Tetrachloroethane	ND		0.00250	1	06/21/2021 22:31	WG1692591
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	06/21/2021 22:31	WG1692591
Tetrachloroethene	ND		0.00250	1	06/21/2021 22:31	WG1692591
Toluene	ND		0.00500	1	06/21/2021 22:31	WG1692591
1,2,3-Trichlorobenzene	ND		0.0125	1	06/21/2021 22:31	WG1692591
1,2,4-Trichlorobenzene	ND		0.0125	1	06/21/2021 22:31	WG1692591
1,1,1-Trichloroethane	ND		0.00250	1	06/21/2021 22:31	WG1692591

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 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	ND		0.00250	1	06/21/2021 22:31	WG1692591
Trichloroethene	ND		0.00100	1	06/21/2021 22:31	WG1692591
Trichlorofluoromethane	ND		0.00250	1	06/21/2021 22:31	WG1692591
1,2,3-Trichloropropane	ND		0.0125	1	06/21/2021 22:31	WG1692591
1,2,4-Trimethylbenzene	ND		0.00500	1	06/21/2021 22:31	WG1692591
1,2,3-Trimethylbenzene	ND		0.00500	1	06/21/2021 22:31	WG1692591
1,3,5-Trimethylbenzene	ND		0.00500	1	06/21/2021 22:31	WG1692591
Vinyl chloride	ND		0.00250	1	06/21/2021 22:31	WG1692591
Xylenes, Total	ND		0.00650	1	06/21/2021 22:31	WG1692591
(S) Toluene-d8	103		75.0-131		06/21/2021 22:31	WG1692591
(S) 4-Bromofluorobenzene	104		67.0-138		06/21/2021 22:31	WG1692591
(S) 1,2-Dichloroethane-d4	96.8		70.0-130		06/21/2021 22:31	WG1692591

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 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND		0.0500	1	06/21/2021 22:50	WG1692591
Acrylonitrile	ND		0.0125	1	06/21/2021 22:50	WG1692591
Benzene	ND		0.00100	1	06/21/2021 22:50	WG1692591
Bromobenzene	ND		0.0125	1	06/21/2021 22:50	WG1692591
Bromodichloromethane	ND		0.00250	1	06/21/2021 22:50	WG1692591
Bromoform	ND		0.0250	1	06/21/2021 22:50	WG1692591
Bromomethane	ND		0.0125	1	06/21/2021 22:50	WG1692591
n-Butylbenzene	ND		0.0125	1	06/21/2021 22:50	WG1692591
sec-Butylbenzene	ND		0.0125	1	06/21/2021 22:50	WG1692591
tert-Butylbenzene	ND		0.00500	1	06/21/2021 22:50	WG1692591
Carbon tetrachloride	ND		0.00500	1	06/21/2021 22:50	WG1692591
Chlorobenzene	ND		0.00250	1	06/21/2021 22:50	WG1692591
Chlorodibromomethane	ND		0.00250	1	06/21/2021 22:50	WG1692591
Chloroethane	ND		0.00500	1	06/21/2021 22:50	WG1692591
Chloroform	ND		0.00250	1	06/21/2021 22:50	WG1692591
Chloromethane	ND		0.0125	1	06/21/2021 22:50	WG1692591
2-Chlorotoluene	ND		0.00250	1	06/21/2021 22:50	WG1692591
4-Chlorotoluene	ND		0.00500	1	06/21/2021 22:50	WG1692591
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	06/21/2021 22:50	WG1692591
1,2-Dibromoethane	ND		0.00250	1	06/21/2021 22:50	WG1692591
Dibromomethane	ND		0.00500	1	06/21/2021 22:50	WG1692591
1,2-Dichlorobenzene	ND		0.00500	1	06/21/2021 22:50	WG1692591
1,3-Dichlorobenzene	ND		0.00500	1	06/21/2021 22:50	WG1692591
1,4-Dichlorobenzene	ND		0.00500	1	06/21/2021 22:50	WG1692591
Dichlorodifluoromethane	ND		0.00250	1	06/21/2021 22:50	WG1692591
1,1-Dichloroethane	ND		0.00250	1	06/21/2021 22:50	WG1692591
1,2-Dichloroethane	ND		0.00250	1	06/21/2021 22:50	WG1692591
1,1-Dichloroethene	ND		0.00250	1	06/21/2021 22:50	WG1692591
cis-1,2-Dichloroethene	ND		0.00250	1	06/21/2021 22:50	WG1692591
trans-1,2-Dichloroethene	ND		0.00500	1	06/21/2021 22:50	WG1692591
1,2-Dichloropropane	ND		0.00500	1	06/21/2021 22:50	WG1692591
1,1-Dichloropropene	ND		0.00250	1	06/21/2021 22:50	WG1692591
1,3-Dichloropropane	ND		0.00500	1	06/21/2021 22:50	WG1692591
cis-1,3-Dichloropropene	ND		0.00250	1	06/21/2021 22:50	WG1692591
trans-1,3-Dichloropropene	ND		0.00500	1	06/21/2021 22:50	WG1692591
2,2-Dichloropropane	ND		0.00250	1	06/21/2021 22:50	WG1692591
Di-isopropyl ether	ND		0.00100	1	06/21/2021 22:50	WG1692591
Ethylbenzene	ND		0.00250	1	06/21/2021 22:50	WG1692591
Hexachloro-1,3-butadiene	ND		0.0250	1	06/21/2021 22:50	WG1692591
Isopropylbenzene	ND		0.00250	1	06/21/2021 22:50	WG1692591
p-Isopropyltoluene	ND		0.00500	1	06/21/2021 22:50	WG1692591
2-Butanone (MEK)	ND		0.100	1	06/21/2021 22:50	WG1692591
Methylene Chloride	ND		0.0250	1	06/21/2021 22:50	WG1692591
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	06/21/2021 22:50	WG1692591
Methyl tert-butyl ether	ND		0.00100	1	06/21/2021 22:50	WG1692591
Naphthalene	ND		0.0125	1	06/21/2021 22:50	WG1692591
n-Propylbenzene	ND		0.00500	1	06/21/2021 22:50	WG1692591
Styrene	ND		0.0125	1	06/21/2021 22:50	WG1692591
1,1,1,2-Tetrachloroethane	ND		0.00250	1	06/21/2021 22:50	WG1692591
1,1,2,2-Tetrachloroethane	ND		0.00250	1	06/21/2021 22:50	WG1692591
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	06/21/2021 22:50	WG1692591
Tetrachloroethene	ND		0.00250	1	06/21/2021 22:50	WG1692591
Toluene	ND		0.00500	1	06/21/2021 22:50	WG1692591
1,2,3-Trichlorobenzene	ND		0.0125	1	06/21/2021 22:50	WG1692591
1,2,4-Trichlorobenzene	ND		0.0125	1	06/21/2021 22:50	WG1692591
1,1,1-Trichloroethane	ND		0.00250	1	06/21/2021 22:50	WG1692591

- 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 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	ND		0.00250	1	06/21/2021 22:50	WG1692591
Trichloroethene	ND		0.00100	1	06/21/2021 22:50	WG1692591
Trichlorofluoromethane	ND		0.00250	1	06/21/2021 22:50	WG1692591
1,2,3-Trichloropropane	ND		0.0125	1	06/21/2021 22:50	WG1692591
1,2,4-Trimethylbenzene	ND		0.00500	1	06/21/2021 22:50	WG1692591
1,2,3-Trimethylbenzene	ND		0.00500	1	06/21/2021 22:50	WG1692591
1,3,5-Trimethylbenzene	ND		0.00500	1	06/21/2021 22:50	WG1692591
Vinyl chloride	ND		0.00250	1	06/21/2021 22:50	WG1692591
Xylenes, Total	ND		0.00650	1	06/21/2021 22:50	WG1692591
(S) Toluene-d8	102		75.0-131		06/21/2021 22:50	WG1692591
(S) 4-Bromofluorobenzene	99.0		67.0-138		06/21/2021 22:50	WG1692591
(S) 1,2-Dichloroethane-d4	84.9		70.0-130		06/21/2021 22:50	WG1692591

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Perchlorate	ND		0.0400	1	06/28/2021 22:52	WG1695249

Semi-Volatile Organic Compounds (HPLC) by Method 8330B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Tetryl	ND		0.500	1	06/23/2021 20:02	WG1692080
2,4-Dinitrotoluene	ND		0.500	1	06/23/2021 20:02	WG1692080
4-Nitrotoluene (4-NT)	ND		0.500	1	06/23/2021 20:02	WG1692080
RDX	ND		0.500	1	06/23/2021 20:02	WG1692080
Nitrobenzene	ND		0.500	1	06/23/2021 20:02	WG1692080
2,6-Dinitrotoluene	ND		0.500	1	06/23/2021 20:02	WG1692080
2-Nitrotoluene	ND		0.500	1	06/23/2021 20:02	WG1692080
3-Nitrotoluene	ND		0.500	1	06/23/2021 20:02	WG1692080
1,3,5-Trinitrobenzene	ND		0.500	1	06/23/2021 20:02	WG1692080
1,3-Dinitrobenzene	ND		0.500	1	06/23/2021 20:02	WG1692080
2,4,6-Trinitrotoluene	ND		0.500	1	06/23/2021 20:02	WG1692080
4-Amino-2,6-Dinitrotoluene	ND		0.500	1	06/23/2021 20:02	WG1692080
2-Amino-4,6-Dinitrotoluene	ND		0.500	1	06/23/2021 20:02	WG1692080
HMX	ND		0.500	1	06/23/2021 20:02	WG1692080
PETN	ND		2.00	1	06/23/2021 20:02	WG1692080
Nitroglycerine	ND		2.00	1	06/23/2021 20:02	WG1692080
(S) 1,3-Dimethyl-2-NB	109		80.0-128		06/23/2021 20:02	WG1692080

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 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND		0.0500	1	06/24/2021 15:07	WG1694524
Acrylonitrile	ND		0.0125	1	06/24/2021 15:07	WG1694524
Benzene	ND		0.00100	1	06/24/2021 15:07	WG1694524
Bromobenzene	ND		0.0125	1	06/24/2021 15:07	WG1694524
Bromodichloromethane	ND		0.00250	1	06/24/2021 15:07	WG1694524
Bromoform	ND		0.0250	1	06/24/2021 15:07	WG1694524
Bromomethane	ND		0.0125	1	06/24/2021 15:07	WG1694524
n-Butylbenzene	ND		0.0125	1	06/24/2021 15:07	WG1694524
sec-Butylbenzene	ND		0.0125	1	06/24/2021 15:07	WG1694524
tert-Butylbenzene	ND		0.00500	1	06/24/2021 15:07	WG1694524
Carbon tetrachloride	ND		0.00500	1	06/24/2021 15:07	WG1694524
Chlorobenzene	ND		0.00250	1	06/24/2021 15:07	WG1694524
Chlorodibromomethane	ND		0.00250	1	06/24/2021 15:07	WG1694524
Chloroethane	ND		0.00500	1	06/24/2021 15:07	WG1694524
Chloroform	ND		0.00250	1	06/24/2021 15:07	WG1694524
Chloromethane	ND		0.0125	1	06/24/2021 15:07	WG1694524
2-Chlorotoluene	ND		0.00250	1	06/24/2021 15:07	WG1694524
4-Chlorotoluene	ND		0.00500	1	06/24/2021 15:07	WG1694524
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	06/24/2021 15:07	WG1694524
1,2-Dibromoethane	ND		0.00250	1	06/24/2021 15:07	WG1694524
Dibromomethane	ND		0.00500	1	06/24/2021 15:07	WG1694524
1,2-Dichlorobenzene	ND		0.00500	1	06/24/2021 15:07	WG1694524
1,3-Dichlorobenzene	ND		0.00500	1	06/24/2021 15:07	WG1694524
1,4-Dichlorobenzene	ND		0.00500	1	06/24/2021 15:07	WG1694524
Dichlorodifluoromethane	ND		0.00250	1	06/24/2021 15:07	WG1694524
1,1-Dichloroethane	ND		0.00250	1	06/24/2021 15:07	WG1694524
1,2-Dichloroethane	ND		0.00250	1	06/24/2021 15:07	WG1694524
1,1-Dichloroethene	ND		0.00250	1	06/24/2021 15:07	WG1694524
cis-1,2-Dichloroethene	ND		0.00250	1	06/24/2021 15:07	WG1694524
trans-1,2-Dichloroethene	ND		0.00500	1	06/24/2021 15:07	WG1694524
1,2-Dichloropropane	ND		0.00500	1	06/24/2021 15:07	WG1694524
1,1-Dichloropropene	ND		0.00250	1	06/24/2021 15:07	WG1694524
1,3-Dichloropropane	ND		0.00500	1	06/24/2021 15:07	WG1694524
cis-1,3-Dichloropropene	ND		0.00250	1	06/24/2021 15:07	WG1694524
trans-1,3-Dichloropropene	ND		0.00500	1	06/24/2021 15:07	WG1694524
2,2-Dichloropropane	ND		0.00250	1	06/24/2021 15:07	WG1694524
Di-isopropyl ether	ND		0.00100	1	06/24/2021 15:07	WG1694524
Ethylbenzene	0.00340		0.00250	1	06/24/2021 15:07	WG1694524
Hexachloro-1,3-butadiene	ND		0.0250	1	06/24/2021 15:07	WG1694524
Isopropylbenzene	ND		0.00250	1	06/24/2021 15:07	WG1694524
p-Isopropyltoluene	0.510		0.00500	1	06/24/2021 15:07	WG1694524
2-Butanone (MEK)	0.143	B	0.100	1	06/24/2021 15:07	WG1694524
Methylene Chloride	ND		0.0250	1	06/24/2021 15:07	WG1694524
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	06/24/2021 15:07	WG1694524
Methyl tert-butyl ether	ND		0.00100	1	06/24/2021 15:07	WG1694524
Naphthalene	0.0184		0.0125	1	06/24/2021 15:07	WG1694524
n-Propylbenzene	ND		0.00500	1	06/24/2021 15:07	WG1694524
Styrene	ND		0.0125	1	06/24/2021 15:07	WG1694524
1,1,1,2-Tetrachloroethane	ND		0.00250	1	06/24/2021 15:07	WG1694524
1,1,2,2-Tetrachloroethane	ND		0.00250	1	06/24/2021 15:07	WG1694524
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	06/24/2021 15:07	WG1694524
Tetrachloroethene	ND		0.00250	1	06/24/2021 15:07	WG1694524
Toluene	0.0824		0.00500	1	06/24/2021 15:07	WG1694524
1,2,3-Trichlorobenzene	ND	J4	0.0125	1	06/24/2021 15:07	WG1694524
1,2,4-Trichlorobenzene	ND		0.0125	1	06/24/2021 15:07	WG1694524
1,1,1-Trichloroethane	ND		0.00250	1	06/24/2021 15:07	WG1694524

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 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	ND		0.00250	1	06/24/2021 15:07	WG1694524
Trichloroethene	ND		0.00100	1	06/24/2021 15:07	WG1694524
Trichlorofluoromethane	ND		0.00250	1	06/24/2021 15:07	WG1694524
1,2,3-Trichloropropane	ND		0.0125	1	06/24/2021 15:07	WG1694524
1,2,4-Trimethylbenzene	0.0172		0.00500	1	06/24/2021 15:07	WG1694524
1,2,3-Trimethylbenzene	0.0130	J4	0.00500	1	06/24/2021 15:07	WG1694524
1,3,5-Trimethylbenzene	0.00928		0.00500	1	06/24/2021 15:07	WG1694524
Vinyl chloride	ND		0.00250	1	06/24/2021 15:07	WG1694524
Xylenes, Total	0.0170		0.00650	1	06/24/2021 15:07	WG1694524
<i>(S) Toluene-d8</i>	95.7		75.0-131		06/24/2021 15:07	WG1694524
<i>(S) 4-Bromofluorobenzene</i>	111		67.0-138		06/24/2021 15:07	WG1694524
<i>(S) 1,2-Dichloroethane-d4</i>	109		70.0-130		06/24/2021 15:07	WG1694524

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

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Perchlorate	ND		0.0400	1	06/28/2021 23:21	WG1695249

Semi-Volatile Organic Compounds (HPLC) by Method 8330B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Tetryl	ND		0.500	1	06/23/2021 20:29	WG1692080
2,4-Dinitrotoluene	ND		0.500	1	06/23/2021 20:29	WG1692080
4-Nitrotoluene (4-NT)	ND		0.500	1	06/23/2021 20:29	WG1692080
RDX	ND		0.500	1	06/23/2021 20:29	WG1692080
Nitrobenzene	ND		0.500	1	06/23/2021 20:29	WG1692080
2,6-Dinitrotoluene	ND		0.500	1	06/23/2021 20:29	WG1692080
2-Nitrotoluene	ND		0.500	1	06/23/2021 20:29	WG1692080
3-Nitrotoluene	ND		0.500	1	06/23/2021 20:29	WG1692080
1,3,5-Trinitrobenzene	ND		0.500	1	06/23/2021 20:29	WG1692080
1,3-Dinitrobenzene	ND		0.500	1	06/23/2021 20:29	WG1692080
2,4,6-Trinitrotoluene	ND		0.500	1	06/23/2021 20:29	WG1692080
4-Amino-2,6-Dinitrotoluene	ND		0.500	1	06/23/2021 20:29	WG1692080
2-Amino-4,6-Dinitrotoluene	ND		0.500	1	06/23/2021 20:29	WG1692080
HMX	ND		0.500	1	06/23/2021 20:29	WG1692080
PETN	ND		2.00	1	06/23/2021 20:29	WG1692080
Nitroglycerine	ND		2.00	1	06/23/2021 20:29	WG1692080
(S) 1,3-Dimethyl-2-NB	108		80.0-128		06/23/2021 20:29	WG1692080

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Perchlorate	ND		0.0400	1	06/29/2021 01:43	WG1695249

Semi-Volatile Organic Compounds (HPLC) by Method 8330B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Tetryl	ND		0.500	1	06/23/2021 20:56	WG1692080
2,4-Dinitrotoluene	ND		0.500	1	06/23/2021 20:56	WG1692080
4-Nitrotoluene (4-NT)	ND		0.500	1	06/23/2021 20:56	WG1692080
RDX	ND		0.500	1	06/23/2021 20:56	WG1692080
Nitrobenzene	ND		0.500	1	06/23/2021 20:56	WG1692080
2,6-Dinitrotoluene	ND		0.500	1	06/23/2021 20:56	WG1692080
2-Nitrotoluene	ND		0.500	1	06/23/2021 20:56	WG1692080
3-Nitrotoluene	ND		0.500	1	06/23/2021 20:56	WG1692080
1,3,5-Trinitrobenzene	ND		0.500	1	06/23/2021 20:56	WG1692080
1,3-Dinitrobenzene	ND		0.500	1	06/23/2021 20:56	WG1692080
2,4,6-Trinitrotoluene	ND		0.500	1	06/23/2021 20:56	WG1692080
4-Amino-2,6-Dinitrotoluene	ND		0.500	1	06/23/2021 20:56	WG1692080
2-Amino-4,6-Dinitrotoluene	ND		0.500	1	06/23/2021 20:56	WG1692080
HMX	ND		0.500	1	06/23/2021 20:56	WG1692080
PETN	ND		2.00	1	06/23/2021 20:56	WG1692080
Nitroglycerine	ND		2.00	1	06/23/2021 20:56	WG1692080
(S) 1,3-Dimethyl-2-NB	106		80.0-128		06/23/2021 20:56	WG1692080

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Perchlorate	ND		0.0400	1	06/29/2021 02:11	WG1695249

Semi-Volatile Organic Compounds (HPLC) by Method 8330B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Tetryl	ND		0.500	1	06/23/2021 21:22	WG1692080
2,4-Dinitrotoluene	ND		0.500	1	06/23/2021 21:22	WG1692080
4-Nitrotoluene (4-NT)	ND		0.500	1	06/23/2021 21:22	WG1692080
RDX	ND		0.500	1	06/23/2021 21:22	WG1692080
Nitrobenzene	ND		0.500	1	06/23/2021 21:22	WG1692080
2,6-Dinitrotoluene	ND		0.500	1	06/23/2021 21:22	WG1692080
2-Nitrotoluene	ND		0.500	1	06/23/2021 21:22	WG1692080
3-Nitrotoluene	ND		0.500	1	06/23/2021 21:22	WG1692080
1,3,5-Trinitrobenzene	ND		0.500	1	06/23/2021 21:22	WG1692080
1,3-Dinitrobenzene	ND		0.500	1	06/23/2021 21:22	WG1692080
2,4,6-Trinitrotoluene	ND		0.500	1	06/23/2021 21:22	WG1692080
4-Amino-2,6-Dinitrotoluene	ND		0.500	1	06/23/2021 21:22	WG1692080
2-Amino-4,6-Dinitrotoluene	ND		0.500	1	06/23/2021 21:22	WG1692080
HMX	ND		0.500	1	06/23/2021 21:22	WG1692080
PETN	ND		2.00	1	06/23/2021 21:22	WG1692080
Nitroglycerine	ND		2.00	1	06/23/2021 21:22	WG1692080
(S) 1,3-Dimethyl-2-NB	113		80.0-128		06/23/2021 21:22	WG1692080

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Perchlorate	ND		0.0400	1	06/29/2021 02:40	WG1695249

Semi-Volatile Organic Compounds (HPLC) by Method 8330B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Tetryl	ND		0.500	1	06/23/2021 21:49	WG1692080
2,4-Dinitrotoluene	ND		0.500	1	06/23/2021 21:49	WG1692080
4-Nitrotoluene (4-NT)	ND		0.500	1	06/23/2021 21:49	WG1692080
RDX	ND		0.500	1	06/23/2021 21:49	WG1692080
Nitrobenzene	ND		0.500	1	06/23/2021 21:49	WG1692080
2,6-Dinitrotoluene	ND		0.500	1	06/23/2021 21:49	WG1692080
2-Nitrotoluene	ND		0.500	1	06/23/2021 21:49	WG1692080
3-Nitrotoluene	ND		0.500	1	06/23/2021 21:49	WG1692080
1,3,5-Trinitrobenzene	ND		0.500	1	06/23/2021 21:49	WG1692080
1,3-Dinitrobenzene	ND		0.500	1	06/23/2021 21:49	WG1692080
2,4,6-Trinitrotoluene	ND		0.500	1	06/23/2021 21:49	WG1692080
4-Amino-2,6-Dinitrotoluene	ND		0.500	1	06/23/2021 21:49	WG1692080
2-Amino-4,6-Dinitrotoluene	ND		0.500	1	06/23/2021 21:49	WG1692080
HMX	ND		0.500	1	06/23/2021 21:49	WG1692080
PETN	ND		2.00	1	06/23/2021 21:49	WG1692080
Nitroglycerine	ND		2.00	1	06/23/2021 21:49	WG1692080
(S) 1,3-Dimethyl-2-NB	109		80.0-128		06/23/2021 21:49	WG1692080

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Perchlorate	ND		0.0400	1	06/29/2021 03:08	WG1695249

Semi-Volatile Organic Compounds (HPLC) by Method 8330B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Tetryl	ND		0.500	1	06/23/2021 22:16	WG1692080
2,4-Dinitrotoluene	ND		0.500	1	06/23/2021 22:16	WG1692080
4-Nitrotoluene (4-NT)	ND		0.500	1	06/23/2021 22:16	WG1692080
RDX	ND		0.500	1	06/23/2021 22:16	WG1692080
Nitrobenzene	ND		0.500	1	06/23/2021 22:16	WG1692080
2,6-Dinitrotoluene	ND		0.500	1	06/23/2021 22:16	WG1692080
2-Nitrotoluene	ND		0.500	1	06/23/2021 22:16	WG1692080
3-Nitrotoluene	ND		0.500	1	06/23/2021 22:16	WG1692080
1,3,5-Trinitrobenzene	ND		0.500	1	06/23/2021 22:16	WG1692080
1,3-Dinitrobenzene	ND		0.500	1	06/23/2021 22:16	WG1692080
2,4,6-Trinitrotoluene	ND		0.500	1	06/23/2021 22:16	WG1692080
4-Amino-2,6-Dinitrotoluene	ND		0.500	1	06/23/2021 22:16	WG1692080
2-Amino-4,6-Dinitrotoluene	ND		0.500	1	06/23/2021 22:16	WG1692080
HMX	ND		0.500	1	06/23/2021 22:16	WG1692080
PETN	ND		2.00	1	06/23/2021 22:16	WG1692080
Nitroglycerine	ND		2.00	1	06/23/2021 22:16	WG1692080
(S) 1,3-Dimethyl-2-NB	109		80.0-128		06/23/2021 22:16	WG1692080

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

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Perchlorate	ND		0.0400	1	06/29/2021 03:36	WG1695249

Semi-Volatile Organic Compounds (HPLC) by Method 8330B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Tetryl	ND		0.500	1	06/23/2021 23:10	WG1692080
2,4-Dinitrotoluene	ND		0.500	1	06/23/2021 23:10	WG1692080
4-Nitrotoluene (4-NT)	ND		0.500	1	06/23/2021 23:10	WG1692080
RDX	ND		0.500	1	06/23/2021 23:10	WG1692080
Nitrobenzene	ND		0.500	1	06/23/2021 23:10	WG1692080
2,6-Dinitrotoluene	ND		0.500	1	06/23/2021 23:10	WG1692080
2-Nitrotoluene	ND		0.500	1	06/23/2021 23:10	WG1692080
3-Nitrotoluene	ND		0.500	1	06/23/2021 23:10	WG1692080
1,3,5-Trinitrobenzene	ND		0.500	1	06/23/2021 23:10	WG1692080
1,3-Dinitrobenzene	ND		0.500	1	06/23/2021 23:10	WG1692080
2,4,6-Trinitrotoluene	ND		0.500	1	06/23/2021 23:10	WG1692080
4-Amino-2,6-Dinitrotoluene	ND		0.500	1	06/23/2021 23:10	WG1692080
2-Amino-4,6-Dinitrotoluene	ND		0.500	1	06/23/2021 23:10	WG1692080
HMX	ND		0.500	1	06/23/2021 23:10	WG1692080
PETN	ND		2.00	1	06/23/2021 23:10	WG1692080
Nitroglycerine	ND		2.00	1	06/23/2021 23:10	WG1692080
(S) 1,3-Dimethyl-2-NB	109		80.0-128		06/23/2021 23:10	WG1692080

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Perchlorate	ND		0.0400	1	06/29/2021 04:05	WG1695249

Semi-Volatile Organic Compounds (HPLC) by Method 8330B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Tetryl	ND		0.500	1	06/23/2021 23:37	WG1692080
2,4-Dinitrotoluene	ND		0.500	1	06/23/2021 23:37	WG1692080
4-Nitrotoluene (4-NT)	ND		0.500	1	06/23/2021 23:37	WG1692080
RDX	ND		0.500	1	06/23/2021 23:37	WG1692080
Nitrobenzene	ND		0.500	1	06/23/2021 23:37	WG1692080
2,6-Dinitrotoluene	ND		0.500	1	06/23/2021 23:37	WG1692080
2-Nitrotoluene	ND		0.500	1	06/23/2021 23:37	WG1692080
3-Nitrotoluene	ND		0.500	1	06/23/2021 23:37	WG1692080
1,3,5-Trinitrobenzene	ND		0.500	1	06/23/2021 23:37	WG1692080
1,3-Dinitrobenzene	ND		0.500	1	06/23/2021 23:37	WG1692080
2,4,6-Trinitrotoluene	ND		0.500	1	06/23/2021 23:37	WG1692080
4-Amino-2,6-Dinitrotoluene	ND		0.500	1	06/23/2021 23:37	WG1692080
2-Amino-4,6-Dinitrotoluene	ND		0.500	1	06/23/2021 23:37	WG1692080
HMX	ND		0.500	1	06/23/2021 23:37	WG1692080
PETN	ND		2.00	1	06/23/2021 23:37	WG1692080
Nitroglycerine	ND		2.00	1	06/23/2021 23:37	WG1692080
(S) 1,3-Dimethyl-2-NB	107		80.0-128		06/23/2021 23:37	WG1692080

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Perchlorate	ND		0.0400	1	06/29/2021 04:33	WG1695249

Semi-Volatile Organic Compounds (HPLC) by Method 8330B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Tetryl	ND		0.500	1	06/24/2021 00:04	WG1692080
2,4-Dinitrotoluene	ND		0.500	1	06/24/2021 00:04	WG1692080
4-Nitrotoluene (4-NT)	ND		0.500	1	06/24/2021 00:04	WG1692080
RDX	ND		0.500	1	06/24/2021 00:04	WG1692080
Nitrobenzene	ND		0.500	1	06/24/2021 00:04	WG1692080
2,6-Dinitrotoluene	ND		0.500	1	06/24/2021 00:04	WG1692080
2-Nitrotoluene	ND		0.500	1	06/24/2021 00:04	WG1692080
3-Nitrotoluene	ND		0.500	1	06/24/2021 00:04	WG1692080
1,3,5-Trinitrobenzene	ND		0.500	1	06/24/2021 00:04	WG1692080
1,3-Dinitrobenzene	ND		0.500	1	06/24/2021 00:04	WG1692080
2,4,6-Trinitrotoluene	ND		0.500	1	06/24/2021 00:04	WG1692080
4-Amino-2,6-Dinitrotoluene	ND		0.500	1	06/24/2021 00:04	WG1692080
2-Amino-4,6-Dinitrotoluene	ND		0.500	1	06/24/2021 00:04	WG1692080
HMX	ND		0.500	1	06/24/2021 00:04	WG1692080
PETN	ND		2.00	1	06/24/2021 00:04	WG1692080
Nitroglycerine	ND		2.00	1	06/24/2021 00:04	WG1692080
(S) 1,3-Dimethyl-2-NB	110		80.0-128		06/24/2021 00:04	WG1692080

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Perchlorate	ND		0.0400	1	06/29/2021 05:02	WG1695249

Semi-Volatile Organic Compounds (HPLC) by Method 8330B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Tetryl	ND		0.500	1	06/24/2021 00:31	WG1692080
2,4-Dinitrotoluene	ND		0.500	1	06/24/2021 00:31	WG1692080
4-Nitrotoluene (4-NT)	ND		0.500	1	06/24/2021 00:31	WG1692080
RDX	ND		0.500	1	06/24/2021 00:31	WG1692080
Nitrobenzene	ND		0.500	1	06/24/2021 00:31	WG1692080
2,6-Dinitrotoluene	ND		0.500	1	06/24/2021 00:31	WG1692080
2-Nitrotoluene	ND		0.500	1	06/24/2021 00:31	WG1692080
3-Nitrotoluene	ND		0.500	1	06/24/2021 00:31	WG1692080
1,3,5-Trinitrobenzene	ND		0.500	1	06/24/2021 00:31	WG1692080
1,3-Dinitrobenzene	ND		0.500	1	06/24/2021 00:31	WG1692080
2,4,6-Trinitrotoluene	ND		0.500	1	06/24/2021 00:31	WG1692080
4-Amino-2,6-Dinitrotoluene	ND		0.500	1	06/24/2021 00:31	WG1692080
2-Amino-4,6-Dinitrotoluene	ND		0.500	1	06/24/2021 00:31	WG1692080
HMX	ND		0.500	1	06/24/2021 00:31	WG1692080
PETN	ND		2.00	1	06/24/2021 00:31	WG1692080
Nitroglycerine	ND		2.00	1	06/24/2021 00:31	WG1692080
(S) 1,3-Dimethyl-2-NB	109		80.0-128		06/24/2021 00:31	WG1692080

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

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Perchlorate	ND		0.0400	1	06/29/2021 05:30	WG1695249

Semi-Volatile Organic Compounds (HPLC) by Method 8330B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Tetryl	ND		0.500	1	06/24/2021 00:58	WG1692080
2,4-Dinitrotoluene	ND		0.500	1	06/24/2021 00:58	WG1692080
4-Nitrotoluene (4-NT)	ND		0.500	1	06/24/2021 00:58	WG1692080
RDX	ND		0.500	1	06/24/2021 00:58	WG1692080
Nitrobenzene	ND		0.500	1	06/24/2021 00:58	WG1692080
2,6-Dinitrotoluene	ND		0.500	1	06/24/2021 00:58	WG1692080
2-Nitrotoluene	ND		0.500	1	06/24/2021 00:58	WG1692080
3-Nitrotoluene	ND		0.500	1	06/24/2021 00:58	WG1692080
1,3,5-Trinitrobenzene	ND		0.500	1	06/24/2021 00:58	WG1692080
1,3-Dinitrobenzene	ND		0.500	1	06/24/2021 00:58	WG1692080
2,4,6-Trinitrotoluene	ND		0.500	1	06/24/2021 00:58	WG1692080
4-Amino-2,6-Dinitrotoluene	ND		0.500	1	06/24/2021 00:58	WG1692080
2-Amino-4,6-Dinitrotoluene	ND		0.500	1	06/24/2021 00:58	WG1692080
HMX	ND		0.500	1	06/24/2021 00:58	WG1692080
PETN	ND		2.00	1	06/24/2021 00:58	WG1692080
Nitroglycerine	ND		2.00	1	06/24/2021 00:58	WG1692080
(S) 1,3-Dimethyl-2-NB	107		80.0-128		06/24/2021 00:58	WG1692080

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Perchlorate	ND		0.0400	1	06/29/2021 05:58	WG1695249

Semi-Volatile Organic Compounds (HPLC) by Method 8330B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Tetryl	ND		0.500	1	06/24/2021 01:25	WG1692080
2,4-Dinitrotoluene	ND		0.500	1	06/24/2021 01:25	WG1692080
4-Nitrotoluene (4-NT)	ND		0.500	1	06/24/2021 01:25	WG1692080
RDX	ND		0.500	1	06/24/2021 01:25	WG1692080
Nitrobenzene	ND		0.500	1	06/24/2021 01:25	WG1692080
2,6-Dinitrotoluene	ND		0.500	1	06/24/2021 01:25	WG1692080
2-Nitrotoluene	ND		0.500	1	06/24/2021 01:25	WG1692080
3-Nitrotoluene	ND		0.500	1	06/24/2021 01:25	WG1692080
1,3,5-Trinitrobenzene	ND		0.500	1	06/24/2021 01:25	WG1692080
1,3-Dinitrobenzene	ND		0.500	1	06/24/2021 01:25	WG1692080
2,4,6-Trinitrotoluene	ND		0.500	1	06/24/2021 01:25	WG1692080
4-Amino-2,6-Dinitrotoluene	ND		0.500	1	06/24/2021 01:25	WG1692080
2-Amino-4,6-Dinitrotoluene	ND		0.500	1	06/24/2021 01:25	WG1692080
HMX	ND		0.500	1	06/24/2021 01:25	WG1692080
PETN	ND		2.00	1	06/24/2021 01:25	WG1692080
Nitroglycerine	ND		2.00	1	06/24/2021 01:25	WG1692080
(S) 1,3-Dimethyl-2-NB	105		80.0-128		06/24/2021 01:25	WG1692080

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

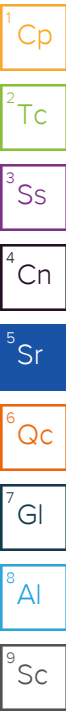
9 Sc

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Perchlorate	ND		0.0400	1	06/29/2021 07:24	WG1695249

Semi-Volatile Organic Compounds (HPLC) by Method 8330B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Tetryl	ND		0.505	1.01	06/24/2021 11:14	WG1693311
2,4-Dinitrotoluene	ND		0.505	1.01	06/24/2021 11:14	WG1693311
4-Nitrotoluene (4-NT)	ND		0.505	1.01	06/24/2021 11:14	WG1693311
RDX	ND		0.505	1.01	06/24/2021 11:14	WG1693311
Nitrobenzene	ND		0.505	1.01	06/24/2021 11:14	WG1693311
2,6-Dinitrotoluene	ND		0.505	1.01	06/24/2021 11:14	WG1693311
2-Nitrotoluene	ND		0.505	1.01	06/24/2021 11:14	WG1693311
3-Nitrotoluene	ND		0.505	1.01	06/24/2021 11:14	WG1693311
1,3,5-Trinitrobenzene	ND		0.505	1.01	06/24/2021 11:14	WG1693311
1,3-Dinitrobenzene	ND		0.505	1.01	06/24/2021 11:14	WG1693311
2,4,6-Trinitrotoluene	ND		0.505	1.01	06/24/2021 11:14	WG1693311
4-Amino-2,6-Dinitrotoluene	ND		0.505	1.01	06/24/2021 11:14	WG1693311
2-Amino-4,6-Dinitrotoluene	ND		0.505	1.01	06/24/2021 11:14	WG1693311
HMX	ND		0.505	1.01	06/24/2021 11:14	WG1693311
PETN	ND		2.02	1.01	06/24/2021 11:14	WG1693311
Nitroglycerine	ND		2.02	1.01	06/24/2021 11:14	WG1693311
(S) 1,3-Dimethyl-2-NB	111		80.0-128		06/24/2021 11:14	WG1693311



Total Solids by Method 2540 G-2011

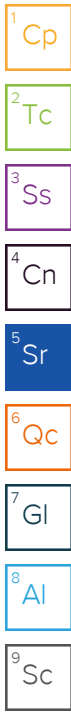
Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.8		1	06/23/2021 10:23	WG1693076

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Perchlorate	ND		0.0400	1	06/29/2021 07:52	WG1695249

Semi-Volatile Organic Compounds (HPLC) by Method 8330B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Tetryl	ND		0.500	1	06/24/2021 11:42	WG1693311
2,4-Dinitrotoluene	ND		0.500	1	06/24/2021 11:42	WG1693311
4-Nitrotoluene (4-NT)	ND		0.500	1	06/24/2021 11:42	WG1693311
RDX	ND		0.500	1	06/24/2021 11:42	WG1693311
Nitrobenzene	ND		0.500	1	06/24/2021 11:42	WG1693311
2,6-Dinitrotoluene	ND		0.500	1	06/24/2021 11:42	WG1693311
2-Nitrotoluene	ND		0.500	1	06/24/2021 11:42	WG1693311
3-Nitrotoluene	ND		0.500	1	06/24/2021 11:42	WG1693311
1,3,5-Trinitrobenzene	ND		0.500	1	06/24/2021 11:42	WG1693311
1,3-Dinitrobenzene	ND		0.500	1	06/24/2021 11:42	WG1693311
2,4,6-Trinitrotoluene	ND		0.500	1	06/24/2021 11:42	WG1693311
4-Amino-2,6-Dinitrotoluene	ND		0.500	1	06/24/2021 11:42	WG1693311
2-Amino-4,6-Dinitrotoluene	ND		0.500	1	06/24/2021 11:42	WG1693311
HMX	ND		0.500	1	06/24/2021 11:42	WG1693311
PETN	ND		2.00	1	06/24/2021 11:42	WG1693311
Nitroglycerine	ND		2.00	1	06/24/2021 11:42	WG1693311
(S) 1,3-Dimethyl-2-NB	110		80.0-128		06/24/2021 11:42	WG1693311



Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Perchlorate	ND		0.0400	1	06/29/2021 08:20	WG1695249

Semi-Volatile Organic Compounds (HPLC) by Method 8330B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Tetryl	ND		0.500	1	06/24/2021 12:10	WG1693311
2,4-Dinitrotoluene	ND		0.500	1	06/24/2021 12:10	WG1693311
4-Nitrotoluene (4-NT)	ND		0.500	1	06/24/2021 12:10	WG1693311
RDX	ND		0.500	1	06/24/2021 12:10	WG1693311
Nitrobenzene	ND		0.500	1	06/24/2021 12:10	WG1693311
2,6-Dinitrotoluene	ND		0.500	1	06/24/2021 12:10	WG1693311
2-Nitrotoluene	ND		0.500	1	06/24/2021 12:10	WG1693311
3-Nitrotoluene	ND		0.500	1	06/24/2021 12:10	WG1693311
1,3,5-Trinitrobenzene	ND		0.500	1	06/24/2021 12:10	WG1693311
1,3-Dinitrobenzene	ND		0.500	1	06/24/2021 12:10	WG1693311
2,4,6-Trinitrotoluene	ND		0.500	1	06/24/2021 12:10	WG1693311
4-Amino-2,6-Dinitrotoluene	ND		0.500	1	06/24/2021 12:10	WG1693311
2-Amino-4,6-Dinitrotoluene	ND		0.500	1	06/24/2021 12:10	WG1693311
HMX	ND		0.500	1	06/24/2021 12:10	WG1693311
PETN	ND		2.00	1	06/24/2021 12:10	WG1693311
Nitroglycerine	ND		2.00	1	06/24/2021 12:10	WG1693311
(S) 1,3-Dimethyl-2-NB	104		80.0-128		06/24/2021 12:10	WG1693311

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

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Perchlorate	ND		0.0400	1	06/29/2021 08:49	WG1695249

Semi-Volatile Organic Compounds (HPLC) by Method 8330B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Tetryl	ND		0.500	1	06/24/2021 12:38	WG1693311
2,4-Dinitrotoluene	ND		0.500	1	06/24/2021 12:38	WG1693311
4-Nitrotoluene (4-NT)	ND		0.500	1	06/24/2021 12:38	WG1693311
RDX	ND		0.500	1	06/24/2021 12:38	WG1693311
Nitrobenzene	ND		0.500	1	06/24/2021 12:38	WG1693311
2,6-Dinitrotoluene	ND		0.500	1	06/24/2021 12:38	WG1693311
2-Nitrotoluene	ND		0.500	1	06/24/2021 12:38	WG1693311
3-Nitrotoluene	ND		0.500	1	06/24/2021 12:38	WG1693311
1,3,5-Trinitrobenzene	ND		0.500	1	06/24/2021 12:38	WG1693311
1,3-Dinitrobenzene	ND		0.500	1	06/24/2021 12:38	WG1693311
2,4,6-Trinitrotoluene	ND		0.500	1	06/24/2021 12:38	WG1693311
4-Amino-2,6-Dinitrotoluene	ND		0.500	1	06/24/2021 12:38	WG1693311
2-Amino-4,6-Dinitrotoluene	ND		0.500	1	06/24/2021 12:38	WG1693311
HMX	ND		0.500	1	06/24/2021 12:38	WG1693311
PETN	ND		2.00	1	06/24/2021 12:38	WG1693311
Nitroglycerine	ND		2.00	1	06/24/2021 12:38	WG1693311
(S) 1,3-Dimethyl-2-NB	108		80.0-128		06/24/2021 12:38	WG1693311

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

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Perchlorate	ND		0.0400	1	06/29/2021 09:17	WG1695249

Semi-Volatile Organic Compounds (HPLC) by Method 8330B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Tetryl	ND		0.500	1	06/24/2021 13:06	WG1693311
2,4-Dinitrotoluene	ND		0.500	1	06/24/2021 13:06	WG1693311
4-Nitrotoluene (4-NT)	ND		0.500	1	06/24/2021 13:06	WG1693311
RDX	ND		0.500	1	06/24/2021 13:06	WG1693311
Nitrobenzene	ND		0.500	1	06/24/2021 13:06	WG1693311
2,6-Dinitrotoluene	ND		0.500	1	06/24/2021 13:06	WG1693311
2-Nitrotoluene	ND		0.500	1	06/24/2021 13:06	WG1693311
3-Nitrotoluene	ND		0.500	1	06/24/2021 13:06	WG1693311
1,3,5-Trinitrobenzene	ND		0.500	1	06/24/2021 13:06	WG1693311
1,3-Dinitrobenzene	ND		0.500	1	06/24/2021 13:06	WG1693311
2,4,6-Trinitrotoluene	ND		0.500	1	06/24/2021 13:06	WG1693311
4-Amino-2,6-Dinitrotoluene	ND		0.500	1	06/24/2021 13:06	WG1693311
2-Amino-4,6-Dinitrotoluene	ND		0.500	1	06/24/2021 13:06	WG1693311
HMX	ND		0.500	1	06/24/2021 13:06	WG1693311
PETN	ND		2.00	1	06/24/2021 13:06	WG1693311
Nitroglycerine	ND		2.00	1	06/24/2021 13:06	WG1693311
(S) 1,3-Dimethyl-2-NB	93.7		80.0-128		06/24/2021 13:06	WG1693311

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

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	9.73		2.50	25	06/24/2021 15:39	WG1694326
(S) a, a, a-Trifluorotoluene(FID)	108		77.0-120		06/24/2021 15:39	WG1694326

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND		0.0500	1	06/23/2021 03:08	WG1693305
Acrylonitrile	ND		0.0125	1	06/23/2021 03:08	WG1693305
Benzene	ND		0.00100	1	06/23/2021 03:08	WG1693305
Bromobenzene	ND		0.0125	1	06/23/2021 03:08	WG1693305
Bromodichloromethane	ND		0.00250	1	06/23/2021 03:08	WG1693305
Bromoform	ND		0.0250	1	06/23/2021 03:08	WG1693305
Bromomethane	ND		0.0125	1	06/23/2021 03:08	WG1693305
n-Butylbenzene	ND		0.0125	1	06/23/2021 03:08	WG1693305
sec-Butylbenzene	ND		0.0125	1	06/23/2021 03:08	WG1693305
tert-Butylbenzene	ND		0.00500	1	06/23/2021 03:08	WG1693305
Carbon tetrachloride	ND		0.00500	1	06/23/2021 03:08	WG1693305
Chlorobenzene	ND		0.00250	1	06/23/2021 03:08	WG1693305
Chlorodibromomethane	ND		0.00250	1	06/23/2021 03:08	WG1693305
Chloroethane	ND		0.00500	1	06/23/2021 03:08	WG1693305
Chloroform	ND		0.00250	1	06/23/2021 03:08	WG1693305
Chloromethane	ND		0.0125	1	06/23/2021 03:08	WG1693305
2-Chlorotoluene	ND		0.00250	1	06/23/2021 03:08	WG1693305
4-Chlorotoluene	ND		0.00500	1	06/23/2021 03:08	WG1693305
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	06/23/2021 03:08	WG1693305
1,2-Dibromoethane	ND		0.00250	1	06/23/2021 03:08	WG1693305
Dibromomethane	ND		0.00500	1	06/23/2021 03:08	WG1693305
1,2-Dichlorobenzene	ND		0.00500	1	06/23/2021 03:08	WG1693305
1,3-Dichlorobenzene	ND		0.00500	1	06/23/2021 03:08	WG1693305
1,4-Dichlorobenzene	0.00990		0.00500	1	06/23/2021 03:08	WG1693305
Dichlorodifluoromethane	ND		0.00250	1	06/23/2021 03:08	WG1693305
1,1-Dichloroethane	ND		0.00250	1	06/23/2021 03:08	WG1693305
1,2-Dichloroethane	ND		0.00250	1	06/23/2021 03:08	WG1693305
1,1-Dichloroethene	ND		0.00250	1	06/23/2021 03:08	WG1693305
cis-1,2-Dichloroethene	ND		0.00250	1	06/23/2021 03:08	WG1693305
trans-1,2-Dichloroethene	ND		0.00500	1	06/23/2021 03:08	WG1693305
1,2-Dichloropropane	ND		0.00500	1	06/23/2021 03:08	WG1693305
1,1-Dichloropropene	ND		0.00250	1	06/23/2021 03:08	WG1693305
1,3-Dichloropropane	ND		0.00500	1	06/23/2021 03:08	WG1693305
cis-1,3-Dichloropropene	ND		0.00250	1	06/23/2021 03:08	WG1693305
trans-1,3-Dichloropropene	ND		0.00500	1	06/23/2021 03:08	WG1693305
2,2-Dichloropropane	ND		0.00250	1	06/23/2021 03:08	WG1693305
Di-isopropyl ether	ND		0.00100	1	06/23/2021 03:08	WG1693305
Ethylbenzene	ND		0.00250	1	06/23/2021 03:08	WG1693305
Hexachloro-1,3-butadiene	ND		0.0250	1	06/23/2021 03:08	WG1693305
Isopropylbenzene	ND		0.00250	1	06/23/2021 03:08	WG1693305
p-Isopropyltoluene	0.338		0.00500	1	06/23/2021 03:08	WG1693305
2-Butanone (MEK)	0.104		0.100	1	06/23/2021 03:08	WG1693305
Methylene Chloride	ND		0.0250	1	06/23/2021 03:08	WG1693305
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	06/23/2021 03:08	WG1693305
Methyl tert-butyl ether	ND		0.00100	1	06/23/2021 03:08	WG1693305
Naphthalene	0.0245		0.0125	1	06/23/2021 03:08	WG1693305
n-Propylbenzene	ND		0.00500	1	06/23/2021 03:08	WG1693305
Styrene	ND		0.0125	1	06/23/2021 03:08	WG1693305
1,1,1,2-Tetrachloroethane	ND		0.00250	1	06/23/2021 03:08	WG1693305

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 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND		0.00250	1	06/23/2021 03:08	WG1693305
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	06/23/2021 03:08	WG1693305
Tetrachloroethene	ND		0.00250	1	06/23/2021 03:08	WG1693305
Toluene	0.00858		0.00500	1	06/23/2021 03:08	WG1693305
1,2,3-Trichlorobenzene	ND		0.0125	1	06/23/2021 03:08	WG1693305
1,2,4-Trichlorobenzene	ND		0.0125	1	06/23/2021 03:08	WG1693305
1,1,1-Trichloroethane	ND		0.00250	1	06/23/2021 03:08	WG1693305
1,1,2-Trichloroethane	ND		0.00250	1	06/23/2021 03:08	WG1693305
Trichloroethene	ND		0.00100	1	06/23/2021 03:08	WG1693305
Trichlorofluoromethane	ND		0.00250	1	06/23/2021 03:08	WG1693305
1,2,3-Trichloropropane	ND		0.0125	1	06/23/2021 03:08	WG1693305
1,2,4-Trimethylbenzene	0.0172	B	0.00500	1	06/23/2021 03:08	WG1693305
1,2,3-Trimethylbenzene	0.0130		0.00500	1	06/23/2021 03:08	WG1693305
1,3,5-Trimethylbenzene	0.00770		0.00500	1	06/23/2021 03:08	WG1693305
Vinyl chloride	ND		0.00250	1	06/23/2021 03:08	WG1693305
Xylenes, Total	0.00828		0.00650	1	06/23/2021 03:08	WG1693305
(S) Toluene-d8	104		75.0-131		06/23/2021 03:08	WG1693305
(S) 4-Bromofluorobenzene	90.3		67.0-138		06/23/2021 03:08	WG1693305
(S) 1,2-Dichloroethane-d4	124		70.0-130		06/23/2021 03:08	WG1693305



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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Diesel Range Organics (DRO)	461		40.0	10	06/26/2021 04:06	WG1694224
Residual Range Organics (RRO)	1220		100	10	06/26/2021 04:06	WG1694224
(S) o-Terphenyl	72.5		18.0-148		06/26/2021 04:06	WG1694224

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.0280	4.66	06/24/2021 15:40	WG1694205
Acenaphthene	ND		0.0280	4.66	06/24/2021 15:40	WG1694205
Acenaphthylene	ND		0.0280	4.66	06/24/2021 15:40	WG1694205
Benzo(a)anthracene	ND		0.0280	4.66	06/24/2021 15:40	WG1694205
Benzo(a)pyrene	ND		0.0280	4.66	06/24/2021 15:40	WG1694205
Benzo(b)fluoranthene	ND		0.0280	4.66	06/24/2021 15:40	WG1694205
Benzo(g,h,i)perylene	ND		0.0280	4.66	06/24/2021 15:40	WG1694205
Benzo(k)fluoranthene	ND		0.0280	4.66	06/24/2021 15:40	WG1694205
Chrysene	ND		0.0280	4.66	06/24/2021 15:40	WG1694205
Dibenz(a,h)anthracene	ND		0.0280	4.66	06/24/2021 15:40	WG1694205
Fluoranthene	ND		0.0280	4.66	06/24/2021 15:40	WG1694205
Fluorene	ND		0.0280	4.66	06/24/2021 15:40	WG1694205
Indeno(1,2,3-cd)pyrene	ND		0.0280	4.66	06/24/2021 15:40	WG1694205
Naphthalene	ND		0.0932	4.66	06/24/2021 15:40	WG1694205
Phenanthrene	ND		0.0280	4.66	06/24/2021 15:40	WG1694205
Pyrene	ND		0.0280	4.66	06/24/2021 15:40	WG1694205
1-Methylnaphthalene	0.0950		0.0932	4.66	06/24/2021 15:40	WG1694205
2-Methylnaphthalene	ND		0.0932	4.66	06/24/2021 15:40	WG1694205
2-Chloronaphthalene	ND		0.0932	4.66	06/24/2021 15:40	WG1694205
(S) p-Terphenyl-d14	90.7		23.0-120		06/24/2021 15:40	WG1694205
(S) Nitrobenzene-d5	69.9		14.0-149		06/24/2021 15:40	WG1694205
(S) 2-Fluorobiphenyl	74.6		34.0-125		06/24/2021 15:40	WG1694205

Method Blank (MB)

(MB) R3671358-1 06/23/21 10:23

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

1 Cp

2 Tc

3 Ss

L1368595-18 Original Sample (OS) • Duplicate (DUP)

(OS) L1368595-18 06/23/21 10:23 • (DUP) R3671358-3 06/23/21 10:23

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Total Solids	94.8	93.4	1	1.53		10

4 Cn

5 Sr

6 Qc

Laboratory Control Sample (LCS)

(LCS) R3671358-2 06/23/21 10:23

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

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3673396-1 06/28/21 20:02

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Perchlorate	U		0.00300	0.0400

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1368595-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1368595-01 06/28/21 21:55 • (DUP) R3673396-3 06/28/21 22:24

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Perchlorate	ND	ND	1	0.000		20

L1368595-21 Original Sample (OS) • Duplicate (DUP)

(OS) L1368595-21 06/29/21 09:17 • (DUP) R3673396-6 06/29/21 09:46

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Perchlorate	ND	ND	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3673396-2 06/28/21 20:30

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Perchlorate	0.0998	0.110	110	90.0-110	

L1368595-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1368595-06 06/28/21 23:21 • (MS) R3673396-4 06/28/21 23:49 • (MSD) R3673396-5 06/29/21 00:18

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Perchlorate	0.100	ND	0.0985	0.106	98.5	106	1	80.0-120			7.38	20

Method Blank (MB)

(MB) R3671654-2 06/24/21 14:18

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Gasoline Range Organics-NWTPH	U		0.0339	0.100
(S) a,a,a-Trifluorotoluene(FID)	106			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3671654-1 06/24/21 13:35

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5.50	6.43	117	71.0-124	
(S) a,a,a-Trifluorotoluene(FID)			107	77.0-120	

L1368277-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1368277-11 06/24/21 16:00 • (MS) R3671654-3 06/24/21 22:50 • (MSD) R3671654-4 06/24/21 23:11

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Gasoline Range Organics-NWTPH	204	ND	151	155	82.5	84.7	33.3	10.0-149			2.61	27
(S) a,a,a-Trifluorotoluene(FID)					97.0	96.1		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) R3671425-2 06/21/21 15:48

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) R3671425-2 06/21/21 15:48

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00255	0.00500
2-Butanone (MEK)	U		0.0635	0.100
Methylene Chloride	U		0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.00228	0.0250
Methyl tert-butyl ether	U		0.000350	0.00100
Naphthalene	U		0.00488	0.0125
n-Propylbenzene	U		0.000950	0.00500
Styrene	U		0.000229	0.0125
1,1,1,2-Tetrachloroethane	U		0.000948	0.00250
1,1,2,2-Tetrachloroethane	U		0.000695	0.00250
Tetrachloroethene	U		0.000896	0.00250
Toluene	U		0.00130	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000754	0.00250
1,2,3-Trichlorobenzene	U		0.00733	0.0125
1,2,4-Trichlorobenzene	U		0.00440	0.0125
1,1,1-Trichloroethane	U		0.000923	0.00250
1,1,2-Trichloroethane	U		0.000597	0.00250
Trichloroethene	U		0.000584	0.00100
Trichlorofluoromethane	U		0.000827	0.00250
1,2,3-Trichloropropane	U		0.00162	0.0125
1,2,3-Trimethylbenzene	U		0.00158	0.00500
1,2,4-Trimethylbenzene	U		0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
Vinyl chloride	U		0.00116	0.00250
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	104			75.0-131
(S) 4-Bromofluorobenzene	104			67.0-138
(S) 1,2-Dichloroethane-d4	96.0			70.0-130

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3671425-1 06/21/21 14:32

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	0.692	111	10.0-160	
Acrylonitrile	0.625	0.669	107	45.0-153	
Benzene	0.125	0.136	109	70.0-123	
Bromobenzene	0.125	0.126	101	73.0-121	
Bromodichloromethane	0.125	0.121	96.8	73.0-121	

Laboratory Control Sample (LCS)

(LCS) R3671425-1 06/21/21 14:32

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Bromoform	0.125	0.127	102	64.0-132	
Bromomethane	0.125	0.129	103	56.0-147	
n-Butylbenzene	0.125	0.132	106	68.0-135	
sec-Butylbenzene	0.125	0.130	104	74.0-130	
tert-Butylbenzene	0.125	0.126	101	75.0-127	
Carbon tetrachloride	0.125	0.143	114	66.0-128	
Chlorobenzene	0.125	0.130	104	76.0-128	
Chlorodibromomethane	0.125	0.124	99.2	74.0-127	
Chloroethane	0.125	0.130	104	61.0-134	
Chloroform	0.125	0.139	111	72.0-123	
Chloromethane	0.125	0.130	104	51.0-138	
2-Chlorotoluene	0.125	0.130	104	75.0-124	
4-Chlorotoluene	0.125	0.129	103	75.0-124	
1,2-Dibromo-3-Chloropropane	0.125	0.128	102	59.0-130	
1,2-Dibromoethane	0.125	0.129	103	74.0-128	
Dibromomethane	0.125	0.124	99.2	75.0-122	
1,2-Dichlorobenzene	0.125	0.128	102	76.0-124	
1,3-Dichlorobenzene	0.125	0.126	101	76.0-125	
1,4-Dichlorobenzene	0.125	0.123	98.4	77.0-121	
Dichlorodifluoromethane	0.125	0.138	110	43.0-156	
1,1-Dichloroethane	0.125	0.118	94.4	70.0-127	
1,2-Dichloroethane	0.125	0.128	102	65.0-131	
1,1-Dichloroethene	0.125	0.145	116	65.0-131	
cis-1,2-Dichloroethene	0.125	0.125	100	73.0-125	
trans-1,2-Dichloroethene	0.125	0.130	104	71.0-125	
1,2-Dichloropropane	0.125	0.127	102	74.0-125	
1,1-Dichloropropene	0.125	0.141	113	73.0-125	
1,3-Dichloropropane	0.125	0.128	102	80.0-125	
cis-1,3-Dichloropropene	0.125	0.125	100	76.0-127	
trans-1,3-Dichloropropene	0.125	0.125	100	73.0-127	
2,2-Dichloropropane	0.125	0.138	110	59.0-135	
Di-isopropyl ether	0.125	0.129	103	60.0-136	
Ethylbenzene	0.125	0.131	105	74.0-126	
Hexachloro-1,3-butadiene	0.125	0.141	113	57.0-150	
Isopropylbenzene	0.125	0.131	105	72.0-127	
p-Isopropyltoluene	0.125	0.128	102	72.0-133	
2-Butanone (MEK)	0.625	0.653	104	30.0-160	
Methylene Chloride	0.125	0.121	96.8	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.625	0.631	101	56.0-143	
Methyl tert-butyl ether	0.125	0.115	92.0	66.0-132	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3671425-1 06/21/21 14:32

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Naphthalene	0.125	0.153	122	59.0-130	
n-Propylbenzene	0.125	0.127	102	74.0-126	
Styrene	0.125	0.125	100	72.0-127	
1,1,1,2-Tetrachloroethane	0.125	0.125	100	74.0-129	
1,1,2,2-Tetrachloroethane	0.125	0.118	94.4	68.0-128	
Tetrachloroethene	0.125	0.139	111	70.0-136	
Toluene	0.125	0.134	107	75.0-121	
1,1,2-Trichlorotrifluoroethane	0.125	0.166	133	61.0-139	
1,2,3-Trichlorobenzene	0.125	0.154	123	59.0-139	
1,2,4-Trichlorobenzene	0.125	0.148	118	62.0-137	
1,1,1-Trichloroethane	0.125	0.129	103	69.0-126	
1,1,2-Trichloroethane	0.125	0.118	94.4	78.0-123	
Trichloroethene	0.125	0.135	108	76.0-126	
Trichlorofluoromethane	0.125	0.142	114	61.0-142	
1,2,3-Trichloropropane	0.125	0.111	88.8	67.0-129	
1,2,3-Trimethylbenzene	0.125	0.122	97.6	74.0-124	
1,2,4-Trimethylbenzene	0.125	0.123	98.4	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.123	98.4	73.0-127	
Vinyl chloride	0.125	0.126	101	63.0-134	
Xylenes, Total	0.375	0.400	107	72.0-127	
(S) Toluene-d8			99.7	75.0-131	
(S) 4-Bromofluorobenzene			99.6	67.0-138	
(S) 1,2-Dichloroethane-d4			100	70.0-130	

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L1367833-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1367833-11 06/21/21 20:18 • (MS) R3671425-3 06/22/21 00:07 • (MSD) R3671425-4 06/22/21 00:26

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Acetone	0.620	ND	0.217	0.270	35.0	43.5	1	10.0-160			21.8	40
Acrylonitrile	0.620	ND	0.384	0.520	61.9	83.9	1	10.0-160			30.1	40
Benzene	0.124	0.00153	0.120	0.124	95.5	98.8	1	10.0-149			3.28	37
Bromobenzene	0.124	ND	0.106	0.109	85.5	87.9	1	10.0-156			2.79	38
Bromodichloromethane	0.124	ND	0.100	0.103	80.6	83.1	1	10.0-143			2.96	37
Bromoform	0.124	ND	0.101	0.109	81.5	87.9	1	10.0-146			7.62	36
Bromomethane	0.124	ND	0.0781	0.0600	63.0	48.4	1	10.0-149			26.2	38
n-Butylbenzene	0.124	ND	0.0951	0.112	76.7	90.3	1	10.0-160			16.3	40
sec-Butylbenzene	0.124	ND	0.103	0.117	83.1	94.4	1	10.0-159			12.7	39
tert-Butylbenzene	0.124	ND	0.105	0.112	84.7	90.3	1	10.0-156			6.45	39

L1367833-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1367833-11 06/21/21 20:18 • (MS) R3671425-3 06/22/21 00:07 • (MSD) R3671425-4 06/22/21 00:26

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Carbon tetrachloride	0.124	ND	0.104	0.113	83.9	91.1	1	10.0-145			8.29	37
Chlorobenzene	0.124	ND	0.106	0.112	85.5	90.3	1	10.0-152			5.50	39
Chlorodibromomethane	0.124	ND	0.0993	0.108	80.1	87.1	1	10.0-146			8.39	37
Chloroethane	0.124	ND	0.0484	0.0516	39.0	41.6	1	10.0-146			6.40	40
Chloroform	0.124	ND	0.101	0.110	81.5	88.7	1	10.0-146			8.53	37
Chloromethane	0.124	ND	0.0815	0.0460	65.7	37.1	1	10.0-159		J3	55.7	37
2-Chlorotoluene	0.124	ND	0.102	0.111	82.3	89.5	1	10.0-159			8.45	38
4-Chlorotoluene	0.124	ND	0.106	0.109	85.5	87.9	1	10.0-155			2.79	39
1,2-Dibromo-3-Chloropropane	0.124	ND	0.0992	0.103	80.0	83.1	1	10.0-151			3.76	39
1,2-Dibromoethane	0.124	ND	0.113	0.115	91.1	92.7	1	10.0-148			1.75	34
Dibromomethane	0.124	ND	0.101	0.106	81.5	85.5	1	10.0-147			4.83	35
1,2-Dichlorobenzene	0.124	ND	0.106	0.120	85.5	96.8	1	10.0-155			12.4	37
1,3-Dichlorobenzene	0.124	ND	0.104	0.117	83.9	94.4	1	10.0-153			11.8	38
1,4-Dichlorobenzene	0.124	ND	0.103	0.114	83.1	91.9	1	10.0-151			10.1	38
Dichlorodifluoromethane	0.124	ND	0.0713	0.0701	57.5	56.5	1	10.0-160			1.70	35
1,1-Dichloroethane	0.124	ND	0.0888	0.0965	71.6	77.8	1	10.0-147			8.31	37
1,2-Dichloroethane	0.124	ND	0.0976	0.108	78.7	87.1	1	10.0-148			10.1	35
1,1-Dichloroethene	0.124	ND	0.115	0.115	92.7	92.7	1	10.0-155			0.000	37
cis-1,2-Dichloroethene	0.124	ND	0.0866	0.102	69.8	82.3	1	10.0-149			16.3	37
trans-1,2-Dichloroethene	0.124	ND	0.0969	0.0964	78.1	77.7	1	10.0-150			0.517	37
1,2-Dichloropropane	0.124	ND	0.106	0.107	83.1	84.0	1	10.0-148			0.939	37
1,1-Dichloropropene	0.124	ND	0.107	0.109	86.3	87.9	1	10.0-153			1.85	35
1,3-Dichloropropane	0.124	ND	0.110	0.116	88.7	93.5	1	10.0-154			5.31	35
cis-1,3-Dichloropropene	0.124	ND	0.107	0.104	86.3	83.9	1	10.0-151			2.84	37
trans-1,3-Dichloropropene	0.124	ND	0.105	0.108	84.7	87.1	1	10.0-148			2.82	37
2,2-Dichloropropane	0.124	ND	0.0652	0.0658	52.6	53.1	1	10.0-138			0.916	36
Di-isopropyl ether	0.124	ND	0.0932	0.105	75.2	84.7	1	10.0-147			11.9	36
Ethylbenzene	0.124	ND	0.103	0.110	82.3	88.0	1	10.0-160			6.57	38
Hexachloro-1,3-butadiene	0.124	ND	0.108	0.126	87.1	102	1	10.0-160			15.4	40
Isopropylbenzene	0.124	ND	0.102	0.114	82.3	91.9	1	10.0-155			11.1	38
p-Isopropyltoluene	0.124	ND	0.100	0.115	80.6	92.7	1	10.0-160			14.0	40
2-Butanone (MEK)	0.620	ND	0.401	0.558	64.7	90.0	1	10.0-160			32.7	40
Methylene Chloride	0.124	ND	0.0979	0.0922	79.0	74.4	1	10.0-141			6.00	37
4-Methyl-2-pentanone (MIBK)	0.620	ND	0.495	0.535	79.3	85.7	1	10.0-160			7.77	35
Methyl tert-butyl ether	0.124	ND	0.0756	0.0833	61.0	67.2	1	11.0-147			9.69	35
Naphthalene	0.124	ND	0.113	0.133	91.1	107	1	10.0-160			16.3	36
n-Propylbenzene	0.124	ND	0.101	0.111	81.5	89.5	1	10.0-158			9.43	38
Styrene	0.124	ND	0.103	0.109	83.1	87.9	1	10.0-160			5.66	40
1,1,1,2-Tetrachloroethane	0.124	ND	0.0947	0.106	76.4	85.5	1	10.0-149			11.3	39
1,1,2,2-Tetrachloroethane	0.124	ND	0.0898	0.0910	72.4	73.4	1	10.0-160			1.33	35

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1367833-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1367833-11 06/21/21 20:18 • (MS) R3671425-3 06/22/21 00:07 • (MSD) R3671425-4 06/22/21 00:26

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Tetrachloroethene	0.124	ND	0.108	0.117	87.1	94.4	1	10.0-156			8.00	39
Toluene	0.124	0.00651	0.134	0.141	103	108	1	10.0-156			5.09	38
1,1,2-Trichlorotrifluoroethane	0.124	ND	0.124	0.124	100	100	1	10.0-160			0.000	36
1,2,3-Trichlorobenzene	0.124	ND	0.128	0.159	103	128	1	10.0-160			21.6	40
1,2,4-Trichlorobenzene	0.124	ND	0.113	0.140	91.1	113	1	10.0-160			21.3	40
1,1,1-Trichloroethane	0.124	ND	0.0976	0.106	78.7	85.5	1	10.0-144			8.25	35
1,1,2-Trichloroethane	0.124	ND	0.111	0.118	88.2	93.8	1	10.0-160			6.11	35
Trichloroethene	0.124	ND	0.118	0.120	95.2	96.8	1	10.0-156			1.68	38
Trichlorofluoromethane	0.124	ND	0.0642	0.0690	51.8	55.6	1	10.0-160			7.21	40
1,2,3-Trichloropropane	0.124	ND	0.105	0.105	84.7	84.7	1	10.0-156			0.000	35
1,2,3-Trimethylbenzene	0.124	ND	0.100	0.112	80.6	90.3	1	10.0-160			11.3	36
1,2,4-Trimethylbenzene	0.124	ND	0.0944	0.105	74.5	83.1	1	10.0-160			10.6	36
1,3,5-Trimethylbenzene	0.124	ND	0.0961	0.106	77.5	85.5	1	10.0-160			9.80	38
Vinyl chloride	0.124	ND	0.0844	0.0857	68.1	69.1	1	10.0-160			1.53	37
Xylenes, Total	0.372	ND	0.310	0.344	82.3	91.4	1	10.0-160			10.4	38
(S) Toluene-d8					103	102		75.0-131				
(S) 4-Bromofluorobenzene					99.7	102		67.0-138				
(S) 1,2-Dichloroethane-d4					88.9	94.7		70.0-130				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3670878-2 06/23/21 01:32

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

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3670878-2 06/23/21 01:32

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00255	0.00500
2-Butanone (MEK)	U		0.0635	0.100
Methylene Chloride	U		0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.00228	0.0250
Methyl tert-butyl ether	U		0.000350	0.00100
Naphthalene	U		0.00488	0.0125
n-Propylbenzene	U		0.000950	0.00500
Styrene	U		0.000229	0.0125
1,1,1,2-Tetrachloroethane	U		0.000948	0.00250
1,1,2,2-Tetrachloroethane	U		0.000695	0.00250
Tetrachloroethene	U		0.000896	0.00250
Toluene	U		0.00130	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000754	0.00250
1,2,3-Trichlorobenzene	U		0.00733	0.0125
1,2,4-Trichlorobenzene	U		0.00440	0.0125
1,1,1-Trichloroethane	U		0.000923	0.00250
1,1,2-Trichloroethane	U		0.000597	0.00250
Trichloroethene	U		0.000584	0.00100
Trichlorofluoromethane	U		0.000827	0.00250
1,2,3-Trichloropropane	U		0.00162	0.0125
1,2,3-Trimethylbenzene	U		0.00158	0.00500
1,2,4-Trimethylbenzene	0.00213	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	107			75.0-131
(S) 4-Bromofluorobenzene	86.6			67.0-138
(S) 1,2-Dichloroethane-d4	113			70.0-130

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3670878-1 06/23/21 00:35

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	0.473	75.7	10.0-160	
Acrylonitrile	0.625	0.509	81.4	45.0-153	
Benzene	0.125	0.112	89.6	70.0-123	
Bromobenzene	0.125	0.123	98.4	73.0-121	
Bromodichloromethane	0.125	0.128	102	73.0-121	

Laboratory Control Sample (LCS)

(LCS) R3670878-1 06/23/21 00:35

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Bromoform	0.125	0.129	103	64.0-132	
Bromomethane	0.125	0.134	107	56.0-147	
n-Butylbenzene	0.125	0.124	99.2	68.0-135	
sec-Butylbenzene	0.125	0.125	100	74.0-130	
tert-Butylbenzene	0.125	0.115	92.0	75.0-127	
Carbon tetrachloride	0.125	0.126	101	66.0-128	
Chlorobenzene	0.125	0.115	92.0	76.0-128	
Chlorodibromomethane	0.125	0.116	92.8	74.0-127	
Chloroethane	0.125	0.117	93.6	61.0-134	
Chloroform	0.125	0.111	88.8	72.0-123	
Chloromethane	0.125	0.106	84.8	51.0-138	
2-Chlorotoluene	0.125	0.112	89.6	75.0-124	
4-Chlorotoluene	0.125	0.123	98.4	75.0-124	
1,2-Dibromo-3-Chloropropane	0.125	0.125	100	59.0-130	
1,2-Dibromoethane	0.125	0.0986	78.9	74.0-128	
Dibromomethane	0.125	0.113	90.4	75.0-122	
1,2-Dichlorobenzene	0.125	0.122	97.6	76.0-124	
1,3-Dichlorobenzene	0.125	0.121	96.8	76.0-125	
1,4-Dichlorobenzene	0.125	0.117	93.6	77.0-121	
Dichlorodifluoromethane	0.125	0.123	98.4	43.0-156	
1,1-Dichloroethane	0.125	0.115	92.0	70.0-127	
1,2-Dichloroethane	0.125	0.141	113	65.0-131	
1,1-Dichloroethene	0.125	0.110	88.0	65.0-131	
cis-1,2-Dichloroethene	0.125	0.107	85.6	73.0-125	
trans-1,2-Dichloroethene	0.125	0.106	84.8	71.0-125	
1,2-Dichloropropane	0.125	0.101	80.8	74.0-125	
1,1-Dichloropropene	0.125	0.111	88.8	73.0-125	
1,3-Dichloropropane	0.125	0.117	93.6	80.0-125	
cis-1,3-Dichloropropene	0.125	0.109	87.2	76.0-127	
trans-1,3-Dichloropropene	0.125	0.136	109	73.0-127	
2,2-Dichloropropane	0.125	0.155	124	59.0-135	
Di-isopropyl ether	0.125	0.0894	71.5	60.0-136	
Ethylbenzene	0.125	0.112	89.6	74.0-126	
Hexachloro-1,3-butadiene	0.125	0.161	129	57.0-150	
Isopropylbenzene	0.125	0.112	89.6	72.0-127	
p-Isopropyltoluene	0.125	0.111	88.8	72.0-133	
2-Butanone (MEK)	0.625	0.637	102	30.0-160	
Methylene Chloride	0.125	0.107	85.6	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.625	0.533	85.3	56.0-143	
Methyl tert-butyl ether	0.125	0.121	96.8	66.0-132	

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS)

(LCS) R3670878-1 06/23/21 00:35

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Naphthalene	0.125	0.105	84.0	59.0-130	
n-Propylbenzene	0.125	0.129	103	74.0-126	
Styrene	0.125	0.113	90.4	72.0-127	
1,1,1,2-Tetrachloroethane	0.125	0.102	81.6	74.0-129	
1,1,2,2-Tetrachloroethane	0.125	0.111	88.8	68.0-128	
Tetrachloroethene	0.125	0.137	110	70.0-136	
Toluene	0.125	0.121	96.8	75.0-121	
1,1,2-Trichlorotrifluoroethane	0.125	0.110	88.0	61.0-139	
1,2,3-Trichlorobenzene	0.125	0.133	106	59.0-139	
1,2,4-Trichlorobenzene	0.125	0.122	97.6	62.0-137	
1,1,1-Trichloroethane	0.125	0.125	100	69.0-126	
1,1,2-Trichloroethane	0.125	0.104	83.2	78.0-123	
Trichloroethene	0.125	0.102	81.6	76.0-126	
Trichlorofluoromethane	0.125	0.129	103	61.0-142	
1,2,3-Trichloropropane	0.125	0.108	86.4	67.0-129	
1,2,3-Trimethylbenzene	0.125	0.121	96.8	74.0-124	
1,2,4-Trimethylbenzene	0.125	0.121	96.8	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.113	90.4	73.0-127	
Vinyl chloride	0.125	0.118	94.4	63.0-134	
Xylenes, Total	0.375	0.338	90.1	72.0-127	
<i>(S) Toluene-d8</i>			102	75.0-131	
<i>(S) 4-Bromofluorobenzene</i>			89.1	67.0-138	
<i>(S) 1,2-Dichloroethane-d4</i>			125	70.0-130	

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L1368234-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1368234-03 06/23/21 07:35 • (MS) R3670878-3 06/23/21 08:13 • (MSD) R3670878-4 06/23/21 08:33

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Acetone	4.43	ND	7.40	9.60	197	256	8	10.0-160	<u>J5</u>	<u>J5</u>	25.9	40
Acrylonitrile	4.43	ND	5.95	3.57	159	95.2	8	10.0-160	<u>J3</u>	<u>J3</u>	50.0	40
Benzene	0.889	0.0255	0.595	0.340	75.9	41.9	8	10.0-149		<u>J3</u>	54.5	37
Bromobenzene	0.889	ND	0.668	0.425	89.1	56.7	8	10.0-156		<u>J3</u>	44.5	38
Bromodichloromethane	0.889	ND	0.714	0.402	95.2	53.6	8	10.0-143		<u>J3</u>	55.9	37
Bromoform	0.889	ND	0.888	0.659	118	87.9	8	10.0-146			29.6	36
Bromomethane	0.889	ND	0.635	0.336	84.7	44.8	8	10.0-149		<u>J3</u>	61.6	38
n-Butylbenzene	0.889	3.74	3.74	3.67	0.000	0.000	8	10.0-160	<u>V</u>	<u>V</u>	1.89	40
sec-Butylbenzene	0.889	1.06	1.50	1.33	58.7	36.0	8	10.0-159			12.0	39
tert-Butylbenzene	0.889	ND	0.552	0.339	73.6	45.2	8	10.0-156		<u>J3</u>	47.8	39

L1368234-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1368234-03 06/23/21 07:35 • (MS) R3670878-3 06/23/21 08:13 • (MSD) R3670878-4 06/23/21 08:33

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Carbon tetrachloride	0.889	ND	0.568	0.254	75.7	33.9	8	10.0-145		U3	76.4	37
Chlorobenzene	0.889	ND	0.643	0.394	85.7	52.5	8	10.0-152		U3	48.0	39
Chlorodibromomethane	0.889	ND	0.734	0.527	97.9	70.3	8	10.0-146			32.8	37
Chloroethane	0.889	ND	0.484	0.286	64.5	38.1	8	10.0-146		U3	51.4	40
Chloroform	0.889	ND	0.644	0.387	85.9	51.6	8	10.0-146		U3	49.9	37
Chloromethane	0.889	ND	0.454	0.241	60.5	32.1	8	10.0-159		U3	61.3	37
2-Chlorotoluene	0.889	ND	0.550	0.346	73.3	46.1	8	10.0-159		U3	45.5	38
4-Chlorotoluene	0.889	ND	0.626	0.406	83.5	54.1	8	10.0-155		U3	42.6	39
1,2-Dibromo-3-Chloropropane	0.889	ND	0.918	0.715	122	95.3	8	10.0-151			24.9	39
1,2-Dibromoethane	0.889	ND	0.657	0.580	87.6	77.3	8	10.0-148			12.4	34
Dibromomethane	0.889	ND	0.682	0.457	90.9	60.9	8	10.0-147		U3	39.5	35
1,2-Dichlorobenzene	0.889	ND	0.702	0.490	93.6	65.3	8	10.0-155			35.6	37
1,3-Dichlorobenzene	0.889	ND	0.602	0.408	80.3	54.4	8	10.0-153		U3	38.4	38
1,4-Dichlorobenzene	0.889	ND	0.638	0.441	85.1	58.8	8	10.0-151			36.5	38
Dichlorodifluoromethane	0.889	ND	0.718	0.286	95.7	38.1	8	10.0-160		U3	86.1	35
1,1-Dichloroethane	0.889	ND	0.591	0.334	78.8	44.5	8	10.0-147		U3	55.6	37
1,2-Dichloroethane	0.889	ND	0.699	0.487	93.2	64.9	8	10.0-148		U3	35.8	35
1,1-Dichloroethene	0.889	ND	0.497	0.230	66.3	30.7	8	10.0-155		U3	73.5	37
cis-1,2-Dichloroethene	0.889	ND	0.523	0.324	69.7	43.2	8	10.0-149		U3	47.0	37
trans-1,2-Dichloroethene	0.889	ND	0.481	0.242	64.1	32.3	8	10.0-150		U3	66.1	37
1,2-Dichloropropane	0.889	ND	0.660	0.319	88.0	42.5	8	10.0-148		U3	69.7	37
1,1-Dichloropropene	0.889	ND	0.517	0.239	68.9	31.9	8	10.0-153		U3	73.5	35
1,3-Dichloropropane	0.889	ND	0.743	0.561	99.1	74.8	8	10.0-154			27.9	35
cis-1,3-Dichloropropene	0.889	ND	0.579	0.429	77.2	57.2	8	10.0-151			29.8	37
trans-1,3-Dichloropropene	0.889	ND	0.758	0.590	101	78.7	8	10.0-148			24.9	37
2,2-Dichloropropane	0.889	ND	0.525	0.242	70.0	32.3	8	10.0-138		U3	73.8	36
Di-isopropyl ether	0.889	ND	0.511	0.349	68.1	46.5	8	10.0-147		U3	37.7	36
Ethylbenzene	0.889	4.91	5.34	4.84	57.3	0.000	8	10.0-160		V	9.82	38
Hexachloro-1,3-butadiene	0.889	ND	0.800	0.605	107	80.7	8	10.0-160			27.8	40
Isopropylbenzene	0.889	1.32	1.86	1.55	72.0	30.7	8	10.0-155			18.2	38
p-Isopropyltoluene	0.889	0.129	0.751	0.562	82.9	57.7	8	10.0-160			28.8	40
2-Butanone (MEK)	4.43	ND	4.15	4.53	111	121	8	10.0-160			8.76	40
Methylene Chloride	0.889	ND	ND	0.329	24.0	43.9	8	10.0-141		U3	58.5	37
4-Methyl-2-pentanone (MIBK)	4.43	ND	6.17	4.75	165	127	8	10.0-160	U5		26.0	35
Methyl tert-butyl ether	0.889	ND	0.751	0.538	100	71.7	8	11.0-147			33.0	35
Naphthalene	0.889	7.54	7.95	7.98	54.7	58.7	8	10.0-160			0.377	36
n-Propylbenzene	0.889	7.01	6.99	6.76	0.000	0.000	8	10.0-158	V	V	3.35	38
Styrene	0.889	ND	0.620	0.405	82.7	54.0	8	10.0-160		U3	42.0	40
1,1,1,2-Tetrachloroethane	0.889	ND	0.615	0.394	82.0	52.5	8	10.0-149		U3	43.8	39
1,1,2,2-Tetrachloroethane	0.889	ND	0.908	0.768	121	102	8	10.0-160			16.7	35

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1368234-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1368234-03 06/23/21 07:35 • (MS) R3670878-3 06/23/21 08:13 • (MSD) R3670878-4 06/23/21 08:33

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Tetrachloroethene	0.889	ND	0.689	0.339	91.9	45.2	8	10.0-156		J3	68.1	39
Toluene	0.889	0.144	0.743	0.411	79.9	35.6	8	10.0-156		J3	57.5	38
1,1,2-Trichlorotrifluoroethane	0.889	ND	0.475	0.216	63.3	28.8	8	10.0-160		J3	75.0	36
1,2,3-Trichlorobenzene	0.889	ND	0.655	0.640	87.3	85.3	8	10.0-160			2.32	40
1,2,4-Trichlorobenzene	0.889	ND	0.665	0.575	88.7	76.7	8	10.0-160			14.5	40
1,1,1-Trichloroethane	0.889	ND	0.558	0.186	74.4	24.8	8	10.0-144		J3	100	35
1,1,2-Trichloroethane	0.889	ND	0.986	0.879	131	117	8	10.0-160			11.5	35
Trichloroethene	0.889	ND	0.536	0.294	71.5	39.2	8	10.0-156		J3	58.3	38
Trichlorofluoromethane	0.889	ND	0.575	0.256	76.7	34.1	8	10.0-160		J3	76.8	40
1,2,3-Trichloropropane	0.889	ND	0.734	0.530	97.9	70.7	8	10.0-156			32.3	35
1,2,3-Trimethylbenzene	0.889	8.52	8.63	8.33	14.7	0.000	8	10.0-160		V	3.54	36
1,2,4-Trimethylbenzene	0.889	2.31	2.75	2.49	58.7	24.0	8	10.0-160			9.92	36
1,3,5-Trimethylbenzene	0.889	0.416	0.919	0.715	67.1	39.9	8	10.0-160			25.0	38
Vinyl chloride	0.889	ND	0.470	0.207	62.7	27.6	8	10.0-160		J3	77.7	37
Xylenes, Total	2.66	1.25	3.17	2.29	85.3	46.2	8	10.0-160			32.2	38
(S) Toluene-d8					112	107		75.0-131				
(S) 4-Bromofluorobenzene					110	102		67.0-138				
(S) 1,2-Dichloroethane-d4					120	110		70.0-130				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3671627-2 06/24/21 10:14

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	0.00300	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) R3671627-2 06/24/21 10:14

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)	0.197		0.0635	0.100
Methylene Chloride	U		0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.00228	0.0250
Methyl tert-butyl ether	U		0.000350	0.00100
Naphthalene	U		0.00488	0.0125
n-Propylbenzene	U		0.000950	0.00500
Styrene	U		0.000229	0.0125
1,1,1,2-Tetrachloroethane	U		0.000948	0.00250
1,1,2,2-Tetrachloroethane	U		0.000695	0.00250
Tetrachloroethene	U		0.000896	0.00250
Toluene	U		0.00130	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000754	0.00250
1,2,3-Trichlorobenzene	U		0.00733	0.0125
1,2,4-Trichlorobenzene	U		0.00440	0.0125
1,1,1-Trichloroethane	U		0.000923	0.00250
1,1,2-Trichloroethane	U		0.000597	0.00250
Trichloroethene	U		0.000584	0.00100
Trichlorofluoromethane	U		0.000827	0.00250
1,2,3-Trichloropropane	U		0.00162	0.0125
1,2,3-Trimethylbenzene	U		0.00158	0.00500
1,2,4-Trimethylbenzene	U		0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
Vinyl chloride	U		0.00116	0.00250
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	99.4			75.0-131
(S) 4-Bromofluorobenzene	107			67.0-138
(S) 1,2-Dichloroethane-d4	105			70.0-130

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3671627-1 06/24/21 09:17

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	0.733	117	10.0-160	
Acrylonitrile	0.625	0.597	95.5	45.0-153	
Benzene	0.125	0.117	93.6	70.0-123	
Bromobenzene	0.125	0.116	92.8	73.0-121	
Bromodichloromethane	0.125	0.133	106	73.0-121	

Laboratory Control Sample (LCS)

(LCS) R3671627-1 06/24/21 09:17

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Bromoform	0.125	0.0970	77.6	64.0-132	
Bromomethane	0.125	0.0938	75.0	56.0-147	
n-Butylbenzene	0.125	0.0950	76.0	68.0-135	
sec-Butylbenzene	0.125	0.103	82.4	74.0-130	
tert-Butylbenzene	0.125	0.119	95.2	75.0-127	
Carbon tetrachloride	0.125	0.104	83.2	66.0-128	
Chlorobenzene	0.125	0.106	84.8	76.0-128	
Chlorodibromomethane	0.125	0.103	82.4	74.0-127	
Chloroethane	0.125	0.0919	73.5	61.0-134	
Chloroform	0.125	0.115	92.0	72.0-123	
Chloromethane	0.125	0.119	95.2	51.0-138	
2-Chlorotoluene	0.125	0.113	90.4	75.0-124	
4-Chlorotoluene	0.125	0.120	96.0	75.0-124	
1,2-Dibromo-3-Chloropropane	0.125	0.0867	69.4	59.0-130	
1,2-Dibromoethane	0.125	0.117	93.6	74.0-128	
Dibromomethane	0.125	0.130	104	75.0-122	
1,2-Dichlorobenzene	0.125	0.110	88.0	76.0-124	
1,3-Dichlorobenzene	0.125	0.110	88.0	76.0-125	
1,4-Dichlorobenzene	0.125	0.105	84.0	77.0-121	
Dichlorodifluoromethane	0.125	0.134	107	43.0-156	
1,1-Dichloroethane	0.125	0.121	96.8	70.0-127	
1,2-Dichloroethane	0.125	0.128	102	65.0-131	
1,1-Dichloroethene	0.125	0.101	80.8	65.0-131	
cis-1,2-Dichloroethene	0.125	0.113	90.4	73.0-125	
trans-1,2-Dichloroethene	0.125	0.117	93.6	71.0-125	
1,2-Dichloropropane	0.125	0.129	103	74.0-125	
1,1-Dichloropropene	0.125	0.114	91.2	73.0-125	
1,3-Dichloropropane	0.125	0.116	92.8	80.0-125	
cis-1,3-Dichloropropene	0.125	0.132	106	76.0-127	
trans-1,3-Dichloropropene	0.125	0.106	84.8	73.0-127	
2,2-Dichloropropane	0.125	0.119	95.2	59.0-135	
Di-isopropyl ether	0.125	0.113	90.4	60.0-136	
Ethylbenzene	0.125	0.107	85.6	74.0-126	
Hexachloro-1,3-butadiene	0.125	0.0895	71.6	57.0-150	
Isopropylbenzene	0.125	0.106	84.8	72.0-127	
p-Isopropyltoluene	0.125	0.121	96.8	72.0-133	
2-Butanone (MEK)	0.625	0.752	120	30.0-160	
Methylene Chloride	0.125	0.118	94.4	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.625	0.614	98.2	56.0-143	
Methyl tert-butyl ether	0.125	0.103	82.4	66.0-132	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3671627-1 06/24/21 09:17

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Naphthalene	0.125	0.0767	61.4	59.0-130	
n-Propylbenzene	0.125	0.114	91.2	74.0-126	
Styrene	0.125	0.0962	77.0	72.0-127	
1,1,1,2-Tetrachloroethane	0.125	0.0989	79.1	74.0-129	
1,1,2,2-Tetrachloroethane	0.125	0.120	96.0	68.0-128	
Tetrachloroethene	0.125	0.101	80.8	70.0-136	
Toluene	0.125	0.110	88.0	75.0-121	
1,1,2-Trichlorotrifluoroethane	0.125	0.100	80.0	61.0-139	
1,2,3-Trichlorobenzene	0.125	0.0607	48.6	59.0-139	J4
1,2,4-Trichlorobenzene	0.125	0.0915	73.2	62.0-137	
1,1,1-Trichloroethane	0.125	0.126	101	69.0-126	
1,1,2-Trichloroethane	0.125	0.114	91.2	78.0-123	
Trichloroethene	0.125	0.108	86.4	76.0-126	
Trichlorofluoromethane	0.125	0.0992	79.4	61.0-142	
1,2,3-Trichloropropane	0.125	0.123	98.4	67.0-129	
1,2,3-Trimethylbenzene	0.125	0.0849	67.9	74.0-124	J4
1,2,4-Trimethylbenzene	0.125	0.115	92.0	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.120	96.0	73.0-127	
Vinyl chloride	0.125	0.119	95.2	63.0-134	
Xylenes, Total	0.375	0.320	85.3	72.0-127	
(S) Toluene-d8			96.4	75.0-131	
(S) 4-Bromofluorobenzene			99.3	67.0-138	
(S) 1,2-Dichloroethane-d4			115	70.0-130	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3672214-1 06/24/21 21:37

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Diesel Range Organics (DRO)	U		1.33	4.00
Residual Range Organics (RRO)	U		3.33	10.0
<i>(S) o-Terphenyl</i>	73.6			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3672214-2 06/24/21 21:50

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Diesel Range Organics (DRO)	50.0	45.0	90.0	50.0-150	
<i>(S) o-Terphenyl</i>			87.4	18.0-148	

L1367690-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1367690-01 06/24/21 22:03 • (MS) R3672214-3 06/24/21 22:16 • (MSD) R3672214-4 06/24/21 22:29

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Diesel Range Organics (DRO)	47.9	ND	42.3	46.3	88.5	95.9	1	50.0-150			9.03	20
<i>(S) o-Terphenyl</i>					85.3	89.9		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) R3671348-1 06/23/21 16:26

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Tetryl	U		0.0876	0.500
2,4-Dinitrotoluene	U		0.0784	0.500
4-Nitrotoluene (4-NT)	U		0.138	0.500
RDX	U		0.109	0.500
Nitrobenzene	U		0.0862	0.500
2,6-Dinitrotoluene	U		0.0864	0.500
2-Nitrotoluene	U		0.0915	0.500
3-Nitrotoluene	U		0.113	0.500
1,3,5-Trinitrobenzene	U		0.0392	0.500
1,3-Dinitrobenzene	U		0.0515	0.500
2,4,6-Trinitrotoluene	U		0.0631	0.500
4-Amino-2,6-Dinitrotoluene	U		0.0573	0.500
2-Amino-4,6-Dinitrotoluene	U		0.0638	0.500
HMX	U		0.0779	0.500
PETN	U		0.212	2.00
Nitroglycerine	U		0.154	2.00
(S) 1,3-Dimethyl-2-NB	110			80.0-128

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3671348-2 06/23/21 16:53

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Tetryl	8.00	9.04	113	80.0-122	
2,4-Dinitrotoluene	8.00	9.00	113	80.0-120	
4-Nitrotoluene (4-NT)	8.00	8.59	107	80.0-121	
RDX	8.00	8.68	109	80.0-120	
Nitrobenzene	8.00	9.17	115	80.0-120	
2,6-Dinitrotoluene	8.00	9.40	117	80.0-120	
2-Nitrotoluene	8.00	8.61	108	80.0-120	
3-Nitrotoluene	8.00	8.60	108	80.0-120	
1,3,5-Trinitrobenzene	8.00	8.84	111	80.0-124	
1,3-Dinitrobenzene	8.00	8.52	107	80.0-122	
2,4,6-Trinitrotoluene	8.00	8.52	107	80.0-120	
4-Amino-2,6-Dinitrotoluene	8.00	9.02	113	80.0-120	
2-Amino-4,6-Dinitrotoluene	8.00	8.54	107	80.0-123	
HMX	8.00	8.66	108	80.0-120	
PETN	8.00	8.59	107	80.0-137	
Nitroglycerine	8.00	9.12	114	78.0-120	

Laboratory Control Sample (LCS)

(LCS) R3671348-2 06/23/21 16:53

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
(S) 1,3-Dimethyl-2-NB			113	80.0-128	

L1368248-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1368248-21 06/23/21 18:14 • (MS) R3671348-3 06/23/21 17:20 • (MSD) R3671348-4 06/23/21 17:47

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Tetryl	8.05	ND	7.99	8.65	98.9	108	1.01	46.0-158			7.93	20
2,4-Dinitrotoluene	8.05	ND	9.03	9.46	112	119	1.01	78.0-138			4.65	20
4-Nitrotoluene (4-NT)	8.05	ND	8.70	8.51	108	107	1.01	80.0-129			2.21	20
RDX	8.05	ND	8.83	8.53	109	107	1.01	57.0-126			3.46	20
Nitrobenzene	8.05	ND	9.13	8.82	113	111	1.01	80.0-126			3.45	20
2,6-Dinitrotoluene	8.05	ND	9.74	12.1	121	152	1.01	80.0-125		J3 J5	21.6	20
2-Nitrotoluene	8.05	ND	8.69	8.50	108	107	1.01	80.0-125			2.21	20
3-Nitrotoluene	8.05	ND	8.73	8.51	108	107	1.01	80.0-120			2.55	20
1,3,5-Trinitrobenzene	8.05	ND	8.90	8.70	110	109	1.01	80.0-133			2.27	20
1,3-Dinitrobenzene	8.05	ND	8.63	8.40	107	105	1.01	80.0-138			2.70	20
2,4,6-Trinitrotoluene	8.05	ND	9.43	8.72	117	109	1.01	80.0-127			7.82	20
4-Amino-2,6-Dinitrotoluene	8.05	ND	11.7	10.1	145	127	1.01	80.0-127	J5		14.7	20
2-Amino-4,6-Dinitrotoluene	8.05	ND	10.9	11.8	135	148	1.01	80.0-135		J5	7.93	20
HMX	8.05	ND	8.78	8.57	109	107	1.01	79.0-125			2.42	20
PETN	8.05	ND	8.91	8.58	110	108	1.01	77.0-145			3.77	20
Nitroglycerine	8.05	ND	10.2	8.76	126	110	1.01	66.0-137			15.2	20
(S) 1,3-Dimethyl-2-NB					109	107		80.0-128				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3671629-1 06/24/21 09:22

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Tetryl	U		0.0876	0.500
2,4-Dinitrotoluene	U		0.0784	0.500
4-Nitrotoluene (4-NT)	U		0.138	0.500
RDX	U		0.109	0.500
Nitrobenzene	U		0.0862	0.500
2,6-Dinitrotoluene	U		0.0864	0.500
2-Nitrotoluene	U		0.0915	0.500
3-Nitrotoluene	U		0.113	0.500
1,3,5-Trinitrobenzene	U		0.0392	0.500
1,3-Dinitrobenzene	U		0.0515	0.500
2,4,6-Trinitrotoluene	U		0.0631	0.500
4-Amino-2,6-Dinitrotoluene	U		0.0573	0.500
2-Amino-4,6-Dinitrotoluene	U		0.0638	0.500
HMX	U		0.0779	0.500
PETN	U		0.212	2.00
Nitroglycerine	U		0.154	2.00
(S) 1,3-Dimethyl-2-NB	111			80.0-128

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

Laboratory Control Sample (LCS)

(LCS) R3671629-2 06/24/21 09:50

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Tetryl	8.00	8.50	106	80.0-122	
2,4-Dinitrotoluene	8.00	8.47	106	80.0-120	
4-Nitrotoluene (4-NT)	8.00	8.46	106	80.0-121	
RDX	8.00	8.56	107	80.0-120	
Nitrobenzene	8.00	8.66	108	80.0-120	
2,6-Dinitrotoluene	8.00	8.41	105	80.0-120	
2-Nitrotoluene	8.00	8.50	106	80.0-120	
3-Nitrotoluene	8.00	8.66	108	80.0-120	
1,3,5-Trinitrobenzene	8.00	8.63	108	80.0-124	
1,3-Dinitrobenzene	8.00	8.51	106	80.0-122	
2,4,6-Trinitrotoluene	8.00	8.22	103	80.0-120	
4-Amino-2,6-Dinitrotoluene	8.00	8.60	108	80.0-120	
2-Amino-4,6-Dinitrotoluene	8.00	8.31	104	80.0-123	
HMX	8.00	8.54	107	80.0-120	
PETN	8.00	8.91	111	80.0-137	
Nitroglycerine	8.00	8.27	103	78.0-120	

Laboratory Control Sample (LCS)

(LCS) R3671629-2 06/24/21 09:50

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
(S) 1,3-Dimethyl-2-NB			109	80.0-128	

L1368595-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1368595-17 06/24/21 11:14 • (MS) R3671629-3 06/24/21 10:18 • (MSD) R3671629-4 06/24/21 10:46

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Tetryl	8.06	ND	9.22	8.85	114	110	1.01	46.0-158			4.10	20
2,4-Dinitrotoluene	8.06	ND	8.86	8.85	110	110	1.01	78.0-138			0.113	20
4-Nitrotoluene (4-NT)	8.06	ND	8.78	8.74	109	109	1.01	80.0-129			0.457	20
RDX	8.06	ND	9.03	8.95	112	112	1.01	57.0-126			0.890	20
Nitrobenzene	8.06	ND	9.06	8.99	112	112	1.01	80.0-126			0.776	20
2,6-Dinitrotoluene	8.06	ND	8.85	8.79	110	110	1.01	80.0-125			0.680	20
2-Nitrotoluene	8.06	ND	8.92	8.88	111	111	1.01	80.0-125			0.449	20
3-Nitrotoluene	8.06	ND	8.99	9.03	112	113	1.01	80.0-120			0.444	20
1,3,5-Trinitrobenzene	8.06	ND	9.03	8.92	112	111	1.01	80.0-133			1.23	20
1,3-Dinitrobenzene	8.06	ND	8.83	8.80	110	110	1.01	80.0-138			0.340	20
2,4,6-Trinitrotoluene	8.06	ND	8.70	8.65	108	108	1.01	80.0-127			0.576	20
4-Amino-2,6-Dinitrotoluene	8.06	ND	8.78	8.74	109	109	1.01	80.0-127			0.457	20
2-Amino-4,6-Dinitrotoluene	8.06	ND	8.67	8.61	108	107	1.01	80.0-135			0.694	20
HMX	8.06	ND	9.14	9.07	113	113	1.01	79.0-125			0.769	20
PETN	8.06	ND	9.22	9.35	114	117	1.01	77.0-145			1.40	20
Nitroglycerine	8.06	ND	8.82	8.76	109	109	1.01	66.0-137			0.683	20
(S) 1,3-Dimethyl-2-NB					112	112		80.0-128				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3671784-2 06/24/21 15:20

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.00230	0.00600
Acenaphthene	U		0.00209	0.00600
Acenaphthylene	U		0.00216	0.00600
Benzo(a)anthracene	U		0.00173	0.00600
Benzo(a)pyrene	U		0.00179	0.00600
Benzo(b)fluoranthene	U		0.00153	0.00600
Benzo(g,h,i)perylene	U		0.00177	0.00600
Benzo(k)fluoranthene	U		0.00215	0.00600
Chrysene	U		0.00232	0.00600
Dibenz(a,h)anthracene	U		0.00172	0.00600
Fluoranthene	U		0.00227	0.00600
Fluorene	U		0.00205	0.00600
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600
Naphthalene	U		0.00408	0.0200
Phenanthrene	U		0.00231	0.00600
Pyrene	U		0.00200	0.00600
1-Methylnaphthalene	U		0.00449	0.0200
2-Methylnaphthalene	U		0.00427	0.0200
2-Chloronaphthalene	U		0.00466	0.0200
(S) Nitrobenzene-d5	60.4			14.0-149
(S) 2-Fluorobiphenyl	68.1			34.0-125
(S) p-Terphenyl-d14	77.9			23.0-120

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3671784-1 06/24/21 15:01

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0658	82.3	50.0-126	
Acenaphthene	0.0800	0.0607	75.9	50.0-120	
Acenaphthylene	0.0800	0.0686	85.8	50.0-120	
Benzo(a)anthracene	0.0800	0.0666	83.3	45.0-120	
Benzo(a)pyrene	0.0800	0.0537	67.1	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0540	67.5	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0517	64.6	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0545	68.1	49.0-125	
Chrysene	0.0800	0.0633	79.1	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0508	63.5	47.0-125	
Fluoranthene	0.0800	0.0675	84.4	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3671784-1 06/24/21 15:01

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.0800	0.0688	86.0	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0553	69.1	46.0-125	
Naphthalene	0.0800	0.0591	73.9	50.0-120	
Phenanthrene	0.0800	0.0627	78.4	47.0-120	
Pyrene	0.0800	0.0632	79.0	43.0-123	
1-Methylnaphthalene	0.0800	0.0648	81.0	51.0-121	
2-Methylnaphthalene	0.0800	0.0623	77.9	50.0-120	
2-Chloronaphthalene	0.0800	0.0616	77.0	50.0-120	
(S) Nitrobenzene-d5			72.5	14.0-149	
(S) 2-Fluorobiphenyl			80.9	34.0-125	
(S) p-Terphenyl-d14			89.0	23.0-120	

Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) • (MS) R3671784-3 06/24/21 19:00 • (MSD) R3671784-4 06/24/21 19:20

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Anthracene	0.0796		0.0604	0.0629	75.9	79.4	1	10.0-145			4.06	30
Acenaphthene	0.0796		0.0574	0.0593	72.1	74.9	1	14.0-127			3.26	27
Acenaphthylene	0.0796		0.0638	0.0660	80.2	83.3	1	21.0-124			3.39	25
Benzo(a)anthracene	0.0796		0.0581	0.0604	73.0	76.3	1	10.0-139			3.88	30
Benzo(a)pyrene	0.0796		0.0551	0.0577	69.2	72.9	1	10.0-141			4.61	31
Benzo(b)fluoranthene	0.0796		0.0508	0.0535	63.8	67.6	1	10.0-140			5.18	36
Benzo(g,h,i)perylene	0.0796		0.0533	0.0560	67.0	70.7	1	10.0-140			4.94	33
Benzo(k)fluoranthene	0.0796		0.0537	0.0563	67.5	71.1	1	10.0-137			4.73	31
Chrysene	0.0796		0.0604	0.0627	75.9	79.2	1	10.0-145			3.74	30
Dibenz(a,h)anthracene	0.0796		0.0473	0.0497	59.4	62.8	1	10.0-132			4.95	31
Fluoranthene	0.0796		0.0630	0.0652	79.1	82.3	1	10.0-153			3.43	33
Fluorene	0.0796		0.0651	0.0657	81.8	83.0	1	11.0-130			0.917	29
Indeno(1,2,3-cd)pyrene	0.0796		0.0495	0.0519	62.2	65.5	1	10.0-137			4.73	32
Naphthalene	0.0796		0.0560	0.0578	70.4	73.0	1	10.0-135			3.16	27
Phenanthrene	0.0796		0.0582	0.0610	73.1	77.0	1	10.0-144			4.70	31
Pyrene	0.0796		0.0626	0.0650	78.6	82.1	1	10.0-148			3.76	35
1-Methylnaphthalene	0.0796		0.0619	0.0634	77.8	80.1	1	10.0-142			2.39	28
2-Methylnaphthalene	0.0796		0.0586	0.0604	73.6	76.3	1	10.0-137			3.03	28
2-Chloronaphthalene	0.0796		0.0587	0.0607	73.7	76.6	1	29.0-120			3.35	24
(S) Nitrobenzene-d5					59.5	70.8		14.0-149				
(S) 2-Fluorobiphenyl					69.5	83.7		34.0-125				
(S) p-Terphenyl-d14					84.6	94.3		23.0-120				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

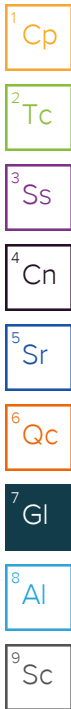
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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.
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.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
V	The sample concentration is too high to evaluate accurate spike recoveries.



ACCREDITATIONS & LOCATIONS

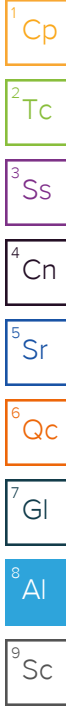
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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.

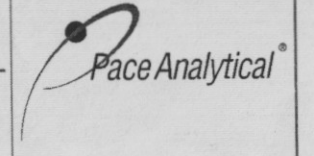
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.



2420 W. 26TH AVE., SUITE 100-D
Denver, CO 80211

400 Libbey Parkway
Weymouth, MA 02189

Pres Chk																				
----------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--



Report to: **Steve Long**

Email To: **slong@vertexeng.com;labreports@vertexeng.co**

Project Description: **Boring Frederickson**

City/State Collected: **Puyallup WA**

Please Circle: **PT** MT CT ET

Phone: **303-623-9118**

Client Project # **71555**

Lab Project # **VERTEXCO-WA**

Collected by (print): **S. Long**

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)
 Three Day

Quote #
Date Results Needed

Immediately Packed on Ice N Y

No. of Cntrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs	PERCHLORATE 2ozClr-NoPres	SV8330SF, TS 4ozAmb-NoPres													
TP-125 C 1 0-1	grab	SS	0-1	6/17	9:30	2	X	X													-11
TP-125 C 1 5'		SS	5'		9:35	2	X	X													-12
TP-125 D 1 0-1		SS	0-1		9:40	2	X	X													-13
TP-125 D 1		SS	6'		9:45	2	X	X													-14
TP-125 E / 0-1		SS	0-1		9:50	2	X	X													-15
TP-125 E /		SS	6'		9:55	2	X	X													-16
TP-125 F / 0-1		SS	0-1		10:00	2	X	X													-17
TP-125 F /		SS	6'		10:05	2	X	X													-18
Comp - 6	comp	SS	0-6"	6/18	11:00	2	X	X													-19
Comp - 4	comp	SS	0-6"	6/18	11:30	2	X	X													-20

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

Remarks: **COMP-7** 0-6" 6/15 6:45 2 X X -21
 pH _____ Temp _____
 Flow _____ Other _____

Samples returned via: UPS FedEx Courier Tracking #

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

Relinquished by: (Signature) *[Signature]*

Date: **6/18/21** Time: **12:00**

Received by: (Signature) **Fed Ex**

Trip Blank Received: Yes No
 HCL / MeOH
 TBR

Relinquished by: (Signature)

Date: Time:

Received by: (Signature)

Temp: **51.5** °C Bottles Received: **39**

If preservation required by Login: Date/Time

Relinquished by: (Signature)

Date: Time:

Received for lab by: (Signature) *[Signature]*

Date: **6-19-21** Time: **0900**


Hold: Condition: **NCF / OK**

L1368595 VERTEXDCO NCF HM

R3/R4/RX/EX

Time estimate: 0h Time spent: 0h

Members

-  Hailey Melson (responsible)
-  Chris Ward

- Login Clarification needed
- Chain of custody is incomplete
- Please specify Metals requested
- Please specify TCLP requested
- Received additional samples not listed on COC
- Sample IDs on containers do not match IDs on COC
- Client did not "X" analysis
- Chain of Custody is missing
- If no COC: Received by: _____
- If no COC: Date/Time: _____
- If no COC: Temp./Cont.Rec./pH: _____
- If no COC: Carrier: _____
- If no COC: Tracking #: _____
- Client informed by call
- Client informed by Email
- Client informed by Voicemail
- Date/Time: 6/21/21@0933 _____
- PM initials: CMW _____
- Client Contact: Steve Long _____

Comments

- Hailey Melson* 19 June 2021 2:09 PM
1) Received Tp-97 not listed on COC received.
2) Missing page 3 of the COC so # 1 may be answered when the 3rd page is found.
- Chris Ward* 21 June 2021 9:33 AM
Please log for V8260, NWTPHGX, NWTPHDX, and SV8270PAHSIM

Vertex - CO

Sample Delivery Group: L1369345
Samples Received: 06/22/2021
Project Number: 71555
Description: Boeing Frederickson Facility
Site: PUYALLUP, WA
Report To: Steve Long
2420 W. 26TH AVE., SUITE 100-D
Denver, CO 80211

Entire Report Reviewed By:



Chris Ward
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

COMP-1 L1369345-01 Solid

Collected by: Mark Martin
 Collected date/time: 06/18/21 18:00
 Received date/time: 06/22/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1695253	1	06/25/21 15:50	06/26/21 02:57	GB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (HPLC) by Method 8330B	WG1693311	1	06/23/21 15:45	06/24/21 13:34	GKM	Mt. Juliet, TN

¹Cp

²Tc

³Ss

COMP-2 L1369345-02 Solid

Collected by: Mark Martin
 Collected date/time: 06/18/21 18:10
 Received date/time: 06/22/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1695253	1	06/25/21 15:50	06/26/21 04:22	GB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (HPLC) by Method 8330B	WG1693311	1.01	06/23/21 15:45	06/24/21 14:02	GKM	Mt. Juliet, TN

⁴Cn

⁵Sr

⁶Qc

COMP-5 L1369345-03 Solid

Collected by: Mark Martin
 Collected date/time: 06/18/21 18:20
 Received date/time: 06/22/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1695253	1	06/25/21 15:50	06/26/21 04:50	GB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (HPLC) by Method 8330B	WG1693311	1	06/23/21 15:45	06/24/21 14:30	GKM	Mt. Juliet, TN

⁷Gl

⁸Al

⁹Sc

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.



Chris Ward
Project Manager

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

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Perchlorate	ND		0.0400	1	06/26/2021 02:57	WG1695253

Semi-Volatile Organic Compounds (HPLC) by Method 8330B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Tetryl	ND		0.500	1	06/24/2021 13:34	WG1693311
2,4-Dinitrotoluene	ND		0.500	1	06/24/2021 13:34	WG1693311
4-Nitrotoluene (4-NT)	ND		0.500	1	06/24/2021 13:34	WG1693311
RDX	ND		0.500	1	06/24/2021 13:34	WG1693311
Nitrobenzene	ND		0.500	1	06/24/2021 13:34	WG1693311
2,6-Dinitrotoluene	ND		0.500	1	06/24/2021 13:34	WG1693311
2-Nitrotoluene	ND		0.500	1	06/24/2021 13:34	WG1693311
3-Nitrotoluene	ND		0.500	1	06/24/2021 13:34	WG1693311
1,3,5-Trinitrobenzene	ND		0.500	1	06/24/2021 13:34	WG1693311
1,3-Dinitrobenzene	ND		0.500	1	06/24/2021 13:34	WG1693311
2,4,6-Trinitrotoluene	ND		0.500	1	06/24/2021 13:34	WG1693311
4-Amino-2,6-Dinitrotoluene	ND		0.500	1	06/24/2021 13:34	WG1693311
2-Amino-4,6-Dinitrotoluene	ND		0.500	1	06/24/2021 13:34	WG1693311
HMX	ND		0.500	1	06/24/2021 13:34	WG1693311
PETN	ND		2.00	1	06/24/2021 13:34	WG1693311
Nitroglycerine	ND		2.00	1	06/24/2021 13:34	WG1693311
(S) 1,3-Dimethyl-2-NB	110		80.0-128		06/24/2021 13:34	WG1693311

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

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Perchlorate	ND		0.0400	1	06/26/2021 04:22	WG1695253

Semi-Volatile Organic Compounds (HPLC) by Method 8330B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Tetryl	ND		0.505	1.01	06/24/2021 14:02	WG1693311
2,4-Dinitrotoluene	ND		0.505	1.01	06/24/2021 14:02	WG1693311
4-Nitrotoluene (4-NT)	ND		0.505	1.01	06/24/2021 14:02	WG1693311
RDX	ND		0.505	1.01	06/24/2021 14:02	WG1693311
Nitrobenzene	ND		0.505	1.01	06/24/2021 14:02	WG1693311
2,6-Dinitrotoluene	ND		0.505	1.01	06/24/2021 14:02	WG1693311
2-Nitrotoluene	ND		0.505	1.01	06/24/2021 14:02	WG1693311
3-Nitrotoluene	ND		0.505	1.01	06/24/2021 14:02	WG1693311
1,3,5-Trinitrobenzene	ND		0.505	1.01	06/24/2021 14:02	WG1693311
1,3-Dinitrobenzene	ND		0.505	1.01	06/24/2021 14:02	WG1693311
2,4,6-Trinitrotoluene	ND		0.505	1.01	06/24/2021 14:02	WG1693311
4-Amino-2,6-Dinitrotoluene	ND		0.505	1.01	06/24/2021 14:02	WG1693311
2-Amino-4,6-Dinitrotoluene	ND		0.505	1.01	06/24/2021 14:02	WG1693311
HMX	ND		0.505	1.01	06/24/2021 14:02	WG1693311
PETN	ND		2.02	1.01	06/24/2021 14:02	WG1693311
Nitroglycerine	ND		2.02	1.01	06/24/2021 14:02	WG1693311
(S) 1,3-Dimethyl-2-NB	103		80.0-128		06/24/2021 14:02	WG1693311

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Perchlorate	ND		0.0400	1	06/26/2021 04:50	WG1695253

Semi-Volatile Organic Compounds (HPLC) by Method 8330B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Tetryl	ND		0.500	1	06/24/2021 14:30	WG1693311
2,4-Dinitrotoluene	ND		0.500	1	06/24/2021 14:30	WG1693311
4-Nitrotoluene (4-NT)	ND		0.500	1	06/24/2021 14:30	WG1693311
RDX	ND		0.500	1	06/24/2021 14:30	WG1693311
Nitrobenzene	ND		0.500	1	06/24/2021 14:30	WG1693311
2,6-Dinitrotoluene	ND		0.500	1	06/24/2021 14:30	WG1693311
2-Nitrotoluene	ND		0.500	1	06/24/2021 14:30	WG1693311
3-Nitrotoluene	ND		0.500	1	06/24/2021 14:30	WG1693311
1,3,5-Trinitrobenzene	ND		0.500	1	06/24/2021 14:30	WG1693311
1,3-Dinitrobenzene	ND		0.500	1	06/24/2021 14:30	WG1693311
2,4,6-Trinitrotoluene	ND		0.500	1	06/24/2021 14:30	WG1693311
4-Amino-2,6-Dinitrotoluene	ND		0.500	1	06/24/2021 14:30	WG1693311
2-Amino-4,6-Dinitrotoluene	ND		0.500	1	06/24/2021 14:30	WG1693311
HMX	ND		0.500	1	06/24/2021 14:30	WG1693311
PETN	ND		2.00	1	06/24/2021 14:30	WG1693311
Nitroglycerine	ND		2.00	1	06/24/2021 14:30	WG1693311
(S) 1,3-Dimethyl-2-NB	107		80.0-128		06/24/2021 14:30	WG1693311

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

Method Blank (MB)

(MB) R3672420-1 06/25/21 19:20

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Perchlorate	U		0.00300	0.0400

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1368248-19 Original Sample (OS) • Duplicate (DUP)

(OS) L1368248-19 06/25/21 21:16 • (DUP) R3672420-3 06/25/21 21:44

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Perchlorate	ND	ND	1	0.000		20

L1369345-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1369345-03 06/26/21 04:50 • (DUP) R3672420-6 06/26/21 05:19

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Perchlorate	ND	ND	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3672420-2 06/25/21 19:51

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Perchlorate	0.0996	0.102	103	90.0-110	

L1369345-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1369345-01 06/26/21 02:57 • (MS) R3672420-4 06/26/21 03:25 • (MSD) R3672420-5 06/26/21 03:54

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Perchlorate	0.100	ND	0.0915	0.0969	91.5	96.9	1	80.0-120			5.78	20

Method Blank (MB)

(MB) R3671629-1 06/24/21 09:22

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Tetryl	U		0.0876	0.500
2,4-Dinitrotoluene	U		0.0784	0.500
4-Nitrotoluene (4-NT)	U		0.138	0.500
RDX	U		0.109	0.500
Nitrobenzene	U		0.0862	0.500
2,6-Dinitrotoluene	U		0.0864	0.500
2-Nitrotoluene	U		0.0915	0.500
3-Nitrotoluene	U		0.113	0.500
1,3,5-Trinitrobenzene	U		0.0392	0.500
1,3-Dinitrobenzene	U		0.0515	0.500
2,4,6-Trinitrotoluene	U		0.0631	0.500
4-Amino-2,6-Dinitrotoluene	U		0.0573	0.500
2-Amino-4,6-Dinitrotoluene	U		0.0638	0.500
HMX	U		0.0779	0.500
PETN	U		0.212	2.00
Nitroglycerine	U		0.154	2.00
(S) 1,3-Dimethyl-2-NB	111			80.0-128

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3671629-2 06/24/21 09:50

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Tetryl	8.00	8.50	106	80.0-122	
2,4-Dinitrotoluene	8.00	8.47	106	80.0-120	
4-Nitrotoluene (4-NT)	8.00	8.46	106	80.0-121	
RDX	8.00	8.56	107	80.0-120	
Nitrobenzene	8.00	8.66	108	80.0-120	
2,6-Dinitrotoluene	8.00	8.41	105	80.0-120	
2-Nitrotoluene	8.00	8.50	106	80.0-120	
3-Nitrotoluene	8.00	8.66	108	80.0-120	
1,3,5-Trinitrobenzene	8.00	8.63	108	80.0-124	
1,3-Dinitrobenzene	8.00	8.51	106	80.0-122	
2,4,6-Trinitrotoluene	8.00	8.22	103	80.0-120	
4-Amino-2,6-Dinitrotoluene	8.00	8.60	108	80.0-120	
2-Amino-4,6-Dinitrotoluene	8.00	8.31	104	80.0-123	
HMX	8.00	8.54	107	80.0-120	
PETN	8.00	8.91	111	80.0-137	
Nitroglycerine	8.00	8.27	103	78.0-120	

Laboratory Control Sample (LCS)

(LCS) R3671629-2 06/24/21 09:50

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
(S) 1,3-Dimethyl-2-NB			109	80.0-128	

L1368595-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1368595-17 06/24/21 11:14 • (MS) R3671629-3 06/24/21 10:18 • (MSD) R3671629-4 06/24/21 10:46

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Tetryl	8.06	ND	9.22	8.85	114	110	1.01	46.0-158			4.10	20
2,4-Dinitrotoluene	8.06	ND	8.86	8.85	110	110	1.01	78.0-138			0.113	20
4-Nitrotoluene (4-NT)	8.06	ND	8.78	8.74	109	109	1.01	80.0-129			0.457	20
RDX	8.06	ND	9.03	8.95	112	112	1.01	57.0-126			0.890	20
Nitrobenzene	8.06	ND	9.06	8.99	112	112	1.01	80.0-126			0.776	20
2,6-Dinitrotoluene	8.06	ND	8.85	8.79	110	110	1.01	80.0-125			0.680	20
2-Nitrotoluene	8.06	ND	8.92	8.88	111	111	1.01	80.0-125			0.449	20
3-Nitrotoluene	8.06	ND	8.99	9.03	112	113	1.01	80.0-120			0.444	20
1,3,5-Trinitrobenzene	8.06	ND	9.03	8.92	112	111	1.01	80.0-133			1.23	20
1,3-Dinitrobenzene	8.06	ND	8.83	8.80	110	110	1.01	80.0-138			0.340	20
2,4,6-Trinitrotoluene	8.06	ND	8.70	8.65	108	108	1.01	80.0-127			0.576	20
4-Amino-2,6-Dinitrotoluene	8.06	ND	8.78	8.74	109	109	1.01	80.0-127			0.457	20
2-Amino-4,6-Dinitrotoluene	8.06	ND	8.67	8.61	108	107	1.01	80.0-135			0.694	20
HMX	8.06	ND	9.14	9.07	113	113	1.01	79.0-125			0.769	20
PETN	8.06	ND	9.22	9.35	114	117	1.01	77.0-145			1.40	20
Nitroglycerine	8.06	ND	8.82	8.76	109	109	1.01	66.0-137			0.683	20
(S) 1,3-Dimethyl-2-NB					112	112		80.0-128				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

GLOSSARY OF TERMS

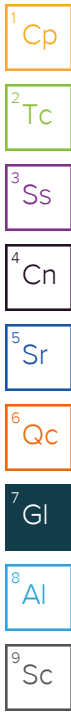
Guide to Reading and Understanding Your Laboratory Report

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.
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

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

VERTEX - CO
 2420 W. 26th Avenue; Suite 100-D
 Denver, CO 80211

Billing Information:
 Accounts Payable
 400 Libby Parkway
 Weymouth, MA 02189

Pres
 Chk

Report to:
 Steve Long

Email To: slong@vertexeng.com

Boeing Fredrickson

City/State
 Collected: Puyallup, WA

Please Circle:
 PT MT CT ET

Phone: _____ Client Project # 71555 Lab Project # _____
 Collected by (print): Mark Martin Site/Facility ID # _____ P.O. # _____
 Collected by (signature): *[Signature]* Rush? (Lab MUST Be Notified) Quote # _____
 Immediately _____ Next Day _____ 5 Day (Rad Only) _____
 Packed on Ice N ___ Y ___ Two Day _____ 10 Day (Rad Only) _____
 Three Day _____ Date Results Needed _____ No. of Cntrs _____

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Perchlorate	SV8330SF
Comp-1	Comp	SS	0.0-0.5'	6/18/2021	18:00	2	X	X
Comp-2	Comp	SS	0.0-0.5'	6/18/2021	18:10	2	X	X
Comp-5	Comp	SS	0.0-0.5'	6/18/2021	18:20	2	X	X

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace Analytical
 National Center for Testing & Innovation
 12065 Lebanon Rd
 Mount Juliet, TN 37122
 Phone: 615-758-5858
 Phone: 800-767-5859
 Fax: 615-758-5859
 SDG # **1369395**
I206

ACCTNUM: _____
 Template: _____
 Prelogin: _____
 PM: _____
 PB: _____
 Shipped Via: _____
 Remarks Sample # (Lab only)
 -01
 -02
 -03

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

Remarks: 3-DAY TURNAROUND TIME
 pH _____ Temp _____
 Flow _____ Other _____
 Samples returned via:
 ___ UPS ___ FedEx ___ Courier _____
 Tracking # **616 376 985 250**

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

Relinquished by (Signature) *[Signature]* Date: **6/21** Time: **14:00** Received by (Signature) *[Signature]* Trip Blank Received: Yes / No
 Relinquished by (Signature) Date: _____ Time: _____ Received by (Signature) _____ Temp: **1.37** HCL / MeOH
 Relinquished by (Signature) Date: _____ Time: _____ Received for lab by (Signature) _____ Date: **6/23/21** Time: **0900** Bottles Received: **6** If preservation required by Login: Date/Time
 Hold: _____ Condition: **NCF / OK**

July 15, 2021

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Vertex - CO

Sample Delivery Group: L1376242
Samples Received: 07/09/2021
Project Number: 71555
Description: Boeing Frederickson Facility
Site: PUYALLUP, WA
Report To: Steve Long
2420 W. 26TH AVE., SUITE 100-D
Denver, CO 80211

Entire Report Reviewed By:



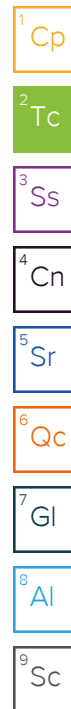
Chris Ward
Project Manager

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

VSG109 L1376242-01 Air

Collected by CH/JC Collected date/time 07/06/21 12:33 Received date/time 07/09/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1703178	1	07/10/21 13:09	07/10/21 13:09	MBF	Mt. Juliet, TN

1 Cp

2 Tc

VSG110 L1376242-02 Air

Collected by CH/JC Collected date/time 07/06/21 13:38 Received date/time 07/09/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1703178	1	07/10/21 13:39	07/10/21 13:39	MBF	Mt. Juliet, TN

3 Ss

4 Cn

5 Sr

VSG112 L1376242-03 Air

Collected by CH/JC Collected date/time 07/06/21 15:27 Received date/time 07/09/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1703178	1	07/10/21 14:10	07/10/21 14:10	MBF	Mt. Juliet, TN

6 Qc

7 Gl

8 Al

AMBIENT 1 L1376242-04 Air

Collected by CH/JC Collected date/time 07/06/21 18:05 Received date/time 07/09/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1703178	1	07/10/21 14:39	07/10/21 14:39	MBF	Mt. Juliet, TN

9 Sc

AMBIENT 2 L1376242-05 Air

Collected by CH/JC Collected date/time 07/07/21 17:15 Received date/time 07/09/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1703178	1	07/10/21 15:08	07/10/21 15:08	MBF	Mt. Juliet, TN

VSG 101 L1376242-06 Air

Collected by CH/JC Collected date/time 07/07/21 10:39 Received date/time 07/09/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1703178	1	07/10/21 15:38	07/10/21 15:38	MBF	Mt. Juliet, TN

VSG 102 L1376242-07 Air

Collected by CH/JC Collected date/time 07/07/21 11:44 Received date/time 07/09/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1703178	1	07/10/21 16:08	07/10/21 16:08	MBF	Mt. Juliet, TN

VSG 103 L1376242-08 Air

Collected by CH/JC Collected date/time 07/07/21 12:45 Received date/time 07/09/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1703178	1	07/10/21 16:38	07/10/21 16:38	MBF	Mt. Juliet, TN

SAMPLE SUMMARY

VSG 104 L1376242-09 Air

Collected by CH/JC Collected date/time 07/07/21 13:33 Received date/time 07/09/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1703178	1	07/10/21 17:08	07/10/21 17:08	MBF	Mt. Juliet, TN

1 Cp

2 Tc

VSG 105 L1376242-10 Air

Collected by CH/JC Collected date/time 07/06/21 13:41 Received date/time 07/09/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1703178	1	07/10/21 17:38	07/10/21 17:38	MBF	Mt. Juliet, TN

3 Ss

4 Cn

5 Sr

VSG 106 L1376242-11 Air

Collected by CH/JC Collected date/time 07/06/21 12:21 Received date/time 07/09/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1703178	1	07/10/21 18:07	07/10/21 18:07	MBF	Mt. Juliet, TN

6 Qc

7 Gl

8 Al

VSG 107 L1376242-12 Air

Collected by CH/JC Collected date/time 07/06/21 14:30 Received date/time 07/09/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1703178	1	07/10/21 18:37	07/10/21 18:37	MBF	Mt. Juliet, TN

9 Sc

VSG 108 L1376242-13 Air

Collected by CH/JC Collected date/time 07/06/21 14:24 Received date/time 07/09/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1703178	1	07/10/21 19:07	07/10/21 19:07	MBF	Mt. Juliet, TN

VSG 114 L1376242-14 Air

Collected by CH/JC Collected date/time 07/06/21 10:17 Received date/time 07/09/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1703178	1	07/10/21 19:37	07/10/21 19:37	MBF	Mt. Juliet, TN

VSG 115 L1376242-15 Air

Collected by CH/JC Collected date/time 07/06/21 11:28 Received date/time 07/09/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1703178	1	07/10/21 20:06	07/10/21 20:06	MBF	Mt. Juliet, TN

VSG 116 L1376242-16 Air

Collected by CH/JC Collected date/time 07/06/21 15:50 Received date/time 07/09/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1703178	1	07/10/21 20:36	07/10/21 20:36	MBF	Mt. Juliet, TN

SAMPLE SUMMARY

VSG 117 L1376242-17 Air

Collected by: CH/JC
 Collected date/time: 07/06/21 15:59
 Received date/time: 07/09/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1703178	1	07/10/21 21:06	07/10/21 21:06	MBF	Mt. Juliet, TN

¹Cp

²Tc

³Ss

VSG 118 L1376242-18 Air

Collected by: CH/JC
 Collected date/time: 07/06/21 16:44
 Received date/time: 07/09/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1703178	1	07/10/21 21:36	07/10/21 21:36	MBF	Mt. Juliet, TN

⁴Cn

⁵Sr

VSG 119 L1376242-19 Air

Collected by: CH/JC
 Collected date/time: 07/06/21 16:52
 Received date/time: 07/09/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1703178	1	07/10/21 22:06	07/10/21 22:06	MBF	Mt. Juliet, TN

⁶Qc

⁷Gl

⁸Al

⁹Sc

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.



Chris Ward
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	9.93	23.6		1	WG1703178
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1703178
Benzene	71-43-2	78.10	0.200	0.639	1.18	3.77		1	WG1703178
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1703178
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1703178
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1703178
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1703178
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1703178
Carbon disulfide	75-15-0	76.10	0.200	0.622	1.70	5.29		1	WG1703178
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1703178
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1703178
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1703178
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1703178
Chloromethane	74-87-3	50.50	0.200	0.413	2.18	4.50		1	WG1703178
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1703178
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1703178
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1703178
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1703178
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1703178
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	0.620	3.73		1	WG1703178
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1703178
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1703178
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1703178
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1703178
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1703178
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1703178
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1703178
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1703178
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1703178
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1703178
Ethanol	64-17-5	46.10	1.25	2.36	21.4	40.3		1	WG1703178
Ethylbenzene	100-41-4	106	0.200	0.867	0.513	2.22		1	WG1703178
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1703178
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1703178
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.235	1.16		1	WG1703178
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1703178
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1703178
Heptane	142-82-5	100	0.200	0.818	0.406	1.66		1	WG1703178
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1703178
n-Hexane	110-54-3	86.20	0.630	2.22	0.849	2.99		1	WG1703178
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1703178
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1703178
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1703178
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	3.92	11.6		1	WG1703178
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1703178
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1703178
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1703178
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1703178
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1703178
Propene	115-07-1	42.10	1.25	2.15	15.3	26.3		1	WG1703178
Styrene	100-42-5	104	0.200	0.851	0.245	1.04		1	WG1703178
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1703178
Tetrachloroethylene	127-18-4	166	0.200	1.36	0.361	2.45		1	WG1703178
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	2.16	6.37		1	WG1703178
Toluene	108-88-3	92.10	0.500	1.88	1.40	5.27		1	WG1703178
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1703178

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	WG1703178
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1703178
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1703178
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.372	1.83		1	WG1703178
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1703178
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1703178
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1703178
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1703178
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1703178
m&p-Xylene	1330-20-7	106	0.400	1.73	1.54	6.68		1	WG1703178
o-Xylene	95-47-6	106	0.200	0.867	0.942	4.08		1	WG1703178
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	264	1090	<u>B</u>	1	WG1703178
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.4				WG1703178

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	5.88	14.0		1	WG1703178
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1703178
Benzene	71-43-2	78.10	0.200	0.639	0.240	0.767		1	WG1703178
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1703178
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1703178
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1703178
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1703178
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1703178
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.793	2.47		1	WG1703178
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1703178
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1703178
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1703178
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1703178
Chloromethane	74-87-3	50.50	0.200	0.413	1.65	3.41		1	WG1703178
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1703178
Cyclohexane	110-82-7	84.20	0.200	0.689	0.209	0.720		1	WG1703178
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1703178
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1703178
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1703178
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	0.369	2.22		1	WG1703178
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1703178
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1703178
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1703178
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1703178
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1703178
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1703178
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1703178
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1703178
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1703178
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1703178
Ethanol	64-17-5	46.10	1.25	2.36	17.1	32.2		1	WG1703178
Ethylbenzene	100-41-4	106	0.200	0.867	0.250	1.08		1	WG1703178
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1703178
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1703178
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.303	1.50		1	WG1703178
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1703178
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1703178
Heptane	142-82-5	100	0.200	0.818	0.206	0.843		1	WG1703178
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1703178
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1703178
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1703178
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.264	0.917		1	WG1703178
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1703178
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1703178
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1703178
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1703178
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1703178
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1703178
2-Propanol	67-63-0	60.10	1.25	3.07	2.41	5.92		1	WG1703178
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1703178
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1703178
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1703178
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1703178
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	0.961	2.83		1	WG1703178
Toluene	108-88-3	92.10	0.500	1.88	1.42	5.35		1	WG1703178
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1703178

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	WG1703178
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1703178
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1703178
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.273	1.34		1	WG1703178
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1703178
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1703178
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1703178
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1703178
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1703178
m&p-Xylene	1330-20-7	106	0.400	1.73	0.802	3.48		1	WG1703178
o-Xylene	95-47-6	106	0.200	0.867	0.464	2.01		1	WG1703178
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1703178
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		97.8				WG1703178

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	2.87	6.82		1	WG1703178
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1703178
Benzene	71-43-2	78.10	0.200	0.639	0.239	0.763		1	WG1703178
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1703178
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1703178
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1703178
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1703178
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1703178
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.496	1.54		1	WG1703178
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1703178
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1703178
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1703178
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1703178
Chloromethane	74-87-3	50.50	0.200	0.413	2.62	5.41		1	WG1703178
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1703178
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1703178
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1703178
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1703178
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1703178
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	0.566	3.40		1	WG1703178
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1703178
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1703178
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1703178
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1703178
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1703178
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1703178
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1703178
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1703178
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1703178
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1703178
Ethanol	64-17-5	46.10	1.25	2.36	8.00	15.1		1	WG1703178
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1703178
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1703178
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.296	1.66		1	WG1703178
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.372	1.84		1	WG1703178
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1703178
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1703178
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1703178
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1703178
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1703178
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1703178
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1703178
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1703178
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1703178
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1703178
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1703178
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1703178
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1703178
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1703178
Propene	115-07-1	42.10	1.25	2.15	2.64	4.55		1	WG1703178
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1703178
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1703178
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1703178
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	1.28	3.77		1	WG1703178
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1703178
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1703178

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	WG1703178
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1703178
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1703178
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1703178
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1703178
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1703178
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1703178
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1703178
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1703178
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1703178
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1703178
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1703178
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.9				WG1703178

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	2.15	5.11		1	WG1703178
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1703178
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1703178
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1703178
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1703178
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1703178
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1703178
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1703178
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1703178
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1703178
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1703178
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1703178
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1703178
Chloromethane	74-87-3	50.50	0.200	0.413	0.406	0.839		1	WG1703178
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1703178
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1703178
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1703178
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1703178
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1703178
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1703178
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1703178
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1703178
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1703178
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1703178
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1703178
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1703178
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1703178
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1703178
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1703178
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1703178
Ethanol	64-17-5	46.10	1.25	2.36	1.88	3.54		1	WG1703178
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1703178
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1703178
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1703178
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.427	2.11		1	WG1703178
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1703178
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1703178
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1703178
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1703178
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1703178
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1703178
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1703178
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1703178
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1703178
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1703178
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1703178
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1703178
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1703178
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1703178
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1703178
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1703178
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1703178
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1703178
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1703178
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1703178
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1703178

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	WG1703178
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1703178
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1703178
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1703178
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1703178
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1703178
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1703178
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1703178
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1703178
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1703178
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1703178
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1703178
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.5				WG1703178

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	1.82	4.32		1	WG1703178
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1703178
Benzene	71-43-2	78.10	0.200	0.639	0.356	1.14		1	WG1703178
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1703178
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1703178
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1703178
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1703178
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1703178
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1703178
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1703178
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1703178
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1703178
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1703178
Chloromethane	74-87-3	50.50	0.200	0.413	0.401	0.828		1	WG1703178
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1703178
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1703178
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1703178
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1703178
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1703178
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1703178
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1703178
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1703178
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1703178
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1703178
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1703178
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1703178
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1703178
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1703178
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1703178
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1703178
Ethanol	64-17-5	46.10	1.25	2.36	8.16	15.4		1	WG1703178
Ethylbenzene	100-41-4	106	0.200	0.867	0.368	1.60		1	WG1703178
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1703178
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1703178
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.426	2.11		1	WG1703178
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1703178
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1703178
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1703178
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1703178
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1703178
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1703178
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1703178
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1703178
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1703178
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1703178
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1703178
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1703178
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1703178
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1703178
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1703178
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1703178
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1703178
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1703178
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1703178
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1703178
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1703178

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	WG1703178
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1703178
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1703178
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1703178
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1703178
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1703178
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1703178
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1703178
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1703178
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1703178
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1703178
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1703178
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		97.5				WG1703178

- 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	2.01	4.78		1	WG1703178
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1703178
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1703178
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1703178
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1703178
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1703178
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1703178
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1703178
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.742	2.31		1	WG1703178
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1703178
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1703178
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1703178
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1703178
Chloromethane	74-87-3	50.50	0.200	0.413	4.23	8.74		1	WG1703178
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1703178
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1703178
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1703178
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1703178
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1703178
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1703178
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1703178
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1703178
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1703178
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1703178
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1703178
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1703178
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1703178
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1703178
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1703178
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1703178
Ethanol	64-17-5	46.10	1.25	2.36	9.68	18.3		1	WG1703178
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1703178
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1703178
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1703178
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.282	1.39		1	WG1703178
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1703178
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1703178
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1703178
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1703178
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1703178
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1703178
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1703178
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1703178
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1703178
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1703178
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1703178
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1703178
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1703178
2-Propanol	67-63-0	60.10	1.25	3.07	1.51	3.71		1	WG1703178
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1703178
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1703178
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1703178
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1703178
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	0.493	1.45		1	WG1703178
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1703178
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1703178

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	WG1703178
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1703178
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1703178
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1703178
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1703178
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1703178
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1703178
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1703178
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1703178
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1703178
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1703178
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1703178
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.4				WG1703178

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	2.86	6.80		1	WG1703178
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1703178
Benzene	71-43-2	78.10	0.200	0.639	0.846	2.70		1	WG1703178
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1703178
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1703178
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1703178
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1703178
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1703178
Carbon disulfide	75-15-0	76.10	0.200	0.622	2.83	8.81		1	WG1703178
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1703178
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1703178
Chloroethane	75-00-3	64.50	0.200	0.528	0.461	1.22		1	WG1703178
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1703178
Chloromethane	74-87-3	50.50	0.200	0.413	7.90	16.3		1	WG1703178
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1703178
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1703178
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1703178
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1703178
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1703178
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1703178
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1703178
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1703178
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1703178
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1703178
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1703178
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1703178
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1703178
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1703178
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1703178
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1703178
Ethanol	64-17-5	46.10	1.25	2.36	35.1	66.2		1	WG1703178
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1703178
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1703178
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1703178
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.292	1.44		1	WG1703178
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1703178
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1703178
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1703178
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1703178
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1703178
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1703178
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1703178
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1703178
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1703178
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1703178
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1703178
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1703178
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1703178
2-Propanol	67-63-0	60.10	1.25	3.07	2.13	5.24		1	WG1703178
Propene	115-07-1	42.10	1.25	2.15	7.31	12.6		1	WG1703178
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1703178
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1703178
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1703178
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	2.61	7.70		1	WG1703178
Toluene	108-88-3	92.10	0.500	1.88	0.903	3.40		1	WG1703178
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1703178

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	WG1703178
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1703178
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1703178
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1703178
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1703178
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1703178
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1703178
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1703178
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1703178
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1703178
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1703178
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1703178
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		94.0				WG1703178

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	1.25	2.97		1	WG1703178
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1703178
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1703178
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1703178
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1703178
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1703178
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1703178
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1703178
Carbon disulfide	75-15-0	76.10	0.200	0.622	1.08	3.36		1	WG1703178
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1703178
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1703178
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1703178
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1703178
Chloromethane	74-87-3	50.50	0.200	0.413	3.05	6.30		1	WG1703178
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1703178
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1703178
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1703178
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1703178
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1703178
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1703178
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1703178
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1703178
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1703178
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1703178
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1703178
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1703178
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1703178
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1703178
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1703178
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1703178
Ethanol	64-17-5	46.10	1.25	2.36	14.7	27.7		1	WG1703178
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1703178
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1703178
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1703178
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.432	2.14		1	WG1703178
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1703178
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1703178
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1703178
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1703178
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1703178
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1703178
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1703178
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1703178
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1703178
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1703178
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1703178
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1703178
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1703178
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1703178
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1703178
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1703178
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1703178
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1703178
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	1.40	4.13		1	WG1703178
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1703178
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1703178

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	WG1703178
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1703178
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1703178
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1703178
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1703178
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1703178
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1703178
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1703178
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1703178
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1703178
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1703178
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1703178
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		94.4				WG1703178

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	1.25	2.97		1	WG1703178
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1703178
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1703178
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1703178
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1703178
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1703178
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1703178
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1703178
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.241	0.750		1	WG1703178
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1703178
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1703178
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1703178
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1703178
Chloromethane	74-87-3	50.50	0.200	0.413	0.743	1.53		1	WG1703178
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1703178
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1703178
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1703178
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1703178
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1703178
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	0.298	1.79		1	WG1703178
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1703178
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1703178
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1703178
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1703178
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1703178
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1703178
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1703178
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1703178
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1703178
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1703178
Ethanol	64-17-5	46.10	1.25	2.36	8.47	16.0		1	WG1703178
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1703178
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1703178
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1703178
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.453	2.24		1	WG1703178
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1703178
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1703178
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1703178
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1703178
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1703178
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1703178
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1703178
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1703178
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1703178
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1703178
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1703178
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1703178
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1703178
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1703178
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1703178
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1703178
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1703178
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1703178
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	0.225	0.663		1	WG1703178
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1703178
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1703178

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	WG1703178
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1703178
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1703178
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1703178
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1703178
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1703178
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1703178
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1703178
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1703178
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1703178
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1703178
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1703178
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		94.2				WG1703178

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	1.53	3.64		1	WG1703178
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1703178
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1703178
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1703178
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1703178
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1703178
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1703178
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1703178
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.561	1.75		1	WG1703178
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1703178
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1703178
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1703178
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1703178
Chloromethane	74-87-3	50.50	0.200	0.413	2.99	6.18		1	WG1703178
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1703178
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1703178
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1703178
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1703178
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1703178
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1703178
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1703178
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1703178
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1703178
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1703178
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1703178
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1703178
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1703178
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1703178
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1703178
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1703178
Ethanol	64-17-5	46.10	1.25	2.36	14.4	27.2		1	WG1703178
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1703178
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1703178
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1703178
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.447	2.21		1	WG1703178
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1703178
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1703178
Heptane	142-82-5	100	0.200	0.818	0.621	2.54		1	WG1703178
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1703178
n-Hexane	110-54-3	86.20	0.630	2.22	0.856	3.02		1	WG1703178
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1703178
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1703178
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1703178
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1703178
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1703178
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1703178
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1703178
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1703178
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1703178
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1703178
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1703178
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1703178
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1703178
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	1.15	3.39		1	WG1703178
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1703178
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1703178

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	WG1703178
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1703178
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1703178
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1703178
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1703178
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1703178
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1703178
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1703178
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1703178
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1703178
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1703178
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1703178
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.4				WG1703178

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	WG1703178
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1703178
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1703178
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1703178
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1703178
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1703178
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1703178
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1703178
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1703178
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1703178
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1703178
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1703178
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1703178
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1703178
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1703178
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1703178
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1703178
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1703178
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1703178
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	0.245	1.47		1	WG1703178
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1703178
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1703178
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1703178
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1703178
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1703178
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1703178
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1703178
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1703178
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1703178
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1703178
Ethanol	64-17-5	46.10	1.25	2.36	8.34	15.7		1	WG1703178
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1703178
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1703178
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1703178
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.444	2.20		1	WG1703178
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1703178
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1703178
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1703178
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1703178
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1703178
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1703178
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1703178
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1703178
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1703178
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1703178
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1703178
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1703178
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1703178
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1703178
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1703178
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1703178
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1703178
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1703178
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1703178
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1703178
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1703178

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	WG1703178
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1703178
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1703178
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1703178
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1703178
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1703178
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1703178
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1703178
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1703178
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1703178
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1703178
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1703178
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.8				WG1703178

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	1.54	3.66		1	WG1703178
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1703178
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1703178
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1703178
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1703178
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1703178
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1703178
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1703178
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.466	1.45		1	WG1703178
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1703178
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1703178
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1703178
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1703178
Chloromethane	74-87-3	50.50	0.200	0.413	3.14	6.49		1	WG1703178
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1703178
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1703178
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1703178
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1703178
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1703178
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1703178
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1703178
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1703178
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1703178
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1703178
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1703178
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1703178
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1703178
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1703178
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1703178
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1703178
Ethanol	64-17-5	46.10	1.25	2.36	12.7	23.9		1	WG1703178
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1703178
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1703178
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1703178
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.423	2.09		1	WG1703178
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1703178
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1703178
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1703178
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1703178
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1703178
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1703178
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1703178
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1703178
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1703178
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1703178
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1703178
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1703178
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1703178
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1703178
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1703178
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1703178
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1703178
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1703178
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	0.464	1.37		1	WG1703178
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1703178
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1703178

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	WG1703178
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1703178
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1703178
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1703178
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1703178
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1703178
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1703178
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1703178
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1703178
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1703178
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1703178
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1703178
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.7				WG1703178

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	1.93	4.59		1	WG1703178
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1703178
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1703178
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1703178
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1703178
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1703178
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1703178
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1703178
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.249	0.775		1	WG1703178
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1703178
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1703178
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1703178
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1703178
Chloromethane	74-87-3	50.50	0.200	0.413	2.65	5.47		1	WG1703178
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1703178
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1703178
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1703178
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1703178
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1703178
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	0.371	2.23		1	WG1703178
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1703178
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1703178
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1703178
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1703178
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1703178
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1703178
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1703178
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1703178
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1703178
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1703178
Ethanol	64-17-5	46.10	1.25	2.36	8.62	16.3		1	WG1703178
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1703178
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1703178
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1703178
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.428	2.12		1	WG1703178
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1703178
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1703178
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1703178
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1703178
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1703178
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1703178
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1703178
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1703178
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1703178
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1703178
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1703178
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1703178
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1703178
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1703178
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1703178
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1703178
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1703178
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1703178
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	0.218	0.643		1	WG1703178
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1703178
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1703178

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	WG1703178
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1703178
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1703178
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1703178
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1703178
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1703178
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1703178
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1703178
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1703178
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1703178
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1703178
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1703178
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.6				WG1703178

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	1.53	3.64		1	WG1703178
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1703178
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1703178
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1703178
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1703178
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1703178
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1703178
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1703178
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.360	1.12		1	WG1703178
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1703178
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1703178
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1703178
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1703178
Chloromethane	74-87-3	50.50	0.200	0.413	0.748	1.54		1	WG1703178
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1703178
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1703178
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1703178
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1703178
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1703178
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1703178
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1703178
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1703178
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1703178
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1703178
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1703178
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1703178
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1703178
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1703178
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1703178
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1703178
Ethanol	64-17-5	46.10	1.25	2.36	8.51	16.0		1	WG1703178
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1703178
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1703178
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.200	1.12		1	WG1703178
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.407	2.01		1	WG1703178
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1703178
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1703178
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1703178
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1703178
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1703178
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1703178
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1703178
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1703178
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1703178
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1703178
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1703178
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1703178
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1703178
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1703178
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1703178
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1703178
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1703178
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1703178
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	1.05	3.10		1	WG1703178
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1703178
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1703178

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	WG1703178
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1703178
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1703178
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1703178
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1703178
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1703178
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1703178
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1703178
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1703178
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1703178
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1703178
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	222	917	<u>B</u>	1	WG1703178
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.9				WG1703178

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	2.33	5.54		1	WG1703178
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1703178
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1703178
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1703178
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1703178
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1703178
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1703178
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1703178
Carbon disulfide	75-15-0	76.10	0.200	0.622	1.88	5.85		1	WG1703178
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1703178
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1703178
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1703178
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1703178
Chloromethane	74-87-3	50.50	0.200	0.413	0.752	1.55		1	WG1703178
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1703178
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1703178
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1703178
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1703178
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1703178
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1703178
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1703178
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1703178
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1703178
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1703178
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1703178
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1703178
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1703178
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1703178
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1703178
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1703178
Ethanol	64-17-5	46.10	1.25	2.36	4.63	8.73		1	WG1703178
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1703178
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1703178
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.224	1.26		1	WG1703178
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.400	1.98		1	WG1703178
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1703178
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1703178
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1703178
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1703178
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1703178
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1703178
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1703178
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1703178
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1703178
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1703178
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1703178
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1703178
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1703178
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1703178
Propene	115-07-1	42.10	1.25	2.15	10.6	18.3		1	WG1703178
Styrene	100-42-5	104	0.200	0.851	0.211	0.898		1	WG1703178
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1703178
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1703178
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	0.812	2.39		1	WG1703178
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1703178
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1703178

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	WG1703178
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1703178
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1703178
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1703178
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1703178
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1703178
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1703178
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1703178
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1703178
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1703178
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1703178
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1703178
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.5				WG1703178

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	1.37	3.26		1	WG1703178
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1703178
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1703178
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1703178
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1703178
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1703178
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1703178
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1703178
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.286	0.890		1	WG1703178
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1703178
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1703178
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1703178
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1703178
Chloromethane	74-87-3	50.50	0.200	0.413	0.856	1.77		1	WG1703178
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1703178
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1703178
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1703178
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1703178
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1703178
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	0.262	1.58		1	WG1703178
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1703178
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1703178
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1703178
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1703178
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1703178
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1703178
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1703178
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1703178
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1703178
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1703178
Ethanol	64-17-5	46.10	1.25	2.36	4.99	9.41		1	WG1703178
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1703178
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1703178
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1703178
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.429	2.12		1	WG1703178
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1703178
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1703178
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1703178
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1703178
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1703178
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1703178
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1703178
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1703178
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1703178
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1703178
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1703178
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1703178
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1703178
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1703178
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1703178
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1703178
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1703178
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1703178
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1703178
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1703178
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1703178

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	WG1703178
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1703178
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1703178
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1703178
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1703178
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1703178
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1703178
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1703178
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1703178
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1703178
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1703178
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1703178
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		94.6				WG1703178

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	1.43	3.40		1	WG1703178
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1703178
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1703178
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1703178
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1703178
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1703178
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1703178
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1703178
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.577	1.80		1	WG1703178
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1703178
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1703178
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1703178
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1703178
Chloromethane	74-87-3	50.50	0.200	0.413	3.44	7.11		1	WG1703178
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1703178
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1703178
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1703178
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1703178
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1703178
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1703178
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1703178
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1703178
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1703178
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1703178
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1703178
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1703178
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1703178
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1703178
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1703178
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1703178
Ethanol	64-17-5	46.10	1.25	2.36	13.5	25.5		1	WG1703178
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1703178
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1703178
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1703178
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.458	2.27		1	WG1703178
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1703178
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1703178
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1703178
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1703178
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1703178
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1703178
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1703178
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1703178
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1703178
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1703178
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1703178
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1703178
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1703178
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1703178
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1703178
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1703178
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1703178
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1703178
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	0.300	0.885		1	WG1703178
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1703178
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1703178

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	WG1703178
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1703178
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1703178
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1703178
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1703178
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1703178
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1703178
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1703178
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1703178
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1703178
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1703178
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1703178
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.1				WG1703178

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	5.76	13.7		1	WG1703178
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1703178
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1703178
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1703178
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1703178
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1703178
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1703178
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1703178
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.744	2.32		1	WG1703178
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1703178
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1703178
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1703178
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1703178
Chloromethane	74-87-3	50.50	0.200	0.413	2.99	6.18		1	WG1703178
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1703178
Cyclohexane	110-82-7	84.20	0.200	0.689	0.207	0.713		1	WG1703178
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1703178
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1703178
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1703178
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	0.266	1.60		1	WG1703178
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1703178
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1703178
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1703178
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1703178
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1703178
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1703178
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1703178
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1703178
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1703178
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1703178
Ethanol	64-17-5	46.10	1.25	2.36	21.0	39.6		1	WG1703178
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1703178
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1703178
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1703178
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.452	2.24		1	WG1703178
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1703178
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1703178
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1703178
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1703178
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1703178
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1703178
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1703178
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1703178
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1703178
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1703178
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1703178
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1703178
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1703178
2-Propanol	67-63-0	60.10	1.25	3.07	4.97	12.2		1	WG1703178
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1703178
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1703178
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1703178
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1703178
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1703178
Toluene	108-88-3	92.10	0.500	1.88	2.09	7.87		1	WG1703178
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1703178

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	WG1703178
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1703178
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1703178
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1703178
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1703178
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1703178
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1703178
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1703178
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1703178
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1703178
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1703178
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1703178
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.0				WG1703178

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	1.98	4.71		1	WG1703178
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1703178
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1703178
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1703178
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1703178
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1703178
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1703178
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1703178
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.990	3.08		1	WG1703178
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1703178
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1703178
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1703178
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1703178
Chloromethane	74-87-3	50.50	0.200	0.413	4.39	9.07		1	WG1703178
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1703178
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1703178
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1703178
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1703178
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1703178
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1703178
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1703178
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1703178
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1703178
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1703178
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1703178
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1703178
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1703178
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1703178
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1703178
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1703178
Ethanol	64-17-5	46.10	1.25	2.36	14.1	26.6		1	WG1703178
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1703178
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1703178
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.211	1.19		1	WG1703178
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.441	2.18		1	WG1703178
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1703178
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1703178
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1703178
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1703178
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1703178
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1703178
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1703178
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1703178
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1703178
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1703178
Methyl methacrylate	80-62-6	100.12	0.200	0.819	0.220	0.901		1	WG1703178
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1703178
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1703178
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1703178
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1703178
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1703178
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1703178
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1703178
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	0.663	1.96		1	WG1703178
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1703178
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1703178

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	WG1703178
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1703178
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1703178
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1703178
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1703178
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1703178
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1703178
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1703178
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1703178
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1703178
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1703178
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1703178
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		92.7				WG1703178

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3678277-3 07/10/21 10:14

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
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
Isopropylbenzene	U		0.0777	0.200

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3678277-3 07/10/21 10:14

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	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	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
Ethanol	U		0.265	1.25
TPH (GC/MS) Low Fraction	53.1	U	39.7	200
(S) 1,4-Bromofluorobenzene	95.4			60.0-140

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

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

(LCS) R3678277-1 07/10/21 09:15 • (LCSD) R3678277-2 07/10/21 09:45

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Ethanol	3.75	3.04	2.83	81.1	75.5	55.0-148			7.16	25
Propene	3.75	2.57	2.72	68.5	72.5	64.0-144			5.67	25
Dichlorodifluoromethane	3.75	3.63	3.67	96.8	97.9	64.0-139			1.10	25
1,2-Dichlorotetrafluoroethane	3.75	3.58	3.52	95.5	93.9	70.0-130			1.69	25

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

(LCS) R3678277-1 07/10/21 09:15 • (LCSD) R3678277-2 07/10/21 09:45

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloromethane	3.75	3.16	2.87	84.3	76.5	70.0-130			9.62	25
Vinyl chloride	3.75	3.17	3.09	84.5	82.4	70.0-130			2.56	25
1,3-Butadiene	3.75	2.97	2.91	79.2	77.6	70.0-130			2.04	25
Bromomethane	3.75	3.21	3.21	85.6	85.6	70.0-130			0.000	25
Chloroethane	3.75	3.04	2.98	81.1	79.5	70.0-130			1.99	25
Trichlorofluoromethane	3.75	3.30	3.05	88.0	81.3	70.0-130			7.87	25
1,1,2-Trichlorotrifluoroethane	3.75	3.27	3.25	87.2	86.7	70.0-130			0.613	25
1,1-Dichloroethene	3.75	3.10	3.15	82.7	84.0	70.0-130			1.60	25
1,1-Dichloroethane	3.75	4.22	3.88	113	103	70.0-130			8.40	25
Acetone	3.75	3.43	3.22	91.5	85.9	70.0-130			6.32	25
2-Propanol	3.75	3.31	3.03	88.3	80.8	70.0-139			8.83	25
Carbon disulfide	3.75	3.22	3.19	85.9	85.1	70.0-130			0.936	25
Methylene Chloride	3.75	2.88	2.90	76.8	77.3	70.0-130			0.692	25
MTBE	3.75	4.32	3.93	115	105	70.0-130			9.45	25
trans-1,2-Dichloroethene	3.75	3.28	3.25	87.5	86.7	70.0-130			0.919	25
n-Hexane	3.75	3.75	3.79	100	101	70.0-130			1.06	25
Vinyl acetate	3.75	4.39	3.94	117	105	70.0-130			10.8	25
Methyl Ethyl Ketone	3.75	4.11	4.01	110	107	70.0-130			2.46	25
cis-1,2-Dichloroethene	3.75	3.74	3.74	99.7	99.7	70.0-130			0.000	25
Chloroform	3.75	3.75	3.73	100	99.5	70.0-130			0.535	25
Cyclohexane	3.75	3.78	3.83	101	102	70.0-130			1.31	25
1,1,1-Trichloroethane	3.75	3.66	3.61	97.6	96.3	70.0-130			1.38	25
Carbon tetrachloride	3.75	3.68	3.63	98.1	96.8	70.0-130			1.37	25
Benzene	3.75	3.74	3.72	99.7	99.2	70.0-130			0.536	25
1,2-Dichloroethane	3.75	3.65	3.69	97.3	98.4	70.0-130			1.09	25
Heptane	3.75	3.67	3.67	97.9	97.9	70.0-130			0.000	25
Trichloroethylene	3.75	3.73	3.70	99.5	98.7	70.0-130			0.808	25
1,2-Dichloropropane	3.75	3.64	3.59	97.1	95.7	70.0-130			1.38	25
1,4-Dioxane	3.75	4.73	4.63	126	123	70.0-140			2.14	25
Bromodichloromethane	3.75	3.65	3.64	97.3	97.1	70.0-130			0.274	25
cis-1,3-Dichloropropene	3.75	3.73	3.69	99.5	98.4	70.0-130			1.08	25
4-Methyl-2-pentanone (MIBK)	3.75	4.31	4.32	115	115	70.0-139			0.232	25
Toluene	3.75	3.94	3.91	105	104	70.0-130			0.764	25
trans-1,3-Dichloropropene	3.75	3.74	3.64	99.7	97.1	70.0-130			2.71	25
1,1,2-Trichloroethane	3.75	3.89	3.84	104	102	70.0-130			1.29	25
Tetrachloroethylene	3.75	3.80	3.81	101	102	70.0-130			0.263	25
Methyl Butyl Ketone	3.75	4.27	4.18	114	111	70.0-149			2.13	25
Dibromochloromethane	3.75	3.78	3.75	101	100	70.0-130			0.797	25
1,2-Dibromoethane	3.75	3.82	3.79	102	101	70.0-130			0.788	25
Chlorobenzene	3.75	3.79	3.74	101	99.7	70.0-130			1.33	25

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

(LCS) R3678277-1 07/10/21 09:15 • (LCSD) R3678277-2 07/10/21 09:45

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Ethylbenzene	3.75	4.32	4.27	115	114	70.0-130			1.16	25
m&p-Xylene	7.50	8.89	8.82	119	118	70.0-130			0.791	25
o-Xylene	3.75	4.42	4.41	118	118	70.0-130			0.227	25
Styrene	3.75	4.43	4.48	118	119	70.0-130			1.12	25
Bromoform	3.75	3.94	3.95	105	105	70.0-130			0.253	25
1,1,2,2-Tetrachloroethane	3.75	4.27	4.27	114	114	70.0-130			0.000	25
4-Ethyltoluene	3.75	4.43	4.34	118	116	70.0-130			2.05	25
1,3,5-Trimethylbenzene	3.75	4.25	4.16	113	111	70.0-130			2.14	25
1,2,4-Trimethylbenzene	3.75	4.29	4.17	114	111	70.0-130			2.84	25
1,3-Dichlorobenzene	3.75	4.49	4.51	120	120	70.0-130			0.444	25
1,4-Dichlorobenzene	3.75	4.67	4.65	125	124	70.0-130			0.429	25
Benzyl Chloride	3.75	4.68	4.45	125	119	70.0-152			5.04	25
1,2-Dichlorobenzene	3.75	4.41	4.37	118	117	70.0-130			0.911	25
1,2,4-Trichlorobenzene	3.75	4.04	4.00	108	107	70.0-160			0.995	25
Hexachloro-1,3-butadiene	3.75	4.00	3.88	107	103	70.0-151			3.05	25
Naphthalene	3.75	4.41	4.35	118	116	70.0-159			1.37	25
TPH (GC/MS) Low Fraction	203	221	218	109	107	70.0-130			1.37	25
Allyl Chloride	3.75	2.93	2.89	78.1	77.1	70.0-130			1.37	25
2-Chlorotoluene	3.75	4.28	4.29	114	114	70.0-130			0.233	25
Methyl Methacrylate	3.75	3.78	3.75	101	100	70.0-130			0.797	25
Tetrahydrofuran	3.75	3.59	3.62	95.7	96.5	70.0-137			0.832	25
2,2,4-Trimethylpentane	3.75	3.66	3.64	97.6	97.1	70.0-130			0.548	25
Vinyl Bromide	3.75	3.27	3.07	87.2	81.9	70.0-130			6.31	25
Isopropylbenzene	3.75	4.38	4.35	117	116	70.0-130			0.687	25
<i>(S) 1,4-Bromofluorobenzene</i>				102	101	60.0-140				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

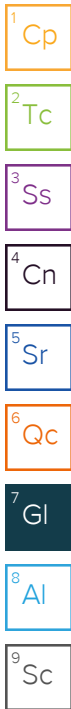
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location.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

Abbreviations and Definitions

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

Qualifier Description

B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.



ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

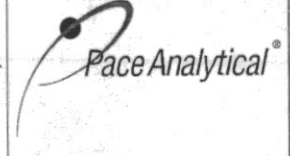
⁸ Al

⁹ Sc

Vertex - CO
 2420 W. 26TH AVE., SUITE 100-D
 Denver, CO 80211

Accounts Payable
 400 Libbey Parkway
 Weymouth, MA 02189

Pres
 Chk



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

Report to: **Steve Long**

Email To: **swaldenmyer@vertexeng.com; aeng@vertexeng.com**

Project Description: **Boeing Frederickson Facility**

City/State Collected: **Puyallup WA**

Please Circle: **PT** MT CT ET

Phone: **303-623-9118**

Client Project # **71555**

Lab Project # **VERTEXDCO-BOEING**

Collected by (print): **Jason Henderson**

Site/Facility ID # **PUYALLUP, WA**

P.O. #

Collected by (signature): *[Signature]*

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

Quote #
 Date Results Needed

Immediately Packed on Ice N ___ Y ___

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TO-15 Summa	Analysis	Container	Preservative	Remarks	Sample # (lab only)
VSG109		Air	5.5	7/6/21	12:33	1	✓					-01
VSG110		Air	5.5	7/6/21	13:38	1	✓					-02
VSG112		Air	5.5	7/6/21	15:27	1	✓					-03
VSG113		Air	5.5	7/6/21	17:16	1	✓				No pres	
Ambient 1		Air	N/A	7/6/21	18:05	1	✓					-04
Ambient 2		Air	N/A	7/7/21	17:15	1	✓					-05
VSG 101		Air	5.5	7/7/21	10:39	1	✓					-06
VSG 102		Air	5.5	7/7/21	11:44	1	✓					-07
VSG 103		Air	5.5	7/7/21	12:45	1	✓					-08
VSG 104		Air	5.5	7/7/21	13:33	1	✓					-09

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

Remarks: **Please turn around in five business days if possible**
 pH _____ Temp _____
 Flow _____ Other _____
 Tracking # **9362 4953 5423**

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

Relinquished by: (Signature) *[Signature]*
 Date: **7/8/21**
 Time: **16:00**

Received by: (Signature) *[Signature]*
 Date: **7-22**
 Time: **0945**

Trip Blank Received: Yes No
 HCL / MeOH TBR
 Temp: **arb** °C
 Bottles Received: **19**

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

Company Name/Address:
Vertex - CO
 2420 W. 26TH AVE., SUITE 100-D
 Denver, CO 80211

Billing Information:
Accounts Payable
 400 Libbey Parkway
 Weymouth, MA 02189

Pres. Chk

Report to:
Steve Long

Email To:
 swaldenmyer@vertexeng.com; aeng@vertexeng.com

Project Description:
Boeing Frederickson Facility

City/State Collected:
Puyallup WA

Please Circle:
 (PT) MT CT ET

Phone: **303-623-9118**

Client Project #
71555

Lab Project #
VERTEXDCO-BOEING

Collected by (print):
Cecilia Henderson + Jason Cass


Site/Facility ID #
PUYALLUP, WA

P.O. #
 Quote #
 Date Results Needed

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

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

No. of Cntrs

Analysis / Container / Preservative							Chain of Custody Page 2 of 2
							<p></p> <p>12065 Lebanon Rd Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubs/pas-standard-terms.pdf</p> <p>SDG # U376242</p> <p>Table #</p> <p>Acctnum: VERTEXDCO</p> <p>Template: T189635</p> <p>Prelogin: P858261</p> <p>PM: 824 - Chris Ward</p> <p>PB: CSL-062814</p> <p>Shipped Via: FedEX Ground</p>

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs
VSG105		Air	5.5	7/7/21	13:41	1 ✓
VSG106		Air	5.5	7/7/21	12:21	1 ✓
VSG107		Air	5.5	7/7/21	14:30	1 ✓
VSG108		Air	5.5	7/7/21	14:24	1 ✓
VSG114		Air	5.5	7/7/21	10:17	1 ✓
VSG115		Air	5.5	7/7/21	11:28	1 ✓
VSG116		Air	5.5	7/7/21	15:52	1 ✓
VSG117		Air	5.5	7/7/21	15:59	1 ✓
VSG118		Air	5.5	7/7/21	16:44	1 ✓
VSG119		Air	5.5	7/7/21	16:52	1 ✓

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

Remarks:
Please turn around in five business days if possible.


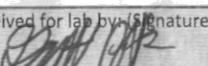
pH _____ Temp _____
 Flow _____ Other _____

Samples returned via:
 ___ UPS FedEx ___ Courier

Tracking #

Sample Receipt Checklist

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

Relinquished by: (Signature) 	Date: 7/8/21	Time: 16:00	Received by: (Signature)	Trip Blank Received: Yes/No <input checked="" type="checkbox"/> HCL/MeOH TBR
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C 20.1 Bottles Received: 19
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) 	Date: 7/21 Time: 0715

If preservation required by Login: Date/Time


Hold:

Condition:
 NCF / OK

Vertex - CO

Sample Delivery Group: L1377074
Samples Received: 07/12/2021
Project Number: 71555
Description: Boeing Frederickson Facility
Site: PUYALLUP, WA
Report To: Steve Long
2420 W. 26TH AVE., SUITE 100-D
Denver, CO 80211

Entire Report Reviewed By:

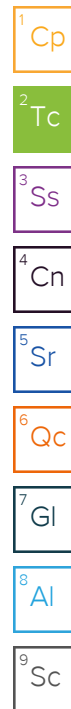


Chris Ward
Project Manager

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

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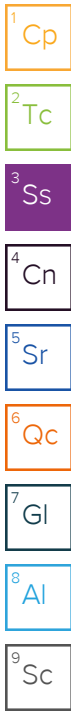


SAMPLE SUMMARY

AMBIENT 3 L1377074-01 Air

Collected by Jason Cass
 Collected date/time 07/08/21 14:48
 Received date/time 07/12/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1704358	1	07/13/21 11:21	07/13/21 11:21	DAH	Mt. Juliet, TN



VSG120 L1377074-02 Air

Collected by Jason Cass
 Collected date/time 07/08/21 09:25
 Received date/time 07/12/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1704358	1	07/13/21 12:02	07/13/21 12:02	DAH	Mt. Juliet, TN

VSG121 L1377074-03 Air

Collected by Jason Cass
 Collected date/time 07/08/21 09:57
 Received date/time 07/12/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1704358	1	07/13/21 12:42	07/13/21 12:42	DAH	Mt. Juliet, TN

VSG122 L1377074-04 Air

Collected by Jason Cass
 Collected date/time 07/08/21 10:39
 Received date/time 07/12/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1704358	1	07/13/21 13:22	07/13/21 13:22	DAH	Mt. Juliet, TN

VSG123 L1377074-05 Air

Collected by Jason Cass
 Collected date/time 07/08/21 10:47
 Received date/time 07/12/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1704358	1	07/13/21 14:03	07/13/21 14:03	DAH	Mt. Juliet, TN

VSG124 L1377074-06 Air

Collected by Jason Cass
 Collected date/time 07/08/21 11:36
 Received date/time 07/12/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1704358	1	07/13/21 14:43	07/13/21 14:43	DAH	Mt. Juliet, TN

VSG125 L1377074-07 Air

Collected by Jason Cass
 Collected date/time 07/08/21 11:54
 Received date/time 07/12/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1704358	1	07/13/21 15:24	07/13/21 15:24	DAH	Mt. Juliet, TN

VSG126 L1377074-08 Air

Collected by Jason Cass
 Collected date/time 07/08/21 12:26
 Received date/time 07/12/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1704358	1	07/13/21 16:04	07/13/21 16:04	DAH	Mt. Juliet, TN

SAMPLE SUMMARY

VSG127 L1377074-09 Air

Collected by Jason Cass Collected date/time 07/08/21 13:15 Received date/time 07/12/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1704358	1	07/13/21 16:45	07/13/21 16:45	DAH	Mt. Juliet, TN

1 Cp

2 Tc

VSG128 L1377074-10 Air

Collected by Jason Cass Collected date/time 07/08/21 13:09 Received date/time 07/12/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1704358	1	07/13/21 17:25	07/13/21 17:25	DAH	Mt. Juliet, TN

3 Ss

4 Cn

5 Sr

VSG129 L1377074-11 Air

Collected by Jason Cass Collected date/time 07/08/21 14:00 Received date/time 07/12/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1704358	1	07/13/21 18:05	07/13/21 18:05	DAH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1705880	20	07/15/21 13:00	07/15/21 13:00	MBF	Mt. Juliet, TN

6 Qc

7 Gl

8 Al

VSG130 L1377074-12 Air

Collected by Jason Cass Collected date/time 07/08/21 14:10 Received date/time 07/12/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1704358	1	07/13/21 18:46	07/13/21 18:46	DAH	Mt. Juliet, TN

9 Sc

VSG131 L1377074-13 Air

Collected by Jason Cass Collected date/time 07/08/21 14:40 Received date/time 07/12/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1704358	1	07/13/21 19:27	07/13/21 19:27	DAH	Mt. Juliet, TN

VSG113 L1377074-14 Air

Collected by Jason Cass Collected date/time 07/08/21 15:10 Received date/time 07/12/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1704358	1	07/13/21 20:07	07/13/21 20:07	DAH	Mt. Juliet, TN

AMBIENT 4 L1377074-15 Air

Collected by Jason Cass Collected date/time 07/09/21 13:49 Received date/time 07/12/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1704358	1	07/13/21 20:49	07/13/21 20:49	DAH	Mt. Juliet, TN

VSG132 L1377074-16 Air

Collected by Jason Cass Collected date/time 07/09/21 09:27 Received date/time 07/12/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1704366	1	07/13/21 11:35	07/13/21 11:35	CEP	Mt. Juliet, TN

SAMPLE SUMMARY

VSG133 L1377074-17 Air

Collected by Jason Cass Collected date/time 07/09/21 10:12 Received date/time 07/12/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1704366	1	07/13/21 12:18	07/13/21 12:18	CEP	Mt. Juliet, TN

VSG134 L1377074-18 Air

Collected by Jason Cass Collected date/time 07/09/21 10:19 Received date/time 07/12/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1704366	1	07/13/21 13:01	07/13/21 13:01	CEP	Mt. Juliet, TN

VSG139 L1377074-19 Air

Collected by Jason Cass Collected date/time 07/09/21 11:04 Received date/time 07/12/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1704366	1	07/13/21 13:44	07/13/21 13:44	CEP	Mt. Juliet, TN

VSG140 L1377074-20 Air

Collected by Jason Cass Collected date/time 07/09/21 11:17 Received date/time 07/12/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1704366	1	07/13/21 14:27	07/13/21 14:27	CEP	Mt. Juliet, TN

VSG141 L1377074-21 Air

Collected by Jason Cass Collected date/time 07/09/21 12:10 Received date/time 07/12/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015M	WG1708377	1	07/20/21 12:18	07/20/21 12:18	CMS	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1704366	1	07/13/21 15:10	07/13/21 15:10	CEP	Mt. Juliet, TN

VSG142 L1377074-22 Air

Collected by Jason Cass Collected date/time 07/09/21 12:55 Received date/time 07/12/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015M	WG1708377	1	07/20/21 12:22	07/20/21 12:22	CMS	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1704366	1	07/13/21 15:53	07/13/21 15:53	CEP	Mt. Juliet, TN

VSG143 L1377074-23 Air

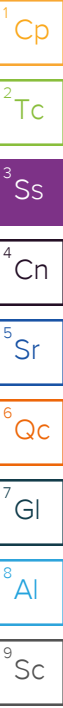
Collected by Jason Cass Collected date/time 07/09/21 13:29 Received date/time 07/12/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015M	WG1708377	1	07/20/21 12:29	07/20/21 12:29	CMS	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1704366	1	07/13/21 16:35	07/13/21 16:35	CEP	Mt. Juliet, TN

VSG144 L1377074-24 Air

Collected by Jason Cass Collected date/time 07/09/21 13:36 Received date/time 07/12/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015M	WG1708377	1	07/20/21 12:34	07/20/21 12:34	CMS	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1704366	1	07/13/21 17:18	07/13/21 17:18	CEP	Mt. Juliet, TN



CASE NARRATIVE

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

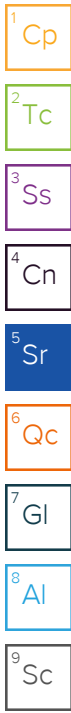


Chris Ward
Project Manager

- 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	2.05	4.87		1	WG1704358
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1704358
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1704358
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1704358
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1704358
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1704358
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1704358
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1704358
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1704358
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1704358
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1704358
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1704358
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1704358
Chloromethane	74-87-3	50.50	0.200	0.413	0.623	1.29		1	WG1704358
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1704358
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1704358
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1704358
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1704358
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1704358
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1704358
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1704358
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1704358
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1704358
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1704358
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1704358
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1704358
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1704358
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1704358
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1704358
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1704358
Ethanol	64-17-5	46.10	1.25	2.36	7.26	13.7		1	WG1704358
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1704358
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1704358
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.251	1.41		1	WG1704358
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.471	2.33		1	WG1704358
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1704358
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1704358
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1704358
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1704358
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1704358
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1704358
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1704358
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1704358
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1704358
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1704358
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1704358
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1704358
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1704358
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1704358
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1704358
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1704358
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1704358
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1704358
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1704358
Toluene	108-88-3	92.10	0.500	1.88	0.695	2.62		1	WG1704358
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1704358



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	WG1704358
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1704358
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1704358
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1704358
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1704358
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1704358
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1704358
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1704358
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1704358
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1704358
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1704358
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1704358
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.7				WG1704358

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	19.1	45.4		1	WG1704358
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1704358
Benzene	71-43-2	78.10	0.200	0.639	0.614	1.96		1	WG1704358
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1704358
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1704358
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1704358
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1704358
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1704358
Carbon disulfide	75-15-0	76.10	0.200	0.622	1.76	5.48		1	WG1704358
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1704358
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1704358
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1704358
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1704358
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1704358
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1704358
Cyclohexane	110-82-7	84.20	0.200	0.689	1.30	4.48		1	WG1704358
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1704358
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1704358
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1704358
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1704358
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1704358
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1704358
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1704358
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1704358
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1704358
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1704358
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1704358
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1704358
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1704358
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1704358
Ethanol	64-17-5	46.10	1.25	2.36	35.8	67.5		1	WG1704358
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1704358
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1704358
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1704358
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1704358
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1704358
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1704358
Heptane	142-82-5	100	0.200	0.818	0.680	2.78		1	WG1704358
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1704358
n-Hexane	110-54-3	86.20	0.630	2.22	5.10	18.0		1	WG1704358
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1704358
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1704358
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1704358
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	6.39	18.8		1	WG1704358
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1704358
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1704358
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1704358
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1704358
2-Propanol	67-63-0	60.10	1.25	3.07	8.00	19.7		1	WG1704358
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1704358
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1704358
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1704358
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1704358
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1704358
Toluene	108-88-3	92.10	0.500	1.88	1.28	4.82		1	WG1704358
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1704358

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	WG1704358
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1704358
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1704358
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1704358
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1704358
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1704358
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1704358
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1704358
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1704358
m&p-Xylene	1330-20-7	106	0.400	1.73	0.482	2.09		1	WG1704358
o-Xylene	95-47-6	106	0.200	0.867	0.228	0.988		1	WG1704358
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1704358
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		99.9				WG1704358

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	4.39	10.4		1	WG1704358
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1704358
Benzene	71-43-2	78.10	0.200	0.639	0.220	0.703		1	WG1704358
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1704358
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1704358
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1704358
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1704358
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1704358
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.998	3.11		1	WG1704358
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1704358
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1704358
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1704358
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1704358
Chloromethane	74-87-3	50.50	0.200	0.413	1.49	3.08		1	WG1704358
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1704358
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1704358
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1704358
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1704358
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1704358
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1704358
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1704358
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1704358
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1704358
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1704358
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1704358
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1704358
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1704358
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1704358
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1704358
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1704358
Ethanol	64-17-5	46.10	1.25	2.36	13.2	24.9		1	WG1704358
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1704358
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1704358
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.260	1.46		1	WG1704358
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1704358
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1704358
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1704358
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1704358
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1704358
n-Hexane	110-54-3	86.20	0.630	2.22	0.895	3.16		1	WG1704358
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1704358
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1704358
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1704358
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1704358
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1704358
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1704358
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1704358
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1704358
2-Propanol	67-63-0	60.10	1.25	3.07	2.77	6.81		1	WG1704358
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1704358
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1704358
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1704358
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1704358
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1704358
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1704358
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1704358

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	WG1704358
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1704358
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1704358
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1704358
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1704358
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1704358
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1704358
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1704358
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1704358
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1704358
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1704358
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	291	1200		1	WG1704358
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		103				WG1704358

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	2.89	6.87		1	WG1704358
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1704358
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1704358
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1704358
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1704358
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1704358
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1704358
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1704358
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.765	2.38		1	WG1704358
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1704358
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1704358
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1704358
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1704358
Chloromethane	74-87-3	50.50	0.200	0.413	1.16	2.40		1	WG1704358
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1704358
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1704358
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1704358
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1704358
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1704358
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1704358
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1704358
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1704358
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1704358
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1704358
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1704358
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1704358
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1704358
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1704358
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1704358
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1704358
Ethanol	64-17-5	46.10	1.25	2.36	13.0	24.5		1	WG1704358
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1704358
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1704358
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.247	1.39		1	WG1704358
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1704358
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1704358
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1704358
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1704358
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1704358
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1704358
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1704358
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1704358
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1704358
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1704358
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1704358
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1704358
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1704358
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1704358
2-Propanol	67-63-0	60.10	1.25	3.07	1.79	4.40		1	WG1704358
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1704358
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1704358
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1704358
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1704358
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1704358
Toluene	108-88-3	92.10	0.500	1.88	0.709	2.67		1	WG1704358
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1704358

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	WG1704358
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1704358
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1704358
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1704358
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1704358
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1704358
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1704358
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1704358
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1704358
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1704358
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1704358
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1704358
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		97.6				WG1704358

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	4.14	9.84		1	WG1704358
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1704358
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1704358
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1704358
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1704358
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1704358
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1704358
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1704358
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.271	0.843		1	WG1704358
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1704358
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1704358
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1704358
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1704358
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1704358
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1704358
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1704358
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1704358
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1704358
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1704358
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1704358
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1704358
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1704358
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1704358
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1704358
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1704358
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1704358
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1704358
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1704358
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1704358
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1704358
Ethanol	64-17-5	46.10	1.25	2.36	23.3	43.9		1	WG1704358
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1704358
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1704358
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.266	1.49		1	WG1704358
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1704358
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1704358
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1704358
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1704358
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1704358
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1704358
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1704358
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1704358
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1704358
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1704358
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1704358
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1704358
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1704358
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1704358
2-Propanol	67-63-0	60.10	1.25	3.07	5.46	13.4		1	WG1704358
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1704358
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1704358
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1704358
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1704358
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1704358
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1704358
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1704358

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	WG1704358
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1704358
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1704358
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1704358
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1704358
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1704358
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1704358
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1704358
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1704358
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1704358
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1704358
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1704358
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.9				WG1704358

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	7.01	16.7		1	WG1704358
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1704358
Benzene	71-43-2	78.10	0.200	0.639	0.674	2.15		1	WG1704358
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1704358
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1704358
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1704358
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1704358
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1704358
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.816	2.54		1	WG1704358
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1704358
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1704358
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1704358
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1704358
Chloromethane	74-87-3	50.50	0.200	0.413	5.14	10.6		1	WG1704358
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1704358
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1704358
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1704358
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1704358
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1704358
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1704358
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1704358
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1704358
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1704358
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1704358
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1704358
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1704358
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1704358
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1704358
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1704358
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1704358
Ethanol	64-17-5	46.10	1.25	2.36	29.3	55.2		1	WG1704358
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1704358
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1704358
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.292	1.64		1	WG1704358
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1704358
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1704358
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1704358
Heptane	142-82-5	100	0.200	0.818	0.396	1.62		1	WG1704358
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1704358
n-Hexane	110-54-3	86.20	0.630	2.22	0.732	2.58		1	WG1704358
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1704358
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1704358
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1704358
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1704358
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1704358
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1704358
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1704358
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1704358
2-Propanol	67-63-0	60.10	1.25	3.07	9.54	23.5		1	WG1704358
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1704358
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1704358
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1704358
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1704358
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1704358
Toluene	108-88-3	92.10	0.500	1.88	0.936	3.53		1	WG1704358
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1704358

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	WG1704358
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1704358
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1704358
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1704358
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1704358
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	0.230	1.07		1	WG1704358
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1704358
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1704358
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1704358
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1704358
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1704358
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1704358
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.3				WG1704358

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	3.89	9.24		1	WG1704358
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1704358
Benzene	71-43-2	78.10	0.200	0.639	0.388	1.24		1	WG1704358
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1704358
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1704358
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1704358
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1704358
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1704358
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.452	1.41		1	WG1704358
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1704358
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1704358
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1704358
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1704358
Chloromethane	74-87-3	50.50	0.200	0.413	1.16	2.40		1	WG1704358
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1704358
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1704358
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1704358
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1704358
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1704358
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1704358
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1704358
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1704358
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1704358
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1704358
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1704358
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1704358
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1704358
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1704358
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1704358
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1704358
Ethanol	64-17-5	46.10	1.25	2.36	22.2	41.9		1	WG1704358
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1704358
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1704358
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.300	1.69		1	WG1704358
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1704358
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1704358
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1704358
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1704358
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1704358
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1704358
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1704358
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1704358
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1704358
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1704358
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1704358
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1704358
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1704358
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1704358
2-Propanol	67-63-0	60.10	1.25	3.07	5.77	14.2		1	WG1704358
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1704358
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1704358
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1704358
Tetrachloroethylene	127-18-4	166	0.200	1.36	0.226	1.53		1	WG1704358
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1704358
Toluene	108-88-3	92.10	0.500	1.88	0.686	2.58		1	WG1704358
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1704358

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	WG1704358
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1704358
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1704358
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1704358
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1704358
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1704358
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1704358
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1704358
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1704358
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1704358
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1704358
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1704358
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		99.0				WG1704358

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	3.62	8.60		1	WG1704358
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1704358
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1704358
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1704358
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1704358
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1704358
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1704358
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1704358
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.363	1.13		1	WG1704358
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1704358
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1704358
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1704358
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1704358
Chloromethane	74-87-3	50.50	0.200	0.413	1.61	3.33		1	WG1704358
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1704358
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1704358
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1704358
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1704358
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1704358
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1704358
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1704358
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1704358
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1704358
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1704358
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1704358
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1704358
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1704358
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1704358
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1704358
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1704358
Ethanol	64-17-5	46.10	1.25	2.36	21.5	40.5		1	WG1704358
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1704358
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1704358
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.233	1.31		1	WG1704358
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1704358
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1704358
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1704358
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1704358
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1704358
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1704358
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1704358
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1704358
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1704358
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1704358
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1704358
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1704358
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1704358
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1704358
2-Propanol	67-63-0	60.10	1.25	3.07	2.91	7.15		1	WG1704358
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1704358
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1704358
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1704358
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1704358
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1704358
Toluene	108-88-3	92.10	0.500	1.88	0.525	1.98		1	WG1704358
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1704358

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	WG1704358
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1704358
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1704358
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1704358
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1704358
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1704358
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1704358
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1704358
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1704358
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1704358
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1704358
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1704358
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.8				WG1704358

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	4.46	10.6		1	WG1704358
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1704358
Benzene	71-43-2	78.10	0.200	0.639	0.415	1.33		1	WG1704358
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1704358
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1704358
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1704358
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1704358
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1704358
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1704358
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1704358
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1704358
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1704358
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1704358
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1704358
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1704358
Cyclohexane	110-82-7	84.20	0.200	0.689	5.73	19.7		1	WG1704358
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1704358
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1704358
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1704358
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1704358
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1704358
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1704358
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1704358
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1704358
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1704358
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1704358
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1704358
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1704358
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1704358
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1704358
Ethanol	64-17-5	46.10	1.25	2.36	18.3	34.5		1	WG1704358
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1704358
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1704358
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1704358
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1704358
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1704358
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1704358
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1704358
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1704358
n-Hexane	110-54-3	86.20	0.630	2.22	7.65	27.0		1	WG1704358
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1704358
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1704358
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1704358
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	1.48	4.36		1	WG1704358
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1704358
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1704358
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1704358
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1704358
2-Propanol	67-63-0	60.10	1.25	3.07	4.50	11.1		1	WG1704358
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1704358
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1704358
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1704358
Tetrachloroethylene	127-18-4	166	0.200	1.36	1.13	7.67		1	WG1704358
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1704358
Toluene	108-88-3	92.10	0.500	1.88	0.652	2.46		1	WG1704358
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1704358

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	WG1704358
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1704358
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1704358
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1704358
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1704358
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1704358
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1704358
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1704358
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1704358
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1704358
o-Xylene	95-47-6	106	0.200	0.867	0.258	1.12		1	WG1704358
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1704358
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		99.2				WG1704358

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	12.3	29.2		1	WG1704358
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1704358
Benzene	71-43-2	78.10	0.200	0.639	0.352	1.12		1	WG1704358
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1704358
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1704358
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1704358
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1704358
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1704358
Carbon disulfide	75-15-0	76.10	0.200	0.622	1.91	5.94		1	WG1704358
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1704358
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1704358
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1704358
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1704358
Chloromethane	74-87-3	50.50	0.200	0.413	21.2	43.8		1	WG1704358
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1704358
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1704358
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1704358
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1704358
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1704358
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1704358
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1704358
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1704358
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1704358
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1704358
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1704358
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1704358
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1704358
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1704358
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1704358
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1704358
Ethanol	64-17-5	46.10	1.25	2.36	48.9	92.2		1	WG1704358
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1704358
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1704358
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.339	1.91		1	WG1704358
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1704358
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1704358
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1704358
Heptane	142-82-5	100	0.200	0.818	0.283	1.16		1	WG1704358
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1704358
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1704358
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1704358
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1704358
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1704358
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	3.37	9.94		1	WG1704358
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1704358
Methyl methacrylate	80-62-6	100.12	0.200	0.819	0.226	0.925		1	WG1704358
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1704358
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1704358
2-Propanol	67-63-0	60.10	1.25	3.07	11.9	29.3		1	WG1704358
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1704358
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1704358
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1704358
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1704358
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1704358
Toluene	108-88-3	92.10	0.500	1.88	0.851	3.21		1	WG1704358
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1704358

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	WG1704358
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1704358
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1704358
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1704358
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1704358
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1704358
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1704358
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1704358
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1704358
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1704358
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1704358
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1704358
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		100				WG1704358

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	13.6	32.3		1	WG1704358
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1704358
Benzene	71-43-2	78.10	0.200	0.639	1.04	3.32		1	WG1704358
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1704358
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1704358
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1704358
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1704358
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1704358
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1704358
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1704358
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1704358
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1704358
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1704358
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1704358
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1704358
Cyclohexane	110-82-7	84.20	0.200	0.689	14.8	51.0		1	WG1704358
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1704358
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1704358
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1704358
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1704358
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1704358
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1704358
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1704358
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1704358
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1704358
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1704358
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1704358
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1704358
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1704358
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1704358
Ethanol	64-17-5	46.10	1.25	2.36	19.0	35.8		1	WG1704358
Ethylbenzene	100-41-4	106	0.200	0.867	1.13	4.90		1	WG1704358
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1704358
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1704358
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1704358
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1704358
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1704358
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1704358
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1704358
n-Hexane	110-54-3	86.20	0.630	2.22	15.6	55.0		1	WG1704358
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1704358
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1704358
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1704358
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	8.86	26.1		1	WG1704358
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1704358
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1704358
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1704358
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1704358
2-Propanol	67-63-0	60.10	1.25	3.07	6.60	16.2		1	WG1704358
Propene	115-07-1	42.10	25.0	43.0	878	1510		20	WG1705880
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1704358
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1704358
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1704358
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1704358
Toluene	108-88-3	92.10	0.500	1.88	0.906	3.41		1	WG1704358
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1704358

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	WG1704358
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1704358
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1704358
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1704358
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1704358
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1704358
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1704358
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1704358
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1704358
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1704358
o-Xylene	95-47-6	106	0.200	0.867	0.223	0.967		1	WG1704358
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	353	1460		1	WG1704358
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		101				WG1704358
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.4				WG1705880

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	2.84	6.75		1	WG1704358
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1704358
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1704358
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1704358
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1704358
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1704358
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1704358
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1704358
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.456	1.42		1	WG1704358
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1704358
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1704358
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1704358
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1704358
Chloromethane	74-87-3	50.50	0.200	0.413	1.14	2.35		1	WG1704358
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1704358
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1704358
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1704358
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1704358
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1704358
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1704358
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1704358
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1704358
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1704358
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1704358
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1704358
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1704358
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1704358
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1704358
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1704358
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1704358
Ethanol	64-17-5	46.10	1.25	2.36	21.6	40.7		1	WG1704358
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1704358
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1704358
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.270	1.52		1	WG1704358
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1704358
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1704358
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1704358
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1704358
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1704358
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1704358
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1704358
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1704358
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1704358
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1704358
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1704358
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1704358
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1704358
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1704358
2-Propanol	67-63-0	60.10	1.25	3.07	2.96	7.28		1	WG1704358
Propene	115-07-1	42.10	1.25	2.15	2.03	3.50		1	WG1704358
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1704358
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1704358
Tetrachloroethylene	127-18-4	166	0.200	1.36	1.58	10.7		1	WG1704358
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1704358
Toluene	108-88-3	92.10	0.500	1.88	0.705	2.66		1	WG1704358
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1704358

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	WG1704358
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1704358
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1704358
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.349	1.71		1	WG1704358
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1704358
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1704358
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1704358
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1704358
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1704358
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1704358
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1704358
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1704358
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		100				WG1704358

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	8.76	20.8		1	WG1704358
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1704358
Benzene	71-43-2	78.10	0.200	0.639	0.786	2.51		1	WG1704358
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1704358
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1704358
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1704358
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1704358
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1704358
Carbon disulfide	75-15-0	76.10	0.200	0.622	2.54	7.91		1	WG1704358
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1704358
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1704358
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1704358
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1704358
Chloromethane	74-87-3	50.50	0.200	0.413	20.1	41.5		1	WG1704358
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1704358
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1704358
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1704358
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1704358
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1704358
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1704358
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1704358
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1704358
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1704358
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1704358
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1704358
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1704358
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1704358
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1704358
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1704358
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1704358
Ethanol	64-17-5	46.10	1.25	2.36	36.5	68.8		1	WG1704358
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1704358
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1704358
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1704358
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1704358
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1704358
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1704358
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1704358
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1704358
n-Hexane	110-54-3	86.20	0.630	2.22	1.95	6.87		1	WG1704358
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1704358
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1704358
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1704358
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1704358
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1704358
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1704358
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1704358
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1704358
2-Propanol	67-63-0	60.10	1.25	3.07	11.2	27.5		1	WG1704358
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1704358
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1704358
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1704358
Tetrachloroethylene	127-18-4	166	0.200	1.36	6.70	45.5		1	WG1704358
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1704358
Toluene	108-88-3	92.10	0.500	1.88	0.983	3.70		1	WG1704358
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1704358

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	WG1704358
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1704358
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1704358
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1704358
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1704358
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1704358
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1704358
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1704358
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1704358
m&p-Xylene	1330-20-7	106	0.400	1.73	0.405	1.76		1	WG1704358
o-Xylene	95-47-6	106	0.200	0.867	0.212	0.919		1	WG1704358
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1704358
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		98.9				WG1704358

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	4.07	9.67		1	WG1704358
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1704358
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1704358
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1704358
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1704358
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1704358
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1704358
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1704358
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.602	1.87		1	WG1704358
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1704358
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1704358
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1704358
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1704358
Chloromethane	74-87-3	50.50	0.200	0.413	1.21	2.50		1	WG1704358
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1704358
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1704358
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1704358
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1704358
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1704358
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1704358
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1704358
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1704358
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1704358
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1704358
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1704358
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1704358
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1704358
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1704358
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1704358
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1704358
Ethanol	64-17-5	46.10	1.25	2.36	31.5	59.4		1	WG1704358
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1704358
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1704358
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.325	1.83		1	WG1704358
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1704358
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1704358
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1704358
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1704358
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1704358
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1704358
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1704358
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.317	1.10		1	WG1704358
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1704358
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1704358
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1704358
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1704358
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1704358
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1704358
2-Propanol	67-63-0	60.10	1.25	3.07	3.53	8.68		1	WG1704358
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1704358
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1704358
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1704358
Tetrachloroethylene	127-18-4	166	0.200	1.36	7.56	51.3		1	WG1704358
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1704358
Toluene	108-88-3	92.10	0.500	1.88	0.793	2.99		1	WG1704358
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1704358

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	WG1704358
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1704358
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1704358
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1704358
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1704358
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1704358
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1704358
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1704358
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1704358
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1704358
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1704358
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1704358
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		97.1				WG1704358

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

AMBIENT 4

SAMPLE RESULTS - 15

Collected date/time: 07/09/21 13:49

L1377074

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	4.14	9.84		1	WG1704358
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1704358
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1704358
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1704358
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1704358
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1704358
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1704358
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1704358
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1704358
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1704358
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1704358
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1704358
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1704358
Chloromethane	74-87-3	50.50	0.200	0.413	0.613	1.27		1	WG1704358
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1704358
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1704358
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1704358
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1704358
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1704358
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1704358
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1704358
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1704358
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1704358
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1704358
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1704358
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1704358
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1704358
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1704358
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1704358
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1704358
Ethanol	64-17-5	46.10	1.25	2.36	34.6	65.2		1	WG1704358
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1704358
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1704358
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.242	1.36		1	WG1704358
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1704358
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1704358
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1704358
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1704358
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1704358
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1704358
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1704358
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.501	1.74		1	WG1704358
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1704358
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1704358
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1704358
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1704358
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1704358
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1704358
2-Propanol	67-63-0	60.10	1.25	3.07	4.08	10.0		1	WG1704358
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1704358
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1704358
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1704358
Tetrachloroethylene	127-18-4	166	0.200	1.36	1.40	9.51		1	WG1704358
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1704358
Toluene	108-88-3	92.10	0.500	1.88	1.10	4.14		1	WG1704358
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1704358

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	WG1704358
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1704358
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1704358
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1704358
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1704358
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	0.226	1.06		1	WG1704358
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1704358
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1704358
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1704358
m&p-Xylene	1330-20-7	106	0.400	1.73	0.491	2.13		1	WG1704358
o-Xylene	95-47-6	106	0.200	0.867	0.218	0.945		1	WG1704358
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1704358
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		99.1				WG1704358

- 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	4.22	10.0		1	WG1704366
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1704366
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1704366
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1704366
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1704366
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1704366
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1704366
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1704366
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.672	2.09	B	1	WG1704366
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1704366
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1704366
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1704366
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1704366
Chloromethane	74-87-3	50.50	0.200	0.413	5.79	12.0		1	WG1704366
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1704366
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1704366
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1704366
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1704366
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1704366
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1704366
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1704366
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1704366
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1704366
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1704366
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1704366
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1704366
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1704366
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1704366
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1704366
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1704366
Ethanol	64-17-5	46.10	1.25	2.36	11.8	22.2		1	WG1704366
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1704366
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1704366
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.301	1.69		1	WG1704366
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.424	2.10		1	WG1704366
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1704366
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1704366
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1704366
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1704366
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1704366
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1704366
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1704366
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1704366
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1704366
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1704366
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1704366
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1704366
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1704366
2-Propanol	67-63-0	60.10	1.25	3.07	5.24	12.9		1	WG1704366
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1704366
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1704366
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1704366
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1704366
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1704366
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1704366
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1704366

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	WG1704366
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1704366
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1704366
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1704366
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1704366
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1704366
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1704366
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1704366
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1704366
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1704366
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1704366
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1704366
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.7				WG1704366

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	3.62	8.60		1	WG1704366
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1704366
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1704366
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1704366
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1704366
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1704366
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1704366
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1704366
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.563	1.75	B	1	WG1704366
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1704366
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1704366
Chloroethane	75-00-3	64.50	0.200	0.528	0.228	0.601		1	WG1704366
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1704366
Chloromethane	74-87-3	50.50	0.200	0.413	1.78	3.68		1	WG1704366
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1704366
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1704366
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1704366
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1704366
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1704366
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1704366
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1704366
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1704366
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1704366
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1704366
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1704366
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1704366
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1704366
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1704366
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1704366
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1704366
Ethanol	64-17-5	46.10	1.25	2.36	25.9	48.8		1	WG1704366
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1704366
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1704366
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.296	1.66		1	WG1704366
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.498	2.46		1	WG1704366
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1704366
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1704366
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1704366
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1704366
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1704366
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1704366
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1704366
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1704366
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1704366
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1704366
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1704366
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1704366
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1704366
2-Propanol	67-63-0	60.10	1.25	3.07	3.33	8.19		1	WG1704366
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1704366
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1704366
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1704366
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1704366
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1704366
Toluene	108-88-3	92.10	0.500	1.88	0.875	3.30		1	WG1704366
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1704366

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	WG1704366
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1704366
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1704366
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1704366
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1704366
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1704366
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1704366
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1704366
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1704366
m&p-Xylene	1330-20-7	106	0.400	1.73	0.495	2.15		1	WG1704366
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1704366
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1704366
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		94.2				WG1704366

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	1.54	3.66		1	WG1704366
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1704366
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1704366
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1704366
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1704366
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1704366
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1704366
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1704366
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.527	1.64	B	1	WG1704366
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1704366
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1704366
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1704366
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1704366
Chloromethane	74-87-3	50.50	0.200	0.413	4.01	8.28		1	WG1704366
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1704366
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1704366
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1704366
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1704366
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1704366
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1704366
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1704366
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1704366
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1704366
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1704366
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1704366
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1704366
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1704366
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1704366
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1704366
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1704366
Ethanol	64-17-5	46.10	1.25	2.36	14.6	27.5		1	WG1704366
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1704366
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1704366
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.324	1.82		1	WG1704366
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.498	2.46		1	WG1704366
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1704366
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1704366
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG1704366
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1704366
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1704366
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1704366
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1704366
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1704366
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1704366
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1704366
Methyl methacrylate	80-62-6	100.12	0.200	0.819	0.217	0.889		1	WG1704366
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1704366
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1704366
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1704366
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1704366
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1704366
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1704366
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1704366
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1704366
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1704366
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1704366

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	WG1704366
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1704366
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1704366
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1704366
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1704366
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1704366
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1704366
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1704366
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1704366
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1704366
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1704366
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1704366
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.7				WG1704366

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	7.07	16.8		1	WG1704366
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1704366
Benzene	71-43-2	78.10	0.200	0.639	0.241	0.770		1	WG1704366
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1704366
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1704366
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1704366
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1704366
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1704366
Carbon disulfide	75-15-0	76.10	0.200	0.622	1.85	5.76		1	WG1704366
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1704366
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1704366
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1704366
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1704366
Chloromethane	74-87-3	50.50	0.200	0.413	14.3	29.5		1	WG1704366
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1704366
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1704366
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1704366
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1704366
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1704366
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1704366
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1704366
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1704366
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1704366
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1704366
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1704366
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1704366
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1704366
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1704366
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1704366
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1704366
Ethanol	64-17-5	46.10	1.25	2.36	35.8	67.5		1	WG1704366
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1704366
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1704366
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.353	1.98		1	WG1704366
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1704366
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	0.201	1.54		1	WG1704366
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1704366
Heptane	142-82-5	100	0.200	0.818	0.203	0.830		1	WG1704366
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1704366
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1704366
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1704366
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1704366
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1704366
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1704366
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1704366
Methyl methacrylate	80-62-6	100.12	0.200	0.819	0.499	2.04		1	WG1704366
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1704366
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1704366
2-Propanol	67-63-0	60.10	1.25	3.07	8.14	20.0		1	WG1704366
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1704366
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1704366
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1704366
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1704366
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1704366
Toluene	108-88-3	92.10	0.500	1.88	0.699	2.63		1	WG1704366
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1704366

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	WG1704366
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1704366
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1704366
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1704366
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1704366
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1704366
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1704366
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1704366
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1704366
m&p-Xylene	1330-20-7	106	0.400	1.73	0.474	2.05		1	WG1704366
o-Xylene	95-47-6	106	0.200	0.867	0.214	0.928		1	WG1704366
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1704366
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.9				WG1704366

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	3.61	8.58		1	WG1704366
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1704366
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG1704366
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1704366
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1704366
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1704366
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1704366
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1704366
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.776	2.42	B	1	WG1704366
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1704366
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1704366
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1704366
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1704366
Chloromethane	74-87-3	50.50	0.200	0.413	5.20	10.7		1	WG1704366
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1704366
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1704366
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1704366
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1704366
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1704366
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1704366
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1704366
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1704366
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1704366
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1704366
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1704366
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1704366
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1704366
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1704366
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1704366
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1704366
Ethanol	64-17-5	46.10	1.25	2.36	17.7	33.4		1	WG1704366
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1704366
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1704366
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.388	2.18		1	WG1704366
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1704366
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1704366
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1704366
Heptane	142-82-5	100	0.200	0.818	0.266	1.09		1	WG1704366
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1704366
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1704366
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1704366
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1704366
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1704366
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1704366
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1704366
Methyl methacrylate	80-62-6	100.12	0.200	0.819	0.271	1.11		1	WG1704366
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1704366
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1704366
2-Propanol	67-63-0	60.10	1.25	3.07	4.67	11.5		1	WG1704366
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1704366
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1704366
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1704366
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1704366
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	1.10	3.24		1	WG1704366
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1704366
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1704366

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	WG1704366
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1704366
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1704366
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1704366
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1704366
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1704366
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1704366
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1704366
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1704366
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1704366
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1704366
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1704366
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.6				WG1704366

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC) by Method 8015M

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch
			ppmv	mg/m3	ppmv	mg/m3			
Methane	74-82-8	16	10.0	6.54	ND	ND		1	WG1708377
Ethane	74-84-0	30	10.0	12.3	ND	ND		1	WG1708377
Ethene	74-85-1	28	10.0	11.5	ND	ND		1	WG1708377

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch
			ppbv	ug/m3	ppbv	ug/m3			
Acetone	67-64-1	58.10	1.25	2.97	16.4	39.0		1	WG1704366
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1704366
Benzene	71-43-2	78.10	0.200	0.639	0.256	0.818		1	WG1704366
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1704366
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1704366
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1704366
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1704366
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1704366
Carbon disulfide	75-15-0	76.10	0.200	0.622	1.77	5.51		1	WG1704366
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1704366
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1704366
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1704366
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1704366
Chloromethane	74-87-3	50.50	0.200	0.413	32.3	66.7		1	WG1704366
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1704366
Cyclohexane	110-82-7	84.20	0.200	0.689	0.589	2.03		1	WG1704366
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1704366
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1704366
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1704366
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1704366
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1704366
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1704366
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1704366
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1704366
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1704366
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1704366
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1704366
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1704366
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1704366
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1704366
Ethanol	64-17-5	46.10	1.25	2.36	31.6	59.6		1	WG1704366
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1704366
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1704366
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.336	1.89		1	WG1704366
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1704366
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1704366
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1704366
Heptane	142-82-5	100	0.200	0.818	0.313	1.28		1	WG1704366
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1704366
n-Hexane	110-54-3	86.20	0.630	2.22	0.809	2.85		1	WG1704366
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1704366
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1704366
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1704366
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	3.29	9.70		1	WG1704366
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1704366
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1704366
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1704366
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1704366

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
2-Propanol	67-63-0	60.10	1.25	3.07	7.59	18.7		1	WG1704366
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1704366
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1704366
1,1,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1704366
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1704366
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1704366
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG1704366
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1704366
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1704366
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1704366
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1704366
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1704366
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1704366
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1704366
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1704366
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1704366
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1704366
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1704366
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1704366
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1704366
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		97.2				WG1704366

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC) by Method 8015M

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch
			ppmv	mg/m3	ppmv	mg/m3			
Methane	74-82-8	16	10.0	6.54	ND	ND		1	WG1708377
Ethane	74-84-0	30	10.0	12.3	ND	ND		1	WG1708377
Ethene	74-85-1	28	10.0	11.5	ND	ND		1	WG1708377

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch
			ppbv	ug/m3	ppbv	ug/m3			
Acetone	67-64-1	58.10	1.25	2.97	9.68	23.0		1	WG1704366
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1704366
Benzene	71-43-2	78.10	0.200	0.639	0.336	1.07		1	WG1704366
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1704366
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1704366
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1704366
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1704366
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1704366
Carbon disulfide	75-15-0	76.10	0.200	0.622	3.20	9.96		1	WG1704366
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1704366
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1704366
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1704366
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1704366
Chloromethane	74-87-3	50.50	0.200	0.413	33.8	69.8		1	WG1704366
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1704366
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1704366
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1704366
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1704366
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1704366
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1704366
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1704366
1,2-Dichloroethane	107-06-2	99	0.200	0.810	0.221	0.895		1	WG1704366
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1704366
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1704366
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1704366
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1704366
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1704366
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1704366
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1704366
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1704366
Ethanol	64-17-5	46.10	1.25	2.36	67.4	127		1	WG1704366
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1704366
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1704366
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.335	1.88		1	WG1704366
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1704366
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1704366
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1704366
Heptane	142-82-5	100	0.200	0.818	0.413	1.69		1	WG1704366
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1704366
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1704366
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1704366
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1704366
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1704366
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	2.90	8.55		1	WG1704366
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1704366
Methyl methacrylate	80-62-6	100.12	0.200	0.819	0.474	1.94		1	WG1704366
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1704366
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1704366

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
2-Propanol	67-63-0	60.10	1.25	3.07	8.54	21.0		1	WG1704366
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1704366
Styrene	100-42-5	104	0.200	0.851	0.203	0.863		1	WG1704366
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1704366
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1704366
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1704366
Toluene	108-88-3	92.10	0.500	1.88	0.594	2.24		1	WG1704366
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1704366
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1704366
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1704366
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1704366
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1704366
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1704366
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1704366
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1704366
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1704366
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1704366
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1704366
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1704366
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1704366
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.9				WG1704366

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC) by Method 8015M

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch
			ppmv	mg/m3	ppmv	mg/m3			
Methane	74-82-8	16	10.0	6.54	ND	ND		1	WG1708377
Ethane	74-84-0	30	10.0	12.3	ND	ND		1	WG1708377
Ethene	74-85-1	28	10.0	11.5	ND	ND		1	WG1708377

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch
			ppbv	ug/m3	ppbv	ug/m3			
Acetone	67-64-1	58.10	1.25	2.97	11.9	28.3		1	WG1704366
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1704366
Benzene	71-43-2	78.10	0.200	0.639	0.324	1.03		1	WG1704366
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1704366
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1704366
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1704366
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1704366
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1704366
Carbon disulfide	75-15-0	76.10	0.200	0.622	2.13	6.63		1	WG1704366
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1704366
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1704366
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1704366
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1704366
Chloromethane	74-87-3	50.50	0.200	0.413	5.38	11.1		1	WG1704366
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1704366
Cyclohexane	110-82-7	84.20	0.200	0.689	0.352	1.21		1	WG1704366
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1704366
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1704366
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1704366
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1704366
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1704366
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1704366
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1704366
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1704366
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1704366
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1704366
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1704366
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1704366
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1704366
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1704366
Ethanol	64-17-5	46.10	1.25	2.36	61.3	116		1	WG1704366
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1704366
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1704366
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.342	1.92		1	WG1704366
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1704366
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1704366
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1704366
Heptane	142-82-5	100	0.200	0.818	0.299	1.22		1	WG1704366
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1704366
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG1704366
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1704366
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1704366
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1704366
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	4.21	12.4		1	WG1704366
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1704366
Methyl methacrylate	80-62-6	100.12	0.200	0.819	0.560	2.29		1	WG1704366
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1704366
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1704366

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
2-Propanol	67-63-0	60.10	1.25	3.07	8.02	19.7		1	WG1704366
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG1704366
Styrene	100-42-5	104	0.200	0.851	0.357	1.52		1	WG1704366
1,1,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1704366
Tetrachloroethylene	127-18-4	166	0.200	1.36	0.637	4.32		1	WG1704366
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1704366
Toluene	108-88-3	92.10	0.500	1.88	1.12	4.22		1	WG1704366
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1704366
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1704366
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1704366
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1704366
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1704366
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1704366
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	0.347	1.62		1	WG1704366
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1704366
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1704366
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1704366
m&p-Xylene	1330-20-7	106	0.400	1.73	0.523	2.27		1	WG1704366
o-Xylene	95-47-6	106	0.200	0.867	0.243	1.05		1	WG1704366
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1704366
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.9				WG1704366

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC) by Method 8015M

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch
			ppmv	mg/m3	ppmv	mg/m3			
Methane	74-82-8	16	10.0	6.54	ND	ND		1	WG1708377
Ethane	74-84-0	30	10.0	12.3	ND	ND		1	WG1708377
Ethene	74-85-1	28	10.0	11.5	ND	ND		1	WG1708377

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch
			ppbv	ug/m3	ppbv	ug/m3			
Acetone	67-64-1	58.10	1.25	2.97	9.25	22.0		1	WG1704366
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1704366
Benzene	71-43-2	78.10	0.200	0.639	0.469	1.50		1	WG1704366
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1704366
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1704366
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1704366
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1704366
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1704366
Carbon disulfide	75-15-0	76.10	0.200	0.622	2.17	6.75		1	WG1704366
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1704366
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1704366
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1704366
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1704366
Chloromethane	74-87-3	50.50	0.200	0.413	4.74	9.79		1	WG1704366
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1704366
Cyclohexane	110-82-7	84.20	0.200	0.689	0.469	1.62		1	WG1704366
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1704366
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1704366
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1704366
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1704366
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1704366
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1704366
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1704366
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1704366
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1704366
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1704366
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1704366
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1704366
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1704366
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1704366
Ethanol	64-17-5	46.10	1.25	2.36	31.4	59.2		1	WG1704366
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1704366
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1704366
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1704366
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1704366
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1704366
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1704366
Heptane	142-82-5	100	0.200	0.818	0.311	1.27		1	WG1704366
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1704366
n-Hexane	110-54-3	86.20	0.630	2.22	1.02	3.60		1	WG1704366
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1704366
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1704366
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1704366
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG1704366
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1704366
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1704366
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1704366
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1704366

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
2-Propanol	67-63-0	60.10	1.25	3.07	11.2	27.5		1	WG1704366
Propene	115-07-1	42.10	1.25	2.15	38.3	65.9		1	WG1704366
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1704366
1,1,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1704366
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1704366
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1704366
Toluene	108-88-3	92.10	0.500	1.88	0.730	2.75		1	WG1704366
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1704366
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1704366
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1704366
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1704366
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.214	1.05		1	WG1704366
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1704366
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1704366
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1704366
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1704366
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1704366
m&p-Xylene	1330-20-7	106	0.400	1.73	0.540	2.34		1	WG1704366
o-Xylene	95-47-6	106	0.200	0.867	0.251	1.09		1	WG1704366
TPH (GC/MS) Low Fraction	8006-61-9	101	200	826	ND	ND		1	WG1704366
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.7				WG1704366

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3681545-3 07/20/21 12:09

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppmv		ppmv	ppmv
Methane	U		6.98	10.0
Ethane	U		3.86	10.0
Ethene	U		3.61	10.0

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

(LCS) R3681545-1 07/20/21 11:42 • (LCSD) R3681545-2 07/20/21 12:06

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppmv	ppmv	ppmv	%	%	%			%	%
Methane	500	471	456	94.2	91.2	79.0-115			3.24	20
Ethane	500	513	494	103	98.8	85.0-115			3.77	20
Ethene	500	490	471	98.0	94.2	85.0-118			3.95	20

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3679177-3 07/13/21 10:03

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	0.200
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
Isopropylbenzene	U		0.0777	0.200

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

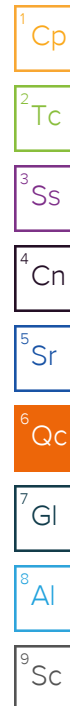
⁸Al

⁹Sc

Method Blank (MB)

(MB) R3679177-3 07/13/21 10:03

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	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	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
Ethanol	U		0.265	1.25
TPH (GC/MS) Low Fraction	U		39.7	200
(S) 1,4-Bromofluorobenzene	95.8			60.0-140



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

(LCS) R3679177-1 07/13/21 08:43 • (LCSD) R3679177-2 07/13/21 09:24

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Ethanol	3.75	4.09	3.94	109	105	55.0-148			3.74	25
Propene	3.75	4.01	3.79	107	101	64.0-144			5.64	25
Dichlorodifluoromethane	3.75	4.17	4.00	111	107	64.0-139			4.16	25
1,2-Dichlorotetrafluoroethane	3.75	4.33	4.16	115	111	70.0-130			4.00	25

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

(LCS) R3679177-1 07/13/21 08:43 • (LCSD) R3679177-2 07/13/21 09:24

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloromethane	3.75	4.39	4.35	117	116	70.0-130			0.915	25
Vinyl chloride	3.75	4.12	3.99	110	106	70.0-130			3.21	25
1,3-Butadiene	3.75	4.02	3.91	107	104	70.0-130			2.77	25
Bromomethane	3.75	4.16	4.05	111	108	70.0-130			2.68	25
Chloroethane	3.75	4.17	4.12	111	110	70.0-130			1.21	25
Trichlorofluoromethane	3.75	4.19	4.06	112	108	70.0-130			3.15	25
1,1,2-Trichlorotrifluoroethane	3.75	4.25	4.21	113	112	70.0-130			0.946	25
1,1-Dichloroethene	3.75	4.28	4.15	114	111	70.0-130			3.08	25
1,1-Dichloroethane	3.75	4.43	4.21	118	112	70.0-130			5.09	25
Acetone	3.75	4.51	4.45	120	119	70.0-130			1.34	25
2-Propanol	3.75	4.14	3.97	110	106	70.0-139			4.19	25
Carbon disulfide	3.75	4.28	4.12	114	110	70.0-130			3.81	25
Methylene Chloride	3.75	4.35	4.20	116	112	70.0-130			3.51	25
MTBE	3.75	4.31	4.11	115	110	70.0-130			4.75	25
trans-1,2-Dichloroethene	3.75	4.24	4.06	113	108	70.0-130			4.34	25
n-Hexane	3.75	4.36	4.25	116	113	70.0-130			2.56	25
Vinyl acetate	3.75	4.27	4.33	114	115	70.0-130			1.40	25
Methyl Ethyl Ketone	3.75	4.22	4.02	113	107	70.0-130			4.85	25
cis-1,2-Dichloroethene	3.75	4.38	4.22	117	113	70.0-130			3.72	25
Chloroform	3.75	4.19	4.05	112	108	70.0-130			3.40	25
Cyclohexane	3.75	4.22	4.20	113	112	70.0-130			0.475	25
1,1,1-Trichloroethane	3.75	4.19	4.07	112	109	70.0-130			2.91	25
Carbon tetrachloride	3.75	4.16	4.15	111	111	70.0-130			0.241	25
Benzene	3.75	4.17	4.08	111	109	70.0-130			2.18	25
1,2-Dichloroethane	3.75	4.11	4.09	110	109	70.0-130			0.488	25
Heptane	3.75	4.26	4.23	114	113	70.0-130			0.707	25
Trichloroethylene	3.75	4.11	4.03	110	107	70.0-130			1.97	25
1,2-Dichloropropane	3.75	4.17	4.09	111	109	70.0-130			1.94	25
1,4-Dioxane	3.75	4.17	4.11	111	110	70.0-140			1.45	25
Bromodichloromethane	3.75	4.16	4.12	111	110	70.0-130			0.966	25
cis-1,3-Dichloropropene	3.75	4.26	4.18	114	111	70.0-130			1.90	25
4-Methyl-2-pentanone (MIBK)	3.75	4.13	4.12	110	110	70.0-139			0.242	25
Toluene	3.75	4.15	4.11	111	110	70.0-130			0.969	25
trans-1,3-Dichloropropene	3.75	4.19	4.23	112	113	70.0-130			0.950	25
1,1,2-Trichloroethane	3.75	4.09	4.03	109	107	70.0-130			1.48	25
Tetrachloroethylene	3.75	4.13	4.15	110	111	70.0-130			0.483	25
Methyl Butyl Ketone	3.75	4.15	4.08	111	109	70.0-149			1.70	25
Dibromochloromethane	3.75	4.14	4.02	110	107	70.0-130			2.94	25
1,2-Dibromoethane	3.75	4.15	4.12	111	110	70.0-130			0.726	25
Chlorobenzene	3.75	4.20	4.00	112	107	70.0-130			4.88	25

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

(LCS) R3679177-1 07/13/21 08:43 • (LCSD) R3679177-2 07/13/21 09:24

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	3.75	4.23	4.11	113	110	70.0-130			2.88	25
m&p-Xylene	7.50	8.56	8.32	114	111	70.0-130			2.84	25
o-Xylene	3.75	4.25	4.19	113	112	70.0-130			1.42	25
Styrene	3.75	4.30	4.33	115	115	70.0-130			0.695	25
Bromoform	3.75	4.08	4.06	109	108	70.0-130			0.491	25
1,1,2,2-Tetrachloroethane	3.75	4.23	4.07	113	109	70.0-130			3.86	25
4-Ethyltoluene	3.75	4.33	4.21	115	112	70.0-130			2.81	25
1,3,5-Trimethylbenzene	3.75	4.27	4.20	114	112	70.0-130			1.65	25
1,2,4-Trimethylbenzene	3.75	4.44	4.28	118	114	70.0-130			3.67	25
1,3-Dichlorobenzene	3.75	4.21	4.15	112	111	70.0-130			1.44	25
1,4-Dichlorobenzene	3.75	4.22	4.11	113	110	70.0-130			2.64	25
Benzyl Chloride	3.75	4.07	3.96	109	106	70.0-152			2.74	25
1,2-Dichlorobenzene	3.75	4.29	4.13	114	110	70.0-130			3.80	25
1,2,4-Trichlorobenzene	3.75	4.26	4.29	114	114	70.0-160			0.702	25
Hexachloro-1,3-butadiene	3.75	4.08	3.96	109	106	70.0-151			2.99	25
Naphthalene	3.75	4.39	4.32	117	115	70.0-159			1.61	25
TPH (GC/MS) Low Fraction	203	228	223	112	110	70.0-130			2.22	25
Allyl Chloride	3.75	4.38	4.45	117	119	70.0-130			1.59	25
2-Chlorotoluene	3.75	4.22	4.14	113	110	70.0-130			1.91	25
Methyl Methacrylate	3.75	4.16	4.20	111	112	70.0-130			0.957	25
Tetrahydrofuran	3.75	4.24	4.21	113	112	70.0-137			0.710	25
2,2,4-Trimethylpentane	3.75	4.32	4.25	115	113	70.0-130			1.63	25
Vinyl Bromide	3.75	4.10	3.99	109	106	70.0-130			2.72	25
Isopropylbenzene	3.75	4.38	4.32	117	115	70.0-130			1.38	25
(S) 1,4-Bromofluorobenzene				101	102	60.0-140				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3679178-3 07/13/21 10:16

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	0.138	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	0.122	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	0.128	U	0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
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
Isopropylbenzene	U		0.0777	0.200

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

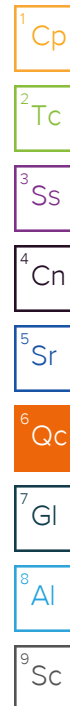
⁸Al

⁹Sc

Method Blank (MB)

(MB) R3679178-3 07/13/21 10:16

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.473	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	0.154	U	0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
Ethanol	0.319	U	0.265	1.25
TPH (GC/MS) Low Fraction	U		39.7	200
(S) 1,4-Bromofluorobenzene	95.3			60.0-140



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

(LCS) R3679178-1 07/13/21 08:51 • (LCSD) R3679178-2 07/13/21 09:34

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Ethanol	3.75	4.17	4.14	111	110	55.0-148			0.722	25
Propene	3.75	4.18	4.21	111	112	64.0-144			0.715	25
Dichlorodifluoromethane	3.75	4.26	4.32	114	115	64.0-139			1.40	25
1,2-Dichlorotetrafluoroethane	3.75	4.27	4.35	114	116	70.0-130			1.86	25

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

(LCS) R3679178-1 07/13/21 08:51 • (LCSD) R3679178-2 07/13/21 09:34

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloromethane	3.75	4.17	4.28	111	114	70.0-130			2.60	25
Vinyl chloride	3.75	4.26	4.41	114	118	70.0-130			3.46	25
1,3-Butadiene	3.75	4.27	4.56	114	122	70.0-130			6.57	25
Bromomethane	3.75	4.29	4.43	114	118	70.0-130			3.21	25
Chloroethane	3.75	4.39	4.55	117	121	70.0-130			3.58	25
Trichlorofluoromethane	3.75	4.35	4.42	116	118	70.0-130			1.60	25
1,1,2-Trichlorotrifluoroethane	3.75	4.16	4.27	111	114	70.0-130			2.61	25
1,1-Dichloroethene	3.75	4.22	4.27	113	114	70.0-130			1.18	25
1,1-Dichloroethane	3.75	4.13	4.25	110	113	70.0-130			2.86	25
Acetone	3.75	4.54	4.58	121	122	70.0-130			0.877	25
2-Propanol	3.75	4.27	4.27	114	114	70.0-139			0.000	25
Carbon disulfide	3.75	3.73	3.81	99.5	102	70.0-130			2.12	25
Methylene Chloride	3.75	4.22	4.32	113	115	70.0-130			2.34	25
MTBE	3.75	4.17	4.23	111	113	70.0-130			1.43	25
trans-1,2-Dichloroethene	3.75	4.14	4.20	110	112	70.0-130			1.44	25
n-Hexane	3.75	4.13	4.17	110	111	70.0-130			0.964	25
Vinyl acetate	3.75	3.87	4.17	103	111	70.0-130			7.46	25
Methyl Ethyl Ketone	3.75	4.04	4.11	108	110	70.0-130			1.72	25
cis-1,2-Dichloroethene	3.75	4.13	4.25	110	113	70.0-130			2.86	25
Chloroform	3.75	4.16	4.27	111	114	70.0-130			2.61	25
Cyclohexane	3.75	4.08	4.23	109	113	70.0-130			3.61	25
1,1,1-Trichloroethane	3.75	4.12	4.24	110	113	70.0-130			2.87	25
Carbon tetrachloride	3.75	4.07	4.13	109	110	70.0-130			1.46	25
Benzene	3.75	4.28	4.34	114	116	70.0-130			1.39	25
1,2-Dichloroethane	3.75	4.31	4.40	115	117	70.0-130			2.07	25
Heptane	3.75	4.23	4.47	113	119	70.0-130			5.52	25
Trichloroethylene	3.75	4.18	4.12	111	110	70.0-130			1.45	25
1,2-Dichloropropane	3.75	4.23	4.29	113	114	70.0-130			1.41	25
1,4-Dioxane	3.75	4.15	4.04	111	108	70.0-140			2.69	25
Bromodichloromethane	3.75	4.24	4.28	113	114	70.0-130			0.939	25
cis-1,3-Dichloropropene	3.75	4.21	4.18	112	111	70.0-130			0.715	25
4-Methyl-2-pentanone (MIBK)	3.75	4.43	4.46	118	119	70.0-139			0.675	25
Toluene	3.75	4.05	4.01	108	107	70.0-130			0.993	25
trans-1,3-Dichloropropene	3.75	4.15	4.25	111	113	70.0-130			2.38	25
1,1,2-Trichloroethane	3.75	4.14	4.21	110	112	70.0-130			1.68	25
Tetrachloroethylene	3.75	3.96	3.98	106	106	70.0-130			0.504	25
Methyl Butyl Ketone	3.75	4.50	4.55	120	121	70.0-149			1.10	25
Dibromochloromethane	3.75	4.20	4.16	112	111	70.0-130			0.957	25
1,2-Dibromoethane	3.75	4.15	4.21	111	112	70.0-130			1.44	25
Chlorobenzene	3.75	4.19	4.27	112	114	70.0-130			1.89	25

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

(LCS) R3679178-1 07/13/21 08:51 • (LCSD) R3679178-2 07/13/21 09:34

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	3.75	4.11	4.13	110	110	70.0-130			0.485	25
m&p-Xylene	7.50	8.23	8.35	110	111	70.0-130			1.45	25
o-Xylene	3.75	4.01	4.07	107	109	70.0-130			1.49	25
Styrene	3.75	4.07	4.13	109	110	70.0-130			1.46	25
Bromoform	3.75	3.91	3.97	104	106	70.0-130			1.52	25
1,1,2,2-Tetrachloroethane	3.75	4.25	4.34	113	116	70.0-130			2.10	25
4-Ethyltoluene	3.75	4.30	4.39	115	117	70.0-130			2.07	25
1,3,5-Trimethylbenzene	3.75	4.45	4.47	119	119	70.0-130			0.448	25
1,2,4-Trimethylbenzene	3.75	4.28	4.36	114	116	70.0-130			1.85	25
1,3-Dichlorobenzene	3.75	4.03	4.04	107	108	70.0-130			0.248	25
1,4-Dichlorobenzene	3.75	4.20	4.18	112	111	70.0-130			0.477	25
Benzyl Chloride	3.75	4.42	4.43	118	118	70.0-152			0.226	25
1,2-Dichlorobenzene	3.75	4.01	4.01	107	107	70.0-130			0.000	25
1,2,4-Trichlorobenzene	3.75	3.95	4.00	105	107	70.0-160			1.26	25
Hexachloro-1,3-butadiene	3.75	3.87	3.91	103	104	70.0-151			1.03	25
Naphthalene	3.75	4.29	4.39	114	117	70.0-159			2.30	25
TPH (GC/MS) Low Fraction	203	240	243	118	120	70.0-130			1.24	25
Allyl Chloride	3.75	3.91	4.29	104	114	70.0-130			9.27	25
2-Chlorotoluene	3.75	4.32	4.36	115	116	70.0-130			0.922	25
Methyl Methacrylate	3.75	4.21	4.54	112	121	70.0-130			7.54	25
Tetrahydrofuran	3.75	4.31	4.35	115	116	70.0-137			0.924	25
2,2,4-Trimethylpentane	3.75	4.24	4.36	113	116	70.0-130			2.79	25
Vinyl Bromide	3.75	4.22	4.27	113	114	70.0-130			1.18	25
Isopropylbenzene	3.75	4.06	4.18	108	111	70.0-130			2.91	25
(S) 1,4-Bromofluorobenzene				98.9	99.2	60.0-140				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3679921-3 07/15/21 10:46

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Propene	0.497	↓	0.0932	1.25
(S) 1,4-Bromofluorobenzene	97.6			60.0-140

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

(LCS) R3679921-1 07/15/21 09:21 • (LCSD) R3679921-2 07/15/21 10:04

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Propene	3.75	4.43	4.56	118	122	64.0-144			2.89	25
(S) 1,4-Bromofluorobenzene				99.3	99.2	60.0-140				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

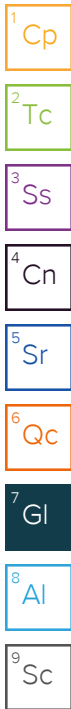
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location.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

Abbreviations and Definitions

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

Qualifier Description

B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.



ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Company Name/Address:
Vertex - CO
 2420 W. 26TH AVE., SUITE 100-D
 Denver, CO 80211

Billing Information:
Accounts Payable
 400 Libbey Parkway
 Weymouth, MA 02189

Pres
 Chk

Analysis / Container / Preservative



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

Report to:
Steve Long

Email To:
 swaldenmyer@vertexeng.com;aeng@vertexeng

Project Description:
Boeing Frederickson Facility

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

Please Circle:
 PT MT CT ET

Phone: **303-623-9118**

Client Project #
71555

Lab Project #
VERTEXDCO-BOEING

Collected by (print):
Jason Cass

Site/Facility ID #
PUYALLUP, WA

P.O. #

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

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

Quote #
 Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs
-----------	-----------	----------	-------	------	------	--------------

TO-15 Summa

Ambient 3		Air	N/A	7/8/21	14:48	1	✓
VSG 120		Air	5.5		9:25	1	✓
VSG 121		Air	5.5		9:57	1	✓
VSG 122		Air	5.5		10:39	1	✓
VSG 123		Air	5.5		10:42	1	✓
VSG 124		Air	5.5		11:36	1	✓
VSG 125		Air	5.5		11:54	1	✓
VSG 126		Air	5.5		12:26	1	✓
VSG 127		Air	5.5		13:15	1	✓
VSG 128		Air	5.5		13:09	1	✓

SDG # **L1377094**

Table #

Acctnum: **VERTEXDCO**

Template: **T189635**

Prelogin: **P858261**
 PM: **824 - Chris Ward**

PB: **CSU dchelu**
 Shipped Via: **FedEX Ground**

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

Samples returned via:
 UPS FedEx Courier

Tracking #
 Trip Blank Received: Yes/No
 HCL / MeOH
 TBR

Relinquished by: (Signature)
Jason Cass

Date:
7/9/21

Time:
17:15

Received by: (Signature)

Temp: **Amb.** °C
 Bottles Received: **24 + 9 empty**

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Date: **7-12-21** Time: **0900**

If preservation required by Login: Date/Time

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)


Date: **7-12-21** Time: **0900**

Hold: Condition: **NCF / OK**

Company Name/Address:
Vertex - CO
 2420 W. 26TH AVE., SUITE 100-D
 Denver, CO 80211

Billing Information:
Accounts Payable
 400 Libbey Parkway
 Weymouth, MA 02189

Analysis / Container / Preservative

Chain of Custody Page **3** of **3**


Report to:
Steve Long

Email To:
 swaldenmyer@vertexeng.com; aeng@vertexeng.com

Project Description:
Boeing Frederickson Facility

City/State Collected:
71555

Please Circle:
 PT MT CT ET

Phone: **303-623-9118**

Client Project #
71555

Lab Project #
VERTEXDCO-BOEING

Collected by (print):
Jason Cass

Site/Facility ID #
PUYALLUP, WA

P.O. #
 Quote #
 Date Results Needed

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

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

No. of Cntrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TO-15 Summa	Methane	Remarks	Sample # (lab only)
VSG 141		Air	5.5	7/9/21	12:10	1	✓	✓		-21
VSG 142		Air	5.5		12:55	1	✓	✓		-22
VSG 143		Air	5.5		13:29	1	✓	✓		-23
VSG 144		Air	5.5		13:36	1	✓	✓		-24
		Air								
		Air								
		Air								
		Air								
		Air								
		Air								

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

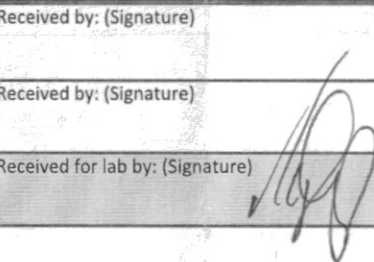
Remarks:
 pH _____ Temp _____
 Flow _____ Other _____
 Samples returned via:
 ___ UPS FedEx ___ Courier _____
 Tracking # _____

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

Relinquished by: (Signature)
Jason Cass

Date:
7/9/21

Time:
17:15

Received by: (Signature)


Trip Blank Received: Yes/No
 HCL / MeOH
 TBR

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: **Amb.** °C
 Bottles Received: **24 + 9 empty**

If preservation required by Login: Date/Time

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date: **7-12-21** Time: **0900**

Hold: Condition: **NCF / OK**

July 26, 2021

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Vertex - CO

Sample Delivery Group: L1379678
Samples Received: 07/16/2021
Project Number:
Description: Boeing Frederickson Facility
Site: PUYALLUP, WA
Report To: Steve Long
2420 W. 26TH AVE., SUITE 100-D
Denver, CO 80211

Entire Report Reviewed By:



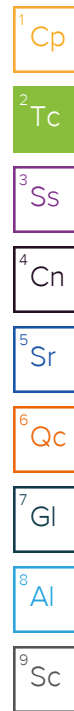
Chris Ward
Project Manager

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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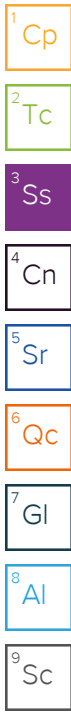


SAMPLE SUMMARY

VSBI-2 L1379678-01 Solid

Collected by Jason Cass Collected date/time 07/12/21 09:05 Received date/time 07/16/21 08:50

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1708547	1	07/20/21 15:05	07/20/21 15:19	KDW	Minneapolis, MN
Mercury by Method 7471B	WG1707973	1	07/19/21 18:50	07/20/21 11:44	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/22/21 23:12	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/23/21 01:27	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1707442	1.56	07/12/21 09:05	07/18/21 22:29	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1710558	1.56	07/12/21 09:05	07/23/21 10:11	DWR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1709309	1	07/22/21 07:51	07/22/21 16:37	TMM	Mt. Juliet, TN



VSBI-17 L1379678-02 Solid

Collected by Jason Cass Collected date/time 07/12/21 09:40 Received date/time 07/16/21 08:50

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1708547	1	07/20/21 15:05	07/20/21 15:19	KDW	Minneapolis, MN
Mercury by Method 7471B	WG1707973	1	07/19/21 18:50	07/20/21 11:46	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/22/21 23:25	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/23/21 01:40	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1707442	1	07/12/21 09:40	07/18/21 22:48	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1710558	1	07/12/21 09:40	07/23/21 10:29	DWR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1709309	1	07/22/21 07:51	07/22/21 16:13	TMM	Mt. Juliet, TN

VSBI-32 L1379678-03 Solid

Collected by Jason Cass Collected date/time 07/12/21 10:30 Received date/time 07/16/21 08:50

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1708548	1	07/20/21 14:56	07/20/21 15:02	KDW	Minneapolis, MN
Mercury by Method 7471B	WG1707869	1	07/20/21 10:59	07/20/21 15:25	SD	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/22/21 23:28	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/23/21 01:43	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1707442	1	07/12/21 10:30	07/18/21 23:08	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1710558	1	07/12/21 10:30	07/23/21 10:49	DWR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1709309	1	07/22/21 07:51	07/22/21 14:16	TMM	Mt. Juliet, TN

VSBI-2 L1379678-04 Solid

Collected by Jason Cass Collected date/time 07/13/21 08:32 Received date/time 07/16/21 08:50

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1708548	1	07/20/21 14:56	07/20/21 15:02	KDW	Minneapolis, MN
Mercury by Method 7471B	WG1707869	1	07/20/21 10:59	07/20/21 15:27	SD	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/22/21 23:30	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/23/21 01:45	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1707442	1.05	07/13/21 08:32	07/18/21 23:27	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1710558	1.05	07/13/21 08:32	07/23/21 11:08	DWR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1709309	1	07/22/21 07:51	07/22/21 18:11	TMM	Mt. Juliet, TN

VSBI-17 L1379678-05 Solid

Collected by Jason Cass Collected date/time 07/13/21 09:36 Received date/time 07/16/21 08:50

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1708548	1	07/20/21 14:56	07/20/21 15:02	KDW	Minneapolis, MN
Mercury by Method 7471B	WG1707869	1	07/20/21 10:59	07/20/21 15:35	SD	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/22/21 23:38	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/23/21 01:53	CCE	Mt. Juliet, TN

SAMPLE SUMMARY

VS2-17 L1379678-05 Solid

Collected by Jason Cass Collected date/time 07/13/21 09:36 Received date/time 07/16/21 08:50

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1707442	1.22	07/13/21 09:36	07/19/21 00:18	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1710558	1.22	07/13/21 09:36	07/23/21 11:27	DWR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1709670	1	07/22/21 07:56	07/22/21 14:30	TMM	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

VS2-32 L1379678-06 Solid

Collected by Jason Cass Collected date/time 07/13/21 10:00 Received date/time 07/16/21 08:50

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1708548	1	07/20/21 14:56	07/20/21 15:02	KDW	Minneapolis, MN
Mercury by Method 7471B	WG1707869	1	07/20/21 10:59	07/20/21 15:37	SD	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/22/21 23:41	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/23/21 01:56	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1707442	1.03	07/13/21 10:00	07/19/21 00:36	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1710558	1.03	07/13/21 10:00	07/23/21 11:46	DWR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1709670	1	07/22/21 07:56	07/22/21 15:13	TMM	Mt. Juliet, TN

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

VS1-57 L1379678-07 Solid

Collected by Jason Cass Collected date/time 07/12/21 15:00 Received date/time 07/16/21 08:50

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1708548	1	07/20/21 14:56	07/20/21 15:02	KDW	Minneapolis, MN
Mercury by Method 7471B	WG1707869	1	07/20/21 10:59	07/20/21 15:40	SD	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/22/21 23:44	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/23/21 01:58	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1707442	1.24	07/12/21 15:00	07/19/21 00:55	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1710558	1.24	07/12/21 15:00	07/23/21 12:05	DWR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1709670	1	07/22/21 07:56	07/22/21 17:48	TMM	Mt. Juliet, TN

9 Sc

VS3-2 L1379678-08 Solid

Collected by Jason Cass Collected date/time 07/13/21 12:10 Received date/time 07/16/21 08:50

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1708548	1	07/20/21 14:56	07/20/21 15:02	KDW	Minneapolis, MN
Mercury by Method 7471B	WG1707869	1	07/20/21 10:59	07/20/21 15:42	SD	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/22/21 23:46	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/23/21 02:01	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1707442	1.25	07/13/21 12:10	07/19/21 01:14	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1710558	1.25	07/13/21 12:10	07/23/21 12:24	DWR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1709670	1	07/22/21 07:56	07/22/21 17:04	TMM	Mt. Juliet, TN

VS3-17 L1379678-09 Solid

Collected by Jason Cass Collected date/time 07/13/21 12:55 Received date/time 07/16/21 08:50

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1708548	1	07/20/21 14:56	07/20/21 15:02	KDW	Minneapolis, MN
Mercury by Method 7471B	WG1707973	1	07/19/21 15:48	07/20/21 11:49	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/22/21 23:49	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/23/21 02:04	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1707442	1.13	07/13/21 12:55	07/19/21 01:33	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1710558	1.13	07/13/21 12:55	07/23/21 12:42	DWR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1709670	1	07/22/21 07:56	07/22/21 15:37	TMM	Mt. Juliet, TN

SAMPLE SUMMARY

VS3-32 L1379678-10 Solid

Collected by Jason Cass Collected date/time 07/13/21 13:40 Received date/time 07/16/21 08:50

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1708548	1	07/20/21 14:56	07/20/21 15:02	KDW	Minneapolis, MN
Mercury by Method 7471B	WG1707973	1	07/19/21 15:48	07/20/21 11:51	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/22/21 23:52	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/23/21 02:06	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1707442	1	07/13/21 13:40	07/19/21 02:50	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1710558	1	07/13/21 13:40	07/23/21 13:01	DWR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1709670	1	07/22/21 07:56	07/22/21 18:09	TMM	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

VS4-7 L1379678-11 Solid

Collected by Jason Cass Collected date/time 07/14/21 09:20 Received date/time 07/16/21 08:50

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1708548	1	07/20/21 14:56	07/20/21 15:02	KDW	Minneapolis, MN
Mercury by Method 7471B	WG1707973	1	07/19/21 18:50	07/20/21 11:54	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/22/21 23:54	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/23/21 02:09	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1707442	1.23	07/14/21 09:20	07/19/21 03:10	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1710558	1.23	07/14/21 09:20	07/23/21 13:20	DWR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1709670	1	07/22/21 07:56	07/22/21 16:42	TMM	Mt. Juliet, TN

6 Qc

7 Gl

8 Al

9 Sc

VS4-17 L1379678-12 Solid

Collected by Jason Cass Collected date/time 07/14/21 09:40 Received date/time 07/16/21 08:50

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1708548	1	07/20/21 14:56	07/20/21 15:02	KDW	Minneapolis, MN
Mercury by Method 7471B	WG1707973	1	07/19/21 15:48	07/20/21 11:56	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/22/21 23:57	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/23/21 02:11	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1707442	1.06	07/14/21 09:40	07/19/21 03:29	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1710558	1.06	07/14/21 09:40	07/23/21 13:39	DWR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1709670	1	07/22/21 07:56	07/22/21 15:59	TMM	Mt. Juliet, TN

VS4-32 L1379678-13 Solid

Collected by Jason Cass Collected date/time 07/14/21 10:15 Received date/time 07/16/21 08:50

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1708552	1	07/20/21 17:12	07/20/21 17:18	KDW	Minneapolis, MN
Mercury by Method 7471B	WG1707973	1	07/19/21 15:48	07/20/21 12:04	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/22/21 23:59	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/23/21 02:14	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1707442	1.11	07/14/21 10:15	07/19/21 03:48	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1710558	1.11	07/14/21 10:15	07/23/21 13:58	DWR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1709670	1	07/22/21 07:56	07/22/21 16:21	TMM	Mt. Juliet, TN

VS5-7 L1379678-14 Solid

Collected by Jason Cass Collected date/time 07/14/21 13:48 Received date/time 07/16/21 08:50

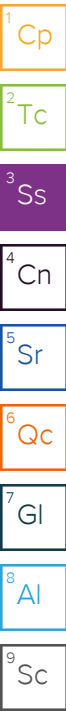
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1708552	1	07/20/21 17:12	07/20/21 17:18	KDW	Minneapolis, MN
Mercury by Method 7471B	WG1707973	1	07/19/21 15:48	07/20/21 12:06	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/23/21 00:02	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/23/21 02:17	CCE	Mt. Juliet, TN

SAMPLE SUMMARY

VSBS-7 L1379678-14 Solid

Collected by Jason Cass Collected date/time 07/14/21 13:48 Received date/time 07/16/21 08:50

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1707442	1.34	07/14/21 13:48	07/19/21 04:07	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1710558	1.34	07/14/21 13:48	07/23/21 14:17	DWR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1709670	1	07/22/21 07:56	07/22/21 17:26	TMM	Mt. Juliet, TN



VSBS-22 L1379678-15 Solid

Collected by Jason Cass Collected date/time 07/14/21 14:20 Received date/time 07/16/21 08:50

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1708552	1	07/20/21 17:12	07/20/21 17:18	KDW	Minneapolis, MN
Mercury by Method 7471B	WG1707973	1	07/19/21 15:48	07/20/21 12:09	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/23/21 00:10	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/23/21 02:25	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1707442	1.05	07/14/21 14:20	07/19/21 04:27	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1710558	1.05	07/14/21 14:20	07/23/21 14:36	DWR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1709670	1	07/22/21 07:56	07/22/21 18:52	TMM	Mt. Juliet, TN

VSBS-32 L1379678-16 Solid

Collected by Jason Cass Collected date/time 07/14/21 14:50 Received date/time 07/16/21 08:50

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1708552	1	07/20/21 17:12	07/20/21 17:18	KDW	Minneapolis, MN
Mercury by Method 7471B	WG1707973	1	07/19/21 15:48	07/20/21 12:12	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/23/21 00:13	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/23/21 02:27	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1707442	1	07/14/21 14:50	07/19/21 04:46	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1710558	1	07/14/21 14:50	07/23/21 14:55	DWR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1709670	1	07/22/21 07:56	07/22/21 14:08	TMM	Mt. Juliet, TN

VSBS-6-7 L1379678-17 Solid

Collected by Jason Cass Collected date/time 07/15/21 10:30 Received date/time 07/16/21 08:50

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1708552	1	07/20/21 17:12	07/20/21 17:18	KDW	Minneapolis, MN
Mercury by Method 7471B	WG1707973	1	07/19/21 15:48	07/20/21 12:14	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/23/21 00:15	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/23/21 02:30	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1707442	1.31	07/15/21 10:30	07/19/21 05:05	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1710558	1.31	07/15/21 10:30	07/23/21 15:14	DWR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1709670	1	07/22/21 07:56	07/22/21 14:51	TMM	Mt. Juliet, TN

VSBS-6-27 L1379678-18 Solid

Collected by Jason Cass Collected date/time 07/15/21 11:15 Received date/time 07/16/21 08:50

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1708552	1	07/20/21 17:12	07/20/21 17:18	KDW	Minneapolis, MN
Mercury by Method 7471B	WG1707973	1	07/19/21 15:48	07/20/21 11:36	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/23/21 00:18	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/23/21 02:33	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1707442	1	07/15/21 11:15	07/19/21 05:24	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1710558	1	07/15/21 11:15	07/23/21 15:33	DWR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1709670	1	07/22/21 07:56	07/22/21 13:25	TMM	Mt. Juliet, TN

SAMPLE SUMMARY

VSB6-37 L1379678-19 Solid

Collected by: Jason Cass
 Collected date/time: 07/15/21 11:45
 Received date/time: 07/16/21 08:50

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1708552	1	07/20/21 17:12	07/20/21 17:18	KDW	Minneapolis, MN
Mercury by Method 7471B	WG1707973	1	07/19/21 15:48	07/20/21 12:17	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/23/21 00:21	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1707348	1	07/21/21 17:20	07/23/21 02:35	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1707442	1.23	07/15/21 11:45	07/19/21 05:44	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1710558	1.23	07/15/21 11:45	07/23/21 15:52	DWR	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1709670	1	07/22/21 07:56	07/22/21 13:47	TMM	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

CASE NARRATIVE

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



Chris Ward
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

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.5		1	07/20/2021 15:19	WG1708547

Mercury by Method 7471B

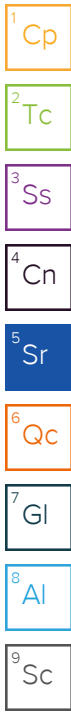
Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0400	1	07/20/2021 11:44	WG1707973

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Aluminum	16700	O1 V	20.0	1	07/23/2021 01:27	WG1707348
Antimony	ND	J6	2.00	1	07/23/2021 01:27	WG1707348
Arsenic	2.52		2.00	1	07/23/2021 01:27	WG1707348
Barium	118	J6	0.500	1	07/23/2021 01:27	WG1707348
Beryllium	ND		0.200	1	07/23/2021 01:27	WG1707348
Cadmium	ND		0.500	1	07/23/2021 01:27	WG1707348
Calcium	4480	V	100	1	07/23/2021 01:27	WG1707348
Chromium	17.0		1.00	1	07/23/2021 01:27	WG1707348
Cobalt	8.78		1.00	1	07/23/2021 01:27	WG1707348
Copper	29.0		2.00	1	07/23/2021 01:27	WG1707348
Iron	23200	O1 V	10.0	1	07/23/2021 01:27	WG1707348
Lead	2.97		0.500	1	07/23/2021 01:27	WG1707348
Magnesium	4760	O1 V	100	1	07/23/2021 01:27	WG1707348
Manganese	306	J6 O1	1.00	1	07/23/2021 01:27	WG1707348
Nickel	20.9	O1	2.00	1	07/23/2021 01:27	WG1707348
Potassium	1090	J6	100	1	07/23/2021 01:27	WG1707348
Selenium	ND		2.00	1	07/23/2021 01:27	WG1707348
Silver	ND		1.00	1	07/23/2021 01:27	WG1707348
Sodium	533		100	1	07/23/2021 01:27	WG1707348
Thallium	ND		2.00	1	07/23/2021 01:27	WG1707348
Vanadium	54.9		2.00	1	07/23/2021 01:27	WG1707348
Zinc	39.0		5.00	1	07/22/2021 23:12	WG1707348

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0780	1.56	07/18/2021 22:29	WG1707442
Acrylonitrile	ND		0.0195	1.56	07/18/2021 22:29	WG1707442
Benzene	ND		0.00156	1.56	07/18/2021 22:29	WG1707442
Bromobenzene	ND		0.0195	1.56	07/18/2021 22:29	WG1707442
Bromodichloromethane	ND		0.00390	1.56	07/18/2021 22:29	WG1707442
Bromoform	ND		0.0390	1.56	07/18/2021 22:29	WG1707442
Bromomethane	ND		0.0195	1.56	07/18/2021 22:29	WG1707442
n-Butylbenzene	ND		0.0195	1.56	07/18/2021 22:29	WG1707442
sec-Butylbenzene	ND		0.0195	1.56	07/18/2021 22:29	WG1707442
tert-Butylbenzene	ND		0.00780	1.56	07/18/2021 22:29	WG1707442
Carbon tetrachloride	ND		0.00780	1.56	07/18/2021 22:29	WG1707442
Chlorobenzene	ND		0.00390	1.56	07/18/2021 22:29	WG1707442
Chlorodibromomethane	ND		0.00390	1.56	07/18/2021 22:29	WG1707442
Chloroethane	ND		0.00780	1.56	07/18/2021 22:29	WG1707442
Chloroform	ND		0.00390	1.56	07/18/2021 22:29	WG1707442
Chloromethane	ND		0.0195	1.56	07/18/2021 22:29	WG1707442
2-Chlorotoluene	ND	J4	0.00390	1.56	07/18/2021 22:29	WG1707442
4-Chlorotoluene	ND		0.00780	1.56	07/18/2021 22:29	WG1707442



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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	ND		0.0390	1.56	07/18/2021 22:29	WG1707442
1,2-Dibromoethane	ND		0.00390	1.56	07/18/2021 22:29	WG1707442
Dibromomethane	ND		0.00780	1.56	07/18/2021 22:29	WG1707442
1,2-Dichlorobenzene	ND		0.00780	1.56	07/18/2021 22:29	WG1707442
1,3-Dichlorobenzene	ND		0.00780	1.56	07/18/2021 22:29	WG1707442
1,4-Dichlorobenzene	ND		0.00780	1.56	07/18/2021 22:29	WG1707442
Dichlorodifluoromethane	ND		0.00390	1.56	07/18/2021 22:29	WG1707442
1,1-Dichloroethane	ND		0.00390	1.56	07/18/2021 22:29	WG1707442
1,2-Dichloroethane	ND		0.00390	1.56	07/18/2021 22:29	WG1707442
1,1-Dichloroethene	ND		0.00390	1.56	07/18/2021 22:29	WG1707442
cis-1,2-Dichloroethene	ND		0.00390	1.56	07/18/2021 22:29	WG1707442
trans-1,2-Dichloroethene	ND		0.00780	1.56	07/18/2021 22:29	WG1707442
1,2-Dichloropropane	ND		0.00780	1.56	07/18/2021 22:29	WG1707442
1,1-Dichloropropene	ND		0.00390	1.56	07/18/2021 22:29	WG1707442
1,3-Dichloropropane	ND		0.00780	1.56	07/18/2021 22:29	WG1707442
cis-1,3-Dichloropropene	ND		0.00390	1.56	07/18/2021 22:29	WG1707442
trans-1,3-Dichloropropene	ND		0.00780	1.56	07/18/2021 22:29	WG1707442
2,2-Dichloropropane	ND		0.00390	1.56	07/18/2021 22:29	WG1707442
Di-isopropyl ether	ND		0.00156	1.56	07/18/2021 22:29	WG1707442
Ethylbenzene	ND		0.00390	1.56	07/18/2021 22:29	WG1707442
Hexachloro-1,3-butadiene	ND		0.0390	1.56	07/18/2021 22:29	WG1707442
Isopropylbenzene	ND		0.00390	1.56	07/18/2021 22:29	WG1707442
p-Isopropyltoluene	ND		0.00780	1.56	07/18/2021 22:29	WG1707442
2-Butanone (MEK)	ND		0.156	1.56	07/18/2021 22:29	WG1707442
Methylene Chloride	ND		0.0390	1.56	07/18/2021 22:29	WG1707442
4-Methyl-2-pentanone (MIBK)	ND		0.0390	1.56	07/18/2021 22:29	WG1707442
Methyl tert-butyl ether	ND		0.00156	1.56	07/18/2021 22:29	WG1707442
Naphthalene	ND		0.0195	1.56	07/23/2021 10:11	WG1710558
n-Propylbenzene	ND		0.00780	1.56	07/18/2021 22:29	WG1707442
Styrene	ND		0.0195	1.56	07/18/2021 22:29	WG1707442
1,1,1,2-Tetrachloroethane	ND		0.00390	1.56	07/18/2021 22:29	WG1707442
1,1,2,2-Tetrachloroethane	ND		0.00390	1.56	07/18/2021 22:29	WG1707442
1,1,2-Trichlorotrifluoroethane	ND		0.00390	1.56	07/18/2021 22:29	WG1707442
Tetrachloroethene	ND		0.00390	1.56	07/18/2021 22:29	WG1707442
Toluene	ND		0.00780	1.56	07/18/2021 22:29	WG1707442
1,2,3-Trichlorobenzene	ND	C4	0.0195	1.56	07/23/2021 10:11	WG1710558
1,2,4-Trichlorobenzene	ND		0.0195	1.56	07/18/2021 22:29	WG1707442
1,1,1-Trichloroethane	ND		0.00390	1.56	07/18/2021 22:29	WG1707442
1,1,2-Trichloroethane	ND		0.00390	1.56	07/18/2021 22:29	WG1707442
Trichloroethene	ND		0.00156	1.56	07/18/2021 22:29	WG1707442
Trichlorofluoromethane	ND		0.00390	1.56	07/18/2021 22:29	WG1707442
1,2,3-Trichloropropane	ND		0.0195	1.56	07/18/2021 22:29	WG1707442
1,2,4-Trimethylbenzene	ND		0.00780	1.56	07/18/2021 22:29	WG1707442
1,2,3-Trimethylbenzene	ND		0.00780	1.56	07/18/2021 22:29	WG1707442
1,3,5-Trimethylbenzene	ND		0.00780	1.56	07/18/2021 22:29	WG1707442
Vinyl chloride	ND		0.00390	1.56	07/18/2021 22:29	WG1707442
Xylenes, Total	ND		0.0101	1.56	07/18/2021 22:29	WG1707442
(S) Toluene-d8	100		75.0-131		07/18/2021 22:29	WG1707442
(S) Toluene-d8	116		75.0-131		07/23/2021 10:11	WG1710558
(S) 4-Bromofluorobenzene	95.9		67.0-138		07/18/2021 22:29	WG1707442
(S) 4-Bromofluorobenzene	93.3		67.0-138		07/23/2021 10:11	WG1710558
(S) 1,2-Dichloroethane-d4	116		70.0-130		07/18/2021 22:29	WG1707442
(S) 1,2-Dichloroethane-d4	97.6		70.0-130		07/23/2021 10:11	WG1710558

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	07/22/2021 16:37	WG1709309
Acenaphthylene	ND		0.0333	1	07/22/2021 16:37	WG1709309
Anthracene	ND		0.0333	1	07/22/2021 16:37	WG1709309
Benzidine	ND		1.67	1	07/22/2021 16:37	WG1709309
Benzo(a)anthracene	ND		0.0333	1	07/22/2021 16:37	WG1709309
Benzo(b)fluoranthene	ND		0.0333	1	07/22/2021 16:37	WG1709309
Benzo(k)fluoranthene	ND		0.0333	1	07/22/2021 16:37	WG1709309
Benzo(g,h,i)perylene	ND		0.0333	1	07/22/2021 16:37	WG1709309
Benzo(a)pyrene	ND		0.0333	1	07/22/2021 16:37	WG1709309
Bis(2-chlorethoxy)methane	ND		0.333	1	07/22/2021 16:37	WG1709309
Bis(2-chloroethyl)ether	ND		0.333	1	07/22/2021 16:37	WG1709309
2,2-Oxybis(1-Chloropropane)	ND		0.333	1	07/22/2021 16:37	WG1709309
4-Bromophenyl-phenylether	ND		0.333	1	07/22/2021 16:37	WG1709309
2-Chloronaphthalene	ND		0.0333	1	07/22/2021 16:37	WG1709309
4-Chlorophenyl-phenylether	ND		0.333	1	07/22/2021 16:37	WG1709309
Chrysene	ND		0.0333	1	07/22/2021 16:37	WG1709309
Dibenz(a,h)anthracene	ND		0.0333	1	07/22/2021 16:37	WG1709309
1,2-Dichlorobenzene	ND		0.333	1	07/22/2021 16:37	WG1709309
1,3-Dichlorobenzene	ND		0.333	1	07/22/2021 16:37	WG1709309
1,4-Dichlorobenzene	ND		0.333	1	07/22/2021 16:37	WG1709309
3,3-Dichlorobenzidine	ND		0.333	1	07/22/2021 16:37	WG1709309
2,4-Dinitrotoluene	ND		0.333	1	07/22/2021 16:37	WG1709309
2,6-Dinitrotoluene	ND		0.333	1	07/22/2021 16:37	WG1709309
Fluoranthene	ND		0.0333	1	07/22/2021 16:37	WG1709309
Fluorene	ND		0.0333	1	07/22/2021 16:37	WG1709309
Hexachlorobenzene	ND		0.333	1	07/22/2021 16:37	WG1709309
Hexachloro-1,3-butadiene	ND		0.333	1	07/22/2021 16:37	WG1709309
Hexachlorocyclopentadiene	ND		0.333	1	07/22/2021 16:37	WG1709309
Hexachloroethane	ND		0.333	1	07/22/2021 16:37	WG1709309
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	07/22/2021 16:37	WG1709309
Isophorone	ND		0.333	1	07/22/2021 16:37	WG1709309
Naphthalene	ND		0.0333	1	07/22/2021 16:37	WG1709309
Nitrobenzene	ND		0.333	1	07/22/2021 16:37	WG1709309
n-Nitrosodimethylamine	ND		0.333	1	07/22/2021 16:37	WG1709309
n-Nitrosodiphenylamine	ND		0.333	1	07/22/2021 16:37	WG1709309
n-Nitrosodi-n-propylamine	ND		0.333	1	07/22/2021 16:37	WG1709309
Phenanthrene	ND		0.0333	1	07/22/2021 16:37	WG1709309
Benzylbutyl phtalate	ND		0.333	1	07/22/2021 16:37	WG1709309
Bis(2-ethylhexyl)phtalate	ND		0.333	1	07/22/2021 16:37	WG1709309
Di-n-butyl phtalate	ND		0.333	1	07/22/2021 16:37	WG1709309
Diethyl phtalate	ND		0.333	1	07/22/2021 16:37	WG1709309
Dimethyl phtalate	ND		0.333	1	07/22/2021 16:37	WG1709309
Di-n-octyl phtalate	ND		0.333	1	07/22/2021 16:37	WG1709309
Pyrene	ND		0.0333	1	07/22/2021 16:37	WG1709309
1,2,4-Trichlorobenzene	ND		0.333	1	07/22/2021 16:37	WG1709309
4-Chloro-3-methylphenol	ND		0.333	1	07/22/2021 16:37	WG1709309
2-Chlorophenol	ND		0.333	1	07/22/2021 16:37	WG1709309
2,4-Dichlorophenol	ND		0.333	1	07/22/2021 16:37	WG1709309
2,4-Dimethylphenol	ND		0.333	1	07/22/2021 16:37	WG1709309
4,6-Dinitro-2-methylphenol	ND		0.333	1	07/22/2021 16:37	WG1709309
2,4-Dinitrophenol	ND		0.333	1	07/22/2021 16:37	WG1709309
2-Nitrophenol	ND		0.333	1	07/22/2021 16:37	WG1709309
4-Nitrophenol	ND		0.333	1	07/22/2021 16:37	WG1709309
Pentachlorophenol	ND		0.333	1	07/22/2021 16:37	WG1709309
Phenol	ND		0.333	1	07/22/2021 16:37	WG1709309
2,4,6-Trichlorophenol	ND		0.333	1	07/22/2021 16:37	WG1709309

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) 2-Fluorophenol	78.5		12.0-120		07/22/2021 16:37	WG1709309
(S) Phenol-d5	75.2		10.0-120		07/22/2021 16:37	WG1709309
(S) Nitrobenzene-d5	73.5		10.0-122		07/22/2021 16:37	WG1709309
(S) 2-Fluorobiphenyl	70.0		15.0-120		07/22/2021 16:37	WG1709309
(S) 2,4,6-Tribromophenol	68.8		10.0-127		07/22/2021 16:37	WG1709309
(S) p-Terphenyl-d14	64.7		10.0-120		07/22/2021 16:37	WG1709309

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

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.7		1	07/20/2021 15:19	WG1708547

Mercury by Method 7471B

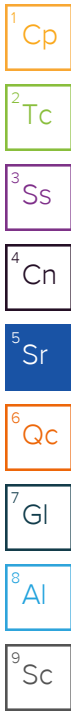
Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0400	1	07/20/2021 11:46	WG1707973

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Aluminum	11500		20.0	1	07/23/2021 01:40	WG1707348
Antimony	ND		2.00	1	07/23/2021 01:40	WG1707348
Arsenic	ND		2.00	1	07/23/2021 01:40	WG1707348
Barium	53.0		0.500	1	07/23/2021 01:40	WG1707348
Beryllium	ND		0.200	1	07/23/2021 01:40	WG1707348
Cadmium	ND		0.500	1	07/23/2021 01:40	WG1707348
Calcium	3610		100	1	07/23/2021 01:40	WG1707348
Chromium	12.7		1.00	1	07/23/2021 01:40	WG1707348
Cobalt	7.20		1.00	1	07/23/2021 01:40	WG1707348
Copper	16.2		2.00	1	07/23/2021 01:40	WG1707348
Iron	13800		10.0	1	07/23/2021 01:40	WG1707348
Lead	2.42		0.500	1	07/23/2021 01:40	WG1707348
Magnesium	3870		100	1	07/23/2021 01:40	WG1707348
Manganese	261		1.00	1	07/23/2021 01:40	WG1707348
Nickel	16.6		2.00	1	07/23/2021 01:40	WG1707348
Potassium	537		100	1	07/23/2021 01:40	WG1707348
Selenium	ND		2.00	1	07/23/2021 01:40	WG1707348
Silver	ND		1.00	1	07/23/2021 01:40	WG1707348
Sodium	344		100	1	07/23/2021 01:40	WG1707348
Thallium	ND		2.00	1	07/23/2021 01:40	WG1707348
Vanadium	27.6		2.00	1	07/23/2021 01:40	WG1707348
Zinc	27.4		5.00	1	07/22/2021 23:25	WG1707348

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0500	1	07/18/2021 22:48	WG1707442
Acrylonitrile	ND		0.0125	1	07/18/2021 22:48	WG1707442
Benzene	ND		0.00100	1	07/18/2021 22:48	WG1707442
Bromobenzene	ND		0.0125	1	07/18/2021 22:48	WG1707442
Bromodichloromethane	ND		0.00250	1	07/18/2021 22:48	WG1707442
Bromoform	ND		0.0250	1	07/18/2021 22:48	WG1707442
Bromomethane	ND		0.0125	1	07/18/2021 22:48	WG1707442
n-Butylbenzene	ND		0.0125	1	07/18/2021 22:48	WG1707442
sec-Butylbenzene	ND		0.0125	1	07/18/2021 22:48	WG1707442
tert-Butylbenzene	ND		0.00500	1	07/18/2021 22:48	WG1707442
Carbon tetrachloride	ND		0.00500	1	07/18/2021 22:48	WG1707442
Chlorobenzene	ND		0.00250	1	07/18/2021 22:48	WG1707442
Chlorodibromomethane	ND		0.00250	1	07/18/2021 22:48	WG1707442
Chloroethane	ND		0.00500	1	07/18/2021 22:48	WG1707442
Chloroform	ND		0.00250	1	07/18/2021 22:48	WG1707442
Chloromethane	ND		0.0125	1	07/18/2021 22:48	WG1707442
2-Chlorotoluene	ND	J4	0.00250	1	07/18/2021 22:48	WG1707442
4-Chlorotoluene	ND		0.00500	1	07/18/2021 22:48	WG1707442



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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	07/18/2021 22:48	WG1707442
1,2-Dibromoethane	ND		0.00250	1	07/18/2021 22:48	WG1707442
Dibromomethane	ND		0.00500	1	07/18/2021 22:48	WG1707442
1,2-Dichlorobenzene	ND		0.00500	1	07/18/2021 22:48	WG1707442
1,3-Dichlorobenzene	ND		0.00500	1	07/18/2021 22:48	WG1707442
1,4-Dichlorobenzene	ND		0.00500	1	07/18/2021 22:48	WG1707442
Dichlorodifluoromethane	ND		0.00250	1	07/18/2021 22:48	WG1707442
1,1-Dichloroethane	ND		0.00250	1	07/18/2021 22:48	WG1707442
1,2-Dichloroethane	ND		0.00250	1	07/18/2021 22:48	WG1707442
1,1-Dichloroethene	ND		0.00250	1	07/18/2021 22:48	WG1707442
cis-1,2-Dichloroethene	ND		0.00250	1	07/18/2021 22:48	WG1707442
trans-1,2-Dichloroethene	ND		0.00500	1	07/18/2021 22:48	WG1707442
1,2-Dichloropropane	ND		0.00500	1	07/18/2021 22:48	WG1707442
1,1-Dichloropropene	ND		0.00250	1	07/18/2021 22:48	WG1707442
1,3-Dichloropropane	ND		0.00500	1	07/18/2021 22:48	WG1707442
cis-1,3-Dichloropropene	ND		0.00250	1	07/18/2021 22:48	WG1707442
trans-1,3-Dichloropropene	ND		0.00500	1	07/18/2021 22:48	WG1707442
2,2-Dichloropropane	ND		0.00250	1	07/18/2021 22:48	WG1707442
Di-isopropyl ether	ND		0.00100	1	07/18/2021 22:48	WG1707442
Ethylbenzene	ND		0.00250	1	07/18/2021 22:48	WG1707442
Hexachloro-1,3-butadiene	ND		0.0250	1	07/18/2021 22:48	WG1707442
Isopropylbenzene	ND		0.00250	1	07/18/2021 22:48	WG1707442
p-Isopropyltoluene	ND		0.00500	1	07/18/2021 22:48	WG1707442
2-Butanone (MEK)	ND		0.100	1	07/18/2021 22:48	WG1707442
Methylene Chloride	ND		0.0250	1	07/18/2021 22:48	WG1707442
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	07/18/2021 22:48	WG1707442
Methyl tert-butyl ether	ND		0.00100	1	07/18/2021 22:48	WG1707442
Naphthalene	ND		0.0125	1	07/23/2021 10:29	WG1710558
n-Propylbenzene	ND		0.00500	1	07/18/2021 22:48	WG1707442
Styrene	ND		0.0125	1	07/18/2021 22:48	WG1707442
1,1,1,2-Tetrachloroethane	ND		0.00250	1	07/18/2021 22:48	WG1707442
1,1,2,2-Tetrachloroethane	ND		0.00250	1	07/18/2021 22:48	WG1707442
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	07/18/2021 22:48	WG1707442
Tetrachloroethene	ND		0.00250	1	07/18/2021 22:48	WG1707442
Toluene	ND		0.00500	1	07/18/2021 22:48	WG1707442
1,2,3-Trichlorobenzene	ND	C4	0.0125	1	07/23/2021 10:29	WG1710558
1,2,4-Trichlorobenzene	ND		0.0125	1	07/18/2021 22:48	WG1707442
1,1,1-Trichloroethane	ND		0.00250	1	07/18/2021 22:48	WG1707442
1,1,2-Trichloroethane	ND		0.00250	1	07/18/2021 22:48	WG1707442
Trichloroethene	ND		0.00100	1	07/18/2021 22:48	WG1707442
Trichlorofluoromethane	ND		0.00250	1	07/18/2021 22:48	WG1707442
1,2,3-Trichloropropane	ND		0.0125	1	07/18/2021 22:48	WG1707442
1,2,4-Trimethylbenzene	ND		0.00500	1	07/18/2021 22:48	WG1707442
1,2,3-Trimethylbenzene	ND		0.00500	1	07/18/2021 22:48	WG1707442
1,3,5-Trimethylbenzene	ND		0.00500	1	07/18/2021 22:48	WG1707442
Vinyl chloride	ND		0.00250	1	07/18/2021 22:48	WG1707442
Xylenes, Total	ND		0.00650	1	07/18/2021 22:48	WG1707442
(S) Toluene-d8	103		75.0-131		07/18/2021 22:48	WG1707442
(S) Toluene-d8	114		75.0-131		07/23/2021 10:29	WG1710558
(S) 4-Bromofluorobenzene	93.9		67.0-138		07/18/2021 22:48	WG1707442
(S) 4-Bromofluorobenzene	90.6		67.0-138		07/23/2021 10:29	WG1710558
(S) 1,2-Dichloroethane-d4	106		70.0-130		07/18/2021 22:48	WG1707442
(S) 1,2-Dichloroethane-d4	93.4		70.0-130		07/23/2021 10:29	WG1710558

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	07/22/2021 16:13	WG1709309
Acenaphthylene	ND		0.0333	1	07/22/2021 16:13	WG1709309
Anthracene	ND		0.0333	1	07/22/2021 16:13	WG1709309
Benzidine	ND		1.67	1	07/22/2021 16:13	WG1709309
Benzo(a)anthracene	ND		0.0333	1	07/22/2021 16:13	WG1709309
Benzo(b)fluoranthene	ND		0.0333	1	07/22/2021 16:13	WG1709309
Benzo(k)fluoranthene	ND		0.0333	1	07/22/2021 16:13	WG1709309
Benzo(g,h,i)perylene	ND		0.0333	1	07/22/2021 16:13	WG1709309
Benzo(a)pyrene	ND		0.0333	1	07/22/2021 16:13	WG1709309
Bis(2-chlorethoxy)methane	ND		0.333	1	07/22/2021 16:13	WG1709309
Bis(2-chloroethyl)ether	ND		0.333	1	07/22/2021 16:13	WG1709309
2,2-Oxybis(1-Chloropropane)	ND		0.333	1	07/22/2021 16:13	WG1709309
4-Bromophenyl-phenylether	ND		0.333	1	07/22/2021 16:13	WG1709309
2-Chloronaphthalene	ND		0.0333	1	07/22/2021 16:13	WG1709309
4-Chlorophenyl-phenylether	ND		0.333	1	07/22/2021 16:13	WG1709309
Chrysene	ND		0.0333	1	07/22/2021 16:13	WG1709309
Dibenz(a,h)anthracene	ND		0.0333	1	07/22/2021 16:13	WG1709309
1,2-Dichlorobenzene	ND		0.333	1	07/22/2021 16:13	WG1709309
1,3-Dichlorobenzene	ND		0.333	1	07/22/2021 16:13	WG1709309
1,4-Dichlorobenzene	ND		0.333	1	07/22/2021 16:13	WG1709309
3,3-Dichlorobenzidine	ND		0.333	1	07/22/2021 16:13	WG1709309
2,4-Dinitrotoluene	ND		0.333	1	07/22/2021 16:13	WG1709309
2,6-Dinitrotoluene	ND		0.333	1	07/22/2021 16:13	WG1709309
Fluoranthene	ND		0.0333	1	07/22/2021 16:13	WG1709309
Fluorene	ND		0.0333	1	07/22/2021 16:13	WG1709309
Hexachlorobenzene	ND		0.333	1	07/22/2021 16:13	WG1709309
Hexachloro-1,3-butadiene	ND		0.333	1	07/22/2021 16:13	WG1709309
Hexachlorocyclopentadiene	ND		0.333	1	07/22/2021 16:13	WG1709309
Hexachloroethane	ND		0.333	1	07/22/2021 16:13	WG1709309
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	07/22/2021 16:13	WG1709309
Isophorone	ND		0.333	1	07/22/2021 16:13	WG1709309
Naphthalene	ND		0.0333	1	07/22/2021 16:13	WG1709309
Nitrobenzene	ND		0.333	1	07/22/2021 16:13	WG1709309
n-Nitrosodimethylamine	ND		0.333	1	07/22/2021 16:13	WG1709309
n-Nitrosodiphenylamine	ND		0.333	1	07/22/2021 16:13	WG1709309
n-Nitrosodi-n-propylamine	ND		0.333	1	07/22/2021 16:13	WG1709309
Phenanthrene	ND		0.0333	1	07/22/2021 16:13	WG1709309
Benzylbutyl phthalate	ND		0.333	1	07/22/2021 16:13	WG1709309
Bis(2-ethylhexyl)phthalate	ND		0.333	1	07/22/2021 16:13	WG1709309
Di-n-butyl phthalate	ND		0.333	1	07/22/2021 16:13	WG1709309
Diethyl phthalate	ND		0.333	1	07/22/2021 16:13	WG1709309
Dimethyl phthalate	ND		0.333	1	07/22/2021 16:13	WG1709309
Di-n-octyl phthalate	ND		0.333	1	07/22/2021 16:13	WG1709309
Pyrene	ND		0.0333	1	07/22/2021 16:13	WG1709309
1,2,4-Trichlorobenzene	ND		0.333	1	07/22/2021 16:13	WG1709309
4-Chloro-3-methylphenol	ND		0.333	1	07/22/2021 16:13	WG1709309
2-Chlorophenol	ND		0.333	1	07/22/2021 16:13	WG1709309
2,4-Dichlorophenol	ND		0.333	1	07/22/2021 16:13	WG1709309
2,4-Dimethylphenol	ND		0.333	1	07/22/2021 16:13	WG1709309
4,6-Dinitro-2-methylphenol	ND		0.333	1	07/22/2021 16:13	WG1709309
2,4-Dinitrophenol	ND		0.333	1	07/22/2021 16:13	WG1709309
2-Nitrophenol	ND		0.333	1	07/22/2021 16:13	WG1709309
4-Nitrophenol	ND		0.333	1	07/22/2021 16:13	WG1709309
Pentachlorophenol	ND		0.333	1	07/22/2021 16:13	WG1709309
Phenol	ND		0.333	1	07/22/2021 16:13	WG1709309
2,4,6-Trichlorophenol	ND		0.333	1	07/22/2021 16:13	WG1709309

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) 2-Fluorophenol	79.9		12.0-120		07/22/2021 16:13	WG1709309
(S) Phenol-d5	77.6		10.0-120		07/22/2021 16:13	WG1709309
(S) Nitrobenzene-d5	75.6		10.0-122		07/22/2021 16:13	WG1709309
(S) 2-Fluorobiphenyl	71.3		15.0-120		07/22/2021 16:13	WG1709309
(S) 2,4,6-Tribromophenol	69.1		10.0-127		07/22/2021 16:13	WG1709309
(S) p-Terphenyl-d14	66.8		10.0-120		07/22/2021 16:13	WG1709309

- 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

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.5		1	07/20/2021 15:02	WG1708548

Mercury by Method 7471B

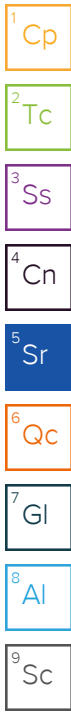
Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0400	1	07/20/2021 15:25	WG1707869

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Aluminum	14100		20.0	1	07/23/2021 01:43	WG1707348
Antimony	ND		2.00	1	07/23/2021 01:43	WG1707348
Arsenic	ND		2.00	1	07/23/2021 01:43	WG1707348
Barium	60.3		0.500	1	07/23/2021 01:43	WG1707348
Beryllium	ND		0.200	1	07/23/2021 01:43	WG1707348
Cadmium	ND		0.500	1	07/23/2021 01:43	WG1707348
Calcium	5730		100	1	07/23/2021 01:43	WG1707348
Chromium	21.4		1.00	1	07/23/2021 01:43	WG1707348
Cobalt	6.55		1.00	1	07/23/2021 01:43	WG1707348
Copper	21.3		2.00	1	07/23/2021 01:43	WG1707348
Iron	19600		10.0	1	07/23/2021 01:43	WG1707348
Lead	2.40		0.500	1	07/23/2021 01:43	WG1707348
Magnesium	3940		100	1	07/23/2021 01:43	WG1707348
Manganese	267		1.00	1	07/23/2021 01:43	WG1707348
Nickel	16.9		2.00	1	07/23/2021 01:43	WG1707348
Potassium	1000		100	1	07/23/2021 01:43	WG1707348
Selenium	ND		2.00	1	07/23/2021 01:43	WG1707348
Silver	ND		1.00	1	07/23/2021 01:43	WG1707348
Sodium	910		100	1	07/23/2021 01:43	WG1707348
Thallium	ND		2.00	1	07/23/2021 01:43	WG1707348
Vanadium	46.0		2.00	1	07/23/2021 01:43	WG1707348
Zinc	32.3		5.00	1	07/22/2021 23:28	WG1707348

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0500	1	07/18/2021 23:08	WG1707442
Acrylonitrile	ND		0.0125	1	07/18/2021 23:08	WG1707442
Benzene	ND		0.00100	1	07/18/2021 23:08	WG1707442
Bromobenzene	ND		0.0125	1	07/18/2021 23:08	WG1707442
Bromodichloromethane	ND		0.00250	1	07/18/2021 23:08	WG1707442
Bromoform	ND		0.0250	1	07/18/2021 23:08	WG1707442
Bromomethane	ND		0.0125	1	07/18/2021 23:08	WG1707442
n-Butylbenzene	ND		0.0125	1	07/18/2021 23:08	WG1707442
sec-Butylbenzene	ND		0.0125	1	07/18/2021 23:08	WG1707442
tert-Butylbenzene	ND		0.00500	1	07/18/2021 23:08	WG1707442
Carbon tetrachloride	ND		0.00500	1	07/18/2021 23:08	WG1707442
Chlorobenzene	ND		0.00250	1	07/18/2021 23:08	WG1707442
Chlorodibromomethane	ND		0.00250	1	07/18/2021 23:08	WG1707442
Chloroethane	ND		0.00500	1	07/18/2021 23:08	WG1707442
Chloroform	ND		0.00250	1	07/18/2021 23:08	WG1707442
Chloromethane	ND		0.0125	1	07/18/2021 23:08	WG1707442
2-Chlorotoluene	ND	J4	0.00250	1	07/18/2021 23:08	WG1707442
4-Chlorotoluene	ND		0.00500	1	07/18/2021 23:08	WG1707442



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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	07/18/2021 23:08	WG1707442
1,2-Dibromoethane	ND		0.00250	1	07/18/2021 23:08	WG1707442
Dibromomethane	ND		0.00500	1	07/18/2021 23:08	WG1707442
1,2-Dichlorobenzene	ND		0.00500	1	07/18/2021 23:08	WG1707442
1,3-Dichlorobenzene	ND		0.00500	1	07/18/2021 23:08	WG1707442
1,4-Dichlorobenzene	ND		0.00500	1	07/18/2021 23:08	WG1707442
Dichlorodifluoromethane	ND		0.00250	1	07/18/2021 23:08	WG1707442
1,1-Dichloroethane	ND		0.00250	1	07/18/2021 23:08	WG1707442
1,2-Dichloroethane	ND		0.00250	1	07/18/2021 23:08	WG1707442
1,1-Dichloroethene	ND		0.00250	1	07/18/2021 23:08	WG1707442
cis-1,2-Dichloroethene	ND		0.00250	1	07/18/2021 23:08	WG1707442
trans-1,2-Dichloroethene	ND		0.00500	1	07/18/2021 23:08	WG1707442
1,2-Dichloropropane	ND		0.00500	1	07/18/2021 23:08	WG1707442
1,1-Dichloropropene	ND		0.00250	1	07/18/2021 23:08	WG1707442
1,3-Dichloropropane	ND		0.00500	1	07/18/2021 23:08	WG1707442
cis-1,3-Dichloropropene	ND		0.00250	1	07/18/2021 23:08	WG1707442
trans-1,3-Dichloropropene	ND		0.00500	1	07/18/2021 23:08	WG1707442
2,2-Dichloropropane	ND		0.00250	1	07/18/2021 23:08	WG1707442
Di-isopropyl ether	ND		0.00100	1	07/18/2021 23:08	WG1707442
Ethylbenzene	ND		0.00250	1	07/18/2021 23:08	WG1707442
Hexachloro-1,3-butadiene	ND		0.0250	1	07/18/2021 23:08	WG1707442
Isopropylbenzene	ND		0.00250	1	07/18/2021 23:08	WG1707442
p-Isopropyltoluene	ND		0.00500	1	07/18/2021 23:08	WG1707442
2-Butanone (MEK)	ND		0.100	1	07/18/2021 23:08	WG1707442
Methylene Chloride	ND		0.0250	1	07/18/2021 23:08	WG1707442
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	07/18/2021 23:08	WG1707442
Methyl tert-butyl ether	ND		0.00100	1	07/18/2021 23:08	WG1707442
Naphthalene	ND		0.0125	1	07/23/2021 10:49	WG1710558
n-Propylbenzene	ND		0.00500	1	07/18/2021 23:08	WG1707442
Styrene	ND		0.0125	1	07/18/2021 23:08	WG1707442
1,1,1,2-Tetrachloroethane	ND		0.00250	1	07/18/2021 23:08	WG1707442
1,1,2,2-Tetrachloroethane	ND		0.00250	1	07/18/2021 23:08	WG1707442
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	07/18/2021 23:08	WG1707442
Tetrachloroethene	ND		0.00250	1	07/18/2021 23:08	WG1707442
Toluene	ND		0.00500	1	07/18/2021 23:08	WG1707442
1,2,3-Trichlorobenzene	ND	C4	0.0125	1	07/23/2021 10:49	WG1710558
1,2,4-Trichlorobenzene	ND		0.0125	1	07/18/2021 23:08	WG1707442
1,1,1-Trichloroethane	ND		0.00250	1	07/18/2021 23:08	WG1707442
1,1,2-Trichloroethane	ND		0.00250	1	07/18/2021 23:08	WG1707442
Trichloroethene	ND		0.00100	1	07/18/2021 23:08	WG1707442
Trichlorofluoromethane	ND		0.00250	1	07/18/2021 23:08	WG1707442
1,2,3-Trichloropropane	ND		0.0125	1	07/18/2021 23:08	WG1707442
1,2,4-Trimethylbenzene	ND		0.00500	1	07/18/2021 23:08	WG1707442
1,2,3-Trimethylbenzene	ND		0.00500	1	07/18/2021 23:08	WG1707442
1,3,5-Trimethylbenzene	ND		0.00500	1	07/18/2021 23:08	WG1707442
Vinyl chloride	ND		0.00250	1	07/18/2021 23:08	WG1707442
Xylenes, Total	ND		0.00650	1	07/18/2021 23:08	WG1707442
(S) Toluene-d8	106		75.0-131		07/18/2021 23:08	WG1707442
(S) Toluene-d8	118		75.0-131		07/23/2021 10:49	WG1710558
(S) 4-Bromofluorobenzene	94.9		67.0-138		07/18/2021 23:08	WG1707442
(S) 4-Bromofluorobenzene	89.3		67.0-138		07/23/2021 10:49	WG1710558
(S) 1,2-Dichloroethane-d4	111		70.0-130		07/18/2021 23:08	WG1707442
(S) 1,2-Dichloroethane-d4	94.4		70.0-130		07/23/2021 10:49	WG1710558

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	07/22/2021 14:16	WG1709309
Acenaphthylene	ND		0.0333	1	07/22/2021 14:16	WG1709309
Anthracene	ND		0.0333	1	07/22/2021 14:16	WG1709309
Benzidine	ND		1.67	1	07/22/2021 14:16	WG1709309
Benzo(a)anthracene	ND		0.0333	1	07/22/2021 14:16	WG1709309
Benzo(b)fluoranthene	ND		0.0333	1	07/22/2021 14:16	WG1709309
Benzo(k)fluoranthene	ND		0.0333	1	07/22/2021 14:16	WG1709309
Benzo(g,h,i)perylene	ND		0.0333	1	07/22/2021 14:16	WG1709309
Benzo(a)pyrene	ND		0.0333	1	07/22/2021 14:16	WG1709309
Bis(2-chloroethoxy)methane	ND		0.333	1	07/22/2021 14:16	WG1709309
Bis(2-chloroethyl)ether	ND		0.333	1	07/22/2021 14:16	WG1709309
2,2-Oxybis(1-Chloropropane)	ND		0.333	1	07/22/2021 14:16	WG1709309
4-Bromophenyl-phenylether	ND		0.333	1	07/22/2021 14:16	WG1709309
2-Chloronaphthalene	ND		0.0333	1	07/22/2021 14:16	WG1709309
4-Chlorophenyl-phenylether	ND		0.333	1	07/22/2021 14:16	WG1709309
Chrysene	ND		0.0333	1	07/22/2021 14:16	WG1709309
Dibenz(a,h)anthracene	ND		0.0333	1	07/22/2021 14:16	WG1709309
1,2-Dichlorobenzene	ND		0.333	1	07/22/2021 14:16	WG1709309
1,3-Dichlorobenzene	ND		0.333	1	07/22/2021 14:16	WG1709309
1,4-Dichlorobenzene	ND		0.333	1	07/22/2021 14:16	WG1709309
3,3-Dichlorobenzidine	ND		0.333	1	07/22/2021 14:16	WG1709309
2,4-Dinitrotoluene	ND		0.333	1	07/22/2021 14:16	WG1709309
2,6-Dinitrotoluene	ND		0.333	1	07/22/2021 14:16	WG1709309
Fluoranthene	ND		0.0333	1	07/22/2021 14:16	WG1709309
Fluorene	ND		0.0333	1	07/22/2021 14:16	WG1709309
Hexachlorobenzene	ND		0.333	1	07/22/2021 14:16	WG1709309
Hexachloro-1,3-butadiene	ND		0.333	1	07/22/2021 14:16	WG1709309
Hexachlorocyclopentadiene	ND		0.333	1	07/22/2021 14:16	WG1709309
Hexachloroethane	ND		0.333	1	07/22/2021 14:16	WG1709309
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	07/22/2021 14:16	WG1709309
Isophorone	ND		0.333	1	07/22/2021 14:16	WG1709309
Naphthalene	ND		0.0333	1	07/22/2021 14:16	WG1709309
Nitrobenzene	ND		0.333	1	07/22/2021 14:16	WG1709309
n-Nitrosodimethylamine	ND		0.333	1	07/22/2021 14:16	WG1709309
n-Nitrosodiphenylamine	ND		0.333	1	07/22/2021 14:16	WG1709309
n-Nitrosodi-n-propylamine	ND		0.333	1	07/22/2021 14:16	WG1709309
Phenanthrene	ND		0.0333	1	07/22/2021 14:16	WG1709309
Benzylbutyl phthalate	ND		0.333	1	07/22/2021 14:16	WG1709309
Bis(2-ethylhexyl)phthalate	ND		0.333	1	07/22/2021 14:16	WG1709309
Di-n-butyl phthalate	ND		0.333	1	07/22/2021 14:16	WG1709309
Diethyl phthalate	ND		0.333	1	07/22/2021 14:16	WG1709309
Dimethyl phthalate	ND		0.333	1	07/22/2021 14:16	WG1709309
Di-n-octyl phthalate	ND		0.333	1	07/22/2021 14:16	WG1709309
Pyrene	ND		0.0333	1	07/22/2021 14:16	WG1709309
1,2,4-Trichlorobenzene	ND		0.333	1	07/22/2021 14:16	WG1709309
4-Chloro-3-methylphenol	ND		0.333	1	07/22/2021 14:16	WG1709309
2-Chlorophenol	ND		0.333	1	07/22/2021 14:16	WG1709309
2,4-Dichlorophenol	ND		0.333	1	07/22/2021 14:16	WG1709309
2,4-Dimethylphenol	ND		0.333	1	07/22/2021 14:16	WG1709309
4,6-Dinitro-2-methylphenol	ND		0.333	1	07/22/2021 14:16	WG1709309
2,4-Dinitrophenol	ND		0.333	1	07/22/2021 14:16	WG1709309
2-Nitrophenol	ND		0.333	1	07/22/2021 14:16	WG1709309
4-Nitrophenol	ND		0.333	1	07/22/2021 14:16	WG1709309
Pentachlorophenol	ND		0.333	1	07/22/2021 14:16	WG1709309
Phenol	ND		0.333	1	07/22/2021 14:16	WG1709309
2,4,6-Trichlorophenol	ND		0.333	1	07/22/2021 14:16	WG1709309

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) 2-Fluorophenol	63.3		12.0-120		07/22/2021 14:16	WG1709309
(S) Phenol-d5	62.0		10.0-120		07/22/2021 14:16	WG1709309
(S) Nitrobenzene-d5	61.8		10.0-122		07/22/2021 14:16	WG1709309
(S) 2-Fluorobiphenyl	57.6		15.0-120		07/22/2021 14:16	WG1709309
(S) 2,4,6-Tribromophenol	59.7		10.0-127		07/22/2021 14:16	WG1709309
(S) p-Terphenyl-d14	54.5		10.0-120		07/22/2021 14:16	WG1709309

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

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.8		1	07/20/2021 15:02	WG1708548

Mercury by Method 7471B

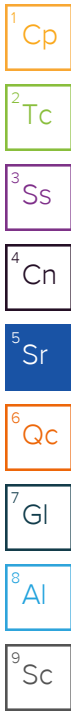
Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0400	1	07/20/2021 15:27	WG1707869

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Aluminum	15500		20.0	1	07/23/2021 01:45	WG1707348
Antimony	ND		2.00	1	07/23/2021 01:45	WG1707348
Arsenic	ND		2.00	1	07/23/2021 01:45	WG1707348
Barium	71.0		0.500	1	07/23/2021 01:45	WG1707348
Beryllium	ND		0.200	1	07/23/2021 01:45	WG1707348
Cadmium	ND		0.500	1	07/23/2021 01:45	WG1707348
Calcium	4170		100	1	07/23/2021 01:45	WG1707348
Chromium	24.0		1.00	1	07/23/2021 01:45	WG1707348
Cobalt	8.17		1.00	1	07/23/2021 01:45	WG1707348
Copper	29.4		2.00	1	07/23/2021 01:45	WG1707348
Iron	25100		10.0	1	07/23/2021 01:45	WG1707348
Lead	3.19		0.500	1	07/23/2021 01:45	WG1707348
Magnesium	5300		100	1	07/23/2021 01:45	WG1707348
Manganese	249		1.00	1	07/23/2021 01:45	WG1707348
Nickel	20.2		2.00	1	07/23/2021 01:45	WG1707348
Potassium	1530		100	1	07/23/2021 01:45	WG1707348
Selenium	ND		2.00	1	07/23/2021 01:45	WG1707348
Silver	ND		1.00	1	07/23/2021 01:45	WG1707348
Sodium	560		100	1	07/23/2021 01:45	WG1707348
Thallium	ND		2.00	1	07/23/2021 01:45	WG1707348
Vanadium	50.3		2.00	1	07/23/2021 01:45	WG1707348
Zinc	42.1		5.00	1	07/22/2021 23:30	WG1707348

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0525	1.05	07/18/2021 23:27	WG1707442
Acrylonitrile	ND		0.0131	1.05	07/18/2021 23:27	WG1707442
Benzene	ND		0.00105	1.05	07/18/2021 23:27	WG1707442
Bromobenzene	ND		0.0131	1.05	07/18/2021 23:27	WG1707442
Bromodichloromethane	ND		0.00263	1.05	07/18/2021 23:27	WG1707442
Bromoform	ND		0.0263	1.05	07/18/2021 23:27	WG1707442
Bromomethane	ND		0.0131	1.05	07/18/2021 23:27	WG1707442
n-Butylbenzene	ND		0.0131	1.05	07/18/2021 23:27	WG1707442
sec-Butylbenzene	ND		0.0131	1.05	07/18/2021 23:27	WG1707442
tert-Butylbenzene	ND		0.00525	1.05	07/18/2021 23:27	WG1707442
Carbon tetrachloride	ND		0.00525	1.05	07/18/2021 23:27	WG1707442
Chlorobenzene	ND		0.00263	1.05	07/18/2021 23:27	WG1707442
Chlorodibromomethane	ND		0.00263	1.05	07/18/2021 23:27	WG1707442
Chloroethane	ND		0.00525	1.05	07/18/2021 23:27	WG1707442
Chloroform	ND		0.00263	1.05	07/18/2021 23:27	WG1707442
Chloromethane	ND		0.0131	1.05	07/18/2021 23:27	WG1707442
2-Chlorotoluene	ND	J4	0.00263	1.05	07/18/2021 23:27	WG1707442
4-Chlorotoluene	ND		0.00525	1.05	07/18/2021 23:27	WG1707442



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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	ND		0.0263	1.05	07/18/2021 23:27	WG1707442
1,2-Dibromoethane	ND		0.00263	1.05	07/18/2021 23:27	WG1707442
Dibromomethane	ND		0.00525	1.05	07/18/2021 23:27	WG1707442
1,2-Dichlorobenzene	ND		0.00525	1.05	07/18/2021 23:27	WG1707442
1,3-Dichlorobenzene	ND		0.00525	1.05	07/18/2021 23:27	WG1707442
1,4-Dichlorobenzene	ND		0.00525	1.05	07/18/2021 23:27	WG1707442
Dichlorodifluoromethane	ND		0.00263	1.05	07/18/2021 23:27	WG1707442
1,1-Dichloroethane	ND		0.00263	1.05	07/18/2021 23:27	WG1707442
1,2-Dichloroethane	ND		0.00263	1.05	07/18/2021 23:27	WG1707442
1,1-Dichloroethene	ND		0.00263	1.05	07/18/2021 23:27	WG1707442
cis-1,2-Dichloroethene	ND		0.00263	1.05	07/18/2021 23:27	WG1707442
trans-1,2-Dichloroethene	ND		0.00525	1.05	07/18/2021 23:27	WG1707442
1,2-Dichloropropane	ND		0.00525	1.05	07/18/2021 23:27	WG1707442
1,1-Dichloropropene	ND		0.00263	1.05	07/18/2021 23:27	WG1707442
1,3-Dichloropropane	ND		0.00525	1.05	07/18/2021 23:27	WG1707442
cis-1,3-Dichloropropene	ND		0.00263	1.05	07/18/2021 23:27	WG1707442
trans-1,3-Dichloropropene	ND		0.00525	1.05	07/18/2021 23:27	WG1707442
2,2-Dichloropropane	ND		0.00263	1.05	07/18/2021 23:27	WG1707442
Di-isopropyl ether	ND		0.00105	1.05	07/18/2021 23:27	WG1707442
Ethylbenzene	ND		0.00263	1.05	07/18/2021 23:27	WG1707442
Hexachloro-1,3-butadiene	ND		0.0263	1.05	07/18/2021 23:27	WG1707442
Isopropylbenzene	ND		0.00263	1.05	07/18/2021 23:27	WG1707442
p-Isopropyltoluene	ND		0.00525	1.05	07/18/2021 23:27	WG1707442
2-Butanone (MEK)	ND		0.105	1.05	07/18/2021 23:27	WG1707442
Methylene Chloride	ND		0.0263	1.05	07/18/2021 23:27	WG1707442
4-Methyl-2-pentanone (MIBK)	ND		0.0263	1.05	07/18/2021 23:27	WG1707442
Methyl tert-butyl ether	ND		0.00105	1.05	07/18/2021 23:27	WG1707442
Naphthalene	ND		0.0131	1.05	07/23/2021 11:08	WG1710558
n-Propylbenzene	ND		0.00525	1.05	07/18/2021 23:27	WG1707442
Styrene	ND		0.0131	1.05	07/18/2021 23:27	WG1707442
1,1,1,2-Tetrachloroethane	ND		0.00263	1.05	07/18/2021 23:27	WG1707442
1,1,2,2-Tetrachloroethane	ND		0.00263	1.05	07/18/2021 23:27	WG1707442
1,1,2-Trichlorotrifluoroethane	ND		0.00263	1.05	07/18/2021 23:27	WG1707442
Tetrachloroethene	ND		0.00263	1.05	07/18/2021 23:27	WG1707442
Toluene	ND		0.00525	1.05	07/18/2021 23:27	WG1707442
1,2,3-Trichlorobenzene	ND	C4	0.0131	1.05	07/23/2021 11:08	WG1710558
1,2,4-Trichlorobenzene	ND		0.0131	1.05	07/18/2021 23:27	WG1707442
1,1,1-Trichloroethane	ND		0.00263	1.05	07/18/2021 23:27	WG1707442
1,1,2-Trichloroethane	ND		0.00263	1.05	07/18/2021 23:27	WG1707442
Trichloroethene	ND		0.00105	1.05	07/18/2021 23:27	WG1707442
Trichlorofluoromethane	ND		0.00263	1.05	07/18/2021 23:27	WG1707442
1,2,3-Trichloropropane	ND		0.0131	1.05	07/18/2021 23:27	WG1707442
1,2,4-Trimethylbenzene	ND		0.00525	1.05	07/18/2021 23:27	WG1707442
1,2,3-Trimethylbenzene	ND		0.00525	1.05	07/18/2021 23:27	WG1707442
1,3,5-Trimethylbenzene	ND		0.00525	1.05	07/18/2021 23:27	WG1707442
Vinyl chloride	ND		0.00263	1.05	07/18/2021 23:27	WG1707442
Xylenes, Total	ND		0.00683	1.05	07/18/2021 23:27	WG1707442
(S) Toluene-d8	104		75.0-131		07/18/2021 23:27	WG1707442
(S) Toluene-d8	117		75.0-131		07/23/2021 11:08	WG1710558
(S) 4-Bromofluorobenzene	92.8		67.0-138		07/18/2021 23:27	WG1707442
(S) 4-Bromofluorobenzene	87.9		67.0-138		07/23/2021 11:08	WG1710558
(S) 1,2-Dichloroethane-d4	110		70.0-130		07/18/2021 23:27	WG1707442
(S) 1,2-Dichloroethane-d4	92.2		70.0-130		07/23/2021 11:08	WG1710558

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	07/22/2021 18:11	WG1709309
Acenaphthylene	ND		0.0333	1	07/22/2021 18:11	WG1709309
Anthracene	ND		0.0333	1	07/22/2021 18:11	WG1709309
Benzidine	ND		1.67	1	07/22/2021 18:11	WG1709309
Benzo(a)anthracene	ND		0.0333	1	07/22/2021 18:11	WG1709309
Benzo(b)fluoranthene	ND		0.0333	1	07/22/2021 18:11	WG1709309
Benzo(k)fluoranthene	ND		0.0333	1	07/22/2021 18:11	WG1709309
Benzo(g,h,i)perylene	ND		0.0333	1	07/22/2021 18:11	WG1709309
Benzo(a)pyrene	ND		0.0333	1	07/22/2021 18:11	WG1709309
Bis(2-chlorethoxy)methane	ND		0.333	1	07/22/2021 18:11	WG1709309
Bis(2-chloroethyl)ether	ND		0.333	1	07/22/2021 18:11	WG1709309
2,2-Oxybis(1-Chloropropane)	ND		0.333	1	07/22/2021 18:11	WG1709309
4-Bromophenyl-phenylether	ND		0.333	1	07/22/2021 18:11	WG1709309
2-Chloronaphthalene	ND		0.0333	1	07/22/2021 18:11	WG1709309
4-Chlorophenyl-phenylether	ND		0.333	1	07/22/2021 18:11	WG1709309
Chrysene	ND		0.0333	1	07/22/2021 18:11	WG1709309
Dibenz(a,h)anthracene	ND		0.0333	1	07/22/2021 18:11	WG1709309
1,2-Dichlorobenzene	ND		0.333	1	07/22/2021 18:11	WG1709309
1,3-Dichlorobenzene	ND		0.333	1	07/22/2021 18:11	WG1709309
1,4-Dichlorobenzene	ND		0.333	1	07/22/2021 18:11	WG1709309
3,3-Dichlorobenzidine	ND		0.333	1	07/22/2021 18:11	WG1709309
2,4-Dinitrotoluene	ND		0.333	1	07/22/2021 18:11	WG1709309
2,6-Dinitrotoluene	ND		0.333	1	07/22/2021 18:11	WG1709309
Fluoranthene	ND		0.0333	1	07/22/2021 18:11	WG1709309
Fluorene	ND		0.0333	1	07/22/2021 18:11	WG1709309
Hexachlorobenzene	ND		0.333	1	07/22/2021 18:11	WG1709309
Hexachloro-1,3-butadiene	ND		0.333	1	07/22/2021 18:11	WG1709309
Hexachlorocyclopentadiene	ND		0.333	1	07/22/2021 18:11	WG1709309
Hexachloroethane	ND		0.333	1	07/22/2021 18:11	WG1709309
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	07/22/2021 18:11	WG1709309
Isophorone	ND		0.333	1	07/22/2021 18:11	WG1709309
Naphthalene	ND		0.0333	1	07/22/2021 18:11	WG1709309
Nitrobenzene	ND		0.333	1	07/22/2021 18:11	WG1709309
n-Nitrosodimethylamine	ND		0.333	1	07/22/2021 18:11	WG1709309
n-Nitrosodiphenylamine	ND		0.333	1	07/22/2021 18:11	WG1709309
n-Nitrosodi-n-propylamine	ND		0.333	1	07/22/2021 18:11	WG1709309
Phenanthrene	ND		0.0333	1	07/22/2021 18:11	WG1709309
Benzylbutyl phtalate	ND		0.333	1	07/22/2021 18:11	WG1709309
Bis(2-ethylhexyl)phtalate	ND		0.333	1	07/22/2021 18:11	WG1709309
Di-n-butyl phtalate	ND		0.333	1	07/22/2021 18:11	WG1709309
Diethyl phtalate	ND		0.333	1	07/22/2021 18:11	WG1709309
Dimethyl phtalate	ND		0.333	1	07/22/2021 18:11	WG1709309
Di-n-octyl phtalate	ND		0.333	1	07/22/2021 18:11	WG1709309
Pyrene	ND		0.0333	1	07/22/2021 18:11	WG1709309
1,2,4-Trichlorobenzene	ND		0.333	1	07/22/2021 18:11	WG1709309
4-Chloro-3-methylphenol	ND		0.333	1	07/22/2021 18:11	WG1709309
2-Chlorophenol	ND		0.333	1	07/22/2021 18:11	WG1709309
2,4-Dichlorophenol	ND		0.333	1	07/22/2021 18:11	WG1709309
2,4-Dimethylphenol	ND		0.333	1	07/22/2021 18:11	WG1709309
4,6-Dinitro-2-methylphenol	ND		0.333	1	07/22/2021 18:11	WG1709309
2,4-Dinitrophenol	ND		0.333	1	07/22/2021 18:11	WG1709309
2-Nitrophenol	ND		0.333	1	07/22/2021 18:11	WG1709309
4-Nitrophenol	ND		0.333	1	07/22/2021 18:11	WG1709309
Pentachlorophenol	ND		0.333	1	07/22/2021 18:11	WG1709309
Phenol	ND		0.333	1	07/22/2021 18:11	WG1709309
2,4,6-Trichlorophenol	ND		0.333	1	07/22/2021 18:11	WG1709309

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) 2-Fluorophenol	70.4		12.0-120		07/22/2021 18:11	WG1709309
(S) Phenol-d5	68.1		10.0-120		07/22/2021 18:11	WG1709309
(S) Nitrobenzene-d5	66.7		10.0-122		07/22/2021 18:11	WG1709309
(S) 2-Fluorobiphenyl	62.3		15.0-120		07/22/2021 18:11	WG1709309
(S) 2,4,6-Tribromophenol	64.0		10.0-127		07/22/2021 18:11	WG1709309
(S) p-Terphenyl-d14	61.7		10.0-120		07/22/2021 18:11	WG1709309

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

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.9		1	07/20/2021 15:02	WG1708548

Mercury by Method 7471B

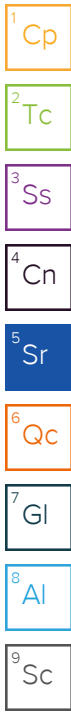
Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0400	1	07/20/2021 15:35	WG1707869

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Aluminum	12500		20.0	1	07/23/2021 01:53	WG1707348
Antimony	ND		2.00	1	07/23/2021 01:53	WG1707348
Arsenic	3.15		2.00	1	07/23/2021 01:53	WG1707348
Barium	44.0		0.500	1	07/23/2021 01:53	WG1707348
Beryllium	ND		0.200	1	07/23/2021 01:53	WG1707348
Cadmium	ND		0.500	1	07/23/2021 01:53	WG1707348
Calcium	3730		100	1	07/23/2021 01:53	WG1707348
Chromium	14.0		1.00	1	07/23/2021 01:53	WG1707348
Cobalt	4.72		1.00	1	07/23/2021 01:53	WG1707348
Copper	12.6		2.00	1	07/23/2021 01:53	WG1707348
Iron	13800		10.0	1	07/23/2021 01:53	WG1707348
Lead	1.78		0.500	1	07/23/2021 01:53	WG1707348
Magnesium	3540		100	1	07/23/2021 01:53	WG1707348
Manganese	198		1.00	1	07/23/2021 01:53	WG1707348
Nickel	17.1		2.00	1	07/23/2021 01:53	WG1707348
Potassium	1300		100	1	07/23/2021 01:53	WG1707348
Selenium	ND		2.00	1	07/23/2021 01:53	WG1707348
Silver	ND		1.00	1	07/23/2021 01:53	WG1707348
Sodium	466		100	1	07/23/2021 01:53	WG1707348
Thallium	ND		2.00	1	07/23/2021 01:53	WG1707348
Vanadium	28.5		2.00	1	07/23/2021 01:53	WG1707348
Zinc	26.0		5.00	1	07/22/2021 23:38	WG1707348

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0610	1.22	07/19/2021 00:18	WG1707442
Acrylonitrile	ND		0.0153	1.22	07/19/2021 00:18	WG1707442
Benzene	ND		0.00122	1.22	07/19/2021 00:18	WG1707442
Bromobenzene	ND		0.0153	1.22	07/19/2021 00:18	WG1707442
Bromodichloromethane	ND		0.00305	1.22	07/19/2021 00:18	WG1707442
Bromoform	ND		0.0305	1.22	07/19/2021 00:18	WG1707442
Bromomethane	ND		0.0153	1.22	07/19/2021 00:18	WG1707442
n-Butylbenzene	ND		0.0153	1.22	07/19/2021 00:18	WG1707442
sec-Butylbenzene	ND		0.0153	1.22	07/19/2021 00:18	WG1707442
tert-Butylbenzene	ND		0.00610	1.22	07/19/2021 00:18	WG1707442
Carbon tetrachloride	ND		0.00610	1.22	07/19/2021 00:18	WG1707442
Chlorobenzene	ND		0.00305	1.22	07/19/2021 00:18	WG1707442
Chlorodibromomethane	ND		0.00305	1.22	07/19/2021 00:18	WG1707442
Chloroethane	ND		0.00610	1.22	07/19/2021 00:18	WG1707442
Chloroform	ND		0.00305	1.22	07/19/2021 00:18	WG1707442
Chloromethane	ND		0.0153	1.22	07/19/2021 00:18	WG1707442
2-Chlorotoluene	ND	J4	0.00305	1.22	07/19/2021 00:18	WG1707442
4-Chlorotoluene	ND		0.00610	1.22	07/19/2021 00:18	WG1707442



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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	ND		0.0305	1.22	07/19/2021 00:18	WG1707442
1,2-Dibromoethane	ND		0.00305	1.22	07/19/2021 00:18	WG1707442
Dibromomethane	ND		0.00610	1.22	07/19/2021 00:18	WG1707442
1,2-Dichlorobenzene	ND		0.00610	1.22	07/19/2021 00:18	WG1707442
1,3-Dichlorobenzene	ND		0.00610	1.22	07/19/2021 00:18	WG1707442
1,4-Dichlorobenzene	ND		0.00610	1.22	07/19/2021 00:18	WG1707442
Dichlorodifluoromethane	ND		0.00305	1.22	07/19/2021 00:18	WG1707442
1,1-Dichloroethane	ND		0.00305	1.22	07/19/2021 00:18	WG1707442
1,2-Dichloroethane	ND		0.00305	1.22	07/19/2021 00:18	WG1707442
1,1-Dichloroethene	ND		0.00305	1.22	07/19/2021 00:18	WG1707442
cis-1,2-Dichloroethene	ND		0.00305	1.22	07/19/2021 00:18	WG1707442
trans-1,2-Dichloroethene	ND		0.00610	1.22	07/19/2021 00:18	WG1707442
1,2-Dichloropropane	ND		0.00610	1.22	07/19/2021 00:18	WG1707442
1,1-Dichloropropene	ND		0.00305	1.22	07/19/2021 00:18	WG1707442
1,3-Dichloropropane	ND		0.00610	1.22	07/19/2021 00:18	WG1707442
cis-1,3-Dichloropropene	ND		0.00305	1.22	07/19/2021 00:18	WG1707442
trans-1,3-Dichloropropene	ND		0.00610	1.22	07/19/2021 00:18	WG1707442
2,2-Dichloropropane	ND		0.00305	1.22	07/19/2021 00:18	WG1707442
Di-isopropyl ether	ND		0.00122	1.22	07/19/2021 00:18	WG1707442
Ethylbenzene	ND		0.00305	1.22	07/19/2021 00:18	WG1707442
Hexachloro-1,3-butadiene	ND		0.0305	1.22	07/19/2021 00:18	WG1707442
Isopropylbenzene	ND		0.00305	1.22	07/19/2021 00:18	WG1707442
p-Isopropyltoluene	ND		0.00610	1.22	07/19/2021 00:18	WG1707442
2-Butanone (MEK)	0.131		0.122	1.22	07/19/2021 00:18	WG1707442
Methylene Chloride	ND		0.0305	1.22	07/19/2021 00:18	WG1707442
4-Methyl-2-pentanone (MIBK)	ND		0.0305	1.22	07/19/2021 00:18	WG1707442
Methyl tert-butyl ether	ND		0.00122	1.22	07/19/2021 00:18	WG1707442
Naphthalene	ND		0.0153	1.22	07/23/2021 11:27	WG1710558
n-Propylbenzene	ND		0.00610	1.22	07/19/2021 00:18	WG1707442
Styrene	ND		0.0153	1.22	07/19/2021 00:18	WG1707442
1,1,1,2-Tetrachloroethane	ND		0.00305	1.22	07/19/2021 00:18	WG1707442
1,1,2,2-Tetrachloroethane	ND		0.00305	1.22	07/19/2021 00:18	WG1707442
1,1,2-Trichlorotrifluoroethane	ND		0.00305	1.22	07/19/2021 00:18	WG1707442
Tetrachloroethene	ND		0.00305	1.22	07/19/2021 00:18	WG1707442
Toluene	ND		0.00610	1.22	07/19/2021 00:18	WG1707442
1,2,3-Trichlorobenzene	ND	C4	0.0153	1.22	07/23/2021 11:27	WG1710558
1,2,4-Trichlorobenzene	ND		0.0153	1.22	07/19/2021 00:18	WG1707442
1,1,1-Trichloroethane	ND		0.00305	1.22	07/19/2021 00:18	WG1707442
1,1,2-Trichloroethane	ND		0.00305	1.22	07/19/2021 00:18	WG1707442
Trichloroethene	ND		0.00122	1.22	07/19/2021 00:18	WG1707442
Trichlorofluoromethane	ND		0.00305	1.22	07/19/2021 00:18	WG1707442
1,2,3-Trichloropropane	ND		0.0153	1.22	07/19/2021 00:18	WG1707442
1,2,4-Trimethylbenzene	ND		0.00610	1.22	07/19/2021 00:18	WG1707442
1,2,3-Trimethylbenzene	ND		0.00610	1.22	07/19/2021 00:18	WG1707442
1,3,5-Trimethylbenzene	ND		0.00610	1.22	07/19/2021 00:18	WG1707442
Vinyl chloride	ND		0.00305	1.22	07/19/2021 00:18	WG1707442
Xylenes, Total	ND		0.00793	1.22	07/19/2021 00:18	WG1707442
(S) Toluene-d8	102		75.0-131		07/19/2021 00:18	WG1707442
(S) Toluene-d8	117		75.0-131		07/23/2021 11:27	WG1710558
(S) 4-Bromofluorobenzene	90.8		67.0-138		07/19/2021 00:18	WG1707442
(S) 4-Bromofluorobenzene	92.1		67.0-138		07/23/2021 11:27	WG1710558
(S) 1,2-Dichloroethane-d4	102		70.0-130		07/19/2021 00:18	WG1707442
(S) 1,2-Dichloroethane-d4	95.0		70.0-130		07/23/2021 11:27	WG1710558

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	07/22/2021 14:30	WG1709670
Acenaphthylene	ND		0.0333	1	07/22/2021 14:30	WG1709670
Anthracene	ND		0.0333	1	07/22/2021 14:30	WG1709670
Benzidine	ND		1.67	1	07/22/2021 14:30	WG1709670
Benzo(a)anthracene	ND		0.0333	1	07/22/2021 14:30	WG1709670
Benzo(b)fluoranthene	ND		0.0333	1	07/22/2021 14:30	WG1709670
Benzo(k)fluoranthene	ND		0.0333	1	07/22/2021 14:30	WG1709670
Benzo(g,h,i)perylene	ND		0.0333	1	07/22/2021 14:30	WG1709670
Benzo(a)pyrene	ND		0.0333	1	07/22/2021 14:30	WG1709670
Bis(2-chlorethoxy)methane	ND		0.333	1	07/22/2021 14:30	WG1709670
Bis(2-chloroethyl)ether	ND		0.333	1	07/22/2021 14:30	WG1709670
2,2-Oxybis(1-Chloropropane)	ND		0.333	1	07/22/2021 14:30	WG1709670
4-Bromophenyl-phenylether	ND		0.333	1	07/22/2021 14:30	WG1709670
2-Chloronaphthalene	ND		0.0333	1	07/22/2021 14:30	WG1709670
4-Chlorophenyl-phenylether	ND		0.333	1	07/22/2021 14:30	WG1709670
Chrysene	ND		0.0333	1	07/22/2021 14:30	WG1709670
Dibenz(a,h)anthracene	ND		0.0333	1	07/22/2021 14:30	WG1709670
1,2-Dichlorobenzene	ND		0.333	1	07/22/2021 14:30	WG1709670
1,3-Dichlorobenzene	ND		0.333	1	07/22/2021 14:30	WG1709670
1,4-Dichlorobenzene	ND		0.333	1	07/22/2021 14:30	WG1709670
3,3-Dichlorobenzidine	ND		0.333	1	07/22/2021 14:30	WG1709670
2,4-Dinitrotoluene	ND		0.333	1	07/22/2021 14:30	WG1709670
2,6-Dinitrotoluene	ND		0.333	1	07/22/2021 14:30	WG1709670
Fluoranthene	ND		0.0333	1	07/22/2021 14:30	WG1709670
Fluorene	ND		0.0333	1	07/22/2021 14:30	WG1709670
Hexachlorobenzene	ND		0.333	1	07/22/2021 14:30	WG1709670
Hexachloro-1,3-butadiene	ND		0.333	1	07/22/2021 14:30	WG1709670
Hexachlorocyclopentadiene	ND		0.333	1	07/22/2021 14:30	WG1709670
Hexachloroethane	ND		0.333	1	07/22/2021 14:30	WG1709670
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	07/22/2021 14:30	WG1709670
Isophorone	ND		0.333	1	07/22/2021 14:30	WG1709670
Naphthalene	ND		0.0333	1	07/22/2021 14:30	WG1709670
Nitrobenzene	ND		0.333	1	07/22/2021 14:30	WG1709670
n-Nitrosodimethylamine	ND		0.333	1	07/22/2021 14:30	WG1709670
n-Nitrosodiphenylamine	ND		0.333	1	07/22/2021 14:30	WG1709670
n-Nitrosodi-n-propylamine	ND		0.333	1	07/22/2021 14:30	WG1709670
Phenanthrene	ND		0.0333	1	07/22/2021 14:30	WG1709670
Benzylbutyl phtalate	ND		0.333	1	07/22/2021 14:30	WG1709670
Bis(2-ethylhexyl)phtalate	ND		0.333	1	07/22/2021 14:30	WG1709670
Di-n-butyl phtalate	ND		0.333	1	07/22/2021 14:30	WG1709670
Diethyl phtalate	ND		0.333	1	07/22/2021 14:30	WG1709670
Dimethyl phtalate	ND		0.333	1	07/22/2021 14:30	WG1709670
Di-n-octyl phtalate	ND		0.333	1	07/22/2021 14:30	WG1709670
Pyrene	ND		0.0333	1	07/22/2021 14:30	WG1709670
1,2,4-Trichlorobenzene	ND		0.333	1	07/22/2021 14:30	WG1709670
4-Chloro-3-methylphenol	ND		0.333	1	07/22/2021 14:30	WG1709670
2-Chlorophenol	ND		0.333	1	07/22/2021 14:30	WG1709670
2,4-Dichlorophenol	ND		0.333	1	07/22/2021 14:30	WG1709670
2,4-Dimethylphenol	ND		0.333	1	07/22/2021 14:30	WG1709670
4,6-Dinitro-2-methylphenol	ND		0.333	1	07/22/2021 14:30	WG1709670
2,4-Dinitrophenol	ND		0.333	1	07/22/2021 14:30	WG1709670
2-Nitrophenol	ND		0.333	1	07/22/2021 14:30	WG1709670
4-Nitrophenol	ND		0.333	1	07/22/2021 14:30	WG1709670
Pentachlorophenol	ND		0.333	1	07/22/2021 14:30	WG1709670
Phenol	ND		0.333	1	07/22/2021 14:30	WG1709670
2,4,6-Trichlorophenol	ND		0.333	1	07/22/2021 14:30	WG1709670

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) 2-Fluorophenol	63.5		12.0-120		07/22/2021 14:30	WG1709670
(S) Phenol-d5	58.3		10.0-120		07/22/2021 14:30	WG1709670
(S) Nitrobenzene-d5	55.0		10.0-122		07/22/2021 14:30	WG1709670
(S) 2-Fluorobiphenyl	63.4		15.0-120		07/22/2021 14:30	WG1709670
(S) 2,4,6-Tribromophenol	62.6		10.0-127		07/22/2021 14:30	WG1709670
(S) p-Terphenyl-d14	61.3		10.0-120		07/22/2021 14:30	WG1709670

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

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.8		1	07/20/2021 15:02	WG1708548

Mercury by Method 7471B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0400	1	07/20/2021 15:37	WG1707869

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Aluminum	8880		20.0	1	07/23/2021 01:56	WG1707348
Antimony	ND		2.00	1	07/23/2021 01:56	WG1707348
Arsenic	3.30		2.00	1	07/23/2021 01:56	WG1707348
Barium	31.9		0.500	1	07/23/2021 01:56	WG1707348
Beryllium	ND		0.200	1	07/23/2021 01:56	WG1707348
Cadmium	ND		0.500	1	07/23/2021 01:56	WG1707348
Calcium	2390		100	1	07/23/2021 01:56	WG1707348
Chromium	9.23		1.00	1	07/23/2021 01:56	WG1707348
Cobalt	4.17		1.00	1	07/23/2021 01:56	WG1707348
Copper	21.0		2.00	1	07/23/2021 01:56	WG1707348
Iron	15600		10.0	1	07/23/2021 01:56	WG1707348
Lead	4.18		0.500	1	07/23/2021 01:56	WG1707348
Magnesium	2450		100	1	07/23/2021 01:56	WG1707348
Manganese	191		1.00	1	07/23/2021 01:56	WG1707348
Nickel	10.7		2.00	1	07/23/2021 01:56	WG1707348
Potassium	652		100	1	07/23/2021 01:56	WG1707348
Selenium	ND		2.00	1	07/23/2021 01:56	WG1707348
Silver	ND		1.00	1	07/23/2021 01:56	WG1707348
Sodium	359		100	1	07/23/2021 01:56	WG1707348
Thallium	ND		2.00	1	07/23/2021 01:56	WG1707348
Vanadium	28.3		2.00	1	07/23/2021 01:56	WG1707348
Zinc	29.2		5.00	1	07/22/2021 23:41	WG1707348

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0515	1.03	07/19/2021 00:36	WG1707442
Acrylonitrile	ND		0.0129	1.03	07/19/2021 00:36	WG1707442
Benzene	ND		0.00103	1.03	07/19/2021 00:36	WG1707442
Bromobenzene	ND		0.0129	1.03	07/19/2021 00:36	WG1707442
Bromodichloromethane	ND		0.00258	1.03	07/19/2021 00:36	WG1707442
Bromoform	ND		0.0258	1.03	07/19/2021 00:36	WG1707442
Bromomethane	ND		0.0129	1.03	07/19/2021 00:36	WG1707442
n-Butylbenzene	ND		0.0129	1.03	07/19/2021 00:36	WG1707442
sec-Butylbenzene	ND		0.0129	1.03	07/19/2021 00:36	WG1707442
tert-Butylbenzene	ND		0.00515	1.03	07/19/2021 00:36	WG1707442
Carbon tetrachloride	ND		0.00515	1.03	07/19/2021 00:36	WG1707442
Chlorobenzene	ND		0.00258	1.03	07/19/2021 00:36	WG1707442
Chlorodibromomethane	ND		0.00258	1.03	07/19/2021 00:36	WG1707442
Chloroethane	ND		0.00515	1.03	07/19/2021 00:36	WG1707442
Chloroform	ND		0.00258	1.03	07/19/2021 00:36	WG1707442
Chloromethane	ND		0.0129	1.03	07/19/2021 00:36	WG1707442
2-Chlorotoluene	ND	J4	0.00258	1.03	07/19/2021 00:36	WG1707442
4-Chlorotoluene	ND		0.00515	1.03	07/19/2021 00:36	WG1707442

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 mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	ND		0.0258	1.03	07/19/2021 00:36	WG1707442
1,2-Dibromoethane	ND		0.00258	1.03	07/19/2021 00:36	WG1707442
Dibromomethane	ND		0.00515	1.03	07/19/2021 00:36	WG1707442
1,2-Dichlorobenzene	ND		0.00515	1.03	07/19/2021 00:36	WG1707442
1,3-Dichlorobenzene	ND		0.00515	1.03	07/19/2021 00:36	WG1707442
1,4-Dichlorobenzene	ND		0.00515	1.03	07/19/2021 00:36	WG1707442
Dichlorodifluoromethane	ND		0.00258	1.03	07/19/2021 00:36	WG1707442
1,1-Dichloroethane	ND		0.00258	1.03	07/19/2021 00:36	WG1707442
1,2-Dichloroethane	ND		0.00258	1.03	07/19/2021 00:36	WG1707442
1,1-Dichloroethene	ND		0.00258	1.03	07/19/2021 00:36	WG1707442
cis-1,2-Dichloroethene	ND		0.00258	1.03	07/19/2021 00:36	WG1707442
trans-1,2-Dichloroethene	ND		0.00515	1.03	07/19/2021 00:36	WG1707442
1,2-Dichloropropane	ND		0.00515	1.03	07/19/2021 00:36	WG1707442
1,1-Dichloropropene	ND		0.00258	1.03	07/19/2021 00:36	WG1707442
1,3-Dichloropropane	ND		0.00515	1.03	07/19/2021 00:36	WG1707442
cis-1,3-Dichloropropene	ND		0.00258	1.03	07/19/2021 00:36	WG1707442
trans-1,3-Dichloropropene	ND		0.00515	1.03	07/19/2021 00:36	WG1707442
2,2-Dichloropropane	ND		0.00258	1.03	07/19/2021 00:36	WG1707442
Di-isopropyl ether	ND		0.00103	1.03	07/19/2021 00:36	WG1707442
Ethylbenzene	ND		0.00258	1.03	07/19/2021 00:36	WG1707442
Hexachloro-1,3-butadiene	ND		0.0258	1.03	07/19/2021 00:36	WG1707442
Isopropylbenzene	ND		0.00258	1.03	07/19/2021 00:36	WG1707442
p-Isopropyltoluene	ND		0.00515	1.03	07/19/2021 00:36	WG1707442
2-Butanone (MEK)	ND		0.103	1.03	07/19/2021 00:36	WG1707442
Methylene Chloride	ND		0.0258	1.03	07/19/2021 00:36	WG1707442
4-Methyl-2-pentanone (MIBK)	ND		0.0258	1.03	07/19/2021 00:36	WG1707442
Methyl tert-butyl ether	ND		0.00103	1.03	07/19/2021 00:36	WG1707442
Naphthalene	ND		0.0129	1.03	07/23/2021 11:46	WG1710558
n-Propylbenzene	ND		0.00515	1.03	07/19/2021 00:36	WG1707442
Styrene	ND		0.0129	1.03	07/19/2021 00:36	WG1707442
1,1,1,2-Tetrachloroethane	ND		0.00258	1.03	07/19/2021 00:36	WG1707442
1,1,2,2-Tetrachloroethane	ND		0.00258	1.03	07/19/2021 00:36	WG1707442
1,1,2-Trichlorotrifluoroethane	ND		0.00258	1.03	07/19/2021 00:36	WG1707442
Tetrachloroethene	ND		0.00258	1.03	07/19/2021 00:36	WG1707442
Toluene	ND		0.00515	1.03	07/19/2021 00:36	WG1707442
1,2,3-Trichlorobenzene	ND	C4	0.0129	1.03	07/23/2021 11:46	WG1710558
1,2,4-Trichlorobenzene	ND		0.0129	1.03	07/19/2021 00:36	WG1707442
1,1,1-Trichloroethane	ND		0.00258	1.03	07/19/2021 00:36	WG1707442
1,1,2-Trichloroethane	ND		0.00258	1.03	07/19/2021 00:36	WG1707442
Trichloroethene	ND		0.00103	1.03	07/19/2021 00:36	WG1707442
Trichlorofluoromethane	ND		0.00258	1.03	07/19/2021 00:36	WG1707442
1,2,3-Trichloropropane	ND		0.0129	1.03	07/19/2021 00:36	WG1707442
1,2,4-Trimethylbenzene	ND		0.00515	1.03	07/19/2021 00:36	WG1707442
1,2,3-Trimethylbenzene	ND		0.00515	1.03	07/19/2021 00:36	WG1707442
1,3,5-Trimethylbenzene	ND		0.00515	1.03	07/19/2021 00:36	WG1707442
Vinyl chloride	ND		0.00258	1.03	07/19/2021 00:36	WG1707442
Xylenes, Total	ND		0.00670	1.03	07/19/2021 00:36	WG1707442
(S) Toluene-d8	104		75.0-131		07/19/2021 00:36	WG1707442
(S) Toluene-d8	117		75.0-131		07/23/2021 11:46	WG1710558
(S) 4-Bromofluorobenzene	95.9		67.0-138		07/19/2021 00:36	WG1707442
(S) 4-Bromofluorobenzene	92.3		67.0-138		07/23/2021 11:46	WG1710558
(S) 1,2-Dichloroethane-d4	109		70.0-130		07/19/2021 00:36	WG1707442
(S) 1,2-Dichloroethane-d4	93.4		70.0-130		07/23/2021 11:46	WG1710558

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	07/22/2021 15:13	WG1709670
Acenaphthylene	ND		0.0333	1	07/22/2021 15:13	WG1709670
Anthracene	ND		0.0333	1	07/22/2021 15:13	WG1709670
Benzidine	ND		1.67	1	07/22/2021 15:13	WG1709670
Benzo(a)anthracene	ND		0.0333	1	07/22/2021 15:13	WG1709670
Benzo(b)fluoranthene	ND		0.0333	1	07/22/2021 15:13	WG1709670
Benzo(k)fluoranthene	ND		0.0333	1	07/22/2021 15:13	WG1709670
Benzo(g,h,i)perylene	ND		0.0333	1	07/22/2021 15:13	WG1709670
Benzo(a)pyrene	ND		0.0333	1	07/22/2021 15:13	WG1709670
Bis(2-chlorethoxy)methane	ND		0.333	1	07/22/2021 15:13	WG1709670
Bis(2-chloroethyl)ether	ND		0.333	1	07/22/2021 15:13	WG1709670
2,2-Oxybis(1-Chloropropane)	ND		0.333	1	07/22/2021 15:13	WG1709670
4-Bromophenyl-phenylether	ND		0.333	1	07/22/2021 15:13	WG1709670
2-Chloronaphthalene	ND		0.0333	1	07/22/2021 15:13	WG1709670
4-Chlorophenyl-phenylether	ND		0.333	1	07/22/2021 15:13	WG1709670
Chrysene	ND		0.0333	1	07/22/2021 15:13	WG1709670
Dibenz(a,h)anthracene	ND		0.0333	1	07/22/2021 15:13	WG1709670
1,2-Dichlorobenzene	ND		0.333	1	07/22/2021 15:13	WG1709670
1,3-Dichlorobenzene	ND		0.333	1	07/22/2021 15:13	WG1709670
1,4-Dichlorobenzene	ND		0.333	1	07/22/2021 15:13	WG1709670
3,3-Dichlorobenzidine	ND		0.333	1	07/22/2021 15:13	WG1709670
2,4-Dinitrotoluene	ND		0.333	1	07/22/2021 15:13	WG1709670
2,6-Dinitrotoluene	ND		0.333	1	07/22/2021 15:13	WG1709670
Fluoranthene	ND		0.0333	1	07/22/2021 15:13	WG1709670
Fluorene	ND		0.0333	1	07/22/2021 15:13	WG1709670
Hexachlorobenzene	ND		0.333	1	07/22/2021 15:13	WG1709670
Hexachloro-1,3-butadiene	ND		0.333	1	07/22/2021 15:13	WG1709670
Hexachlorocyclopentadiene	ND		0.333	1	07/22/2021 15:13	WG1709670
Hexachloroethane	ND		0.333	1	07/22/2021 15:13	WG1709670
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	07/22/2021 15:13	WG1709670
Isophorone	ND		0.333	1	07/22/2021 15:13	WG1709670
Naphthalene	ND		0.0333	1	07/22/2021 15:13	WG1709670
Nitrobenzene	ND		0.333	1	07/22/2021 15:13	WG1709670
n-Nitrosodimethylamine	ND		0.333	1	07/22/2021 15:13	WG1709670
n-Nitrosodiphenylamine	ND		0.333	1	07/22/2021 15:13	WG1709670
n-Nitrosodi-n-propylamine	ND		0.333	1	07/22/2021 15:13	WG1709670
Phenanthrene	ND		0.0333	1	07/22/2021 15:13	WG1709670
Benzylbutyl phthalate	ND		0.333	1	07/22/2021 15:13	WG1709670
Bis(2-ethylhexyl)phthalate	ND		0.333	1	07/22/2021 15:13	WG1709670
Di-n-butyl phthalate	ND		0.333	1	07/22/2021 15:13	WG1709670
Diethyl phthalate	ND		0.333	1	07/22/2021 15:13	WG1709670
Dimethyl phthalate	ND		0.333	1	07/22/2021 15:13	WG1709670
Di-n-octyl phthalate	ND		0.333	1	07/22/2021 15:13	WG1709670
Pyrene	ND		0.0333	1	07/22/2021 15:13	WG1709670
1,2,4-Trichlorobenzene	ND		0.333	1	07/22/2021 15:13	WG1709670
4-Chloro-3-methylphenol	ND		0.333	1	07/22/2021 15:13	WG1709670
2-Chlorophenol	ND		0.333	1	07/22/2021 15:13	WG1709670
2,4-Dichlorophenol	ND		0.333	1	07/22/2021 15:13	WG1709670
2,4-Dimethylphenol	ND		0.333	1	07/22/2021 15:13	WG1709670
4,6-Dinitro-2-methylphenol	ND		0.333	1	07/22/2021 15:13	WG1709670
2,4-Dinitrophenol	ND		0.333	1	07/22/2021 15:13	WG1709670
2-Nitrophenol	ND		0.333	1	07/22/2021 15:13	WG1709670
4-Nitrophenol	ND		0.333	1	07/22/2021 15:13	WG1709670
Pentachlorophenol	ND		0.333	1	07/22/2021 15:13	WG1709670
Phenol	ND		0.333	1	07/22/2021 15:13	WG1709670
2,4,6-Trichlorophenol	ND		0.333	1	07/22/2021 15:13	WG1709670

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) 2-Fluorophenol	60.5		12.0-120		07/22/2021 15:13	WG1709670
(S) Phenol-d5	54.7		10.0-120		07/22/2021 15:13	WG1709670
(S) Nitrobenzene-d5	53.2		10.0-122		07/22/2021 15:13	WG1709670
(S) 2-Fluorobiphenyl	61.3		15.0-120		07/22/2021 15:13	WG1709670
(S) 2,4,6-Tribromophenol	57.8		10.0-127		07/22/2021 15:13	WG1709670
(S) p-Terphenyl-d14	55.3		10.0-120		07/22/2021 15:13	WG1709670

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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.5		1	07/20/2021 15:02	WG1708548

Mercury by Method 7471B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0400	1	07/20/2021 15:40	WG1707869

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Aluminum	16300		20.0	1	07/23/2021 01:58	WG1707348
Antimony	ND		2.00	1	07/23/2021 01:58	WG1707348
Arsenic	2.32		2.00	1	07/23/2021 01:58	WG1707348
Barium	80.6		0.500	1	07/23/2021 01:58	WG1707348
Beryllium	ND		0.200	1	07/23/2021 01:58	WG1707348
Cadmium	ND		0.500	1	07/23/2021 01:58	WG1707348
Calcium	6750		100	1	07/23/2021 01:58	WG1707348
Chromium	67.7		1.00	1	07/23/2021 01:58	WG1707348
Cobalt	8.02		1.00	1	07/23/2021 01:58	WG1707348
Copper	37.7		2.00	1	07/23/2021 01:58	WG1707348
Iron	25500		10.0	1	07/23/2021 01:58	WG1707348
Lead	2.49		0.500	1	07/23/2021 01:58	WG1707348
Magnesium	5170		100	1	07/23/2021 01:58	WG1707348
Manganese	313		1.00	1	07/23/2021 01:58	WG1707348
Nickel	23.5		2.00	1	07/23/2021 01:58	WG1707348
Potassium	1190		100	1	07/23/2021 01:58	WG1707348
Selenium	ND		2.00	1	07/23/2021 01:58	WG1707348
Silver	ND		1.00	1	07/23/2021 01:58	WG1707348
Sodium	917		100	1	07/23/2021 01:58	WG1707348
Thallium	ND		2.00	1	07/23/2021 01:58	WG1707348
Vanadium	50.3		2.00	1	07/23/2021 01:58	WG1707348
Zinc	36.1		5.00	1	07/22/2021 23:44	WG1707348

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0620	1.24	07/19/2021 00:55	WG1707442
Acrylonitrile	ND		0.0155	1.24	07/19/2021 00:55	WG1707442
Benzene	ND		0.00124	1.24	07/19/2021 00:55	WG1707442
Bromobenzene	ND		0.0155	1.24	07/19/2021 00:55	WG1707442
Bromodichloromethane	ND		0.00310	1.24	07/19/2021 00:55	WG1707442
Bromoform	ND		0.0310	1.24	07/19/2021 00:55	WG1707442
Bromomethane	ND		0.0155	1.24	07/19/2021 00:55	WG1707442
n-Butylbenzene	ND		0.0155	1.24	07/19/2021 00:55	WG1707442
sec-Butylbenzene	ND		0.0155	1.24	07/19/2021 00:55	WG1707442
tert-Butylbenzene	ND		0.00620	1.24	07/19/2021 00:55	WG1707442
Carbon tetrachloride	ND		0.00620	1.24	07/19/2021 00:55	WG1707442
Chlorobenzene	ND		0.00310	1.24	07/19/2021 00:55	WG1707442
Chlorodibromomethane	ND		0.00310	1.24	07/19/2021 00:55	WG1707442
Chloroethane	ND		0.00620	1.24	07/19/2021 00:55	WG1707442
Chloroform	ND		0.00310	1.24	07/19/2021 00:55	WG1707442
Chloromethane	ND		0.0155	1.24	07/19/2021 00:55	WG1707442
2-Chlorotoluene	ND	J4	0.00310	1.24	07/19/2021 00:55	WG1707442
4-Chlorotoluene	ND		0.00620	1.24	07/19/2021 00:55	WG1707442

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 mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	ND		0.0310	1.24	07/19/2021 00:55	WG1707442
1,2-Dibromoethane	ND		0.00310	1.24	07/19/2021 00:55	WG1707442
Dibromomethane	ND		0.00620	1.24	07/19/2021 00:55	WG1707442
1,2-Dichlorobenzene	ND		0.00620	1.24	07/19/2021 00:55	WG1707442
1,3-Dichlorobenzene	ND		0.00620	1.24	07/19/2021 00:55	WG1707442
1,4-Dichlorobenzene	ND		0.00620	1.24	07/19/2021 00:55	WG1707442
Dichlorodifluoromethane	ND		0.00310	1.24	07/19/2021 00:55	WG1707442
1,1-Dichloroethane	ND		0.00310	1.24	07/19/2021 00:55	WG1707442
1,2-Dichloroethane	ND		0.00310	1.24	07/19/2021 00:55	WG1707442
1,1-Dichloroethene	ND		0.00310	1.24	07/19/2021 00:55	WG1707442
cis-1,2-Dichloroethene	ND		0.00310	1.24	07/19/2021 00:55	WG1707442
trans-1,2-Dichloroethene	ND		0.00620	1.24	07/19/2021 00:55	WG1707442
1,2-Dichloropropane	ND		0.00620	1.24	07/19/2021 00:55	WG1707442
1,1-Dichloropropene	ND		0.00310	1.24	07/19/2021 00:55	WG1707442
1,3-Dichloropropane	ND		0.00620	1.24	07/19/2021 00:55	WG1707442
cis-1,3-Dichloropropene	ND		0.00310	1.24	07/19/2021 00:55	WG1707442
trans-1,3-Dichloropropene	ND		0.00620	1.24	07/19/2021 00:55	WG1707442
2,2-Dichloropropane	ND		0.00310	1.24	07/19/2021 00:55	WG1707442
Di-isopropyl ether	ND		0.00124	1.24	07/19/2021 00:55	WG1707442
Ethylbenzene	ND		0.00310	1.24	07/19/2021 00:55	WG1707442
Hexachloro-1,3-butadiene	ND		0.0310	1.24	07/19/2021 00:55	WG1707442
Isopropylbenzene	ND		0.00310	1.24	07/19/2021 00:55	WG1707442
p-Isopropyltoluene	ND		0.00620	1.24	07/19/2021 00:55	WG1707442
2-Butanone (MEK)	0.130		0.124	1.24	07/19/2021 00:55	WG1707442
Methylene Chloride	ND		0.0310	1.24	07/19/2021 00:55	WG1707442
4-Methyl-2-pentanone (MIBK)	ND		0.0310	1.24	07/19/2021 00:55	WG1707442
Methyl tert-butyl ether	ND		0.00124	1.24	07/19/2021 00:55	WG1707442
Naphthalene	ND		0.0155	1.24	07/23/2021 12:05	WG1710558
n-Propylbenzene	ND		0.00620	1.24	07/19/2021 00:55	WG1707442
Styrene	ND		0.0155	1.24	07/19/2021 00:55	WG1707442
1,1,1,2-Tetrachloroethane	ND		0.00310	1.24	07/19/2021 00:55	WG1707442
1,1,2,2-Tetrachloroethane	ND		0.00310	1.24	07/19/2021 00:55	WG1707442
1,1,2-Trichlorotrifluoroethane	ND		0.00310	1.24	07/19/2021 00:55	WG1707442
Tetrachloroethene	ND		0.00310	1.24	07/19/2021 00:55	WG1707442
Toluene	ND		0.00620	1.24	07/19/2021 00:55	WG1707442
1,2,3-Trichlorobenzene	ND	C4	0.0155	1.24	07/23/2021 12:05	WG1710558
1,2,4-Trichlorobenzene	ND		0.0155	1.24	07/19/2021 00:55	WG1707442
1,1,1-Trichloroethane	ND		0.00310	1.24	07/19/2021 00:55	WG1707442
1,1,2-Trichloroethane	ND		0.00310	1.24	07/19/2021 00:55	WG1707442
Trichloroethene	ND		0.00124	1.24	07/19/2021 00:55	WG1707442
Trichlorofluoromethane	ND		0.00310	1.24	07/19/2021 00:55	WG1707442
1,2,3-Trichloropropane	ND		0.0155	1.24	07/19/2021 00:55	WG1707442
1,2,4-Trimethylbenzene	ND		0.00620	1.24	07/19/2021 00:55	WG1707442
1,2,3-Trimethylbenzene	ND		0.00620	1.24	07/19/2021 00:55	WG1707442
1,3,5-Trimethylbenzene	ND		0.00620	1.24	07/19/2021 00:55	WG1707442
Vinyl chloride	ND		0.00310	1.24	07/19/2021 00:55	WG1707442
Xylenes, Total	ND		0.00806	1.24	07/19/2021 00:55	WG1707442
(S) Toluene-d8	103		75.0-131		07/19/2021 00:55	WG1707442
(S) Toluene-d8	116		75.0-131		07/23/2021 12:05	WG1710558
(S) 4-Bromofluorobenzene	87.3		67.0-138		07/19/2021 00:55	WG1707442
(S) 4-Bromofluorobenzene	91.1		67.0-138		07/23/2021 12:05	WG1710558
(S) 1,2-Dichloroethane-d4	111		70.0-130		07/19/2021 00:55	WG1707442
(S) 1,2-Dichloroethane-d4	91.9		70.0-130		07/23/2021 12:05	WG1710558

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	07/22/2021 17:48	WG1709670
Acenaphthylene	ND		0.0333	1	07/22/2021 17:48	WG1709670
Anthracene	ND		0.0333	1	07/22/2021 17:48	WG1709670
Benzidine	ND		1.67	1	07/22/2021 17:48	WG1709670
Benzo(a)anthracene	ND		0.0333	1	07/22/2021 17:48	WG1709670
Benzo(b)fluoranthene	ND		0.0333	1	07/22/2021 17:48	WG1709670
Benzo(k)fluoranthene	ND		0.0333	1	07/22/2021 17:48	WG1709670
Benzo(g,h,i)perylene	ND		0.0333	1	07/22/2021 17:48	WG1709670
Benzo(a)pyrene	ND		0.0333	1	07/22/2021 17:48	WG1709670
Bis(2-chloroethoxy)methane	ND		0.333	1	07/22/2021 17:48	WG1709670
Bis(2-chloroethyl)ether	ND		0.333	1	07/22/2021 17:48	WG1709670
2,2-Oxybis(1-Chloropropane)	ND		0.333	1	07/22/2021 17:48	WG1709670
4-Bromophenyl-phenylether	ND		0.333	1	07/22/2021 17:48	WG1709670
2-Chloronaphthalene	ND		0.0333	1	07/22/2021 17:48	WG1709670
4-Chlorophenyl-phenylether	ND		0.333	1	07/22/2021 17:48	WG1709670
Chrysene	ND		0.0333	1	07/22/2021 17:48	WG1709670
Dibenz(a,h)anthracene	ND		0.0333	1	07/22/2021 17:48	WG1709670
1,2-Dichlorobenzene	ND		0.333	1	07/22/2021 17:48	WG1709670
1,3-Dichlorobenzene	ND		0.333	1	07/22/2021 17:48	WG1709670
1,4-Dichlorobenzene	ND		0.333	1	07/22/2021 17:48	WG1709670
3,3-Dichlorobenzidine	ND		0.333	1	07/22/2021 17:48	WG1709670
2,4-Dinitrotoluene	ND		0.333	1	07/22/2021 17:48	WG1709670
2,6-Dinitrotoluene	ND		0.333	1	07/22/2021 17:48	WG1709670
Fluoranthene	ND		0.0333	1	07/22/2021 17:48	WG1709670
Fluorene	ND		0.0333	1	07/22/2021 17:48	WG1709670
Hexachlorobenzene	ND		0.333	1	07/22/2021 17:48	WG1709670
Hexachloro-1,3-butadiene	ND		0.333	1	07/22/2021 17:48	WG1709670
Hexachlorocyclopentadiene	ND		0.333	1	07/22/2021 17:48	WG1709670
Hexachloroethane	ND		0.333	1	07/22/2021 17:48	WG1709670
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	07/22/2021 17:48	WG1709670
Isophorone	ND		0.333	1	07/22/2021 17:48	WG1709670
Naphthalene	ND		0.0333	1	07/22/2021 17:48	WG1709670
Nitrobenzene	ND		0.333	1	07/22/2021 17:48	WG1709670
n-Nitrosodimethylamine	ND		0.333	1	07/22/2021 17:48	WG1709670
n-Nitrosodiphenylamine	ND		0.333	1	07/22/2021 17:48	WG1709670
n-Nitrosodi-n-propylamine	ND		0.333	1	07/22/2021 17:48	WG1709670
Phenanthrene	ND		0.0333	1	07/22/2021 17:48	WG1709670
Benzylbutyl phthalate	ND		0.333	1	07/22/2021 17:48	WG1709670
Bis(2-ethylhexyl)phthalate	ND		0.333	1	07/22/2021 17:48	WG1709670
Di-n-butyl phthalate	ND		0.333	1	07/22/2021 17:48	WG1709670
Diethyl phthalate	ND		0.333	1	07/22/2021 17:48	WG1709670
Dimethyl phthalate	ND		0.333	1	07/22/2021 17:48	WG1709670
Di-n-octyl phthalate	ND		0.333	1	07/22/2021 17:48	WG1709670
Pyrene	ND		0.0333	1	07/22/2021 17:48	WG1709670
1,2,4-Trichlorobenzene	ND		0.333	1	07/22/2021 17:48	WG1709670
4-Chloro-3-methylphenol	ND		0.333	1	07/22/2021 17:48	WG1709670
2-Chlorophenol	ND		0.333	1	07/22/2021 17:48	WG1709670
2,4-Dichlorophenol	ND		0.333	1	07/22/2021 17:48	WG1709670
2,4-Dimethylphenol	ND		0.333	1	07/22/2021 17:48	WG1709670
4,6-Dinitro-2-methylphenol	ND		0.333	1	07/22/2021 17:48	WG1709670
2,4-Dinitrophenol	ND		0.333	1	07/22/2021 17:48	WG1709670
2-Nitrophenol	ND		0.333	1	07/22/2021 17:48	WG1709670
4-Nitrophenol	ND		0.333	1	07/22/2021 17:48	WG1709670
Pentachlorophenol	ND		0.333	1	07/22/2021 17:48	WG1709670
Phenol	ND		0.333	1	07/22/2021 17:48	WG1709670
2,4,6-Trichlorophenol	ND		0.333	1	07/22/2021 17:48	WG1709670

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) 2-Fluorophenol	63.7		12.0-120		07/22/2021 17:48	WG1709670
(S) Phenol-d5	58.9		10.0-120		07/22/2021 17:48	WG1709670
(S) Nitrobenzene-d5	50.5		10.0-122		07/22/2021 17:48	WG1709670
(S) 2-Fluorobiphenyl	63.7		15.0-120		07/22/2021 17:48	WG1709670
(S) 2,4,6-Tribromophenol	67.1		10.0-127		07/22/2021 17:48	WG1709670
(S) p-Terphenyl-d14	60.1		10.0-120		07/22/2021 17:48	WG1709670

- 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

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.0		1	07/20/2021 15:02	WG1708548

Mercury by Method 7471B

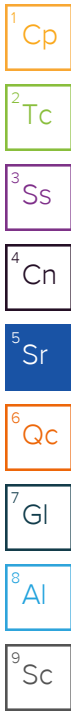
Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0400	1	07/20/2021 15:42	WG1707869

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Aluminum	17400		20.0	1	07/23/2021 02:01	WG1707348
Antimony	ND		2.00	1	07/23/2021 02:01	WG1707348
Arsenic	2.86		2.00	1	07/23/2021 02:01	WG1707348
Barium	71.4		0.500	1	07/23/2021 02:01	WG1707348
Beryllium	ND		0.200	1	07/23/2021 02:01	WG1707348
Cadmium	ND		0.500	1	07/23/2021 02:01	WG1707348
Calcium	5430		100	1	07/23/2021 02:01	WG1707348
Chromium	19.1		1.00	1	07/23/2021 02:01	WG1707348
Cobalt	6.95		1.00	1	07/23/2021 02:01	WG1707348
Copper	23.2		2.00	1	07/23/2021 02:01	WG1707348
Iron	20800		10.0	1	07/23/2021 02:01	WG1707348
Lead	2.77		0.500	1	07/23/2021 02:01	WG1707348
Magnesium	4420		100	1	07/23/2021 02:01	WG1707348
Manganese	276		1.00	1	07/23/2021 02:01	WG1707348
Nickel	18.0		2.00	1	07/23/2021 02:01	WG1707348
Potassium	1120		100	1	07/23/2021 02:01	WG1707348
Selenium	ND		2.00	1	07/23/2021 02:01	WG1707348
Silver	ND		1.00	1	07/23/2021 02:01	WG1707348
Sodium	824		100	1	07/23/2021 02:01	WG1707348
Thallium	ND		2.00	1	07/23/2021 02:01	WG1707348
Vanadium	43.0		2.00	1	07/23/2021 02:01	WG1707348
Zinc	35.1		5.00	1	07/22/2021 23:46	WG1707348

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0625	1.25	07/19/2021 01:14	WG1707442
Acrylonitrile	ND		0.0156	1.25	07/19/2021 01:14	WG1707442
Benzene	ND		0.00125	1.25	07/19/2021 01:14	WG1707442
Bromobenzene	ND		0.0156	1.25	07/19/2021 01:14	WG1707442
Bromodichloromethane	ND		0.00313	1.25	07/19/2021 01:14	WG1707442
Bromoform	ND		0.0313	1.25	07/19/2021 01:14	WG1707442
Bromomethane	ND		0.0156	1.25	07/19/2021 01:14	WG1707442
n-Butylbenzene	ND		0.0156	1.25	07/19/2021 01:14	WG1707442
sec-Butylbenzene	ND		0.0156	1.25	07/19/2021 01:14	WG1707442
tert-Butylbenzene	ND		0.00625	1.25	07/19/2021 01:14	WG1707442
Carbon tetrachloride	ND		0.00625	1.25	07/19/2021 01:14	WG1707442
Chlorobenzene	ND		0.00313	1.25	07/19/2021 01:14	WG1707442
Chlorodibromomethane	ND		0.00313	1.25	07/19/2021 01:14	WG1707442
Chloroethane	ND		0.00625	1.25	07/19/2021 01:14	WG1707442
Chloroform	ND		0.00313	1.25	07/19/2021 01:14	WG1707442
Chloromethane	ND		0.0156	1.25	07/19/2021 01:14	WG1707442
2-Chlorotoluene	ND	J4	0.00313	1.25	07/19/2021 01:14	WG1707442
4-Chlorotoluene	ND		0.00625	1.25	07/19/2021 01:14	WG1707442



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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	ND		0.0313	1.25	07/19/2021 01:14	WG1707442
1,2-Dibromoethane	ND		0.00313	1.25	07/19/2021 01:14	WG1707442
Dibromomethane	ND		0.00625	1.25	07/19/2021 01:14	WG1707442
1,2-Dichlorobenzene	ND		0.00625	1.25	07/19/2021 01:14	WG1707442
1,3-Dichlorobenzene	ND		0.00625	1.25	07/19/2021 01:14	WG1707442
1,4-Dichlorobenzene	ND		0.00625	1.25	07/19/2021 01:14	WG1707442
Dichlorodifluoromethane	ND		0.00313	1.25	07/19/2021 01:14	WG1707442
1,1-Dichloroethane	ND		0.00313	1.25	07/19/2021 01:14	WG1707442
1,2-Dichloroethane	ND		0.00313	1.25	07/19/2021 01:14	WG1707442
1,1-Dichloroethene	ND		0.00313	1.25	07/19/2021 01:14	WG1707442
cis-1,2-Dichloroethene	ND		0.00313	1.25	07/19/2021 01:14	WG1707442
trans-1,2-Dichloroethene	ND		0.00625	1.25	07/19/2021 01:14	WG1707442
1,2-Dichloropropane	ND		0.00625	1.25	07/19/2021 01:14	WG1707442
1,1-Dichloropropene	ND		0.00313	1.25	07/19/2021 01:14	WG1707442
1,3-Dichloropropane	ND		0.00625	1.25	07/19/2021 01:14	WG1707442
cis-1,3-Dichloropropene	ND		0.00313	1.25	07/19/2021 01:14	WG1707442
trans-1,3-Dichloropropene	ND		0.00625	1.25	07/19/2021 01:14	WG1707442
2,2-Dichloropropane	ND		0.00313	1.25	07/19/2021 01:14	WG1707442
Di-isopropyl ether	ND		0.00125	1.25	07/19/2021 01:14	WG1707442
Ethylbenzene	ND		0.00313	1.25	07/19/2021 01:14	WG1707442
Hexachloro-1,3-butadiene	ND		0.0313	1.25	07/19/2021 01:14	WG1707442
Isopropylbenzene	ND		0.00313	1.25	07/19/2021 01:14	WG1707442
p-Isopropyltoluene	ND		0.00625	1.25	07/19/2021 01:14	WG1707442
2-Butanone (MEK)	ND		0.125	1.25	07/19/2021 01:14	WG1707442
Methylene Chloride	ND		0.0313	1.25	07/19/2021 01:14	WG1707442
4-Methyl-2-pentanone (MIBK)	ND		0.0313	1.25	07/19/2021 01:14	WG1707442
Methyl tert-butyl ether	ND		0.00125	1.25	07/19/2021 01:14	WG1707442
Naphthalene	ND		0.0156	1.25	07/23/2021 12:24	WG1710558
n-Propylbenzene	ND		0.00625	1.25	07/19/2021 01:14	WG1707442
Styrene	ND		0.0156	1.25	07/19/2021 01:14	WG1707442
1,1,1,2-Tetrachloroethane	ND		0.00313	1.25	07/19/2021 01:14	WG1707442
1,1,2,2-Tetrachloroethane	ND		0.00313	1.25	07/19/2021 01:14	WG1707442
1,1,2-Trichlorotrifluoroethane	ND		0.00313	1.25	07/19/2021 01:14	WG1707442
Tetrachloroethene	ND		0.00313	1.25	07/19/2021 01:14	WG1707442
Toluene	ND		0.00625	1.25	07/19/2021 01:14	WG1707442
1,2,3-Trichlorobenzene	ND	C4	0.0156	1.25	07/23/2021 12:24	WG1710558
1,2,4-Trichlorobenzene	ND		0.0156	1.25	07/19/2021 01:14	WG1707442
1,1,1-Trichloroethane	ND		0.00313	1.25	07/19/2021 01:14	WG1707442
1,1,2-Trichloroethane	ND		0.00313	1.25	07/19/2021 01:14	WG1707442
Trichloroethene	ND		0.00125	1.25	07/19/2021 01:14	WG1707442
Trichlorofluoromethane	ND		0.00313	1.25	07/19/2021 01:14	WG1707442
1,2,3-Trichloropropane	ND		0.0156	1.25	07/19/2021 01:14	WG1707442
1,2,4-Trimethylbenzene	ND		0.00625	1.25	07/19/2021 01:14	WG1707442
1,2,3-Trimethylbenzene	ND		0.00625	1.25	07/19/2021 01:14	WG1707442
1,3,5-Trimethylbenzene	ND		0.00625	1.25	07/19/2021 01:14	WG1707442
Vinyl chloride	ND		0.00313	1.25	07/19/2021 01:14	WG1707442
Xylenes, Total	ND		0.00813	1.25	07/19/2021 01:14	WG1707442
(S) Toluene-d8	101		75.0-131		07/19/2021 01:14	WG1707442
(S) Toluene-d8	116		75.0-131		07/23/2021 12:24	WG1710558
(S) 4-Bromofluorobenzene	94.7		67.0-138		07/19/2021 01:14	WG1707442
(S) 4-Bromofluorobenzene	90.8		67.0-138		07/23/2021 12:24	WG1710558
(S) 1,2-Dichloroethane-d4	110		70.0-130		07/19/2021 01:14	WG1707442
(S) 1,2-Dichloroethane-d4	88.3		70.0-130		07/23/2021 12:24	WG1710558

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	07/22/2021 17:04	WG1709670
Acenaphthylene	ND		0.0333	1	07/22/2021 17:04	WG1709670
Anthracene	ND		0.0333	1	07/22/2021 17:04	WG1709670
Benzidine	ND		1.67	1	07/22/2021 17:04	WG1709670
Benzo(a)anthracene	ND		0.0333	1	07/22/2021 17:04	WG1709670
Benzo(b)fluoranthene	ND		0.0333	1	07/22/2021 17:04	WG1709670
Benzo(k)fluoranthene	ND		0.0333	1	07/22/2021 17:04	WG1709670
Benzo(g,h,i)perylene	ND		0.0333	1	07/22/2021 17:04	WG1709670
Benzo(a)pyrene	ND		0.0333	1	07/22/2021 17:04	WG1709670
Bis(2-chlorethoxy)methane	ND		0.333	1	07/22/2021 17:04	WG1709670
Bis(2-chloroethyl)ether	ND		0.333	1	07/22/2021 17:04	WG1709670
2,2-Oxybis(1-Chloropropane)	ND		0.333	1	07/22/2021 17:04	WG1709670
4-Bromophenyl-phenylether	ND		0.333	1	07/22/2021 17:04	WG1709670
2-Chloronaphthalene	ND		0.0333	1	07/22/2021 17:04	WG1709670
4-Chlorophenyl-phenylether	ND		0.333	1	07/22/2021 17:04	WG1709670
Chrysene	ND		0.0333	1	07/22/2021 17:04	WG1709670
Dibenz(a,h)anthracene	ND		0.0333	1	07/22/2021 17:04	WG1709670
1,2-Dichlorobenzene	ND		0.333	1	07/22/2021 17:04	WG1709670
1,3-Dichlorobenzene	ND		0.333	1	07/22/2021 17:04	WG1709670
1,4-Dichlorobenzene	ND		0.333	1	07/22/2021 17:04	WG1709670
3,3-Dichlorobenzidine	ND		0.333	1	07/22/2021 17:04	WG1709670
2,4-Dinitrotoluene	ND		0.333	1	07/22/2021 17:04	WG1709670
2,6-Dinitrotoluene	ND		0.333	1	07/22/2021 17:04	WG1709670
Fluoranthene	ND		0.0333	1	07/22/2021 17:04	WG1709670
Fluorene	ND		0.0333	1	07/22/2021 17:04	WG1709670
Hexachlorobenzene	ND		0.333	1	07/22/2021 17:04	WG1709670
Hexachloro-1,3-butadiene	ND		0.333	1	07/22/2021 17:04	WG1709670
Hexachlorocyclopentadiene	ND		0.333	1	07/22/2021 17:04	WG1709670
Hexachloroethane	ND		0.333	1	07/22/2021 17:04	WG1709670
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	07/22/2021 17:04	WG1709670
Isophorone	ND		0.333	1	07/22/2021 17:04	WG1709670
Naphthalene	ND		0.0333	1	07/22/2021 17:04	WG1709670
Nitrobenzene	ND		0.333	1	07/22/2021 17:04	WG1709670
n-Nitrosodimethylamine	ND		0.333	1	07/22/2021 17:04	WG1709670
n-Nitrosodiphenylamine	ND		0.333	1	07/22/2021 17:04	WG1709670
n-Nitrosodi-n-propylamine	ND		0.333	1	07/22/2021 17:04	WG1709670
Phenanthrene	ND		0.0333	1	07/22/2021 17:04	WG1709670
Benzylbutyl phtalate	ND		0.333	1	07/22/2021 17:04	WG1709670
Bis(2-ethylhexyl)phtalate	ND		0.333	1	07/22/2021 17:04	WG1709670
Di-n-butyl phtalate	ND		0.333	1	07/22/2021 17:04	WG1709670
Diethyl phtalate	ND		0.333	1	07/22/2021 17:04	WG1709670
Dimethyl phtalate	ND		0.333	1	07/22/2021 17:04	WG1709670
Di-n-octyl phtalate	ND		0.333	1	07/22/2021 17:04	WG1709670
Pyrene	ND		0.0333	1	07/22/2021 17:04	WG1709670
1,2,4-Trichlorobenzene	ND		0.333	1	07/22/2021 17:04	WG1709670
4-Chloro-3-methylphenol	ND		0.333	1	07/22/2021 17:04	WG1709670
2-Chlorophenol	ND		0.333	1	07/22/2021 17:04	WG1709670
2,4-Dichlorophenol	ND		0.333	1	07/22/2021 17:04	WG1709670
2,4-Dimethylphenol	ND		0.333	1	07/22/2021 17:04	WG1709670
4,6-Dinitro-2-methylphenol	ND		0.333	1	07/22/2021 17:04	WG1709670
2,4-Dinitrophenol	ND		0.333	1	07/22/2021 17:04	WG1709670
2-Nitrophenol	ND		0.333	1	07/22/2021 17:04	WG1709670
4-Nitrophenol	ND		0.333	1	07/22/2021 17:04	WG1709670
Pentachlorophenol	ND		0.333	1	07/22/2021 17:04	WG1709670
Phenol	ND		0.333	1	07/22/2021 17:04	WG1709670
2,4,6-Trichlorophenol	ND		0.333	1	07/22/2021 17:04	WG1709670

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) 2-Fluorophenol	63.4		12.0-120		07/22/2021 17:04	WG1709670
(S) Phenol-d5	58.3		10.0-120		07/22/2021 17:04	WG1709670
(S) Nitrobenzene-d5	57.5		10.0-122		07/22/2021 17:04	WG1709670
(S) 2-Fluorobiphenyl	65.2		15.0-120		07/22/2021 17:04	WG1709670
(S) 2,4,6-Tribromophenol	65.8		10.0-127		07/22/2021 17:04	WG1709670
(S) p-Terphenyl-d14	60.3		10.0-120		07/22/2021 17:04	WG1709670

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

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.9		1	07/20/2021 15:02	WG1708548

Mercury by Method 7471B

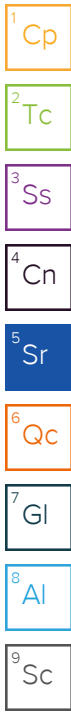
Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0400	1	07/20/2021 11:49	WG1707973

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Aluminum	15000		20.0	1	07/23/2021 02:04	WG1707348
Antimony	ND		2.00	1	07/23/2021 02:04	WG1707348
Arsenic	ND		2.00	1	07/23/2021 02:04	WG1707348
Barium	66.1		0.500	1	07/23/2021 02:04	WG1707348
Beryllium	ND		0.200	1	07/23/2021 02:04	WG1707348
Cadmium	ND		0.500	1	07/23/2021 02:04	WG1707348
Calcium	5860		100	1	07/23/2021 02:04	WG1707348
Chromium	10.6		1.00	1	07/23/2021 02:04	WG1707348
Cobalt	5.78		1.00	1	07/23/2021 02:04	WG1707348
Copper	19.5		2.00	1	07/23/2021 02:04	WG1707348
Iron	17600		10.0	1	07/23/2021 02:04	WG1707348
Lead	1.86		0.500	1	07/23/2021 02:04	WG1707348
Magnesium	4890		100	1	07/23/2021 02:04	WG1707348
Manganese	247		1.00	1	07/23/2021 02:04	WG1707348
Nickel	14.9		2.00	1	07/23/2021 02:04	WG1707348
Potassium	1410		100	1	07/23/2021 02:04	WG1707348
Selenium	ND		2.00	1	07/23/2021 02:04	WG1707348
Silver	ND		1.00	1	07/23/2021 02:04	WG1707348
Sodium	940		100	1	07/23/2021 02:04	WG1707348
Thallium	ND		2.00	1	07/23/2021 02:04	WG1707348
Vanadium	33.1		2.00	1	07/23/2021 02:04	WG1707348
Zinc	38.7		5.00	1	07/22/2021 23:49	WG1707348

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0565	1.13	07/19/2021 01:33	WG1707442
Acrylonitrile	ND		0.0141	1.13	07/19/2021 01:33	WG1707442
Benzene	ND		0.00113	1.13	07/19/2021 01:33	WG1707442
Bromobenzene	ND		0.0141	1.13	07/19/2021 01:33	WG1707442
Bromodichloromethane	ND		0.00283	1.13	07/19/2021 01:33	WG1707442
Bromoform	ND		0.0283	1.13	07/19/2021 01:33	WG1707442
Bromomethane	ND		0.0141	1.13	07/19/2021 01:33	WG1707442
n-Butylbenzene	ND		0.0141	1.13	07/19/2021 01:33	WG1707442
sec-Butylbenzene	ND		0.0141	1.13	07/19/2021 01:33	WG1707442
tert-Butylbenzene	ND		0.00565	1.13	07/19/2021 01:33	WG1707442
Carbon tetrachloride	ND		0.00565	1.13	07/19/2021 01:33	WG1707442
Chlorobenzene	ND		0.00283	1.13	07/19/2021 01:33	WG1707442
Chlorodibromomethane	ND		0.00283	1.13	07/19/2021 01:33	WG1707442
Chloroethane	ND		0.00565	1.13	07/19/2021 01:33	WG1707442
Chloroform	ND		0.00283	1.13	07/19/2021 01:33	WG1707442
Chloromethane	ND		0.0141	1.13	07/19/2021 01:33	WG1707442
2-Chlorotoluene	ND	J4	0.00283	1.13	07/19/2021 01:33	WG1707442
4-Chlorotoluene	ND		0.00565	1.13	07/19/2021 01:33	WG1707442



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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	ND		0.0283	1.13	07/19/2021 01:33	WG1707442
1,2-Dibromoethane	ND		0.00283	1.13	07/19/2021 01:33	WG1707442
Dibromomethane	ND		0.00565	1.13	07/19/2021 01:33	WG1707442
1,2-Dichlorobenzene	ND		0.00565	1.13	07/19/2021 01:33	WG1707442
1,3-Dichlorobenzene	ND		0.00565	1.13	07/19/2021 01:33	WG1707442
1,4-Dichlorobenzene	ND		0.00565	1.13	07/19/2021 01:33	WG1707442
Dichlorodifluoromethane	ND		0.00283	1.13	07/19/2021 01:33	WG1707442
1,1-Dichloroethane	ND		0.00283	1.13	07/19/2021 01:33	WG1707442
1,2-Dichloroethane	ND		0.00283	1.13	07/19/2021 01:33	WG1707442
1,1-Dichloroethene	ND		0.00283	1.13	07/19/2021 01:33	WG1707442
cis-1,2-Dichloroethene	ND		0.00283	1.13	07/19/2021 01:33	WG1707442
trans-1,2-Dichloroethene	ND		0.00565	1.13	07/19/2021 01:33	WG1707442
1,2-Dichloropropane	ND		0.00565	1.13	07/19/2021 01:33	WG1707442
1,1-Dichloropropene	ND		0.00283	1.13	07/19/2021 01:33	WG1707442
1,3-Dichloropropane	ND		0.00565	1.13	07/19/2021 01:33	WG1707442
cis-1,3-Dichloropropene	ND		0.00283	1.13	07/19/2021 01:33	WG1707442
trans-1,3-Dichloropropene	ND		0.00565	1.13	07/19/2021 01:33	WG1707442
2,2-Dichloropropane	ND		0.00283	1.13	07/19/2021 01:33	WG1707442
Di-isopropyl ether	ND		0.00113	1.13	07/19/2021 01:33	WG1707442
Ethylbenzene	ND		0.00283	1.13	07/19/2021 01:33	WG1707442
Hexachloro-1,3-butadiene	ND		0.0283	1.13	07/19/2021 01:33	WG1707442
Isopropylbenzene	ND		0.00283	1.13	07/19/2021 01:33	WG1707442
p-Isopropyltoluene	ND		0.00565	1.13	07/19/2021 01:33	WG1707442
2-Butanone (MEK)	ND		0.113	1.13	07/19/2021 01:33	WG1707442
Methylene Chloride	ND		0.0283	1.13	07/19/2021 01:33	WG1707442
4-Methyl-2-pentanone (MIBK)	ND		0.0283	1.13	07/19/2021 01:33	WG1707442
Methyl tert-butyl ether	ND		0.00113	1.13	07/19/2021 01:33	WG1707442
Naphthalene	ND		0.0141	1.13	07/23/2021 12:42	WG1710558
n-Propylbenzene	ND		0.00565	1.13	07/19/2021 01:33	WG1707442
Styrene	ND		0.0141	1.13	07/19/2021 01:33	WG1707442
1,1,1,2-Tetrachloroethane	ND		0.00283	1.13	07/19/2021 01:33	WG1707442
1,1,2,2-Tetrachloroethane	ND		0.00283	1.13	07/19/2021 01:33	WG1707442
1,1,2-Trichlorotrifluoroethane	ND		0.00283	1.13	07/19/2021 01:33	WG1707442
Tetrachloroethene	ND		0.00283	1.13	07/19/2021 01:33	WG1707442
Toluene	ND		0.00565	1.13	07/19/2021 01:33	WG1707442
1,2,3-Trichlorobenzene	ND	C4	0.0141	1.13	07/23/2021 12:42	WG1710558
1,2,4-Trichlorobenzene	ND		0.0141	1.13	07/19/2021 01:33	WG1707442
1,1,1-Trichloroethane	ND		0.00283	1.13	07/19/2021 01:33	WG1707442
1,1,2-Trichloroethane	ND		0.00283	1.13	07/19/2021 01:33	WG1707442
Trichloroethene	ND		0.00113	1.13	07/19/2021 01:33	WG1707442
Trichlorofluoromethane	ND		0.00283	1.13	07/19/2021 01:33	WG1707442
1,2,3-Trichloropropane	ND		0.0141	1.13	07/19/2021 01:33	WG1707442
1,2,4-Trimethylbenzene	ND		0.00565	1.13	07/19/2021 01:33	WG1707442
1,2,3-Trimethylbenzene	ND		0.00565	1.13	07/19/2021 01:33	WG1707442
1,3,5-Trimethylbenzene	ND		0.00565	1.13	07/19/2021 01:33	WG1707442
Vinyl chloride	ND		0.00283	1.13	07/19/2021 01:33	WG1707442
Xylenes, Total	ND		0.00735	1.13	07/19/2021 01:33	WG1707442
(S) Toluene-d8	107		75.0-131		07/19/2021 01:33	WG1707442
(S) Toluene-d8	113		75.0-131		07/23/2021 12:42	WG1710558
(S) 4-Bromofluorobenzene	99.6		67.0-138		07/19/2021 01:33	WG1707442
(S) 4-Bromofluorobenzene	90.8		67.0-138		07/23/2021 12:42	WG1710558
(S) 1,2-Dichloroethane-d4	113		70.0-130		07/19/2021 01:33	WG1707442
(S) 1,2-Dichloroethane-d4	90.8		70.0-130		07/23/2021 12:42	WG1710558

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	07/22/2021 15:37	WG1709670
Acenaphthylene	ND		0.0333	1	07/22/2021 15:37	WG1709670
Anthracene	ND		0.0333	1	07/22/2021 15:37	WG1709670
Benzidine	ND		1.67	1	07/22/2021 15:37	WG1709670
Benzo(a)anthracene	ND		0.0333	1	07/22/2021 15:37	WG1709670
Benzo(b)fluoranthene	ND		0.0333	1	07/22/2021 15:37	WG1709670
Benzo(k)fluoranthene	ND		0.0333	1	07/22/2021 15:37	WG1709670
Benzo(g,h,i)perylene	ND		0.0333	1	07/22/2021 15:37	WG1709670
Benzo(a)pyrene	ND		0.0333	1	07/22/2021 15:37	WG1709670
Bis(2-chloroethoxy)methane	ND		0.333	1	07/22/2021 15:37	WG1709670
Bis(2-chloroethyl)ether	ND		0.333	1	07/22/2021 15:37	WG1709670
2,2-Oxybis(1-Chloropropane)	ND		0.333	1	07/22/2021 15:37	WG1709670
4-Bromophenyl-phenylether	ND		0.333	1	07/22/2021 15:37	WG1709670
2-Chloronaphthalene	ND		0.0333	1	07/22/2021 15:37	WG1709670
4-Chlorophenyl-phenylether	ND		0.333	1	07/22/2021 15:37	WG1709670
Chrysene	ND		0.0333	1	07/22/2021 15:37	WG1709670
Dibenz(a,h)anthracene	ND		0.0333	1	07/22/2021 15:37	WG1709670
1,2-Dichlorobenzene	ND		0.333	1	07/22/2021 15:37	WG1709670
1,3-Dichlorobenzene	ND		0.333	1	07/22/2021 15:37	WG1709670
1,4-Dichlorobenzene	ND		0.333	1	07/22/2021 15:37	WG1709670
3,3-Dichlorobenzidine	ND		0.333	1	07/22/2021 15:37	WG1709670
2,4-Dinitrotoluene	ND		0.333	1	07/22/2021 15:37	WG1709670
2,6-Dinitrotoluene	ND		0.333	1	07/22/2021 15:37	WG1709670
Fluoranthene	ND		0.0333	1	07/22/2021 15:37	WG1709670
Fluorene	ND		0.0333	1	07/22/2021 15:37	WG1709670
Hexachlorobenzene	ND		0.333	1	07/22/2021 15:37	WG1709670
Hexachloro-1,3-butadiene	ND		0.333	1	07/22/2021 15:37	WG1709670
Hexachlorocyclopentadiene	ND		0.333	1	07/22/2021 15:37	WG1709670
Hexachloroethane	ND		0.333	1	07/22/2021 15:37	WG1709670
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	07/22/2021 15:37	WG1709670
Isophorone	ND		0.333	1	07/22/2021 15:37	WG1709670
Naphthalene	ND		0.0333	1	07/22/2021 15:37	WG1709670
Nitrobenzene	ND		0.333	1	07/22/2021 15:37	WG1709670
n-Nitrosodimethylamine	ND		0.333	1	07/22/2021 15:37	WG1709670
n-Nitrosodiphenylamine	ND		0.333	1	07/22/2021 15:37	WG1709670
n-Nitrosodi-n-propylamine	ND		0.333	1	07/22/2021 15:37	WG1709670
Phenanthrene	ND		0.0333	1	07/22/2021 15:37	WG1709670
Benzylbutyl phthalate	ND		0.333	1	07/22/2021 15:37	WG1709670
Bis(2-ethylhexyl)phthalate	ND		0.333	1	07/22/2021 15:37	WG1709670
Di-n-butyl phthalate	ND		0.333	1	07/22/2021 15:37	WG1709670
Diethyl phthalate	ND		0.333	1	07/22/2021 15:37	WG1709670
Dimethyl phthalate	ND		0.333	1	07/22/2021 15:37	WG1709670
Di-n-octyl phthalate	ND		0.333	1	07/22/2021 15:37	WG1709670
Pyrene	ND		0.0333	1	07/22/2021 15:37	WG1709670
1,2,4-Trichlorobenzene	ND		0.333	1	07/22/2021 15:37	WG1709670
4-Chloro-3-methylphenol	ND		0.333	1	07/22/2021 15:37	WG1709670
2-Chlorophenol	ND		0.333	1	07/22/2021 15:37	WG1709670
2,4-Dichlorophenol	ND		0.333	1	07/22/2021 15:37	WG1709670
2,4-Dimethylphenol	ND		0.333	1	07/22/2021 15:37	WG1709670
4,6-Dinitro-2-methylphenol	ND		0.333	1	07/22/2021 15:37	WG1709670
2,4-Dinitrophenol	ND		0.333	1	07/22/2021 15:37	WG1709670
2-Nitrophenol	ND		0.333	1	07/22/2021 15:37	WG1709670
4-Nitrophenol	ND		0.333	1	07/22/2021 15:37	WG1709670
Pentachlorophenol	ND		0.333	1	07/22/2021 15:37	WG1709670
Phenol	ND		0.333	1	07/22/2021 15:37	WG1709670
2,4,6-Trichlorophenol	ND		0.333	1	07/22/2021 15:37	WG1709670

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) 2-Fluorophenol	65.7		12.0-120		07/22/2021 15:37	WG1709670
(S) Phenol-d5	59.8		10.0-120		07/22/2021 15:37	WG1709670
(S) Nitrobenzene-d5	58.4		10.0-122		07/22/2021 15:37	WG1709670
(S) 2-Fluorobiphenyl	66.0		15.0-120		07/22/2021 15:37	WG1709670
(S) 2,4,6-Tribromophenol	62.8		10.0-127		07/22/2021 15:37	WG1709670
(S) p-Terphenyl-d14	59.0		10.0-120		07/22/2021 15:37	WG1709670

- 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

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.8		1	07/20/2021 15:02	WG1708548

Mercury by Method 7471B

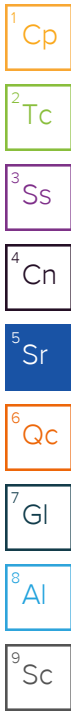
Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0400	1	07/20/2021 11:51	WG1707973

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Aluminum	14400		20.0	1	07/23/2021 02:06	WG1707348
Antimony	ND		2.00	1	07/23/2021 02:06	WG1707348
Arsenic	3.47		2.00	1	07/23/2021 02:06	WG1707348
Barium	59.8		0.500	1	07/23/2021 02:06	WG1707348
Beryllium	ND		0.200	1	07/23/2021 02:06	WG1707348
Cadmium	ND		0.500	1	07/23/2021 02:06	WG1707348
Calcium	3590		100	1	07/23/2021 02:06	WG1707348
Chromium	12.4		1.00	1	07/23/2021 02:06	WG1707348
Cobalt	6.08		1.00	1	07/23/2021 02:06	WG1707348
Copper	21.9		2.00	1	07/23/2021 02:06	WG1707348
Iron	22400		10.0	1	07/23/2021 02:06	WG1707348
Lead	5.09		0.500	1	07/23/2021 02:06	WG1707348
Magnesium	4050		100	1	07/23/2021 02:06	WG1707348
Manganese	288		1.00	1	07/23/2021 02:06	WG1707348
Nickel	14.2		2.00	1	07/23/2021 02:06	WG1707348
Potassium	947		100	1	07/23/2021 02:06	WG1707348
Selenium	ND		2.00	1	07/23/2021 02:06	WG1707348
Silver	ND		1.00	1	07/23/2021 02:06	WG1707348
Sodium	435		100	1	07/23/2021 02:06	WG1707348
Thallium	ND		2.00	1	07/23/2021 02:06	WG1707348
Vanadium	39.7		2.00	1	07/23/2021 02:06	WG1707348
Zinc	36.6		5.00	1	07/22/2021 23:52	WG1707348

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0500	1	07/19/2021 02:50	WG1707442
Acrylonitrile	ND		0.0125	1	07/19/2021 02:50	WG1707442
Benzene	ND		0.00100	1	07/19/2021 02:50	WG1707442
Bromobenzene	ND		0.0125	1	07/19/2021 02:50	WG1707442
Bromodichloromethane	ND		0.00250	1	07/19/2021 02:50	WG1707442
Bromoform	ND		0.0250	1	07/19/2021 02:50	WG1707442
Bromomethane	ND		0.0125	1	07/19/2021 02:50	WG1707442
n-Butylbenzene	ND		0.0125	1	07/19/2021 02:50	WG1707442
sec-Butylbenzene	ND		0.0125	1	07/19/2021 02:50	WG1707442
tert-Butylbenzene	ND		0.00500	1	07/19/2021 02:50	WG1707442
Carbon tetrachloride	ND		0.00500	1	07/19/2021 02:50	WG1707442
Chlorobenzene	ND		0.00250	1	07/19/2021 02:50	WG1707442
Chlorodibromomethane	ND		0.00250	1	07/19/2021 02:50	WG1707442
Chloroethane	ND		0.00500	1	07/19/2021 02:50	WG1707442
Chloroform	ND		0.00250	1	07/19/2021 02:50	WG1707442
Chloromethane	ND		0.0125	1	07/19/2021 02:50	WG1707442
2-Chlorotoluene	ND	J4	0.00250	1	07/19/2021 02:50	WG1707442
4-Chlorotoluene	ND		0.00500	1	07/19/2021 02:50	WG1707442



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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	07/19/2021 02:50	WG1707442
1,2-Dibromoethane	ND		0.00250	1	07/19/2021 02:50	WG1707442
Dibromomethane	ND		0.00500	1	07/19/2021 02:50	WG1707442
1,2-Dichlorobenzene	ND		0.00500	1	07/19/2021 02:50	WG1707442
1,3-Dichlorobenzene	ND		0.00500	1	07/19/2021 02:50	WG1707442
1,4-Dichlorobenzene	ND		0.00500	1	07/19/2021 02:50	WG1707442
Dichlorodifluoromethane	ND		0.00250	1	07/19/2021 02:50	WG1707442
1,1-Dichloroethane	ND		0.00250	1	07/19/2021 02:50	WG1707442
1,2-Dichloroethane	ND		0.00250	1	07/19/2021 02:50	WG1707442
1,1-Dichloroethene	ND		0.00250	1	07/19/2021 02:50	WG1707442
cis-1,2-Dichloroethene	ND		0.00250	1	07/19/2021 02:50	WG1707442
trans-1,2-Dichloroethene	ND		0.00500	1	07/19/2021 02:50	WG1707442
1,2-Dichloropropane	ND		0.00500	1	07/19/2021 02:50	WG1707442
1,1-Dichloropropene	ND		0.00250	1	07/19/2021 02:50	WG1707442
1,3-Dichloropropane	ND		0.00500	1	07/19/2021 02:50	WG1707442
cis-1,3-Dichloropropene	ND		0.00250	1	07/19/2021 02:50	WG1707442
trans-1,3-Dichloropropene	ND		0.00500	1	07/19/2021 02:50	WG1707442
2,2-Dichloropropane	ND		0.00250	1	07/19/2021 02:50	WG1707442
Di-isopropyl ether	ND		0.00100	1	07/19/2021 02:50	WG1707442
Ethylbenzene	ND		0.00250	1	07/19/2021 02:50	WG1707442
Hexachloro-1,3-butadiene	ND		0.0250	1	07/19/2021 02:50	WG1707442
Isopropylbenzene	ND		0.00250	1	07/19/2021 02:50	WG1707442
p-Isopropyltoluene	ND		0.00500	1	07/19/2021 02:50	WG1707442
2-Butanone (MEK)	ND		0.100	1	07/19/2021 02:50	WG1707442
Methylene Chloride	ND		0.0250	1	07/19/2021 02:50	WG1707442
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	07/19/2021 02:50	WG1707442
Methyl tert-butyl ether	ND		0.00100	1	07/19/2021 02:50	WG1707442
Naphthalene	ND		0.0125	1	07/23/2021 13:01	WG1710558
n-Propylbenzene	ND		0.00500	1	07/19/2021 02:50	WG1707442
Styrene	ND		0.0125	1	07/19/2021 02:50	WG1707442
1,1,1,2-Tetrachloroethane	ND		0.00250	1	07/19/2021 02:50	WG1707442
1,1,2,2-Tetrachloroethane	ND		0.00250	1	07/19/2021 02:50	WG1707442
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	07/19/2021 02:50	WG1707442
Tetrachloroethene	ND		0.00250	1	07/19/2021 02:50	WG1707442
Toluene	ND		0.00500	1	07/19/2021 02:50	WG1707442
1,2,3-Trichlorobenzene	ND	C4	0.0125	1	07/23/2021 13:01	WG1710558
1,2,4-Trichlorobenzene	ND		0.0125	1	07/19/2021 02:50	WG1707442
1,1,1-Trichloroethane	ND		0.00250	1	07/19/2021 02:50	WG1707442
1,1,2-Trichloroethane	ND		0.00250	1	07/19/2021 02:50	WG1707442
Trichloroethene	ND		0.00100	1	07/19/2021 02:50	WG1707442
Trichlorofluoromethane	ND		0.00250	1	07/19/2021 02:50	WG1707442
1,2,3-Trichloropropane	ND		0.0125	1	07/19/2021 02:50	WG1707442
1,2,4-Trimethylbenzene	ND		0.00500	1	07/19/2021 02:50	WG1707442
1,2,3-Trimethylbenzene	ND		0.00500	1	07/19/2021 02:50	WG1707442
1,3,5-Trimethylbenzene	ND		0.00500	1	07/19/2021 02:50	WG1707442
Vinyl chloride	ND		0.00250	1	07/19/2021 02:50	WG1707442
Xylenes, Total	ND		0.00650	1	07/19/2021 02:50	WG1707442
(S) Toluene-d8	102		75.0-131		07/19/2021 02:50	WG1707442
(S) Toluene-d8	116		75.0-131		07/23/2021 13:01	WG1710558
(S) 4-Bromofluorobenzene	97.6		67.0-138		07/19/2021 02:50	WG1707442
(S) 4-Bromofluorobenzene	91.3		67.0-138		07/23/2021 13:01	WG1710558
(S) 1,2-Dichloroethane-d4	95.1		70.0-130		07/19/2021 02:50	WG1707442
(S) 1,2-Dichloroethane-d4	94.5		70.0-130		07/23/2021 13:01	WG1710558

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	07/22/2021 18:09	WG1709670
Acenaphthylene	ND		0.0333	1	07/22/2021 18:09	WG1709670
Anthracene	ND		0.0333	1	07/22/2021 18:09	WG1709670
Benzidine	ND		1.67	1	07/22/2021 18:09	WG1709670
Benzo(a)anthracene	ND		0.0333	1	07/22/2021 18:09	WG1709670
Benzo(b)fluoranthene	ND		0.0333	1	07/22/2021 18:09	WG1709670
Benzo(k)fluoranthene	ND		0.0333	1	07/22/2021 18:09	WG1709670
Benzo(g,h,i)perylene	ND		0.0333	1	07/22/2021 18:09	WG1709670
Benzo(a)pyrene	ND		0.0333	1	07/22/2021 18:09	WG1709670
Bis(2-chlorethoxy)methane	ND		0.333	1	07/22/2021 18:09	WG1709670
Bis(2-chloroethyl)ether	ND		0.333	1	07/22/2021 18:09	WG1709670
2,2-Oxybis(1-Chloropropane)	ND		0.333	1	07/22/2021 18:09	WG1709670
4-Bromophenyl-phenylether	ND		0.333	1	07/22/2021 18:09	WG1709670
2-Chloronaphthalene	ND		0.0333	1	07/22/2021 18:09	WG1709670
4-Chlorophenyl-phenylether	ND		0.333	1	07/22/2021 18:09	WG1709670
Chrysene	ND		0.0333	1	07/22/2021 18:09	WG1709670
Dibenz(a,h)anthracene	ND		0.0333	1	07/22/2021 18:09	WG1709670
1,2-Dichlorobenzene	ND		0.333	1	07/22/2021 18:09	WG1709670
1,3-Dichlorobenzene	ND		0.333	1	07/22/2021 18:09	WG1709670
1,4-Dichlorobenzene	ND		0.333	1	07/22/2021 18:09	WG1709670
3,3-Dichlorobenzidine	ND		0.333	1	07/22/2021 18:09	WG1709670
2,4-Dinitrotoluene	ND		0.333	1	07/22/2021 18:09	WG1709670
2,6-Dinitrotoluene	ND		0.333	1	07/22/2021 18:09	WG1709670
Fluoranthene	ND		0.0333	1	07/22/2021 18:09	WG1709670
Fluorene	ND		0.0333	1	07/22/2021 18:09	WG1709670
Hexachlorobenzene	ND		0.333	1	07/22/2021 18:09	WG1709670
Hexachloro-1,3-butadiene	ND		0.333	1	07/22/2021 18:09	WG1709670
Hexachlorocyclopentadiene	ND		0.333	1	07/22/2021 18:09	WG1709670
Hexachloroethane	ND		0.333	1	07/22/2021 18:09	WG1709670
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	07/22/2021 18:09	WG1709670
Isophorone	ND		0.333	1	07/22/2021 18:09	WG1709670
Naphthalene	ND		0.0333	1	07/22/2021 18:09	WG1709670
Nitrobenzene	ND		0.333	1	07/22/2021 18:09	WG1709670
n-Nitrosodimethylamine	ND		0.333	1	07/22/2021 18:09	WG1709670
n-Nitrosodiphenylamine	ND		0.333	1	07/22/2021 18:09	WG1709670
n-Nitrosodi-n-propylamine	ND		0.333	1	07/22/2021 18:09	WG1709670
Phenanthrene	ND		0.0333	1	07/22/2021 18:09	WG1709670
Benzylbutyl phthalate	ND		0.333	1	07/22/2021 18:09	WG1709670
Bis(2-ethylhexyl)phthalate	ND		0.333	1	07/22/2021 18:09	WG1709670
Di-n-butyl phthalate	ND		0.333	1	07/22/2021 18:09	WG1709670
Diethyl phthalate	ND		0.333	1	07/22/2021 18:09	WG1709670
Dimethyl phthalate	ND		0.333	1	07/22/2021 18:09	WG1709670
Di-n-octyl phthalate	ND		0.333	1	07/22/2021 18:09	WG1709670
Pyrene	ND		0.0333	1	07/22/2021 18:09	WG1709670
1,2,4-Trichlorobenzene	ND		0.333	1	07/22/2021 18:09	WG1709670
4-Chloro-3-methylphenol	ND		0.333	1	07/22/2021 18:09	WG1709670
2-Chlorophenol	ND		0.333	1	07/22/2021 18:09	WG1709670
2,4-Dichlorophenol	ND		0.333	1	07/22/2021 18:09	WG1709670
2,4-Dimethylphenol	ND		0.333	1	07/22/2021 18:09	WG1709670
4,6-Dinitro-2-methylphenol	ND		0.333	1	07/22/2021 18:09	WG1709670
2,4-Dinitrophenol	ND		0.333	1	07/22/2021 18:09	WG1709670
2-Nitrophenol	ND		0.333	1	07/22/2021 18:09	WG1709670
4-Nitrophenol	ND		0.333	1	07/22/2021 18:09	WG1709670
Pentachlorophenol	ND		0.333	1	07/22/2021 18:09	WG1709670
Phenol	ND		0.333	1	07/22/2021 18:09	WG1709670
2,4,6-Trichlorophenol	ND		0.333	1	07/22/2021 18:09	WG1709670

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) 2-Fluorophenol	63.8		12.0-120		07/22/2021 18:09	WG1709670
(S) Phenol-d5	59.0		10.0-120		07/22/2021 18:09	WG1709670
(S) Nitrobenzene-d5	56.9		10.0-122		07/22/2021 18:09	WG1709670
(S) 2-Fluorobiphenyl	65.7		15.0-120		07/22/2021 18:09	WG1709670
(S) 2,4,6-Tribromophenol	64.5		10.0-127		07/22/2021 18:09	WG1709670
(S) p-Terphenyl-d14	58.8		10.0-120		07/22/2021 18:09	WG1709670

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

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.7		1	07/20/2021 15:02	WG1708548

Mercury by Method 7471B

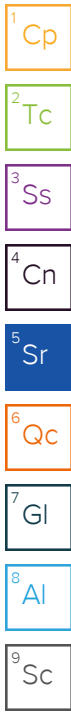
Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0400	1	07/20/2021 11:54	WG1707973

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Aluminum	15700		20.0	1	07/23/2021 02:09	WG1707348
Antimony	ND		2.00	1	07/23/2021 02:09	WG1707348
Arsenic	ND		2.00	1	07/23/2021 02:09	WG1707348
Barium	59.8		0.500	1	07/23/2021 02:09	WG1707348
Beryllium	ND		0.200	1	07/23/2021 02:09	WG1707348
Cadmium	ND		0.500	1	07/23/2021 02:09	WG1707348
Calcium	6760		100	1	07/23/2021 02:09	WG1707348
Chromium	16.5		1.00	1	07/23/2021 02:09	WG1707348
Cobalt	6.78		1.00	1	07/23/2021 02:09	WG1707348
Copper	58.3		2.00	1	07/23/2021 02:09	WG1707348
Iron	19400		10.0	1	07/23/2021 02:09	WG1707348
Lead	1.77		0.500	1	07/23/2021 02:09	WG1707348
Magnesium	3870		100	1	07/23/2021 02:09	WG1707348
Manganese	256		1.00	1	07/23/2021 02:09	WG1707348
Nickel	20.4		2.00	1	07/23/2021 02:09	WG1707348
Potassium	823		100	1	07/23/2021 02:09	WG1707348
Selenium	ND		2.00	1	07/23/2021 02:09	WG1707348
Silver	ND		1.00	1	07/23/2021 02:09	WG1707348
Sodium	935		100	1	07/23/2021 02:09	WG1707348
Thallium	ND		2.00	1	07/23/2021 02:09	WG1707348
Vanadium	41.7		2.00	1	07/23/2021 02:09	WG1707348
Zinc	53.7		5.00	1	07/22/2021 23:54	WG1707348

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0615	1.23	07/19/2021 03:10	WG1707442
Acrylonitrile	ND		0.0154	1.23	07/19/2021 03:10	WG1707442
Benzene	ND		0.00123	1.23	07/19/2021 03:10	WG1707442
Bromobenzene	ND		0.0154	1.23	07/19/2021 03:10	WG1707442
Bromodichloromethane	ND		0.00308	1.23	07/19/2021 03:10	WG1707442
Bromoform	ND		0.0308	1.23	07/19/2021 03:10	WG1707442
Bromomethane	ND		0.0154	1.23	07/19/2021 03:10	WG1707442
n-Butylbenzene	ND		0.0154	1.23	07/19/2021 03:10	WG1707442
sec-Butylbenzene	ND		0.0154	1.23	07/19/2021 03:10	WG1707442
tert-Butylbenzene	ND		0.00615	1.23	07/19/2021 03:10	WG1707442
Carbon tetrachloride	ND		0.00615	1.23	07/19/2021 03:10	WG1707442
Chlorobenzene	ND		0.00308	1.23	07/19/2021 03:10	WG1707442
Chlorodibromomethane	ND		0.00308	1.23	07/19/2021 03:10	WG1707442
Chloroethane	ND		0.00615	1.23	07/19/2021 03:10	WG1707442
Chloroform	ND		0.00308	1.23	07/19/2021 03:10	WG1707442
Chloromethane	ND		0.0154	1.23	07/19/2021 03:10	WG1707442
2-Chlorotoluene	ND	J4	0.00308	1.23	07/19/2021 03:10	WG1707442
4-Chlorotoluene	ND		0.00615	1.23	07/19/2021 03:10	WG1707442



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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	ND		0.0308	1.23	07/19/2021 03:10	WG1707442
1,2-Dibromoethane	ND		0.00308	1.23	07/19/2021 03:10	WG1707442
Dibromomethane	ND		0.00615	1.23	07/19/2021 03:10	WG1707442
1,2-Dichlorobenzene	ND		0.00615	1.23	07/19/2021 03:10	WG1707442
1,3-Dichlorobenzene	ND		0.00615	1.23	07/19/2021 03:10	WG1707442
1,4-Dichlorobenzene	ND		0.00615	1.23	07/19/2021 03:10	WG1707442
Dichlorodifluoromethane	ND		0.00308	1.23	07/19/2021 03:10	WG1707442
1,1-Dichloroethane	ND		0.00308	1.23	07/19/2021 03:10	WG1707442
1,2-Dichloroethane	ND		0.00308	1.23	07/19/2021 03:10	WG1707442
1,1-Dichloroethene	ND		0.00308	1.23	07/19/2021 03:10	WG1707442
cis-1,2-Dichloroethene	ND		0.00308	1.23	07/19/2021 03:10	WG1707442
trans-1,2-Dichloroethene	ND		0.00615	1.23	07/19/2021 03:10	WG1707442
1,2-Dichloropropane	ND		0.00615	1.23	07/19/2021 03:10	WG1707442
1,1-Dichloropropene	ND		0.00308	1.23	07/19/2021 03:10	WG1707442
1,3-Dichloropropane	ND		0.00615	1.23	07/19/2021 03:10	WG1707442
cis-1,3-Dichloropropene	ND		0.00308	1.23	07/19/2021 03:10	WG1707442
trans-1,3-Dichloropropene	ND		0.00615	1.23	07/19/2021 03:10	WG1707442
2,2-Dichloropropane	ND		0.00308	1.23	07/19/2021 03:10	WG1707442
Di-isopropyl ether	ND		0.00123	1.23	07/19/2021 03:10	WG1707442
Ethylbenzene	ND		0.00308	1.23	07/19/2021 03:10	WG1707442
Hexachloro-1,3-butadiene	ND		0.0308	1.23	07/19/2021 03:10	WG1707442
Isopropylbenzene	ND		0.00308	1.23	07/19/2021 03:10	WG1707442
p-Isopropyltoluene	ND		0.00615	1.23	07/19/2021 03:10	WG1707442
2-Butanone (MEK)	ND		0.123	1.23	07/19/2021 03:10	WG1707442
Methylene Chloride	ND		0.0308	1.23	07/19/2021 03:10	WG1707442
4-Methyl-2-pentanone (MIBK)	ND		0.0308	1.23	07/19/2021 03:10	WG1707442
Methyl tert-butyl ether	ND		0.00123	1.23	07/19/2021 03:10	WG1707442
Naphthalene	ND		0.0154	1.23	07/23/2021 13:20	WG1710558
n-Propylbenzene	ND		0.00615	1.23	07/19/2021 03:10	WG1707442
Styrene	ND		0.0154	1.23	07/19/2021 03:10	WG1707442
1,1,1,2-Tetrachloroethane	ND		0.00308	1.23	07/19/2021 03:10	WG1707442
1,1,2,2-Tetrachloroethane	ND		0.00308	1.23	07/19/2021 03:10	WG1707442
1,1,2-Trichlorotrifluoroethane	ND		0.00308	1.23	07/19/2021 03:10	WG1707442
Tetrachloroethene	ND		0.00308	1.23	07/19/2021 03:10	WG1707442
Toluene	ND		0.00615	1.23	07/19/2021 03:10	WG1707442
1,2,3-Trichlorobenzene	ND	C4	0.0154	1.23	07/23/2021 13:20	WG1710558
1,2,4-Trichlorobenzene	ND		0.0154	1.23	07/19/2021 03:10	WG1707442
1,1,1-Trichloroethane	ND		0.00308	1.23	07/19/2021 03:10	WG1707442
1,1,2-Trichloroethane	ND		0.00308	1.23	07/19/2021 03:10	WG1707442
Trichloroethene	ND		0.00123	1.23	07/19/2021 03:10	WG1707442
Trichlorofluoromethane	ND		0.00308	1.23	07/19/2021 03:10	WG1707442
1,2,3-Trichloropropane	ND		0.0154	1.23	07/19/2021 03:10	WG1707442
1,2,4-Trimethylbenzene	ND		0.00615	1.23	07/19/2021 03:10	WG1707442
1,2,3-Trimethylbenzene	ND		0.00615	1.23	07/19/2021 03:10	WG1707442
1,3,5-Trimethylbenzene	ND		0.00615	1.23	07/19/2021 03:10	WG1707442
Vinyl chloride	ND		0.00308	1.23	07/19/2021 03:10	WG1707442
Xylenes, Total	ND		0.00800	1.23	07/19/2021 03:10	WG1707442
(S) Toluene-d8	100		75.0-131		07/19/2021 03:10	WG1707442
(S) Toluene-d8	115		75.0-131		07/23/2021 13:20	WG1710558
(S) 4-Bromofluorobenzene	88.8		67.0-138		07/19/2021 03:10	WG1707442
(S) 4-Bromofluorobenzene	92.0		67.0-138		07/23/2021 13:20	WG1710558
(S) 1,2-Dichloroethane-d4	106		70.0-130		07/19/2021 03:10	WG1707442
(S) 1,2-Dichloroethane-d4	93.1		70.0-130		07/23/2021 13:20	WG1710558

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	07/22/2021 16:42	WG1709670
Acenaphthylene	ND		0.0333	1	07/22/2021 16:42	WG1709670
Anthracene	ND		0.0333	1	07/22/2021 16:42	WG1709670
Benzidine	ND		1.67	1	07/22/2021 16:42	WG1709670
Benzo(a)anthracene	ND		0.0333	1	07/22/2021 16:42	WG1709670
Benzo(b)fluoranthene	ND		0.0333	1	07/22/2021 16:42	WG1709670
Benzo(k)fluoranthene	ND		0.0333	1	07/22/2021 16:42	WG1709670
Benzo(g,h,i)perylene	ND		0.0333	1	07/22/2021 16:42	WG1709670
Benzo(a)pyrene	ND		0.0333	1	07/22/2021 16:42	WG1709670
Bis(2-chloroethoxy)methane	ND		0.333	1	07/22/2021 16:42	WG1709670
Bis(2-chloroethyl)ether	ND		0.333	1	07/22/2021 16:42	WG1709670
2,2-Oxybis(1-Chloropropane)	ND		0.333	1	07/22/2021 16:42	WG1709670
4-Bromophenyl-phenylether	ND		0.333	1	07/22/2021 16:42	WG1709670
2-Chloronaphthalene	ND		0.0333	1	07/22/2021 16:42	WG1709670
4-Chlorophenyl-phenylether	ND		0.333	1	07/22/2021 16:42	WG1709670
Chrysene	ND		0.0333	1	07/22/2021 16:42	WG1709670
Dibenz(a,h)anthracene	ND		0.0333	1	07/22/2021 16:42	WG1709670
1,2-Dichlorobenzene	ND		0.333	1	07/22/2021 16:42	WG1709670
1,3-Dichlorobenzene	ND		0.333	1	07/22/2021 16:42	WG1709670
1,4-Dichlorobenzene	ND		0.333	1	07/22/2021 16:42	WG1709670
3,3-Dichlorobenzidine	ND		0.333	1	07/22/2021 16:42	WG1709670
2,4-Dinitrotoluene	ND		0.333	1	07/22/2021 16:42	WG1709670
2,6-Dinitrotoluene	ND		0.333	1	07/22/2021 16:42	WG1709670
Fluoranthene	ND		0.0333	1	07/22/2021 16:42	WG1709670
Fluorene	ND		0.0333	1	07/22/2021 16:42	WG1709670
Hexachlorobenzene	ND		0.333	1	07/22/2021 16:42	WG1709670
Hexachloro-1,3-butadiene	ND		0.333	1	07/22/2021 16:42	WG1709670
Hexachlorocyclopentadiene	ND		0.333	1	07/22/2021 16:42	WG1709670
Hexachloroethane	ND		0.333	1	07/22/2021 16:42	WG1709670
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	07/22/2021 16:42	WG1709670
Isophorone	ND		0.333	1	07/22/2021 16:42	WG1709670
Naphthalene	ND		0.0333	1	07/22/2021 16:42	WG1709670
Nitrobenzene	ND		0.333	1	07/22/2021 16:42	WG1709670
n-Nitrosodimethylamine	ND		0.333	1	07/22/2021 16:42	WG1709670
n-Nitrosodiphenylamine	ND		0.333	1	07/22/2021 16:42	WG1709670
n-Nitrosodi-n-propylamine	ND		0.333	1	07/22/2021 16:42	WG1709670
Phenanthrene	ND		0.0333	1	07/22/2021 16:42	WG1709670
Benzylbutyl phthalate	ND		0.333	1	07/22/2021 16:42	WG1709670
Bis(2-ethylhexyl)phthalate	ND		0.333	1	07/22/2021 16:42	WG1709670
Di-n-butyl phthalate	ND		0.333	1	07/22/2021 16:42	WG1709670
Diethyl phthalate	ND		0.333	1	07/22/2021 16:42	WG1709670
Dimethyl phthalate	ND		0.333	1	07/22/2021 16:42	WG1709670
Di-n-octyl phthalate	ND		0.333	1	07/22/2021 16:42	WG1709670
Pyrene	ND		0.0333	1	07/22/2021 16:42	WG1709670
1,2,4-Trichlorobenzene	ND		0.333	1	07/22/2021 16:42	WG1709670
4-Chloro-3-methylphenol	ND		0.333	1	07/22/2021 16:42	WG1709670
2-Chlorophenol	ND		0.333	1	07/22/2021 16:42	WG1709670
2,4-Dichlorophenol	ND		0.333	1	07/22/2021 16:42	WG1709670
2,4-Dimethylphenol	ND		0.333	1	07/22/2021 16:42	WG1709670
4,6-Dinitro-2-methylphenol	ND		0.333	1	07/22/2021 16:42	WG1709670
2,4-Dinitrophenol	ND		0.333	1	07/22/2021 16:42	WG1709670
2-Nitrophenol	ND		0.333	1	07/22/2021 16:42	WG1709670
4-Nitrophenol	ND		0.333	1	07/22/2021 16:42	WG1709670
Pentachlorophenol	ND		0.333	1	07/22/2021 16:42	WG1709670
Phenol	ND		0.333	1	07/22/2021 16:42	WG1709670
2,4,6-Trichlorophenol	ND		0.333	1	07/22/2021 16:42	WG1709670

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) 2-Fluorophenol	71.9		12.0-120		07/22/2021 16:42	WG1709670
(S) Phenol-d5	65.7		10.0-120		07/22/2021 16:42	WG1709670
(S) Nitrobenzene-d5	65.7		10.0-122		07/22/2021 16:42	WG1709670
(S) 2-Fluorobiphenyl	70.9		15.0-120		07/22/2021 16:42	WG1709670
(S) 2,4,6-Tribromophenol	70.9		10.0-127		07/22/2021 16:42	WG1709670
(S) p-Terphenyl-d14	64.5		10.0-120		07/22/2021 16:42	WG1709670

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

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.0		1	07/20/2021 15:02	WG1708548

Mercury by Method 7471B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0400	1	07/20/2021 11:56	WG1707973

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Aluminum	12500		20.0	1	07/23/2021 02:11	WG1707348
Antimony	ND		2.00	1	07/23/2021 02:11	WG1707348
Arsenic	2.11		2.00	1	07/23/2021 02:11	WG1707348
Barium	55.7		0.500	1	07/23/2021 02:11	WG1707348
Beryllium	ND		0.200	1	07/23/2021 02:11	WG1707348
Cadmium	ND		0.500	1	07/23/2021 02:11	WG1707348
Calcium	3700		100	1	07/23/2021 02:11	WG1707348
Chromium	21.0		1.00	1	07/23/2021 02:11	WG1707348
Cobalt	7.11		1.00	1	07/23/2021 02:11	WG1707348
Copper	16.0		2.00	1	07/23/2021 02:11	WG1707348
Iron	16500		10.0	1	07/23/2021 02:11	WG1707348
Lead	1.89		0.500	1	07/23/2021 02:11	WG1707348
Magnesium	4580		100	1	07/23/2021 02:11	WG1707348
Manganese	282		1.00	1	07/23/2021 02:11	WG1707348
Nickel	33.7		2.00	1	07/23/2021 02:11	WG1707348
Potassium	826		100	1	07/23/2021 02:11	WG1707348
Selenium	ND		2.00	1	07/23/2021 02:11	WG1707348
Silver	ND		1.00	1	07/23/2021 02:11	WG1707348
Sodium	261		100	1	07/23/2021 02:11	WG1707348
Thallium	ND		2.00	1	07/23/2021 02:11	WG1707348
Vanadium	36.7		2.00	1	07/23/2021 02:11	WG1707348
Zinc	31.6		5.00	1	07/22/2021 23:57	WG1707348

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0530	1.06	07/19/2021 03:29	WG1707442
Acrylonitrile	ND		0.0133	1.06	07/19/2021 03:29	WG1707442
Benzene	ND		0.00106	1.06	07/19/2021 03:29	WG1707442
Bromobenzene	ND		0.0133	1.06	07/19/2021 03:29	WG1707442
Bromodichloromethane	ND		0.00265	1.06	07/19/2021 03:29	WG1707442
Bromoform	ND		0.0265	1.06	07/19/2021 03:29	WG1707442
Bromomethane	ND		0.0133	1.06	07/19/2021 03:29	WG1707442
n-Butylbenzene	ND		0.0133	1.06	07/19/2021 03:29	WG1707442
sec-Butylbenzene	ND		0.0133	1.06	07/19/2021 03:29	WG1707442
tert-Butylbenzene	ND		0.00530	1.06	07/19/2021 03:29	WG1707442
Carbon tetrachloride	ND		0.00530	1.06	07/19/2021 03:29	WG1707442
Chlorobenzene	ND		0.00265	1.06	07/19/2021 03:29	WG1707442
Chlorodibromomethane	ND		0.00265	1.06	07/19/2021 03:29	WG1707442
Chloroethane	ND		0.00530	1.06	07/19/2021 03:29	WG1707442
Chloroform	ND		0.00265	1.06	07/19/2021 03:29	WG1707442
Chloromethane	ND		0.0133	1.06	07/19/2021 03:29	WG1707442
2-Chlorotoluene	ND	J4	0.00265	1.06	07/19/2021 03:29	WG1707442
4-Chlorotoluene	ND		0.00530	1.06	07/19/2021 03:29	WG1707442



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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	ND		0.0265	1.06	07/19/2021 03:29	WG1707442
1,2-Dibromoethane	ND		0.00265	1.06	07/19/2021 03:29	WG1707442
Dibromomethane	ND		0.00530	1.06	07/19/2021 03:29	WG1707442
1,2-Dichlorobenzene	ND		0.00530	1.06	07/19/2021 03:29	WG1707442
1,3-Dichlorobenzene	ND		0.00530	1.06	07/19/2021 03:29	WG1707442
1,4-Dichlorobenzene	ND		0.00530	1.06	07/19/2021 03:29	WG1707442
Dichlorodifluoromethane	ND		0.00265	1.06	07/19/2021 03:29	WG1707442
1,1-Dichloroethane	ND		0.00265	1.06	07/19/2021 03:29	WG1707442
1,2-Dichloroethane	ND		0.00265	1.06	07/19/2021 03:29	WG1707442
1,1-Dichloroethene	ND		0.00265	1.06	07/19/2021 03:29	WG1707442
cis-1,2-Dichloroethene	ND		0.00265	1.06	07/19/2021 03:29	WG1707442
trans-1,2-Dichloroethene	ND		0.00530	1.06	07/19/2021 03:29	WG1707442
1,2-Dichloropropane	ND		0.00530	1.06	07/19/2021 03:29	WG1707442
1,1-Dichloropropene	ND		0.00265	1.06	07/19/2021 03:29	WG1707442
1,3-Dichloropropane	ND		0.00530	1.06	07/19/2021 03:29	WG1707442
cis-1,3-Dichloropropene	ND		0.00265	1.06	07/19/2021 03:29	WG1707442
trans-1,3-Dichloropropene	ND		0.00530	1.06	07/19/2021 03:29	WG1707442
2,2-Dichloropropane	ND		0.00265	1.06	07/19/2021 03:29	WG1707442
Di-isopropyl ether	ND		0.00106	1.06	07/19/2021 03:29	WG1707442
Ethylbenzene	ND		0.00265	1.06	07/19/2021 03:29	WG1707442
Hexachloro-1,3-butadiene	ND		0.0265	1.06	07/19/2021 03:29	WG1707442
Isopropylbenzene	ND		0.00265	1.06	07/19/2021 03:29	WG1707442
p-Isopropyltoluene	ND		0.00530	1.06	07/19/2021 03:29	WG1707442
2-Butanone (MEK)	0.112		0.106	1.06	07/19/2021 03:29	WG1707442
Methylene Chloride	ND		0.0265	1.06	07/19/2021 03:29	WG1707442
4-Methyl-2-pentanone (MIBK)	ND		0.0265	1.06	07/19/2021 03:29	WG1707442
Methyl tert-butyl ether	ND		0.00106	1.06	07/19/2021 03:29	WG1707442
Naphthalene	ND		0.0133	1.06	07/23/2021 13:39	WG1710558
n-Propylbenzene	ND		0.00530	1.06	07/19/2021 03:29	WG1707442
Styrene	ND		0.0133	1.06	07/19/2021 03:29	WG1707442
1,1,1,2-Tetrachloroethane	ND		0.00265	1.06	07/19/2021 03:29	WG1707442
1,1,2,2-Tetrachloroethane	ND		0.00265	1.06	07/19/2021 03:29	WG1707442
1,1,2-Trichlorotrifluoroethane	ND		0.00265	1.06	07/19/2021 03:29	WG1707442
Tetrachloroethene	ND		0.00265	1.06	07/19/2021 03:29	WG1707442
Toluene	ND		0.00530	1.06	07/19/2021 03:29	WG1707442
1,2,3-Trichlorobenzene	ND	C4	0.0133	1.06	07/23/2021 13:39	WG1710558
1,2,4-Trichlorobenzene	ND		0.0133	1.06	07/19/2021 03:29	WG1707442
1,1,1-Trichloroethane	ND		0.00265	1.06	07/19/2021 03:29	WG1707442
1,1,2-Trichloroethane	ND		0.00265	1.06	07/19/2021 03:29	WG1707442
Trichloroethene	ND		0.00106	1.06	07/19/2021 03:29	WG1707442
Trichlorofluoromethane	ND		0.00265	1.06	07/19/2021 03:29	WG1707442
1,2,3-Trichloropropane	ND		0.0133	1.06	07/19/2021 03:29	WG1707442
1,2,4-Trimethylbenzene	ND		0.00530	1.06	07/19/2021 03:29	WG1707442
1,2,3-Trimethylbenzene	ND		0.00530	1.06	07/19/2021 03:29	WG1707442
1,3,5-Trimethylbenzene	ND		0.00530	1.06	07/19/2021 03:29	WG1707442
Vinyl chloride	ND		0.00265	1.06	07/19/2021 03:29	WG1707442
Xylenes, Total	ND		0.00689	1.06	07/19/2021 03:29	WG1707442
(S) Toluene-d8	103		75.0-131		07/19/2021 03:29	WG1707442
(S) Toluene-d8	115		75.0-131		07/23/2021 13:39	WG1710558
(S) 4-Bromofluorobenzene	96.5		67.0-138		07/19/2021 03:29	WG1707442
(S) 4-Bromofluorobenzene	92.4		67.0-138		07/23/2021 13:39	WG1710558
(S) 1,2-Dichloroethane-d4	116		70.0-130		07/19/2021 03:29	WG1707442
(S) 1,2-Dichloroethane-d4	91.4		70.0-130		07/23/2021 13:39	WG1710558

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	07/22/2021 15:59	WG1709670
Acenaphthylene	ND		0.0333	1	07/22/2021 15:59	WG1709670
Anthracene	ND		0.0333	1	07/22/2021 15:59	WG1709670
Benzidine	ND		1.67	1	07/22/2021 15:59	WG1709670
Benzo(a)anthracene	ND		0.0333	1	07/22/2021 15:59	WG1709670
Benzo(b)fluoranthene	ND		0.0333	1	07/22/2021 15:59	WG1709670
Benzo(k)fluoranthene	ND		0.0333	1	07/22/2021 15:59	WG1709670
Benzo(g,h,i)perylene	ND		0.0333	1	07/22/2021 15:59	WG1709670
Benzo(a)pyrene	ND		0.0333	1	07/22/2021 15:59	WG1709670
Bis(2-chlorethoxy)methane	ND		0.333	1	07/22/2021 15:59	WG1709670
Bis(2-chloroethyl)ether	ND		0.333	1	07/22/2021 15:59	WG1709670
2,2-Oxybis(1-Chloropropane)	ND		0.333	1	07/22/2021 15:59	WG1709670
4-Bromophenyl-phenylether	ND		0.333	1	07/22/2021 15:59	WG1709670
2-Chloronaphthalene	ND		0.0333	1	07/22/2021 15:59	WG1709670
4-Chlorophenyl-phenylether	ND		0.333	1	07/22/2021 15:59	WG1709670
Chrysene	ND		0.0333	1	07/22/2021 15:59	WG1709670
Dibenz(a,h)anthracene	ND		0.0333	1	07/22/2021 15:59	WG1709670
1,2-Dichlorobenzene	ND		0.333	1	07/22/2021 15:59	WG1709670
1,3-Dichlorobenzene	ND		0.333	1	07/22/2021 15:59	WG1709670
1,4-Dichlorobenzene	ND		0.333	1	07/22/2021 15:59	WG1709670
3,3-Dichlorobenzidine	ND		0.333	1	07/22/2021 15:59	WG1709670
2,4-Dinitrotoluene	ND		0.333	1	07/22/2021 15:59	WG1709670
2,6-Dinitrotoluene	ND		0.333	1	07/22/2021 15:59	WG1709670
Fluoranthene	ND		0.0333	1	07/22/2021 15:59	WG1709670
Fluorene	ND		0.0333	1	07/22/2021 15:59	WG1709670
Hexachlorobenzene	ND		0.333	1	07/22/2021 15:59	WG1709670
Hexachloro-1,3-butadiene	ND		0.333	1	07/22/2021 15:59	WG1709670
Hexachlorocyclopentadiene	ND		0.333	1	07/22/2021 15:59	WG1709670
Hexachloroethane	ND		0.333	1	07/22/2021 15:59	WG1709670
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	07/22/2021 15:59	WG1709670
Isophorone	ND		0.333	1	07/22/2021 15:59	WG1709670
Naphthalene	ND		0.0333	1	07/22/2021 15:59	WG1709670
Nitrobenzene	ND		0.333	1	07/22/2021 15:59	WG1709670
n-Nitrosodimethylamine	ND		0.333	1	07/22/2021 15:59	WG1709670
n-Nitrosodiphenylamine	ND		0.333	1	07/22/2021 15:59	WG1709670
n-Nitrosodi-n-propylamine	ND		0.333	1	07/22/2021 15:59	WG1709670
Phenanthrene	ND		0.0333	1	07/22/2021 15:59	WG1709670
Benzylbutyl phthalate	ND		0.333	1	07/22/2021 15:59	WG1709670
Bis(2-ethylhexyl)phthalate	ND		0.333	1	07/22/2021 15:59	WG1709670
Di-n-butyl phthalate	ND		0.333	1	07/22/2021 15:59	WG1709670
Diethyl phthalate	ND		0.333	1	07/22/2021 15:59	WG1709670
Dimethyl phthalate	ND		0.333	1	07/22/2021 15:59	WG1709670
Di-n-octyl phthalate	ND		0.333	1	07/22/2021 15:59	WG1709670
Pyrene	ND		0.0333	1	07/22/2021 15:59	WG1709670
1,2,4-Trichlorobenzene	ND		0.333	1	07/22/2021 15:59	WG1709670
4-Chloro-3-methylphenol	ND		0.333	1	07/22/2021 15:59	WG1709670
2-Chlorophenol	ND		0.333	1	07/22/2021 15:59	WG1709670
2,4-Dichlorophenol	ND		0.333	1	07/22/2021 15:59	WG1709670
2,4-Dimethylphenol	ND		0.333	1	07/22/2021 15:59	WG1709670
4,6-Dinitro-2-methylphenol	ND		0.333	1	07/22/2021 15:59	WG1709670
2,4-Dinitrophenol	ND		0.333	1	07/22/2021 15:59	WG1709670
2-Nitrophenol	ND		0.333	1	07/22/2021 15:59	WG1709670
4-Nitrophenol	ND		0.333	1	07/22/2021 15:59	WG1709670
Pentachlorophenol	ND		0.333	1	07/22/2021 15:59	WG1709670
Phenol	ND		0.333	1	07/22/2021 15:59	WG1709670
2,4,6-Trichlorophenol	ND		0.333	1	07/22/2021 15:59	WG1709670

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) 2-Fluorophenol	63.7		12.0-120		07/22/2021 15:59	WG1709670
(S) Phenol-d5	58.9		10.0-120		07/22/2021 15:59	WG1709670
(S) Nitrobenzene-d5	56.5		10.0-122		07/22/2021 15:59	WG1709670
(S) 2-Fluorobiphenyl	65.2		15.0-120		07/22/2021 15:59	WG1709670
(S) 2,4,6-Tribromophenol	61.9		10.0-127		07/22/2021 15:59	WG1709670
(S) p-Terphenyl-d14	59.2		10.0-120		07/22/2021 15:59	WG1709670

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

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.6		1	07/20/2021 17:18	WG1708552

Mercury by Method 7471B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0400	1	07/20/2021 12:04	WG1707973

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Aluminum	10400		20.0	1	07/23/2021 02:14	WG1707348
Antimony	ND		2.00	1	07/23/2021 02:14	WG1707348
Arsenic	2.37		2.00	1	07/23/2021 02:14	WG1707348
Barium	48.2		0.500	1	07/23/2021 02:14	WG1707348
Beryllium	ND		0.200	1	07/23/2021 02:14	WG1707348
Cadmium	ND		0.500	1	07/23/2021 02:14	WG1707348
Calcium	5550		100	1	07/23/2021 02:14	WG1707348
Chromium	68.9		1.00	1	07/23/2021 02:14	WG1707348
Cobalt	7.13		1.00	1	07/23/2021 02:14	WG1707348
Copper	35.1		2.00	1	07/23/2021 02:14	WG1707348
Iron	29100		10.0	1	07/23/2021 02:14	WG1707348
Lead	1.38		0.500	1	07/23/2021 02:14	WG1707348
Magnesium	3590		100	1	07/23/2021 02:14	WG1707348
Manganese	266		1.00	1	07/23/2021 02:14	WG1707348
Nickel	17.7		2.00	1	07/23/2021 02:14	WG1707348
Potassium	643		100	1	07/23/2021 02:14	WG1707348
Selenium	ND		2.00	1	07/23/2021 02:14	WG1707348
Silver	ND		1.00	1	07/23/2021 02:14	WG1707348
Sodium	838		100	1	07/23/2021 02:14	WG1707348
Thallium	ND		2.00	1	07/23/2021 02:14	WG1707348
Vanadium	80.4		2.00	1	07/23/2021 02:14	WG1707348
Zinc	34.3		5.00	1	07/22/2021 23:59	WG1707348

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0555	1.11	07/19/2021 03:48	WG1707442
Acrylonitrile	ND		0.0139	1.11	07/19/2021 03:48	WG1707442
Benzene	ND		0.00111	1.11	07/19/2021 03:48	WG1707442
Bromobenzene	ND		0.0139	1.11	07/19/2021 03:48	WG1707442
Bromodichloromethane	ND		0.00278	1.11	07/19/2021 03:48	WG1707442
Bromoform	ND		0.0278	1.11	07/19/2021 03:48	WG1707442
Bromomethane	ND		0.0139	1.11	07/19/2021 03:48	WG1707442
n-Butylbenzene	ND		0.0139	1.11	07/19/2021 03:48	WG1707442
sec-Butylbenzene	ND		0.0139	1.11	07/19/2021 03:48	WG1707442
tert-Butylbenzene	ND		0.00555	1.11	07/19/2021 03:48	WG1707442
Carbon tetrachloride	ND		0.00555	1.11	07/19/2021 03:48	WG1707442
Chlorobenzene	ND		0.00278	1.11	07/19/2021 03:48	WG1707442
Chlorodibromomethane	ND		0.00278	1.11	07/19/2021 03:48	WG1707442
Chloroethane	ND		0.00555	1.11	07/19/2021 03:48	WG1707442
Chloroform	ND		0.00278	1.11	07/19/2021 03:48	WG1707442
Chloromethane	ND		0.0139	1.11	07/19/2021 03:48	WG1707442
2-Chlorotoluene	ND	J4	0.00278	1.11	07/19/2021 03:48	WG1707442
4-Chlorotoluene	ND		0.00555	1.11	07/19/2021 03:48	WG1707442

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 mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	ND		0.0278	1.11	07/19/2021 03:48	WG1707442
1,2-Dibromoethane	ND		0.00278	1.11	07/19/2021 03:48	WG1707442
Dibromomethane	ND		0.00555	1.11	07/19/2021 03:48	WG1707442
1,2-Dichlorobenzene	ND		0.00555	1.11	07/19/2021 03:48	WG1707442
1,3-Dichlorobenzene	ND		0.00555	1.11	07/19/2021 03:48	WG1707442
1,4-Dichlorobenzene	ND		0.00555	1.11	07/19/2021 03:48	WG1707442
Dichlorodifluoromethane	ND		0.00278	1.11	07/19/2021 03:48	WG1707442
1,1-Dichloroethane	ND		0.00278	1.11	07/19/2021 03:48	WG1707442
1,2-Dichloroethane	ND		0.00278	1.11	07/19/2021 03:48	WG1707442
1,1-Dichloroethene	ND		0.00278	1.11	07/19/2021 03:48	WG1707442
cis-1,2-Dichloroethene	ND		0.00278	1.11	07/19/2021 03:48	WG1707442
trans-1,2-Dichloroethene	ND		0.00555	1.11	07/19/2021 03:48	WG1707442
1,2-Dichloropropane	ND		0.00555	1.11	07/19/2021 03:48	WG1707442
1,1-Dichloropropene	ND		0.00278	1.11	07/19/2021 03:48	WG1707442
1,3-Dichloropropane	ND		0.00555	1.11	07/19/2021 03:48	WG1707442
cis-1,3-Dichloropropene	ND		0.00278	1.11	07/19/2021 03:48	WG1707442
trans-1,3-Dichloropropene	ND		0.00555	1.11	07/19/2021 03:48	WG1707442
2,2-Dichloropropane	ND		0.00278	1.11	07/19/2021 03:48	WG1707442
Di-isopropyl ether	ND		0.00111	1.11	07/19/2021 03:48	WG1707442
Ethylbenzene	ND		0.00278	1.11	07/19/2021 03:48	WG1707442
Hexachloro-1,3-butadiene	ND		0.0278	1.11	07/19/2021 03:48	WG1707442
Isopropylbenzene	ND		0.00278	1.11	07/19/2021 03:48	WG1707442
p-Isopropyltoluene	ND		0.00555	1.11	07/19/2021 03:48	WG1707442
2-Butanone (MEK)	0.129		0.111	1.11	07/19/2021 03:48	WG1707442
Methylene Chloride	ND		0.0278	1.11	07/19/2021 03:48	WG1707442
4-Methyl-2-pentanone (MIBK)	ND		0.0278	1.11	07/19/2021 03:48	WG1707442
Methyl tert-butyl ether	ND		0.00111	1.11	07/19/2021 03:48	WG1707442
Naphthalene	ND		0.0139	1.11	07/23/2021 13:58	WG1710558
n-Propylbenzene	ND		0.00555	1.11	07/19/2021 03:48	WG1707442
Styrene	ND		0.0139	1.11	07/19/2021 03:48	WG1707442
1,1,1,2-Tetrachloroethane	ND		0.00278	1.11	07/19/2021 03:48	WG1707442
1,1,2,2-Tetrachloroethane	ND		0.00278	1.11	07/19/2021 03:48	WG1707442
1,1,2-Trichlorotrifluoroethane	ND		0.00278	1.11	07/19/2021 03:48	WG1707442
Tetrachloroethene	ND		0.00278	1.11	07/19/2021 03:48	WG1707442
Toluene	ND		0.00555	1.11	07/19/2021 03:48	WG1707442
1,2,3-Trichlorobenzene	ND	C4	0.0139	1.11	07/23/2021 13:58	WG1710558
1,2,4-Trichlorobenzene	ND		0.0139	1.11	07/19/2021 03:48	WG1707442
1,1,1-Trichloroethane	ND		0.00278	1.11	07/19/2021 03:48	WG1707442
1,1,2-Trichloroethane	ND		0.00278	1.11	07/19/2021 03:48	WG1707442
Trichloroethene	ND		0.00111	1.11	07/19/2021 03:48	WG1707442
Trichlorofluoromethane	ND		0.00278	1.11	07/19/2021 03:48	WG1707442
1,2,3-Trichloropropane	ND		0.0139	1.11	07/19/2021 03:48	WG1707442
1,2,4-Trimethylbenzene	ND		0.00555	1.11	07/19/2021 03:48	WG1707442
1,2,3-Trimethylbenzene	ND		0.00555	1.11	07/19/2021 03:48	WG1707442
1,3,5-Trimethylbenzene	ND		0.00555	1.11	07/19/2021 03:48	WG1707442
Vinyl chloride	ND		0.00278	1.11	07/19/2021 03:48	WG1707442
Xylenes, Total	ND		0.00722	1.11	07/19/2021 03:48	WG1707442
(S) Toluene-d8	106		75.0-131		07/19/2021 03:48	WG1707442
(S) Toluene-d8	114		75.0-131		07/23/2021 13:58	WG1710558
(S) 4-Bromofluorobenzene	90.6		67.0-138		07/19/2021 03:48	WG1707442
(S) 4-Bromofluorobenzene	90.9		67.0-138		07/23/2021 13:58	WG1710558
(S) 1,2-Dichloroethane-d4	104		70.0-130		07/19/2021 03:48	WG1707442
(S) 1,2-Dichloroethane-d4	95.0		70.0-130		07/23/2021 13:58	WG1710558

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	07/22/2021 16:21	WG1709670
Acenaphthylene	ND		0.0333	1	07/22/2021 16:21	WG1709670
Anthracene	ND		0.0333	1	07/22/2021 16:21	WG1709670
Benzidine	ND		1.67	1	07/22/2021 16:21	WG1709670
Benzo(a)anthracene	ND		0.0333	1	07/22/2021 16:21	WG1709670
Benzo(b)fluoranthene	ND		0.0333	1	07/22/2021 16:21	WG1709670
Benzo(k)fluoranthene	ND		0.0333	1	07/22/2021 16:21	WG1709670
Benzo(g,h,i)perylene	ND		0.0333	1	07/22/2021 16:21	WG1709670
Benzo(a)pyrene	ND		0.0333	1	07/22/2021 16:21	WG1709670
Bis(2-chlorethoxy)methane	ND		0.333	1	07/22/2021 16:21	WG1709670
Bis(2-chloroethyl)ether	ND		0.333	1	07/22/2021 16:21	WG1709670
2,2-Oxybis(1-Chloropropane)	ND		0.333	1	07/22/2021 16:21	WG1709670
4-Bromophenyl-phenylether	ND		0.333	1	07/22/2021 16:21	WG1709670
2-Chloronaphthalene	ND		0.0333	1	07/22/2021 16:21	WG1709670
4-Chlorophenyl-phenylether	ND		0.333	1	07/22/2021 16:21	WG1709670
Chrysene	ND		0.0333	1	07/22/2021 16:21	WG1709670
Dibenz(a,h)anthracene	ND		0.0333	1	07/22/2021 16:21	WG1709670
1,2-Dichlorobenzene	ND		0.333	1	07/22/2021 16:21	WG1709670
1,3-Dichlorobenzene	ND		0.333	1	07/22/2021 16:21	WG1709670
1,4-Dichlorobenzene	ND		0.333	1	07/22/2021 16:21	WG1709670
3,3-Dichlorobenzidine	ND		0.333	1	07/22/2021 16:21	WG1709670
2,4-Dinitrotoluene	ND		0.333	1	07/22/2021 16:21	WG1709670
2,6-Dinitrotoluene	ND		0.333	1	07/22/2021 16:21	WG1709670
Fluoranthene	ND		0.0333	1	07/22/2021 16:21	WG1709670
Fluorene	ND		0.0333	1	07/22/2021 16:21	WG1709670
Hexachlorobenzene	ND		0.333	1	07/22/2021 16:21	WG1709670
Hexachloro-1,3-butadiene	ND		0.333	1	07/22/2021 16:21	WG1709670
Hexachlorocyclopentadiene	ND		0.333	1	07/22/2021 16:21	WG1709670
Hexachloroethane	ND		0.333	1	07/22/2021 16:21	WG1709670
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	07/22/2021 16:21	WG1709670
Isophorone	ND		0.333	1	07/22/2021 16:21	WG1709670
Naphthalene	ND		0.0333	1	07/22/2021 16:21	WG1709670
Nitrobenzene	ND		0.333	1	07/22/2021 16:21	WG1709670
n-Nitrosodimethylamine	ND		0.333	1	07/22/2021 16:21	WG1709670
n-Nitrosodiphenylamine	ND		0.333	1	07/22/2021 16:21	WG1709670
n-Nitrosodi-n-propylamine	ND		0.333	1	07/22/2021 16:21	WG1709670
Phenanthrene	ND		0.0333	1	07/22/2021 16:21	WG1709670
Benzylbutyl phtalate	ND		0.333	1	07/22/2021 16:21	WG1709670
Bis(2-ethylhexyl)phtalate	ND		0.333	1	07/22/2021 16:21	WG1709670
Di-n-butyl phtalate	ND		0.333	1	07/22/2021 16:21	WG1709670
Diethyl phtalate	ND		0.333	1	07/22/2021 16:21	WG1709670
Dimethyl phtalate	ND		0.333	1	07/22/2021 16:21	WG1709670
Di-n-octyl phtalate	ND		0.333	1	07/22/2021 16:21	WG1709670
Pyrene	ND		0.0333	1	07/22/2021 16:21	WG1709670
1,2,4-Trichlorobenzene	ND		0.333	1	07/22/2021 16:21	WG1709670
4-Chloro-3-methylphenol	ND		0.333	1	07/22/2021 16:21	WG1709670
2-Chlorophenol	ND		0.333	1	07/22/2021 16:21	WG1709670
2,4-Dichlorophenol	ND		0.333	1	07/22/2021 16:21	WG1709670
2,4-Dimethylphenol	ND		0.333	1	07/22/2021 16:21	WG1709670
4,6-Dinitro-2-methylphenol	ND		0.333	1	07/22/2021 16:21	WG1709670
2,4-Dinitrophenol	ND		0.333	1	07/22/2021 16:21	WG1709670
2-Nitrophenol	ND		0.333	1	07/22/2021 16:21	WG1709670
4-Nitrophenol	ND		0.333	1	07/22/2021 16:21	WG1709670
Pentachlorophenol	ND		0.333	1	07/22/2021 16:21	WG1709670
Phenol	ND		0.333	1	07/22/2021 16:21	WG1709670
2,4,6-Trichlorophenol	ND		0.333	1	07/22/2021 16:21	WG1709670

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) 2-Fluorophenol	60.4		12.0-120		07/22/2021 16:21	WG1709670
(S) Phenol-d5	56.2		10.0-120		07/22/2021 16:21	WG1709670
(S) Nitrobenzene-d5	55.0		10.0-122		07/22/2021 16:21	WG1709670
(S) 2-Fluorobiphenyl	62.5		15.0-120		07/22/2021 16:21	WG1709670
(S) 2,4,6-Tribromophenol	59.2		10.0-127		07/22/2021 16:21	WG1709670
(S) p-Terphenyl-d14	57.4		10.0-120		07/22/2021 16:21	WG1709670

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

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.4		1	07/20/2021 17:18	WG1708552

Mercury by Method 7471B

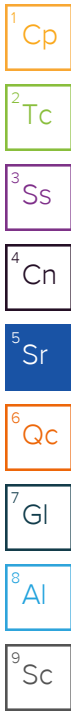
Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0400	1	07/20/2021 12:06	WG1707973

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Aluminum	17000		20.0	1	07/23/2021 02:17	WG1707348
Antimony	ND		2.00	1	07/23/2021 02:17	WG1707348
Arsenic	ND		2.00	1	07/23/2021 02:17	WG1707348
Barium	72.5		0.500	1	07/23/2021 02:17	WG1707348
Beryllium	ND		0.200	1	07/23/2021 02:17	WG1707348
Cadmium	ND		0.500	1	07/23/2021 02:17	WG1707348
Calcium	6210		100	1	07/23/2021 02:17	WG1707348
Chromium	18.2		1.00	1	07/23/2021 02:17	WG1707348
Cobalt	7.95		1.00	1	07/23/2021 02:17	WG1707348
Copper	23.9		2.00	1	07/23/2021 02:17	WG1707348
Iron	23700		10.0	1	07/23/2021 02:17	WG1707348
Lead	2.90		0.500	1	07/23/2021 02:17	WG1707348
Magnesium	5350		100	1	07/23/2021 02:17	WG1707348
Manganese	322		1.00	1	07/23/2021 02:17	WG1707348
Nickel	17.5		2.00	1	07/23/2021 02:17	WG1707348
Potassium	930		100	1	07/23/2021 02:17	WG1707348
Selenium	ND		2.00	1	07/23/2021 02:17	WG1707348
Silver	ND		1.00	1	07/23/2021 02:17	WG1707348
Sodium	825		100	1	07/23/2021 02:17	WG1707348
Thallium	ND		2.00	1	07/23/2021 02:17	WG1707348
Vanadium	53.5		2.00	1	07/23/2021 02:17	WG1707348
Zinc	38.4		5.00	1	07/23/2021 00:02	WG1707348

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0670	1.34	07/19/2021 04:07	WG1707442
Acrylonitrile	ND		0.0168	1.34	07/19/2021 04:07	WG1707442
Benzene	ND		0.00134	1.34	07/19/2021 04:07	WG1707442
Bromobenzene	ND		0.0168	1.34	07/19/2021 04:07	WG1707442
Bromodichloromethane	ND		0.00335	1.34	07/19/2021 04:07	WG1707442
Bromoform	ND		0.0335	1.34	07/19/2021 04:07	WG1707442
Bromomethane	ND		0.0168	1.34	07/19/2021 04:07	WG1707442
n-Butylbenzene	ND		0.0168	1.34	07/19/2021 04:07	WG1707442
sec-Butylbenzene	ND		0.0168	1.34	07/19/2021 04:07	WG1707442
tert-Butylbenzene	ND		0.00670	1.34	07/19/2021 04:07	WG1707442
Carbon tetrachloride	ND		0.00670	1.34	07/19/2021 04:07	WG1707442
Chlorobenzene	ND		0.00335	1.34	07/19/2021 04:07	WG1707442
Chlorodibromomethane	ND		0.00335	1.34	07/19/2021 04:07	WG1707442
Chloroethane	ND		0.00670	1.34	07/19/2021 04:07	WG1707442
Chloroform	ND		0.00335	1.34	07/19/2021 04:07	WG1707442
Chloromethane	ND		0.0168	1.34	07/19/2021 04:07	WG1707442
2-Chlorotoluene	ND	J4	0.00335	1.34	07/19/2021 04:07	WG1707442
4-Chlorotoluene	ND		0.00670	1.34	07/19/2021 04:07	WG1707442



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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	ND		0.0335	1.34	07/19/2021 04:07	WG1707442
1,2-Dibromoethane	ND		0.00335	1.34	07/19/2021 04:07	WG1707442
Dibromomethane	ND		0.00670	1.34	07/19/2021 04:07	WG1707442
1,2-Dichlorobenzene	ND		0.00670	1.34	07/19/2021 04:07	WG1707442
1,3-Dichlorobenzene	ND		0.00670	1.34	07/19/2021 04:07	WG1707442
1,4-Dichlorobenzene	ND		0.00670	1.34	07/19/2021 04:07	WG1707442
Dichlorodifluoromethane	ND		0.00335	1.34	07/19/2021 04:07	WG1707442
1,1-Dichloroethane	ND		0.00335	1.34	07/19/2021 04:07	WG1707442
1,2-Dichloroethane	ND		0.00335	1.34	07/19/2021 04:07	WG1707442
1,1-Dichloroethene	ND		0.00335	1.34	07/19/2021 04:07	WG1707442
cis-1,2-Dichloroethene	ND		0.00335	1.34	07/19/2021 04:07	WG1707442
trans-1,2-Dichloroethene	ND		0.00670	1.34	07/19/2021 04:07	WG1707442
1,2-Dichloropropane	ND		0.00670	1.34	07/19/2021 04:07	WG1707442
1,1-Dichloropropene	ND		0.00335	1.34	07/19/2021 04:07	WG1707442
1,3-Dichloropropane	ND		0.00670	1.34	07/19/2021 04:07	WG1707442
cis-1,3-Dichloropropene	ND		0.00335	1.34	07/19/2021 04:07	WG1707442
trans-1,3-Dichloropropene	ND		0.00670	1.34	07/19/2021 04:07	WG1707442
2,2-Dichloropropane	ND		0.00335	1.34	07/19/2021 04:07	WG1707442
Di-isopropyl ether	ND		0.00134	1.34	07/19/2021 04:07	WG1707442
Ethylbenzene	ND		0.00335	1.34	07/19/2021 04:07	WG1707442
Hexachloro-1,3-butadiene	ND		0.0335	1.34	07/19/2021 04:07	WG1707442
Isopropylbenzene	ND		0.00335	1.34	07/19/2021 04:07	WG1707442
p-Isopropyltoluene	ND		0.00670	1.34	07/19/2021 04:07	WG1707442
2-Butanone (MEK)	ND		0.134	1.34	07/19/2021 04:07	WG1707442
Methylene Chloride	ND		0.0335	1.34	07/19/2021 04:07	WG1707442
4-Methyl-2-pentanone (MIBK)	ND		0.0335	1.34	07/19/2021 04:07	WG1707442
Methyl tert-butyl ether	ND		0.00134	1.34	07/19/2021 04:07	WG1707442
Naphthalene	ND		0.0168	1.34	07/23/2021 14:17	WG1710558
n-Propylbenzene	ND		0.00670	1.34	07/19/2021 04:07	WG1707442
Styrene	ND		0.0168	1.34	07/19/2021 04:07	WG1707442
1,1,1,2-Tetrachloroethane	ND		0.00335	1.34	07/19/2021 04:07	WG1707442
1,1,2,2-Tetrachloroethane	ND		0.00335	1.34	07/19/2021 04:07	WG1707442
1,1,2-Trichlorotrifluoroethane	ND		0.00335	1.34	07/19/2021 04:07	WG1707442
Tetrachloroethene	ND		0.00335	1.34	07/19/2021 04:07	WG1707442
Toluene	ND		0.00670	1.34	07/19/2021 04:07	WG1707442
1,2,3-Trichlorobenzene	ND	C4	0.0168	1.34	07/23/2021 14:17	WG1710558
1,2,4-Trichlorobenzene	ND		0.0168	1.34	07/19/2021 04:07	WG1707442
1,1,1-Trichloroethane	ND		0.00335	1.34	07/19/2021 04:07	WG1707442
1,1,2-Trichloroethane	ND		0.00335	1.34	07/19/2021 04:07	WG1707442
Trichloroethene	ND		0.00134	1.34	07/19/2021 04:07	WG1707442
Trichlorofluoromethane	ND		0.00335	1.34	07/19/2021 04:07	WG1707442
1,2,3-Trichloropropane	ND		0.0168	1.34	07/19/2021 04:07	WG1707442
1,2,4-Trimethylbenzene	ND		0.00670	1.34	07/19/2021 04:07	WG1707442
1,2,3-Trimethylbenzene	ND		0.00670	1.34	07/19/2021 04:07	WG1707442
1,3,5-Trimethylbenzene	ND		0.00670	1.34	07/19/2021 04:07	WG1707442
Vinyl chloride	ND		0.00335	1.34	07/19/2021 04:07	WG1707442
Xylenes, Total	ND		0.00871	1.34	07/19/2021 04:07	WG1707442
(S) Toluene-d8	104		75.0-131		07/19/2021 04:07	WG1707442
(S) Toluene-d8	114		75.0-131		07/23/2021 14:17	WG1710558
(S) 4-Bromofluorobenzene	97.5		67.0-138		07/19/2021 04:07	WG1707442
(S) 4-Bromofluorobenzene	91.4		67.0-138		07/23/2021 14:17	WG1710558
(S) 1,2-Dichloroethane-d4	107		70.0-130		07/19/2021 04:07	WG1707442
(S) 1,2-Dichloroethane-d4	89.4		70.0-130		07/23/2021 14:17	WG1710558

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	07/22/2021 17:26	WG1709670
Acenaphthylene	ND		0.0333	1	07/22/2021 17:26	WG1709670
Anthracene	ND		0.0333	1	07/22/2021 17:26	WG1709670
Benzidine	ND		1.67	1	07/22/2021 17:26	WG1709670
Benzo(a)anthracene	ND		0.0333	1	07/22/2021 17:26	WG1709670
Benzo(b)fluoranthene	ND		0.0333	1	07/22/2021 17:26	WG1709670
Benzo(k)fluoranthene	ND		0.0333	1	07/22/2021 17:26	WG1709670
Benzo(g,h,i)perylene	ND		0.0333	1	07/22/2021 17:26	WG1709670
Benzo(a)pyrene	ND		0.0333	1	07/22/2021 17:26	WG1709670
Bis(2-chloroethoxy)methane	ND		0.333	1	07/22/2021 17:26	WG1709670
Bis(2-chloroethyl)ether	ND		0.333	1	07/22/2021 17:26	WG1709670
2,2-Oxybis(1-Chloropropane)	ND		0.333	1	07/22/2021 17:26	WG1709670
4-Bromophenyl-phenylether	ND		0.333	1	07/22/2021 17:26	WG1709670
2-Chloronaphthalene	ND		0.0333	1	07/22/2021 17:26	WG1709670
4-Chlorophenyl-phenylether	ND		0.333	1	07/22/2021 17:26	WG1709670
Chrysene	ND		0.0333	1	07/22/2021 17:26	WG1709670
Dibenz(a,h)anthracene	ND		0.0333	1	07/22/2021 17:26	WG1709670
1,2-Dichlorobenzene	ND		0.333	1	07/22/2021 17:26	WG1709670
1,3-Dichlorobenzene	ND		0.333	1	07/22/2021 17:26	WG1709670
1,4-Dichlorobenzene	ND		0.333	1	07/22/2021 17:26	WG1709670
3,3-Dichlorobenzidine	ND		0.333	1	07/22/2021 17:26	WG1709670
2,4-Dinitrotoluene	ND		0.333	1	07/22/2021 17:26	WG1709670
2,6-Dinitrotoluene	ND		0.333	1	07/22/2021 17:26	WG1709670
Fluoranthene	ND		0.0333	1	07/22/2021 17:26	WG1709670
Fluorene	ND		0.0333	1	07/22/2021 17:26	WG1709670
Hexachlorobenzene	ND		0.333	1	07/22/2021 17:26	WG1709670
Hexachloro-1,3-butadiene	ND		0.333	1	07/22/2021 17:26	WG1709670
Hexachlorocyclopentadiene	ND		0.333	1	07/22/2021 17:26	WG1709670
Hexachloroethane	ND		0.333	1	07/22/2021 17:26	WG1709670
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	07/22/2021 17:26	WG1709670
Isophorone	ND		0.333	1	07/22/2021 17:26	WG1709670
Naphthalene	ND		0.0333	1	07/22/2021 17:26	WG1709670
Nitrobenzene	ND		0.333	1	07/22/2021 17:26	WG1709670
n-Nitrosodimethylamine	ND		0.333	1	07/22/2021 17:26	WG1709670
n-Nitrosodiphenylamine	ND		0.333	1	07/22/2021 17:26	WG1709670
n-Nitrosodi-n-propylamine	ND		0.333	1	07/22/2021 17:26	WG1709670
Phenanthrene	ND		0.0333	1	07/22/2021 17:26	WG1709670
Benzylbutyl phthalate	ND		0.333	1	07/22/2021 17:26	WG1709670
Bis(2-ethylhexyl)phthalate	ND		0.333	1	07/22/2021 17:26	WG1709670
Di-n-butyl phthalate	ND		0.333	1	07/22/2021 17:26	WG1709670
Diethyl phthalate	ND		0.333	1	07/22/2021 17:26	WG1709670
Dimethyl phthalate	ND		0.333	1	07/22/2021 17:26	WG1709670
Di-n-octyl phthalate	ND		0.333	1	07/22/2021 17:26	WG1709670
Pyrene	ND		0.0333	1	07/22/2021 17:26	WG1709670
1,2,4-Trichlorobenzene	ND		0.333	1	07/22/2021 17:26	WG1709670
4-Chloro-3-methylphenol	ND		0.333	1	07/22/2021 17:26	WG1709670
2-Chlorophenol	ND		0.333	1	07/22/2021 17:26	WG1709670
2,4-Dichlorophenol	ND		0.333	1	07/22/2021 17:26	WG1709670
2,4-Dimethylphenol	ND		0.333	1	07/22/2021 17:26	WG1709670
4,6-Dinitro-2-methylphenol	ND		0.333	1	07/22/2021 17:26	WG1709670
2,4-Dinitrophenol	ND		0.333	1	07/22/2021 17:26	WG1709670
2-Nitrophenol	ND		0.333	1	07/22/2021 17:26	WG1709670
4-Nitrophenol	ND		0.333	1	07/22/2021 17:26	WG1709670
Pentachlorophenol	ND		0.333	1	07/22/2021 17:26	WG1709670
Phenol	ND		0.333	1	07/22/2021 17:26	WG1709670
2,4,6-Trichlorophenol	ND		0.333	1	07/22/2021 17:26	WG1709670

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) 2-Fluorophenol	60.4		12.0-120		07/22/2021 17:26	WG1709670
(S) Phenol-d5	56.3		10.0-120		07/22/2021 17:26	WG1709670
(S) Nitrobenzene-d5	52.6		10.0-122		07/22/2021 17:26	WG1709670
(S) 2-Fluorobiphenyl	61.3		15.0-120		07/22/2021 17:26	WG1709670
(S) 2,4,6-Tribromophenol	63.8		10.0-127		07/22/2021 17:26	WG1709670
(S) p-Terphenyl-d14	59.5		10.0-120		07/22/2021 17:26	WG1709670

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

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.6		1	07/20/2021 17:18	WG1708552

Mercury by Method 7471B

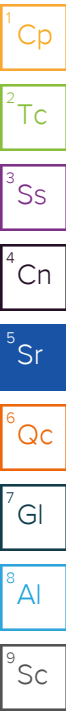
Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0400	1	07/20/2021 12:09	WG1707973

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Aluminum	13000		20.0	1	07/23/2021 02:25	WG1707348
Antimony	ND		2.00	1	07/23/2021 02:25	WG1707348
Arsenic	ND		2.00	1	07/23/2021 02:25	WG1707348
Barium	61.8		0.500	1	07/23/2021 02:25	WG1707348
Beryllium	0.232		0.200	1	07/23/2021 02:25	WG1707348
Cadmium	ND		0.500	1	07/23/2021 02:25	WG1707348
Calcium	5160		100	1	07/23/2021 02:25	WG1707348
Chromium	45.1		1.00	1	07/23/2021 02:25	WG1707348
Cobalt	6.29		1.00	1	07/23/2021 02:25	WG1707348
Copper	24.2		2.00	1	07/23/2021 02:25	WG1707348
Iron	22000		10.0	1	07/23/2021 02:25	WG1707348
Lead	3.14		0.500	1	07/23/2021 02:25	WG1707348
Magnesium	3570		100	1	07/23/2021 02:25	WG1707348
Manganese	282		1.00	1	07/23/2021 02:25	WG1707348
Nickel	16.7		2.00	1	07/23/2021 02:25	WG1707348
Potassium	855		100	1	07/23/2021 02:25	WG1707348
Selenium	ND		2.00	1	07/23/2021 02:25	WG1707348
Silver	ND		1.00	1	07/23/2021 02:25	WG1707348
Sodium	625		100	1	07/23/2021 02:25	WG1707348
Thallium	ND		2.00	1	07/23/2021 02:25	WG1707348
Vanadium	33.4		2.00	1	07/23/2021 02:25	WG1707348
Zinc	30.8		5.00	1	07/23/2021 00:10	WG1707348

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0525	1.05	07/19/2021 04:27	WG1707442
Acrylonitrile	ND		0.0131	1.05	07/19/2021 04:27	WG1707442
Benzene	ND		0.00105	1.05	07/19/2021 04:27	WG1707442
Bromobenzene	ND		0.0131	1.05	07/19/2021 04:27	WG1707442
Bromodichloromethane	ND		0.00263	1.05	07/19/2021 04:27	WG1707442
Bromoform	ND		0.0263	1.05	07/19/2021 04:27	WG1707442
Bromomethane	ND		0.0131	1.05	07/19/2021 04:27	WG1707442
n-Butylbenzene	ND		0.0131	1.05	07/19/2021 04:27	WG1707442
sec-Butylbenzene	ND		0.0131	1.05	07/19/2021 04:27	WG1707442
tert-Butylbenzene	ND		0.00525	1.05	07/19/2021 04:27	WG1707442
Carbon tetrachloride	ND		0.00525	1.05	07/19/2021 04:27	WG1707442
Chlorobenzene	ND		0.00263	1.05	07/19/2021 04:27	WG1707442
Chlorodibromomethane	ND		0.00263	1.05	07/19/2021 04:27	WG1707442
Chloroethane	ND		0.00525	1.05	07/19/2021 04:27	WG1707442
Chloroform	ND		0.00263	1.05	07/19/2021 04:27	WG1707442
Chloromethane	ND		0.0131	1.05	07/19/2021 04:27	WG1707442
2-Chlorotoluene	ND	J4	0.00263	1.05	07/19/2021 04:27	WG1707442
4-Chlorotoluene	ND		0.00525	1.05	07/19/2021 04:27	WG1707442



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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	ND		0.0263	1.05	07/19/2021 04:27	WG1707442
1,2-Dibromoethane	ND		0.00263	1.05	07/19/2021 04:27	WG1707442
Dibromomethane	ND		0.00525	1.05	07/19/2021 04:27	WG1707442
1,2-Dichlorobenzene	ND		0.00525	1.05	07/19/2021 04:27	WG1707442
1,3-Dichlorobenzene	ND		0.00525	1.05	07/19/2021 04:27	WG1707442
1,4-Dichlorobenzene	ND		0.00525	1.05	07/19/2021 04:27	WG1707442
Dichlorodifluoromethane	ND		0.00263	1.05	07/19/2021 04:27	WG1707442
1,1-Dichloroethane	ND		0.00263	1.05	07/19/2021 04:27	WG1707442
1,2-Dichloroethane	ND		0.00263	1.05	07/19/2021 04:27	WG1707442
1,1-Dichloroethene	ND		0.00263	1.05	07/19/2021 04:27	WG1707442
cis-1,2-Dichloroethene	ND		0.00263	1.05	07/19/2021 04:27	WG1707442
trans-1,2-Dichloroethene	ND		0.00525	1.05	07/19/2021 04:27	WG1707442
1,2-Dichloropropane	ND		0.00525	1.05	07/19/2021 04:27	WG1707442
1,1-Dichloropropene	ND		0.00263	1.05	07/19/2021 04:27	WG1707442
1,3-Dichloropropane	ND		0.00525	1.05	07/19/2021 04:27	WG1707442
cis-1,3-Dichloropropene	ND		0.00263	1.05	07/19/2021 04:27	WG1707442
trans-1,3-Dichloropropene	ND		0.00525	1.05	07/19/2021 04:27	WG1707442
2,2-Dichloropropane	ND		0.00263	1.05	07/19/2021 04:27	WG1707442
Di-isopropyl ether	ND		0.00105	1.05	07/19/2021 04:27	WG1707442
Ethylbenzene	ND		0.00263	1.05	07/19/2021 04:27	WG1707442
Hexachloro-1,3-butadiene	ND		0.0263	1.05	07/19/2021 04:27	WG1707442
Isopropylbenzene	ND		0.00263	1.05	07/19/2021 04:27	WG1707442
p-Isopropyltoluene	ND		0.00525	1.05	07/19/2021 04:27	WG1707442
2-Butanone (MEK)	ND		0.105	1.05	07/19/2021 04:27	WG1707442
Methylene Chloride	ND		0.0263	1.05	07/19/2021 04:27	WG1707442
4-Methyl-2-pentanone (MIBK)	ND		0.0263	1.05	07/19/2021 04:27	WG1707442
Methyl tert-butyl ether	ND		0.00105	1.05	07/19/2021 04:27	WG1707442
Naphthalene	ND		0.0131	1.05	07/23/2021 14:36	WG1710558
n-Propylbenzene	ND		0.00525	1.05	07/19/2021 04:27	WG1707442
Styrene	ND		0.0131	1.05	07/19/2021 04:27	WG1707442
1,1,1,2-Tetrachloroethane	ND		0.00263	1.05	07/19/2021 04:27	WG1707442
1,1,2,2-Tetrachloroethane	ND		0.00263	1.05	07/19/2021 04:27	WG1707442
1,1,2-Trichlorotrifluoroethane	ND		0.00263	1.05	07/19/2021 04:27	WG1707442
Tetrachloroethene	ND		0.00263	1.05	07/19/2021 04:27	WG1707442
Toluene	0.0113		0.00525	1.05	07/19/2021 04:27	WG1707442
1,2,3-Trichlorobenzene	ND	C4	0.0131	1.05	07/23/2021 14:36	WG1710558
1,2,4-Trichlorobenzene	ND		0.0131	1.05	07/19/2021 04:27	WG1707442
1,1,1-Trichloroethane	ND		0.00263	1.05	07/19/2021 04:27	WG1707442
1,1,2-Trichloroethane	ND		0.00263	1.05	07/19/2021 04:27	WG1707442
Trichloroethene	ND		0.00105	1.05	07/19/2021 04:27	WG1707442
Trichlorofluoromethane	ND		0.00263	1.05	07/19/2021 04:27	WG1707442
1,2,3-Trichloropropane	ND		0.0131	1.05	07/19/2021 04:27	WG1707442
1,2,4-Trimethylbenzene	0.00622		0.00525	1.05	07/19/2021 04:27	WG1707442
1,2,3-Trimethylbenzene	ND		0.00525	1.05	07/19/2021 04:27	WG1707442
1,3,5-Trimethylbenzene	ND		0.00525	1.05	07/19/2021 04:27	WG1707442
Vinyl chloride	ND		0.00263	1.05	07/19/2021 04:27	WG1707442
Xylenes, Total	0.0191		0.00683	1.05	07/19/2021 04:27	WG1707442
(S) Toluene-d8	105		75.0-131		07/19/2021 04:27	WG1707442
(S) Toluene-d8	113		75.0-131		07/23/2021 14:36	WG1710558
(S) 4-Bromofluorobenzene	92.6		67.0-138		07/19/2021 04:27	WG1707442
(S) 4-Bromofluorobenzene	90.4		67.0-138		07/23/2021 14:36	WG1710558
(S) 1,2-Dichloroethane-d4	110		70.0-130		07/19/2021 04:27	WG1707442
(S) 1,2-Dichloroethane-d4	90.8		70.0-130		07/23/2021 14:36	WG1710558

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	07/22/2021 18:52	WG1709670
Acenaphthylene	ND		0.0333	1	07/22/2021 18:52	WG1709670
Anthracene	ND		0.0333	1	07/22/2021 18:52	WG1709670
Benzidine	ND		1.67	1	07/22/2021 18:52	WG1709670
Benzo(a)anthracene	ND		0.0333	1	07/22/2021 18:52	WG1709670
Benzo(b)fluoranthene	ND		0.0333	1	07/22/2021 18:52	WG1709670
Benzo(k)fluoranthene	ND		0.0333	1	07/22/2021 18:52	WG1709670
Benzo(g,h,i)perylene	ND		0.0333	1	07/22/2021 18:52	WG1709670
Benzo(a)pyrene	ND		0.0333	1	07/22/2021 18:52	WG1709670
Bis(2-chlorethoxy)methane	ND		0.333	1	07/22/2021 18:52	WG1709670
Bis(2-chloroethyl)ether	ND		0.333	1	07/22/2021 18:52	WG1709670
2,2-Oxybis(1-Chloropropane)	ND		0.333	1	07/22/2021 18:52	WG1709670
4-Bromophenyl-phenylether	ND		0.333	1	07/22/2021 18:52	WG1709670
2-Chloronaphthalene	ND		0.0333	1	07/22/2021 18:52	WG1709670
4-Chlorophenyl-phenylether	ND		0.333	1	07/22/2021 18:52	WG1709670
Chrysene	ND		0.0333	1	07/22/2021 18:52	WG1709670
Dibenz(a,h)anthracene	ND		0.0333	1	07/22/2021 18:52	WG1709670
1,2-Dichlorobenzene	ND		0.333	1	07/22/2021 18:52	WG1709670
1,3-Dichlorobenzene	ND		0.333	1	07/22/2021 18:52	WG1709670
1,4-Dichlorobenzene	ND		0.333	1	07/22/2021 18:52	WG1709670
3,3-Dichlorobenzidine	ND		0.333	1	07/22/2021 18:52	WG1709670
2,4-Dinitrotoluene	ND		0.333	1	07/22/2021 18:52	WG1709670
2,6-Dinitrotoluene	ND		0.333	1	07/22/2021 18:52	WG1709670
Fluoranthene	ND		0.0333	1	07/22/2021 18:52	WG1709670
Fluorene	ND		0.0333	1	07/22/2021 18:52	WG1709670
Hexachlorobenzene	ND		0.333	1	07/22/2021 18:52	WG1709670
Hexachloro-1,3-butadiene	ND		0.333	1	07/22/2021 18:52	WG1709670
Hexachlorocyclopentadiene	ND		0.333	1	07/22/2021 18:52	WG1709670
Hexachloroethane	ND		0.333	1	07/22/2021 18:52	WG1709670
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	07/22/2021 18:52	WG1709670
Isophorone	ND		0.333	1	07/22/2021 18:52	WG1709670
Naphthalene	ND		0.0333	1	07/22/2021 18:52	WG1709670
Nitrobenzene	ND		0.333	1	07/22/2021 18:52	WG1709670
n-Nitrosodimethylamine	ND		0.333	1	07/22/2021 18:52	WG1709670
n-Nitrosodiphenylamine	ND		0.333	1	07/22/2021 18:52	WG1709670
n-Nitrosodi-n-propylamine	ND		0.333	1	07/22/2021 18:52	WG1709670
Phenanthrene	ND		0.0333	1	07/22/2021 18:52	WG1709670
Benzylbutyl phthalate	ND		0.333	1	07/22/2021 18:52	WG1709670
Bis(2-ethylhexyl)phthalate	ND		0.333	1	07/22/2021 18:52	WG1709670
Di-n-butyl phthalate	ND		0.333	1	07/22/2021 18:52	WG1709670
Diethyl phthalate	ND		0.333	1	07/22/2021 18:52	WG1709670
Dimethyl phthalate	ND		0.333	1	07/22/2021 18:52	WG1709670
Di-n-octyl phthalate	ND		0.333	1	07/22/2021 18:52	WG1709670
Pyrene	ND		0.0333	1	07/22/2021 18:52	WG1709670
1,2,4-Trichlorobenzene	ND		0.333	1	07/22/2021 18:52	WG1709670
4-Chloro-3-methylphenol	ND		0.333	1	07/22/2021 18:52	WG1709670
2-Chlorophenol	ND		0.333	1	07/22/2021 18:52	WG1709670
2,4-Dichlorophenol	ND		0.333	1	07/22/2021 18:52	WG1709670
2,4-Dimethylphenol	ND		0.333	1	07/22/2021 18:52	WG1709670
4,6-Dinitro-2-methylphenol	ND		0.333	1	07/22/2021 18:52	WG1709670
2,4-Dinitrophenol	ND		0.333	1	07/22/2021 18:52	WG1709670
2-Nitrophenol	ND		0.333	1	07/22/2021 18:52	WG1709670
4-Nitrophenol	ND		0.333	1	07/22/2021 18:52	WG1709670
Pentachlorophenol	ND		0.333	1	07/22/2021 18:52	WG1709670
Phenol	ND		0.333	1	07/22/2021 18:52	WG1709670
2,4,6-Trichlorophenol	ND		0.333	1	07/22/2021 18:52	WG1709670

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) 2-Fluorophenol	67.3		12.0-120		07/22/2021 18:52	WG1709670
(S) Phenol-d5	62.5		10.0-120		07/22/2021 18:52	WG1709670
(S) Nitrobenzene-d5	60.7		10.0-122		07/22/2021 18:52	WG1709670
(S) 2-Fluorobiphenyl	67.6		15.0-120		07/22/2021 18:52	WG1709670
(S) 2,4,6-Tribromophenol	68.0		10.0-127		07/22/2021 18:52	WG1709670
(S) p-Terphenyl-d14	61.9		10.0-120		07/22/2021 18:52	WG1709670

- 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

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	80.4		1	07/20/2021 17:18	WG1708552

Mercury by Method 7471B

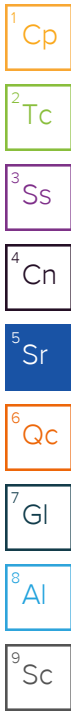
Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	0.0459		0.0400	1	07/20/2021 12:12	WG1707973

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Aluminum	12800		20.0	1	07/23/2021 02:27	WG1707348
Antimony	ND		2.00	1	07/23/2021 02:27	WG1707348
Arsenic	3.71		2.00	1	07/23/2021 02:27	WG1707348
Barium	66.2		0.500	1	07/23/2021 02:27	WG1707348
Beryllium	ND		0.200	1	07/23/2021 02:27	WG1707348
Cadmium	ND		0.500	1	07/23/2021 02:27	WG1707348
Calcium	4070		100	1	07/23/2021 02:27	WG1707348
Chromium	23.1		1.00	1	07/23/2021 02:27	WG1707348
Cobalt	7.92		1.00	1	07/23/2021 02:27	WG1707348
Copper	20.3		2.00	1	07/23/2021 02:27	WG1707348
Iron	17700		10.0	1	07/23/2021 02:27	WG1707348
Lead	2.35		0.500	1	07/23/2021 02:27	WG1707348
Magnesium	4000		100	1	07/23/2021 02:27	WG1707348
Manganese	255		1.00	1	07/23/2021 02:27	WG1707348
Nickel	34.8		2.00	1	07/23/2021 02:27	WG1707348
Potassium	749		100	1	07/23/2021 02:27	WG1707348
Selenium	ND		2.00	1	07/23/2021 02:27	WG1707348
Silver	ND		1.00	1	07/23/2021 02:27	WG1707348
Sodium	273		100	1	07/23/2021 02:27	WG1707348
Thallium	ND		2.00	1	07/23/2021 02:27	WG1707348
Vanadium	44.8		2.00	1	07/23/2021 02:27	WG1707348
Zinc	34.0		5.00	1	07/23/2021 00:13	WG1707348

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0500	1	07/19/2021 04:46	WG1707442
Acrylonitrile	ND		0.0125	1	07/19/2021 04:46	WG1707442
Benzene	ND		0.00100	1	07/19/2021 04:46	WG1707442
Bromobenzene	ND		0.0125	1	07/19/2021 04:46	WG1707442
Bromodichloromethane	ND		0.00250	1	07/19/2021 04:46	WG1707442
Bromoform	ND		0.0250	1	07/19/2021 04:46	WG1707442
Bromomethane	ND		0.0125	1	07/19/2021 04:46	WG1707442
n-Butylbenzene	ND		0.0125	1	07/19/2021 04:46	WG1707442
sec-Butylbenzene	ND		0.0125	1	07/19/2021 04:46	WG1707442
tert-Butylbenzene	ND		0.00500	1	07/19/2021 04:46	WG1707442
Carbon tetrachloride	ND		0.00500	1	07/19/2021 04:46	WG1707442
Chlorobenzene	ND		0.00250	1	07/19/2021 04:46	WG1707442
Chlorodibromomethane	ND		0.00250	1	07/19/2021 04:46	WG1707442
Chloroethane	ND		0.00500	1	07/19/2021 04:46	WG1707442
Chloroform	ND		0.00250	1	07/19/2021 04:46	WG1707442
Chloromethane	ND		0.0125	1	07/19/2021 04:46	WG1707442
2-Chlorotoluene	ND	J4	0.00250	1	07/19/2021 04:46	WG1707442
4-Chlorotoluene	ND		0.00500	1	07/19/2021 04:46	WG1707442



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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	07/19/2021 04:46	WG1707442
1,2-Dibromoethane	ND		0.00250	1	07/19/2021 04:46	WG1707442
Dibromomethane	ND		0.00500	1	07/19/2021 04:46	WG1707442
1,2-Dichlorobenzene	ND		0.00500	1	07/19/2021 04:46	WG1707442
1,3-Dichlorobenzene	ND		0.00500	1	07/19/2021 04:46	WG1707442
1,4-Dichlorobenzene	ND		0.00500	1	07/19/2021 04:46	WG1707442
Dichlorodifluoromethane	ND		0.00250	1	07/19/2021 04:46	WG1707442
1,1-Dichloroethane	ND		0.00250	1	07/19/2021 04:46	WG1707442
1,2-Dichloroethane	ND		0.00250	1	07/19/2021 04:46	WG1707442
1,1-Dichloroethene	ND		0.00250	1	07/19/2021 04:46	WG1707442
cis-1,2-Dichloroethene	ND		0.00250	1	07/19/2021 04:46	WG1707442
trans-1,2-Dichloroethene	ND		0.00500	1	07/19/2021 04:46	WG1707442
1,2-Dichloropropane	ND		0.00500	1	07/19/2021 04:46	WG1707442
1,1-Dichloropropene	ND		0.00250	1	07/19/2021 04:46	WG1707442
1,3-Dichloropropane	ND		0.00500	1	07/19/2021 04:46	WG1707442
cis-1,3-Dichloropropene	ND		0.00250	1	07/19/2021 04:46	WG1707442
trans-1,3-Dichloropropene	ND		0.00500	1	07/19/2021 04:46	WG1707442
2,2-Dichloropropane	ND		0.00250	1	07/19/2021 04:46	WG1707442
Di-isopropyl ether	ND		0.00100	1	07/19/2021 04:46	WG1707442
Ethylbenzene	ND		0.00250	1	07/19/2021 04:46	WG1707442
Hexachloro-1,3-butadiene	ND		0.0250	1	07/19/2021 04:46	WG1707442
Isopropylbenzene	ND		0.00250	1	07/19/2021 04:46	WG1707442
p-Isopropyltoluene	ND		0.00500	1	07/19/2021 04:46	WG1707442
2-Butanone (MEK)	0.115		0.100	1	07/19/2021 04:46	WG1707442
Methylene Chloride	ND		0.0250	1	07/19/2021 04:46	WG1707442
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	07/19/2021 04:46	WG1707442
Methyl tert-butyl ether	ND		0.00100	1	07/19/2021 04:46	WG1707442
Naphthalene	ND		0.0125	1	07/23/2021 14:55	WG1710558
n-Propylbenzene	ND		0.00500	1	07/19/2021 04:46	WG1707442
Styrene	ND		0.0125	1	07/19/2021 04:46	WG1707442
1,1,1,2-Tetrachloroethane	ND		0.00250	1	07/19/2021 04:46	WG1707442
1,1,2,2-Tetrachloroethane	ND		0.00250	1	07/19/2021 04:46	WG1707442
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	07/19/2021 04:46	WG1707442
Tetrachloroethene	ND		0.00250	1	07/19/2021 04:46	WG1707442
Toluene	ND		0.00500	1	07/19/2021 04:46	WG1707442
1,2,3-Trichlorobenzene	ND	C4	0.0125	1	07/23/2021 14:55	WG1710558
1,2,4-Trichlorobenzene	ND		0.0125	1	07/19/2021 04:46	WG1707442
1,1,1-Trichloroethane	ND		0.00250	1	07/19/2021 04:46	WG1707442
1,1,2-Trichloroethane	ND		0.00250	1	07/19/2021 04:46	WG1707442
Trichloroethene	ND		0.00100	1	07/19/2021 04:46	WG1707442
Trichlorofluoromethane	ND		0.00250	1	07/19/2021 04:46	WG1707442
1,2,3-Trichloropropane	ND		0.0125	1	07/19/2021 04:46	WG1707442
1,2,4-Trimethylbenzene	ND		0.00500	1	07/19/2021 04:46	WG1707442
1,2,3-Trimethylbenzene	ND		0.00500	1	07/19/2021 04:46	WG1707442
1,3,5-Trimethylbenzene	ND		0.00500	1	07/19/2021 04:46	WG1707442
Vinyl chloride	ND		0.00250	1	07/19/2021 04:46	WG1707442
Xylenes, Total	ND		0.00650	1	07/19/2021 04:46	WG1707442
(S) Toluene-d8	108		75.0-131		07/19/2021 04:46	WG1707442
(S) Toluene-d8	116		75.0-131		07/23/2021 14:55	WG1710558
(S) 4-Bromofluorobenzene	93.5		67.0-138		07/19/2021 04:46	WG1707442
(S) 4-Bromofluorobenzene	91.4		67.0-138		07/23/2021 14:55	WG1710558
(S) 1,2-Dichloroethane-d4	105		70.0-130		07/19/2021 04:46	WG1707442
(S) 1,2-Dichloroethane-d4	92.1		70.0-130		07/23/2021 14:55	WG1710558

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	07/22/2021 14:08	WG1709670
Acenaphthylene	ND		0.0333	1	07/22/2021 14:08	WG1709670
Anthracene	ND		0.0333	1	07/22/2021 14:08	WG1709670
Benzidine	ND		1.67	1	07/22/2021 14:08	WG1709670
Benzo(a)anthracene	ND		0.0333	1	07/22/2021 14:08	WG1709670
Benzo(b)fluoranthene	ND		0.0333	1	07/22/2021 14:08	WG1709670
Benzo(k)fluoranthene	ND		0.0333	1	07/22/2021 14:08	WG1709670
Benzo(g,h,i)perylene	ND		0.0333	1	07/22/2021 14:08	WG1709670
Benzo(a)pyrene	ND		0.0333	1	07/22/2021 14:08	WG1709670
Bis(2-chlorethoxy)methane	ND		0.333	1	07/22/2021 14:08	WG1709670
Bis(2-chloroethyl)ether	ND		0.333	1	07/22/2021 14:08	WG1709670
2,2-Oxybis(1-Chloropropane)	ND		0.333	1	07/22/2021 14:08	WG1709670
4-Bromophenyl-phenylether	ND		0.333	1	07/22/2021 14:08	WG1709670
2-Chloronaphthalene	ND		0.0333	1	07/22/2021 14:08	WG1709670
4-Chlorophenyl-phenylether	ND		0.333	1	07/22/2021 14:08	WG1709670
Chrysene	ND		0.0333	1	07/22/2021 14:08	WG1709670
Dibenz(a,h)anthracene	ND		0.0333	1	07/22/2021 14:08	WG1709670
1,2-Dichlorobenzene	ND		0.333	1	07/22/2021 14:08	WG1709670
1,3-Dichlorobenzene	ND		0.333	1	07/22/2021 14:08	WG1709670
1,4-Dichlorobenzene	ND		0.333	1	07/22/2021 14:08	WG1709670
3,3-Dichlorobenzidine	ND		0.333	1	07/22/2021 14:08	WG1709670
2,4-Dinitrotoluene	ND		0.333	1	07/22/2021 14:08	WG1709670
2,6-Dinitrotoluene	ND		0.333	1	07/22/2021 14:08	WG1709670
Fluoranthene	ND		0.0333	1	07/22/2021 14:08	WG1709670
Fluorene	ND		0.0333	1	07/22/2021 14:08	WG1709670
Hexachlorobenzene	ND		0.333	1	07/22/2021 14:08	WG1709670
Hexachloro-1,3-butadiene	ND		0.333	1	07/22/2021 14:08	WG1709670
Hexachlorocyclopentadiene	ND		0.333	1	07/22/2021 14:08	WG1709670
Hexachloroethane	ND		0.333	1	07/22/2021 14:08	WG1709670
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	07/22/2021 14:08	WG1709670
Isophorone	ND		0.333	1	07/22/2021 14:08	WG1709670
Naphthalene	ND		0.0333	1	07/22/2021 14:08	WG1709670
Nitrobenzene	ND		0.333	1	07/22/2021 14:08	WG1709670
n-Nitrosodimethylamine	ND		0.333	1	07/22/2021 14:08	WG1709670
n-Nitrosodiphenylamine	ND		0.333	1	07/22/2021 14:08	WG1709670
n-Nitrosodi-n-propylamine	ND		0.333	1	07/22/2021 14:08	WG1709670
Phenanthrene	ND		0.0333	1	07/22/2021 14:08	WG1709670
Benzylbutyl phtalate	ND		0.333	1	07/22/2021 14:08	WG1709670
Bis(2-ethylhexyl)phtalate	ND		0.333	1	07/22/2021 14:08	WG1709670
Di-n-butyl phtalate	ND		0.333	1	07/22/2021 14:08	WG1709670
Diethyl phtalate	ND		0.333	1	07/22/2021 14:08	WG1709670
Dimethyl phtalate	ND		0.333	1	07/22/2021 14:08	WG1709670
Di-n-octyl phtalate	ND		0.333	1	07/22/2021 14:08	WG1709670
Pyrene	ND		0.0333	1	07/22/2021 14:08	WG1709670
1,2,4-Trichlorobenzene	ND		0.333	1	07/22/2021 14:08	WG1709670
4-Chloro-3-methylphenol	ND		0.333	1	07/22/2021 14:08	WG1709670
2-Chlorophenol	ND		0.333	1	07/22/2021 14:08	WG1709670
2,4-Dichlorophenol	ND		0.333	1	07/22/2021 14:08	WG1709670
2,4-Dimethylphenol	ND		0.333	1	07/22/2021 14:08	WG1709670
4,6-Dinitro-2-methylphenol	ND		0.333	1	07/22/2021 14:08	WG1709670
2,4-Dinitrophenol	ND		0.333	1	07/22/2021 14:08	WG1709670
2-Nitrophenol	ND		0.333	1	07/22/2021 14:08	WG1709670
4-Nitrophenol	ND		0.333	1	07/22/2021 14:08	WG1709670
Pentachlorophenol	ND		0.333	1	07/22/2021 14:08	WG1709670
Phenol	ND		0.333	1	07/22/2021 14:08	WG1709670
2,4,6-Trichlorophenol	ND		0.333	1	07/22/2021 14:08	WG1709670

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) 2-Fluorophenol	58.4		12.0-120		07/22/2021 14:08	WG1709670
(S) Phenol-d5	52.6		10.0-120		07/22/2021 14:08	WG1709670
(S) Nitrobenzene-d5	53.5		10.0-122		07/22/2021 14:08	WG1709670
(S) 2-Fluorobiphenyl	61.0		15.0-120		07/22/2021 14:08	WG1709670
(S) 2,4,6-Tribromophenol	52.1		10.0-127		07/22/2021 14:08	WG1709670
(S) p-Terphenyl-d14	47.4		10.0-120		07/22/2021 14:08	WG1709670

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

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.3		1	07/20/2021 17:18	WG1708552

Mercury by Method 7471B

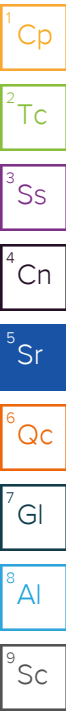
Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0400	1	07/20/2021 12:14	WG1707973

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Aluminum	14600		20.0	1	07/23/2021 02:30	WG1707348
Antimony	ND		2.00	1	07/23/2021 02:30	WG1707348
Arsenic	4.17		2.00	1	07/23/2021 02:30	WG1707348
Barium	138		0.500	1	07/23/2021 02:30	WG1707348
Beryllium	ND		0.200	1	07/23/2021 02:30	WG1707348
Cadmium	ND		0.500	1	07/23/2021 02:30	WG1707348
Calcium	7270		100	1	07/23/2021 02:30	WG1707348
Chromium	15.2		1.00	1	07/23/2021 02:30	WG1707348
Cobalt	6.56		1.00	1	07/23/2021 02:30	WG1707348
Copper	25.4		2.00	1	07/23/2021 02:30	WG1707348
Iron	17200		10.0	1	07/23/2021 02:30	WG1707348
Lead	2.22		0.500	1	07/23/2021 02:30	WG1707348
Magnesium	4070		100	1	07/23/2021 02:30	WG1707348
Manganese	254		1.00	1	07/23/2021 02:30	WG1707348
Nickel	16.6		2.00	1	07/23/2021 02:30	WG1707348
Potassium	787		100	1	07/23/2021 02:30	WG1707348
Selenium	ND		2.00	1	07/23/2021 02:30	WG1707348
Silver	ND		1.00	1	07/23/2021 02:30	WG1707348
Sodium	707		100	1	07/23/2021 02:30	WG1707348
Thallium	ND		2.00	1	07/23/2021 02:30	WG1707348
Vanadium	39.6		2.00	1	07/23/2021 02:30	WG1707348
Zinc	31.1		5.00	1	07/23/2021 00:15	WG1707348

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0655	1.31	07/19/2021 05:05	WG1707442
Acrylonitrile	ND		0.0164	1.31	07/19/2021 05:05	WG1707442
Benzene	ND		0.00131	1.31	07/19/2021 05:05	WG1707442
Bromobenzene	ND		0.0164	1.31	07/19/2021 05:05	WG1707442
Bromodichloromethane	ND		0.00328	1.31	07/19/2021 05:05	WG1707442
Bromoform	ND		0.0328	1.31	07/19/2021 05:05	WG1707442
Bromomethane	ND		0.0164	1.31	07/19/2021 05:05	WG1707442
n-Butylbenzene	ND		0.0164	1.31	07/19/2021 05:05	WG1707442
sec-Butylbenzene	ND		0.0164	1.31	07/19/2021 05:05	WG1707442
tert-Butylbenzene	ND		0.00655	1.31	07/19/2021 05:05	WG1707442
Carbon tetrachloride	ND		0.00655	1.31	07/19/2021 05:05	WG1707442
Chlorobenzene	ND		0.00328	1.31	07/19/2021 05:05	WG1707442
Chlorodibromomethane	ND		0.00328	1.31	07/19/2021 05:05	WG1707442
Chloroethane	ND		0.00655	1.31	07/19/2021 05:05	WG1707442
Chloroform	ND		0.00328	1.31	07/19/2021 05:05	WG1707442
Chloromethane	ND		0.0164	1.31	07/19/2021 05:05	WG1707442
2-Chlorotoluene	ND	J4	0.00328	1.31	07/19/2021 05:05	WG1707442
4-Chlorotoluene	ND		0.00655	1.31	07/19/2021 05:05	WG1707442



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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	ND		0.0328	1.31	07/19/2021 05:05	WG1707442
1,2-Dibromoethane	ND		0.00328	1.31	07/19/2021 05:05	WG1707442
Dibromomethane	ND		0.00655	1.31	07/19/2021 05:05	WG1707442
1,2-Dichlorobenzene	ND		0.00655	1.31	07/19/2021 05:05	WG1707442
1,3-Dichlorobenzene	ND		0.00655	1.31	07/19/2021 05:05	WG1707442
1,4-Dichlorobenzene	ND		0.00655	1.31	07/19/2021 05:05	WG1707442
Dichlorodifluoromethane	ND		0.00328	1.31	07/19/2021 05:05	WG1707442
1,1-Dichloroethane	ND		0.00328	1.31	07/19/2021 05:05	WG1707442
1,2-Dichloroethane	ND		0.00328	1.31	07/19/2021 05:05	WG1707442
1,1-Dichloroethene	ND		0.00328	1.31	07/19/2021 05:05	WG1707442
cis-1,2-Dichloroethene	ND		0.00328	1.31	07/19/2021 05:05	WG1707442
trans-1,2-Dichloroethene	ND		0.00655	1.31	07/19/2021 05:05	WG1707442
1,2-Dichloropropane	ND		0.00655	1.31	07/19/2021 05:05	WG1707442
1,1-Dichloropropene	ND		0.00328	1.31	07/19/2021 05:05	WG1707442
1,3-Dichloropropane	ND		0.00655	1.31	07/19/2021 05:05	WG1707442
cis-1,3-Dichloropropene	ND		0.00328	1.31	07/19/2021 05:05	WG1707442
trans-1,3-Dichloropropene	ND		0.00655	1.31	07/19/2021 05:05	WG1707442
2,2-Dichloropropane	ND		0.00328	1.31	07/19/2021 05:05	WG1707442
Di-isopropyl ether	ND		0.00131	1.31	07/19/2021 05:05	WG1707442
Ethylbenzene	ND		0.00328	1.31	07/19/2021 05:05	WG1707442
Hexachloro-1,3-butadiene	ND		0.0328	1.31	07/19/2021 05:05	WG1707442
Isopropylbenzene	ND		0.00328	1.31	07/19/2021 05:05	WG1707442
p-Isopropyltoluene	ND		0.00655	1.31	07/19/2021 05:05	WG1707442
2-Butanone (MEK)	ND		0.131	1.31	07/19/2021 05:05	WG1707442
Methylene Chloride	ND		0.0328	1.31	07/19/2021 05:05	WG1707442
4-Methyl-2-pentanone (MIBK)	ND		0.0328	1.31	07/19/2021 05:05	WG1707442
Methyl tert-butyl ether	ND		0.00131	1.31	07/19/2021 05:05	WG1707442
Naphthalene	ND		0.0164	1.31	07/23/2021 15:14	WG1710558
n-Propylbenzene	ND		0.00655	1.31	07/19/2021 05:05	WG1707442
Styrene	ND		0.0164	1.31	07/19/2021 05:05	WG1707442
1,1,1,2-Tetrachloroethane	ND		0.00328	1.31	07/19/2021 05:05	WG1707442
1,1,2,2-Tetrachloroethane	ND		0.00328	1.31	07/19/2021 05:05	WG1707442
1,1,2-Trichlorotrifluoroethane	ND		0.00328	1.31	07/19/2021 05:05	WG1707442
Tetrachloroethene	ND		0.00328	1.31	07/19/2021 05:05	WG1707442
Toluene	ND		0.00655	1.31	07/19/2021 05:05	WG1707442
1,2,3-Trichlorobenzene	ND	C4	0.0164	1.31	07/23/2021 15:14	WG1710558
1,2,4-Trichlorobenzene	ND		0.0164	1.31	07/19/2021 05:05	WG1707442
1,1,1-Trichloroethane	ND		0.00328	1.31	07/19/2021 05:05	WG1707442
1,1,2-Trichloroethane	ND		0.00328	1.31	07/19/2021 05:05	WG1707442
Trichloroethene	ND		0.00131	1.31	07/19/2021 05:05	WG1707442
Trichlorofluoromethane	ND		0.00328	1.31	07/19/2021 05:05	WG1707442
1,2,3-Trichloropropane	ND		0.0164	1.31	07/19/2021 05:05	WG1707442
1,2,4-Trimethylbenzene	ND		0.00655	1.31	07/19/2021 05:05	WG1707442
1,2,3-Trimethylbenzene	ND		0.00655	1.31	07/19/2021 05:05	WG1707442
1,3,5-Trimethylbenzene	ND		0.00655	1.31	07/19/2021 05:05	WG1707442
Vinyl chloride	ND		0.00328	1.31	07/19/2021 05:05	WG1707442
Xylenes, Total	ND		0.00852	1.31	07/19/2021 05:05	WG1707442
(S) Toluene-d8	107		75.0-131		07/19/2021 05:05	WG1707442
(S) Toluene-d8	113		75.0-131		07/23/2021 15:14	WG1710558
(S) 4-Bromofluorobenzene	90.2		67.0-138		07/19/2021 05:05	WG1707442
(S) 4-Bromofluorobenzene	89.8		67.0-138		07/23/2021 15:14	WG1710558
(S) 1,2-Dichloroethane-d4	107		70.0-130		07/19/2021 05:05	WG1707442
(S) 1,2-Dichloroethane-d4	91.9		70.0-130		07/23/2021 15:14	WG1710558

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

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	07/22/2021 14:51	WG1709670
Acenaphthylene	ND		0.0333	1	07/22/2021 14:51	WG1709670
Anthracene	ND		0.0333	1	07/22/2021 14:51	WG1709670
Benzidine	ND		1.67	1	07/22/2021 14:51	WG1709670
Benzo(a)anthracene	ND		0.0333	1	07/22/2021 14:51	WG1709670
Benzo(b)fluoranthene	ND		0.0333	1	07/22/2021 14:51	WG1709670
Benzo(k)fluoranthene	ND		0.0333	1	07/22/2021 14:51	WG1709670
Benzo(g,h,i)perylene	ND		0.0333	1	07/22/2021 14:51	WG1709670
Benzo(a)pyrene	ND		0.0333	1	07/22/2021 14:51	WG1709670
Bis(2-chlorethoxy)methane	ND		0.333	1	07/22/2021 14:51	WG1709670
Bis(2-chloroethyl)ether	ND		0.333	1	07/22/2021 14:51	WG1709670
2,2-Oxybis(1-Chloropropane)	ND		0.333	1	07/22/2021 14:51	WG1709670
4-Bromophenyl-phenylether	ND		0.333	1	07/22/2021 14:51	WG1709670
2-Chloronaphthalene	ND		0.0333	1	07/22/2021 14:51	WG1709670
4-Chlorophenyl-phenylether	ND		0.333	1	07/22/2021 14:51	WG1709670
Chrysene	ND		0.0333	1	07/22/2021 14:51	WG1709670
Dibenz(a,h)anthracene	ND		0.0333	1	07/22/2021 14:51	WG1709670
1,2-Dichlorobenzene	ND		0.333	1	07/22/2021 14:51	WG1709670
1,3-Dichlorobenzene	ND		0.333	1	07/22/2021 14:51	WG1709670
1,4-Dichlorobenzene	ND		0.333	1	07/22/2021 14:51	WG1709670
3,3-Dichlorobenzidine	ND		0.333	1	07/22/2021 14:51	WG1709670
2,4-Dinitrotoluene	ND		0.333	1	07/22/2021 14:51	WG1709670
2,6-Dinitrotoluene	ND		0.333	1	07/22/2021 14:51	WG1709670
Fluoranthene	ND		0.0333	1	07/22/2021 14:51	WG1709670
Fluorene	ND		0.0333	1	07/22/2021 14:51	WG1709670
Hexachlorobenzene	ND		0.333	1	07/22/2021 14:51	WG1709670
Hexachloro-1,3-butadiene	ND		0.333	1	07/22/2021 14:51	WG1709670
Hexachlorocyclopentadiene	ND		0.333	1	07/22/2021 14:51	WG1709670
Hexachloroethane	ND		0.333	1	07/22/2021 14:51	WG1709670
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	07/22/2021 14:51	WG1709670
Isophorone	ND		0.333	1	07/22/2021 14:51	WG1709670
Naphthalene	ND		0.0333	1	07/22/2021 14:51	WG1709670
Nitrobenzene	ND		0.333	1	07/22/2021 14:51	WG1709670
n-Nitrosodimethylamine	ND		0.333	1	07/22/2021 14:51	WG1709670
n-Nitrosodiphenylamine	ND		0.333	1	07/22/2021 14:51	WG1709670
n-Nitrosodi-n-propylamine	ND		0.333	1	07/22/2021 14:51	WG1709670
Phenanthrene	ND		0.0333	1	07/22/2021 14:51	WG1709670
Benzylbutyl phthalate	ND		0.333	1	07/22/2021 14:51	WG1709670
Bis(2-ethylhexyl)phthalate	ND		0.333	1	07/22/2021 14:51	WG1709670
Di-n-butyl phthalate	ND		0.333	1	07/22/2021 14:51	WG1709670
Diethyl phthalate	ND		0.333	1	07/22/2021 14:51	WG1709670
Dimethyl phthalate	ND		0.333	1	07/22/2021 14:51	WG1709670
Di-n-octyl phthalate	ND		0.333	1	07/22/2021 14:51	WG1709670
Pyrene	ND		0.0333	1	07/22/2021 14:51	WG1709670
1,2,4-Trichlorobenzene	ND		0.333	1	07/22/2021 14:51	WG1709670
4-Chloro-3-methylphenol	ND		0.333	1	07/22/2021 14:51	WG1709670
2-Chlorophenol	ND		0.333	1	07/22/2021 14:51	WG1709670
2,4-Dichlorophenol	ND		0.333	1	07/22/2021 14:51	WG1709670
2,4-Dimethylphenol	ND		0.333	1	07/22/2021 14:51	WG1709670
4,6-Dinitro-2-methylphenol	ND		0.333	1	07/22/2021 14:51	WG1709670
2,4-Dinitrophenol	ND		0.333	1	07/22/2021 14:51	WG1709670
2-Nitrophenol	ND		0.333	1	07/22/2021 14:51	WG1709670
4-Nitrophenol	ND		0.333	1	07/22/2021 14:51	WG1709670
Pentachlorophenol	ND		0.333	1	07/22/2021 14:51	WG1709670
Phenol	ND		0.333	1	07/22/2021 14:51	WG1709670
2,4,6-Trichlorophenol	ND		0.333	1	07/22/2021 14:51	WG1709670

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) 2-Fluorophenol	64.3		12.0-120		07/22/2021 14:51	WG1709670
(S) Phenol-d5	59.9		10.0-120		07/22/2021 14:51	WG1709670
(S) Nitrobenzene-d5	57.4		10.0-122		07/22/2021 14:51	WG1709670
(S) 2-Fluorobiphenyl	65.5		15.0-120		07/22/2021 14:51	WG1709670
(S) 2,4,6-Tribromophenol	63.4		10.0-127		07/22/2021 14:51	WG1709670
(S) p-Terphenyl-d14	60.7		10.0-120		07/22/2021 14:51	WG1709670

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

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.5		1	07/20/2021 17:18	WG1708552

Mercury by Method 7471B

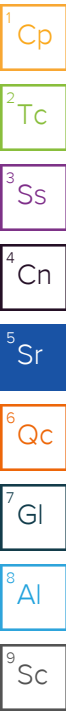
Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0400	1	07/20/2021 11:36	WG1707973

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Aluminum	12000		20.0	1	07/23/2021 02:33	WG1707348
Antimony	ND		2.00	1	07/23/2021 02:33	WG1707348
Arsenic	ND		2.00	1	07/23/2021 02:33	WG1707348
Barium	61.8		0.500	1	07/23/2021 02:33	WG1707348
Beryllium	ND		0.200	1	07/23/2021 02:33	WG1707348
Cadmium	ND		0.500	1	07/23/2021 02:33	WG1707348
Calcium	4820		100	1	07/23/2021 02:33	WG1707348
Chromium	324		1.00	1	07/23/2021 02:33	WG1707348
Cobalt	6.88		1.00	1	07/23/2021 02:33	WG1707348
Copper	23.2		2.00	1	07/23/2021 02:33	WG1707348
Iron	36400		10.0	1	07/23/2021 02:33	WG1707348
Lead	1.31		0.500	1	07/23/2021 02:33	WG1707348
Magnesium	3920		100	1	07/23/2021 02:33	WG1707348
Manganese	318		1.00	1	07/23/2021 02:33	WG1707348
Nickel	33.7		2.00	1	07/23/2021 02:33	WG1707348
Potassium	799		100	1	07/23/2021 02:33	WG1707348
Selenium	2.73		2.00	1	07/23/2021 02:33	WG1707348
Silver	ND		1.00	1	07/23/2021 02:33	WG1707348
Sodium	513		100	1	07/23/2021 02:33	WG1707348
Thallium	ND		2.00	1	07/23/2021 02:33	WG1707348
Vanadium	35.5		2.00	1	07/23/2021 02:33	WG1707348
Zinc	27.6		5.00	1	07/23/2021 00:18	WG1707348

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0500	1	07/19/2021 05:24	WG1707442
Acrylonitrile	ND		0.0125	1	07/19/2021 05:24	WG1707442
Benzene	ND		0.00100	1	07/19/2021 05:24	WG1707442
Bromobenzene	ND		0.0125	1	07/19/2021 05:24	WG1707442
Bromodichloromethane	ND		0.00250	1	07/19/2021 05:24	WG1707442
Bromoform	ND		0.0250	1	07/19/2021 05:24	WG1707442
Bromomethane	ND		0.0125	1	07/19/2021 05:24	WG1707442
n-Butylbenzene	ND		0.0125	1	07/19/2021 05:24	WG1707442
sec-Butylbenzene	ND		0.0125	1	07/19/2021 05:24	WG1707442
tert-Butylbenzene	ND		0.00500	1	07/19/2021 05:24	WG1707442
Carbon tetrachloride	ND		0.00500	1	07/19/2021 05:24	WG1707442
Chlorobenzene	ND		0.00250	1	07/19/2021 05:24	WG1707442
Chlorodibromomethane	ND		0.00250	1	07/19/2021 05:24	WG1707442
Chloroethane	ND		0.00500	1	07/19/2021 05:24	WG1707442
Chloroform	ND		0.00250	1	07/19/2021 05:24	WG1707442
Chloromethane	ND		0.0125	1	07/19/2021 05:24	WG1707442
2-Chlorotoluene	ND	J4	0.00250	1	07/19/2021 05:24	WG1707442
4-Chlorotoluene	ND		0.00500	1	07/19/2021 05:24	WG1707442



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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	07/19/2021 05:24	WG1707442
1,2-Dibromoethane	ND		0.00250	1	07/19/2021 05:24	WG1707442
Dibromomethane	ND		0.00500	1	07/19/2021 05:24	WG1707442
1,2-Dichlorobenzene	ND		0.00500	1	07/19/2021 05:24	WG1707442
1,3-Dichlorobenzene	ND		0.00500	1	07/19/2021 05:24	WG1707442
1,4-Dichlorobenzene	ND		0.00500	1	07/19/2021 05:24	WG1707442
Dichlorodifluoromethane	ND		0.00250	1	07/19/2021 05:24	WG1707442
1,1-Dichloroethane	ND		0.00250	1	07/19/2021 05:24	WG1707442
1,2-Dichloroethane	ND		0.00250	1	07/19/2021 05:24	WG1707442
1,1-Dichloroethene	ND		0.00250	1	07/19/2021 05:24	WG1707442
cis-1,2-Dichloroethene	ND		0.00250	1	07/19/2021 05:24	WG1707442
trans-1,2-Dichloroethene	ND		0.00500	1	07/19/2021 05:24	WG1707442
1,2-Dichloropropane	ND		0.00500	1	07/19/2021 05:24	WG1707442
1,1-Dichloropropene	ND		0.00250	1	07/19/2021 05:24	WG1707442
1,3-Dichloropropane	ND		0.00500	1	07/19/2021 05:24	WG1707442
cis-1,3-Dichloropropene	ND		0.00250	1	07/19/2021 05:24	WG1707442
trans-1,3-Dichloropropene	ND		0.00500	1	07/19/2021 05:24	WG1707442
2,2-Dichloropropane	ND		0.00250	1	07/19/2021 05:24	WG1707442
Di-isopropyl ether	ND		0.00100	1	07/19/2021 05:24	WG1707442
Ethylbenzene	ND		0.00250	1	07/19/2021 05:24	WG1707442
Hexachloro-1,3-butadiene	ND		0.0250	1	07/19/2021 05:24	WG1707442
Isopropylbenzene	ND		0.00250	1	07/19/2021 05:24	WG1707442
p-Isopropyltoluene	ND		0.00500	1	07/19/2021 05:24	WG1707442
2-Butanone (MEK)	ND		0.100	1	07/19/2021 05:24	WG1707442
Methylene Chloride	ND		0.0250	1	07/19/2021 05:24	WG1707442
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	07/19/2021 05:24	WG1707442
Methyl tert-butyl ether	ND		0.00100	1	07/19/2021 05:24	WG1707442
Naphthalene	ND		0.0125	1	07/23/2021 15:33	WG1710558
n-Propylbenzene	ND		0.00500	1	07/19/2021 05:24	WG1707442
Styrene	ND		0.0125	1	07/19/2021 05:24	WG1707442
1,1,1,2-Tetrachloroethane	ND		0.00250	1	07/19/2021 05:24	WG1707442
1,1,2,2-Tetrachloroethane	ND		0.00250	1	07/19/2021 05:24	WG1707442
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	07/19/2021 05:24	WG1707442
Tetrachloroethene	ND		0.00250	1	07/19/2021 05:24	WG1707442
Toluene	ND		0.00500	1	07/19/2021 05:24	WG1707442
1,2,3-Trichlorobenzene	ND	C4	0.0125	1	07/23/2021 15:33	WG1710558
1,2,4-Trichlorobenzene	ND		0.0125	1	07/19/2021 05:24	WG1707442
1,1,1-Trichloroethane	ND		0.00250	1	07/19/2021 05:24	WG1707442
1,1,2-Trichloroethane	ND		0.00250	1	07/19/2021 05:24	WG1707442
Trichloroethene	ND		0.00100	1	07/19/2021 05:24	WG1707442
Trichlorofluoromethane	ND		0.00250	1	07/19/2021 05:24	WG1707442
1,2,3-Trichloropropane	ND		0.0125	1	07/19/2021 05:24	WG1707442
1,2,4-Trimethylbenzene	ND		0.00500	1	07/19/2021 05:24	WG1707442
1,2,3-Trimethylbenzene	ND		0.00500	1	07/19/2021 05:24	WG1707442
1,3,5-Trimethylbenzene	ND		0.00500	1	07/19/2021 05:24	WG1707442
Vinyl chloride	ND		0.00250	1	07/19/2021 05:24	WG1707442
Xylenes, Total	ND		0.00650	1	07/19/2021 05:24	WG1707442
(S) Toluene-d8	104		75.0-131		07/19/2021 05:24	WG1707442
(S) Toluene-d8	116		75.0-131		07/23/2021 15:33	WG1710558
(S) 4-Bromofluorobenzene	89.3		67.0-138		07/19/2021 05:24	WG1707442
(S) 4-Bromofluorobenzene	89.7		67.0-138		07/23/2021 15:33	WG1710558
(S) 1,2-Dichloroethane-d4	105		70.0-130		07/19/2021 05:24	WG1707442
(S) 1,2-Dichloroethane-d4	90.5		70.0-130		07/23/2021 15:33	WG1710558

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	07/22/2021 13:25	WG1709670
Acenaphthylene	ND		0.0333	1	07/22/2021 13:25	WG1709670
Anthracene	ND		0.0333	1	07/22/2021 13:25	WG1709670
Benzidine	ND		1.67	1	07/22/2021 13:25	WG1709670
Benzo(a)anthracene	ND		0.0333	1	07/22/2021 13:25	WG1709670
Benzo(b)fluoranthene	ND		0.0333	1	07/22/2021 13:25	WG1709670
Benzo(k)fluoranthene	ND		0.0333	1	07/22/2021 13:25	WG1709670
Benzo(g,h,i)perylene	ND		0.0333	1	07/22/2021 13:25	WG1709670
Benzo(a)pyrene	ND		0.0333	1	07/22/2021 13:25	WG1709670
Bis(2-chlorethoxy)methane	ND		0.333	1	07/22/2021 13:25	WG1709670
Bis(2-chloroethyl)ether	ND		0.333	1	07/22/2021 13:25	WG1709670
2,2-Oxybis(1-Chloropropane)	ND		0.333	1	07/22/2021 13:25	WG1709670
4-Bromophenyl-phenylether	ND		0.333	1	07/22/2021 13:25	WG1709670
2-Chloronaphthalene	ND		0.0333	1	07/22/2021 13:25	WG1709670
4-Chlorophenyl-phenylether	ND		0.333	1	07/22/2021 13:25	WG1709670
Chrysene	ND		0.0333	1	07/22/2021 13:25	WG1709670
Dibenz(a,h)anthracene	ND		0.0333	1	07/22/2021 13:25	WG1709670
1,2-Dichlorobenzene	ND		0.333	1	07/22/2021 13:25	WG1709670
1,3-Dichlorobenzene	ND		0.333	1	07/22/2021 13:25	WG1709670
1,4-Dichlorobenzene	ND		0.333	1	07/22/2021 13:25	WG1709670
3,3-Dichlorobenzidine	ND		0.333	1	07/22/2021 13:25	WG1709670
2,4-Dinitrotoluene	ND		0.333	1	07/22/2021 13:25	WG1709670
2,6-Dinitrotoluene	ND		0.333	1	07/22/2021 13:25	WG1709670
Fluoranthene	ND		0.0333	1	07/22/2021 13:25	WG1709670
Fluorene	ND		0.0333	1	07/22/2021 13:25	WG1709670
Hexachlorobenzene	ND		0.333	1	07/22/2021 13:25	WG1709670
Hexachloro-1,3-butadiene	ND		0.333	1	07/22/2021 13:25	WG1709670
Hexachlorocyclopentadiene	ND		0.333	1	07/22/2021 13:25	WG1709670
Hexachloroethane	ND		0.333	1	07/22/2021 13:25	WG1709670
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	07/22/2021 13:25	WG1709670
Isophorone	ND		0.333	1	07/22/2021 13:25	WG1709670
Naphthalene	ND		0.0333	1	07/22/2021 13:25	WG1709670
Nitrobenzene	ND		0.333	1	07/22/2021 13:25	WG1709670
n-Nitrosodimethylamine	ND		0.333	1	07/22/2021 13:25	WG1709670
n-Nitrosodiphenylamine	ND		0.333	1	07/22/2021 13:25	WG1709670
n-Nitrosodi-n-propylamine	ND		0.333	1	07/22/2021 13:25	WG1709670
Phenanthrene	ND		0.0333	1	07/22/2021 13:25	WG1709670
Benzylbutyl phtalate	ND		0.333	1	07/22/2021 13:25	WG1709670
Bis(2-ethylhexyl)phtalate	ND		0.333	1	07/22/2021 13:25	WG1709670
Di-n-butyl phtalate	ND		0.333	1	07/22/2021 13:25	WG1709670
Diethyl phtalate	ND		0.333	1	07/22/2021 13:25	WG1709670
Dimethyl phtalate	ND		0.333	1	07/22/2021 13:25	WG1709670
Di-n-octyl phtalate	ND		0.333	1	07/22/2021 13:25	WG1709670
Pyrene	ND		0.0333	1	07/22/2021 13:25	WG1709670
1,2,4-Trichlorobenzene	ND		0.333	1	07/22/2021 13:25	WG1709670
4-Chloro-3-methylphenol	ND		0.333	1	07/22/2021 13:25	WG1709670
2-Chlorophenol	ND		0.333	1	07/22/2021 13:25	WG1709670
2,4-Dichlorophenol	ND		0.333	1	07/22/2021 13:25	WG1709670
2,4-Dimethylphenol	ND		0.333	1	07/22/2021 13:25	WG1709670
4,6-Dinitro-2-methylphenol	ND		0.333	1	07/22/2021 13:25	WG1709670
2,4-Dinitrophenol	ND		0.333	1	07/22/2021 13:25	WG1709670
2-Nitrophenol	ND		0.333	1	07/22/2021 13:25	WG1709670
4-Nitrophenol	ND		0.333	1	07/22/2021 13:25	WG1709670
Pentachlorophenol	ND		0.333	1	07/22/2021 13:25	WG1709670
Phenol	ND		0.333	1	07/22/2021 13:25	WG1709670
2,4,6-Trichlorophenol	ND		0.333	1	07/22/2021 13:25	WG1709670

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) 2-Fluorophenol	64.0		12.0-120		07/22/2021 13:25	WG1709670
(S) Phenol-d5	59.0		10.0-120		07/22/2021 13:25	WG1709670
(S) Nitrobenzene-d5	55.9		10.0-122		07/22/2021 13:25	WG1709670
(S) 2-Fluorobiphenyl	64.6		15.0-120		07/22/2021 13:25	WG1709670
(S) 2,4,6-Tribromophenol	63.4		10.0-127		07/22/2021 13:25	WG1709670
(S) p-Terphenyl-d14	59.8		10.0-120		07/22/2021 13:25	WG1709670

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

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.3		1	07/20/2021 17:18	WG1708552

Mercury by Method 7471B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0400	1	07/20/2021 12:17	WG1707973

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Aluminum	13400		20.0	1	07/23/2021 02:35	WG1707348
Antimony	ND		2.00	1	07/23/2021 02:35	WG1707348
Arsenic	2.86		2.00	1	07/23/2021 02:35	WG1707348
Barium	77.1		0.500	1	07/23/2021 02:35	WG1707348
Beryllium	ND		0.200	1	07/23/2021 02:35	WG1707348
Cadmium	ND		0.500	1	07/23/2021 02:35	WG1707348
Calcium	6320		100	1	07/23/2021 02:35	WG1707348
Chromium	16.4		1.00	1	07/23/2021 02:35	WG1707348
Cobalt	7.12		1.00	1	07/23/2021 02:35	WG1707348
Copper	20.4		2.00	1	07/23/2021 02:35	WG1707348
Iron	18700		10.0	1	07/23/2021 02:35	WG1707348
Lead	2.80		0.500	1	07/23/2021 02:35	WG1707348
Magnesium	4520		100	1	07/23/2021 02:35	WG1707348
Manganese	239		1.00	1	07/23/2021 02:35	WG1707348
Nickel	19.5		2.00	1	07/23/2021 02:35	WG1707348
Potassium	1230		100	1	07/23/2021 02:35	WG1707348
Selenium	ND		2.00	1	07/23/2021 02:35	WG1707348
Silver	ND		1.00	1	07/23/2021 02:35	WG1707348
Sodium	925		100	1	07/23/2021 02:35	WG1707348
Thallium	ND		2.00	1	07/23/2021 02:35	WG1707348
Vanadium	42.6		2.00	1	07/23/2021 02:35	WG1707348
Zinc	33.1		5.00	1	07/23/2021 00:21	WG1707348

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0615	1.23	07/19/2021 05:44	WG1707442
Acrylonitrile	ND		0.0154	1.23	07/19/2021 05:44	WG1707442
Benzene	ND		0.00123	1.23	07/19/2021 05:44	WG1707442
Bromobenzene	ND		0.0154	1.23	07/19/2021 05:44	WG1707442
Bromodichloromethane	ND		0.00308	1.23	07/19/2021 05:44	WG1707442
Bromoform	ND		0.0308	1.23	07/19/2021 05:44	WG1707442
Bromomethane	ND		0.0154	1.23	07/19/2021 05:44	WG1707442
n-Butylbenzene	ND		0.0154	1.23	07/19/2021 05:44	WG1707442
sec-Butylbenzene	ND		0.0154	1.23	07/19/2021 05:44	WG1707442
tert-Butylbenzene	ND		0.00615	1.23	07/19/2021 05:44	WG1707442
Carbon tetrachloride	ND		0.00615	1.23	07/19/2021 05:44	WG1707442
Chlorobenzene	ND		0.00308	1.23	07/19/2021 05:44	WG1707442
Chlorodibromomethane	ND		0.00308	1.23	07/19/2021 05:44	WG1707442
Chloroethane	ND		0.00615	1.23	07/19/2021 05:44	WG1707442
Chloroform	ND		0.00308	1.23	07/19/2021 05:44	WG1707442
Chloromethane	ND		0.0154	1.23	07/19/2021 05:44	WG1707442
2-Chlorotoluene	ND	J4	0.00308	1.23	07/19/2021 05:44	WG1707442
4-Chlorotoluene	ND		0.00615	1.23	07/19/2021 05:44	WG1707442

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 mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	ND		0.0308	1.23	07/19/2021 05:44	WG1707442
1,2-Dibromoethane	ND		0.00308	1.23	07/19/2021 05:44	WG1707442
Dibromomethane	ND		0.00615	1.23	07/19/2021 05:44	WG1707442
1,2-Dichlorobenzene	ND		0.00615	1.23	07/19/2021 05:44	WG1707442
1,3-Dichlorobenzene	ND		0.00615	1.23	07/19/2021 05:44	WG1707442
1,4-Dichlorobenzene	ND		0.00615	1.23	07/19/2021 05:44	WG1707442
Dichlorodifluoromethane	ND		0.00308	1.23	07/19/2021 05:44	WG1707442
1,1-Dichloroethane	ND		0.00308	1.23	07/19/2021 05:44	WG1707442
1,2-Dichloroethane	ND		0.00308	1.23	07/19/2021 05:44	WG1707442
1,1-Dichloroethene	ND		0.00308	1.23	07/19/2021 05:44	WG1707442
cis-1,2-Dichloroethene	ND		0.00308	1.23	07/19/2021 05:44	WG1707442
trans-1,2-Dichloroethene	ND		0.00615	1.23	07/19/2021 05:44	WG1707442
1,2-Dichloropropane	ND		0.00615	1.23	07/19/2021 05:44	WG1707442
1,1-Dichloropropene	ND		0.00308	1.23	07/19/2021 05:44	WG1707442
1,3-Dichloropropane	ND		0.00615	1.23	07/19/2021 05:44	WG1707442
cis-1,3-Dichloropropene	ND		0.00308	1.23	07/19/2021 05:44	WG1707442
trans-1,3-Dichloropropene	ND		0.00615	1.23	07/19/2021 05:44	WG1707442
2,2-Dichloropropane	ND		0.00308	1.23	07/19/2021 05:44	WG1707442
Di-isopropyl ether	ND		0.00123	1.23	07/19/2021 05:44	WG1707442
Ethylbenzene	ND		0.00308	1.23	07/19/2021 05:44	WG1707442
Hexachloro-1,3-butadiene	ND		0.0308	1.23	07/19/2021 05:44	WG1707442
Isopropylbenzene	ND		0.00308	1.23	07/19/2021 05:44	WG1707442
p-Isopropyltoluene	ND		0.00615	1.23	07/19/2021 05:44	WG1707442
2-Butanone (MEK)	ND		0.123	1.23	07/19/2021 05:44	WG1707442
Methylene Chloride	ND		0.0308	1.23	07/19/2021 05:44	WG1707442
4-Methyl-2-pentanone (MIBK)	ND		0.0308	1.23	07/19/2021 05:44	WG1707442
Methyl tert-butyl ether	ND		0.00123	1.23	07/19/2021 05:44	WG1707442
Naphthalene	ND		0.0154	1.23	07/23/2021 15:52	WG1710558
n-Propylbenzene	ND		0.00615	1.23	07/19/2021 05:44	WG1707442
Styrene	ND		0.0154	1.23	07/19/2021 05:44	WG1707442
1,1,1-Tetrachloroethane	ND		0.00308	1.23	07/19/2021 05:44	WG1707442
1,1,2,2-Tetrachloroethane	ND		0.00308	1.23	07/19/2021 05:44	WG1707442
1,1,2-Trichlorotrifluoroethane	ND		0.00308	1.23	07/19/2021 05:44	WG1707442
Tetrachloroethene	ND		0.00308	1.23	07/19/2021 05:44	WG1707442
Toluene	ND		0.00615	1.23	07/19/2021 05:44	WG1707442
1,2,3-Trichlorobenzene	ND	C4	0.0154	1.23	07/23/2021 15:52	WG1710558
1,2,4-Trichlorobenzene	ND		0.0154	1.23	07/19/2021 05:44	WG1707442
1,1,1-Trichloroethane	ND		0.00308	1.23	07/19/2021 05:44	WG1707442
1,1,2-Trichloroethane	ND		0.00308	1.23	07/19/2021 05:44	WG1707442
Trichloroethene	ND		0.00123	1.23	07/19/2021 05:44	WG1707442
Trichlorofluoromethane	ND		0.00308	1.23	07/19/2021 05:44	WG1707442
1,2,3-Trichloropropane	ND		0.0154	1.23	07/19/2021 05:44	WG1707442
1,2,4-Trimethylbenzene	ND		0.00615	1.23	07/19/2021 05:44	WG1707442
1,2,3-Trimethylbenzene	ND		0.00615	1.23	07/19/2021 05:44	WG1707442
1,3,5-Trimethylbenzene	ND		0.00615	1.23	07/19/2021 05:44	WG1707442
Vinyl chloride	ND		0.00308	1.23	07/19/2021 05:44	WG1707442
Xylenes, Total	ND		0.00800	1.23	07/19/2021 05:44	WG1707442
(S) Toluene-d8	105		75.0-131		07/19/2021 05:44	WG1707442
(S) Toluene-d8	115		75.0-131		07/23/2021 15:52	WG1710558
(S) 4-Bromofluorobenzene	95.6		67.0-138		07/19/2021 05:44	WG1707442
(S) 4-Bromofluorobenzene	91.4		67.0-138		07/23/2021 15:52	WG1710558
(S) 1,2-Dichloroethane-d4	115		70.0-130		07/19/2021 05:44	WG1707442
(S) 1,2-Dichloroethane-d4	91.3		70.0-130		07/23/2021 15:52	WG1710558

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		0.0333	1	07/22/2021 13:47	WG1709670
Acenaphthylene	ND		0.0333	1	07/22/2021 13:47	WG1709670
Anthracene	ND		0.0333	1	07/22/2021 13:47	WG1709670
Benzidine	ND		1.67	1	07/22/2021 13:47	WG1709670
Benzo(a)anthracene	ND		0.0333	1	07/22/2021 13:47	WG1709670
Benzo(b)fluoranthene	ND		0.0333	1	07/22/2021 13:47	WG1709670
Benzo(k)fluoranthene	ND		0.0333	1	07/22/2021 13:47	WG1709670
Benzo(g,h,i)perylene	ND		0.0333	1	07/22/2021 13:47	WG1709670
Benzo(a)pyrene	ND		0.0333	1	07/22/2021 13:47	WG1709670
Bis(2-chloroethoxy)methane	ND		0.333	1	07/22/2021 13:47	WG1709670
Bis(2-chloroethyl)ether	ND		0.333	1	07/22/2021 13:47	WG1709670
2,2-Oxybis(1-Chloropropane)	ND		0.333	1	07/22/2021 13:47	WG1709670
4-Bromophenyl-phenylether	ND		0.333	1	07/22/2021 13:47	WG1709670
2-Chloronaphthalene	ND		0.0333	1	07/22/2021 13:47	WG1709670
4-Chlorophenyl-phenylether	ND		0.333	1	07/22/2021 13:47	WG1709670
Chrysene	ND		0.0333	1	07/22/2021 13:47	WG1709670
Dibenz(a,h)anthracene	ND		0.0333	1	07/22/2021 13:47	WG1709670
1,2-Dichlorobenzene	ND		0.333	1	07/22/2021 13:47	WG1709670
1,3-Dichlorobenzene	ND		0.333	1	07/22/2021 13:47	WG1709670
1,4-Dichlorobenzene	ND		0.333	1	07/22/2021 13:47	WG1709670
3,3-Dichlorobenzidine	ND		0.333	1	07/22/2021 13:47	WG1709670
2,4-Dinitrotoluene	ND		0.333	1	07/22/2021 13:47	WG1709670
2,6-Dinitrotoluene	ND		0.333	1	07/22/2021 13:47	WG1709670
Fluoranthene	ND		0.0333	1	07/22/2021 13:47	WG1709670
Fluorene	ND		0.0333	1	07/22/2021 13:47	WG1709670
Hexachlorobenzene	ND		0.333	1	07/22/2021 13:47	WG1709670
Hexachloro-1,3-butadiene	ND		0.333	1	07/22/2021 13:47	WG1709670
Hexachlorocyclopentadiene	ND		0.333	1	07/22/2021 13:47	WG1709670
Hexachloroethane	ND		0.333	1	07/22/2021 13:47	WG1709670
Indeno(1,2,3-cd)pyrene	ND		0.0333	1	07/22/2021 13:47	WG1709670
Isophorone	ND		0.333	1	07/22/2021 13:47	WG1709670
Naphthalene	ND		0.0333	1	07/22/2021 13:47	WG1709670
Nitrobenzene	ND		0.333	1	07/22/2021 13:47	WG1709670
n-Nitrosodimethylamine	ND		0.333	1	07/22/2021 13:47	WG1709670
n-Nitrosodiphenylamine	ND		0.333	1	07/22/2021 13:47	WG1709670
n-Nitrosodi-n-propylamine	ND		0.333	1	07/22/2021 13:47	WG1709670
Phenanthrene	ND		0.0333	1	07/22/2021 13:47	WG1709670
Benzylbutyl phthalate	ND		0.333	1	07/22/2021 13:47	WG1709670
Bis(2-ethylhexyl)phthalate	ND		0.333	1	07/22/2021 13:47	WG1709670
Di-n-butyl phthalate	ND		0.333	1	07/22/2021 13:47	WG1709670
Diethyl phthalate	ND		0.333	1	07/22/2021 13:47	WG1709670
Dimethyl phthalate	ND		0.333	1	07/22/2021 13:47	WG1709670
Di-n-octyl phthalate	ND		0.333	1	07/22/2021 13:47	WG1709670
Pyrene	ND		0.0333	1	07/22/2021 13:47	WG1709670
1,2,4-Trichlorobenzene	ND		0.333	1	07/22/2021 13:47	WG1709670
4-Chloro-3-methylphenol	ND		0.333	1	07/22/2021 13:47	WG1709670
2-Chlorophenol	ND		0.333	1	07/22/2021 13:47	WG1709670
2,4-Dichlorophenol	ND		0.333	1	07/22/2021 13:47	WG1709670
2,4-Dimethylphenol	ND		0.333	1	07/22/2021 13:47	WG1709670
4,6-Dinitro-2-methylphenol	ND		0.333	1	07/22/2021 13:47	WG1709670
2,4-Dinitrophenol	ND		0.333	1	07/22/2021 13:47	WG1709670
2-Nitrophenol	ND		0.333	1	07/22/2021 13:47	WG1709670
4-Nitrophenol	ND		0.333	1	07/22/2021 13:47	WG1709670
Pentachlorophenol	ND		0.333	1	07/22/2021 13:47	WG1709670
Phenol	ND		0.333	1	07/22/2021 13:47	WG1709670
2,4,6-Trichlorophenol	ND		0.333	1	07/22/2021 13:47	WG1709670

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) 2-Fluorophenol	65.0		12.0-120		07/22/2021 13:47	WG1709670
(S) Phenol-d5	59.6		10.0-120		07/22/2021 13:47	WG1709670
(S) Nitrobenzene-d5	57.1		10.0-122		07/22/2021 13:47	WG1709670
(S) 2-Fluorobiphenyl	65.2		15.0-120		07/22/2021 13:47	WG1709670
(S) 2,4,6-Tribromophenol	64.6		10.0-127		07/22/2021 13:47	WG1709670
(S) p-Terphenyl-d14	59.5		10.0-120		07/22/2021 13:47	WG1709670

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Method Blank (MB)

(MB) R3681946-1 07/20/21 15:19

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

¹Cp

²Tc

³Ss

L1379676-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1379676-01 07/20/21 15:19 • (DUP) R3681946-3 07/20/21 15:19

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Total Solids	83.3	83.3	1	0.0628		10

⁴Cn

⁵Sr

Laboratory Control Sample (LCS)

(LCS) R3681946-2 07/20/21 15:19

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

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3681939-1 07/20/21 15:02

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

1 Cp

2 Tc

3 Ss

L1379678-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1379678-11 07/20/21 15:02 • (DUP) R3681939-3 07/20/21 15:02

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Total Solids	93.7	93.8	1	0.0958		10

4 Cn

5 Sr

Laboratory Control Sample (LCS)

(LCS) R3681939-2 07/20/21 15:02

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

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3682084-1 07/20/21 17:18

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

¹Cp

²Tc

³Ss

L1379681-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1379681-02 07/20/21 17:18 • (DUP) R3682084-3 07/20/21 17:18

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	85.9	85.9	1	0.0527		10

⁴Cn

⁵Sr

⁶Qc

Laboratory Control Sample (LCS)

(LCS) R3682084-2 07/20/21 17:18

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

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3681740-1 07/20/21 15:05

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Mercury	U		0.0180	0.0400

1 Cp

2 Tc

3 Ss

Laboratory Control Sample (LCS)

(LCS) R3681740-2 07/20/21 15:07

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Mercury	0.500	0.523	105	80.0-120	

4 Cn

5 Sr

L1379697-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1379697-03 07/20/21 15:09 • (MS) R3681740-3 07/20/21 15:12 • (MSD) R3681740-4 07/20/21 15:14

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Mercury	0.500	ND	0.431	0.410	86.2	82.0	1	75.0-125			4.97	20

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3681632-1 07/20/21 11:26

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Mercury	U		0.0180	0.0400

1 Cp

2 Tc

3 Ss

Laboratory Control Sample (LCS)

(LCS) R3681632-2 07/20/21 11:34

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Mercury	0.500	0.491	98.1	80.0-120	

4 Cn

5 Sr

L1379678-18 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1379678-18 07/20/21 11:36 • (MS) R3681632-3 07/20/21 11:39 • (MSD) R3681632-4 07/20/21 11:41

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Mercury	0.500	ND	0.411	0.436	82.2	87.2	1	75.0-125			5.84	20

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3683089-1 07/23/21 01:22

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Aluminum	U		6.08	20.0
Antimony	U		0.544	2.00
Arsenic	U		0.518	2.00
Barium	U		0.0852	0.500
Beryllium	U		0.0315	0.200
Cadmium	U		0.0471	0.500
Calcium	U		10.6	100
Chromium	U		0.133	1.00
Cobalt	U		0.0811	1.00
Copper	U		0.400	2.00
Iron	U		2.24	10.0
Lead	U		0.208	0.500
Magnesium	U		7.38	100
Manganese	U		0.133	1.00
Nickel	U		0.132	2.00
Potassium	U		20.9	100
Selenium	U		0.764	2.00
Silver	U		0.127	1.00
Sodium	U		41.2	100
Thallium	U		0.394	2.00
Vanadium	U		0.506	2.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3683155-1 07/22/21 23:07

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Zinc	U		0.832	5.00

Laboratory Control Sample (LCS)

(LCS) R3683089-2 07/23/21 01:25

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aluminum	1000	947	94.7	80.0-120	
Antimony	100	97.2	97.2	80.0-120	
Arsenic	100	93.3	93.3	80.0-120	
Barium	100	101	101	80.0-120	
Beryllium	100	97.6	97.6	80.0-120	

Laboratory Control Sample (LCS)

(LCS) R3683089-2 07/23/21 01:25

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Cadmium	100	94.6	94.6	80.0-120	
Calcium	1000	957	95.7	80.0-120	
Chromium	100	95.2	95.2	80.0-120	
Cobalt	100	97.3	97.3	80.0-120	
Copper	100	95.8	95.8	80.0-120	
Iron	1000	956	95.6	80.0-120	
Lead	100	93.5	93.5	80.0-120	
Magnesium	1000	932	93.2	80.0-120	
Manganese	100	95.1	95.1	80.0-120	
Nickel	100	96.3	96.3	80.0-120	
Potassium	1000	958	95.8	80.0-120	
Selenium	100	96.4	96.4	80.0-120	
Silver	20.0	17.2	86.1	80.0-120	
Sodium	1000	963	96.3	80.0-120	
Thallium	100	94.1	94.1	80.0-120	
Vanadium	100	97.6	97.6	80.0-120	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3683155-2 07/22/21 23:09

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Zinc	100	98.0	98.0	80.0-120	

L1379678-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1379678-01 07/23/21 01:27 • (MS) R3683089-5 07/23/21 01:35 • (MSD) R3683089-6 07/23/21 01:37

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Aluminum	1000	16700	14500	17400	0.000	65.4	1	75.0-125	V	V	18.0	20
Antimony	100	ND	48.7	47.5	48.7	47.5	1	75.0-125	J6	J6	2.49	20
Arsenic	100	2.52	92.1	91.2	89.6	88.7	1	75.0-125			0.985	20
Barium	100	118	150	151	31.9	32.8	1	75.0-125	J6	J6	0.621	20
Beryllium	100	ND	95.2	93.1	95.0	92.9	1	75.0-125			2.21	20
Cadmium	100	ND	92.4	90.6	92.1	90.4	1	75.0-125			1.90	20
Calcium	1000	4480	5070	5910	59.8	143	1	75.0-125	V	V	15.2	20
Chromium	100	17.0	105	106	87.7	88.9	1	75.0-125			1.18	20
Cobalt	100	8.78	108	108	99.7	99.6	1	75.0-125			0.0825	20
Copper	100	29.0	114	114	85.3	84.8	1	75.0-125			0.434	20

L1379678-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1379678-01 07/23/21 01:27 • (MS) R3683089-5 07/23/21 01:35 • (MSD) R3683089-6 07/23/21 01:37

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Iron	1000	23200	19000	21600	0.000	0.000	1	75.0-125	V	V	12.7	20
Lead	100	2.97	98.4	97.5	95.5	94.5	1	75.0-125			0.961	20
Magnesium	1000	4760	4990	5810	22.7	104	1	75.0-125	V		15.2	20
Manganese	100	306	360	413	54.0	107	1	75.0-125	J6		13.7	20
Nickel	100	20.9	119	118	97.8	97.1	1	75.0-125			0.619	20
Potassium	1000	1090	1730	1670	63.9	58.2	1	75.0-125	J6	J6	3.33	20
Selenium	100	ND	94.6	92.7	93.2	91.2	1	75.0-125			2.13	20
Silver	20.0	ND	17.0	16.7	85.2	83.5	1	75.0-125			2.02	20
Sodium	1000	533	1410	1340	87.4	80.9	1	75.0-125			4.78	20
Thallium	100	ND	92.2	90.6	92.2	90.6	1	75.0-125			1.78	20
Vanadium	100	54.9	133	133	78.0	78.5	1	75.0-125			0.346	20

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1379678-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1379678-01 07/22/21 23:12 • (MS) R3683155-5 07/22/21 23:20 • (MSD) R3683155-6 07/22/21 23:22

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Zinc	100	39.0	126	126	87.4	86.6	1	75.0-125			0.626	20

Method Blank (MB)

(MB) R3683074-2 07/18/21 21:38

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) R3683074-2 07/18/21 21:38

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
n-Propylbenzene	U		0.000950	0.00500
Styrene	U		0.000229	0.0125
1,1,1,2-Tetrachloroethane	U		0.000948	0.00250
1,1,2,2-Tetrachloroethane	U		0.000695	0.00250
Tetrachloroethene	U		0.000896	0.00250
Toluene	U		0.00130	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000754	0.00250
1,2,4-Trichlorobenzene	U		0.00440	0.0125
1,1,1-Trichloroethane	U		0.000923	0.00250
1,1,2-Trichloroethane	U		0.000597	0.00250
Trichloroethene	U		0.000584	0.00100
Trichlorofluoromethane	U		0.000827	0.00250
1,2,3-Trichloropropane	U		0.00162	0.0125
1,2,3-Trimethylbenzene	U		0.00158	0.00500
1,2,4-Trimethylbenzene	U		0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
Vinyl chloride	U		0.00116	0.00250
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	98.5			75.0-131
(S) 4-Bromofluorobenzene	93.4			67.0-138
(S) 1,2-Dichloroethane-d4	116			70.0-130

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3683074-1 07/18/21 20:41

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	0.690	110	10.0-160	
Acrylonitrile	0.625	0.689	110	45.0-153	
Benzene	0.125	0.126	101	70.0-123	
Bromobenzene	0.125	0.142	114	73.0-121	
Bromodichloromethane	0.125	0.136	109	73.0-121	
Bromoform	0.125	0.114	91.2	64.0-132	
Bromomethane	0.125	0.116	92.8	56.0-147	

Laboratory Control Sample (LCS)

(LCS) R3683074-1 07/18/21 20:41

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
n-Butylbenzene	0.125	0.107	85.6	68.0-135	
sec-Butylbenzene	0.125	0.127	102	74.0-130	
tert-Butylbenzene	0.125	0.139	111	75.0-127	
Carbon tetrachloride	0.125	0.145	116	66.0-128	
Chlorobenzene	0.125	0.134	107	76.0-128	
Chlorodibromomethane	0.125	0.118	94.4	74.0-127	
Chloroethane	0.125	0.133	106	61.0-134	
Chloroform	0.125	0.142	114	72.0-123	
Chloromethane	0.125	0.112	89.6	51.0-138	
2-Chlorotoluene	0.125	0.156	125	75.0-124	J4
4-Chlorotoluene	0.125	0.130	104	75.0-124	
1,2-Dibromo-3-Chloropropane	0.125	0.120	96.0	59.0-130	
1,2-Dibromoethane	0.125	0.126	101	74.0-128	
Dibromomethane	0.125	0.134	107	75.0-122	
1,2-Dichlorobenzene	0.125	0.127	102	76.0-124	
1,3-Dichlorobenzene	0.125	0.126	101	76.0-125	
1,4-Dichlorobenzene	0.125	0.130	104	77.0-121	
Dichlorodifluoromethane	0.125	0.139	111	43.0-156	
1,1-Dichloroethane	0.125	0.145	116	70.0-127	
1,2-Dichloroethane	0.125	0.147	118	65.0-131	
1,1-Dichloroethene	0.125	0.135	108	65.0-131	
cis-1,2-Dichloroethene	0.125	0.131	105	73.0-125	
trans-1,2-Dichloroethene	0.125	0.110	88.0	71.0-125	
1,2-Dichloropropane	0.125	0.128	102	74.0-125	
1,1-Dichloropropene	0.125	0.128	102	73.0-125	
1,3-Dichloropropane	0.125	0.126	101	80.0-125	
cis-1,3-Dichloropropene	0.125	0.126	101	76.0-127	
trans-1,3-Dichloropropene	0.125	0.127	102	73.0-127	
2,2-Dichloropropane	0.125	0.123	98.4	59.0-135	
Di-isopropyl ether	0.125	0.129	103	60.0-136	
Ethylbenzene	0.125	0.115	92.0	74.0-126	
Hexachloro-1,3-butadiene	0.125	0.118	94.4	57.0-150	
Isopropylbenzene	0.125	0.127	102	72.0-127	
p-Isopropyltoluene	0.125	0.128	102	72.0-133	
2-Butanone (MEK)	0.625	0.629	101	30.0-160	
Methylene Chloride	0.125	0.118	94.4	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.625	0.694	111	56.0-143	
Methyl tert-butyl ether	0.125	0.155	124	66.0-132	
n-Propylbenzene	0.125	0.145	116	74.0-126	
Styrene	0.125	0.113	90.4	72.0-127	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3683074-1 07/18/21 20:41

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
1,1,1,2-Tetrachloroethane	0.125	0.141	113	74.0-129	
1,1,2,2-Tetrachloroethane	0.125	0.106	84.8	68.0-128	
Tetrachloroethene	0.125	0.133	106	70.0-136	
Toluene	0.125	0.123	98.4	75.0-121	
1,1,2-Trichlorotrifluoroethane	0.125	0.147	118	61.0-139	
1,2,4-Trichlorobenzene	0.125	0.119	95.2	62.0-137	
1,1,1-Trichloroethane	0.125	0.140	112	69.0-126	
1,1,2-Trichloroethane	0.125	0.134	107	78.0-123	
Trichloroethene	0.125	0.140	112	76.0-126	
Trichlorofluoromethane	0.125	0.146	117	61.0-142	
1,2,3-Trichloropropane	0.125	0.141	113	67.0-129	
1,2,3-Trimethylbenzene	0.125	0.122	97.6	74.0-124	
1,2,4-Trimethylbenzene	0.125	0.125	100	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.133	106	73.0-127	
Vinyl chloride	0.125	0.123	98.4	63.0-134	
Xylenes, Total	0.375	0.350	93.3	72.0-127	
(S) Toluene-d8			96.2	75.0-131	
(S) 4-Bromofluorobenzene			96.6	67.0-138	
(S) 1,2-Dichloroethane-d4			117	70.0-130	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1379676-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1379676-02 07/18/21 22:10 • (MS) R3683074-3 07/19/21 06:03 • (MSD) R3683074-4 07/19/21 06:22

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Acetone	0.883	ND	0.802	0.858	90.8	97.2	1.41	10.0-160			6.75	40
Acrylonitrile	0.883	ND	1.12	1.26	127	143	1.41	10.0-160			11.8	40
Benzene	0.177	ND	0.125	0.173	70.6	97.7	1.41	10.0-149			32.2	37
Bromobenzene	0.177	ND	0.170	0.248	96.0	140	1.41	10.0-156			37.3	38
Bromodichloromethane	0.177	ND	0.133	0.185	75.1	105	1.41	10.0-143			32.7	37
Bromoform	0.177	ND	0.145	0.161	81.9	91.0	1.41	10.0-146			10.5	36
Bromomethane	0.177	ND	0.133	0.181	75.1	102	1.41	10.0-149			30.6	38
n-Butylbenzene	0.177	ND	0.104	0.167	58.8	94.4	1.41	10.0-160		J3	46.5	40
sec-Butylbenzene	0.177	ND	0.114	0.178	64.4	101	1.41	10.0-159		J3	43.8	39
tert-Butylbenzene	0.177	ND	0.130	0.193	73.4	109	1.41	10.0-156			39.0	39
Carbon tetrachloride	0.177	ND	0.101	0.172	57.1	97.2	1.41	10.0-145		J3	52.0	37
Chlorobenzene	0.177	ND	0.146	0.175	82.5	98.9	1.41	10.0-152			18.1	39
Chlorodibromomethane	0.177	ND	0.148	0.165	83.6	93.2	1.41	10.0-146			10.9	37
Chloroethane	0.177	ND	0.110	0.186	62.1	105	1.41	10.0-146		J3	51.4	40

L1379676-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1379676-02 07/18/21 22:10 • (MS) R3683074-3 07/19/21 06:03 • (MSD) R3683074-4 07/19/21 06:22

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloroform	0.177	ND	0.135	0.184	76.3	104	1.41	10.0-146			30.7	37
Chloromethane	0.177	ND	0.0781	0.133	44.1	75.1	1.41	10.0-159		U3	52.0	37
2-Chlorotoluene	0.177	ND	0.145	0.227	81.9	128	1.41	10.0-159		U3	44.1	38
4-Chlorotoluene	0.177	ND	0.128	0.191	72.3	108	1.41	10.0-155		U3	39.5	39
1,2-Dibromo-3-Chloropropane	0.177	ND	0.130	0.160	73.4	90.4	1.41	10.0-151			20.7	39
1,2-Dibromoethane	0.177	ND	0.182	0.196	103	111	1.41	10.0-148			7.41	34
Dibromomethane	0.177	ND	0.170	0.182	96.0	103	1.41	10.0-147			6.82	35
1,2-Dichlorobenzene	0.177	ND	0.155	0.195	87.6	110	1.41	10.0-155			22.9	37
1,3-Dichlorobenzene	0.177	ND	0.144	0.199	81.4	112	1.41	10.0-153			32.1	38
1,4-Dichlorobenzene	0.177	ND	0.153	0.205	86.4	116	1.41	10.0-151			29.1	38
Dichlorodifluoromethane	0.177	ND	0.0606	0.125	34.2	70.6	1.41	10.0-160		U3	69.4	35
1,1-Dichloroethane	0.177	ND	0.127	0.184	71.8	104	1.41	10.0-147			36.7	37
1,2-Dichloroethane	0.177	ND	0.183	0.216	103	122	1.41	10.0-148			16.5	35
1,1-Dichloroethene	0.177	ND	0.0904	0.166	51.1	93.8	1.41	10.0-155		U3	59.0	37
cis-1,2-Dichloroethene	0.177	ND	0.132	0.173	74.6	97.7	1.41	10.0-149			26.9	37
trans-1,2-Dichloroethene	0.177	ND	0.104	0.151	58.8	85.3	1.41	10.0-150			36.9	37
1,2-Dichloropropane	0.177	ND	0.144	0.172	81.4	97.2	1.41	10.0-148			17.7	37
1,1-Dichloropropene	0.177	ND	0.0966	0.158	54.6	89.3	1.41	10.0-153		U3	48.2	35
1,3-Dichloropropane	0.177	ND	0.189	0.198	107	112	1.41	10.0-154			4.65	35
cis-1,3-Dichloropropene	0.177	ND	0.144	0.185	81.4	105	1.41	10.0-151			24.9	37
trans-1,3-Dichloropropene	0.177	ND	0.150	0.164	84.7	92.7	1.41	10.0-148			8.92	37
2,2-Dichloropropane	0.177	ND	0.0985	0.171	55.6	96.6	1.41	10.0-138		U3	53.8	36
Di-isopropyl ether	0.177	ND	0.147	0.182	83.1	103	1.41	10.0-147			21.3	36
Ethylbenzene	0.177	ND	0.115	0.148	65.0	83.6	1.41	10.0-160			25.1	38
Hexachloro-1,3-butadiene	0.177	ND	0.0984	0.175	55.6	98.9	1.41	10.0-160		U3	56.0	40
Isopropylbenzene	0.177	ND	0.115	0.158	65.0	89.3	1.41	10.0-155			31.5	38
p-Isopropyltoluene	0.177	ND	0.113	0.189	63.8	107	1.41	10.0-160		U3	50.3	40
2-Butanone (MEK)	0.883	ND	1.09	0.747	123	84.6	1.41	10.0-160			37.3	40
Methylene Chloride	0.177	ND	0.144	0.202	81.4	114	1.41	10.0-141			33.5	37
4-Methyl-2-pentanone (MIBK)	0.883	ND	1.05	1.06	119	120	1.41	10.0-160			0.948	35
Methyl tert-butyl ether	0.177	ND	0.193	0.218	109	123	1.41	11.0-147			12.2	35
n-Propylbenzene	0.177	ND	0.125	0.203	70.6	115	1.41	10.0-158		U3	47.6	38
Styrene	0.177	ND	0.134	0.157	75.7	88.7	1.41	10.0-160			15.8	40
1,1,1,2-Tetrachloroethane	0.177	ND	0.149	0.170	84.2	96.0	1.41	10.0-149			13.2	39
1,1,2,2-Tetrachloroethane	0.177	ND	0.148	0.152	83.6	85.9	1.41	10.0-160			2.67	35
Tetrachloroethene	0.177	ND	0.0956	0.160	54.0	90.4	1.41	10.0-156		U3	50.4	39
Toluene	0.177	ND	0.123	0.166	69.5	93.8	1.41	10.0-156			29.8	38
1,1,2-Trichlorotrifluoroethane	0.177	ND	0.0849	0.173	48.0	97.7	1.41	10.0-160		U3	68.3	36
1,2,4-Trichlorobenzene	0.177	ND	0.140	0.212	79.1	120	1.41	10.0-160		U3	40.9	40
1,1,1-Trichloroethane	0.177	ND	0.0995	0.128	56.2	72.3	1.41	10.0-144			25.1	35

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1379676-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1379676-02 07/18/21 22:10 • (MS) R3683074-3 07/19/21 06:03 • (MSD) R3683074-4 07/19/21 06:22

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,1,2-Trichloroethane	0.177	ND	0.187	0.191	106	108	1.41	10.0-160			2.12	35
Trichloroethene	0.177	ND	0.129	0.215	72.9	121	1.41	10.0-156		J3	50.0	38
Trichlorofluoromethane	0.177	ND	0.0827	0.184	46.7	104	1.41	10.0-160		J3	76.0	40
1,2,3-Trichloropropane	0.177	ND	0.185	0.261	105	147	1.41	10.0-156			34.1	35
1,2,3-Trimethylbenzene	0.177	ND	0.136	0.190	76.8	107	1.41	10.0-160			33.1	36
1,2,4-Trimethylbenzene	0.177	ND	0.132	0.179	74.6	101	1.41	10.0-160			30.2	36
1,3,5-Trimethylbenzene	0.177	ND	0.121	0.181	68.4	102	1.41	10.0-160		J3	39.7	38
Vinyl chloride	0.177	ND	0.0691	0.135	39.0	76.3	1.41	10.0-160		J3	64.6	37
Xylenes, Total	0.530	ND	0.399	0.475	75.3	89.6	1.41	10.0-160			17.4	38
(S) Toluene-d8					102	98.6		75.0-131				
(S) 4-Bromofluorobenzene					94.8	91.1		67.0-138				
(S) 1,2-Dichloroethane-d4					112	108		70.0-130				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3683305-3 07/23/21 09:35

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Naphthalene	U		0.00488	0.0125
1,2,3-Trichlorobenzene	U		0.00733	0.0125
(S) Toluene-d8	113			75.0-131
(S) 4-Bromofluorobenzene	93.7			67.0-138
(S) 1,2-Dichloroethane-d4	100			70.0-130

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

(LCS) R3683305-1 07/23/21 08:11 • (LCSD) R3683305-2 07/23/21 08:30

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Naphthalene	0.125	0.139	0.139	111	111	59.0-130			0.000	20
1,2,3-Trichlorobenzene	0.125	0.113	0.120	90.4	96.0	59.0-139			6.01	20
(S) Toluene-d8				107	109	75.0-131				
(S) 4-Bromofluorobenzene				98.5	95.3	67.0-138				
(S) 1,2-Dichloroethane-d4				107	106	70.0-130				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3682703-2 07/22/21 11:11

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acenaphthene	U		0.00539	0.0333
Acenaphthylene	U		0.00469	0.0333
Anthracene	U		0.00593	0.0333
Benzidine	U		0.0626	1.67
Benzo(a)anthracene	U		0.00587	0.0333
Benzo(b)fluoranthene	U		0.00621	0.0333
Benzo(k)fluoranthene	U		0.00592	0.0333
Benzo(g,h,i)perylene	U		0.00609	0.0333
Benzo(a)pyrene	U		0.00619	0.0333
Bis(2-chlorethoxy)methane	U		0.0100	0.333
Bis(2-chloroethyl)ether	U		0.0110	0.333
2,2-Oxybis(1-Chloropropane)	U		0.0144	0.333
4-Bromophenyl-phenylether	U		0.0117	0.333
2-Chloronaphthalene	U		0.00585	0.0333
4-Chlorophenyl-phenylether	U		0.0116	0.333
Chrysene	U		0.00662	0.0333
Dibenz(a,h)anthracene	U		0.00923	0.0333
1,2-Dichlorobenzene	U		0.00987	0.333
1,3-Dichlorobenzene	U		0.0101	0.333
1,4-Dichlorobenzene	U		0.00991	0.333
3,3-Dichlorobenzidine	U		0.0123	0.333
2,4-Dinitrotoluene	U		0.00955	0.333
2,6-Dinitrotoluene	U		0.0109	0.333
Fluoranthene	U		0.00601	0.0333
Fluorene	U		0.00542	0.0333
Hexachlorobenzene	U		0.0118	0.333
Hexachloro-1,3-butadiene	U		0.0112	0.333
Hexachlorocyclopentadiene	U		0.0175	0.333
Hexachloroethane	U		0.0131	0.333
Indeno(1,2,3-cd)pyrene	U		0.00941	0.0333
Isophorone	U		0.0102	0.333
Naphthalene	U		0.00836	0.0333
Nitrobenzene	U		0.0116	0.333
n-Nitrosodimethylamine	U		0.0494	0.333
n-Nitrosodiphenylamine	U		0.0252	0.333
n-Nitrosodi-n-propylamine	U		0.0111	0.333
Phenanthrene	U		0.00661	0.0333
Benzylbutyl phthalate	U		0.0104	0.333
Bis(2-ethylhexyl)phthalate	U		0.0422	0.333
Di-n-butyl phthalate	U		0.0114	0.333

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3682703-2 07/22/21 11:11

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Diethyl phthalate	U		0.0110	0.333
Dimethyl phthalate	U		0.0706	0.333
Di-n-octyl phthalate	U		0.0225	0.333
Pyrene	U		0.00648	0.0333
1,2,4-Trichlorobenzene	U		0.0104	0.333
4-Chloro-3-methylphenol	U		0.0108	0.333
2-Chlorophenol	U		0.0110	0.333
2,4-Dichlorophenol	U		0.00970	0.333
2,4-Dimethylphenol	U		0.00870	0.333
4,6-Dinitro-2-methylphenol	U		0.0755	0.333
2,4-Dinitrophenol	U		0.0779	0.333
2-Nitrophenol	U		0.0119	0.333
4-Nitrophenol	U		0.0104	0.333
Pentachlorophenol	U		0.00896	0.333
Phenol	U		0.0134	0.333
2,4,6-Trichlorophenol	U		0.0107	0.333
(S) 2-Fluorophenol	80.9			12.0-120
(S) Phenol-d5	79.0			10.0-120
(S) Nitrobenzene-d5	76.9			10.0-122
(S) 2-Fluorobiphenyl	74.5			15.0-120
(S) 2,4,6-Tribromophenol	68.0			10.0-127
(S) p-Terphenyl-d14	70.9			10.0-120

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3682703-1 07/22/21 10:49

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.666	0.431	64.7	38.0-120	
Acenaphthylene	0.666	0.478	71.8	40.0-120	
Anthracene	0.666	0.478	71.8	42.0-120	
Benzidine	1.33	0.419	31.5	10.0-120	
Benzo(a)anthracene	0.666	0.542	81.4	44.0-120	
Benzo(b)fluoranthene	0.666	0.497	74.6	43.0-120	
Benzo(k)fluoranthene	0.666	0.490	73.6	44.0-120	
Benzo(g,h,i)perylene	0.666	0.505	75.8	43.0-120	
Benzo(a)pyrene	0.666	0.518	77.8	45.0-120	
Bis(2-chlorethoxy)methane	0.666	0.392	58.9	20.0-120	
Bis(2-chloroethyl)ether	0.666	0.483	72.5	16.0-120	

Laboratory Control Sample (LCS)

(LCS) R3682703-1 07/22/21 10:49

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
2,2-Oxybis(1-Chloropropane)	0.666	0.444	66.7	23.0-120	
4-Bromophenyl-phenylether	0.666	0.454	68.2	40.0-120	
2-Chloronaphthalene	0.666	0.451	67.7	35.0-120	
4-Chlorophenyl-phenylether	0.666	0.455	68.3	40.0-120	
Chrysene	0.666	0.483	72.5	43.0-120	
Dibenz(a,h)anthracene	0.666	0.498	74.8	44.0-120	
1,2-Dichlorobenzene	0.666	0.445	66.8	32.0-120	
1,3-Dichlorobenzene	0.666	0.427	64.1	30.0-120	
1,4-Dichlorobenzene	0.666	0.435	65.3	31.0-120	
3,3-Dichlorobenzidine	1.33	0.962	72.3	28.0-120	
2,4-Dinitrotoluene	0.666	0.508	76.3	45.0-120	
2,6-Dinitrotoluene	0.666	0.478	71.8	42.0-120	
Fluoranthene	0.666	0.496	74.5	44.0-120	
Fluorene	0.666	0.468	70.3	41.0-120	
Hexachlorobenzene	0.666	0.422	63.4	39.0-120	
Hexachloro-1,3-butadiene	0.666	0.352	52.9	15.0-120	
Hexachlorocyclopentadiene	0.666	0.487	73.1	15.0-120	
Hexachloroethane	0.666	0.454	68.2	17.0-120	
Indeno(1,2,3-cd)pyrene	0.666	0.537	80.6	45.0-120	
Isophorone	0.666	0.412	61.9	23.0-120	
Naphthalene	0.666	0.376	56.5	18.0-120	
Nitrobenzene	0.666	0.400	60.1	17.0-120	
n-Nitrosodimethylamine	0.666	0.461	69.2	10.0-125	
n-Nitrosodiphenylamine	0.666	0.464	69.7	40.0-120	
n-Nitrosodi-n-propylamine	0.666	0.497	74.6	26.0-120	
Phenanthrene	0.666	0.460	69.1	42.0-120	
Benzylbutyl phthalate	0.666	0.520	78.1	40.0-120	
Bis(2-ethylhexyl)phthalate	0.666	0.512	76.9	41.0-120	
Di-n-butyl phthalate	0.666	0.516	77.5	43.0-120	
Diethyl phthalate	0.666	0.482	72.4	43.0-120	
Dimethyl phthalate	0.666	0.460	69.1	43.0-120	
Di-n-octyl phthalate	0.666	0.569	85.4	40.0-120	
Pyrene	0.666	0.474	71.2	41.0-120	
1,2,4-Trichlorobenzene	0.666	0.350	52.6	17.0-120	
4-Chloro-3-methylphenol	0.666	0.400	60.1	28.0-120	
2-Chlorophenol	0.666	0.494	74.2	28.0-120	
2,4-Dichlorophenol	0.666	0.392	58.9	25.0-120	
2,4-Dimethylphenol	0.666	0.385	57.8	15.0-120	
4,6-Dinitro-2-methylphenol	0.666	0.493	74.0	16.0-120	
2,4-Dinitrophenol	0.666	0.380	57.1	10.0-120	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3682703-1 07/22/21 10:49

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
2-Nitrophenol	0.666	0.395	59.3	20.0-120	
4-Nitrophenol	0.666	0.606	91.0	27.0-120	
Pentachlorophenol	0.666	0.488	73.3	29.0-120	
Phenol	0.666	0.494	74.2	28.0-120	
2,4,6-Trichlorophenol	0.666	0.465	69.8	37.0-120	
(S) 2-Fluorophenol			81.1	12.0-120	
(S) Phenol-d5			79.4	10.0-120	
(S) Nitrobenzene-d5			60.4	10.0-122	
(S) 2-Fluorobiphenyl			71.5	15.0-120	
(S) 2,4,6-Tribromophenol			73.7	10.0-127	
(S) p-Terphenyl-d14			66.7	10.0-120	

L1378981-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1378981-03 07/22/21 14:39 • (MS) R3682703-3 07/22/21 15:03 • (MSD) R3682703-4 07/22/21 15:27

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acenaphthene	0.638	ND	0.358	0.386	56.1	60.5	1	18.0-120			7.53	32
Acenaphthylene	0.638	ND	0.400	0.424	62.7	66.5	1	25.0-120			5.83	32
Anthracene	0.638	ND	0.405	0.405	63.5	63.5	1	22.0-120			0.000	29
Benzidine	1.28	ND	ND	ND	18.8	0.000	1	10.0-120		J3 J6	200	40
Benzo(a)anthracene	0.638	ND	0.455	0.465	71.3	72.9	1	25.0-120			2.17	29
Benzo(b)fluoranthene	0.638	ND	0.409	0.410	64.1	64.3	1	19.0-122			0.244	31
Benzo(k)fluoranthene	0.638	ND	0.412	0.412	64.6	64.6	1	23.0-120			0.000	30
Benzo(g,h,i)perylene	0.638	ND	0.412	0.421	64.6	66.0	1	10.0-120			2.16	33
Benzo(a)pyrene	0.638	ND	0.427	0.435	66.9	68.2	1	24.0-120			1.86	30
Bis(2-chlorethoxy)methane	0.638	ND	0.339	0.352	53.1	55.2	1	10.0-120			3.76	34
Bis(2-chloroethyl)ether	0.638	ND	0.429	0.417	67.2	65.4	1	10.0-120			2.84	40
2,2-Oxybis(1-Chloropropane)	0.638	ND	0.372	0.397	58.3	62.2	1	10.0-120			6.50	40
4-Bromophenyl-phenylether	0.638	ND	0.382	0.382	59.9	59.9	1	27.0-120			0.000	30
2-Chloronaphthalene	0.638	ND	0.381	0.405	59.7	63.5	1	20.0-120			6.11	32
4-Chlorophenyl-phenylether	0.638	ND	0.378	0.403	59.2	63.2	1	24.0-120			6.40	29
Chrysene	0.638	ND	0.410	0.405	64.3	63.5	1	21.0-120			1.23	29
Dibenz(a,h)anthracene	0.638	ND	0.417	0.409	65.4	64.1	1	10.0-120			1.94	32
1,2-Dichlorobenzene	0.638	ND	0.371	0.393	58.2	61.6	1	10.0-120			5.76	38
1,3-Dichlorobenzene	0.638	ND	0.361	0.380	56.6	59.6	1	10.0-120			5.13	40
1,4-Dichlorobenzene	0.638	ND	0.366	0.385	57.4	60.3	1	10.0-120			5.06	39
3,3-Dichlorobenzidine	1.28	ND	0.858	0.803	67.0	62.7	1	10.0-120			6.62	34
2,4-Dinitrotoluene	0.638	ND	0.422	0.441	66.1	69.1	1	30.0-120			4.40	31

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1378981-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1378981-03 07/22/21 14:39 • (MS) R3682703-3 07/22/21 15:03 • (MSD) R3682703-4 07/22/21 15:27

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
2,6-Dinitrotoluene	0.638	ND	0.400	0.419	62.7	65.7	1	25.0-120			4.64	31
Fluoranthene	0.638	ND	0.427	0.433	66.9	67.9	1	18.0-126			1.40	32
Fluorene	0.638	ND	0.389	0.410	61.0	64.3	1	25.0-120			5.26	30
Hexachlorobenzene	0.638	ND	0.356	0.358	55.8	56.1	1	27.0-120			0.560	28
Hexachloro-1,3-butadiene	0.638	ND	ND	ND	48.4	49.2	1	10.0-120			1.61	38
Hexachlorocyclopentadiene	0.638	ND	0.378	0.408	59.2	63.9	1	10.0-120			7.63	40
Hexachloroethane	0.638	ND	0.401	0.426	62.9	66.8	1	10.0-120			6.05	40
Indeno(1,2,3-cd)pyrene	0.638	ND	0.447	0.442	70.1	69.3	1	10.0-120			1.12	32
Isophorone	0.638	ND	0.355	0.362	55.6	56.7	1	13.0-120			1.95	34
Naphthalene	0.638	ND	0.325	0.338	50.9	53.0	1	10.0-120			3.92	35
Nitrobenzene	0.638	ND	0.348	0.355	54.5	55.6	1	10.0-120			1.99	36
n-Nitrosodimethylamine	0.638	ND	0.355	0.367	55.6	57.5	1	10.0-127			3.32	40
n-Nitrosodiphenylamine	0.638	ND	0.393	0.396	61.6	62.1	1	17.0-120			0.760	29
n-Nitrosodi-n-propylamine	0.638	ND	0.421	0.442	66.0	69.3	1	10.0-120			4.87	37
Phenanthrene	0.638	ND	0.386	0.397	60.5	62.2	1	17.0-120			2.81	31
Benzylbutyl phthalate	0.638	ND	0.442	0.442	69.3	69.3	1	23.0-120			0.000	30
Bis(2-ethylhexyl)phthalate	0.638	ND	0.428	0.436	67.1	68.3	1	17.0-126			1.85	30
Di-n-butyl phthalate	0.638	ND	0.443	0.445	69.4	69.7	1	30.0-120			0.450	29
Diethyl phthalate	0.638	ND	0.405	0.425	63.5	66.6	1	26.0-120			4.82	28
Dimethyl phthalate	0.638	ND	0.392	0.411	61.4	64.4	1	25.0-120			4.73	29
Di-n-octyl phthalate	0.638	ND	0.486	0.492	76.2	77.1	1	21.0-123			1.23	29
Pyrene	0.638	ND	0.401	0.404	62.9	63.3	1	16.0-121			0.745	32
1,2,4-Trichlorobenzene	0.638	ND	ND	ND	48.7	50.3	1	12.0-120			3.16	37
4-Chloro-3-methylphenol	0.638	ND	0.347	0.354	54.4	55.5	1	15.0-120			2.00	30
2-Chlorophenol	0.638	ND	0.418	0.434	65.5	68.0	1	15.0-120			3.76	37
2,4-Dichlorophenol	0.638	ND	0.342	0.353	53.6	55.3	1	20.0-120			3.17	31
2,4-Dimethylphenol	0.638	ND	0.338	0.347	53.0	54.4	1	10.0-120			2.63	33
4,6-Dinitro-2-methylphenol	0.638	ND	0.464	0.472	72.7	74.0	1	10.0-120			1.71	39
2,4-Dinitrophenol	0.638	ND	0.464	0.494	72.7	77.4	1	10.0-121			6.26	40
2-Nitrophenol	0.638	ND	0.370	0.396	58.0	62.1	1	12.0-120			6.79	39
4-Nitrophenol	0.638	ND	0.531	0.562	83.2	88.1	1	10.0-137			5.67	32
Pentachlorophenol	0.638	ND	0.451	0.462	70.7	72.4	1	10.0-160			2.41	31
Phenol	0.638	ND	0.417	0.431	65.4	67.6	1	12.0-120			3.30	38
2,4,6-Trichlorophenol	0.638	ND	0.391	0.408	61.3	63.9	1	19.0-120			4.26	32
(S) 2-Fluorophenol					72.6	74.6		12.0-120				
(S) Phenol-d5					70.8	73.4		10.0-120				
(S) Nitrobenzene-d5					55.8	60.2		10.0-122				
(S) 2-Fluorobiphenyl					62.4	66.1		15.0-120				
(S) 2,4,6-Tribromophenol					68.0	68.0		10.0-127				
(S) p-Terphenyl-d14					59.2	58.9		10.0-120				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3682944-2 07/22/21 11:04

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acenaphthene	U		0.00539	0.0333
Acenaphthylene	U		0.00469	0.0333
Anthracene	U		0.00593	0.0333
Benzidine	U		0.0626	1.67
Benzo(a)anthracene	U		0.00587	0.0333
Benzo(b)fluoranthene	U		0.00621	0.0333
Benzo(k)fluoranthene	U		0.00592	0.0333
Benzo(g,h,i)perylene	U		0.00609	0.0333
Benzo(a)pyrene	U		0.00619	0.0333
Bis(2-chlorethoxy)methane	U		0.0100	0.333
Bis(2-chloroethyl)ether	U		0.0110	0.333
2,2-oxybis(1-chloropropane)	U		0.0144	0.333
4-Bromophenyl-phenylether	U		0.0117	0.333
2-Chloronaphthalene	U		0.00585	0.0333
4-Chlorophenyl-phenylether	U		0.0116	0.333
Chrysene	U		0.00662	0.0333
Dibenz(a,h)anthracene	U		0.00923	0.0333
1,2-Dichlorobenzene	U		0.00987	0.333
1,3-Dichlorobenzene	U		0.0101	0.333
1,4-Dichlorobenzene	U		0.00991	0.333
3,3-Dichlorobenzidine	U		0.0123	0.333
2,4-Dinitrotoluene	U		0.00955	0.333
2,6-Dinitrotoluene	U		0.0109	0.333
Fluoranthene	U		0.00601	0.0333
Fluorene	U		0.00542	0.0333
Hexachlorobenzene	U		0.0118	0.333
Hexachloro-1,3-butadiene	U		0.0112	0.333
Hexachlorocyclopentadiene	U		0.0175	0.333
Hexachloroethane	U		0.0131	0.333
Indeno(1,2,3-cd)pyrene	U		0.00941	0.0333
Isophorone	U		0.0102	0.333
Naphthalene	U		0.00836	0.0333
Nitrobenzene	U		0.0116	0.333
n-Nitrosodimethylamine	U		0.0494	0.333
n-Nitrosodiphenylamine	U		0.0252	0.333
n-Nitrosodi-n-propylamine	U		0.0111	0.333
Phenanthrene	U		0.00661	0.0333
Benzylbutyl phthalate	U		0.0104	0.333
Bis(2-ethylhexyl)phthalate	U		0.0422	0.333
Di-n-butyl phthalate	U		0.0114	0.333

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3682944-2 07/22/21 13:04

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Diethyl phthalate	U		0.0110	0.333
Dimethyl phthalate	U		0.0706	0.333
Di-n-octyl phthalate	U		0.0225	0.333
Pyrene	U		0.00648	0.0333
1,2,4-Trichlorobenzene	U		0.0104	0.333
4-Chloro-3-methylphenol	U		0.0108	0.333
2-Chlorophenol	U		0.0110	0.333
2,4-Dichlorophenol	U		0.00970	0.333
2,4-Dimethylphenol	U		0.00870	0.333
4,6-Dinitro-2-methylphenol	U		0.0755	0.333
2,4-Dinitrophenol	U		0.0779	0.333
2-Nitrophenol	U		0.0119	0.333
4-Nitrophenol	U		0.0104	0.333
Pentachlorophenol	U		0.00896	0.333
Phenol	U		0.0134	0.333
2,4,6-Trichlorophenol	U		0.0107	0.333
(S) Nitrobenzene-d5	64.0			10.0-122
(S) 2-Fluorobiphenyl	72.4			15.0-120
(S) p-Terphenyl-d14	67.6			10.0-120
(S) Phenol-d5	66.1			10.0-120
(S) 2-Fluorophenol	71.8			12.0-120
(S) 2,4,6-Tribromophenol	68.5			10.0-127

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3682944-1 07/22/21 12:43

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.666	0.433	65.0	38.0-120	
Acenaphthylene	0.666	0.461	69.2	40.0-120	
Anthracene	0.666	0.464	69.7	42.0-120	
Benzidine	1.33	0.336	25.3	10.0-120	
Benzo(a)anthracene	0.666	0.517	77.6	44.0-120	
Benzo(b)fluoranthene	0.666	0.502	75.4	43.0-120	
Benzo(k)fluoranthene	0.666	0.508	76.3	44.0-120	
Benzo(g,h,i)perylene	0.666	0.499	74.9	43.0-120	
Benzo(a)pyrene	0.666	0.514	77.2	45.0-120	
Bis(2-chlorethoxy)methane	0.666	0.344	51.7	20.0-120	
Bis(2-chloroethyl)ether	0.666	0.399	59.9	16.0-120	

Laboratory Control Sample (LCS)

(LCS) R3682944-1 07/22/21 12:43

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
2,2-Oxybis(1-Chloropropane)	0.666	0.397	59.6	23.0-120	
4-Bromophenyl-phenylether	0.666	0.492	73.9	40.0-120	
2-Chloronaphthalene	0.666	0.464	69.7	35.0-120	
4-Chlorophenyl-phenylether	0.666	0.495	74.3	40.0-120	
Chrysene	0.666	0.499	74.9	43.0-120	
Dibenz(a,h)anthracene	0.666	0.502	75.4	44.0-120	
1,2-Dichlorobenzene	0.666	0.431	64.7	32.0-120	
1,3-Dichlorobenzene	0.666	0.434	65.2	30.0-120	
1,4-Dichlorobenzene	0.666	0.425	63.8	31.0-120	
3,3-Dichlorobenzidine	1.33	0.857	64.4	28.0-120	
2,4-Dinitrotoluene	0.666	0.545	81.8	45.0-120	
2,6-Dinitrotoluene	0.666	0.492	73.9	42.0-120	
Fluoranthene	0.666	0.505	75.8	44.0-120	
Fluorene	0.666	0.469	70.4	41.0-120	
Hexachlorobenzene	0.666	0.478	71.8	39.0-120	
Hexachloro-1,3-butadiene	0.666	0.409	61.4	15.0-120	
Hexachlorocyclopentadiene	0.666	0.524	78.7	15.0-120	
Hexachloroethane	0.666	0.393	59.0	17.0-120	
Indeno(1,2,3-cd)pyrene	0.666	0.510	76.6	45.0-120	
Isophorone	0.666	0.341	51.2	23.0-120	
Naphthalene	0.666	0.364	54.7	18.0-120	
Nitrobenzene	0.666	0.345	51.8	17.0-120	
n-Nitrosodimethylamine	0.666	0.379	56.9	10.0-125	
n-Nitrosodiphenylamine	0.666	0.452	67.9	40.0-120	
n-Nitrosodi-n-propylamine	0.666	0.378	56.8	26.0-120	
Phenanthrene	0.666	0.461	69.2	42.0-120	
Benzylbutyl phthalate	0.666	0.429	64.4	40.0-120	
Bis(2-ethylhexyl)phthalate	0.666	0.430	64.6	41.0-120	
Di-n-butyl phthalate	0.666	0.442	66.4	43.0-120	
Diethyl phthalate	0.666	0.467	70.1	43.0-120	
Dimethyl phthalate	0.666	0.478	71.8	43.0-120	
Di-n-octyl phthalate	0.666	0.440	66.1	40.0-120	
Pyrene	0.666	0.466	70.0	41.0-120	
1,2,4-Trichlorobenzene	0.666	0.411	61.7	17.0-120	
4-Chloro-3-methylphenol	0.666	0.357	53.6	28.0-120	
2-Chlorophenol	0.666	0.435	65.3	28.0-120	
2,4-Dichlorophenol	0.666	0.390	58.6	25.0-120	
2,4-Dimethylphenol	0.666	0.348	52.3	15.0-120	
4,6-Dinitro-2-methylphenol	0.666	0.510	76.6	16.0-120	
2,4-Dinitrophenol	0.666	0.342	51.4	10.0-120	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3682944-1 07/22/21 12:43

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
2-Nitrophenol	0.666	0.389	58.4	20.0-120	
4-Nitrophenol	0.666	0.559	83.9	27.0-120	
Pentachlorophenol	0.666	0.571	85.7	29.0-120	
Phenol	0.666	0.415	62.3	28.0-120	
2,4,6-Trichlorophenol	0.666	0.473	71.0	37.0-120	
<i>(S) Nitrobenzene-d5</i>			59.8	10.0-122	
<i>(S) 2-Fluorobiphenyl</i>			70.9	15.0-120	
<i>(S) p-Terphenyl-d14</i>			66.4	10.0-120	
<i>(S) Phenol-d5</i>			62.3	10.0-120	
<i>(S) 2-Fluorophenol</i>			67.4	12.0-120	
<i>(S) 2,4,6-Tribromophenol</i>			71.8	10.0-127	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

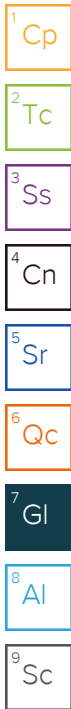
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

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.
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
C4	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Data is likely to show a low bias concerning the result.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
V	The sample concentration is too high to evaluate accurate spike recoveries.



ACCREDITATIONS & LOCATIONS

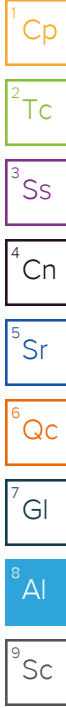
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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.



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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www.friedmanandbruya.com

July 27, 2021

Steve Long, Project Manager
Vertex
810 3rd Ave, Suite. 307
Seattle, WA 98104

Dear Mr Long:

Included are the results from the testing of material submitted on July 20, 2021 from the Boeing Fredrickson 71555, F&BI 107309 project. There are 8 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: slong@vertexeng.com
NAA0727R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 20, 2021 by Friedman & Bruya, Inc. from the Vertex Boeing Fredrickson 71555, F&BI 107309 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Vertex</u>
107309 -01	VSG-145

The TO-15 calibration standard failed the acceptance criteria for several analytes. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	VSG-145	Client:	Vertex
Date Received:	07/20/21	Project:	Boeing Fredrickson 71555
Date Collected:	07/20/21	Lab ID:	107309-01 1/5.7
Date Analyzed:	07/26/21	Data File:	072621.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	83	70	130

Compounds:	Concentration		Compounds:	Concentration	
	ug/m3	ppbv		ug/m3	ppbv
Propene	20	12	1,2-Dichloropropane	<1.3	<0.28
Dichlorodifluoromethane	<2.8	<0.57	1,4-Dioxane	<2.1	<0.57
Chloromethane	<21	<10	2,2,4-Trimethylpentane	<27	<5.7
F-114	<4	<0.57	Methyl methacrylate	<23	<5.7
Vinyl chloride	<1.5	<0.57	Heptane	<23	<5.7
1,3-Butadiene	<0.25	<0.11	Bromodichloromethane	<0.38	<0.057
Butane	<27	<11	Trichloroethene	<0.61	<0.11
Bromomethane	<13	<3.4	cis-1,3-Dichloropropene	<2.6	<0.57
Chloroethane	<15	<5.7	4-Methyl-2-pentanone	<23	<5.7
Vinyl bromide	<2.5	<0.57	trans-1,3-Dichloropropene	<2.6	<0.57
Ethanol	<43	<23	Toluene	<110	<28
Acrolein	<0.65	<0.28	1,1,2-Trichloroethane	<0.31	<0.057
Pentane	<17 ca	<5.7 ca	2-Hexanone	<23	<5.7
Trichlorofluoromethane	<13	<2.3	Tetrachloroethene	<39	<5.7
Acetone	<27	<11	Dibromochloromethane	<0.49	<0.057
2-Propanol	<49	<20	1,2-Dibromoethane (EDB)	<0.44	<0.057
1,1-Dichloroethene	<2.3	<0.57	Chlorobenzene	<2.6	<0.57
trans-1,2-Dichloroethene	<2.3	<0.57	Ethylbenzene	<2.5	<0.57
Methylene chloride	<200	<57	1,1,2,2-Tetrachloroethane	<0.78	<0.11
t-Butyl alcohol (TBA)	<69	<23	Nonane	<30	<5.7
3-Chloropropene	<8.9	<2.8	Isopropylbenzene	<14	<2.8
CFC-113	<4.4	<0.57	2-Chlorotoluene	<30	<5.7
Carbon disulfide	<36	<11	Propylbenzene	<14	<2.8
Methyl t-butyl ether (MTBE)	<10	<2.8	4-Ethyltoluene	<14	<2.8
Vinyl acetate	<40 ca	<11 ca	m,p-Xylene	<5	<1.1
1,1-Dichloroethane	<2.3	<0.57	o-Xylene	<2.5	<0.57
cis-1,2-Dichloroethene	<2.3	<0.57	Styrene	<4.9	<1.1
Hexane	<20 ca	<5.7 ca	Bromoform	<12	<1.1
Chloroform	<0.28	<0.057	Benzyl chloride	<0.3	<0.057
Ethyl acetate	<41	<11	1,3,5-Trimethylbenzene	<14	<2.8
Tetrahydrofuran	3.6 ca	1.2 ca	1,2,4-Trimethylbenzene	<14	<2.8
2-Butanone (MEK)	<17	<5.7	1,3-Dichlorobenzene	5.8	0.96
1,2-Dichloroethane (EDC)	<0.23	<0.057	1,4-Dichlorobenzene	<1.3	<0.22
1,1,1-Trichloroethane	<3.1	<0.57	1,2-Dichlorobenzene	<3.4	<0.57
Carbon tetrachloride	<1.8	<0.28	1,2,4-Trichlorobenzene	<4.2	<0.57
Benzene	<1.8	<0.57	Naphthalene	<1.5	<0.28
Cyclohexane	<39	<11	Hexachlorobutadiene	<1.2	<0.11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Method Blank	Client:	Vertex
Date Received:	Not Applicable	Project:	Boeing Fredrickson 71555
Date Collected:	Not Applicable	Lab ID:	01-1699 MB
Date Analyzed:	07/26/21	Data File:	072611.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	86	70	130

Compounds:	Concentration		Compounds:	Concentration	
	ug/m3	ppbv		ug/m3	ppbv
Propene	<1.2	<0.7	1,2-Dichloropropane	<0.23	<0.05
Dichlorodifluoromethane	<0.49	<0.1	1,4-Dioxane	<0.36	<0.1
Chloromethane	<3.7	<1.8	2,2,4-Trimethylpentane	<4.7	<1
F-114	<0.7	<0.1	Methyl methacrylate	<4.1	<1
Vinyl chloride	<0.26	<0.1	Heptane	<4.1	<1
1,3-Butadiene	<0.044	<0.02	Bromodichloromethane	<0.067	<0.01
Butane	<4.8	<2	Trichloroethene	<0.11	<0.02
Bromomethane	<2.3	<0.6	cis-1,3-Dichloropropene	<0.45	<0.1
Chloroethane	<2.6	<1	4-Methyl-2-pentanone	<4.1	<1
Vinyl bromide	<0.44	<0.1	trans-1,3-Dichloropropene	<0.45	<0.1
Ethanol	<7.5	<4	Toluene	<19	<5
Acrolein	<0.11	<0.05	1,1,2-Trichloroethane	<0.055	<0.01
Pentane	<3 ca	<1 ca	2-Hexanone	<4.1	<1
Trichlorofluoromethane	<2.2	<0.4	Tetrachloroethene	<6.8	<1
Acetone	<4.8	<2	Dibromochloromethane	<0.085	<0.01
2-Propanol	<8.6	<3.5	1,2-Dibromoethane (EDB)	<0.077	<0.01
1,1-Dichloroethene	<0.4	<0.1	Chlorobenzene	<0.46	<0.1
trans-1,2-Dichloroethene	<0.4	<0.1	Ethylbenzene	<0.43	<0.1
Methylene chloride	<35	<10	1,1,2,2-Tetrachloroethane	<0.14	<0.02
t-Butyl alcohol (TBA)	<12	<4	Nonane	<5.2	<1
3-Chloropropene	<1.6	<0.5	Isopropylbenzene	<2.5	<0.5
CFC-113	<0.77	<0.1	2-Chlorotoluene	<5.2	<1
Carbon disulfide	<6.2	<2	Propylbenzene	<2.5	<0.5
Methyl t-butyl ether (MTBE)	<1.8	<0.5	4-Ethyltoluene	<2.5	<0.5
Vinyl acetate	<7 ca	<2 ca	m,p-Xylene	<0.87	<0.2
1,1-Dichloroethane	<0.4	<0.1	o-Xylene	<0.43	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1	Styrene	<0.85	<0.2
Hexane	<3.5 ca	<1 ca	Bromoform	<2.1	<0.2
Chloroform	<0.049	<0.01	Benzyl chloride	<0.052	<0.01
Ethyl acetate	<7.2	<2	1,3,5-Trimethylbenzene	<2.5	<0.5
Tetrahydrofuran	<0.59 ca	<0.2 ca	1,2,4-Trimethylbenzene	<2.5	<0.5
2-Butanone (MEK)	<2.9	<1	1,3-Dichlorobenzene	<0.6	<0.1
1,2-Dichloroethane (EDC)	<0.04	<0.01	1,4-Dichlorobenzene	<0.23	<0.038
1,1,1-Trichloroethane	<0.55	<0.1	1,2-Dichlorobenzene	<0.6	<0.1
Carbon tetrachloride	<0.31	<0.05	1,2,4-Trichlorobenzene	<0.74	<0.1
Benzene	<0.32	<0.1	Naphthalene	<0.26	<0.05
Cyclohexane	<6.9	<2	Hexachlorobutadiene	<0.21	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/27/21

Date Received: 07/20/21

Project: Boeing Fredrickson 71555, F&BI 107309

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES
FOR VOLATILES BY METHOD TO-15**

Laboratory Code: 107308-01 1/4.9 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Propene	ug/m3	<5.9	<5.9	nm
Dichlorodifluoromethane	ug/m3	<2.4	<2.4	nm
Chloromethane	ug/m3	<18	<18	nm
F-114	ug/m3	<3.4	<3.4	nm
Vinyl chloride	ug/m3	<1.3	<1.3	nm
1,3-Butadiene	ug/m3	1.2	1.2	0
Butane	ug/m3	<23	<23	nm
Bromomethane	ug/m3	<11	<11	nm
Chloroethane	ug/m3	<13	<13	nm
Vinyl bromide	ug/m3	<2.1	<2.1	nm
Ethanol	ug/m3	1,800	1,700	6
Acrolein	ug/m3	0.76	0.81	6
Pentane	ug/m3	<14	<14	nm
Trichlorofluoromethane	ug/m3	<11	<11	nm
Acetone	ug/m3	570	570	0
2-Propanol	ug/m3	250	250	0
1,1-Dichloroethene	ug/m3	<1.9	<1.9	nm
trans-1,2-Dichloroethene	ug/m3	<1.9	<1.9	nm
Methylene chloride	ug/m3	<170	<170	nm
t-Butyl alcohol (TBA)	ug/m3	<59	<59	nm
3-Chloropropene	ug/m3	<7.7	<7.7	nm
CFC-113	ug/m3	<3.8	<3.8	nm
Carbon disulfide	ug/m3	<31	<31	nm
Methyl t-butyl ether (MTBE)	ug/m3	<8.8	<8.8	nm
Vinyl acetate	ug/m3	<35	<35	nm
1,1-Dichloroethane	ug/m3	<2	<2	nm
cis-1,2-Dichloroethene	ug/m3	<1.9	<1.9	nm
Hexane	ug/m3	<17	<17	nm
Chloroform	ug/m3	<0.24	<0.24	nm
Ethyl acetate	ug/m3	<35	<35	nm
Tetrahydrofuran	ug/m3	6.3	5.7	10
2-Butanone (MEK)	ug/m3	48	49	2
1,2-Dichloroethane (EDC)	ug/m3	<0.2	<0.2	nm
1,1,1-Trichloroethane	ug/m3	<2.7	<2.7	nm
Carbon tetrachloride	ug/m3	<1.5	<1.5	nm
Benzene	ug/m3	1.6	1.6	0
Cyclohexane	ug/m3	<34	<34	nm
1,2-Dichloropropane	ug/m3	<1.1	<1.1	nm
1,4-Dioxane	ug/m3	<1.8	<1.8	nm
2,2,4-Trimethylpentane	ug/m3	<23	<23	nm

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/27/21

Date Received: 07/20/21

Project: Boeing Fredrickson 71555, F&BI 107309

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES
FOR VOLATILES BY METHOD TO-15**

Laboratory Code: 107308-01 1/4.9 (Duplicate, continued)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Methyl methacrylate	ug/m3	<20	<20	nm
Heptane	ug/m3	<20	<20	nm
Bromodichloromethane	ug/m3	<0.33	<0.33	nm
Trichloroethene	ug/m3	<0.53	<0.53	nm
cis-1,3-Dichloropropene	ug/m3	<2.2	<2.2	nm
4-Methyl-2-pentanone	ug/m3	<20	<20	nm
trans-1,3-Dichloropropene	ug/m3	<2.2	<2.2	nm
Toluene	ug/m3	<92	<92	nm
1,1,2-Trichloroethane	ug/m3	<0.27	<0.27	nm
2-Hexanone	ug/m3	<20	<20	nm
Tetrachloroethene	ug/m3	<33	<33	nm
Dibromochloromethane	ug/m3	<0.42	<0.42	nm
1,2-Dibromoethane (EDB)	ug/m3	<0.38	<0.38	nm
Chlorobenzene	ug/m3	<2.3	<2.3	nm
Ethylbenzene	ug/m3	2.3	2.3	0
1,1,2,2-Tetrachloroethane	ug/m3	<0.67	<0.67	nm
Nonane	ug/m3	<26	<26	nm
Isopropylbenzene	ug/m3	<12	<12	nm
2-Chlorotoluene	ug/m3	<25	<25	nm
Propylbenzene	ug/m3	<12	<12	nm
4-Ethyltoluene	ug/m3	<12	<12	nm
m,p-Xylene	ug/m3	10	9.9	1
o-Xylene	ug/m3	4.2	4.1	2
Styrene	ug/m3	<4.2	<4.2	nm
Bromoform	ug/m3	<10	<10	nm
Benzyl chloride	ug/m3	<0.25	<0.25	nm
1,3,5-Trimethylbenzene	ug/m3	<12	<12	nm
1,2,4-Trimethylbenzene	ug/m3	<12	<12	nm
1,3-Dichlorobenzene	ug/m3	<2.9	<2.9	nm
1,4-Dichlorobenzene	ug/m3	<1.1	<1.1	nm
1,2-Dichlorobenzene	ug/m3	<2.9	<2.9	nm
1,2,4-Trichlorobenzene	ug/m3	<3.6	<3.6	nm
Naphthalene	ug/m3	1.6	1.6	0
Hexachlorobutadiene	ug/m3	<1	<1	nm

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/27/21

Date Received: 07/20/21

Project: Boeing Fredrickson 71555, F&BI 107309

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES
FOR VOLATILES BY METHOD TO-15**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	Acceptance Criteria
			Recovery LCS	
Propene	ug/m3	23	79	70-130
Dichlorodifluoromethane	ug/m3	67	97	70-130
Chloromethane	ug/m3	28	84	70-130
F-114	ug/m3	94	97	70-130
Vinyl chloride	ug/m3	35	90	70-130
1,3-Butadiene	ug/m3	30	79	70-130
Butane	ug/m3	32	83	70-130
Bromomethane	ug/m3	52	98	70-130
Chloroethane	ug/m3	36	90	70-130
Vinyl bromide	ug/m3	59	99	70-130
Ethanol	ug/m3	25	76	70-130
Acrolein	ug/m3	31	72	70-130
Pentane	ug/m3	40	68 vo	70-130
Trichlorofluoromethane	ug/m3	76	99	70-130
Acetone	ug/m3	32	85	70-130
2-Propanol	ug/m3	33	75	70-130
1,1-Dichloroethene	ug/m3	54	93	70-130
trans-1,2-Dichloroethene	ug/m3	54	88	70-130
Methylene chloride	ug/m3	94	92	70-130
t-Butyl alcohol (TBA)	ug/m3	41	82	70-130
3-Chloropropene	ug/m3	42	73	70-130
CFC-113	ug/m3	100	100	70-130
Carbon disulfide	ug/m3	42	95	70-130
Methyl t-butyl ether (MTBE)	ug/m3	49	74	70-130
Vinyl acetate	ug/m3	48	56 vo	70-130
1,1-Dichloroethane	ug/m3	55	86	70-130
cis-1,2-Dichloroethene	ug/m3	54	85	70-130
Hexane	ug/m3	48	63 vo	70-130
Chloroform	ug/m3	66	90	70-130
Ethyl acetate	ug/m3	49	85	70-130
Tetrahydrofuran	ug/m3	40	68 vo	70-130
2-Butanone (MEK)	ug/m3	40	84	70-130
1,2-Dichloroethane (EDC)	ug/m3	55	84	70-130
1,1,1-Trichloroethane	ug/m3	74	94	70-130
Carbon tetrachloride	ug/m3	85	98	70-130
Benzene	ug/m3	43	83	70-130
Cyclohexane	ug/m3	46	74	70-130
1,2-Dichloropropane	ug/m3	62	94	70-130
1,4-Dioxane	ug/m3	49	87	70-130
2,2,4-Trimethylpentane	ug/m3	63	80	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Methyl methacrylate	ug/m3	55	81	70-130
Heptane	ug/m3	55	75	70-130
Bromodichloromethane	ug/m3	90	103	70-130
Trichloroethene	ug/m3	73	99	70-130
cis-1,3-Dichloropropene	ug/m3	61	98	70-130
4-Methyl-2-pentanone	ug/m3	55	101	70-130
trans-1,3-Dichloropropene	ug/m3	61	94	70-130
Toluene	ug/m3	51	94	70-130
1,1,2-Trichloroethane	ug/m3	74	106	70-130
2-Hexanone	ug/m3	55	82	70-130
Tetrachloroethene	ug/m3	92	127	70-130
Dibromochloromethane	ug/m3	120	116	70-130
1,2-Dibromoethane (EDB)	ug/m3	100	102	70-130
Chlorobenzene	ug/m3	62	102	70-130
Ethylbenzene	ug/m3	59	76	70-130
1,1,2,2-Tetrachloroethane	ug/m3	93	93	70-130
Nonane	ug/m3	71	73	70-130
Isopropylbenzene	ug/m3	66	90	70-130
2-Chlorotoluene	ug/m3	70	93	70-130
Propylbenzene	ug/m3	66	85	70-130
4-Ethyltoluene	ug/m3	66	85	70-130
m,p-Xylene	ug/m3	120	86	70-130
o-Xylene	ug/m3	59	90	70-130
Styrene	ug/m3	58	88	70-130
Bromoform	ug/m3	140	120	70-130
Benzyl chloride	ug/m3	70	106	70-130
1,3,5-Trimethylbenzene	ug/m3	66	90	70-130
1,2,4-Trimethylbenzene	ug/m3	66	80	70-130
1,3-Dichlorobenzene	ug/m3	81	111	70-130
1,4-Dichlorobenzene	ug/m3	81	99	70-130
1,2-Dichlorobenzene	ug/m3	81	103	70-130
1,2,4-Trichlorobenzene	ug/m3	100	102	70-130
Naphthalene	ug/m3	71	90	70-130
Hexachlorobutadiene	ug/m3	140	123	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

107369

SAMPLE CHAIN OF CUSTODY

ME 07-20-21

Page # 1 of 1

Report To Steve Lang

Company The Vertex Company

Address 2420 W 26th Ave., Ste. 100-D

City, State, ZIP Denver, CO 80211

Phone 720-440-8116 Email slang@vertexeng.com

SAMPLERS (signature) Jason Cass

PROJECT NAME & ADDRESS

Boeing Franchikson

PO #

71555

NOTES:

INVOICE TO

TURNAROUND TIME

Standard
BRUSH Label TAT per
4/26/11
Rush charges authorized by:

SAMPLE DISPOSAL
 Default: Clean after 3 days
 Archive (Fee may apply)

SAMPLE INFORMATION

ANALYSIS REQUESTED

Sample Name	Lab ID	Canister ID	Flow Cont. ID	Reporting Level: IA=Indoor Air SG=Soil Gas (Circle One)	Date Sampled	Initial Vac. (°Hg)	Field Initial Time	Final Vac. (°Hg)	Field Final Time	TO15 Full Scan	TO15 BTEXN	TO15 cVOCs	APH	Helium	Notes
USG-145	01	3344	106	IA / (SG)	7/20/21	-29	14:02	-3	14:09	X					
				IA / SG											
				IA / SG											
				IA / SG											
				IA / SG											
				IA / SG											
				IA / SG											
				IA / SG											
				IA / SG											

Samples received at 25 °C

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-3039

Ph. (206) 285-8282

Fax (206) 283-5044

FORMS\COO\COCTO-18.DOC

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Jason Cass</u>	<u>Jason Cass</u>	<u>Vertex</u>	<u>7/20/21</u>	<u>15:50</u>
Received by: <u>Steve Lang</u>	<u>Steve Lang</u>	<u>Vertex</u>	<u>7/20/21</u>	<u>15:50</u>
Relinquished by:				
Received by:				